

# EASTERN CAPE PARKS BOARD



## INTEGRATED RESERVE MANAGEMENT PLAN – STRATEGIC MANAGEMENT PLAN

### DWESA-CWEBE NATURE RESERVE

*Draft*



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**EASTERN CAPE PARKS BOARD**  
Integrated Reserve Management Plan - Strategic Management Plan

**DWESA-CWEBE NATURE RESERVE**

***Draft***

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## ACRONYMS

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<b>APO:</b>	Annual Plan of Operations
<b>CDF:</b>	Conservation Development Framework
<b>CMC:</b>	Co-management Committee
<b>DEAT:</b>	Department of Environmental Affairs and Tourism (National)
<b>DEAET:</b>	Department of Economic Affairs, Environment and Tourism (Eastern Cape)
<b>DLA:</b>	Department of Land Affairs
<b>DCNR</b>	Dwesa-Cwebe Nature Reserve
<b>ECPB:</b>	Eastern Cape Parks Board
<b>ECTB:</b>	East Cape Tourism Board
<b>EIA:</b>	Environmental Impact Assessment
<b>EMP:</b>	Environmental Management Plan
<b>EMS:</b>	Environmental Management System
<b>EKZNW:</b>	Ezemvelo KwaZulu Natal Wildlife
<b>GEF:</b>	Global Environment Facility
<b>GIS:</b>	Geographic Information System
<b>IBA:</b>	Important Bird Area
<b>IEM:</b>	Integrated Environmental Management
<b>IDP:</b>	Integrated Development Plan

<b>IEMP:</b>	Integrated Environmental Management Plan
<b>KRA:</b>	Key Result Area
<b>MCM:</b>	Marine and Coastal Management
<b>MLRA:</b>	Marine Living Resources Act.
<b>MPA:</b>	Marine Protected Area
<b>PNP:</b>	Pondoland National Park
<b>SAHRA:</b>	South African Heritage Resources Agency
<b>SANParks:</b>	South African National Parks
<b>SAPS:</b>	South African Police Service
<b>SDF:</b>	Spatial Development Framework
<b>SMMEs:</b>	Small, Micro and Medium Enterprises
<b>SMP:</b>	Strategic Management Plan
<b>TBD:</b>	To Be Decided
<b>TOR:</b>	Terms of Reference
<b>UNDP:</b>	United Nations Development Programme
<b>VFFA:</b>	Veld and Forest Fire Act
<b>WFW:</b>	Working for Water Programme
<b>WWF:</b>	World Wide Fund for Nature

# 1 CONTEXTUAL FRAMEWORK

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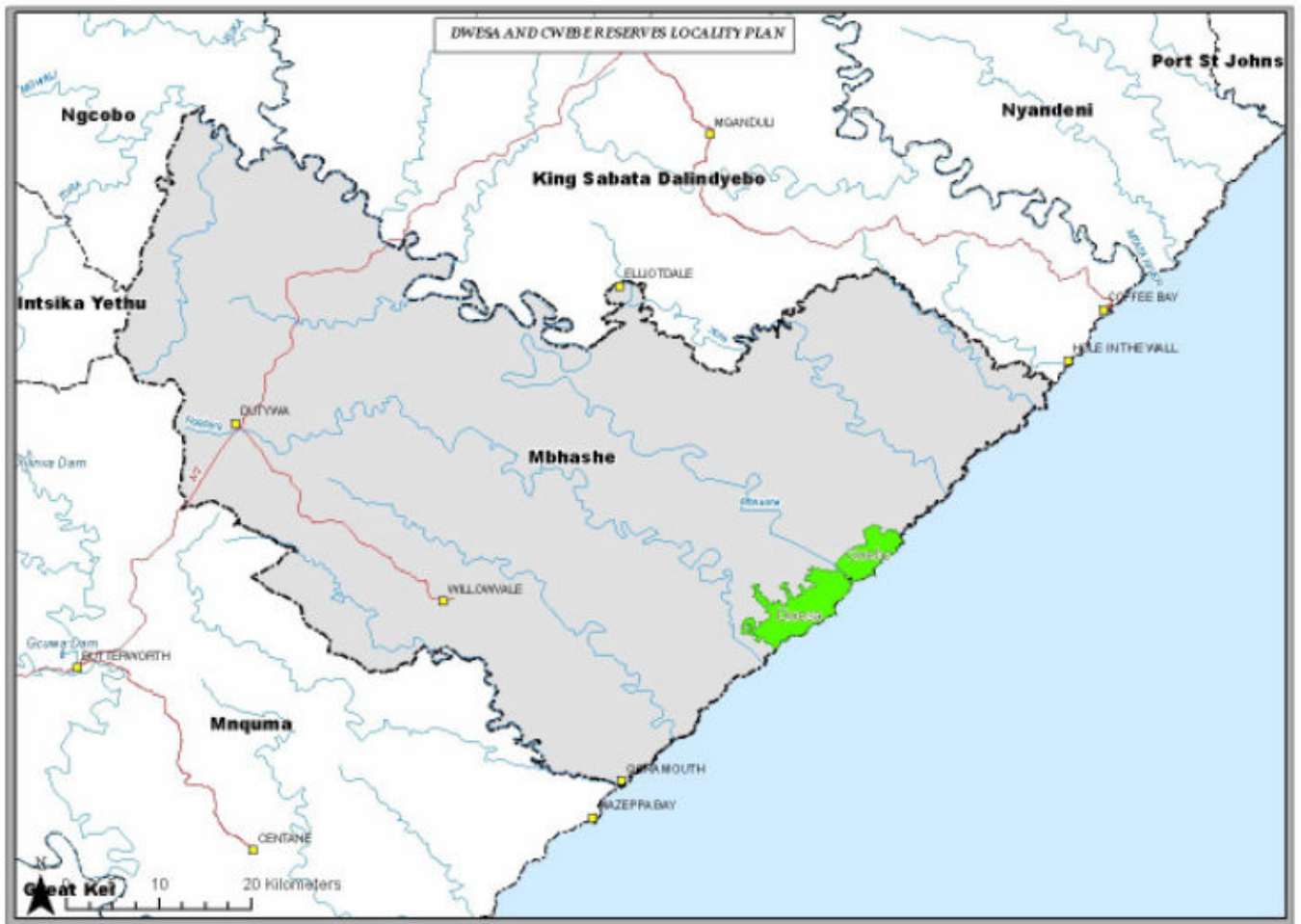
## 1.1 Location and extent of the reserve

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The Dwesa and Cwebe Nature Reserves are located on either side of the of the Mbashe River estuary approximately 250 km north-east of East London. The Mbashe River is one of the major rivers on the Wild Coast and effectively isolates the two reserves from each other, as the river can only be crossed by boat. However, there is radio communication across the river and the two reserves can be managed as a unit. Dwesa Nature Reserve is approximately 3500 ha in extent, and Cwebe 2200 ha, but there are uncertainties about the exact boundaries, and the Cwebe Reserve is unfenced. Together the Reserves occupy a narrow coastal strip of approximately 14 km long and 1-2 km wide (Figure 1). The Mbashe River separating the two reserves marks the boundary between the Agulhas warm temperate and Natal subtropical inshore marine biogeographic zones. The eastern boundary of the Dwesa-Cwebe Nature Reserve is the high water mark that forms the inshore boundary of the Dwesa-Cwebe Marine Protected Area (MPA). The MPA extends 6 nm out to sea from the high water mark, and extends from the western bank of the mouth of the Suku River to Human's Rock just north of Nqabara Point. The MPA also includes the tidal portion of the Mbashe River.

Road access from the N2 to both Dwesa and Cwebe Nature Reserves is moderate. The roads are tarred from the N2 to both Willowvale and Elliotdale, but thereafter the roads to both reserves can become quite poor after rain. As a rule access to the two main entrance gates is reliable, but points within the reserves may not always be accessible after heavy rain.

The focus of this Strategic Management Plan (SMP) is to develop a common, medium term (5-year) operational framework for the Dwesa-Cwebe Nature Reserve that strategically directs and coordinates the prioritised allocation of resources and capacity to the Reserve, in order to achieve a common set of goals and objectives.



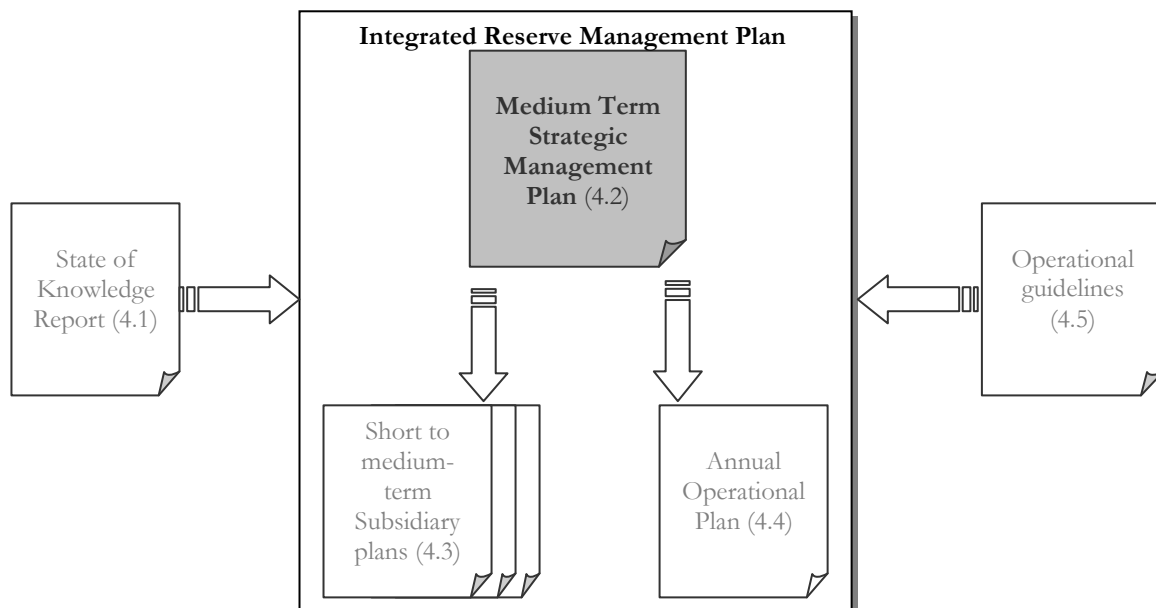
**Figure 1.** Location of the Dwesa-Cwebe Nature Reserve within the Eastern Cape Province

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## 1.2 Purpose of the Strategic Management Plan

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The major elements of the reserve planning process for Dwesa-Cwebe Nature Reserve are: (I) a *strategic management plan*; (ii) detailed *subsidiary plans* (as required) and; iii) an *annual operational plan*. These elements are collectively termed the *Integrated Reserve Management Plan*. The integrated reserve management plan for Dwesa-Cwebe Nature Reserve is supported by a *state of knowledge report* and *operational guidelines* to ensure ongoing implementation and review of protected area management activities (see Figure 2).

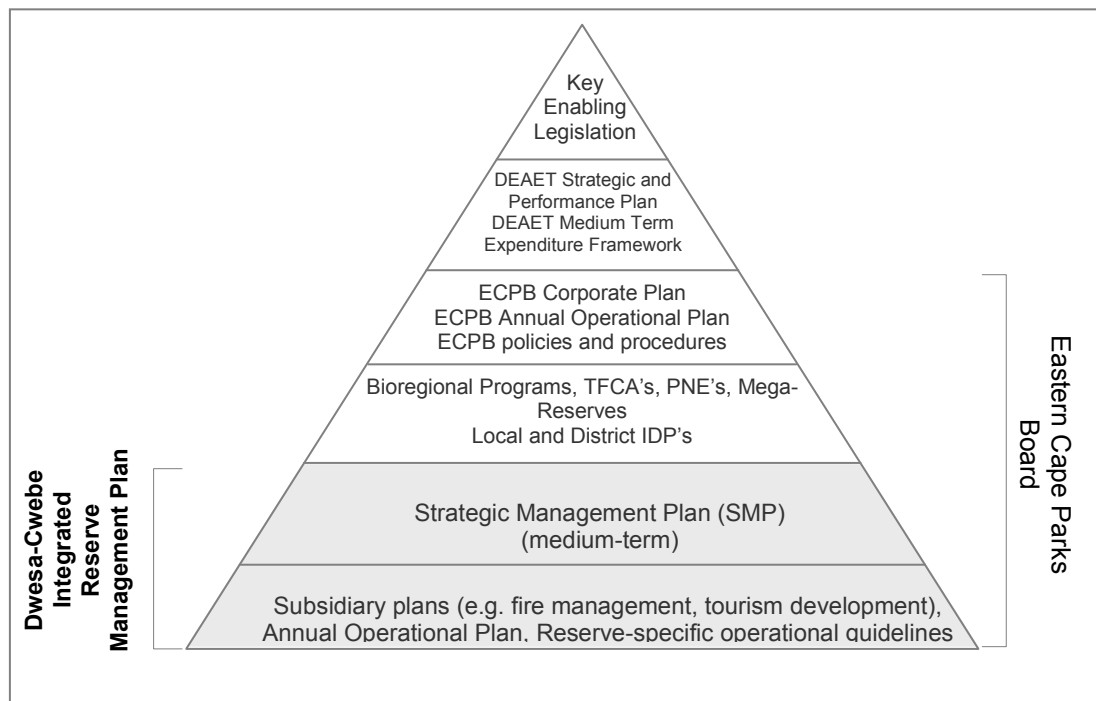


**Figure 2:** The elements of the reserve management plan

The integrated reserve management plan for the Dwesa-Cwebe Nature Reserve forms part of a tiered series of policies, legislation and related planning documents at the sectoral, institutional, agency and local levels. The integrated reserve management plan will directly relate to these policies, legislation and planning documents as part of a logical hierarchy of plans (see below).

The approach to and format of, the SMP is directed by the “Corporate Norms and Standards for the Development of Integrated Reserve Management Plans” (2006).

The purpose of the Strategic Management Plan (SMP) is to ensure that Dwesa-Cwebe Nature Reserve has clearly defined objectives and activities to direct the protection and sustainable use of its natural, scenic and heritage resources over a five year time horizon. The SMP indicates where the Reserve Management Team intends to focus its efforts in the next five years. The SMP thus provides the medium-term operational framework for the prioritised allocation of resources and capacity in the management, use, and development of the reserve.



**Figure 3.** The policy, legal and planning context for Dwesa-Cwebe Integrated Management Plan

It must be noted that the SMP focuses on strategic priorities rather than detailing all operational and potential reactive courses of action in the next five years. While planning for some emergencies is part of the SMP, it remains possible that unforeseen circumstances could disrupt the prioritization established in this SMP. These should be addressed in the annual review and update of the SMP. The scope of the SMP for Dwesa-Cwebe Nature Reserve is constrained by the reserve’s actual or potential performance capability - given available personnel, funding, and any other external factors - to ensure that the plan is achievable and sustainable.

The drafting of the SMP has been guided by an interdisciplinary reserve planning team comprising the Reserve Manager, four members of the Dwesa-Cwebe Land Trust, a Dwesa-Cwebe community Headman, three Community members from Dwesa-Cwebe, two members of the Mbashe municipality, two Department of Water Affairs and Forestry officials, a member of the ECPB Scientific Services, and contracted reserve planning service providers.

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## **1.3 Legal and Policy Framework**

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### **1.3.1 Legal framework**

The current legal framework that directs planning and operational management activities in the reserve is largely contained in the following legislation:

- National Environmental Management Act (No.107 of 1998)
- NEMA: Biodiversity Act (No. 10 of 2004)
- NEMA: Protected Areas Act (No. 57 of 2003)
- Nature and Environmental Conservation Ordinance (No. 19 of 1974)
- National Forest Act (No. 84 of 1998)
- National Veld and Forest Fire Act (No. 101 of 1998)
- Fencing Act (No. 31 of 1963)
- Problem Animal Control Ordinance (No. 26 of 1957)
- Mountain Catchment Areas Act (No. 63 of 1970)
- Eastern Cape Provincial Parks Board Act (No. 12 of 2003)
- Marine Living Resources Act (No. 31 of 1998)
- National Heritage Resources Act (No. 25 of 1999)
- Transkei Environmental Decree (No. 9 of 1992)
- Public Finance Management Act (No. 1 of 1999)
- Conservation of Agricultural Resources Act (No. 43 of 1983)
- Restitution Act (No. 22 of 1994)
- National Water Act (No. 36 of 1998)

### **1.3.2 Settlement and management agreements**

A long and complex negotiation based on the rights to land demarcated as the Dwesa and Cwebe Nature Reserves eventually (2001) resulted in a Settlement Agreement that gave title to the land to the Dwesa-Cwebe Land Trust. However, it would appear that the Trust does not yet have the title deeds. The Land Trust represents Communal Property Associations of the communities of Ntubeni, Mpume, Ngoma, Ntlangano, Mendwana, Hobeni and Cwebe. The Land Trust comprises one member from each CPA and seven 7 representatives from various government departments (DWAF, ECPB, Local and District Municipalities, DLA). The Trust was formed to act on behalf of the communities to ensure the effective use of the allocated restitution funds and form a link between the community, Mbashe Municipality, Amatola District Municipality and other institutions.

The Dwesa-Cwebe settlement agreement addresses issues relating to 1) The Dwesa/Cwebe Reserve, including the Ntlonyana and Mbayana cottages; 2) The Haven Hotel; and 3) Development for the seven communities of Dwesa/Cwebe. With regard to the Reserves, the Settlement Agreement states that:

- The land will in perpetuity be reserved for conservation purposes.
- Conservation will be the primary management objective, but that there will also be utilization for economic and subsistence benefit
- All legislation which normally applies to Protected Areas in South Africa will in apply to the Dwesa and Cwebe Nature Reserves
- The land will be jointly managed by the Community and a Nature Conservation Agency according to an approved Management Plan.

Much of Dwesa-Cwebe is still registered as State forest and there is no formal agreement between DWAF and DEAET or ECPB for the transfer of management responsibility. However, this process should be completed early in 2007.

The management of the Marine Protected Area is the responsibility of MCM but MCM undertake no management activities. There is no formal agreement with ECPB to manage the MPA, despite the requirements of the Protected Areas Act (2003)

### **1.3.3 Municipal planning context**

Dwesa-Cwebe Nature Reserve falls within the area of jurisdiction of the Mbashe local municipality which in turn falls within the jurisdiction of the Amatola District Municipality. The Amatola district municipality IDP highlights tourism as a local economic development driver (historical-cultural attractions, nature/outdoor attractions, water recreational attractions) but does not mention Dwesa-Cwebe Nature Reserve as a factor in this development. The ADM IDP recognizes the existence of sensitive and conservation worthy areas within its region, (subtropical thicket, wetlands, river systems, cultural sites, rare and endangered species and the coastal areas), and it also acknowledges the need to manage several aspects of the environment (alien vegetation, pollution). However, the IDP deals with environmental planning issues and tourism planning issues in a very general way by calling for an Environmental Management Plan and a Tourism Development Plan. In the Mbashe Municipal IDP, tourism is identified as a key sector to develop the local economy, and Dwesa-Cwebe and Nqabara are identified as key areas for the development of tourism.

Vultures, game fishing and unspecified natural sites are listed as tourism opportunities. The Mbashe Municipal SDF lists the eradication of alien vegetation as an environmental project but no other tourism development projects are identified.

#### **1.3.4 Local policy, plans and programs**

The Mbashe Municipal SDF identifies Dwesa-Cwebe as a strategic tourism area but outside the development nodes of the municipality, there are no detailed land use and development plans. The Wild Coast Biodiversity Strategy and Action Plan makes detailed recommendations for the Mbashe area in general and the Dwesa-Cwebe Reserve in particular. Many of these recommendations are reflected in this Management Plan. Other important, and complementary, local policies, plans and programs include

- Wild Coast Tourism Development Policy
- Wild Coast Spatial Development Framework
- Working for Water funded projects
- Expanded Public Works Program funded projects
- UNDP-GEF project: Conservation and Sustainable Use of Biodiversity of the South African Wild Coast

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### **1.4 Institutional Framework**

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The Dwesa-Cwebe Nature Reserve is managed by the Operations Directorate of the Eastern Cape Parks Board. The Dwesa-Cwebe Nature Reserve is located within the Eastern Region of the Directorate, and falls under the oversight of the Regional Manager (East). The Dwesa-Cwebe Nature Reserve is under the management responsibility of a Reserve Manager. The operational management of the Dwesa-Cwebe Nature Reserve is directly supported by the corporate Scientific Services Unit.

The current staffing complement is as follows:

Reserve Manager for both reserves (1)

Field Rangers (7 Dwesa and 8 Cwebe)

Gatekeepers (7 Dwesa and 8 Cwebe)

Principal General Foreman (1 Dwesa and 1 Cwebe)

General Foreman (1 Dwesa and 1 Cwebe)

General Assistants (2 Cwebe campsite, 42 for Dwesa-Cwebe combined)

Administration Clerk (1 Dwesa and 1 Cwebe)

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## 1.5 Description of the Reserve

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### 1.5.1 History

The Dwesa and Cwebe Forests were established as Demarcated State Forests in 1891 and 1893 respectively. From establishment until 1978 the forests were managed by forestry departments, first under the RSA and then under the Transkei Bantustan administration. Since 1978 the reserves have been managed by Nature Conservation Departments, first in the Transkei and since 1994, under the Eastern Cape Provincial Government. In 1975 Dwesa and Cwebe were established as Nature Reserves in terms of the Transkei Nature Conservation Act No.6 of 1971, but retained their status as Demarcated State Forests. In 1992 the reserves were renamed as National Wildlife Reserves in terms of the Transkei Environmental Decree of that year. The Dwesa-Cwebe Marine Protected Areas were proclaimed in terms of the same Decree. In 1994 the reserves reverted back to the Republic of South Africa, again retaining their status as Demarcated State Forests. In 1998 the Dwesa-Cwebe MPA was proclaimed under Section 43 of the Marine Living Resources Act of that year

Towards the end of the apartheid era local people voiced their belief that the Dwesa and Cwebe Reserves excluded them from a significant part of their ancestral lands, and that they were not compensated for this exclusion. Particular problems were access to: grazing, thatching grass, marine resources and forest products. Increasingly militant resistance to management authority between 1992 and 1994 eventually resulted in a “land invasion” and a stripping and dumping of marine resources. In 1996 a formal land claim was lodged with the Regional Land Claims Commission and this was settled in June 2001. The land was awarded to the Dwesa-Cwebe Land Trust as the constituted representative of seven communities surrounding the two reserves.

Issues that complicate management of the two Reserves are the presence of holiday cottages in the northern part of the Cwebe Reserve, and the operation of a hotel in the middle of the joint protected area of Dwesa/Cwebe. In the early part of the 20<sup>th</sup> century white families were permitted to build holiday cottages with short term rental contracts along the Transkei Coast (Permission to Occupy system). These rental contracts can be terminated by the Department of Land Affairs and holiday cottages inside the Dwesa Nature Reserve were demolished by the Transkei Government in the 1970s and 1980s. However,

two groups of cottages are still located at Ntlonyana and Mbanyana inside Cwebe Nature Reserve, and the activities of the cottage residents have had a considerable impact on the environment.

The Haven hotel is situated on the eastern side of the Mbashe River. It was established during the last century, prior to the area being declared a protected area. Very little effort seems to have been made to moderate the activities of the guests and successive managers in order to achieve compliance with any conservation requirements, both in the terrestrial reserve and the MPA. General environmental management in the vicinity of the hotel is very poor (increased alien vegetation, improper waste disposal, uncontrolled visitor and staff behavior, operation of a golf course). Hotel owners and managers constantly request exemptions from protected area regulations on the basis that the hotel is not economically viable without a suite of extractive resource use activities.

The Mbashe Light House is situated on the Mbashe Point and the site as well as access rights to it are held under servitude by PORTNET.

Cebe Camp Site is a 6-ha area to the west of Dwesa, near the town of Kentane. The campsite is located outside the boundaries of the reserves, but is managed by the reserve authorities.

### **1.5.2 Climate**

The mean annual rainfall in the Dwesa/Cwebe area is 965 mm, mainly concentrated in summer. From October to March most months can be expected to receive 100 mm or more, with peaks in November and March. In these months up to 10 or more rainy days can generally be expected, accompanied by flooding of river crossings and inflow of muddy river water into the sea. As a result of the rainfall pattern the smaller estuary mouths tend to be open in summer and closed in winter.

Lower than normal rainfall occurs periodically, and affects communal grazing lands outside the reserves, sometimes leading to requests to use the reserves for emergency grazing. During droughts, low flow in rivers can affect water supply to infrastructure in the reserves because a number of facilities are supplied through pumping from small streams. The Dwesa and Cwebe Nature Reserves show the same wind patterns as the rest of our south-

eastern Cape coast, with north easterlies associated with high pressure systems prevailing in summer and south westerlies associated with low pressure systems and cold fronts prevailing in the winter months. The sea is generally relatively warm (16-22<sup>0</sup> C) but north easterly winds result in localized upwelling of cold water along the coast.

### **1.5.3 Geomorphology**

The topography of the Dwesa-Cwebe complex varies from rolling hills to steep cliffs. The steep areas are located adjacent to the rivers and streams and along part of the seashore. Coastal landforms include rocky platforms, sandy beaches, subtidal rocky reefs and subtidal sandy benthos. With deep water relatively close inshore the sea is often rough and dangerous. Considerable sections of the coast comprise stabilised dunes, which are sensitive to disturbance and unsuitable for the construction of roads and tourism infrastructure.

The Dwesa-Cwebe area is underlain by a horizontally orientated formation forming part of the Karoo Sequence. The formation consists mainly of the Ecca Group (shales, mudstones and sandstones) and but the Beaufort Group (bluish-grey fine-grained sandstone and bluish grey, greenish grey or reddish mudstone) occurs in the south west. Dolerite sheets are found throughout the area. Soil types range from deep sandy loam to loamy clay soil over eroded shales. The arable potential of the soil in the Dwesa-Cwebe area is low, and less than 3% of the area has potential for cultivation. In the planning and construction of roads, as well as the design and siting of buildings, the nature of underlying rock and soil should be considered. Aquifers occur both inside Dwesa and Cwebe and in surrounding communal areas. A few aquifers in Cwebe Nature Reserve are tapped via bore holes. Yield is generally low, with water quality varying from brackish to fresh. Minor areas of erosion occur throughout the area, either in the form of gully erosion or sheet erosion.

### **1.5.4 Flora**

The environment of Dwesa-Cwebe is complex and contains ecosystems that are considered rare and of high conservation importance. Dwesa Nature Reserve comprises roughly 80% indigenous coastal Scarp forest and 20% Transkei Coastal Belt grassland or other vegetation types, while the ratio in Cwebe is considered to be roughly 50:50. In general, indigenous forest covers the inland areas of the reserves, with a narrow strip of coastal grassland bordering the Indian Ocean. Dune forest and scrub forest are also found close to the coast and are classified as sensitive vegetation types. The coastal forests are

amongst the largest remaining indigenous forests on the Eastern Cape Coast, and have a unique floristic composition. As long ago as 1900 there were concerns about over-utilization of certain timber species, e.g. Boxwood, Sneeze Wood and Yellow Wood, and exploitation was stopped. However, subsistence utilization of indigenous tree species in the forests by local people has occurred on an ongoing basis.

The grasslands in the Dwesa and Cwebe Nature Reserves are similar to the sourveld grasslands found across the southern parts of the Wild Coast, but are different from the unique grasslands found on Pondoland sand stones north of Port St Johns. This southern grassland type is not protected in nature reserves other than Dwesa [approximately 600 ha] and Cwebe (approximately 900 ha), and outside these two reserves this grassland type is heavily utilised by live-stock across its range. Although the Dwesa grasslands contain fewer endemic species than Pondoland grasslands, they still have high botanical diversity and are considered deserving of conservation. Fire is the critical environmental factor in maintaining species diversity in these grasslands and preventing encroachment by pioneer forest species of trees. A small sector of coastal grassland between the Mendu and Mbashe Rivers contains fynbos elements, adding to plant diversity in Dwesa Nature Reserve

On the drier, steep slopes, and especially where the soil is stony in the Dwesa-Cwebe communal area, Valley Thicket and Mesic Succulent Thicket is found. These vegetation types are characterised by woody evergreen plants, especially *Euphorbia*, *Aloe* and *Acacia* species. A number of interesting succulent plant species are found in Valley Thicket. This vegetation type is vulnerable to poor veld management, over-browsing by goats and cattle and also to invasion by alien plant species.

Small mangrove communities occur on the banks of the Nqabara River, outside the borders of the Nature Reserve, and in the lower reaches of the Mbashe River. Small patches of wetland vegetation occur wherever conditions are appropriate. There is a species a list of trees found in the Reserves, and a detailed map of vegetation types found in Dwesa Nature Reserve in the State of Knowledge Report (2006).

In common with the rest of the Wild Coast Region, populations of alien, invasive plants are increasing in Dwesa and Cwebe Nature Reserves. Species known to occur are Mauritius Thorn, Lantana, Ink Berry, Morning Glory, Bugweed, Guava, Black Wattle, Eucalyptus spp. Sesbania, Peanut butter Cassia and Jacaranda.

### 1.5.5 Fauna

After the reserves were fenced in the late 1970's a range of large game species were introduced into the Dwesa and Cwebe Nature Reserves, including bulk grazers such as Cape Buffalo, Blesbok, Burchells Zebra, Red Hartebeest, White Rhinoceros, and Blue Wildebeest. Apart from Cape Buffalo, most of these probably did not occur naturally in the Reserve. Bushpig, Grey Duiker, Bushbuck and Blue Duiker always occurred in the area and are still present. Local people have reported concern about the apparent low numbers of Blue Duiker

Current population estimates of some of the larger mammal species are:

Cape Buffalo – 100

Blesbok – 4?

White rhinoceros – 7?

Blue Wildebeest - 36

Burchells zebra - 20

Red Hartebeest – 0

Eland – 20

Population census of mammal species is difficult because of the large extent of the forest biome. Buffalo and rhinoceros appear to have modified their normal behaviour, hiding in the forest during the day and only coming out to graze at night. Stocking rates and species composition of wildlife relative to habitat condition have not been scientifically evaluated in recent years. However, current stocking rates are generally low, mainly as a result of heavy poaching between 1990 and 1995. As a result, apart from the removal of extra-limital species, active management is probably not required right now

A wide variety of forest and grassland bird species occurs in the two reserves. A detailed list of bird species occurring in Cwebe Nature Reserve exists (updated January 2002 - State of Knowledge Report, 2006).

There is very limited information regarding the various species of reptiles and amphibians found in Dwesa and Cwebe Nature Reserves.

The Dwesa-Cwebe MPA is important for fish stocks, particularly large sparids, and efforts should be made to accord the entire area full sanctuary status. The Mbashe River itself also deserves higher protection status than it currently enjoys, because large kob (collapsed fishery) occur there in large numbers and are targeted by fishermen. The inshore area

immediately north of the mouth is an important white steenbras spawning area and is one of only two breeding sites used by this endangered angling fish. The equally threatened Red Steenbras breeds on reefs in the deeper waters of the MPA. Fishermen have targeted the kob and steenbras for several decades, and the management of the Haven hotel exerts pressure for exemption from the sanctuary status of the MPA, on the grounds that the hotel is not economically viable without the tourism generated by these fisheries.

Rocky shore invertebrates are targeted by subsistence collectors along the coast, and the MPA contains one of the very few remaining areas where abalone is found in reasonable concentrations. Abalone poaching is a perennial problem and field staff need appropriate equipment and training to deal with this threat.

### **1.5.6 Estuaries**

In addition to the large Mbashe estuary the coastal strip is incised by a number of smaller rivers that have their mouths in Dwesa and Cwebe Nature Reserves. These include the Koboli, Mbanyana, Mendu, Mendwana, Mpenzu, Bhula and Suku Rivers. Although outside the border of Dwesa Nature Reserve, the Nqabara Estuary is important and should be protected and conserved as part of this Management Plan. All estuaries are important from a conservation point of view. They all act as nursery areas for marine fishes, contribute to overall biological diversity and greatly enhance the scenic beauty and variety of the coast. The Mbanyana River north of the Mbashe is unique in that a waterfall effectively segments the river, limiting the intrusion of salt water. There are also a number of small pans, wetlands and vleis in the area. According to the few water quality studies that have been done, the overall quality of the water is good with a tendency to high nitrate levels. The Mbashe River has silted up considerably because of poor agricultural practices in the catchment area, and the river continues to pour tons of silt into the marine environment whenever it rains.

The Mbashe, and to a lesser extent the Nqabara, estuaries are extensively used for recreational angling and The Haven Hotel has traditionally catered for recreational anglers. Local communities increasingly make use of the estuaries, targeting kob and mangroves.

### **1.5.7 Heritage resources**

There are very few data regarding heritage resources in the Dwesa-Cwebe Nature Reserve. Shell middens are present throughout the reserve but their origins and value have

not been assessed and they have not been mapped. There is a wreck site (the O' Bell 1916) near the mouth of the Mendu River. On major holidays, community members access the shore in large numbers at both Dwesa and Cwebe.

### **1.5.8 Reserve infrastructure**

Dwesa: The visitor housing infrastructure at consists of:

- Eight Chalets set in the forest - condition moderate to poor
- A Camp site with a newly built communal ablution block and an old ablution block
- Two hiking trail huts at Nqabara Mouth, in good condition (outside reserve)

The main office complex and a meeting hall with kitchen facilities are located at the Main Gate [Dwesa Gate No 1]. The office complex has sufficient space for present management purposes, has a telephone line, and is in reasonable condition. The building is not ESKOM electrified but two small generators supply power. A wooden research station (moderate to poor condition) formerly operated by the University of Transkei (now Walter Sisulu University) is also located near the main gate. Dwesa has a further 5 staffed entrance gates, more or less evenly spaced along the inland border of the reserve. Each gate has at least one staff house but the buildings are rudimentary and in urgent need of upgrading/renovation. Water supply is problematic and relies mainly on rain water. In most cases staff are permitted to cultivate small gardens for their personal use.

The main stores complex is located in a separately fenced area outside the western boundary fence of the reserve. This complex has sufficient space, but buildings are rudimentary and workshop equipment primitive and inadequate. A number of staff houses, all substandard, are located inside the stores enclosure. The stores complex urgently needs upgrading.

The majority of Dwesa staff live in villages outside the reserve. Official accommodation comprises four standard official houses near the stores enclosure [all in need of renovation], nine single quarter huts located in the stores enclosure, accommodation for Field Rangers and Gate Guards located at each of the five subsidiary entrance gates and the old foresters residence near the Kobole River.

The visitor housing infrastructure at Cwebe consists of:

- The Haven Hotel in moderate to poor condition – currently a private concession

- Two hiking trail huts near the Mbashe Estuary
- Two groups of private holiday cottages (Ntlonyana and Mbanyana)

The reserve office is located at the Cwebe Main Gate [Cwebe Gate No 2], The office buildings are substandard and not appropriate for normal management purposes. The office is not electrified and basic office equipment is lacking. Two staff houses in fairly good condition are located near the office, one for the Reserve Manager and one for the senior Foreman. There are also seven huts which are substandard but occupied.

The majority of staff live in villages outside the reserve. Four Field Ranger substations are located inside the Cwebe Nature Reserve, but not at entrance gates. One of the substations monitors access to the Mbashe Estuary via a boom gate and supervises the Mbashe Hiking Trail Huts, while three others are distributed to facilitate regulatory activities. Infrastructure at all the substations is in need of renovation and upgrading. The station next to the Suku River road dates from an earlier Forestry Station and can become a sound management asset if upgraded and renovated. Other than the main gate Cwebe has one additional staffed entrance gate [Cwebe Gate No 1] with a few associated staff houses, which require upgrading. Water supply is problematic and normally relies on rain water. Staff are permitted to cultivate small gardens for their personal use. There are a further 2 gates where local people gain access to various sectors of Cwebe Nature Reserve.

Cwebe Nature Reserve does not have an adequate stores complex, or workshop facilities. Fencing material is stored outside, or at the main Field Ranger station.

Both Dwesa and Cwebe are served by management tracks which become impassable in wet conditions. In general 4X4 vehicles are required for management purposes. There are a total of 8 low-water bridges/causeways, all of which requires regular maintenance and repair. The causeway over the Mpenzu stream has been repaired by Portnet in order to secure access to the Mbashe Lighthouse, and the reserve is committed to maintaining this causeway. Access from Dwesa to Cwebe is problematic for management. Present options are to travel by road via Mendwana (two hours on a very bad road) or to travel by 4x4 to the Mbashe River, cross the river by boat, and arrange secondary transport on the other side.

Water is supplied to the Dwesa chalets by gravity feed from a reservoir inside the reserve which is filled in turn from a reservoir outside the reserve. The outside reservoir and treatment works are supplied by pumping from the Ngomane River and are serviced by the

Amatola District Council. Water is of low quality and the supply is limited. Staff houses at Dwesa have no rainwater tanks, and staff have to carry water from streams or use rain water. The Haven Hotel is supplied from a bore-hole, as well as from a weir with pump-house in the Mpenzu River. Bore-holes tend to supply low-quality water in variable quantities. At Cwebe, water is pumped from the Mbanyana River via a treatment works to reservoirs which gravity feed the administration area.

After 1978 the reserves were fenced with 2.5 m fencing that was suitable to contain animals such as White Rhinoceros and Eland. Over the last ten years much theft and vandalism has occurred, and there have been very little resources to maintain the fences. Fencing is now in bad condition, with an estimated 70% of the fence-line no longer viable. Many gates are corroded and need to be replaced. Cwebe is not fenced at all

## 1.6 Strengths, Weaknesses, Opportunities and Threats

The SWOT analysis has been used to guide the development of the SMP and the focus of the goals, objectives, activities and deliverables for the Dwesa-Cwebe Nature Reserve.

**Table 1.** SWOT analysis for Dwesa-Cwebe Nature Reserve based on inputs from the Reserve manager.

<b>STRENGTHS</b>	<b>WEAKNESSES</b>
<p style="text-align: center;"><b>STRENGTHS</b></p> <ul style="list-style-type: none"> <li>• Largely pristine environment</li> <li>• Large reserve</li> <li>• Large tracts of indigenous forest</li> <li>• Interesting environment, mosaic of tree species from Cape and Natal areas</li> <li>• Endemic tree species – Forest Iron plum (<i>Drypetes sp.</i>)</li> <li>• Fairly good internal roads</li> <li>• Scenic landscapes, estuaries and coastline</li> <li>• Resolved land claim</li> <li>• Fairly good access roads from Willowvale</li> </ul>	<p style="text-align: center;"><b>WEAKNESSES</b></p> <ul style="list-style-type: none"> <li>• Cwebe Nature Reserve is a reserve on paper but there are currently very few controls on activities within the reserve. The reserve needs to be reclaimed</li> <li>• No monitoring and enforcement of the MPA by MCM</li> <li>• Lack of fencing</li> <li>• Little game and veld management is practised</li> <li>• The reserve does not possess two-way radios, limiting productivity and effectiveness since reserve staff based at different outposts and cannot communicate with each other</li> <li>• No electricity currently on the reserve</li> </ul>
<p style="text-align: center;"><b>OPPORTUNITIES</b></p> <ul style="list-style-type: none"> <li>• Potential for tourism exists – bird watching, horseriding, and bike trails, dolphin, sardine and whale watching from high vantage points</li> <li>• Research opportunities – especially as MPA joins terrestrial protected area</li> <li>• The Co-Management agreement between community and management could provide a model for other areas</li> </ul>	<p style="text-align: center;"><b>THREATS</b></p> <ul style="list-style-type: none"> <li>• Incomplete fencing – 17 km not fenced at Dwesa, 15 km in poor repair, and the whole of Cwebe (11 km) is not fenced</li> <li>• Adjacent communities are expanding</li> <li>• Agreement between the community and management authority must be clarified</li> <li>• Cwebe – the hotel and staff cottages are situated within the reserve boundaries</li> <li>• Poaching is a threat – particularly abalone</li> <li>• MCM provide no enforcement assistance and Field staff not mandated to enforce MLRA regulations</li> </ul>

## 2 MANAGEMENT OBJECTIVES FRAMEWORK

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The strategic management planning process begins with the definition of the reserve *purpose*. This purpose is captured in a clear *vision* of the desired future conditions of the reserve, supported by the underpinning operating *principles*. It then identifies the management *goals* for the reserve. The major goals of the Strategic Management Plan are broadly described as *Key Result Areas* (KRA). For each goal, a number of management *objectives* are identified. The management objectives are then made operational through the identification of key implementation *activities*. Implementation activities for each KRA are prioritized for the five-year time horizon of the plan. Time frames, deliverables, performance indicators and responsibilities are then allocated for each activity, or a group of linked activities.

These goals, objectives, activities, time frames, deliverables, performance indicators and targets are presented in Section 3 in a tabular log frame format for each KRA

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### 2.1 Reserve Purpose

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The Dwesa-Cwebe Nature Reserve conserves coastal forests that are amongst the largest remaining indigenous coastal forests on the Eastern Cape Coast, and they have a unique floristic composition. The reserve also conserves a southern sourveld grassland type that is not protected elsewhere. Furthermore, the Dwesa – Cwebe ecosystem complex that includes the MPA and the estuarine environment provides a habitat that is critical to the survival of a number of collapsed fish stocks.

The primary purpose of the reserves then is the ***conservation of this unique biodiversity***.

While conserving this biodiversity, the secondary purpose is to sustainably use the biodiversity of the Reserve for:

- i) The development of high quality nature-based tourism infrastructure, facilities and services;
- ii) The delivery of socio-economic benefits to local communities on communal landholdings immediately adjoining the Reserve;
- iii) Better integration of the Reserve into adjacent land use planning and development; and

iv)The development of opportunities to increase income generation without compromising the integrity of the area's biodiversity.

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## 2.2 Reserve Principles

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The following principles underpin the management activities of the Dwesa-Cwebe Nature Reserve as it moves towards realizing its vision (see below). These principles are reflected in the goals, objectives and activities described for each of the Key Result Areas (KRAs) detailed below. It is important to note that while these principles are intended to guide the Reserve Management in its work, reserves are also subject to the principles and provisions of relevant international treaties and conventions, national and provincial legislation and policy, and any local contractual agreements.

*Custodianship* - Reserve management<sup>1</sup> will seek to respect, protect and promote the Dwesa-Cwebe Nature Reserve, and its environmental and heritage resources, as a common heritage and a national asset for all South Africans (KRA 1 and KRA 2).

*Capacity* – Reserve management will seek to ensure that the management of the Dwesa-Cwebe Nature Reserve is adequately resourced to meet its mandated and ethical responsibilities in the effective management of the respective reserves (KRA 4 and KRA 6).

*Cooperation and Partnerships* - Reserve management will seek to work co-operatively and in partnership with public institutions, the private sector, NGO's and local communities to: anticipate, avoid and resolve potential conflicts; protect the reserves resources and values; provide for visitor enjoyment; and address mutual interests in the quality of life of the surrounding communities (KRA 3)

*Alignment and Integration* - Reserve management will seek to align and integrate the reserves management activities and priorities into, and with, the relevant local and regional institutional, socio-economic, developmental and conservation context (KRA 1).

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<sup>1</sup> For the purposes of this *Strategic Management Plan*, "Reserve Management" means the Reserves Management institution/s, the Scientific Services supporting services and the executive officers and personnel appointed by ECPB to support, plan and manage the Park. "The Reserve" means the land and areas formally proclaimed, or designated for proclamation, as a Provincial Nature Reserve or other formal protected area designation.

*Empowerment* - Reserve management will seek to empower staff and stakeholders involved with the reserves by promoting capacity building, transformation and access to economic opportunities (KRA 3, KRA 6 and KRA 7)

*Culture of learning* – Reserve management will aim for continual improvement through both a scientific based approach that provides the basis for informed decision making, and a creative and collaborative approach to problem solving and learning (KRA 7).

*Access:* Reserve management shall seek to ensure that stakeholders shall have equitable, sustainable, and managed access to the reserves and the benefits that are derived from the reserves (KRA 5).

*Accountability and transparency* - Reserve management will seek to ensure that management tasks in the Dwesa-Cwebe Nature Reserve are carried out efficiently and within stipulated time frames, productivity is increased, costs are controlled and impacts are managed, with integrity and in compliance with applicable laws (KRA 6 and KRA 7).

*Sustainability* – Reserve management will seek to achieve a balance between ecological sustainability, social equity and economic efficiency so that present needs are met without compromising the ability of future generations to meet their own needs (KRA 2, KRA 3 and KRA 7).

*Management excellence* - Reserve management will seek to attain excellence in managing the Dwesa-Cwebe Nature Reserve and serving the communities that live near it, and visitors that use it, through accountable and informed decision-making, and co-ordination, co-operation and integration with relevant government agencies and stakeholders (KRA 1, KRA 4, KRA 5, KRA 6 and KRA 7).

In practical terms, the Reserve Management needs to ensure that the following requirements for the effective management of the Dwesa-Cwebe Nature Reserve are adequately addressed:

- The necessary *mandate, human capacity and financial resources* to implement and achieve the objectives and activities described in the strategic management plan;

- A clear definition of *roles and responsibilities* of partner institutions and stakeholders in the implementation of the strategic management plan;
  - The delivery of *tangible benefits* to local communities that outweigh their social and economic costs (i.e. they are cost-effective).
  - *Flexibility of service delivery* that encourages innovation and a wide range of government, community and non-government sector involvement.
  - *Performance indicators and accountability measures* that provide for regular review of outcomes.
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## 2.3 Reserve Vision

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*To develop Dwesa and Cwebe Nature Reserves as models of community-owned natural resources managed in partnership with conservation authorities in a manner that conserves a unique biodiversity and habitat mosaic, while providing sustainable benefits to the Dwesa-Cwebe Communities.*

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## 2.4 Goals and Key Result Areas

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The following overarching management Goals and associated Key Result Areas were developed to direct the management of the Dwesa-Cwebe Nature Reserve:

### KRA 1: RESERVE PLANNING AND EXPANSION

Goal: To ensure that the planning and expansion of the Dwesa-Cwebe Nature Reserve maintains and enhances the integrity of its ecological, cultural and scenic resources; promotes its financial sustainability; and is integrated and coordinated with the development and planning of the surrounding areas.

### KRA 2: BIODIVERSITY AND HERITAGE RESOURCES

Goal: To promote the long-term conservation, rehabilitation and restoration of the biodiversity, scenic, and heritage features of the Reserve, and to minimize operational impacts on the environment.

### KRA 3: STAKEHOLDER INVOLVEMENT

Goal: To establish and nurture co-operative, collaborative and mutually beneficial relationships with stakeholders to ensure the long-term sustainability of the Dwesa-Cwebe Nature Reserve.

### KRA 4: INFRASTRUCTURE AND EQUIPMENT

Goal: To ensure the provision, installation, development, and maintenance of adequate and appropriate reserve infrastructure and equipment that supports effective conservation management and provision of visitor facilities and services.

### KRA 5. VISITOR SERVICES AND FACILITIES

Goal: To effectively market, provide, and maintain a unique experience and good service and facilities to all users of, and visitors to, the Dwesa-Cwebe Nature Reserve.

### KRA 6: RESERVE ADMINISTRATION

Goal: To develop the administrative capacity, human resources, and financial resources to support the implementation of the Reserve's strategic management plan and to meet the required legal responsibilities.

### KRA 7: KNOWLEDGE MANAGEMENT

Goal: To ensure that relevant scientific research and monitoring guides the improving management of the Dwesa-Cwebe Nature Reserve, and results in information that is readily accessible to managers and relevant stakeholders.

### KRA 8: EDUCATION, INTERPRETATION AND AWARENESS

Goal: To develop education, interpretation and awareness programs, facilities and services to improve reserve visitors, users and staff awareness about the ECPB, the Reserve and conservation in general.

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## **2.5 Objectives and activities**

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Each of the *Key Result Areas* is introduced by:

- ii) A demonstration of the strategic link between the KRA and the ECPB corporate strategy

- ii) A brief description of the Reserve's strategic approach to addressing the KRA

Each *KRA* is directed by a number of *objectives*. Each objective will be achieved through a set of *activities* and will result in a number of *deliverables* within a defined *time frame*. The prioritized achievement of the objectives will be monitored using *performance indicators* within a set *time frame*. These objectives, activities, time frames performance indicators, and deliverables are presented in a log frame format for each KRA.

For the purposes of monitoring the progress and performance of the Dwesa-Cwebe Nature Reserve management in achieving the defined strategic objectives for each KRA, the measurable progress on actions, the delivery of defined products and the realisation of outcomes shall be used as performance indicators in this SMP.

It is expected that the reserve manager shall take full responsibility for the implementation of, and reporting on, this SMP. The Regional Manager: East shall be directly responsible for the strategic oversight of the implementation of this SMP. The ECPB supporting Directorates, notably Scientific Services, Tourism and Finance shall provide direct professional, technical and administrative support in the implementation of the SMP under the strategic guidance of the reserve manager and regional manager.

### 3 STRATEGIC IMPLEMENTATION FRAMEWORK

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#### 3.1 KRA 1: Reserve Planning and Expansion

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This KRA relates directly to the Strategic Goal 1: *Best Practice Bio-Diversity and Cultural Resource Conservation* of the ECPB's Strategic Plan. More specifically, the KRA responds to both the strategic objective *Establish effective measures to conserve all elements of biodiversity in the Eastern Cape by 2010*. Relevant interventions defined to achieve this goal and objective are: *i) Revise/amend legislation to address constraints of boundaries; ii) Plan and implement a strategy to expand, consolidate or deproclaim protected areas in the best interests of biodiversity conservation; iii) Update and develop integrated Management Plans for each Protected Area, vi) Implement, monitor and review Protected Area Management Plans*

The short-term and medium term focus for the **legal and management** rationalization, and reserve expansion component of this KRA is: i) The verification and alignment of the legal and management boundaries of the Dwesa-Cwebe Nature reserve; ii) The delegation of management authority for the State Forests and MPA to the ECPB; iii) The integration of the Reserve planning priorities into the local and district municipal IDPs; iv) The possible expansion of the Dwesa-Cwebe Nature Reserve, through informal or formal management agreements, to establish a larger regional co-operative conservation estate. The expansion goals for the reserve will only be addressed through formal negotiation and agreement with affected public institutions and legitimate local community structures.

The development of detailed **subsidiary plans** with regard to tourism, recreation, management, services and facilities are priorities for the Conservation Development Framework (CDF) that forms part of this Integrated Environmental Management Plan. Effective planning for the Reserve will also require the implementation of mechanisms to ensure **annual review and updating** of the Integrated Management Plan for the Dwesa-Cwebe Nature Reserve.

KRA1: RESERVE PLANNING AND EXPANSION									
<b>GOAL:</b> : To ensure that the planning and expansion of the Dwesa-Cwebe Nature Reserve maintains and enhances the integrity of its ecological and scenic resources; enables its financial sustainability; and is integrated and coordinated with the development and planning of the surrounding areas.									
<b>OBJECTIVE 1:</b> Rationalise the legal tenure of, and management authority for, the Dwesa-Cwebe Nature Reserve									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Establish and align the legal and management boundaries of the Dwesa-Cwebe Nature reserve.	✓	✓				High	Surveyed and mapped boundaries	Extent of land (ha) incorporated into reserve	TBD (based on discussions with community)
2. Ensure the proper demarcation of the proclaimed boundaries of the Dwesa-Cwebe Nature Reserve, including reclaiming existing proclaimed areas under illegal private use	✓	✓	✓			High		Extent of land (ha) incorporated into reserve	TBD (based on outcome of discussions with community)
3. Formalise and draw up the required lease agreement between ECPB and the Dwesa Land Trust for the lease of the Dwesa-Cwebe reserve land by conservation authorities	✓	✓				High	Contractual management agreement	No. of disputes between ECPB and communities	No disputes between ECPB and communities
4. Pursue the development of a contractual agreement between MCM and ECPB for the delegation of management responsibility for the MPA adjacent to the Dwesa-Cwebe Nature Reserve	✓	✓				High	Contractual management agreements		TBD (by comparison with type and number of current marine enforcement incidents)
5. Pursue the development of a contractual agreement between DWAF and ECPB for the delegation of management responsibility for Forest Reserves to the Dwesa-Cwebe Nature Reserve and proclaim the forests at the appropriate level of formal conservation status	✓	✓				High	Contractual management agreements		
6. Pursue the provision of formal title deeds to the land of the Dwesa-Cwebe Nature Reserve for the D-C Land Trust	✓	✓				High	Title Deeds		Title deeds lodged with D-C Land Trust within two years

KRA1: RESERVE PLANNING AND EXPANSION									
GOAL: : To ensure that the planning and expansion of the Dwesa-Cwebe Nature Reserve maintains and enhances the integrity of its ecological and scenic resources; enables its financial sustainability; and is integrated and coordinated with the development and planning of the surrounding areas.									
OBJECTIVE 2: Consolidate and expand the extent of the Dwesa-Cwebe Nature Reserve to ensure the maintenance of ecological patterns and processes									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Develop, and maintain a simple and functional land consolidation and expansion program to guide the expansion and consolidation priorities for the Dwesa-Cwebe Nature Reserve	✓	✓	✓	✓	✓	Low	Land consolidation and expansion program	Extent of land (ha) proclaimed and management as a Provincial Nature Reserve	TBD (Expansion programme)
2. Initiate discussions with Dwesa-Cwebe Community Land Trust and other relevant community representatives to explore the development of mutually beneficial contractual agreements that will commit the use of the area between the Nqabara River the southern boundary of Dwesa to conservation.	✓	✓	✓	✓	✓	Moderate	Contractual management agreements		
3. Initiate discussions with MCM to explore legal requirements associated with the declaration of the tidal portion of the Nqabara River as a protected estuary	✓	✓	✓	✓	✓	High	Contractual management agreements	Extent of estuarine habitat (ha) proclaimed and managed as Provincial Nature Reserve	
4. Explore funding options to finance negotiated contractual agreements for the expansion of the Reserve		✓	✓			Moderate			
5. Ensure that all areas currently incorporated into, and future areas included in, the Dwesa-Cwebe Nature Reserve are formally proclaimed	✓	✓	✓	✓	✓	High			

**KRA1: RESERVE PLANNING AND EXPANSION**

**GOAL:** : To ensure that the planning and expansion of the Dwesa-Cwebe Nature Reserve maintains and enhances the integrity of its ecological and scenic resources; enables its financial sustainability; and is integrated and coordinated with the development and planning of the surrounding areas.

**OBJECTIVE 3:** Develop key subsidiary plans to provide program-specific information on the broad objectives and activities identified in the Strategic Management Plan

Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
	1. Prepare a detailed invasive alien plant eradication and control strategy and program for the Dwesa-Cwebe Nature Reserve that meets the requirements of the Biodiversity Act (2004)	✓	✓						
2. Prepare a detailed tourism development master plan for the Dwesa-Cwebe Nature Reserve with a focus on a range of infrastructure and accommodation types to suit the existing and developing eco-tourism market. This will include upgrading and new building	✓	✓				High	Tourism Development Plan		
3. . Prepare a detailed wildlife management plan for the Dwesa-Cwebe Nature Reserve		✓	✓			Low	Wildlife Management Plan		
4. Prepare a detailed fire management plan for the Dwesa-Cwebe Nature Reserve that meets the legal requirements in terms of the Veld and Forest Fire Act (1999)	✓	✓				High	Fire Management Plan.		

KRA1: RESERVE PLANNING AND EXPANSION									
GOAL: : To ensure that the planning and expansion of the Dwesa-Cwebe Nature Reserve maintains and enhances the integrity of its ecological and scenic resources; enables its financial sustainability; and is integrated and coordinated with the development and planning of the surrounding areas.									
OBJECTIVE 4: Maintain institutional mechanisms for the ongoing review and update of the integrated management plan									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Maintain a small Reserve Planning Team (RPT) comprising at least the Regional Manager, Reserve Manager, senior reserve management staff, ECPB Scientific Services and a representative of the cooperative governance structure established for the Dwesa-Cwebe Nature Reserve to guide the review of the SMP	✓	✓	✓	✓	✓	High			
2. Collect and maintain the information required to report on the performance indicators, and progress achieved toward meeting the listed targets in the Strategic Management Plan		✓	✓	✓	✓	High			
3. Undertake an annual audit and update of the Strategic Management Plan		✓	✓	✓	✓	High	Updated and approved SMP	Annual performance audit report	Audit completed, and SMP updated every year
4. Undertake a quarterly audit and annual update of the Annual Operational Plan		✓	✓	✓	✓	High	Approved AOP for financial year	Annual performance audit report	Quarterly audit completed, and AOP updated every year
5. Provide performance data, in the required format, to the ECPB for integration into the corporate annual reports	✓	✓	✓	✓	✓	Moderate	Annual performance audit report		

<b>KRA1: RESERVE PLANNING AND EXPANSION</b>									
<b>GOAL: : To ensure that the planning and expansion of the Dwesa-Cwebe Nature Reserve maintains and enhances the integrity of its ecological and scenic resources; enables its financial sustainability; and is integrated and coordinated with the development and planning of the surrounding areas.</b>									
<b>OBJECTIVE 5: To participate in regional land use and conservation planning initiatives surrounding the Reserve</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Actively participate in regional and local land use planning initiatives affecting the area surrounding the Reserve, e.g. IDP and SDF planning for Mbashe Local Municipality, Elliotdale and Willowvate District Councils and OR Tambo District Municipality	✓	✓	✓	✓	✓	Moderate		Number of regional and local land use and conservation planning initiatives that Reserve is involved in	Involvement in all relevant local land use and conservation planning processes affecting reserve
2. Actively participate in regional and local conservation initiatives affecting the conservation status of the reserve e.g. GEF-funded Wild Coast Program, National and Regional Spatial Biodiversity Assessment programmes	✓	✓	✓	✓	✓	Moderate			

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### 3.2 KRA2: Biodiversity and Heritage Resources

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This KRA relates directly to the Strategic Goal 1: *Best Practice Bio-Diversity and Cultural Resource Conservation of the ECPB's Strategic Plan*. More specifically, it responds to the strategic objective *Establish effective measures to conserve all elements of biodiversity in the Eastern Cape by 2010*. Relevant interventions defined to achieve this goal and objective are: *i) Develop Province-wide Protected Area Plans that include biodiversity surveys, cultural resources surveys, threat assessments, target identifications and implementation strategies; ii) Implement special projects e.g. removal of alien species, iii) Research and manage impacts and reduce threats to biodiversity conservation in protected areas iv) Determine sustainable resource use levels and develop subsidiary management plans to address specific issues; v) Monitor key biodiversity indicators.*

The medium-term focus for the **wildlife management** component, of this KRA is: i) The removal of extra-limital game species; ii) The re-introduction of appropriate locally indigenous fauna; iii) The active management of selected large game species; iv) The re-establishment, upkeep, control of theft, and re-alignment, of fencing; v) The annual census of large game.

The medium-term focus for **vegetation management** component, of this KRA is: i) The development of good baseline and monitoring information for forests, thicket, fynbos and grasslands; ii). The development of a fire management plan to manage the grasslands for optimal biodiversity and stocking rates iii) The review, implementation, enforcement and monitoring of the resource-use agreements for the harvesting of forest and grassland products.

The medium-term focus for the **invasive alien species control** component of this KRA is i) The sourcing of funding for sustaining invasive alien species control programs; ii) The implementation of an invasive alien control program with a focus on the (in order of priority) grassland, thicket and forest vegetation iii) The development of good baseline mapping and monitoring information

The medium-term focus for the **biodiversity monitoring** component of this KRA is i) The establishment of monitoring programs; ii) The maintenance of existing monitoring programs and iii) The collection of key baseline information.

The medium-term focus for the **rehabilitation and restoration** component of this KRA is i) The restoration and rehabilitation of transformed and disturbed habitats at selected sites; ii) The control of erosion iii) The demolition of old buildings and reservoirs and rehabilitation of these sites.

The medium-term focus for the **heritage** management component of this KRA is I) Strengthening the linkages of the Dwesa-Cwebe Nature Reserve to local and regional heritage management projects and tourism routes; ii) The mapping and securing of middens; iii) The upgrading of access to the Mendu wreck site

The medium-term focus for the **compliance** component of this KRA is I) The control of illegal hunting and poaching of natural resources ii) The management and control of access to the Reserve; iii) The development of the staff skills base; iv) The maintenance of the compliance and enforcement capacity v) The integration of the Dwesa-Cwebe Nature Reserve into local and regional compliance and enforcement initiatives.

The medium-term focus for the **managing impacts** component of this KRA is I) The development of off-reserve solid waste disposal mechanisms; ii) Adoption of the EIA procedures for developments iii) The evaluation of alternative road surfacing designs for the internal management tracks.

<b>KRA2: BIODIVERSITY AND HERITAGE RESOURCES</b>									
<b>GOAL: To promote the long-term conservation, rehabilitation and restoration of the biodiversity, scenic, and heritage features of the Reserve, and to minimize operational impacts on the environment.</b>									
<b>OBJECTIVE 1: To remove invasive alien plants from the Reserve and maintain a follow-up program</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Finalise delivery of 1:10 000 vegetation maps and map the distribution and density of the most harmful invasive and alien plant species in the Reserve	✓	✓				High	Map of distribution and density of invasive alien plants		
2. Develop a detailed implementation plan for the prioritized removal, and control of re-growth, of the high priority invasive and alien plant species	✓	✓				High	Invasive alien plant control implementation plan	Extent of areas (ha) invaded/ invasive plant species	Entire reserve under maintenance program by year 5
3. Source funding for the implementation of the plan, including but not limited to reserve operational funding, Poverty Relief funding, Working for Water funding. Resolve problem issues with Working for Water management.	✓	✓	✓	✓	✓	High	Funding for alien invasive control	Income (Rands) committed to the implementation of the Invasive alien plant eradication and control program	TBD (based on funds available)
4. Implement the invasive alien plant eradication and control programme, with an initial focus on the eradication of bugweed and inkberry in Dwesa and lantana and guava in Cwebe		✓	✓	✓	✓	High		Extent (ha) of area cleared or under maintenance per annum	70% of targeted invasive aliens cleared from grassland and thicket habitats by year 5
5. Regularly monitor the efficiency and cost-effectiveness of invasive plant species control techniques and update the plan as required		✓	✓	✓	✓	High		Cost (Rands) of clearing and control per ha	Clearing costs do not exceed R10,000/ha (initial clearing) and R4000/ha (follow up)
6. Maintain key baseline and monitoring information on the implementation of the invasive alien and invasive species control programme		✓	✓	✓	✓	High	Invasive alien plant distribution and control database		

<b>KRA2: BIODIVERSITY AND HERITAGE RESOURCES</b>									
<b>GOAL: To promote the long-term extension and conservation, rehabilitation and restoration of the Reserve's biodiversity, scenic, historic and cultural features, and to minimize operational impacts on the environment</b>									
<b>OBJECTIVE 2: To develop and implement a Fire Management Plan</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. In consultation with grassland ecologists and fire management specialists, develop a fire management plan for the Dwesa-Cwebe Nature Reserve	✓	✓				High	Fire management policy and program	Frequency and extent of human induced and natural fires	No accidental human-induced wildfires
2. Establish, equip, train and maintain a well-resourced and well-trained fire fighting capacity for the Reserve	✓	✓	✓	✓	✓	High	Effective fire fighting unit	Injuries to staff and damage to Reserve Infrastructure	No injuries to staff or damage to infrastructure
3. Implement grassland management in the Reserve by controlled burning according to the fire management plan		✓	✓	✓	✓	Moderate			
4. Determine and meet Reserve management legal responsibilities for fire management in terms of the Veld and Forest Fire Act (without compromising the ecological integrity of the Reserve)	✓	✓	✓	✓	✓	Moderate			
5. When fencing is completed, develop and maintain functional firebreaks along the Reserve fence (VFFA).	✓	✓	✓	✓	✓	High			
6. Maintain accurate fire history records that provide details of the timing, cause and extent of fires in the Reserve.	✓	✓	✓	✓	✓	Moderate	Database of fire incidence	Records of fire incidence	All relevant fire incidence data recorded
7. Develop and implement a fire and veld management awareness program. Collaborate with local communities on the management of fire, fire risks, and fuel loads in areas adjacent to the Reserve.	✓	✓	✓	✓	✓	High			

<b>KRA2: BIODIVERSITY AND HERITAGE RESOURCES</b>									
<b>GOAL: To promote the long-term extension and conservation, rehabilitation and restoration of the Reserve's biodiversity, scenic, historic and cultural features, and to minimize operational impacts on the environment</b>									
<b>OBJECTIVE 3: To maintain an effective enforcement capacity to control illegal activities and impacts of Reserve users and visitors</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Provide adequate equipment and training for enforcement and compliance activities.	✓	✓	✓	✓	✓	High	Training courses and Enforcement/compliance equipment	Training records	One training course per annum for each compliance/enforcement staff
2. Ensure the effective deployment and equipping of the enforcement and compliance staff complement	✓	✓	✓	✓	✓	High		Number of successful prosecutions Number of fines issued Income (Rands) generated from fines	10 prosecutions/annum 50 fines/annum R50 000/annum
3. Maintain regular Reserve patrols particularly along Reserve boundaries, the seashore, and the Mbashe River	✓	✓	✓	✓	✓	High		Successful prosecutions for illegal marine resource harvesting	
4. Direct field staff enforcement activities towards the management of terrestrial and marine poaching, mitigating visitor impacts and ensuring security of visitors	✓	✓	✓	✓	✓	High		Number of FCO	All field rangers as FCOs by year 2
5. Develop and maintain better understanding and working relationships with local magistrates and SAPS		✓	✓	✓	✓	Moderate			
6. Obtain Fishery Control Officer status for all field staff to improve enforcement of Marine Living Resource Act regulations	✓	✓				High			
7. Maintain and collate information on all incidents to enable effective deployment of enforcement and compliance resources and capacity	✓	✓	✓	✓	✓	High	Incident database	Trends in number of incidents	Reduction of number of resource use incidents by 50% by year 5
8. Institute discussions with communities regarding access to the Reserve and individual responsibilities inside the Reserve	✓	✓				Moderate			

<b>KRA2: BIODIVERSITY AND HERITAGE RESOURCES</b>									
<b>GOAL: To promote the long-term extension and conservation, rehabilitation and restoration of the Reserve's biodiversity, scenic, historic and cultural features, and to minimize operational impacts on the environment</b>									
<b>OBJECTIVE 4: To re-establish, manage and maintain populations of locally indigenous faunal species which historically occurred in the Reserve</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Remove, where practicable, all the extra-limital species from the Dwesa-Cwebe Nature Reserve, with a focus on the white rhino, Zebra and Blue Wildebeest	✓	✓	✓	✓	✓	Moderate		Number of extra-limital large and medium-sized animals/species	No large and medium-sized extra-limital species in D-C Nature Reserve by year 5
2. Under direction of a Wildlife Management Plan and other specialist scientific and ecological advice, phase in the introduction of locally indigenous bulk grazers to the Dwesa-Cwebe Nature Reserve (eland, red hartebeest, oribi)			✓	✓	✓	Moderate		Bulk grazer population profiles (numbers, distribution, M:F:Juv ratios)	TBD (Wildlife Management Plan)
3. Ensure regular maintenance of the perimeter fencing to meet the requirements for a Certificate of Adequate Enclosure (CAE). Identify, and implement effective and environmentally friendly means to fence across the river bank of the Mbashe River to contain escapes of large, dangerous herbivores (white rhino, buffalo)	✓	✓	✓	✓	✓	High		Compliance with Certificate of Adequate Enclosure (CAE) Number of large herbivore escape incidents	100% compliance with CAE requirements  2 or less escape incidents/annum
4. Maintain an annual game census of large mammals. Maintain foot patrol game counts with a focus on assessing forest dwelling rhino and buffalo populations.	✓	✓	✓	✓	✓	Moderate		Large and medium-size game profiles(number, distribution, M:F:Juv ratios)	TBD (Wildlife Management Plan)
5. Based on the outcomes of the annual game census, and the population profile requirements determined in the Wildlife Management Plan for the Reserve, maintain a restocking and/or culling/capture operation for medium-sized and large game			✓	✓	✓	Moderate			

<b>KRA2: BIODIVERSITY AND HERITAGE RESOURCES</b>									
<b>GOAL: To promote the long-term extension and conservation, rehabilitation and restoration of the Reserve's biodiversity, scenic, historic and cultural features, and to minimize operational impacts on the environment</b>									
<b>OBJECTIVE 4: To re-establish, manage and maintain populations of locally indigenous faunal species which historically occurred in the Reserve</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
6. Monitor the impacts of large and medium sized herbivores (and any other important species identified in the Wildlife Management Plan) on vegetation communities and indicator plant species, and adapt stocking rates accordingly			✓	✓	✓	Moderate	Updated Wildlife Management Plan, with complementary species plans		
7. Under direction of specialist scientific advice, determine the disease status of the buffalo population.			✓	✓	✓	Moderate			
8. Develop a policy for the management of problem animals	✓	✓	✓	✓	✓	High	Problem animal policy	Numbers of problem animal incidents	No problem animal incidents.
9. Develop a plan and procedures that reduce the conflicts between monkeys and visitors	✓	✓	✓	✓	✓	High	Plan and procedures for managing monkey-visitor conflicts	Visitor complaints about monkeys	No visitor complaints

<b>KRA2: BIODIVERSITY AND HERITAGE RESOURCES</b>									
<b>GOAL: To promote the long-term extension and conservation, rehabilitation and restoration of the Reserve's biodiversity, scenic, historic and cultural features, and to minimize operational impacts on the environment.</b>									
OBJECTIVE 5: To develop forest and grassland resource use agreements with the Dwesa-Cwebe communities that are compatible with the Nature Reserve's biodiversity conservation function.									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Implement programme to determine status of forest and grassland species currently utilised by communities	✓	✓	✓			High	Forest species status report	Profiles (species, structural profile, % cover) of threatened forest species	No target
2. With immediate effect develop resource use agreements with the CMC for firewood, gum and wattle, and thatching grass	✓	✓	✓			High	Contractual agreements		
2. Develop forest and grassland product resource use agreements with the CMC for other species based on status report of forest species	✓	✓	✓			High			
3. Initiate discussions with local chiefs and the CMC to resolve issues related to a) cutting of fences to allow grazing of cattle within the Dwes-Cwebe Nature Reserve and b) the possible impact of cattle-buffalo interactions on the previously disease free status of buffalo	✓	✓	✓			High	Agreement on grazing rights within D-C Reserve		

<b>KRA2: BIODIVERSITY AND HERITAGE RESOURCES</b>									
<b>GOAL: To promote the long-term extension and conservation, rehabilitation and restoration of the Reserve's biodiversity, scenic, historic and cultural features, and to minimize operational impacts on the environment.</b>									
<b>OBJECTIVE 6: To develop and maintain targeted collection of baseline data and focussed monitoring of components of the Dwesa-Cwebe Nature Reserve's biodiversity</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Implement and maintain a vegetation monitoring program as a decision-support tool for 1) determining the carrying capacity of the large and medium-sized herbivore populations and 2) ongoing assessment of the biodiversity status of the Reserve		✓	✓	✓	✓	Moderate	Vegetation database	Profiles (species, structural profile, % cover) of vegetation change at fixed sites or transects over time	No target
2. Maintain and update baseline data on the biodiversity of the reserve with a focus on small mammals, birds, reptiles and amphibians	✓	✓	✓	✓	✓	Low	Biodiversity database		

<b>KRA2: BIODIVERSITY AND HERITAGE RESOURCES</b>									
<b>GOAL: To promote the long-term extension and conservation, rehabilitation and restoration of the Reserve's biodiversity, scenic, historic and cultural features, and to minimize operational impacts on the environment.</b>									
<b>OBJECTIVE 7: To effectively manage the heritage resources of the Dwesa-Cwebe Nature Reserve</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Identify, describe and map the positions of all shell middens. In collaboration with SAHRA (Eastern Cape), assign significance ratings to these shell middens				✓	✓	Low	Heritage status report		
2. Ensure all known shell middens are maintained and do not degrade any further.	✓	✓	✓	✓	✓	High		Photographic record of sites	No obvious degradation of sites.
3. Develop an access path (foot only) to the Mendu wreck site and erect information boards.				✓	✓	Low	Access path	Number of visits to wreck site	No target
4. In conjunction with neighbouring communities, determine other cultural/heritage/historical values associated with the Dwesa-Cwebe Nature Reserve and the surrounding area				✓	✓	Low	Heritage assessment report and heritage resource database and map.		
5. Strengthen the linkages of the Dwesa-Cwebe Nature Reserve to local and regional heritage management projects and tourism routes				✓	✓	Low		Number of visits to the Reserve as part of a heritage route	No Target

<b>KRA2: BIODIVERSITY AND HERITAGE RESOURCES</b>									
<b>GOAL: To promote the long-term extension and conservation, rehabilitation and restoration of the Reserve's biodiversity, scenic, historic and cultural features, and to minimize operational impacts on the environment.</b>									
<b>OBJECTIVE 8: To manage the impacts of reserve management and promote the use of sustainable technologies</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Undertake an audit of the significant environmental impacts in the Dwesa-Cwebe Nature Reserve that are regulated by the legislative framework		✓	✓			Moderate	Audit of impacts		
2. Implement corporate procedures to reduce the environmental impacts and ensure regulatory compliance.			✓	✓	✓	High		Extent of regulatory compliance (none, partial, complete)/ regulatory legislation	100% regulatory compliance by year 5
3. Introduce sustainable technology (e.g. energy efficient architectural design, low wattage lighting, dual flush toilets, solar power, waterless urinals, low flow shower heads, removal of baths, bio-technology for waste treatment, etc) into new and existing reserve facilities and services, where cost-effective	✓	✓	✓	✓	✓	Low		Water (litres) and energy (Kw) usage	Reduction in energy and water usage TBD by year 5.
4. Close and rehabilitate the solid waste dump sites at the Haven hotel, the Cwebe cottages and outside Dwesa Reserve. Remove all solid waste from Reserve related dump sites to municipal dump sites (see Infrastructure KRA)	✓	✓				High	Accumulated solid waste removed	Unlicensed dump site inside Reserve	No accumulated solid waste on site

<b>KRA2: BIODIVERSITY AND HERITAGE RESOURCES</b>									
<b>GOAL:</b> To promote the long-term extension and conservation, rehabilitation and restoration of the Reserve's biodiversity, scenic, historic and cultural features, and to minimize operational impacts on the environment.									
OBJECTIVE 9: To rehabilitate and restore degraded areas in the Reserve, and maintain a follow-up program									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Identify, map and prioritise sites that require rehabilitation and restoration		✓	✓	✓	✓	Moderate	Map of areas requiring restoration		
1. Develop site specific rehabilitation plans in line with priorities, with a focus on controlling the erosion of the management tracks leading to the banks of the Mbashe River			✓	✓	✓	Moderate	Rehabilitation and restoration programs	Number and extent of sites rehabilitated or restored	All sites rehabilitated or restored
2. Demolish the old hiking huts at the mouth of Mbashe River remove all old building material and rehabilitate site after construction of new hiking huts.			✓	✓	✓	Low	Demolished rondavels	Amount of visible scrap building material	All building material removed by year 5
3. Undertake rehabilitation in line with priorities, available manpower, and resources and maintain a follow-up program			✓	✓	✓	Moderate		Areal extent (ha) of sites rehabilitated or restored	TBD (with development of subsidiary plans)
4. Maintain records of all rehabilitation activities - areas, nature and extent of the problem, the date and nature of rehabilitation, follow-up activities, and the success of the rehabilitation program			✓	✓	✓	Moderate			

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### 3.3 KRA3: Stakeholder Involvement and partnerships

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This KRA relates directly to the Strategic Goal 2: *Linking People and Parks* of the ECPB's Strategic Plan. More specifically, it responds to strategic objective 1: *Transform the relationship between parks and neighbours from 'exclusion' to 'involvement' by 2008*. Relevant interventions defined to achieve this goal and objective are: *i) Make it possible for communities and stakeholders to participate in management processes; ii) Develop co-management arrangements to ensure biodiversity sustainability; iii) Build an image that brands the organisation as one that conserves biodiversity through involvement of people.*

The medium-term focus for the **cooperative governance** component of this KRA is: i) The rationalization of the composition of the co-management committee ii) The formalisation of the co-management committee functions iii) The improvement of relationships with local, provincial and national public bodies and institutions

The medium-term focus for the **communication** component of this KRA is: i) The development and maintenance of good communication processes with the co-management committee; and ii) The involvement in forums with interest groups; and iii) The appointment of dedicated community liaison staff.

The medium-term focus for the **equitable physical access** component of this KRA is: i) The development of a policy to control access of community members; ii) Facilitating access for traditional or cultural use; ii) Subsidizing access to special user groups.

The medium-term focus for the **benefit sharing** component of this KRA is: i) Identification of conservation related employment opportunities for members of local communities; ii) Identification of opportunities for the involvement of local communities in tourism related activities; iii) Testing the feasibility of applying community levies to reserve transactions

The medium-term focus for the **commercialisation** component of this KRA is: I) Explore the feasibility of concessioning some of the tourism related opportunities of the Reserve

<b>KRA 3: STAKEHOLDER INVOLVEMENT AND PARTNERSHIPS</b>									
<b>GOAL: To establish and nurture co-operative, collaborative and mutually beneficial relationships with stakeholders to ensure the long-term sustainability of the Dwesa-Cwebe Nature Reserve.</b>									
<b>OBJECTIVE 1: To establish and maintain a co-management structure to support and direct the strategic management of the Reserve</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. In conjunction with existing co-management committee identify primary and secondary stakeholders, and define terms for representation on co-management committee (CMC)	✓	✓				High	Stakeholder list	Representation on community forum	All key stakeholder groups represented on community forum
2. In conjunction with existing CMC, rationalise composition of CMC in order to improve functionality	✓	✓				High			
3. Clarify institutional functioning for the CMC, and establish formal terms of reference (TOR), and a constitution. Ensure that clear arbitration processes are formalised in CMC constitution	✓	✓				High	Terms of Reference		
4. Provide logistical and resource support to the functioning of the CMC, with focus on training in management related issues	✓	✓	✓	✓	✓	High		Minutes of CMC meetings	At least 6 CMC meetings a year.

<b>KRA 3: STAKEHOLDER INVOLVEMENT AND PARTNERSHIPS</b>									
<b>GOAL: To establish and nurture co-operative, collaborative and mutually beneficial relationships with stakeholders to ensure the long-term sustainability of the Dwesa-Cwebe Nature Reserve.</b>									
<b>OBJECTIVE 2: Develop and maintain effective mechanisms for on-going communication with local stakeholders</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Develop, participate in and maintain discussion forums with key public agencies, authorities, landowners and bodies (e.g. local and district municipalities, DWAF, traditional authorities, Dwesa-Cwebe Land and Development Trust) to address issues of mutual concern	✓	✓	✓	✓	✓	Moderate		Minutes of key meetings	At least 5 meetings a year
2. Appoint a full time community liaison officer to maintain communications, on a regular basis (monthly) with the CMC, neighbouring communities and other key stakeholders		✓	✓	✓	✓	High	Community liaison officer.	Minutes of key meetings	At least 12 meetings a year

<b>KRA 3: STAKEHOLDER INVOLVEMENT AND PARTNERSHIPS</b>									
<b>GOAL: To establish and nurture co-operative, collaborative and mutually beneficial relationships with stakeholders to ensure the long-term sustainability of the Dwesa-Cwebe Nature Reserve.</b>									
<b>OBJECTIVE 3: To identify potential benefits (employment, empowerment and capacity building opportunities) that can be derived from the Reserve and all its activities, for the local communities immediately adjacent to the reserve. To promote access to these on an equitable basis.</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Define the target communities living immediately adjacent to the Dwesa-Cwebe Nature Reserve that will benefit from employment, empowerment and capacity building.	✓	✓				High	Map of targeted local communities		

<b>KRA 3: STAKEHOLDER INVOLVEMENT AND PARTNERSHIPS</b>									
<b>GOAL: To establish and nurture co-operative, collaborative and mutually beneficial relationships with stakeholders to ensure the long-term sustainability of the Dwesa-Cwebe Nature Reserve.</b>									
<b>OBJECTIVE 3: To identify potential benefits (employment, empowerment and capacity building opportunities) that can be derived from the Reserve and all its activities, for the local communities immediately adjacent to the reserve. To promote access to these on an equitable basis.</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
2. Establish and maintain a formal working forum with these targeted communities to provide information and discuss mechanisms to optimise employment, empowerment and capacity building opportunities and equitable ways to select beneficiaries		✓	✓	✓	✓	Moderate			
3. Within the working forum, resolve with immediate effect the incompatible issues of grazing rights inside the Reserve, the maintenance of a disease free buffalo population, and the need to control dangerous animals	✓					High			
3. Conduct skills audit in adjacent communities to establish available potential		✓	✓			Moderate			
4. Simplify reserve related tender documents and employment contracts, and identify a facilitator to assist community members in the completion of tenders and contracts	✓	✓	✓	✓	✓	High			
3. Develop opportunities for targeted communities to be trained and directly employed in appropriate conservation and tourism related work, including fencing, construction and maintenance, capital development projects, invasive alien plant control, security, road maintenance, tourist guiding.	✓	✓	✓	✓	✓	High		Employment (person work days) from targeted communities employed per annum	At least 1000 work days per annum created
4. Identify and establish a dedicated site near the Dwesa administration block for the sale of curios and crafts by local communities	✓	✓				High			
5. Actively source funding support for Reserve-based activities that could provide employment opportunities to local communities such as: Working for Water and DEAT Poverty Relief funding	✓	✓	✓	✓	✓	High		Additional income raised from DEAT/DWAF programs	TBD

<b>KRA 3: STAKEHOLDER INVOLVEMENT AND PARTNERSHIPS</b>									
<b>GOAL: To establish and nurture co-operative, collaborative and mutually beneficial relationships with stakeholders to ensure the long-term sustainability of the Dwesa-Cwebe Nature Reserve.</b>									
<b>OBJECTIVE 3: To identify potential benefits (employment, empowerment and capacity building opportunities) that can be derived from the Reserve and all its activities, for the local communities immediately adjacent to the reserve. To promote access to these on an equitable basis.</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
6. In conjunction with local communities, develop a nursery for indigenous plants used by local communities			✓	✓	✓	Low		Level of use of forest products	50% reduction in illegal harvesting of forest products by year 5
7. Develop a framework for community empowerment in any nature-based tourism concessioning process for the Dwesa-Cwebe Nature Reserve			✓	✓	✓	Low		Income generated to targeted communities from concessions	No target for first 5 years
8. Investigate the feasibility (legal, institutional and cost-effectiveness) of implementing a community levy on visitor services and facilities in the Dwesa-Cwebe Nature Reserve	✓	✓	✓	✓	✓	Low	Feasibility assessment		

<b>KRA 3: STAKEHOLDER INVOLVEMENT AND PARTNERSHIPS</b>									
<b>GOAL: To establish and nurture co-operative, collaborative and mutually beneficial relationships with stakeholders to ensure the long-term sustainability of the Dwesa-Cwebe Nature Reserve.</b>									
<b>OBJECTIVE 4: Facilitate controlled access to the reserve for special use groups and local communities</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Provide, on request, controlled access to recognised cultural/religious sites and non-destructive or non-consumptive cultural/religious practices.	✓	✓	✓	✓	✓	Low			
2. Develop, and implement, mechanisms for subsidised entry for local community user and interest groups		✓	✓			Low			
3. Facilitate controlled access to external institutions undertaking relevant research and monitoring programs within the Dwesa-Cwebe Nature Reserve	✓	✓	✓	✓	✓	Low		Number of external research or monitoring programmes	Two research or monitoring programmes per year

### 3.4 KRA4: Infrastructure and Equipment

This KRA relates mainly to Strategic Goal 9: *Excellence in Nature-Based Tourism Delivery* of the ECPB's Strategic Plan, but also to Strategic Goal 1: *Best Practice Bio-Diversity and Cultural Resource Conservation*. More specifically, the KRA responds to the strategic objectives: *Achieve excellence in nature based tourism; Position the ECPB as the number one nature-based tourism destination in South Africa within the next five years and Establish effective measures to conserve all elements of biodiversity in the Eastern Cape by 2010*. Relevant interventions defined to achieve this goal and objectives are: *i) Address infrastructure, facility and service standards to ensure delivery against expectations; ii) Implement Special Projects (Infrastructure)*.

The medium-term focus for the **infrastructure** component of this KRA is: l) The renovation of the chalets at Dwesa; ii) The upgrade and maintenance of aspects of the water, waste management and power bulk infrastructure throughout both Reserves; iii) The upgrade and maintenance of the roads, bridges, drainage, and management tracks within the Reserves; iv) The upgrade and maintenance of staff housing, v) The revision and improvement of directional, informational and interpretive signage system inside and outside the Dwesa-Cwebe Nature Reserve; vi) The upgrade and maintenance of day visitor infrastructure; vii) The mapping and upgrading of hiking trails and associated infrastructure viii) The upgrading and maintenance of administrative buildings and store rooms viii) The upgrade and maintenance of the Reserves' gates and associated infrastructure ix) The demolition of the old hiking huts at the mouth of the Mbashe River; x) An investigation into the feasibility of canceling the existing cottage leases at Nttonyana and Cwebe

The medium-term focus for the **equipment** component of this KRA is: i) The acquisition of firearms for field rangers; ii) The acquisition, replacement and maintenance of reserve vehicles, with a focus on the acquisition of a tractor and trailer for Cwebe, and a five ton truck for Dwesa, iii) The supply and maintenance of additional firefighting equipment; iv) The supply and maintenance of operations equipment for field staff, with a focus on binoculars, radios, handcuffs and GPS capability; v) The upgrade and maintenance of telecommunications and computer equipment; vi) The acquisition of canoes for river patrols.

KRA 4: INFRASTRUCTURE AND EQUIPMENT									
GOAL: To ensure the provision, installation, development, and maintenance of adequate and appropriate reserve infrastructure and equipment that supports effective conservation management and provision of visitor facilities and services.									
OBJECTIVE 1: Upgrade and maintain the road and trails system in the Reserve									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
<p>1. Upgrade and maintain the management and visitor roads, trails and tracks throughout the Dwesa and Cwebe Reserves. Priorities for road/tracks/trails upgrades and maintenance are:</p> <ul style="list-style-type: none"> <li>The roads to banks of the Mbashe River from both Dwesa and Cwebe sides (see also Activity 2)</li> <li>The main Dwesa management road from Gate 1 to Gate 5.</li> <li>The road to Dwesa Point - Management track only</li> <li>The road from the Haven hotel to the Mbashe River mouth – develop parking area at end of road</li> <li>The footpath from the Haven hotel to the beach – investigate boardwalk solution</li> <li>The footpath from the Dwesa campsite to the beach – install board walk</li> <li>The footpath and suspension bridge linking the Dwesa campsite and ablation blocks</li> <li>The footpath from the Dwesa administration block to the beach – investigate boardwalk solution</li> <li>The trail to the Mbanyana Falls - 800m of boardwalk and/or path</li> </ul> <p>2. Initiate discussions with Mbashe Municipality to upgrade and regularly maintain the management roads on either side of the Mbashe River to improve link between Dwesa and Cwebe Reserves and reduce erosion and siltation in the Mbashe River</p> <p>3. Source funding support from the District and local Municipalities for the upgrade and tarring of public roads from</p>	✓	✓	✓	✓	✓	High	Schedule of road repair and maintenance requirements with specifications	Length (km) of road /track upgraded/maintained	At least 5 km per annum upgraded/maintained
	✓					High	Contractual agreement	Non-eroding all weather management track	Non-eroding all weather management track by year 2
		✓	✓	✓	✓	Moderate	Contractual agreement	Tarred road to both Reserves	Tarred roads to Reserves by year 5

<b>KRA 4: INFRASTRUCTURE AND EQUIPMENT</b>									
<b>GOAL: To ensure the provision, installation, development, and maintenance of adequate and appropriate reserve infrastructure and equipment that supports effective conservation management and provision of visitor facilities and services.</b>									
<b>OBJECTIVE 1: Upgrade and maintain the road and trails system in the Reserve</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
Elliotdale to Cwebe and Willowvale to Dwesa									
4. Approach local government to improve directional signage from Elliotdale to Cwebe and Willowvale to Dwesa		✓	✓			Moderate		Clear directional signage to both Reserves	Clear signage by year 3
5. Investigate use of a grass block machine to provide a more permanent solution to road/track maintenance			✓	✓	✓	Moderate	Feasibility study		
6. Enlarge and pave with vegetated grass blocks the parking area for visitors at the administration blocks at both Dwesa and Cwebe and at nes campsites and parking areas		✓	✓	✓	✓	Moderate			
7. Close and rehabilitate, on a prioritized basis, roads, tracks and footpaths that are no longer required for management services or visitors				✓	✓	Low			
8. Investigate the cost-benefits of a pont across the Mbashe River to allow easier management access between Dwesa and Cwebe				✓	✓	Low	Feasibility study		

KRA 4: INFRASTRUCTURE AND EQUIPMENT									
GOAL: To ensure the provision, installation, development, and maintenance of adequate and appropriate reserve infrastructure and equipment that supports effective conservation management and provision of visitor facilities and services.									
OBJECTIVE 2: Construct, upgrade and maintain overnight visitor and day visitor buildings and infrastructure									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Determine minimum standards for the provision of day visitor and overnight visitor infrastructure	✓	✓				High	Minimum standards		
2. Undertake upgrading/rebuilding of Dwesa chalets and camp site under guidance of a tourism development Master Plan. Determine in line with EIA the extent of the expansion	✓	✓	✓	✓	✓	High	Tourism Development Master Plan.		All developments comply with minimum standards and Tourism Development Master Plan
3. Provide day visitor facilities at Mbashe River mouth for day visitors at Cwebe (e.g Picnic area, braai, monkey proof refuse bins), and build ablution blocks to service day visitors. Separate day visitors from campers/chalets at Dwesa and provide ablution facilities for Dwesa day visitors near the Administration buildings	✓	✓	✓	✓	✓	Moderate			
4. In conjunction with D-C Land trust and hotel concessionaire, define precise nature and extent of Haven hotel concession under existing management lease. Draft legal document outlining tenant responsibilities and limits of tenant activities.	✓					High	Contractual agreement	Reduction in illegal and environmentally harmful activities by current concessionaire	No illegal and environmentally harmful activities by current concessionaire by year 1
5. In accordance with Tourist Development Master Plan, undertake feasibility studies, plans and cost/benefit estimates for 1) the upgrade of hotel and long term lease, or alternatively for full concessioning of hotel facility 2) the development of a Cwebe campsite at the mouth of the Mbashe River	✓	✓	✓			High	Feasibility study		
6. Demolish old hiking trail huts and construct new hiking trail huts at Mbashe mouth	✓	✓				Moderate	New trail hut		
7. Clarify lease agreements for cottages at Nlonyana and Mbashe. Evaluate options for future use of cottages – continue			✓	✓		Moderate	Feasibility study		

<b>KRA 4: INFRASTRUCTURE AND EQUIPMENT</b>									
<b>GOAL: To ensure the provision, installation, development, and maintenance of adequate and appropriate reserve infrastructure and equipment that supports effective conservation management and provision of visitor facilities and services.</b>									
<b>OBJECTIVE 2: Construct, upgrade and maintain overnight visitor and day visitor buildings and infrastructure</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
with current use, demolish, market related lease, upgrade and rent, re-development - as dictated by Tourism Development Master Plan									
8. Consider co-management options for Cebe campsite when drafting Tourism Development Master Plan. Upgrade and maintain Cebe campsite	✓	✓	✓	✓	✓	Low			
Maintain all day visitor and overnight visitor buildings and infrastructure to meet minimum standards and any other legal requirements								TBD (Minimum standards)	TBD (Minimum standards)

KRA 4: INFRASTRUCTURE AND EQUIPMENT									
GOAL: To ensure the provision, installation, development, and maintenance of adequate and appropriate reserve infrastructure and equipment that supports effective conservation management and provision of visitor facilities and services.									
OBJECTIVE 3: Upgrade and maintain the Reserves bulk services infrastructure									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Determine minimum standards for the supply and maintenance of reserve bulk infrastructure	✓	✓	✓				Minimum standards	TBD (Minimum Standards)	TBD (Minimum standards)
2. Evaluate existing and future sewage disposal facilities with regard to possible upgraded visitor accommodation at Dwesa and possible developments at Cwebe. Upgrade or revise as necessary.	✓	✓	✓	✓	✓	High	Sewage disposal master plan	Sewage related environmental impacts	No sewage related environmental impacts
3. With immediate effect: a) Investigate and implement new sewage disposal system for Haven hotel and hotel staff quarters b) Upgrade all conservancy tanks at Dwesa and Cwebe c) Resolve construction problems for conservancy tank of new Dwesa campsite ablution block d) Regularise schedule with PWD for emptying of conservancy tanks	✓	✓	✓			High	Functional sewage disposal systems	Sewage leakage to groundwater	No leakage to groundwater by year 3
4. Regularise with Mbashe municipality a schedule for the removal of solid waste from both Dwesa and Cwebe Reserves. Obtain agreement with municipality to remove accumulated solid waste. Rehabilitate existing dump sites outside Dwesa, inside Cwebe, at hotel, and at Ntlongyana and Mbanyana cottages. Motivate for Willowvale and Elliotdale to develop DWAF approved waste disposal sites	✓	✓	✓	✓	✓	High	Solid waste management plan	Waste management procedures that comply with Integrated Pollution and Waste Management Policy requirements	Waste disposal procedures that meets DWAF Minimum Requirements
5. Complete an audit to evaluate the conformance with DWAF requirements of waste water disposal facilities, and likely future developments (as outlined in CDF and new tourism developments at both Reserves).		✓	✓	✓	✓	Moderate	Manual of waste water disposal routes	Conformance with DWAF requirements	100% conformance

<b>KRA 4: INFRASTRUCTURE AND EQUIPMENT</b>									
<b>GOAL: To ensure the provision, installation, development, and maintenance of adequate and appropriate reserve infrastructure and equipment that supports effective conservation management and provision of visitor facilities and services.</b>									
<b>OBJECTIVE 3: Upgrade and maintain the Reserves bulk services infrastructure</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
6. Evaluate, upgrade and maintain water pumps, pipes reservoirs and water purification, storage and distribution facilities, in line with FPP and likely future requirements for management and existing and new tourism developments.	✓	✓	✓	✓	✓	High	Water requirements plan	Supply Interruptions / low pressure in water supply	No interruptions/low pressure in water supply
7. Upgrade water supply for staff housing on both Reserves	✓	✓	✓			High			
8. Evaluate minimum acceptable standards for Reserve power supply requirements for management, and proposed tourism developments.	✓	✓				High	Power supply plan	Reported electrical faults	No faults reported
9. Complete Eskom connections to Dwesa and Cwebe administration blocks and staff housing at Desa Gate 1 and Cwebe Gate 2.	✓	✓				High			
10. Source funding for underground Eskom cabling from Dwesa administration block to chalets and camp site		✓	✓	✓		Moderate			
11. Install solar power supply for staff housing at Dwesa gates 3, 5 and 6, and staff housing at Cwebe Gate 1			✓	✓		Moderate			
12. Prioritise and carry out required power supply developments and upgrades to minimum acceptable standards	✓	✓	✓	✓	✓	High			
13. Adequately maintain all the reserve bulk infrastructure to meet minimum standards and any other legal requirements.	✓	✓	✓	✓	✓	High	Minimum standards	TBD (Minimum Standards)	TBD (Minimum Standards)

KRA 4: INFRASTRUCTURE AND EQUIPMENT									
GOAL: To ensure the provision, installation, development, and maintenance of adequate and appropriate reserve infrastructure and equipment that supports effective conservation management and provision of visitor facilities and services.									
OBJECTIVE 4: Construct, upgrade and maintain reserve staff houses, gates, store rooms and administrative buildings									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Determine minimum standards for the quality of Reserve staff housing, gates, operations infrastructure and administrative buildings.	✓	✓				High	Minimum standards	TBD (Minimum Standards)	TBD (Minimum standards)
2. Upgrade official staff houses and single quarters around Dwesa stores enclosure	✓	✓	✓	✓	✓	Moderate		TBD (Minimum Standards)	TBD (Minimum standards)
3. Upgrade field ranger substations at gates 3, 5 and 6 at Dwesa, as well as old foresters residence near the Kobole River	✓	✓	✓	✓	✓	Moderate			
4. At Cwebe, upgrade staff accommodation at Gates 1 and 2 and field ranger substations.	✓	✓	✓	✓	✓	Moderate			
5. Establish Hotel staff village at Cwebe gate 2. Demolish old quarters and rehabilitate site		✓	✓	✓		Moderate			
6. Demolish existing entrance Gate 2 at Cwebe and construct new gate and associated infrastructure in line with boundary fence and under guidance of an EMP.		✓	✓			Moderate			
7. Close Gate 2 and 4 on Dwesa western boundary. Demolish infrastructure and rehabilitate sites			✓	✓	✓	Low			
8. Upgrade administration buildings and develop an information centre at Cwebe		✓	✓	✓	✓	Moderate			
9. Develop adequate stores and workshop facilities at Cwebe and upgrade stores and workshop facilities at Dwesa		✓	✓	✓	✓	Moderate			
10. Undertake financial and administrative arrangements to acquire extra and functional telephone lines for internet access and efficient reserve administration at Dwesa and Cwebe	✓					High		Internet capability	All Administrative staff with IT capability

<b>KRA 4: INFRASTRUCTURE AND EQUIPMENT</b>										
<b>GOAL: To ensure the provision, installation, development, and maintenance of adequate and appropriate reserve infrastructure and equipment that supports effective conservation management and provision of visitor facilities and services.</b>										
<b>OBJECTIVE 4: Construct, upgrade and maintain reserve staff houses, gates, store rooms and administrative buildings</b>										
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator	Minimum
	1	2	3	4	5					
11. Demolish unused infrastructure (e.g. old staff quarters, old hiking huts, gates) and rehabilitate areas.			✓	✓	✓	Low				
12. Maintain all the reserve buildings and infrastructure to meet minimum standards and any other legal requirements	✓	✓	✓	✓	✓	High		TBD (minimum standards)	TBD (minimum standards)	

<b>KRA 4: INFRASTRUCTURE AND EQUIPMENT</b>										
<b>GOAL: To ensure the provision, installation, development, and maintenance of adequate and appropriate reserve infrastructure and equipment that supports effective conservation management and provision of visitor facilities and services.</b>										
<b>OBJECTIVE 5: Acquire and maintain appropriate equipment that meets the requirements for effective management and planned tourism developments</b>										
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator	Minimum
	1	2	3	4	5					
1. Acquire and maintain fire arms, binoculars, radios, handcuffs, canoes and other gear necessary for effective enforcement operations.	✓	✓	✓	✓	✓	High	Effective operations gear	Number of incidences of poaching	75% reduction in poaching incidence by year 5	
2. Acquire tractor, trailer and 4x4 (Cwebe) and 5 ton truck and 4 wheelers (Dwesa).		✓	✓	✓	✓	Moderate				
3. Acquire adequate workshop equipment (Dwesa and Cwebe) to enable effective maintenance of Reserves' equipment and	✓	✓	✓	✓	✓	High				

KRA 4: INFRASTRUCTURE AND EQUIPMENT									
GOAL: To ensure the provision, installation, development, and maintenance of adequate and appropriate reserve infrastructure and equipment that supports effective conservation management and provision of visitor facilities and services.									
OBJECTIVE 5: Acquire and maintain appropriate equipment that meets the requirements for effective management and planned tourism developments									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
infrastructure									
4. Maintain all reserve vehicles and equipment according to the manufacturers specifications and maintenance cycles	✓	✓	✓	✓	✓	High		Spot check conformance	100% conformance
5. Replace all vehicles and equipment as required	✓	✓	✓	✓	✓	High			

### 3.5 KRA5: Visitor Services and Facilities

This KRA relates mainly to Strategic Goal 9: *Excellence in Nature-Based Tourism Delivery* of the ECPB's Strategic Plan, but also to Strategic Goal 2: *Linking People and Parks*. More specifically, the KRA responds to the strategic objectives: *Achieve excellence in nature based tourism and Position the ECPB as the number one nature-based tourism destination in South Africa within the next five years*. Relevant interventions defined to achieve this goal and objectives are *i) Establish a culture in which ECPB staff and neighbors treat Reserve visitors as valued guests; ii) Carry out a detailed market analysis; iii) Formulate a marketing plan; iii) Develop a budget through which the ECPB image can be built and sustained; iii) Increase revenue from eco-tourism; iv) Improve service delivery to customers and stakeholders*

The short and medium-term focus for the **tourism and recreation** component of this KRA is: i) The development of a range of adventure and outdoor activities; ii) The marketing and development of tourism and recreational services and facilities; iii) The training of community members for the effective delivery of various tourism related services: iv) The development, mapping and rehabilitation of hiking trails; v) The development and upgrade of day visitor facilities; vi) The maintenance of key information on visitor profiles and their needs.

The medium-term focus for the education and awareness component of this KRA is: i) The development of a local educational and awareness strategy; ii) The establishment and maintenance of information and interpretive facilities and services; and iii) The establishment of an environmental education program

<b>KRA 5: VISITOR SERVICES AND FACILITIES</b>									
<b>GOAL: To effectively market, provide, and maintain a unique experience and good service and facilities to all users of, and visitors to, the Dwesa-Cwebe Nature Reserve.</b>									
<b>OBJECTIVE 1: Provide a range of adventure, educational and recreational products in the Reserve</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Develop minimum standards for the provision of Reserve visitor facilities and services	✓	✓				High	Minimum standards profile	TBD	TBD
2. Upgrade, and maintain, all existing reserve facilities and services to meet the minimum standards	✓	✓	✓	✓	✓	High		Visitor satisfaction and complaints	No Visitor complaints
3. Map, clear, upgrade and maintain existing hiking trails. Where required, close and rehabilitate erodible trails. Where appropriate, design, clear, and maintain new hiking trails. Produce visitor map of trails.		✓	✓	✓		Moderate	Map of rationalised hiking trail network		
4. Develop a craft display and sale area in the vicinity of the Dwesa administration block and Cwebe entrance gate	✓					High			

<b>KRA 5: VISITOR SERVICES AND FACILITIES</b>									
<b>GOAL: To effectively market, provide, and maintain a unique experience and good service and facilities to all users of, and visitors to, the Dwesa-Cwebe Nature Reserve.</b>									
<b>OBJECTIVE 1: Provide a range of adventure, educational and recreational products in the Reserve</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
5. Assess the feasibility of establishing Mountain Bike trails using the existing management track network			✓	✓	✓	Moderate	Feasibility study		
6. Establish horse riding trails using community guides and horses	✓	✓	✓			Moderate			
7. Establish guided day and night drives for day and overnight visitors		✓	✓			Moderate			
8. Develop canoeing and fly fishing trails on Mbashe estuary and river		✓	✓	✓		Moderate			
9. Provide directional and informational signage for all trails	✓	✓	✓	✓		Moderate			
10. Support opportunities for the development of other approved recreational activities in the Reserve	✓	✓	✓	✓	✓	Low			
11. Support capacity building programs for local communities to provide visitor services in the Reserve (Guides, birding, boating, horses etc)	✓	✓	✓	✓	✓	High		Local tourism service providers/guides	60% of tourism services provided by locals by year 5
12. Source external funding for development of adventure, educational and recreational products in the Reserve	✓	✓	✓	✓	✓	Moderate	Range of Activities	Number and profile of activities available	5 different recreational activities available by year 5

<b>KRA 5: VISITOR SERVICES AND FACILITIES</b>									
<b>GOAL: To effectively market, provide, and maintain a unique experience and good service and facilities to all users of, and visitors to, the Dwesa-Cwebe Nature Reserve.</b>									
<b>OBJECTIVE 2: Maintain information on the profile and needs of the Reserve visitors</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Maintain daily profiles of the reserve visitors and users (e.g. numbers/group, age category, gender, time of visit, length of stay, nationality, etc.) in a standardised ECPB format	✓	✓	✓	✓	✓	High	Visitor/user profile database		
2. Conduct extensive 2-yearly opinion surveys to assess the level of dissatisfaction and needs of the visitors/users	✓		✓		✓	Moderate	Visitor/user survey		
3. Use the visitor profiles and surveys as a decision-support tool to guide and direct the development and updating of the tourism development plan	✓	✓	✓	✓	✓	High	Tourism development plan		

<b>KRA 5: VISITOR SERVICES AND FACILITIES</b>									
<b>GOAL: To effectively market, provide, and maintain a unique experience and good service and facilities to all users of, and visitors to, the Dwesa-Cwebe Nature Reserve.</b>									
<b>OBJECTIVE 3: Ensure visitor safety</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Provide adequate security arrangements for visitors to Reserve	✓	✓	✓	✓	✓	High	Reserve Safety guidelines contained in marketing materials and visitor information material	Number of reported crime and accident incidents	No crime and accident incidents involving Reserve staff and visitors

<b>KRA 5: VISITOR SERVICES AND FACILITIES</b>									
<b>GOAL: To effectively market, provide, and maintain a unique experience and good service and facilities to all users of, and visitors to, the Dwesa-Cwebe Nature Reserve.</b>									
<b>OBJECTIVE 3: Ensure visitor safety</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
2. Provide adequate information to visitors and users to reduce opportunities for crime and possibilities of injury, particularly with regard to dangerous animals and monkey-visitor interactions	✓	✓	✓	✓	✓	High			
3. Establish collaborative relationships with local policing	✓	✓	✓	✓	✓	Moderate			

<b>KRA5: VISITOR SERVICES AND FACILITIES</b>									
<b>GOAL: To effectively market, provide, and maintain a unique experience and good service and facilities to all users of, and visitors to, the Dwesa-Cwebe Nature Reserve.</b>									
<b>OBJECTIVE 4: To manage visitor and user activities to reduce the environmental impacts of such activities</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Train Reserve visitor management staff to effectively control and assist visitors to the Reserve	✓	✓	✓	✓	✓	High	Hospitality and compliance training programmes	Number of visitor infringements of Reserve regulations	Zero infringements
2. In conjunction with Haven hotel lessee, clearly define hotel environmental responsibilities and permissible scope and extent of hotel activities	✓	✓				High	Service level agreement	Number of hotel management and visitor infringements of agreement	No infringements of agreement

<b>KRA5: VISITOR SERVICES AND FACILITIES</b>									
<b>GOAL: To effectively market, provide, and maintain a unique experience and good service and facilities to all users of, and visitors to, the Dwesa-Cwebe Nature Reserve.</b>									
<b>OBJECTIVE 4: To manage visitor and user activities to reduce the environmental impacts of such activities</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
3. Provide adequate visitor information and signage		✓	✓	✓	✓	Moderate			
4. Identify, monitor and manage impacts of different visitor uses	✓	✓	✓	✓	✓	Moderate			

<b>KRA5: VISITOR SERVICES AND FACILITIES</b>									
<b>GOAL: To effectively market, provide, and maintain a unique experience and good service and facilities to all users of, and visitors to, the Dwesa-Cwebe Nature Reserve.</b>									
<b>OBJECTIVE 5: To release commercial opportunities for the development and provision of tourist infrastructure, services and facilities</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Determine the optimal management/institutional arrangements (i.e. most cost-effective service delivery) for the provision of existing and proposed tourist services and facilities, and implement these where bureaucratically feasible	✓	✓	✓	✓	✓	High	Cost-benefit analyses Contractual or concession agreements	Increase in visitor numbers and income	TBD (Based on assessment of opportunities)
2. Support entrepreneurial opportunities for local communities to participate in the provision and management of tourist services and facilities		✓	✓	✓	✓	High		Number of entrepreneurs involved	

<b>KRA5: VISITOR SERVICES AND FACILITIES</b>									
<b>GOAL: To effectively market, provide, and maintain a unique experience and good service and facilities to all users of, and visitors to, the Dwesa-Cwebe Nature Reserve.</b>									
<b>OBJECTIVE 5: To release commercial opportunities for the development and provision of tourist infrastructure, services and facilities</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
3. With D-C Land Trust assess the long term development opportunities for the Haven hotel.		✓	✓			Moderate	Feasibility study		
4. Undertake feasibility study for the development of new lodge sites at Cwebe once cottage leases have expired		✓	✓			Moderate	Feasibility study		
5. Undertake feasibility study for development of tented camp in high intensity activity zone at Dwesa			✓	✓		Low	Feasibility study		

<b>KRA5: VISITOR SERVICES AND FACILITIES</b>									
<b>GOAL: To effectively market, provide, and maintain a unique experience and good service and facilities to all users of, and visitors to, the Dwesa-Cwebe Nature Reserve.</b>									
<b>OBJECTIVE 6: To actively and effectively market the Reserve and its resources and services</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Conduct training for Reserve staff in basic requirements for hospitality industry (including courtesies, provision of information, administrative efficiency) to ensure a professional image is maintained.	✓	✓	✓	✓	✓	High	Marketing and communication strategy	Number and profile of marketing initiatives	Sustained increase in visitor numbers of 15% per year over 5 years
2. Develop and implement a marketing plan for the region, the Reserve, and its products	✓	✓	✓	✓	✓	High			
3. Develop a visitor information centre near the Administration block (Dwesa and Cwebe)			✓	✓	✓	Low			
4. Develop and distribute an updated information booklet/ guide for the Reserve and surrounding area			✓	✓	✓	Moderate			
5. Develop and maintain mutually beneficial partnerships with regional marketing and tourism initiatives (eg East Cape Tourism Board, Wild Coast Meander, Port St Johns Tourism Board).	✓	✓	✓	✓	✓	Moderate			

### 3.6 KRA6: Reserve Administration

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This KRA relates to several of the goals of ECPBs Strategic Plan:- Strategic Goal 3: *Development of a focused and structured organization, Strategic Goal 5: Development of approved policies, procedures and systems*, and Strategic Goal 8: *Achievement of financial sustainability*. More specifically, the KRA responds to the following strategic objectives: Ensure that ECPB has a multi-disciplinary team by 2008; Ensure that ECPB has a coherent team and a safe working environment; Put in place approved policies, procedures and systems that are necessary for proper functioning of ECPB by 2006; Identify relevant legislation and implement measures to ensure compliance; and Secure funding from other sources for non-core conservation operations by 2009. Relevant interventions defined to achieve these goals and objectives are l) *Determine the organisation's requirements in terms of skills, expertise and competencies; ii) Develop and implement procurement policy guidelines that will meet the needs of the ECPB iii) Implement a training and development programme where employees have the potential to meet ECPB's requirements; iv) Implement performance management systems to measure, review, reward and apply corrective measures; v) Implement a transparent, effective and efficient financial management system; vi) Develop and implement recruitment and placement guidelines that will provide the required human resource capacity for the ECPB; vii) Develop and implement procurement policy guidelines that will fulfill the needs of the ECPB; viii) Implement a health and safety programme ix) Develop and implement an industrial relations strategy that will lead to constructive relationships with labour.*

The short to medium-term focus for the **administration and financing** component of this KRA is: l) The improvement of the financial management and accountability of the reserve; ii) The development of additional sustainable income from the resources of the Reserve.

The medium-term focus for the **human resource component** of this KRA is: l) To establish a full staff complement to ensure effective reserve management; ii) The training and capacity building of the staff complement.

<b>KRA6: RESERVE ADMINISTRATION</b>									
<b>GOAL: To develop the administrative capacity, human resources, and financial resources to support the implementation of the Reserve's strategic management plan and to meet the required legal responsibilities.</b>									
<b>OBJECTIVE 1: To improve the financial management and accountability of the Dwesa-Cwebe Nature Reserve.</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Prepare an accurate and realistic annual operational and capital budget for Dwesa-Cwebe Nature Reserve, in an Annual Plan of Operations (APO) that is in line with the SMP objectives and that meets ECPB financial management procedures	✓	✓	✓	✓	✓	High	Approved capital and operational budget		
2. Implement the ECPB financial management procedures and provide ongoing inputs to streamlining these procedures	✓	✓	✓	✓	✓	High	1. Audited financial statements 2. Monthly budget reports	Conformance with financial management procedures Number of queries raised by auditors	100% Conformance  No queries
3. Ensure implementation of ECPB procurement policy	✓	✓	✓	✓	✓	High		Conformance with procurement procedures	100% Conformance
4. Provide relevant financial information to field management to achieve conformance with approved budgets	✓	✓	✓	✓	✓	Moderate			
5. Maintain an up to date asset register for Dwesa-Cwebe Nature Reserve	✓	✓	✓	✓	✓	Moderate	Asset register	Updated asset register	Updates every year
6. Outsource management functions where this is most cost-effective	✓	✓	✓	✓	✓	Moderate		Number, and profile of outsourced reserve functions	No Target

RESERVE ADMINISTRATION									
To develop the administrative capacity, human resources, and financial resources to support the implementation of the Reserve's strategic management plan and to meet the required legal responsibilities.									
OBJECTIVE 2: To develop additional sustainable income for the Dwesa-Cwebe Nature Reserve									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Identify and implement mechanisms and practices that reduce expenditure by improving efficiency	✓	✓	✓	✓	✓	High	Decreased Reserve expenditure	Human Resource costs as % of budget	HR costs <60% of total operating budget
2. Optimise the income streams from reserve-based developments, facilities and services.	✓	✓	✓	✓	✓	High	Increased Reserve income	Internally generated Income (Rand/annum) Profit/Loss declared by Reserve	Income increases by a factor of 10%/annum from year 2 to year 5 Income matches operating expenditure
3. Identify, and source, additional funding for capital investment projects, special developmental projects or community projects (e.g. donor agencies, sponsorships, private donations, levies, public works programs)	✓	✓	✓	✓	✓	Moderate	Increased Reserve income	Externally generated Income (Rand/annum)	On average R1m/annum over the 5 year term of this SMP
4. Develop and maintain relationships with funders and provide audited financial and performance reports in the required format	✓	✓	✓	✓	✓	Moderate	Audited financial and performance reports		

<b>KRA6: RESERVE ADMINISTRATION</b>									
<b>GOAL: To develop the administrative capacity, human resources, and financial resources to support the implementation of the Reserve's strategic management plan and to meet the required legal responsibilities.</b>									
<b>OBJECTIVE 3: To maintain a properly trained staff complement in the Dwesa-Cwebe Nature Reserve to ensure effective implementation of the SMP</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Design and establish an effective staffing complement for the Dwesa-Cwebe Nature Reserve	✓	✓	✓	✓		High	Dwesa-Cwebe Nature Reserve organogram with job descriptions and grading	Annual management system and performance audit reports	No duplication of functions across staffing complement
2. Regularly review the staff complement, job descriptions and grading of posts	✓	✓	✓	✓	✓	Moderate	Dwesa-Cwebe Nature Reserve organogram with job descriptions and grading	Annual management system and performance audit reports	No duplication of functions across staffing complement
3. Implement the ECPB performance appraisal system			✓	✓	✓	Moderate	Annual staff performance reports		
4. Fill key vacant posts in the approved staff complement	✓	✓	✓			High		No. of vacant posts	Any vacant post filled within 4 months
5. Identify and address training needs for reserve staff with a priority focus on financial accounting, IT and administration skills, field ranger training, hospitality training, AIDS awareness and marine resource use regulations	✓	✓	✓	✓	✓	High	Training needs analysis and training program	Annual staff performance reports Training records	TBD (based on ECPB targets)
5. Institute mechanisms for consultative decision making between ECPB head office, hospitality managers and reserve managers	✓	✓	✓	✓	✓	High	Decision making policy	No. of complaints related to hospitality management	No complaints
6. Identify employees within the Reserve with special skills and use skills most effectively	✓	✓	✓	✓	✓	Moderate			
7. Identify employees within the Reserve with potential for rapid promotion and provide them with skills development programmes to further their careers	✓	✓	✓	✓	✓	Moderate			

<b>KRA6: RESERVE ADMINISTRATION</b>									
<b>GOAL: To develop the administrative capacity, human resources, and financial resources to support the implementation of the Reserve's strategic management plan and to meet the required legal responsibilities.</b>									
<b>OBJECTIVE 3: To maintain a properly trained staff complement in the Dwesa-Cwebe Nature Reserve to ensure effective implementation of the SMP</b>									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
8. Implement the ECPB health and safety program to conform with legal requirements	✓	✓	✓	✓	✓	High	Health and Safety program	Health and safety audit	100% conformance with legal standards
8. Integrate the reserve training needs analysis into the ECPB training program	✓	✓	✓	✓	✓	High			

### 3.7 KRA7: Knowledge Management

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This KRA relates generally to the Strategic Goal 1: *Best Practice Bio-Diversity and Cultural Resource Conservation* of the ECPB's Strategic Plan and also to Strategic Goal 5: *Development of Policies Procedures and Systems*. More specifically, the KRA responds to the strategic objectives: *Establish effective measures to conserve all elements of biodiversity in the Eastern Cape by 2010 and Put in place approved policies, procedures and systems that are necessary for the proper functioning of ECPB*. Relevant interventions defined to achieve these goals and objectives are I) *Improve the knowledge base for protected area management; ii) Implement research programs for priority conservation management issues; iii) Identify and monitor key biodiversity indicators iv) Develop, implement and monitor an Information Technology strategy that will meet current and future needs of the ECPB*

The medium-term focus for the **baseline information** component of this KRA is: I) The collection and collation of key reserve baseline inventory data; ii) The maintenance of the State of Knowledge Report

The medium-term focus for the **research and monitoring** component of this KRA is: I) The development of a comprehensive reserve monitoring program; ii) The identification of research priorities to address management priorities; iii) The development of collaborative relationships with research institutions and conservation agencies in neighbouring provinces (Ezemvelo KZN Wildlife, CapeNature and the Free State Department of Tourism, Economic and Environment Affairs).

The medium-term focus for the **data management** component of this KRA is: I) The design and development of coordinated, well structured reserve databases for biophysical information, socio-economic context, profile of visitor usage and information on Reserve management interventions

KRA7 : KNOWLEDGE MANAGEMENT									
GOAL: To ensure that relevant scientific research and monitoring guides the improving management of the Dwesa-Cwebe Nature Reserve, and results in information that is readily accessible to managers and relevant stakeholders.									
OBJECTIVE 1: 1. To collect and maintain baseline information on biodiversity, resource use, relevant socio-economic conditions and Reserve use.									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Collate key baseline data for the reserve, including: proclaimed land; heritage resources; plant species and communities; faunal species; biological processes; resource use; invasive species; hydrology; reserve staff complement; reserve roads and tracks; municipal IDP's; research and monitoring data; and visitor infrastructure, facilities and services	✓	✓	✓	✓	✓	High	Reserve database	Number and profile of Reserve staff using databases to support decision-making	All staff with access to database
2. Maintain key baseline data for the reserve, including: visitor profiles and usage; reserve budgets; reserve assets; weather conditions; socio-economic conditions; enforcement incidents; and faunal numbers and distribution	✓	✓	✓	✓	✓	High	Reserve database	Number and profile of Reserve staff using databases to support decision-making	All staff with access to database
3. Update the Reserve State of Knowledge report every 2 years.		✓		✓		Moderate	Up to date State of Knowledge Report	SOK Report	All staff with access to SOK report

KRA7 : KNOWLEDGE MANAGEMENT									
GOAL: To ensure that relevant scientific research and monitoring guides the improving management of the Dwesa-Cwebe Nature Reserve, and results in information that is readily accessible to managers and relevant stakeholders.									
OBJECTIVE 2: To develop, maintain and manage basic research and monitoring programmes that support the Reserve's functioning and management									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Develop, implement, and maintain a relevant and focused research and monitoring program for the Dwesa-Cwebe Nature Reserve. e.g. invasive alien clearing, vegetation monitoring, game counts, resource use activities, visitor numbers and profiles, illegal activity register. Prioritise monitoring requirements and phase development and implementation of monitoring	✓	✓	✓	✓	✓	High	Research and monitoring programme	Basic research and monitoring databases developed	All databases up to date
2. Implement and maintain a vegetation monitoring program as a decision-support tool for determining the carrying capacity of large and medium-sized herbivore populations	✓	✓	✓	✓	✓	Moderate	Vegetation monitoring programme	Profiles (species, structural profile, % cover) of vegetation change at fixed sites/transects over time	No Target
3. Maintain coastal forests, thicket and grasslands as a dedicated facility for researchers undertaking research and monitoring programs that align with the Dwesa-Cwebe Nature Reserve research and monitoring priorities	✓	✓	✓	✓	✓	Moderate	Coastal forest research	Number of coastal forest research programs	No Target
4. Actively facilitate the involvement of research institutions in the implementation of the research and monitoring program for the Dwesa-Cwebe Nature Reserve		✓	✓	✓	✓	High	Brochure of information sent out to research institutions	Number of research and monitoring programs undertaken by external research institutions	No Target
5. Provide support for existing, or new, external-driven monitoring and research programs, particularly long-term monitoring and research programs	✓	✓	✓	✓	✓	Moderate			

KRA7 : KNOWLEDGE MANAGEMENT									
GOAL: To ensure that relevant scientific research and monitoring guides the improving management of the Dwesa-Cwebe Nature Reserve, and results in information that is readily accessible to managers and relevant stakeholders.									
OBJECTIVE 3: To ensure that inventory, research, and monitoring data required to inform management decisions are effectively captured, and accessible									
Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Establish and maintain a database of available Reserve information that aids decision-making. Ensure a schedule of regular backups	✓	✓	✓	✓	✓	Moderate	Reserve database	Staff knowledge of and ability to use database	By year 5 all staff know how to use database
2. Train relevant staff to use the database	✓	✓	✓	✓	✓	Moderate			
3. Store all information in a single locality	✓	✓	✓	✓	✓	Moderate			
4. Integrate information maintained in the database into the annual review of the SMP and AOP		✓	✓	✓	✓	High			
5. Develop and maintain a checking system that allows borrowed documents to be traced.	✓	✓	✓	✓	✓	Low			

### 3.8 KRA8: Education, Interpretation and Awareness

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This KRA relates generally to several goals of the ECPB's Strategic Plan:- Strategic Goal 1: *Best Practice Bio-Diversity and Cultural Resource Conservation*; Strategic Goal 2: *Linking people and parks* and also Strategic Goal 4: *Building the image of the ECPB*. More specifically, the KRA responds to the strategic objectives: *Establish effective measures to conserve all elements of biodiversity in the Eastern Cape by 2010 and Transform the relationship between reserves and neighbours from exclusion to involvement*. Relevant interventions defined to achieve these goals and objectives are: i) *Reduce the lack of societal recognition of the economic benefits of biodiversity conservation at regional and local levels*; ii) *Address the lack of capacity in co-management arrangements*; iii) *Build the image of the organization*.

The medium term focus of the education, interpretation and awareness component of this KRA is: i) The development of a local educational and awareness strategy; ii) The sourcing and displaying of easily available educational material; iii) Taking advantage of environmental and management training courses offered; iv) Establishing links with organisations that have already developed environment related educational materials;; v) The establishment and maintenance of information and interpretive facilities and services; and vi) The establishment of an environmental education program.

**KRA8: EDUCATION, INTERPRETATION AND AWARENESS**

**GOAL:** To develop education, interpretation and awareness programs, facilities and services to improve reserve visitors, users and staff awareness about the ECPB, the Reserve and conservation in general.

**OBJECTIVE 1:** 1. To develop an effective environmental education and awareness programme

Activities	Time Frame (years)					Priority	Key Deliverables	Key Indicators	Target for indicator
	1	2	3	4	5				
1. Develop an education and awareness strategy for the Dwesa-Cwebe Nature Reserve with a focus on raising awareness in local communities of the nature and purpose of the Reserve.		✓	✓	✓	✓	High	Education and Awareness Strategy		
2. Actively seek out and display relevant posters and other materials (e.g. MCM and WESSA posters) in existing and new visitor and staff infrastructure, facilities and services	✓	✓	✓	✓	✓	Moderate	Poster and information displays in visitor and staff infrastructure and facilities	Type, profile and distribution of interpretive displays and materials	By Year 5 all tourist and staff infrastructure, facilities and services have an interpretive component
3. Develop links with environmental education networks to facilitate the development and sharing of education programmes and resources e.g. Marine Educators Network, WESSA, Rhodes Environmental Education Dept. SANParks and EKZN Wildlife, Greater St Lucia Wetland Reserve.	✓	✓	✓	✓	✓	Moderate			
4. Facilitate and/or participate in any suitable training courses relating to PA management and function	✓	✓	✓	✓	✓	Moderate			
5. Design and develop environmental education infrastructure, facilities and programs at Dwesa-Cwebe and link these to the existing and proposed recreational services and facilities						Low	Education centre building	Rating of functionality of building as an Education centre on a scale of 1-5 with 1 being very poor.	1. State of readiness rated 4 or higher by year 5

#### **4 CONSERVATION DEVELOPMENT FRAMEWORK**

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Based on available information on the biophysical, heritage, socio-economic and land use context of the Reserve, and in consultation with the Reserve Planning Team and the Land Trust, a Conservation Development Framework (CDF) for the projected medium-term extent of the Reserve has been developed as part of this management plan. This CDF will provide an overarching spatial planning framework for the Dwesa-Cwebe Nature Reserve and the adjacent conservation estate. The CDF indicates the extent and location of suitable visitor use zones for the Reserve, with management guidelines and broad conservation and tourism infrastructural requirements (e.g. fences, roads) designated for each use zone. Table 1 indicates the desired visitor experiences, suitable activities, appropriate infrastructural developments and management guidelines for different use zones. Table 2 provides a schedule of road classifications proposed for the Reserve. The visitor use zones, services and facilities identified in the CDF will undergo detailed local area planning prior to development implementation, as the Reserve expands and consolidates.

**Map 2: Conservation Development Framework for the Dwesa-Cwebe Nature Reserve.**

## GUIDE TO VISITOR USE ZONES, MANAGEMENT OVERLAYS AND ROAD CLASSIFICATIONS - EASTERN CAPE RESERVES

**Note: Use Zones relate to visitor experiential qualities**

### MARINE PROTECTED AREA - ZONATION

**DESCRIPTION:** The **Marine Protected Area (MPA)** is made up of three zones namely, **Offshore, Inshore and Estuary Zones**. Offshore is the area of the MPA beyond (seaward side) of the 10m-depth line. Inshore is the area of the MPA within (landward side) from the 10m-depth line - up to the high-water mark. Estuary is the area of the MPA within the tidal portion of the rivers. The MPA includes the seabed, water and air space up to 1000m above sea level (vertical). Each of the three zones can be classified as **Sanctuary** or **Controlled Zones**.

**MARINE PROTECTED AREA - ACTIVITIES:** No scuba diving permitted unless a permit has been granted. Scuba diving permits shall not be granted to persons who intend to scuba dive as part of a commercial activity. No person shall operate a scuba diving business unless such person has been granted a scuba diving operator permit. Scuba divers issued with permits shall not be allowed to feed fish, chum or dump any material or discharge any attractions, use any form or type of cage, use or possess any electro acoustic-discharging device or power head or remove any part or article from a ship wreck. No tourism business or commercial filming without a tour operator permit or commercial filming permit. No scientific research without a scientific research permit. No person shall be entitled to use any type of personal water craft (power driven vessel), or moor for more than 24 hours without permission. No person shall organise, promote or carry out any form of organised competition utilising motorised vessels.

**SANCTUARY ZONE - ACTIVITIES:** All forms of fishing shall be prohibited. Spear fishers not allowed entering the water. All fishing gear aboard fishing vessels shall be stowed when entering this zone. No scuba diving permitted unless a permit has been granted. Scuba diving permits shall not be granted to persons who intend to scuba dive as part of a commercial activity.

**CONTROLLED ZONE - ACTIVITIES:** The holders of commercial, recreational and subsistence permits (granted in terms of section 13 of the the Marine Living Resources Act - Act 18 of 1998) shall be permitted to fish.

<b>PROVINCIAL PARK - ZONATION</b>	
<b>CHARACTERISTICS</b>	<b>MANAGEMENT GUIDELINES</b>
Complies fully with the criteria of and is designated in terms of the Protected Areas Act	Managed to protect and maintain natural and cultural resources biodiversity and the provision of environmental goods and services.
An area retaining an intrinsically wild appearance and character, or capable of being restored to such and which is undeveloped and roadless, without permanent improvements or human habitation.	Apply principles of wilderness management (needs to be compiled as a norm). Only apply limited management interventions and these may only under be carried out in extreme conditions applying "tread lightly" principles.
An area that provides outstanding opportunities for solitude.	Restrict visitor numbers. Allow for rest periods of no visitors. No contact between different user groups.
An area with awe inspiring natural characteristics.	Leave no trace ethic.
Sight and sound of human habitation and activities barely discernable and at far distance (except your own group)	Over flying by aircraft to be strictly controlled.
<b>ACTIVITIES</b> "No-trace-left" activities; guided nature observation on non-defined hiking routes, research, bird watching. "pack it in and pack it out" principle.	
<b>SUSTAINABLE RESOURCE USE:</b> Not applicable	
<b>FACILITIES:</b> No facilities. Facilities serving this zone is placed in adjoining zones and in particular the Primitive zone. No audible equipment or communications structures.	
<b>INTERACTION WITH OTHER USERS:</b> None, confined to own group. Numbers of groups and numbers per group to be se	
<b>ADDITIONAL FACILITIES:</b> NONE	
<b>SOPHISTICATION OF FACILITIES:</b> No structures excepting those existing structures of cultural significance (guided by SAHRA). Facilities serving the zone placed in adjoining zones and in particular the Primitive zone.	
<b>ACCESS:</b> Non-mechanised access for visitors and management. Non-motorised river rides acceptable.	
<b>ROADS:</b> No roads.	
<b>AUDIBLE EQUIPMENT AND COMMUNICATION STRUCTURES:</b> None	

**Wilderness**

CHARACTERISTICS	MANAGEMENT GUIDELINES
Provides a "Wilderness" experience, but does not comply with the criteria for zonation as Wilderness Zone.	Need to mitigate impacts of visible and audible human activities impacting from outside the zone.
Human impacts (evidence of human use / existence) from outside the zone may be visible or audible from certain vantage points.	No mechanised access
	"Leave no trace" camping
	No new accommodation (eg hiking huts etc) Existing cultural buildings could be used in line with guidelines set by SAHRA
<b>ACTIVITIES</b> "No-trace-left" activities; canoeing, environmental education, nature observation on defined or non-defined hiking routes, research, bird watching. "Pack it in and pack it out" principle. Several groups may be in area at the same time.	
<b>SUSTAINABLE RESOURCE USE:</b> Under controlled conditions	
<b>FACILITIES:</b> No facilities. Facilities serving this zone is placed in adjoining zones and in particular the Primitive zone. No audible equipment or communications structures.	
<b>ADDITIONAL FACILITIES:</b> None	
<b>SOPHISTICATION OF FACILITIES:</b> No facilities except portable tents. Park policy should define rules for washing, ablution and cooking.	
<b>ACCESS:</b> Non-motorised. Parking provided in Primitive zone.	
<b>ROADS:</b> No roads, but C1, D1 or E for management access under controlled levels of use.	
<b>AUDIBLE EQUIPMENT AND COMMUNICATION STRUCTURES:</b> None	

Remote

CHARACTERISTICS	MANAGEMENT GUIDELINES
Provides basic self catering facilities and access to Remote Zone.	Roads or other infrastructure limited to minimum required to serve Remote zones for both recreation and management
Access is limited to users of the facilities. Limited number of users	Minimum contact between users
Views of human activities and development outside of the park may be visible from this zone.	
<b>SUSTAINABLE RESOURCE USE:</b> Under controlled conditions	

Primitive

<b>ACTIVITIES:</b> Guided/unguided hiking/walking tours, game drives. Vehicular access routes to park infrastructure and facilities and facilities serving the remote zones.
<b>INTERACTION WITH OTHER USERS:</b> Limited - access control focused on maintaining a "natural" experience for visitors.
<b>FACILITIES:</b> Small permanent "touch the earth lightly" camps, and hikers huts.
<b>ADDITIONAL FACILITIES:</b> None
<b>SOPHISTICATION OF FACILITIES:</b> Limited<15 beds. Basic facilities using gas/solar/fire for heating and cooking.
<b>ACCESS:</b> Limited and controlled mechanised access on designated routes.
<b>ROADS:</b> A1, B1 or C1.
<b>AUDIBLE EQUIPMENT AND COMMUNICATION STRUCTURES:</b> No cell phone or radio coverage/usage. Emergency communications provided.

### CHARACTERISTICS

Non motorised accompanied or unaccompanied access to a wide range of recreational activities  
 The landscape can provide a sense of solitude of a smaller scale and relative to the park. ie areas within a park that cannot be zoned as Remote, but a relative sense of solitude can be experienced  
 The zone can define non motorised access within Low Intensity and High Intensity Leisure zones

**ACTIVITIES:** Hiking, rock climbing, self guided constructed trails and walks

**SUSTAINABLE RESOURCE USE:** Under controlled conditions

**INTERACTION WITH OTHER USERS:** Moderate to high

**FACILITIES:** Hiking trails, footpaths, and bird hides. No accommodation. Ablution facilities may be provided in high use areas.

**ADDITIONAL FACILITIES:** None

**SOPHISTICATION OF FACILITIES:** Where provided should be basic.

**ACCESS:** Pedestrian only or in some cases cycles

**ROADS:** No roads except essential management tracks C1, D1 or E

**AUDIBLE EQUIPMENT AND COMMUNICATION STRUCTURES:** Cell phone coverage/usage for emergencies. Code of use for cell phones and radios required to retain relative level of solitude.

### MANAGEMENT GUIDELINES

This zone may have different meanings and implementation in different parks

This zone may have different meanings and implementation in different parks

Essentially pedestrian access, but in certain parks horse and Mountain bikes can be accommodated

**ACTIVITIES:** Hiking, rock climbing, self guided constructed trails and walks

**SUSTAINABLE RESOURCE USE:** Under controlled conditions

**INTERACTION WITH OTHER USERS:** Moderate to high

**FACILITIES:** Hiking trails, footpaths, and bird hides. No accommodation. Ablution facilities may be provided in high use areas.

**ADDITIONAL FACILITIES:** None

**SOPHISTICATION OF FACILITIES:** Where provided should be basic.

**ACCESS:** Pedestrian only or in some cases cycles

**ROADS:** No roads except essential management tracks C1, D1 or E

**AUDIBLE EQUIPMENT AND COMMUNICATION STRUCTURES:** Cell phone coverage/usage for emergencies. Code of use for cell phones and radios required to retain relative level of solitude.

Low Intensity Leisure	CHARACTERISTICS	MANAGEMENT GUIDELINES
	Limited sensitive basic infrastructure for accessibility and enjoyment of the area.	Only limited, sympathetic development linked to tourism and management tourism facilities.
	Landscapes that can absorb larger concentrations of people.	A range of low impact leisure activities.
	Slightly modified landscapes.	Development limited to visitor sites.
	Limited motorised access on designated game routes.	For concession areas with limited access.
	<b>ACTIVITIES:</b> Tourist accommodation, picnicking, walking, boating (motorised – dead slow, non motorised), no fishing.	
	<b>SUSTAINABLE RESOURCE USE:</b> Under controlled conditions.	
	<b>INTERACTION WITH OTHER USERS:</b> Limited to Moderate	
	<b>FACILITIES:</b> Ablution facilities and small self-catering or lodge accommodation only. No day visitor sites.	
	<b>ADDITIONAL FACILITIES:</b> Facilities linked to the operation of the low intensity leisure activities.	
	<b>SOPHISTICATION OF FACILITIES:</b> Low to medium density 8 - 30 beds.	
	<b>ACCESS:</b> Limited and controlled mechanised access on designated routes.	
	<b>ROADS:</b> B1 or C1.	
	<b>AUDIBLE EQUIPMENT AND COMMUNICATION STRUCTURES:</b> Cell phone coverage in vicinity of camps. Code of use for cell phones and radios required to retain relative level of solitude.	

High Intensity Leisure	CHARACTERISTICS	MANAGEMENT GUIDELINES
	High density tourist development nodes with modern amenities	Should reflect ethos and character of park.
	Accessible by motorised transport (Car/bus) on designated transport routes.	Preferable to locate high order facilities such as staff accommodation, workshops inside this zone.
	More concentrated activities than Low Intensity leisure.	Visitor and traffic management required.
	Range of infrastructure and facilities.	For administration and operational facilities - placed on periphery of the park. For tourism accommodation - placed on high potential sites.
	<b>ACTIVITIES:</b> Restaurants, shops, education centres, day visitor picnicking and braais, park administration and staff accommodation, tourism accommodation / lodge facilities, lodge reception and parking areas. Boating, water skiing, fishing.	

<b>SUSTAINABLE RESOURCE USE:</b> Not compatible
<b>INTERACTION WITH OTHER USERS:</b> Moderate to High
<b>FACILITIES:</b> Education Centres, day visitor sites, high-density camps/lodges providing tourist accommodation with modern amenities. Staff villages and administrative centres restricted to park and concessionaire staff. Cell phone coverage in camps.
<b>Edutainment centres, swimming pools, day visitor sites (adjoining or within camp), petrol stations, restaurants.</b>
<b>SOPHISTICATION OF FACILITIES:</b> Moderate to high-density 30-60 beds. Self catering and catered
<b>ACCESS:</b> Highly motorised including busses and delivery vehicles. Access could be limited or restricted to certain tourism accommodation sites. Visitor and traffic management required. Monitor visitor experience and control numbers if required.
<b>ROADS:</b> A1, B1 or C1.
<b>AUDIBLE EQUIPMENT AND COMMUNICATION STRUCTURES:</b> Cell phone coverage in vicinity of camps. Code of use for cell phones and radios required to retain relative level of solitude.

<b>MANAGEMENT OVERLAY</b>	
<b>CHARACTERISTICS</b>	<b>MANAGEMENT GUIDELINES</b>
Area of at least <b>national</b> significance.	No destructive scientific investigation without national permit. (Eg Excavations).
Areas that will be managed for the preservation, protection and interpretation of cultural resources.	Moratorium on destructive research preferred.
Cultural resources that are key to the purposes of the park will be included in this zone.	Presentation of sites according to the following guidelines: Reversibility, impact control.
Features that can be used for education purposes (geo sites).	Secure site against vandalism, treasure hunting or disrespectful behaviour (sacred sites).
<b>ACTIVITIES:</b> Non destructive scientific investigation and educational / interpretive visits, geo sites	
<b>SUSTAINABLE RESOURCE USE:</b> Not compatible	
<b>FACILITIES:</b> No infrastructure development, except for providing access	
<b>ACCESS:</b> Control numbers of visitors. Guided excursions only.	
<b>ROADS:</b> A1, B1, C1	

**Heritage**

<b>MANAGEMENT OVERLAY</b>	
<b>CHARACTERISTICS</b>	<b>MANAGEMENT GUIDELINES</b>
Areas of extreme sensitivity (eg. red data and endemic species).	No-go area for visitors
Area of exceptional diversity, endemism and rarity.	No development of any kind
Can be on any scale eg a small area within a rest camp.	
<b>ACTIVITIES:</b> Scientific and conservation measures only	
<b>SUSTAINABLE RESOURCE USE:</b> Not compatible	<b>SUSTAINABLE RESOURCE USE:</b> Not compatible
<b>FACILITIES:</b> None	
<b>ACCESS:</b> Mainly for scientific and conservation measures, but some access for education and interpretation can be considered.	
<b>ROADS:</b> A1, B1, C1	

**Special Conservation**

<b>CHARACTERISTICS</b>	<b>MANAGEMENT GUIDELINES</b>
Areas that have been disturbed by humans by means of land use practices.	Use areas for creating public awareness
Long term vision to upgrade to another category	
<b>ACTIVITIES:</b> scientific and conservation, some tourism possible for awareness and interpretation purposes.	
<b>SUSTAINABLE RESOURCE USE:</b> Not compatible	
<b>FACILITIES:</b> None	
<b>ACCESS:</b> Primarily for management only, but access for awareness and interpretation can be considered.	
<b>ROADS:</b> A1, B1, C1	

**Rehabilitation**

KEY TO THE ROAD CLASSIFICATION SCHEME						
Road category	Sub category	Road Type	Use	Design standards	Service level	Comments
A	A1	Connecting Entrance Gates with main camps and linking main camps	Linking Camps and Entrance Gates for the delivery of goods and the transporting of guests and staff to camps - all vehicles with axle weight < 8 tonnes	High level of traffic. 60 km/h - 7,2m wide	Riding quality very high. Specialized road sealing equipment required	Main roads should be classified as this, fuel & other deliveries etc, should be as far as possible restricted to them etc.
	A2	Primary tourist roads - Acting as link roads / Game viewing roads	All buses, cars, SUV and caravans, etc - Limited delivery vehicles	High level of traffic. Heavy utility vehicles are restricted, except for deliveries to smaller camps. 40 km/h - 6,0m wide	Riding quality high. Specialized road sealing equipment required	There may be restrictions on the amount of delivery vehicles, buses and trucks, etc
	A3	Secondary tourist roads - Acting as game viewing roads	Only OSV, cars and vehicles less than 25 seats and carrying capacity < 4000kg	Low level of traffic. Heavy utility vehicles are excluded, except for deliveries to concessions and smaller camps. 30 km/h - 5,0m wide	Riding quality high. Specialized road sealing equipment required	Game viewing roads - only game viewing purposes - no deliveries or link functions, except deliveries to Concessions and smaller camps
B. Gravel	B1	Secondary tourist roads - Main tourist game viewing and linking roads	Cars, small buses (<25 seats), camper bakkies, SUV and 4X4 vehicles, etc. Limited deliveries	Medium level of traffic. 40km/h -6,5m wide	Medium quality. Grading of road surface twice per annum, drainage & surface maintained by grader	Link roads > 50 vehicles per day.
	B2	Minor tourist game viewing roads - loops	Cars, small buses (<25 seats), camper vans, bakkies, SUV and 4X4 vehicles, etc Limited deliveries to concessions and smaller camps	Low level of traffic - 30km/h - 4m wide	Medium quality. Grading of road surface once per annum, drainage & surface maintained by grader	Link roads < 50 vehicles per day and loops. Generally one way.
C. All weather two track roads	C1	All weather two track roads - graveled or stabilized	Limited and controlled access to low key destinations/loops and management access.	3m wide	Low riding quality. Patch gravel as required - limited grader work	Access to wilderness destinations. Graveled where required. Generally one way, but sections of two three-track to allow passing can be constructed. Drainage work
D. Non-All weather two track roads	D1	Non All weather two track roads - natural <i>in situ</i> materials	Limited and controlled access for adventure trails and management access.	2m wide	Low riding quality - only hand work on drainage	Limited gravel in sensitive soil conditions. Drainage work.
E. Off road driving	E1	Limited application to small camps and operational management	Occasional traffic to specific spot/site and official management actions	Not more than one vehicle per track	Only remedial work by hand	Limited to small camps/ operational management

## 5 INSTITUTIONAL ARRANGEMENTS

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### 5.1 Approval and Adoption of the SMP

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The Regional Manager and the Chief Operating Officer are the officials responsible for submitting the SMP and associated AOP to the ECPB Directorate for formal approval and adoption

The ECPB will finally submit the approved SMP to the Eastern Cape MEC for Economic Affairs, Environment and Tourism as per the requirements of the Provincial Parks Board Act 12 of 2003 (EC) and the NEM: Protected Areas Act 57 of 2003.

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