Gourikwa Reserve

Western Cape
South Africa

Management Plan

Prepared by Dave Savage
CapeNature Biodiversity Stewardship Programme

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STATUS

The Gourikwa Nature Reserve has been declared as a Section 23 Nature Reserve.

Declaration Date:	**Government Gazette Notice:**
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AUTHORISATION

This Integrated Management Plan for Gourikwa Reserve was drafted and recommended by Dave Savage

Supported by:
CapeNature Conservation Operations

Recommended and adopted by:

Name and Title	**Signature and Date**
Management Authority *Management Authority: Gourikwa Reserve (PTY) Ltd 1999/016082/07* *Represented by Dave Savage*	
CapeNature Landscape Manager *Dr Alan Wheeler*	

Approved by:

Name and Title	**Signature and Date**
Mr Anton Bredell Minister of Local Government, Environmental Affairs and Development Planning	

Review Date: November 2034

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ABBREVIATIONS

CBA	Critical Biodiversity Area
CEO	Chief Executive Officer
DEA&DP	Department of Environmental Affairs and Development Planning
DEFF	Department of Environment, Forestry and Fisheries
DWA	National Department of Water Affairs
EIA	Environmental Impact Assessment
EMF	Environmental Management Framework
EMP	Environmental Management Plan
FEPA	Freshwater Ecosystem Priority Area
FPA	Fire Protection Association in terms of the National Veld and Forest Fire Act (No.1 of 1998)
GIS	Geographical Information System
IDP	Municipal Integrated Development Plan
IUCN	International Union for the Conservation of Nature
MCM	National Department of Marine and Coastal Management
MEC	Member of the Executive Council
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
NEMA	National Environmental Management Act
NFEPA	National Freshwater Ecosystem Priority Area
NPAES	National Protected Area Expansion Strategy
NSBA	National Spatial Biodiversity Assessment
PA	Protected Area
SAHRA	South African Heritage Resources Agency
SOB	State of Biodiversity Report
SDF	Municipal Spatial Development Framework
SMP	Strategic Management Plan
SWOT	Strengths, weaknesses, opportunities and threats analysis
UNESCO	United Nations Educational, Scientific and Cultural Organisation

1) BACKGROUND

1.1 Purpose of the plan

Management plans for biodiversity stewardship sites are strategic documents that provide the framework for the development and operation of biodiversity stewardship sites. They inform management at all levels, from the landowner through to support staff within CapeNature. The purpose of the management plan is to:

- Provide the primary strategic tool for management of Gourikwa Reserve, informing the need for specific programmes and operational procedures.
- Provide for capacity building, future thinking and continuity of management.
- Enable the landowner to develop and manage Gourikwa Reserve in such a way that its values and the purpose for which it has been established are protected.

1.2 Structure of the plan

Section 1:	Provides an introduction and background to the management plan and Gourikwa Reserve.
Section 2:	Sets out the vision and objectives for the biodiversity stewardship site.
Section 3:	Establishes the context of the biodiversity stewardship site, providing the basis for the operational management framework that follows.
Section 4:	Sets out the zonation of the biodiversity stewardship site, outlining the land uses in particular zones.
Section 5:	Describes the administrative structure that has been established for Gourikwa Reserve.
Section 6:	Operational Management Framework - Sets out the management targets that must be achieved in managing the nature reserve.
Section 7:	Annual Plan of Operation and Review

1.3 Adaptive management

The preparation of this management plan has been undertaken based on the guiding principles of adaptive management, which is a structured, iterative process in which decisions are made using the best available information, with the aim of obtaining better information through monitoring of performance (Figure 1.1). In this way, decision making is aimed at achieving the best outcome based on current understanding, whilst accruing the information needed to improve future management. Adaptive management can lead to revision of a part or if necessary the whole management plan.

Figure 1.1 The adaptive management cycle (Management Strategy Evaluation, 2009)

Adaptive management enables landowners and managers to:

i) Learn through experience.

ii) Take account of, and respond to, changing factors that affect the biodiversity stewardship site.

iii) Develop or refine management processes.

iv) Adopt best practices and new innovations in biodiversity conservation management.

v) Demonstrate that management is appropriate and effective.

1.4 Introduction

The Gourikwa Nature Reserve (depicted by the red arrow in Figure 1.2), consists of the following property description, portion 15 of the farm Buffelshoek 455. It is situated near the village of Gouritsmond and falls under the Hessequa District Municipality.

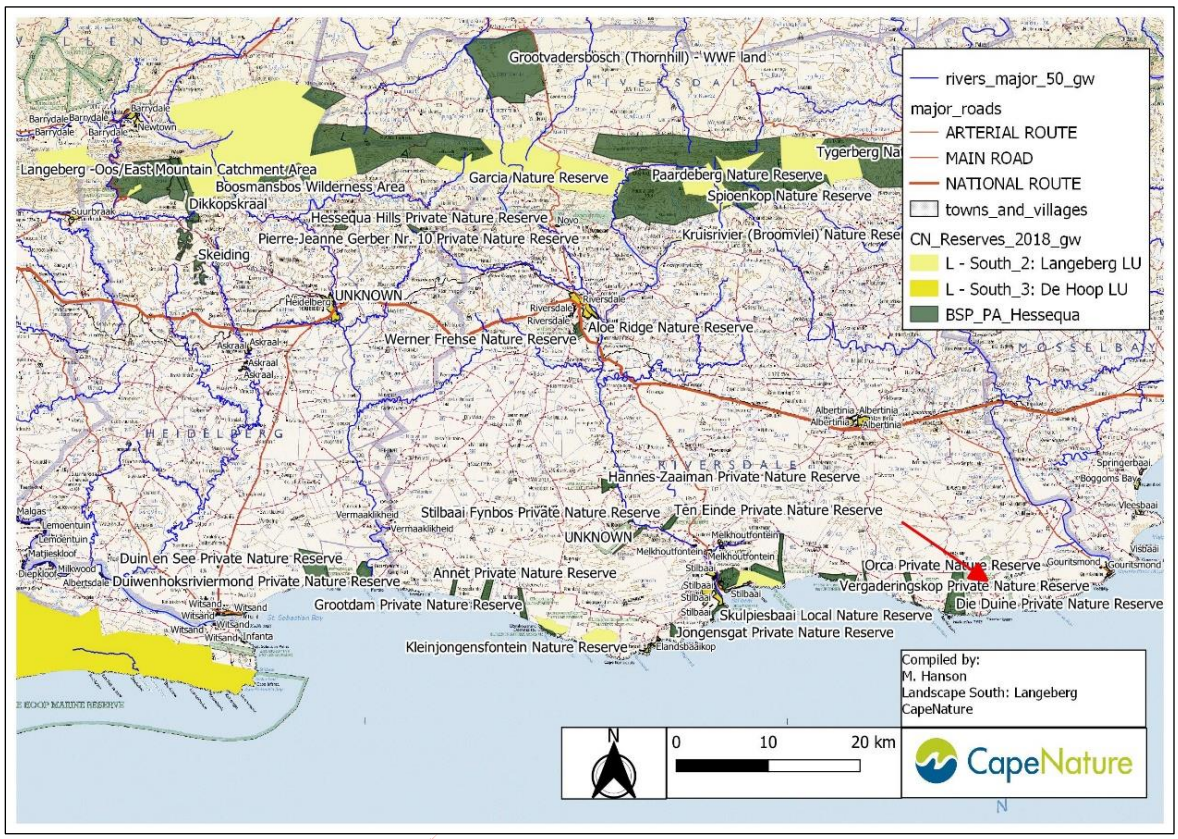


Figure 1.2 Regional location of Gourikwa Reserve

1.5 Landowner details

Owner	Dave Savage
Contact person	Sonia Louw
Contact details – Tel.	087 702 9126
Contact details – email	manager@gourikwa.co.za
Management Authority	Gourikwa Reserve (PTY) Ltd 1999/016082/07
Property descriptions and title deed number	Portion 15 of the Farm Buffelshoek 455
Total property area	2 455 hectares

1.6 The values of Gourikwa Reserve

The values of a site are those remarkable attributes that led to it being identified as a priority for the Biodiversity Stewardship Programme. The values are important in planning and management, as they are the aspects of the place that must be protected. The values of Gourikwa Reserve include:

Natural values	– Vegetation types are *Canca Limestome (LT), Albertinia sand Fynbos (LT) and Blombos strandveld (LT).* – *Important endemic flora species; Lobostemon belliformis (CE) Aspalathus arenaria (VU) Agathosma muirii (VU) Leucadendron galpinii (VU)* – Apart from these mentioned species there are an additional 14 species of flora on the property that are either Vulnerable or threatened – Meets four of the CapeNature Protected Areas Expansion plan objectives. i. Critically Endangered ecosystems (All though vegetation types are LT, the vegetation is listed as CBA in the Biodiversity Sector plan of 2010 as areas of conservation) ii. Under-protected ecosystems and strategic landscapes iii. Essential habitat for selected species (Bontebok and Cape Mountain Zebra) iv. Marine, estuarine and coastal systems v. Freshwater ecosystems
Biodiversity targets of the Reserve	To ensure conservation of species and process by maintaining and improving ecosystem functioning. To achieve this by Maintain habitat connectivity – **Monitor Movement:** track the movement of at least 10 Cape Mountain zebras annually to ensure they are utilizing habitat effectively. – **Reduce Barriers:** Identify and remove or mitigate at least 80% of physical barriers (e.g., fences, roads) that impede zebra movement by 2030.**Expansion of habitat:** identify opportunities for expanding the boundaries of the reserve to neighbouring properties, by 2030. Promote species conservation such as Cape Mountain zebra and contribute to metapopulation management. – **Population Growth**: Increase the Cape Mountain zebra population within the reserve to 20 individuals, over the next five years. – **Health Monitoring:** Conduct bi-annual health assessments on at least 50% of the zebra population to monitor disease and overall health. Promote Genetic bulstering within the Cape:

	– **Genetic Diversity:** Introduce at least five new individuals from genetically diverse populations into the reserve every ten years. – **Genetic Testing:** Perform genetic testing on 30% of the population every five years, to monitor genetic diversity and identify potential inbreeding issues. – **Compliance with BMP:** Ensure that all conservation activities align with the Biodiversity Management Plan (BMP) for Cape Mountain Zebra, with annual reviews and adjustments as needed. – **Stakeholder Engagement:** Conduct at least two stakeholder meetings with the conservation agency every three years to discuss progress and updates on the BMP objectives. Reporting and communication: – **Reporting:** Compile an annual Cape Mountain zebra report providing information of breeding successes, management interventions, any escaped animals, any translocations planned or completed, etc.
Ecosystem service values	Cycling Processes: nutrient cycling, nitrogen fixation, carbon sequestration, soil formation; Regulation and Stabilisation: erosion control, regulation of rainfall and water supply, climate regulation, mitigation of storms and floods; Habitat Provision: refuge for animals and plants, storehouse for genetic material]. Pollination Services.
Eco-cultural tourism values	The property is fully equipped for tourism, there are couple cottages, family guest houses / rooms all self-catering. The reserve caters for conferences as well as weddings and events.
Cultural and historic values	Shell middens and fish traps along the coast
Socio-Economic values	The reserve caters for tourism, events, and has conference facilities. There is opportunities of guided tours and self-guided hiking / interpretation trails. There are also opportunities for wood cutter community projects whereby contractors are permitted to removed alien invasive vegetation form the reserve to sell wood collected for fiscal benefits.

1.7 Summary of management challenges and opportunities

In Hessequa the industrialization of agriculture is the leading cause of habitat loss and therefore biodiversity loss. As economical imperatives dictate ever larger fields that can be worked by mechanical means at an industrial scale, hedge rows and other kinds of untransformed land for wildlife fall victim to cultivation. Often these practices increase the susceptibility of the land to wind and water erosion. Not only

does this degrade the land further, it also increases the siltation of streams that are already stressed from over-pumping for irrigation. As the land area for natural ecosystems shrinks, there is less natural capacity to filter pollutants and detoxify waters; and less capacity to cycle nutrients and compost organic wastes. Species and ecosystem services decrease as a consequence.

Poor land management is a significant threat to biodiversity. The ecosystems of the Riversdale Coastal Plain require informed management for their healthy maintenance. Neglect or unwise management can result in invasive alien plant infestation, soil erosion, overgrazing of veld and inappropriate fire regimes, any of which can have devastating impacts on the natural environment.

Table 1.7.1 Management challenges and opportunities

Key performance area	Challenges and Opportunities
Fire management	Promote a veld age mosaic within the reserve by rotational block burning. Install priority firebreaks within the reserve. Establish a fire regime and burning frequency that promotes vegetation regrowth. Limit any negative impacts of frequent uncontrolled fires would have on vegetation / habitat. Reduce the vegetation fuel load that would contribute to intensity of fires which would impact the seedbank within the soils.
Invasive vegetation management	Reducing the Invasive species densities of the reserve remains a challenge. Opportunity The introduction of TMF funded projects "Conservation @ Work" could be implemented when funding becomes available. Maintaining control of the invasive flora vegetation by implementing best clearing methodology and practices Develop invasive vegetation clearing blocks within the reserve and implement annual clearing plan. Investigate opportunities for introduction of Biocontrol agents to assist in invasive flora control. Being a Contract Nature Reserve allows the management authority to access avenues of potential funding form tax incentives (SARS) and other special projects i.e TMF
Wildlife management	Population management of game species. Ie. Eland to reduce numbers to a safe low impact population that will allow for less competition with other game species and utilisation of vegetation. Maintaining a healthy vegetation carrying capacity that promotes sustainable utilisation of resources and game species diversity. Habitat utilisation and management that will allow for favourable introduction of additional species. Supplement feeding deficiencies by adding trace elements to artificial water supplies or game lick-blocks.

Sustainable harvesting	Promote long term sustainable use of flora species on the reserve by plant harvesters through monitoring and compliance with permits.
Erosion prevention and control	There are no major erosion concerns on the conservation areas of the property, however an assessment could be done in the future to ascertain and problems that can be dealt with when the need arises.
Monitoring and Baseline data collection	Create a Biodiversity Resource Inventory list. Promote Conservation of Threatened and Endemic flora on the reserve. Manage consumptive utilisation of biological resources that may be caused by harvesting of flora species.
Biodiversity security	There are partnerships in place with local and provincial law enforcement as well as conservation agencies to assist in illegal activities as and should they arise that the management authority need assistance on. Attendance to local community policing forums.
Development of tourism opportunities	Developing tourism products that will enhance the experience of visitors to the reserve, that is sustainable and not harmful to the biophysical asset of the reserve. Low impact, self-guide trails with interpretation information. Employment of guides for interpretation of the intertidal zone of the reserve for visitors.
Legal compliance	There are no compliance issues on the property and any future developments will need to be authorised through the appropriate departments and adhere to local or provincial legislation
Management effectiveness	The audits conducted by the provincial conservation authority are all up to date and management adaptions to the five-year plan are updated accordingly in agreement with the landowner. Currently the biggest objective to the reserve that is taking up most of the resources at this take is Alien invasive flora management and the effectiveness of these projects is audited alone.
Infrastructure	All infrastructures on the reserve is adequately maintained and future infrastructure ventures are not envisioned for the reserve. The objective is to maintain the natural integrity of the property and to tread lightly with any human activities. There is a network of existing jeep tracks that could also double up as future hiking and bike trails.

2) STRATEGIC MANAGEMENT FRAMEWORK

The strategic management framework is aimed at providing the basis for the protection, development and operation of the protected area over a five-year period. It consists of the vision, purpose and objectives of Gourikwa Reserve It has been

prepared collaboratively through a process involving the landowner (Management Authority), site manager and CapeNature.

2.1 Gourikwa Reserve Vision and Purpose

The Vision

"Our vision is to ensure the long-term protection of the site through appropriate management actions. The management of Gourikwa Reserve will strive to continually improve all aspects of the way in which the Reserve is managed - environmentally, socially and economically.

Purpose

The purpose is the foundation on which all future actions are based and is in line with the overall management philosophy of the nature reserve.

According to S17 of NEM: PAA, the purpose of declaring an area as a protected area are:

a) to protect ecologically viable areas representative of South Africa's biological diversity and its natural landscapes and seascapes in a system of protected areas;
b) to preserve the ecological integrity of those areas;
c) to conserve biodiversity in those areas;
d) to protect areas representative of all ecosystems, habitats and species naturally occurring in South Africa;
e) to protect South Africa's threatened or rare species;
f) to protect an area which is vulnerable or ecologically sensitive;
g) to assist in ensuring the sustained supply of environmental goods and services;
h) to provide for the sustainable use of natural and biological resources;
i) to create or augment destinations for nature-based tourism;
j) to manage the interrelationship between natural environmental biodiversity, human settlement and economic development;
k) generally, to contribute to human, social, cultural, spiritual and economic development; or
l) to rehabilitate and restore degraded ecosystems and promote the recovery of endangered and vulnerable species.

Gourikwa Reserve serves in the protection of South Africa's threatened and rare species, provides protection to ecosystems and preserves ecological integrity. Benefits of appropriate nature based economic activities may be utilised to promote human, social, cultural and economic development while protecting ecosystems that are vulnerable and ecologically sensitive.

2.2 Objectives

The objectives were derived from the vision and purpose and are grouped into Key Performance Areas (KPA) in which achievement must be obtained in order to support the management intention. Objectives are then prioritised through the development of action plans which are set out in the Operational Management Framework.

Table 2.1 sets out the key performance areas, the objective for each key performance area and the key deliverables, required to realise the objectives.

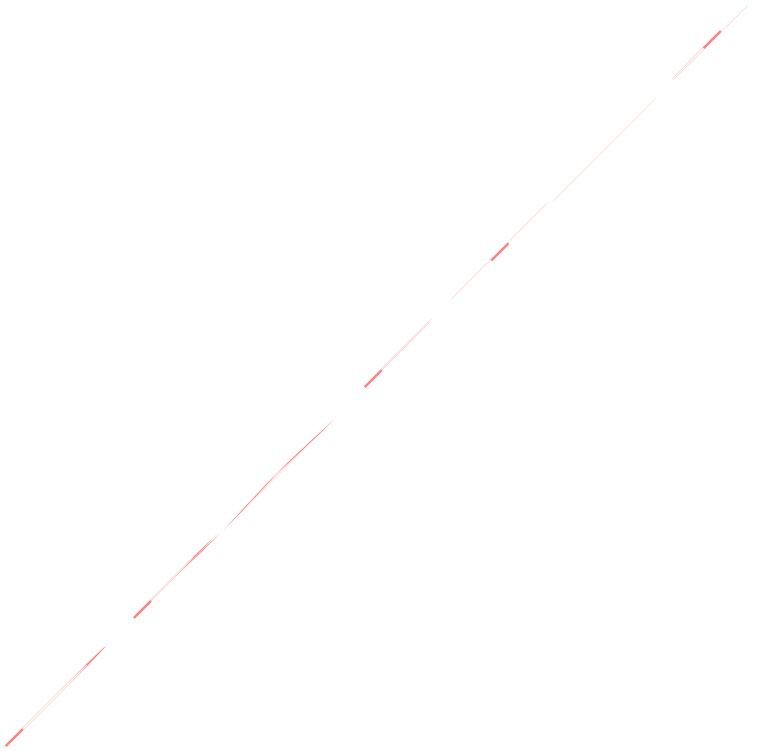


Table 2.1 Objectives and Key Deliverables for Gourikwa Reserve

Key Performance Area	Objective	Key Deliverable
Biodiversity Management		
Fire management	To ensure conservation of species and processes by maintaining and improving ecosystem functioning. To allow for natural fire processes to occur without impacting on safety and infrastructure. To implement effective Integrated Catchment Management.	Reduce/Prevent the Spread of Fires. Maintain Partnerships to Improve Fire Management. Determine and Implement Thresholds of Potential Concern. Reduce Wildfires due to Human Negligence and implement an ecological burn programme (if applicable).
Invasive vegetation management	To enhance biodiversity protection and conservation. To ensure conservation of species and processes by maintaining and improving ecosystem functioning.	Eradicate Alien and Invasive Species. Implement Biological Control. Prevent Further Introduction of Aliens.
Wildlife management	To ensure effective conservation of species and processes by maintaining and improving ecosystem functioning. To enhance biodiversity protection and conservation.	Prevent the introduction of alien fauna species. Control invasive alien fauna. Manage the introduction of fauna on the Reserve. Evaluate and monitor impact of fauna on the Reserve. Establish viable fauna species numbers on the Reserve. Maintain a healthy and productive fauna species on the Reserve while maintain species behavioural ecology.
Sustainable harvesting	To ensure the sustainable use of wild fynbos resources. To ensure the conservation of biodiversity where harvesting operations occur. To monitor the impact of harvesting on selected fynbos species.	Identify Management Zones Classify Floral Species according to Vulnerability Index Minimise Harvesting Impact Monitoring and Record Keeping Compliance with Relevant Legislation and permit conditions

Erosion prevention and control	To ensure implementation of effective conservation management interventions. To enhance biodiversity protection and conservation.	Prevent and mitigate soil erosion.
Monitoring and Baseline data collection	To manage biodiversity knowledge to ensure effective conservation management. To implement measures to ensure resilience and persistence of biodiversity in light of climate change. To ensure the implementation of effective conservation management interventions. To ensure conservation of species and processes by maintaining and improving ecosystem functioning.	Create a Biodiversity Resource Inventory. Implement Monitoring Programme. Implement Research Programme. Protection of Flora of Conservation Concern. Conservation of Threatened and Endemic Fauna. Manage consumptive utilisation of biological resources. Insert Ecological plan of Operation into CapeNature Conservation Services Ecological Matrix for the Area.
Biodiversity security	To enhance biodiversity protection and conservation. To ensure conservation of species and processes by maintaining and improving ecosystem functioning.	Improved security and safety of the biodiversity assets on the Nature Reserve.
Development		
Development of tourism opportunities	To evaluate potential tourism opportunities. To implement effective management systems. To ensure legal compliance and implementation of authorised development plans.	Development of tourism opportunities that generate revenue for the Nature Reserve.
Operational Management		
Legal compliance	To ensure legal compliance to all relevant legislation and policies.	Ensure that all legal requirements are met.
Management effectiveness	To implement effective management systems.	Conduct annual audits Auditing systems inform management and management plan revision.
Infrastructure	To ensure the implementation of effective conservation management interventions. To enhance biodiversity protection and conservation. To ensure conservation of species and processes by maintaining and improving ecosystem functioning.	All infrastructure on the Reserve is adequately maintained.

3) DESCRIPTION OF GOURIKWA RESERVE AND ITS CONTEXT

3.1 The legislative basis for the management of Gourikwa Reserve

There is a large body of legislation that is relevant to the management of Gourikwa Reserve, but the primary legislation guiding the management of protected areas is the National Environmental Management: Protected Areas Act (No.57 of 2003) (Hereafter referred to as the Act).

The Act establishes the legal basis for the creation and administration of protected areas in South Africa, as its objectives include provisions "for the protection and conservation of ecologically viable areas representative of South Africa's biological diversity and its natural landscapes". The Act sets out the mechanisms for the declaration of protected areas and the requirements for their management.

In the Western Cape, CapeNature is the Provincial Conservation Authority and its Biodiversity Stewardship Programme facilitates the establishment and management of protected areas on private land.

A detailed list of relevant legislation is provided in Appendix A. Landowners should familiarise themselves with the purpose and contents of the statutes and their subsequent amendments and regulations.

3.1.1 Proclamation status of Gourikwa Reserve

Gourikwa Reserve is proclaimed under Section 23(1) of the National Environmental management: Protected Areas Act (Act 57 of 2003). See Appendix B

3.1.2 Invasive species control in terms of the Biodiversity Act

In terms of Section 76 of the National Environmental Management: Biodiversity Act (No.10 of 2004), the management authority of a protected area must incorporate an invasive species control plan in the protected area management plan. This is addressed in Sections 6 and 8 below.

3.2 The regional and local planning context of Gourikwa Reserve

3.2.1 The Protected Area Expansion Strategy and Implementation Plan

The Protected Area Expansion Strategy and Implementation Plan is a response to the National Protected Area Expansion Strategy (NPAES) (SANBI & DEAT, 2010) which calls on provinces to develop implementation plans in support of the NPAES and in support of provincial conservation efforts and priorities. The NPAES, which provides a broad national framework for Protected Area expansion in South Africa, also identifies areas of importance to be targeted for Protected Area expansion in the country, and mechanisms to achieve this.

The CapeNature Protected Area Expansion Strategy addresses the formal proclamation of priority natural habitats as protected areas to secure biodiversity and ecosystem services for future generations. This strategy is aligned to the concepts and goals of the 2008 NPAES, but does identify some different spatial priorities.

The priority areas for Protected Area expansion in the Western Cape Province are based on the provincial map of critical biodiversity areas (referred to as the Western Cape Biodiversity Framework; see Pence, 2014). Critical Biodiversity Areas (CBAs) are terrestrial and aquatic features (e.g. wetlands, rivers and estuaries) that must be kept in a natural state in order to retain a reasonable proportion of biodiversity pattern in an ecologically functional and resilient landscape. CBAs represent the most area-efficient option to meeting all stated biodiversity thresholds (Maree and Vromans, 2010).

Two factors, importance and urgency, are then used to identify the highest priority CBAs for formal protection. An area is considered important for the expansion of the land-based Protected Area network if it is one of the best remaining examples of a Critically Endangered ecosystem, contributes to meeting biodiversity thresholds for under-protected terrestrial or freshwater ecosystems, maintaining ecological processes or climate change resilience, provides essential habitat for threatened and under-protected taxa, or a combination of these. Urgency is determined by the extent to which spatial options for meeting targets (and optimal Protected Area design) still exist, which is often linked to the degree of competing land or resource uses in an area.

Areas that have emerged as top priorities for landscape-scale Protected Area expansion in the Western Cape are highlighted by the Conservation Action Priorities (CAP) Map9. This CAP Map is underpinned by a comprehensive database which indicates specific cadastres targeted for Protected Area expansion according to objective, mechanism, organization and urgency.

Integrated Development Plans (IDPs) are compiled annually and for five year periods by all municipalities in South Africa in order to establish prioritization and allocation of budget expenditure in terms of development priorities.

Hessequa Local Authority Spatial Development Framework

Spatial Development Frameworks (SDFs) are compiled in order to illustrate current and desired future land uses spatially across the municipality and link in to the Integrated Development Plan (IDP) in terms of the spatial allocation of the municipal budget. The IDP and SDF should be taken into consideration in determining the zone of influence and establishing potential threats and opportunities in these areas. There is also the opportunity to identify projects and interventions that need to be included in the IDPs and SDFs where appropriate and within the legislated stakeholder engagement processes.

As for the district municipality IDP, Still Bay Harbour development is identified as a key project, but has no direct influence on this reserve. The coastal management programme for the district is compiled in terms of NEM:ICMA, however the coastal development setback line has not yet been finalised. The Working for the Coast/CoastCare Programme can assist the nature reserve complex with manpower as required during beach cleanup incidents and general alien invasive flora clearance. The local municipality climate change adaptation strategy is aligned to the district municipality. This strategy acts as a guide assisting municipalities to identify and prioritise climate change indicators facilitating the assessment of adaptive capacity The major climatic hazards in the Garden Route district (Hessequa incl.) identified by a Vulnerability Assessment include: droughts, floods and veld fires. Climate change is also expected to incrementally increase the frequency and severity of these hazards. Additionally, financial losses in the district, due to these climate hazards, has already been high, and will increase going into the future. Fire and Floods are most likely to affect the reserve in much the same way. Eg: damages to property by extreme weather and wild fires. The Lappiesbaai Management Plan is for the dune system at the east of the Goukou Estuary mouth and is of relevance to both the Goukou Estuary and Geelkrans Nature Reserve. These programs do not affect the reserve directly.

Western Cape Biodiversity Spatial Plan

With regards to the WCBSP and categorisation of the areas surrounding the nature reserve complex, Die Duine Private Nature Reserve is bounded by the reserve to the West, the north and east of the reserve there are combination of CBA and ESA's with natural vegetation. To the south is the coastline of the Indian Ocean.

Blomboschfontein, Groenland and Die Duine Private Nature Reserves as well as Klein Jongensfontein and Fynbosstrand Nature Reserve are surrounded by natural areas, with CBA along the coastal corridor and Other Natural on the inland boundary.

Critical Biodiversity Areas are those areas required to meet biodiversity thresholds. They are areas of land or aquatic features (or riparian buffer vegetation alongside CBA aquatic features) which must be safeguarded in their natural state if biodiversity is to persist, and ecosystems are to continue functioning. These Critical Biodiversity Areas incorporate i) areas that need to be safeguarded in order to meet national biodiversity pattern thresholds (target area), ii) areas required to ensure the continued existence and functioning of species and ecosystems (including the delivery of ecosystem services); and/or iii) important locations for biodiversity features or rare species. The CBA network represents the most land-efficient option to achieving all biodiversity targets. Any, relevant District Sector or Bioregional Plans, prepared in accordance with the Biodiversity Act.

Any relevant Environmental Management Frameworks, prepared in accordance with the National Environmental Management Act EIA Regulations.

The Integrated Development Plans (IDP), Spatial Development Frameworks (SDF) and Land Use Management Systems (LUMS) of the district and local municipalities within which the protected area falls. Refer to Figure 3.1

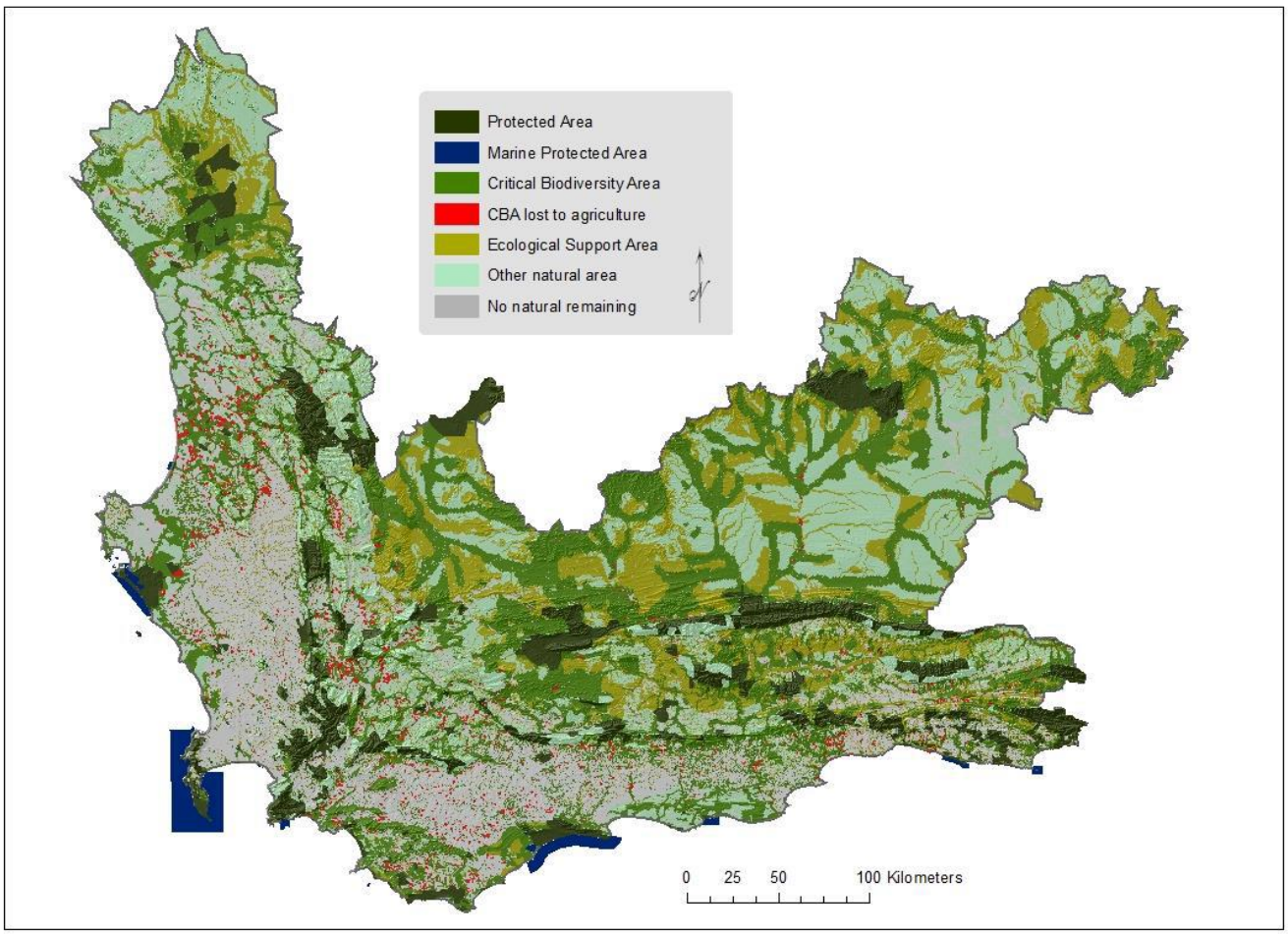


Figure 3.1 Critical Biodiversity Area map of the Western Cape

3.3 The history of Gourikwa Reserve

What is now Gourikwa Reserve, was once four different farms. The area was known as Buffelshoek. In 1980, the Atomic Energy Board (AEC) bought up the farms and renamed the area Gourikwa. The aim had been to establish a nuclear energy plant, a project which was eventually abandoned as it proved to be too expensive. During the AEC years, up to 1994, Gourikwa had been a national key point and was heavily guarded. Security fences were erected and soldiers patrolled the area. Razor wire fencing stretched right into the sea, making the area impenetrable. Any approaches from the sea were guarded by a patrol boat. The air space was off limits for fly overs. Fishermen and reed harvesters were therefore also banned from Gourikwa. Today, remnants of the activities carried out during that period, are the big store rooms, the conference centre, harbour walls and rusting steel plates on some of the rocks. The magnificent road infrastructure also dates back to this era.

The advent of the tarred road to the gates of Gourikwa, changed the face of farming in the area forever. Access to towns was suddenly easier and faster. It is told that the farmers and fishermen used to be fully self-sustained, living off the sea and the land. Small dairies, wheat, sheep and venison were staples from the land. Water came from fresh water springs, which allowed farmers to grow Lucerne, fruit trees and enormous water melons. The area is rich in Aloe Ferox, from which the bitter aloe juice was tapped. The fragrant herb buchu (Agagthosma sp), was also harvested, especially for medicinal purposes.

From the sea they harvested perlemoen, periwinkles and abundant fish. Thatch reed, Thamnochortus, was another source of income. Used in thatch roofs, the reed is still being harvested today. Wild life used to be prolific all along the dunes and towards the interior. In recent years, however, poaching has decimated the small antelope like bushbuck and duiker. The sea life also dwindled.

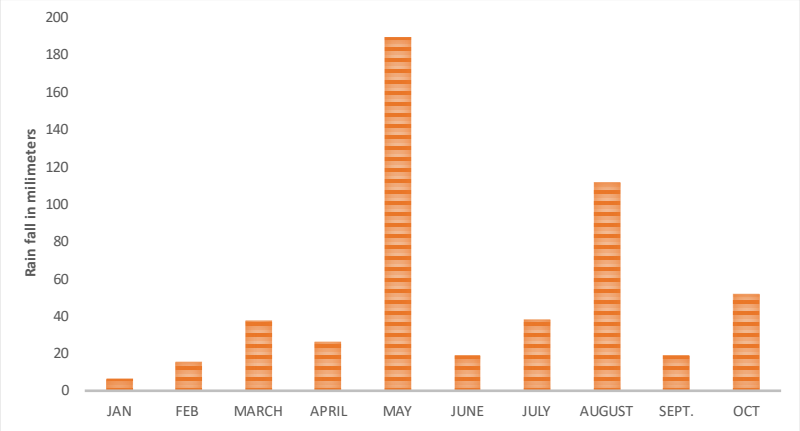
When the AEC sold Gourikwa in 1994, it was bought by a German couple, Monica and Gerhard Rein. Their dream was to establish a game reserve and a tourist destination, which they named Rein's Reserve. The cottages and fisherman's houses along the sea front were built during their reign. Upon the passing of his wife, Gerhard Rein had the beautiful chapel on the beach front built, aptly named, Monica's Kapelle.

In 2015 Mr Rein sold the property to the current owners. It was renamed Gourikwa Reserve. During 2016 the reserve, its infrastructure and all its buildings were upgraded, a project that is still continuing. The current owners feel that the word "owner" is misleading. Their vision is to be stewards of a very special parcel of land. Therefore, they advocate a close co-operation with neighbouring farmers and conservancies, such as Duineveld, Fynbos and Gouritsmond. They see these entities, as well as Cape Nature, as essential role players in their own conservation mission.

3.4 Ecological context of Gourikwa Reserve

This section reflects the ecological conditions of Gourikwa Reserve

3.4.1 Climate and weather



The climate is hinterland with cool, rainy winters and warm, dry summers.

Maximum temperatures are experienced in January (average daily max = 37ºC) and minimum temperatures usually occur in July (average daily min = 13ºC).

Rainfall occurs mainly in winter between mid-May and late August.

3.4.2 Topography

The Fynbos Biome is topographically diverse and this heterogeneity of habitats has been a major driving force in the creation of arguably the most diverse and unique of the temperate floras.

Gourikwa is adjacent to the sea with steep dunes directly adjacent to the beach (Figure 3.2). Continuing inland the slopes are gentle with no sheer cliff faces present (Figure 3.2). On the property the elevation changes from sea level to 277m above sea level (Figure 3.2). The topography of the property is mainly continuous with a few rounded hills (Figure 3.2). There are two small valleys present on the property, one adjacent to the beach (from sea level to approximately 120m above sea level) and the other further inland (from 180m to 240m above sea level).

3.4.3 Geology and soils

Gourikwa has two main geological rock types present, namely: calcareous sandstone (mainly from the Bredasdorp Group), clastic limestone, conglomerate, coquinite (which is present inland) (Figure 3.2) and sandstone/quartzite, shale, conglomerate, minor jaspilite (which is present adjacent to the coast) (Figure 3.2). The property has a high presence of lime within the soil, as well as grey regic sand which may contain shell material (Cape Farm Mapper, 2019). The soils on the property have limited pedological development and are therefore quite shallow (approximately 450mm deep) with a low clay content (less than 15%) (Cape Farm Mapper, 2019). The soils often have excessive drainage, especially adjacent to the coast where a high sand content is present (Cape Farm Mapper, 2019). The soils on the property have a high erodibility with an erodibility factor ranging from 0.55 adjacent to the coast to 0.63 inland (Cape Farm Mapper, 2019).

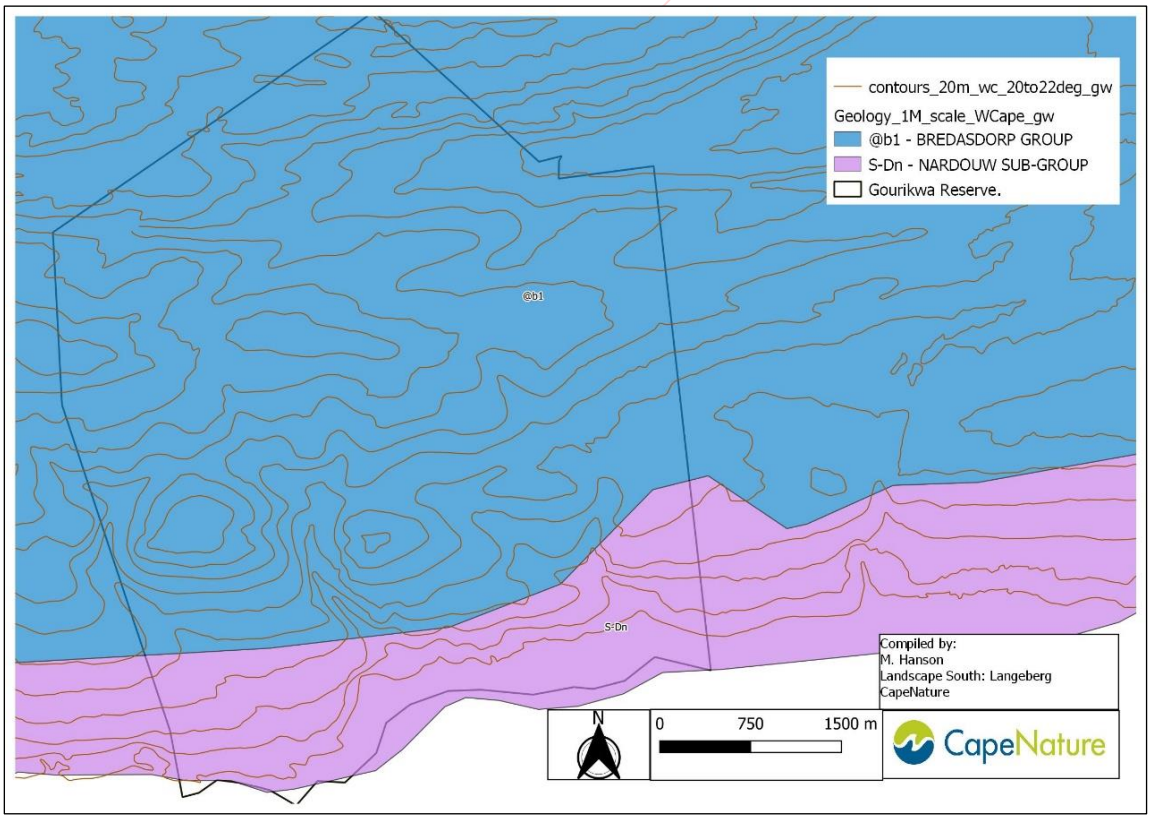


Figure 3.2 Topography and Geology of Gourikwa Reserve

3.4.3.1 Soil interfaces

Where two soil types meet there is often a “tension zone”. Different soils support different vegetation types and the meeting point is known as an ecotone. The vegetation here is often a unique combination of both parent types. These ecotones are biologically important because they are often areas of active speciation. For this reason, disturbance in this zone must be avoided and it is preferable to buffer it with at least 30m of vegetation on either side.

3.4.4 Hydrology

Gourikwa falls within the Gouritz Water Management Area (Department of Water Affairs, Cape Farm Mapper, 2019). Which has a few water quality concerns including the significant role of groundwater. Within the Gouritz WMA (especially in the south) groundwater plays a significant role and there is an increase in the amount of groundwater abstraction which poses concerns about saline intrusion and the base flow of river systems. Other issues in the Gouritz WMA include the impact of agricultural practices, urbanisation and sand mining (Western Cape IWRM Action Plan, 2011).

The hydrology of Gourikwa: The property has no rivers running through it but has two wetland sites (Figure 3.4). The wetlands are both natural wetlands and are formed at the bottom of the valley, one wetland is however unchanneled and is receives it water supply from the upper drainage lines on the property (Figure 3.3) The property has groundwater which falls within a major intergranular aquifer (which yields between 0.5 – 2.0 l/s), the aquifer is classified as having a very high susceptibility and falls within the “most” vulnerable category (Department of Water and Sanitation, Cape Farm Mapper, 2019).

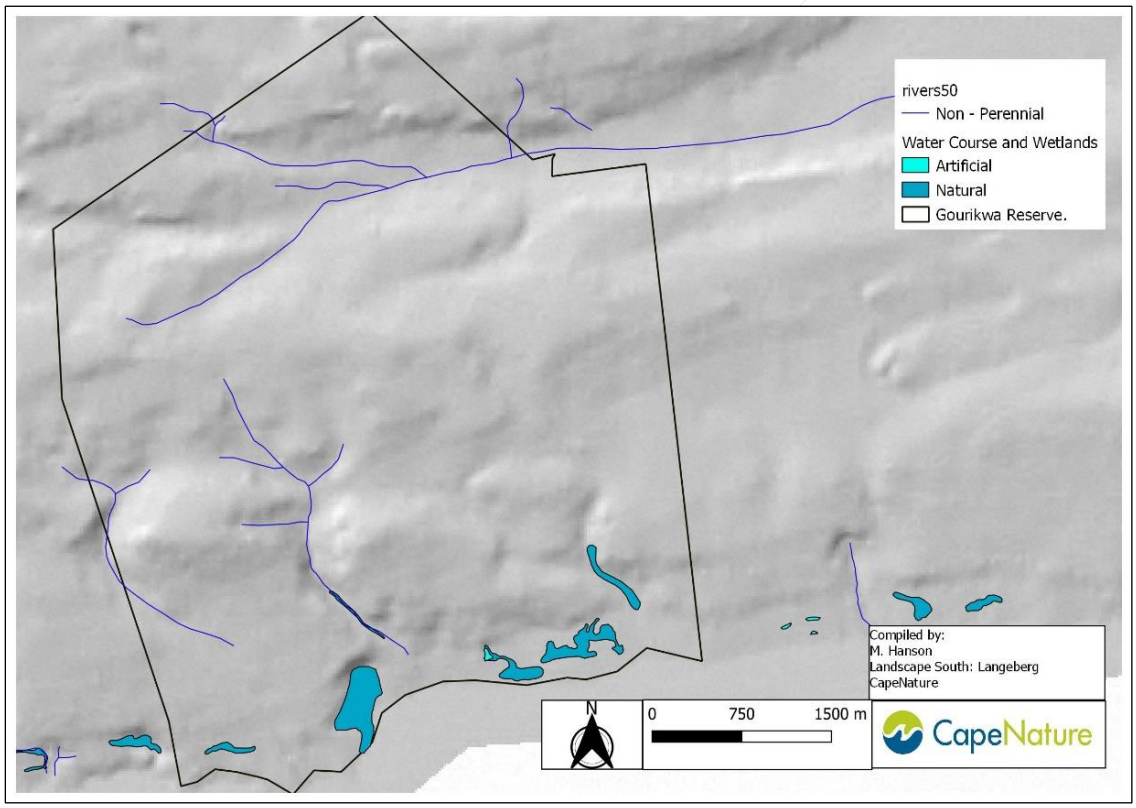


Figure 3.3 Hydrology of Gourikwa Reserve

3.4.5 Vegetation

The Cape Floristic Kingdom, one of six world floral kingdoms, is internationally renowned for its special rich flora containing an estimated 9 000 species of vascular plants of which almost 69% are endemic (restricted to the region). This makes it one of the richest regions in the world in

terms of botanical diversity. It is characterized by five endemic families and by the conspicuous presence of, amongst others, species belonging to the families Aizoaceae, Ericaceae, Fabaceae, Iridaceae, Orchidaceae, Proteaceae, Restionaceae, Rutaceae and Scrophulariaceae (Goldblatt & Manning, 2000).

Canca Limestone Fynbos:

Gourikwa has a small portion of Canca Limestone Fynbos (Figure 3.4) which falls within the Fynbos Biome and is part of the South Coast Fynbos Bioregion. The Canca Limestone Fynbos is distributed from the Breede Rivier to Mossel Bay along the coastal forelands. It currently has a least threatened conservation status with a target of 32%. A small portion is conserved in the Pauline Bohnen and Geelkrans Nature Reserves and about 3% is conserved in private conservation areas such as Gouriwka Nature Reserve and Die Duine. Currently approximately 14% has been transformed for cultivation and by alien invasive species (e.g. Acacia cyclops) (Mucina and Rutherford, 2006).

Cape Seashore Vegetation

Along the coast, Gourikwa has a small portion of Cape Seashore Vegetation (Figure 3.5). This vegetation type forms part of the Coastal Azonal Vegetation Biome and the Seashore Vegetation Bioregion. Cape Seashore Vegetation is distributed along the temperate coasts of both the Atlantic and Indian Oceans (Western and Eastern Cape), along the South West and South Coasts. This vegetation type is classified as least threatened with a target of 20%. Approximately half of the area is conserved in the West Coast, Cape Peninsula, Agulhas, Garden Route, Greater Addo Elephant

National Park, Rocher Pan, Cape Columbine, Dassen Island, Wolvengat, Kleinmond, Walker Bay, De Mond (Ramsar site), De Hoop, Kleinjongensfontein, Geelkrans, Robberg, Cape St Francis, Cape Recife, Joan Muir, Gxulu, Cape Henderson, Kwelera and Bosbokstrand Nature Reserves. Private reserves also protect considerable portions of the vegetation (Mucina and Rutherford, 2006).

Hartenbos Dune Thicket

Hartenbos Dune Thicket, previously classified as Albertinia Sand Fynbos, forms the majority of Gourikwa's vegetation (Figure 3.4). Hartenbos Dune Thicket is part of the Albany Thicket Biome and is also classified within the Albany Thicket Bioregion. This vegetation type is typically distributed longitudinally from Potberg to the Gouritz river. It currently has a vulnerable status with a target of 32%. About 5% is conserved in De Hoop, Pauline Bohnen, Geelkrans, Kleinjongensfontein, Skulpiesbaai and Blomboschfontein Nature Reserves; 2% is protected in private conservation areas such as Gourikwa Nature Reserve and Die Duine. Currently a large percentage has been transformed for cultivation, plantations and by alien invasive species (e.g. Acacia cyclops) (Mucina and Rutherford, 2006).

According to Vlok (2007) classification system the property also consists of three vegetation types: Canca Limestone Fynbos, Albertinia Sand Fynbos and Blombos Strandveld all three of which are in the Fynbos Biome (Figure 3.4).

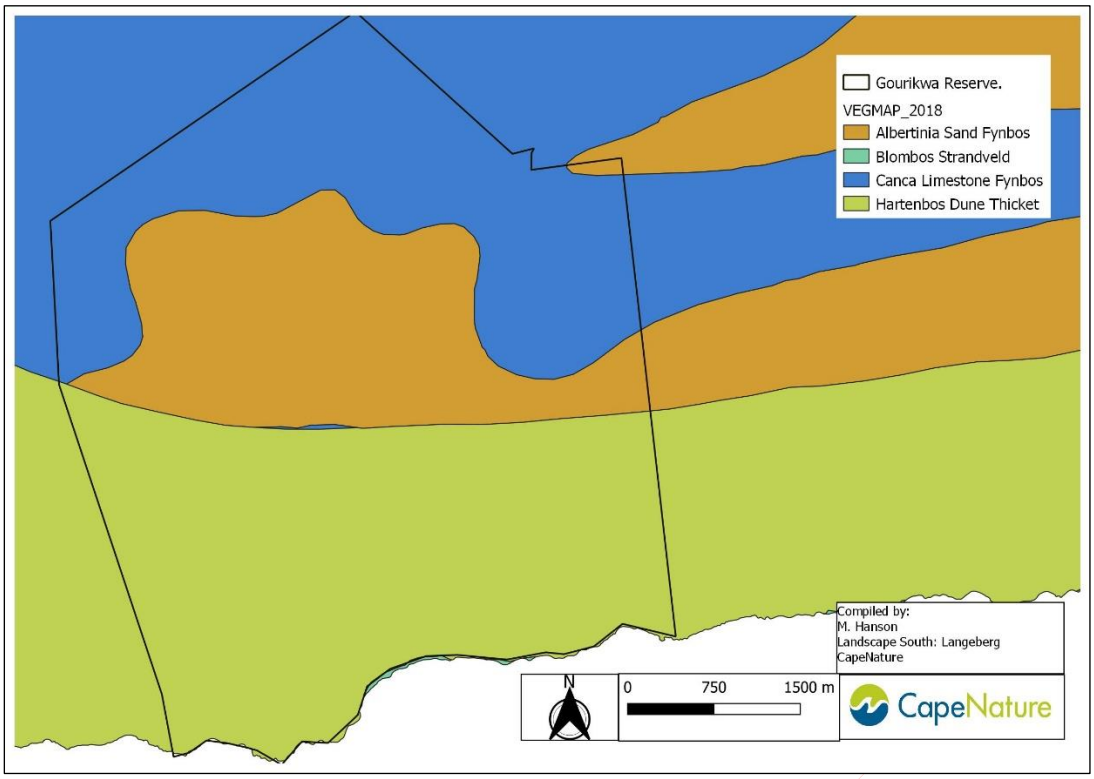


Figure 3.4 Vegetation types found on Gourikwa Reserve

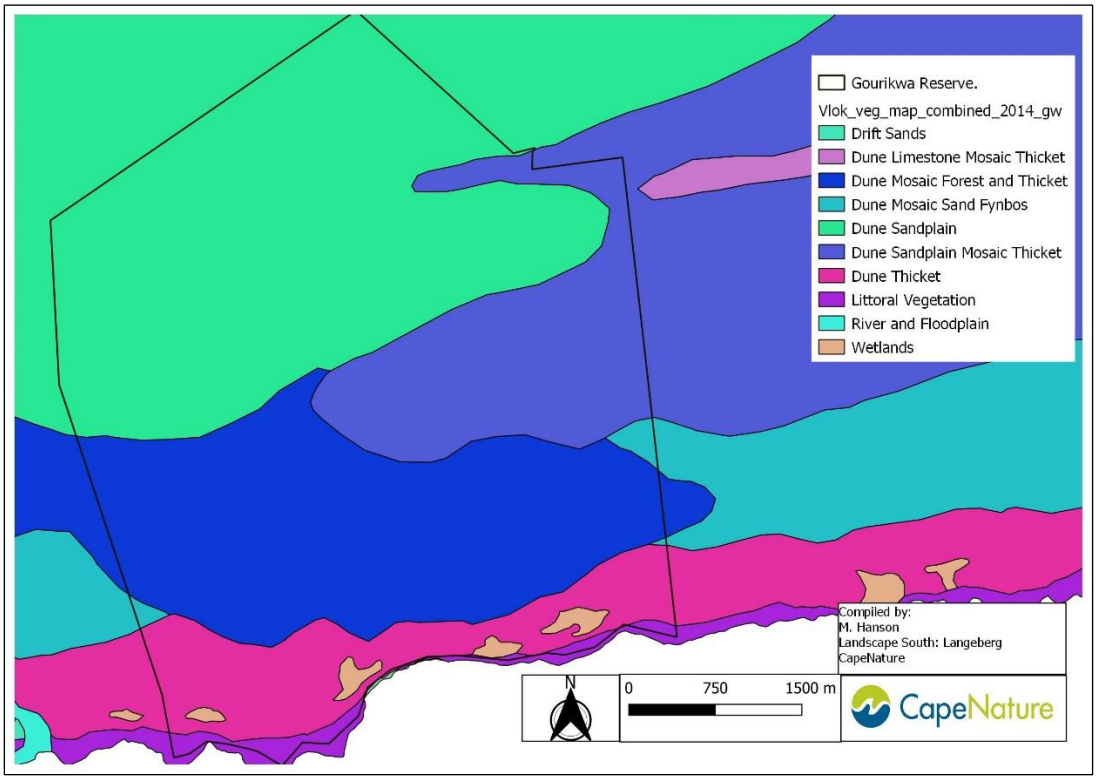


Figure 3.4.1 Fine scale Vegetation types found on Gourikwa Reserve

3.4.6 Fire regime

Ecologically the vegetation of the property benefits from fire as it influences community and species composition. Fires should however not occur frequently (once every 15-20 years) to ensure species survival, if fires occur to frequently key species may be eliminated from the community (Mucina and Rutherford, 2006). However, if the veld becomes too old and there is a build-up of fuel the fire will burn too hot and numerous species' seedbank will be depleted (Mucina and Rutherford, 2006). There are also species that do not benefit from fire (for example the Cape Milkwood) and grow within areas outside of the natural fire regime (Mucina and Rutherford, 2006) and it therefore important to ensure that fire remains outside of these areas.

The property Is divided into numerous management blocks (Figure 3.5) to help with the control of wildfires. Each management block has a cut fire break (all firebreaks are regularly maintained as part of annual preparedness before the fire season). There are also three main water points (Figure 3.6) as well as a water tanker for emergency fire suppression. The property also has numerous access roads, some double up as firebreaks, which provide easy accessibility to ensure efficient evacuation (Figure 3.6). A block of the property was burnt in 2014 to manage the dominant overstory thicket, however the majority of Gourikwa veld is over 7 years old (Figure 3.5) but continuous fuel control occurs (for example removal of alien invasives which are highly flammable). In March 2021 a control burn was implemented over 200ha of fynbos and Proteoid veld burn that was severely overgrown. Local knowledge supplied confirmed that the blocks in question had burn more than 20 years ago. (blocks JL and N, Figure 6.1)

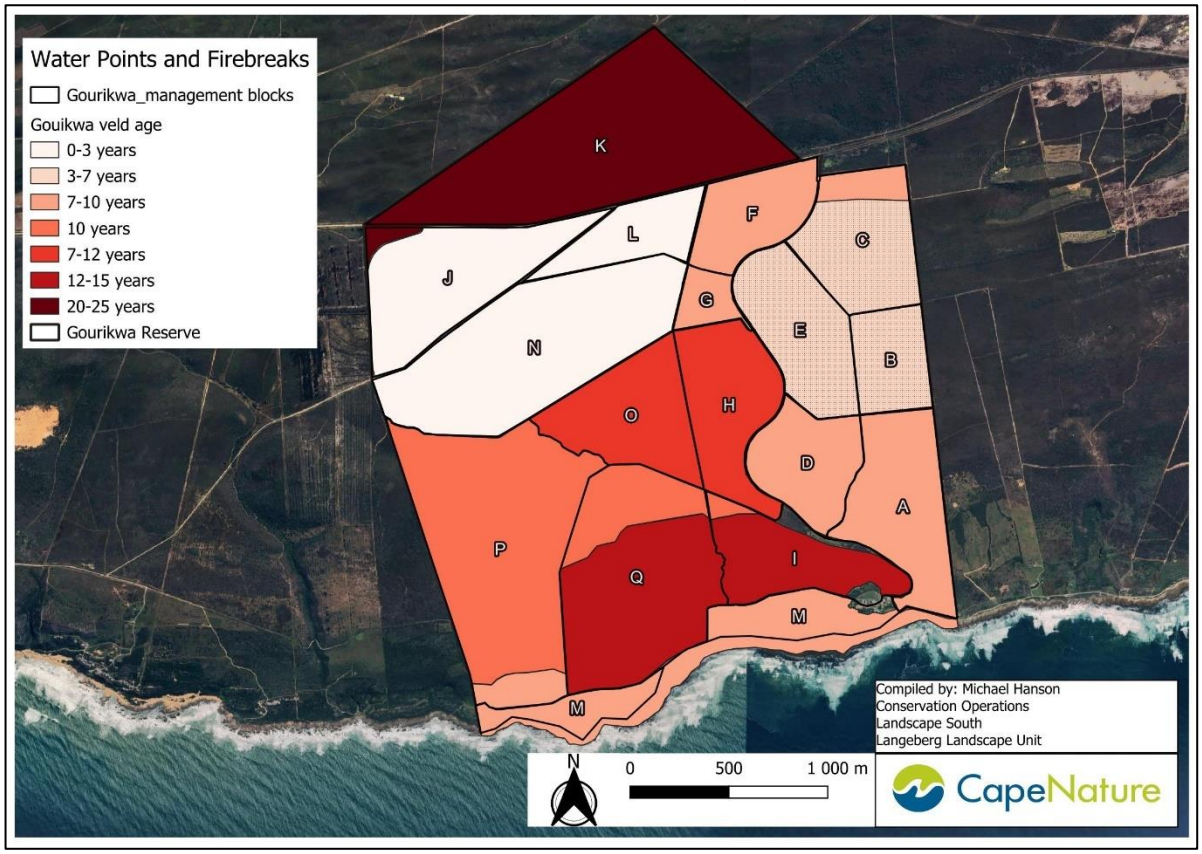


Figure 3.5 Veld Age map Gourikwa Reserve

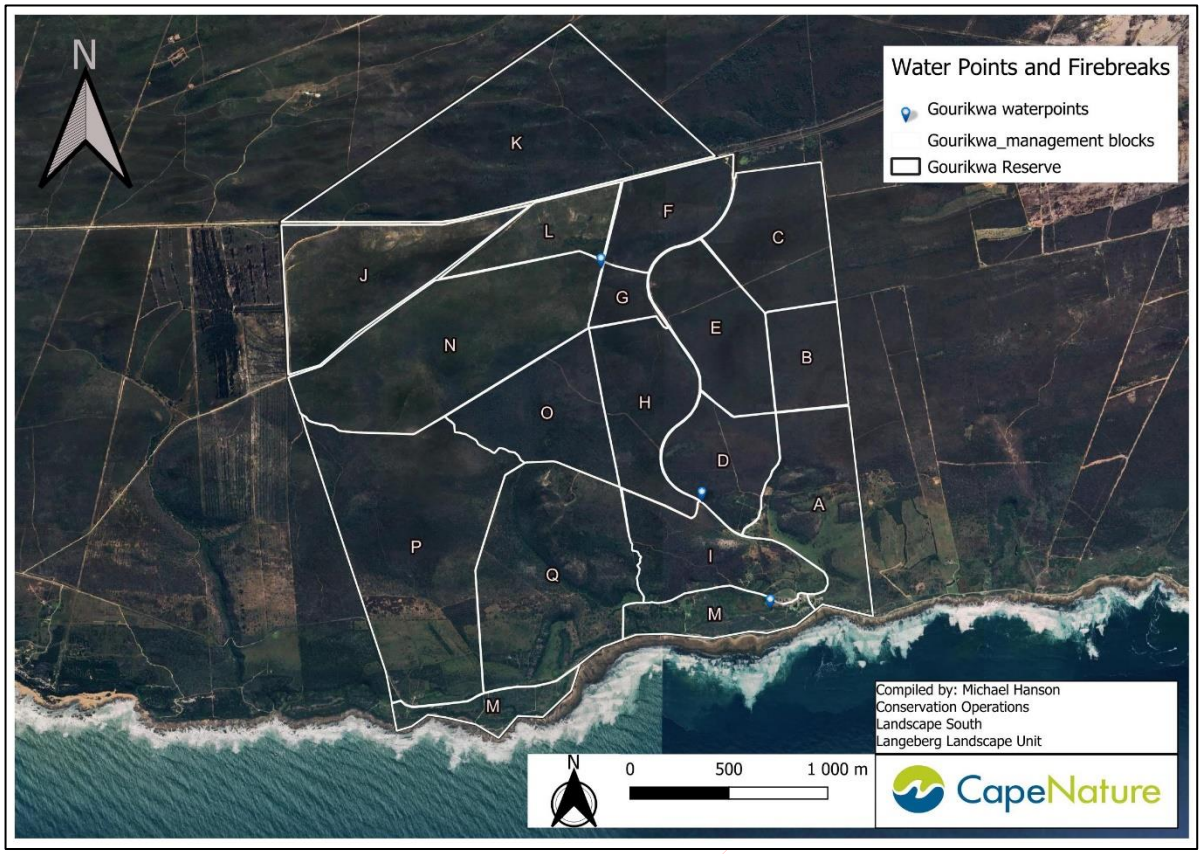


Figure 3.6: Water points, firebreaks and access roads.

3.4.7 Invasive species

The main invasive species of Invasive Alien Flora is the *Acacia cyclops* (rooikrans or red eyed wattle). Acacia cyclops is classified as a category 1b under NEMBA regulations and are therefore defined as having a high invasive potential, requiring compulsory control as part of an invasive species control program. Under NEMBA regulations these species need to be removed and destroyed. Some infestations of Acacia cyclops can qualify to be placed under government sponsored invasive species management. At Gourikwa Acacia cyclops densities range from between 6.67% to 29.67%, according to the survey done in 2019 by staff on the reserve and assisted by CapeNature Conservation off reserve staff. (Table 1). Currently there is an invasive species removal plan which removes blocks/segments of *Acacia cyclops* by contracting woodcutters who cut-down and remove the invasive species.

Cleared areas are maintained through regular removal of the juvenile plants and in firebreaks *Acacia cyclops* are cut (bossiekap) with the rest of the vegetation. A small population of Pinus species can also be found in the western corner of the property (5% density, Table 1).

Pinus spp is also defined as a category 1b invasive under NEMBA regulations and therefore require the same compulsory control efforts. Gourikwa implements the same removal methods for Pinus spp as Acacia cyclops through the cut down and removal of the species.

See Figure 6.2 for Invasive vegetation map and management compartments Gourikwa Reserve

3.4.8 Mammalian fauna

Large mammals have largely been absent from fynbos for almost two centuries and we can only speculate as to their effects on the vegetation. Fynbos however has evolved with animals and is reliant on them for its fundamental processes such as pollination and dispersal. The reserve hosts a sub-population of eight Cape Mountain Zebra that is considered a species of Conservation concern to the Western Cape. The management of the reserve must not impact the population negatively in any way. Interventions to the population taken by management shall be in line with the National Biodiversity Management Plan for the species. It is suggested that management maintain a breeding population of eight individuals and to introduce a second family group of six animals as well as three stallions in order to stimulate breeding and competition. DNA profiling and opportunistic sampling is important in determining the genetic variation of the species on the reserve. Only Genetically tested animals may be translocated to-and-from the property. Small antelope, ecotype species (bushbuck, common duiker, Cape grysbok) their persistence in the landscape must be maintained and the preservation of these small species is important. The introduction of Bontebok antelope to the reserve, which is also the natural distribution range of the species, can also be considered in conjunction with a custodian partnership agreement and the likelihood of this happening should be investigated.

National Biodiversity Management Plan – Mountain Zebra

At the end of 2015, the Cape mountain zebra meta-population comprised of approximately 4,872 individuals in 76 sub-populations throughout South Africa. The meta-population is considered stable, increasing and has exceeded the previous target set in the 2002 IUCN Equid Specialist Group Status Action Plan for the mountain zebra as a species. Apart from the three relict sub-populations occurring on protected areas (Kammanassie Nature Reserve, Gamkaberg Nature Reserve and Mountain Zebra National Park), Cape mountain zebra have been reintroduced to another nine protected areas within their natural distribution range and 7 protected areas outside the natural distribution range, comprising approximately 70% of the

population. Cape mountain zebra populations on private land were estimated at 1,481 individuals, in 2015, comprising approximately 30% of the total population.

In 2011, a partnership between CapeNature, the Wilderness Foundation, the World Wildlife Fund - South Africa and the Table Mountain Fund was initiated towards the drafting of a Biodiversity Management Plan (BMP-S) for Cape mountain zebra. The initiative was primarily aimed at integrating the efforts of the then Mountain Zebra Working Group into the BMP-S. An inter-agency collaboration between the South African National Parks, CapeNature, Eastern Cape Parks and Tourism Agency, National Zoological Gardens of South Africa, the National Department of Environmental Affairs, Northern Cape Department of Environment and Nature Conservation, Eastern Cape Department of Economic Development, Environmental Affairs and Tourism and Free State Department of Economic, Small business, Tourism and Environmental Affairs, ensued and acknowledged the need for a Cape mountain zebra BMP-S to ensure the long term survival of the species in nature.

Stakeholder engagements identified threats and challenges including the loss of genetic diversity through inbreeding and genetic drift, diseases such as equine sarcoidosis, the risk of hybridization, predation, poaching, emigration threats, and the lack of implementation of a meta-population strategy. The selection of the Cape mountain zebra for a BMP-S is based on the requirements of the NDF, its threat status, the requirement for meta-population management and inter-agency cooperation towards shared objectives for the conservation of the species, standardized monitoring, collaborative research, increased participation by landowners and opportunities as a flagship for protected area expansion and stewardship initiatives.

During the Cape mountain zebra BMP-S development process, both internal and external stakeholder consultation developed the following **desired state** for the Cape mountain zebra:

The scientifically sound conservation (including regulation) of an ecologically healthy and genetically diverse meta-population of Cape mountain zebra

The desired state is underpinned by the following **goals**.

1. Conservation of the Cape mountain zebra meta-population.

2. Advancement of knowledge and understanding regarding the genetic diversity of the

Cape mountain zebra meta-population.

3. Eliminate risk for genetic contamination due to hybridization with other equine species

and safeguard Cape mountain zebra in their natural distribution range.

4. Mitigate and manage the impact of current and emerging diseases.

5. Long-term monitoring of Cape mountain zebra meta-population dynamics and habitat.

6. Aligned legislation and mandates.

7. Effective communication, collaboration and coordination among stakeholders.

The prioritised **strategic objectives** of the Cape mountain zebra BMP-S are as follows:

1. to maintain genetic diversity in the Cape mountain zebra meta-population,

2. to implement monitoring and research to inform adaptive management,

3. to consistently and uniformly implement legislation, regulations, policies and guidelines, and

4. to ensure effective communication, collaboration and coordination between stakeholders and the public for Cape mountain zebra conservation.

The implementation of this BMP-S will have the following **benefits.**

1. The Cape mountain zebra population remains stable and increasing.

2. Scientifically-sound meta-population management is implemented, and through this, the full extent of the genetic diversity is represented throughout the population.

3. The population is ecologically healthy and secure (including being regulated effectively and efficiently).

4. Implementation and maintenance of sustainable off-takes to support the NDF.

5. Private sector support and investment in Cape mountain zebra conservation.

Considering the prioritised objectives stated in the BMP for the species, Gourikwa shall contribute to maintaining genetic diversity within the population of Cape Mountain Zebra at the reserve as well where possible contribute within meta-population. Gourikwa Reserve shall also implement a monitoring and research program that will inform adaptive management while acknowledging that any management of the species be ethical and such management overrides the financial ambitions it may have on the species in considering any use, distribution or sale thereof.

3.4.9 Avifauna

Gourikwa provides suitable habitat for a wide range of endemic and indigenous avifauna species. Among these species there has observations of near threatened African black oystercatcher (*Haematopus moquini*) and Jackal buzzards (*Buteo rufofuscus*). The reserve also has an abundance of the endemic Cape sugarbird (*Promerops cafer*). The property's coastline provides habitat for the endangered species such as the Bank- (*Phalacrocorax neglectus*) and Cape- cormorant (*Phalacrocorax capensis*) (State of Biodiversity Western Cape, 2017). Gourikwa also provides a refuge for migrant birds, especially along the coastline. The reserve provides much needed habitat for the Avifauna in the fynbos region as the property does not have any powerlines and there are no agricultural practices on the property both of which lead to bird mortalities and the decrease of bird population sizes (State of Biodiversity Western Cape, 2017). The majority of the Avifuana on the property require as little as possible habitat disturbance or destruction and often severe population declines occur when man-made infrastructure expands (State of Biodiversity Western Cape, 2017). Therefore, for Avifauna

protection management needs to adjust or maintain the vegetation to as near as possible natural state and limit any further man-made (infrastructure other than the approved).

3.4.10 Herpetofauna (reptiles and amphibians)

Currently in the Western Cape there is a lack of sufficient data on Herpetofauna, with the majority of the species requiring an increase in information collection to improve their protection (State of Biodiversity Western Cape, 2017). For Herpetofauna in the Western Cape there is also a need to improve the landscape connectivity of protected areas and increase knowledge about habitat requirements, population biology and ecology (State of Biodiversity Western Cape, 2017).

3.4.11 Invertebrates

Over 55 000 invertebrate species have been described in South Africa. The invertebrate fauna of the Western Cape is equally rich with 300 known types of butterflies, 968 arachnids, 84 dragonflies and damselflies, and 156 net-winged insects. Many only occur in this province and there are many more still to discover and document. Species specific information for the reserve is not known, possible future post graduate research programs would assist in this regard. The reserve management are open to such future program when requested.

3.5 Cultural Heritage context of Gourikwa Reserve

The origin of the name could most probably be from an indigenous group of Khoikhoi people who lived in the area. According to the well-known historian, G. M. Theal, who mentioned the explorer Hieronimus Cruse, crossing the river for the first time in 1667 coming from Mossel Bay in the east while heading west. Cruse found a Khoikhoi tribe named the Gourikwa, after who the river was apparently named.

Long before Gourikwa had a name, it was home to the indigenous people of South Africa. Archaeologists believe that the Khoikhoi were the builders of the fish-traps along the coast, some dating back 4000 years. These can be found among the boulders beyond the chapel.

As settlers moved into the interior during the 1700's, farms were established along the coast. It had been a very isolated farming community until the late 70's.

In 1932, the coast was placed on the map, when the SS Haliartus ran aground on the rocks at Yzervarkfontein. Cyanide for mining purposes was part of the very rich cargo. The leaked cyanide created havoc along the coast, killing fish, dolphins and all other sea life in the vicinity. A full report of the wreck can be found in the book Shipwrecks and Salvage in South Africa by Malcolm Turner.

In 1964 a lighthouse was established on the rocky outcrop on the southwestern border of the reserve, called Ystervarkpunt. The steel structure was replaced by a concrete one in 2006. It stands 51m tall and is one of the youngest lighthouses in the country with the official GPS: 34 23' 26" S / 21 43' 05" E.

3.6 Socio-economic context

The finance, real estate and business sector (contributing 32% of GDP) dominates the Western Cape economy, followed by the manufacturing sector (17% of GDP), retail and wholesale trade, catering and accommodation sector (15% of GDP) and the transport, storage and communications sector and the government services sector each contribute an additional 10% of GDP. Whilst the Western Cape economy is essentially based on secondary and tertiary activities that take place in the province's main urban centers, many of these activities relate to adding-value to the outputs of the province's agriculture, forestry and fishing sector (4% of GDP). These linkages between the Western Cape's urban and rural economies are thus significant.

The importance of the natural resource base in supporting livelihoods and its potential to improve the quality of life of all the district's residents cannot be underestimated and thus the protection and enhancement of the environment is one of the three main drivers of the spatial concept. The spatial strategy is to protect, enhance and develop the distinct attributes and resources of the Klein Karoo and Garden Route, as two different but interconnected places each with their varied:

- Natural and agricultural resource base;
- Economic role and potential; and
- Diverse landscape, lifestyle and tourism offerings.

PRIMARY SECTOR ECONOMIC ACTIVITIES:

1. Agriculture:

Despite the importance of secondary and tertiary economic activities, agriculture remains the backbone of the provincial economy. Farming in the Western Cape covers some 11.5m hectares, and contributes almost 21% of the country's agricultural production. The agricultural sector comprises: 6 682 commercial farmers, 9 844 smallholder farmers, and some 201 230 farm workers Outside the metro region agricultural production and agro-processing of the following products underpins local economies:

- Animals & animal products (i.e. poultry, cattle, sheep, ostrich, and pigs) are produced throughout the province. Farming with Game species in the local district of Hessequa has also increased of the last five years as farmers acknowledge the sector and benefits coming from this new industry.
- Field crops (i.e. wheat, maize, barley) are produced mainly in the Malmesbury, Moorreesburg, Piketberg regions (West Coast) and Caledon and Bredasdorp (Overberg) and Hessequa - Heidelberg.

Agriculture and the agro-processing industry have substantial competitive advantage in relation to the other provinces and in terms of export growth. The sector is in transition from a reliance on cheap and unskilled labour to one characterised by fewer, more skilled and better paid workers (FARE 2013). "This sector is currently subject to intense structural change which should be navigated carefully in the interests of inclusive growth. Furthermore, the impact of climate change and a potential carbon tax regime in future need to be discounted in efforts to develop this sector. Exports and the development of the local agro-processing industries as a source of local demand for agricultural products should be the focus of developmental policies" (PERO 2013, p80).

2. Tourism and accommodation

Tourism is the second most economic driver in the Hessequa region of Eden District. The Hessequa region consists of 6 main towns namely Witsand, Heidelberg, Riversdale, Albertinia,

Stilbaai and Gouritsmond and 4 villages of Slangriver, Vermaaklikheid, Melkhoutfontein and Jongensfontein. Accommodation in these 6 towns will suit the needs from hiking to hotel for every tourist either foreign or local. The Hessequa region is branded as The Explorer's Garden Route and offers visitors a world of authentic experiences like the Boosmansbos Wilderness Area, Grootvadersbosch Conservancy Mountain Bike Trails, Grootvadersbosch Nature Reserve, Heidelberg Bird Route, Gysmanshoek Mountain Pass, Korentepoort Dam & Bass Fishing, Baleia Wines, Dibiki Holiday Resort, Tuinplaas, Inverroche Gin, Kasselshoop Cheese Farm, Pallingsgat Homestead, Tuin-Op-Die-Brak Fynbos Park, Eden Park 4×4 Route, Pili Pili Adventure Centre, Anchorage Beach Restaurant & Bar, Gourikwa Nature Reserve and Hessequa Art Route. (Explore Garden Route)

4) ZONATION PLAN

The purpose of the zonation of Gourikwa Reserve is to control the intensity and type of use within it, in efforts to ensure the main goal of biodiversity conservation is met. On this basis, within some zones, the permissible intensity of use will be relatively higher than in others. Refer to Figure 4.1

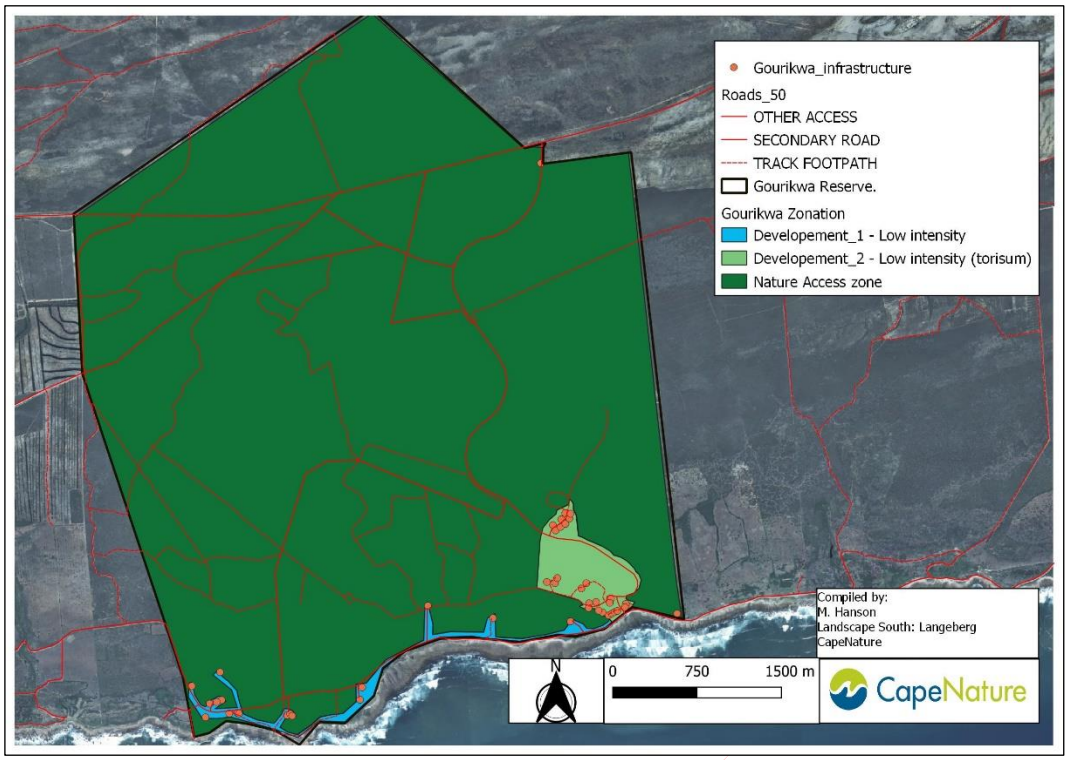


Figure 4.1 Zonation map of Gourikwa Reserve

Figure 4.1.1 Location of structures on the reserve

Table 4.1 Conceptual development guidelines.

Zone	Zone Objective	Characteristics	Visitor Activities	Facilities / Infrastructure	Visitor Access	Management Guidelines
Nature Access	***Conservation:*** To manage and direct visitor use, and plan infrastructure to minimise impact on sensitive environments. To actively manage users and visitor impacts. Allows for minimal or more intensive biodiversity management intervention. *Provide additional protection to sensitive or threatened habitats, species or other features by Special Management Overlays* ***Users:*** To provide easy access to natural landscapes with low expectation of solitude at all times. Can buffer wilderness or Primitive Zone.	Areas with extensive lower sensitivity habitats: Areas able to accommodate higher numbers of visitors regularly, with no identified sensitive or regionally rare biodiversity. Extensive areas able to accommodate roads, trails and tracks without high risk of erosion and degradation. Areas accessible for regular management of roads and trails Areas where roads and trail infrastructure can be located with low visibility from the surrounding landscape, particularly from adjacent Primitive or Wilderness Zones. Usually, areas that require active fire management with firebreaks to stay within thresholds of concern, but may also include natural burning regimes.	Guided or unguided nature observation. Day hiking trails and/or short trails. Bird hides, mountain biking & rock-climbing where appropriate. Other activities if specifically considered and approved as part of specific reserve zoning scheme. Motorised 2x4 self-drive access on designated routes. Frequent interaction with other users.	Some deviation from natural/pristine state allowed particularly on less sensitive or already disturbed/transformed sites. No accommodation; but ablution facilities may be provided. May have defined or beaconed hiking routes, tourism and management access roads, and management tracks and firebreaks. Infrastructure should be designed to reduce impacts of higher visitor numbers. Roads open to the public should be accessible by 2x4 sedan. Full width tarred or surfaced roads or roads and tracks to accommodate two vehicles are appropriate. Unsurfaced roads may be surfaced if a road planning exercise has confirmed that the location is suitable.	No special access control or permits required for this zone. Will cater for larger number of visitors than primitive zone Vehicle access on dedicated routes, with pedestrian access from parking areas or adjacent Development Zones.	***Visitor Management:*** More frequent monitoring of these areas are necessary to prevent damage or degradation. More frequent footpath maintenance must be scheduled for busy routes, with particular attention paid to use of railings or other access control to prevent damage to sensitive areas. Unless visitor access can definitely be intensively guided and managed, re-route trails away from any sensitive local habitats or plant and animal species. Trail layout, design and construction must be specified to reduce maintenance requirements under higher use. Visible & audible human impacts to adjacent Primitive or Wilderness Zones should be mitigated ***Conservation Management:*** Habitats with lower or higher management requirements. May be natural burning zones. Prevent or restore visible trampling or any other visitor impact. Rehabilitate non-useful roads to natural vegetation. ***Consumptive Use:*** Sustainable use may be appropriate subject to a formal assessment and application in accordance with CapeNature policies.

Zone	Zone Objective	Characteristics	Visitor Activities	Facilities / Infrastructure	Visitor Access	Management Guidelines
Development – Low Intensity	***Conservation:*** To locate the zone and infrastructure to minimise impact on sensitive environments. To actively manage users and visitor impacts on adjacent sensitive areas. *Provide additional protection to sensitive or threatened habitats, species or other features by Special Management Overlays* ***Users:*** To provide access to adjacent natural landscapes with little expectation of solitude. To provide primarily self-catering accommodation or camping. Can provide for Environmental Education accommodation and access into surrounding landscapes.	Areas with extensive degraded or transformed footprints. Natural or semi-natural habitats only when use of these areas is essential to minimise infrastructure/use impacts over whole reserve. Areas able to accommodate high numbers of visitors regularly, with no identified sensitive or regionally rare biodiversity. Areas able to accommodate roads, trails and accommodation infrastructure without risk of erosion or degradation. Areas easily accessible from reserve management centre. Areas where risk of fire damage to infrastructure is low or can be mitigated without unacceptable impacts on surrounding environment. Areas not visible from Primitive or Wilderness Zones. Areas where new infrastructure can be located with low visibility from the surrounding landscape. Areas with available potable water, and not sensitive to disposal of treated wastewater via soak away.	Picnicking. Walking or bicycle access into adjacent areas. Self-catering accommodation and camping. Meeting, workshops or mini-conference activities for no more than the number of people that can be accommodated overnight in the zone. Can provide for Environmental Education accommodation and access into surrounding landscapes, but this must be carefully planned not to conflict with visitor use.	Reception offices. Self-catering accommodation for up to 130 guests in total at any time[1] No more than 6 beds per unit. Single small lodges for up to 30 guests are permissible if all facilities are contained in a compact footprint, this represents the total accommodation for the zone, and any restaurant or catering facilities are for overnight guests only. If possible, roads should be narrow with separate incoming and outgoing routes, otherwise double vehicle width roads are strongly advisable for safety and usability. Roads in this zone should be surfaced wherever possible to reduce management cost and environmental impacts. Development and infrastructure may take up a significant proportion of the zone, but planning should ensure that area still provides relatively natural outdoor experience.	Motorised self-drive 2x4 sedan car access. Tour bus access Parking areas This zone should be used to provide parking and walk-in access for day visitors to adjacent Nature Access zone if possible.	***Visitor Management:*** Use built and infrastructure solutions to such as railings, hard surfacing and boardwalks to manage undesirable visitor impacts. Accept some impact on natural habitats in this zone unless these are specifically addressed in a Special Management Overlay. Frequent footpath and road maintenance must be scheduled for high impact routes. Visible impacts to adjacent Zones should be mitigated ***Conservation Management:*** Provide access and generate revenue. Management should aim to mitigate the impacts of the high number of visitors. L largely transformed habitats with lower management requirements. Usually fire exclusion areas. Prevent or restore visible trampling or any other visitor impact. Plan for a compact overall development footprint, avoiding dispersed infrastructure that will increase fire risk and/or environmental footprint. This is most critical in fire-prone environments. ***Consumptive Use:*** Sustainable use may be appropriate subject to a formal assessment and application in accordance with CapeNature policies.

[1] Although this sounds high this is still in line with many CapeNature sites that would fall within this zone definition and E.g. configured as 10 x 4-sleeper self-catering units and 15 campsites this seems completely reasonable.

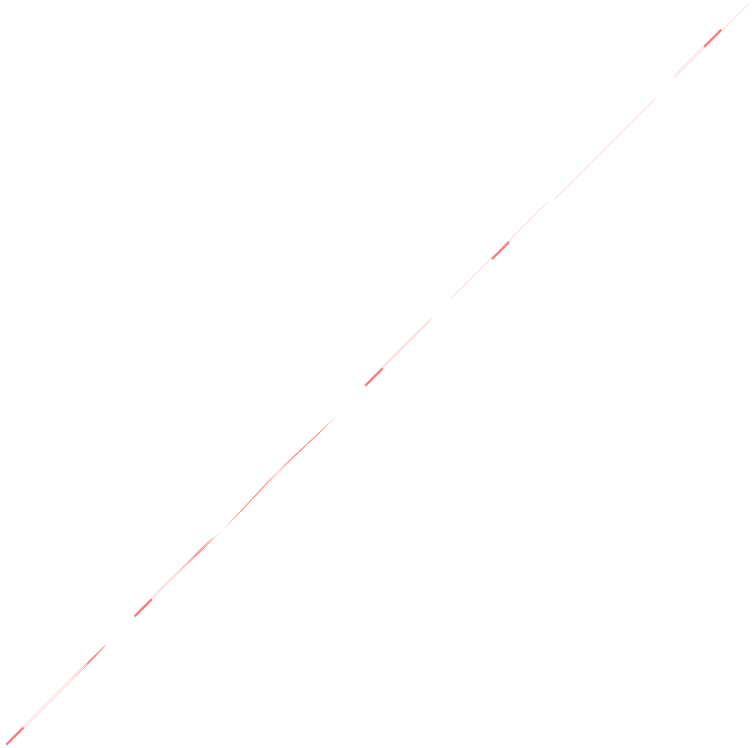
Zone	Zone Objective	Characteristics	Visitor Activities	Facilities / Infrastructure	Visitor Access	Management Guidelines
Development - Management	Location of infrastructure and facilities for Reserve Administration & Conservation management facilities Not compatible with tourism	Areas with extensive degraded or transformed footprints. Natural or semi-natural habitats only when use of these areas is essential to minimise infrastructure/use impacts over whole reserve. Areas able to accommodate high disturbance, with no identified sensitive or regionally rare biodiversity. Areas not visible or audible from Development - Low / High Intensity zone, but in close proximity to any other Development Zones. Areas providing easy access to reserve and infrastructure. Areas where risk of fire damage to infrastructure is low or can be mitigated without unacceptable impacts on surrounding environment. Areas not visible from Primitive or Wilderness Zones. Areas where new infrastructure can be located with low visibility from the surrounding landscape. Areas with available potable water, and not sensitive to disposal of treated wastewater via soak away.	n/a	Any reserve management infrastructure including offices, sheds, garages, stores, etc. Roads required to access these should be surfaced to reduce long-term maintenance costs and environmental impact.	none	***Visitor Management:*** Accept some impact on natural habitats in this zone unless these are specifically addressed in a Special Management Overlay. Frequent footpath and road maintenance must be scheduled for high impact routes. Visible impacts to adjacent Zones should be mitigated ***Conservation Management:*** Management should aim to contain all activities within the smallest possible footprint. L largely transformed habitats with lower management requirements. Usually fire exclusion areas. Prevent or restore trampling or any other management impact. Plan for a compact overall development footprint, avoiding dispersed infrastructure that will increase fire risk and/or environmental footprint. This is most critical in fire-prone environments. ***Consumptive Use:*** Sustainable use unlikely to be possible in small zone.

Zone	Zone Objective	Characteristics	Visitor Activities	Facilities / Infrastructure	Visitor Access	Management Guidelines
Development – Private Areas	Private dwelling and surrounds (only applicable to privately owned & managed Contract Nature Reserves)	Private homestead Areas with existing degraded or transformed footprints. Natural or semi-natural habitats only when use of these areas is supported by a bioregional plan and specialist site assessment.	n/a	Dwellings and private accommodation areas. Roads to access these.	No access to the public without permission from landowner	Should have no negative impacts on the surrounding conservation area

Other zones which can overlap any of the above zones = Special Management overlays:

Special Management overlays	Objective of zone	Characteristics	Type of Activities	Facilities / Infrastructure	Type of Access	Management Guidelines
Cultural Feature protection	Protection of localised identified important Cultural Feature	Could overlap any other zone, Permanent, temporary or temporal zone to manage important cultural or heritage features	Specific activities dependent on ability to manage activity and feature in question.	Usually none, but specific infrastructure dependent on feature in question.	Specific access dependent on ability to manage access and feature in question.	Feature specific – as required
Species/Habitat protection	Protection of localised identified important Biodiversity Feature	Could overlap any other zone, Permanent, temporary or temporal zone to manage important cultural or heritage features	Specific activities dependent on ability to manage activity and feature in question.	Usually none, but specific infrastructure dependent on feature in question.	Specific access dependent on ability to manage access and feature in question.	Feature specific – as required
Visual protection	Protection of localised sensitive viewsheds and particularly for Wilderness Zone viewsheds	. Sensitive viewsheds and particularly for areas within Wilderness Zone viewsheds	Specific activities dependent on ability to manage activity and feature in question.	No roads, firebreaks or buildings. No visible infrastructure Trails may be appropriate	Walking access likely to be appropriate	Feature specific – as required
Natural Resource Access	Access to identified sustainable consumptive use resources as per a resource management plant	Areas with identified natural resources formally assessed as not sensitive to harvesting and provided with a sustainable harvesting plan.	Harvesting of identified resources	None	Specific access dependent on feature in question.	Feature specific – as required
Rehabilitation		This should fall under specific management objectives for any zone				

Research is permissible in all zones, except Species/Habitat protection or Cultural Protection where it may be considered on a case-by-case basis. Research that requires extensive destructive harvesting, or manipulation of more than a few square meters of habitat should not be considered in any of the Protection overlays, except where research outputs are considered essential for management of that ecosystem research cannot be done at an equivalent site elsewhere, and research results are certain to contribute substantially to management objective



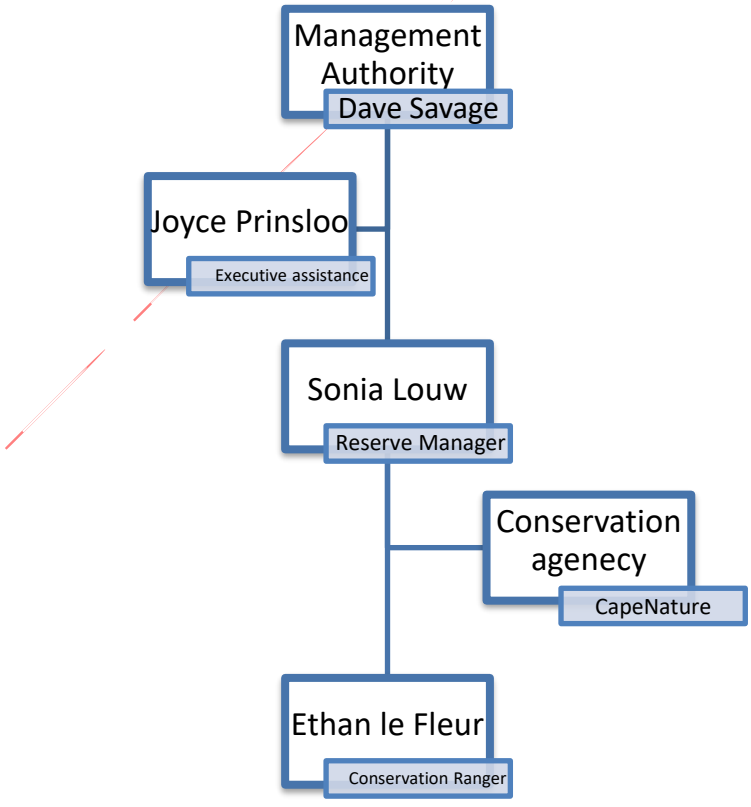
5) ADMINISTRATIVE STRUCTURE

The landowner, Gourikwa Reserve (PTY) Ltd 1999/026082/07, is appointed as the management authority for the Nature Reserve as agreed to in the Management Agreement concluded between CapeNature and the landowner. In cases where the landowner is an entity, and this entity is the Management Authority. The owner is represented by a juristic person. The Organogram below depicts the flow in which management decisions are made regarding the operational activities of the reserve.

Where applicable, Management decisions are made collaboratively between the Management Authority, it representatives and CapeNature.

The role of the conservation agency – CapeNature - is to advise and assist with the implementation of the management plan of the Nature Reserve as agreed upon.

CapeNature is also responsible for conducting an annual audit of the Nature Reserve, its Annual Plan of Operations (APO) documents and updating the Management Plan accordingly.



Organigram of the management authority structure responsible for the decision making

5.1 Five-year Costing Plan

Below is an estimated breakdown of management costs for each management objective over the ten-year period of this Strategic Management Plan. The figures listed below are considered to be realistic in-terms of the Management Authorities forecasted budget at the time of drafting this plan. The detailed budgets in the successive Annual Plans of Operation will override this costing estimate.

Table 5. Estimated annual management cost breakdown.

Management objectives	2025	2026	2027	2028	2029
1. To manage the risks associated with uncontrolled wildfire in an integrated way to limit negative impacts on biodiversity and ecosystem function as well as the risks to human safety and infrastructure from wildfire.	R 29,800	R31,290	R32,854.50	R34,497.23	R36,222.09
2. To control (or eradicate where possible) invasive alien species using appropriate methods, and to reduce combustible material to reduce intensity and spread of wildfires, as well as the effective monitoring to prevent further introductions of invasive aliens.	R42,300	R47,460	R49,833	R52,325	R54,941
3. To conserve the biodiversity and ecosystem function of aquatic and riparian systems on the reserve.	R100	R105	R110	R116	R122
4. To identify areas of degraded ecosystems and/or habitat in the reserve, understand the causes of degradation and implement restoration/rehabilitation measures.	R650	R683	R717	R753	R791
5. To ensure the optimal long-term population health and ecological function of any plants and animals of special concern.	R760	R798	R838	R879	R923
6. To ensure effective conservation of faunal species, populations and inter-relationships in order to enhance biodiversity and maintain and improve ecosystem functioning.	R800	R840	R882	R926.10	R972.40
7. Managers and staff are supported in the implementation of the management plan by ensuring they have the necessary knowledge and skills to perform their management responsibilities.	R24,220	R25,431	R26,702.55	R28,037.67	R29,439.56
8. Stakeholders receive an increased awareness and understanding of the importance and value of functioning ecosystems and an introduction to careers in eco-tourism, hospitality and nature conservation.	R800	R840	R882	R926.10	R972.40

Estimated Annual Management Cost:	**R84,990**	**R89,240**	**R93,701**	**R98,386**	**R103,306**

* [1] Estimate. Soil erosion budget is dependent on assessment of priority sites in YR1 and YR6.
* [2] IAP control budget is dependent on individual landowner assessments in YR2 and budgets.
* TBD - 'To be determined'.

6) OPERATIONAL MANAGEMENT FRAMEWORK

This section translates the strategic framework described in Section 2 above into Key Deliverables and Management Activities, which will be used to inform annual plans of operation and the resources required to implement them. The management targets will form the basis for monitoring of performance in implementing the plan and are thus measurable.

6.1 Biodiversity management

6.1.1 Fire management

Fire plays an important role in southern African ecology, and has important effects on vegetation composition, primary productivity and nutrient cycling. In developing a fire management strategy for the site, the following guiding principles should be adhered to:

- Burning should be undertaken in such a way that it maintains spatial and temporal heterogeneity within the landscape.
- A patch mosaic of burnt and un-burnt areas should be maintained.
- The burning of areas should be undertaken in such a way that promotes patchy burns (i.e. within the block being burnt, some patches will remain un-burnt rather than aiming for a complete burn).
- Burning must be undertaken with consideration of the biodiversity conservation requirements of the site and the need to protect rare and endangered species.
- Burning and fire management must be undertaken in a safe manner that is legally compliant with the National Veld and Forest Fire Act (No.101 of 1998).

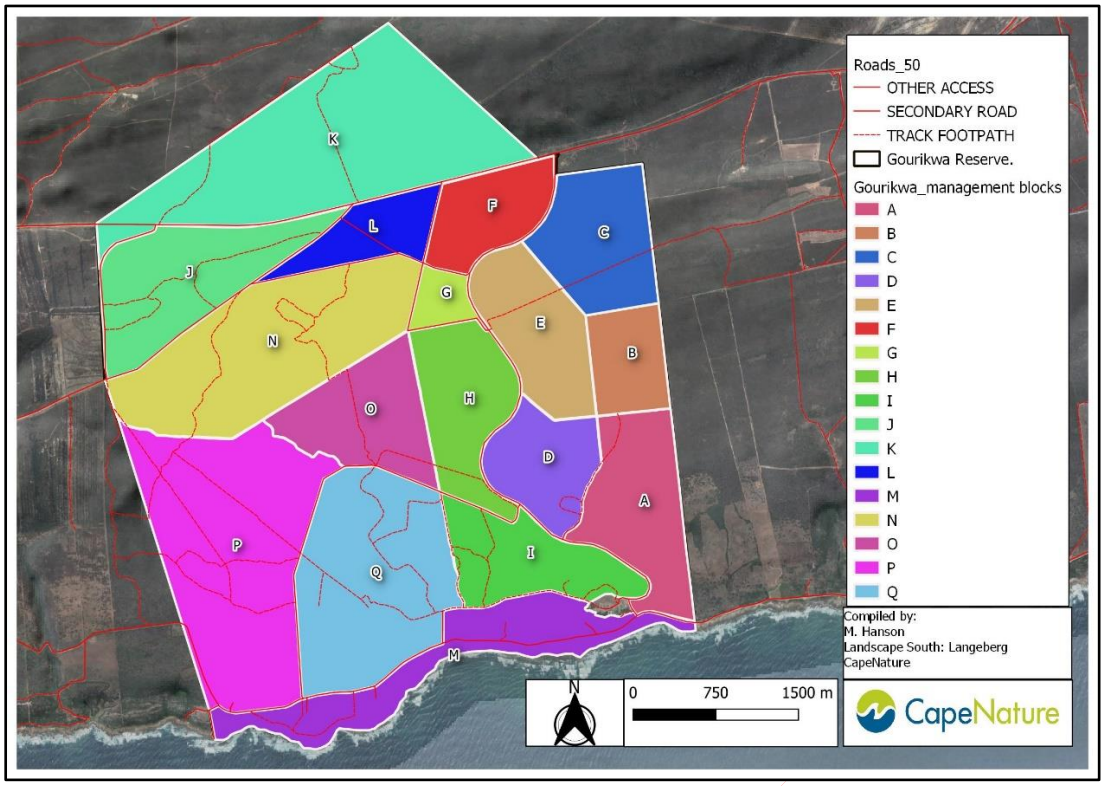


Figure 6.1 Fire Management Map for Gourikwa Reserve

Table1: Block burning Schedule:

Block Colour	Block	Year burnt	Year of next burn	Comments
Light-red	A	2015	2037	The block is approximately 7 years old. Fynbos needs 10 years and more before burning can be considered.
Orange	B	2015	2038	The block is approximately 7 years old. Fynbos needs 10 years and more before burning can be considered.
Blue	C	2015	2039	The block is approximately 7 years old. Fynbos needs 10 years and more before burning can be considered.
Moonstone blue	D	2016	2038	Has been burnt recently +/- 5 years old
Khaki brown	E	2016	2038	Has been burnt recently +/- 5 years old
Scarlet Red	F	2015	2039	The block is approximately 7 years old. Fynbos needs 10 years and more before burning can be considered.
Lime-green	G	2015	2029	The block is approximately 7 years old. Fynbos needs 10 years and more before burning can be considered.
Light-Green	H	0	2024	The block is approximately 7 years old. Fynbos needs 10 years and more before burning can be considered.
Green	I	0	2028	The block is approximately 5 years old. Fynbos needs 10 years and more before burning can be considered.

Sea-green	J	2021	2040	Control burn in March 2021 was effective. Fixed point Photography monitoring to follow in March 2022.
Turquoise	K	2001	2026	There is no historical record of previous burns for this block, local knowledge suggests the block is 25 years old
Royal blue	L	2021	2040	Control burn in March 2021 was effective. Fixed point Photography monitoring to follow in March 2022.
Purple	M	2016	2028	Costal vegetation possibly no burn
Stone	N	2021	2040	Control burn in March 2021 was effective. Fixed point Photography monitoring to follow in March 2022.
Maroon	O	0	2030	The block is approximately 7 years old. Fynbos needs 10 years and more before burning can be considered.
Light pink	P	2012	2026	Is approximately 10 years old
Light blue	Q	2010	2032	The block is approximately 12 years old. Fynbos needs 10 years and more before burning can be considered.

0* denotes unknown value.

Table 6.1 Operational Management Framework

FIRE MANAGEMENT			
Objectives	· To ensure conservation of species and processes by maintaining and improving ecosystem functioning. · To implement effective Integrated Catchment Management. · To allow for natural fire processes to occur without impacting on safety and infrastructure.		
Key Deliverables	**Management Activities**	**Responsibility**	**Timeframe**
Reduce/Prevent the Spread of Fires.	Construct Priority Firebreaks according to Schedule. Negotiate Firebreak Agreement with Neighbours. Fuel Reduction around Infrastructure to Minimise Risk. Conduct Pre-Fire Season Fire Audit. Mapping of all Fires and Capture on GIS.	Management Authority	Annually
Maintain Partnerships to Improve Fire Management.	Attend Local FPA Meetings. Maintain Firebreak Agreements with Neighbours. Attend Pre-Fire Season meetings with local Fire & Rescue Service.	Management Authority	Annually
Determine and Implement Thresholds of Potential Concern.	Establish a series of Fixed Point Photography Monitoring Plots. Conduct Permanent *Protea spp.* Plot Monitoring. Conduct Post-Fire Regeneration Monitoring. Set and Monitor Thresholds of Potential Concern.	Management Authority CapeNature	Annually
Reduce Wildfires due to Human Negligence.	Create Fire Awareness Programme for Members and Staff Eradication and Control of Alien Vegetation Infestations where Necessary (see AVM management)	Management Authority	Annually

6.1.2 Invasive vegetation management

A listed invasive species means any species, which is listed in terms of section 70 of the Biodiversity Act, whose establishment and spread occurs outside of its natural distribution range. In undertaking invasive plant control, the following guiding principles will be adhered to:

- Invasive plant control will require an ongoing programme that prioritises key infestations along water courses, drainage lines and upper catchment areas.
- Initial clearing efforts should focus on containing infestations that are most likely to spread into new areas.
- All follow-up requirements must be strictly adhered to otherwise the problem will be exacerbated.
- Strategic partnerships and poverty relief programmes such as the Working for Water programme should be utilised.

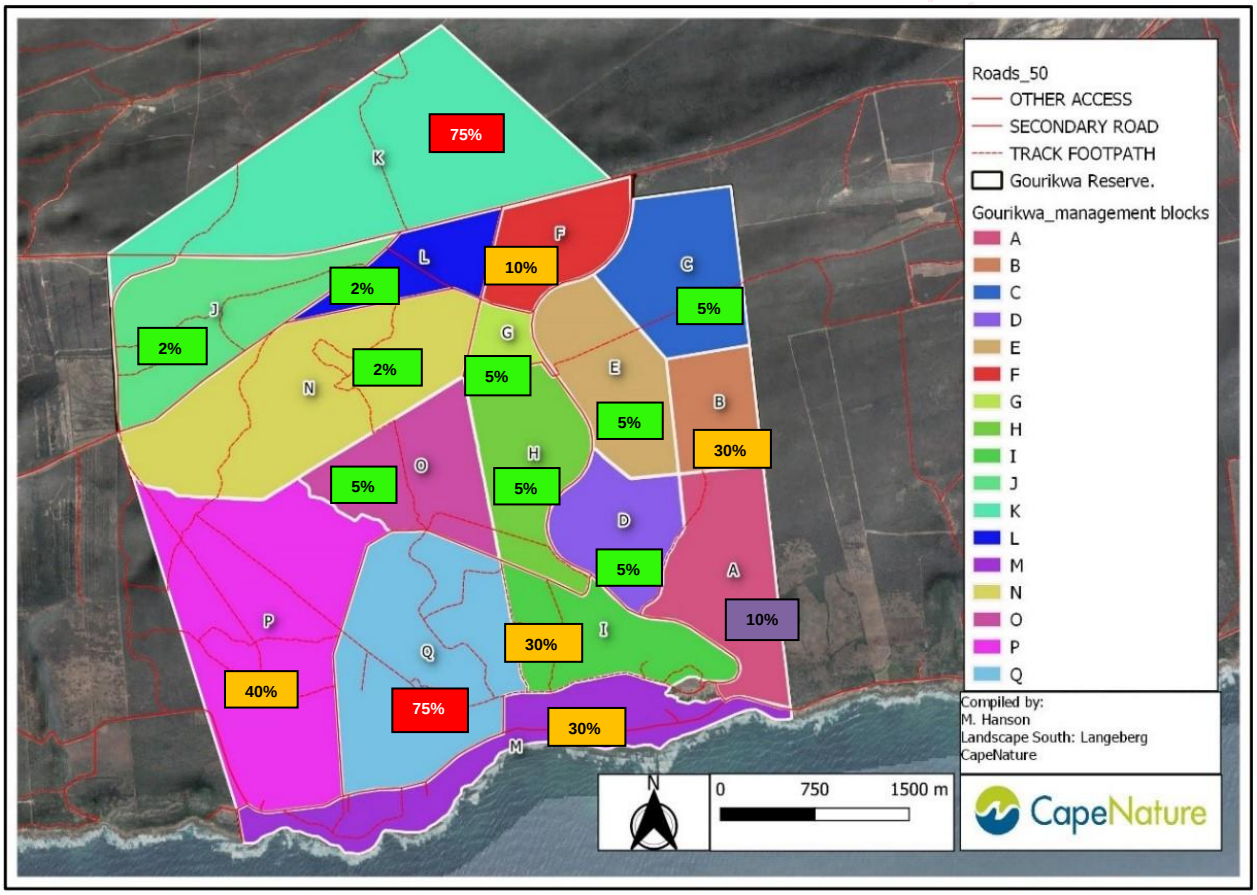


Figure 6.2 Invasive Vegetation Management Map for Gourikwa Reserve

Mangament Block	Infestation Density	Density Estimate %	Veld Age	Year of Next Burn
A	Moderate	10%	7-10 y	2037
B	Moderate	30%	3-7 y	2038
C	Minimal	5%	3-7 y	2039
D	Minimal	5%	7-10 y	2037
E	Minimal	5%	3-7 y	2033
F	Moderate	10%	7-10 y	2039
G	Minimal	5%	7-10 y	2024
H	Minimal	5%	7-12 y	2024
I	Moderate	30%	12-15 y	2028/2032
J	Minimal	2%	0-3 y	2040
K	Dense	75%	20-25 y	2025/2026
L	Minimal	2%	0-3 y	2040
M	Moderate	30%	3-7 y	2038
N	Minimal	2%	0-3 y	2040
O	Minimal	5%	7-12 y	2030
P	Moderate	40%	10 y	2033/2034
Q	Dense	75%	12-15 y	2028/2032

INVASIVE VEGETATION MANAGEMENT			
Objectives	· To enhance biodiversity protection and conservation. · To ensure conservation of species and processes by maintaining and improving ecosystem functioning. · To implement effective Integrated Catchment Management.		
Key Deliverables	**Management Activities**	**Responsibility**	**Timeframe**
Eradicate Alien and Invasive Species	Identify and Map all Alien Invasive Flora Within or Threatening the Reserve. Compile a Management Unit Clearing Plan. Identify Areas in Maintenance Phase.	MA / CapeNature	Annually
Implement Biological Control	Identify Potential Biological Control Sites and Prioritise Accordingly. Map and Update Biological Control Sites. Implement New and Supplement Existing Biological Control. Monitor Success of Biological Control. Ensure Accurate Record keeping of Biological Control Data. Ensure Biological Control Site Security.	MA / CapeNature	Ongoing
Prevent Further Introduction of Aliens	Ensure Surrounding Landowners are aware of Relevant Legislation.	CapeNature	Ongoing

6.1.3 Wildlife Management

To promote the conservation of indigenous fauna as an important component contributing to and maintaining ecosystem functioning.

Small antelope (Cape Grysbok, Common (Grey) Duiker, Steenbok and Vaal (Grey) Rhebok) occur naturally in the area, and move freely between farms. There is currently no need to manage these populations.

6.1.3.2 Reintroduction of Game

Before reintroduction the following points need to be considered:

- Was the desired species naturally resident in the area?
- Why did the animal become extinct in the area?
- Is that causal factor still a threat?
- Is the habitat still suitable for the species?
- What are the potential negative effects of the reintroduction?
- Where is the nearest existing population?

Commission a reintroduction policy and plan for species that used to occur in the area and the suitable carrying capacities. Investigate the potential for reintroductions, specifically small game, which may have previously occurred naturally in the area. Herbivores are essential for biodiversity and ecosystem processes to persist.

The careful reintroduction of species can enhance the conservation value of the area and increase the marketability of the Nature Reserve. All reintroductions must be based on sound ecological principles. CapeNature must be consulted on the translocation and reintroduction of all fauna.

WILDLIFE MANAGEMENT			
Objectives	· To enhance biodiversity protection and conservation. · To ensure conservation of species and processes by maintaining and improving ecosystem functioning. · To implement effective Integrated Catchment Management.		
Key Deliverables	**Management Activities**	**Responsibility**	**Timeframe**
Prevent the Introduction of Alien Species	Formulate Policy regarding Domestic Animals in the Reserve. No Introduction of Alien Fish Species into River Systems.	MA	Ongoing
Control Alien and Invasive Species	Identify the Occurrence of Alien Fauna on Nature Reserve. Monitor Populations of Alien Fauna on the Reserve. Implement Control Measures where appropriate. Measure Success of Control Methods utilised.	MA / CapeNature	Ongoing
Manage the introduction of fauna on the Reserve	All possible introductions of game need to be in accordance with all the necessary permits and permissions of CapeNature. This includes the construction of and maintenance of a fence according to the CapeNature policy, after which a Certificate of Adequate Enclosure (CoAE) certificate will be issued (Appendix? Guidelines of CoAE)		
Evaluate and monitor the impact of fauna on the Reserve	Impact in the Reserve by large herbivores needs to be closely monitored. Monitoring is to be carried out by a mutually agreed third party, who will prescribe indicators of change to determine when management interventions will be necessary. Hunting of game is permitted under the hunting proclamation and rights obtained from the CoAE in the Contract Reserve provided it is to manage the game population and remove surplus game		

6.1.4 Sustainable Harvesting

The Sustainable Utilization of Wild Fynbos Resources ensures that the use does not exceed the regenerative and/or productive capacity of the specific plant species. It is important, therefore, to make certain that species are harvested in a manner that minimizes harvesting impact on individual populations. These standards are as follows:

- A cautionary approach must be followed whereby an amount not exceeding 50 % of the flower heads produced on a yearly basis by a plant shall be removed.
- No harvesting may occur one year prior to a burn.
- No harvesting of seeding plants between one and five years after a burn.
- Correct harvesting equipment that is in good working condition must be used at all times.
- No cuts shall be made to old growth of the plant stem and cuts must be at an angle of 45° to the stem.
- No breaking or uprooting of plants is allowed.
- Binding twine must be transported in a closed container and it is the responsibility of pickers to remove binding twine from their harvesting location.
- No litter must be left in the harvesting location.

It is therefore important to ensure that Pickers, Supervisors or Contractors must have completed an accredited sustainable harvesting course. Skills development programs must be in place for all pickers that have not attended the course.

An exclusion block representative of all harvestable species utilized must be created to ensure population persistence. The block should be demarcated and included on the map incorporating the management zones. The exclusion block may be utilized further for research and monitoring purposes.

SUSTAINABLE HARVESTING			
Objectives	· To ensure the sustainable use of Wild Fynbos Resources. · To ensure the conservation of biodiversity where harvesting operations occur. · To monitor the impact of harvesting on selected Fynbos species.		
Key Deliverables	**Management Activities**	**Responsibility**	**Timeframe**
Identify Management Zones	Map the boundaries of the property Divide the property into management zones.	MA/CN	Annually
Classify Floral Species according to Vulnerability Index	Classify harvestable species according to Vulnerability Index Develop list of harvestable species as per floral licence on the property Classify harvestable species according to their distribution per management zone	MA/CN	Annually
Minimise Harvesting Impact	Harvesting Guidelines must be adhered to Pickers/Contractors must be accredited	MA	On-going
Record Keeping	Daily Harvesting Record Maintained Monthly Harvesting Records Submitted Invoice and Delivery Note System Maintained	MA	On-going
Compliance with Relevant Legislation	Possession of Valid CapeNature Flora License Understanding of legislation relevant to protected flora	MA	On-going
Monitoring	Identify and demarcate exclusion zones representative of harvestable species Monitoring Program in place to develop Thresholds of Potential Concern	CN	On-going

6.1.5 Erosion Prevention and Control

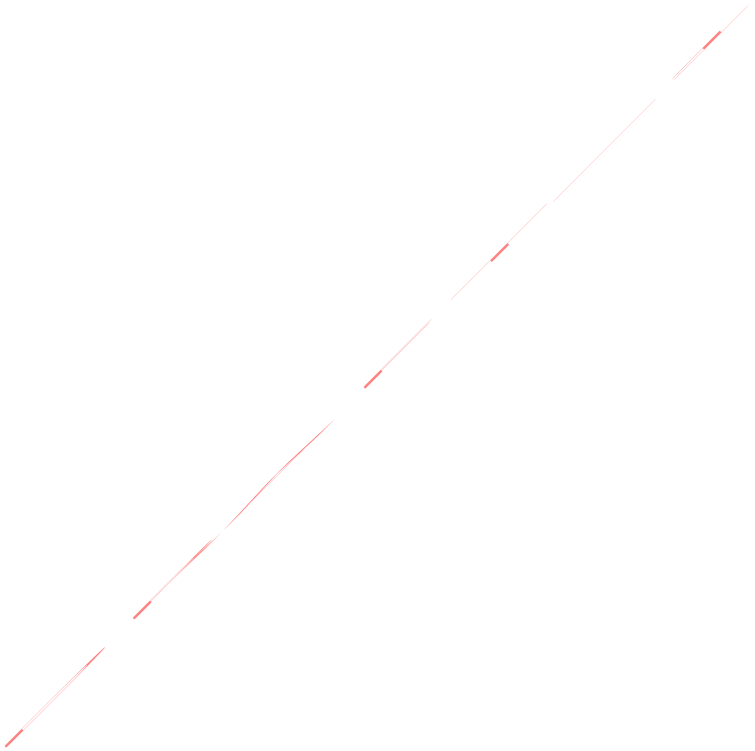
In addressing soil erosion, the following guiding principles should be adhered to:

- Areas impacted by soil erosion should be stabilised and re-vegetated with indigenous plant species to prevent the spread of listed invasive plant species.
- Areas susceptible to soil erosion, or showing early signs of soil erosion such as loss of vegetation cover, must be managed to prevent soil erosion.

EROSION PREVENTION AND CONTROL			
Objectives	· To ensure the sustainable use of Wild Fynbos Resources. · To ensure the conservation of biodiversity where harvesting operations occur. · To monitor the impact of harvesting on selected Fynbos species.		
Key Deliverables	**Management Activities**	**Responsibility**	**Timeframe**
Prevent and Mitigate Soil Erosion	Conduct a Soil Erosion Assessment Map Erosion Sites and Ensure Photographs are available. Compile an Erosion Maintenance Plan. Monitor the effectivity of the Erosion Control Mitigation. Monitor Cost Effectiveness of Maintenance. Monitor Site Recovery Conduct a Roads and Footpath Assessment.	MA	Annually

6.1.6 Monitoring and Baseline Data Collection

Information on the locality of Rare, Endangered and Endemic species is necessary to ensure effective management and monitoring of populations. This objective aims to improve the biological knowledge base through the implementation and promotion of effective baseline data collection and research opportunities.



MONITORING AND BASELINE DATA COLLECTION			
Objectives	· To manage biodiversity knowledge to ensure effective conservation management. · To implement measures to ensure resilience and persistence of biodiversity in light of climate change. · To ensure the implementation of effective conservation management interventions. · To ensure conservation of species and processes by maintaining and improving ecosystem functioning.		
Key Deliverables	**Management Activities**	**Responsibility**	**Timeframe**
Compile Ecological Plan of Operations (in APO) and insert into CapeNature Conservation Services Ecological Matrix	Collate all relevant Monitoring and Research Protocols and Data Sheets. Insert [insert sites name] into the CapeNature Conservation Services Ecological Matrix for the Area.	MA/CapeNature	Annually
Create a Biodiversity Resource Inventory	Prioritise Species for inclusion in the CapeNature Conservation Services Ecological Matrix. Collect Specimens and Submit to CapeNature Scientific Services.	MA/CapeNature	Annually
Implement Monitoring Programme	Review Monitoring Protocols. Identify Monitoring Needs of Nature Reserve in consultation with CapeNature. Establish Indicators for Monitoring. Implement Monitoring Activities as per Ecological Matrix (see above). Report on Monitoring Activities as per Ecological Matrix (see above). Analyse data, re-assess and implement Adaptive Management Strategies.	MA/CapeNature	Annually

6.1.7 Biodiversity and security

Develop an integrated security strategy for the Nature Reserve. Access to the Nature Reserve needs to be controlled and conditions of entry for visitors into the Nature Reserve should be clearly stipulated on signboards at access points.

BIODIVERSITY SECURITY			
Objectives	· To enhance biodiversity protection and conservation. · To ensure conservation of species and processes by maintaining and improving ecosystem functioning.		
Key Deliverables	**Management Activities**	**Responsibility**	**Timeframe**
Improved security and safety of the biodiversity assets on the Nature Reserve	Ensure Notarial Deed with surveyor diagram and title deed restrictions are registered with the Notary and Surveyor General against the property Ensure Conservation Area is rezoned to appropriate conservation zoning, e.g. Open Space III Ensure appropriate signage at access points.	MA/CapeNature	Once off

6.2 Tourism development

In developing tourism within the biodiversity stewardship site, the following guiding principles should be adhered to:

- Tourism products must be appropriate to the site's values and must not threaten its biodiversity or ecological function.
- In developing tourism products, requirements for environmental authorisation must be considered and adhered to.
- Tourism products should be designed to capitalise on the unique beauty and biodiversity features of the site.
- Tourism products should be developed in response to tourism market demands and opportunities within the site and should be carefully assessed to determine their viability.

DEVELOPMENT OF TOURISM OPPORTUNITIES			
Objectives	· To evaluate potential tourism opportunities. · To implement effective management systems. · To ensure legal compliance and implementation of authorised development plans.		
Key Deliverables	**Management Activities**	**Responsibility**	**Timeframe**
Development of tourism opportunities that generate revenue for the Nature Reserve	Planning and development of hiking routes, mountain bike trails, and basic facilities to cater for visitors to the Nature Reserve Development of a business plan for tourism accommodation facilities.	Management Authority	As required

6.3 Operational Management

6.3.1 Legal Compliance

Through the landowners of the biodiversity stewardship site, the management authority has been mandated to enforce laws related to the conservation of the site, which prohibit particular activities. In fulfilling this role, the managers of Gourikwa Reserve will adhere to the following guiding principles:

- Law enforcement efforts should be coordinated with the relevant authorities including CapeNature and the South African Police Service in addressing offences and breaches of the law.
- Law enforcement at the site will be undertaken through surveillance, monitoring and appropriate reaction in the event of an offence.

LEGAL COMPLIANCE			
Objectives	· To ensure legal compliance to all relevant legislation and policies.		
Key Deliverable	**Management Activities**	**Responsibility**	**Timeframe**
Ensure that all legal requirements are met.	All development needs to be done according to the NEMA principles and follow the applicable legislation and procedures of all relevant stakeholders. All water management within the Reserve must comply with the National Water Act (No 36 of 1998). Abstraction of water from water sources originating in the Reserve must not affect the biodiversity of the Reserve	Management Authority	Ongoing

6.3.2 Management Effectiveness

MANAGEMENT EFFECTIVENESS			
Objectives	· To implement effective management systems.		
Key Deliverable	**Management Activities**	**Responsibility**	**Timeframe**
Annual audit completed. Auditing systems inform management	Conduct annual audits. Implementation, annual review and update of management plan Compile detailed work plan identifying specific targets for achieving management	Management Authority/ CapeNature	Annually

6.3.3 Infrastructure development and management

In order for Gourikwa Reserve to operate appropriately, adequate infrastructure needs to be developed and maintained both for management and tourism purposes. In addressing infrastructure needs at the site, the following guiding principles will be adhered to:

- Infrastructure must be maintained to avoid any damage to the environment and ensure the safety of staff and visitors to the site.
- Infrastructure must be provided to ensure the effective management and operation of the nature reserve.

Figure 6.3 Infrastructure on Gourikwa Reserve.

INFRASTRUCTURE			
Objectives	· To ensure the implementation of effective conservation management interventions. · To enhance biodiversity protection and conservation. · To ensure conservation of species and processes by maintaining and improving ecosystem functioning.		
Key Deliverable	**Management Activities**	**Responsibility**	**Timeframe**
All infrastructures on the Reserve is adequately maintained.	Develop and implement a scheduled maintenance programme to maintain facilities and infrastructure in a condition that meet relevant environmental, health and safety requirements.	Management Authority	Ongoing

7) ANNUAL PLAN OF OPERATION AND REVIEW

Monitoring and reporting enable the effective assessment of management interventions. If necessary, it can be used to direct modifications of management in an effort to achieve the outcomes required.

7.1 Annual Plan of Operation

The Annual Plan of Operation (APO) gives life to the Operational Management Framework on an annual basis and allows for progress to be tracked.

See Table 7.1

7.2 Management Plan Review

The purpose of undertaking an annual review of implementation of the protected area management plan will be to:

- Determine how effectively the management plan has been implemented.
- Assist in determining the focus for the annual plan of operation and the setting of appropriate time frames and budgets.
- Enable effective adaptive management by identifying changes and modifying management interventions.

The annual audit will form the basis of the management plan review. This should include records of recommendations for update/changes to the annual revision of the management schedules as well as the five-year plan. The Annual Plan of Operation (APO) is in a similar format to the Annual Audit See Appendix D below, allowing for a seamless transition of information from Audit to new APO.

7.3 Budget allocation for operations

Budget requirements to implement operational activities on a reserve is crucial for the long-term management of the nature reserve. Gourikwa Nature Reserve has adequate budget for its day-to-day operations. There is a budget or costing document at reserve level.

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LIST OF STATUTES TO WHICH THE GOURIKWA RESERVE IS SUBJECT

Biodiversity and Cultural Resource Management and Development:

- Animals Protection Act [No. 71 of 1962]
- Atmospheric Pollution Prevention Act [No. 45 of 1965]
- Conservation of Agricultural Resources Act [No. 43 of 1983]
- Constitution of the Republic of South Africa [No. 108 of 1996]
- Criminal Procedures Act [1977]
- Environment Conservation Act [No. 73 of 1989]
- Forest Act [No. 122 of 1984]
- Hazardous Substances Act [No. 15 of 1973]
- Western Cape Heritage Management Act [No. 10 of 1997]
- Western Cape Nature Conservation Management Act [No. 9 of 1997]
- National Environmental Management Act [No. 107 of 1998]
- National Environmental Management: Biodiversity Act [No. 10 of 2004]
- National Environmental Management: Protected Areas Act [No. 57 of 2003]
- National Forests Act [No. 84 of 1998]
- National Heritage Resources Act [No. 25 of 1999]
- National Water Act [No. 36 of 1998]
- National Water Amendment Act [No. 45 of 1999]
- National Veld and Forest Fire Act [No 101 of 1998]
- Nature Conservation Ordinance [No. 15 of 1974]
- Western Cape Biodiversity Management Act [No. 6 of 2021]

General Management:

- Development Facilitation Act [No. 67 of 1995]
- Disaster Management Act [No. 57 of 2002]
- Fire Brigade Services Act [No. 99 of 1987]
- Local Government: Municipal Systems Act [No. 32 of 2000]
- National Road Traffic Act [No. 93 of 1996]
- National Building Standards Act [No. 103 of 1977]
- Occupational Health and Safety Act [No. 85 of 1993]
- Western Cape Planning and Development Act [No. 5 of 1998]
- Water Services Act [No. 108 of 1997]

Financial Management:

- Public Finance Management Act [No. 1 of 1999]

Human Resource Management:

- Basic Conditions of Employment Act [No. 75 of 1997]
- Broad-Based Black Economic Empowerment Act [No. 53 of 2003]
- Compensation for Occupational Injuries and Diseases Act [No. 130 of 1993]
- Employment Equity Act [No. 55 of 1998]
- Labour Relations Act [No. 66 of 1995]
- Occupational Health and Safety Act [No. 85 of 1993]
- Pension Funds Act [No. 24 of 1956]
- Skills Development Act [No. 97 of 1998]
- Skills Development Levies Act [No. 9 of 1999]
- Unemployment Insurance Act [No. 63 of 2001]

A brief summary of the most applicable legislation:

Protected Areas are proclaimed under section 23(1) of the National Environmental Protected Areas Act, 57 of 2003, ("the Protected Areas Act").

- **Protected Areas Act (Act No. 57 of 2003)**

The *[Minister/MEC]* is empowered, under section 23(1) of the National Environmental Protected Areas Act, 57 of 2003, ("the Protected Areas Act") to declare an area as a Conservation Area if:

1 It has significant natural features or biodiversity;

2 Is in need of long-term protection for the maintenance of its biodiversity or for the provision of environmental goods and services.

Both of the above criteria pertain to the De Rust Nature Reserve and are discussed in detail under "Conservation Significance".

Biodiversity management agreements

The Minister may enter into a biodiversity management agreement with the person, organization or organ of state identified in terms of section 43(2), or any other suitable person, organization or organ of state, regarding the implementation of a biodiversity management plan, or any aspect of it.

- **Biodiversity Act (Act No. 10 0f 2004)**

Objectives of Act

(a) within the framework of the National Environmental Management Act, to provide for—

(i) the management and conservation of biological diversity within the Republic and of the components of such biological diversity;
(ii) the use of indigenous biological resources in a sustainable manner; and
(iii) the fair and equitable sharing among stakeholders of benefits arising from bio-prospecting involving indigenous biological resources;
(b) to give effect to ratified international agreements relating to biodiversity which are binding on the Republic;
(c) to provide for co-operative governance in biodiversity management and conservation; and
(d) to provide for a South African National Biodiversity Institute to assist in achieving the objectives of this Act.

- **National Veld and Forest Fire Act (Act No. 101 of 1998)**

Purpose

'The purpose of the Act is to prevent and combat veld, forest and mountain fires throughout the Republic.''

Firebreaks

In terms of section 12 and 14 every landowner must prepare and maintain a firebreak as determined in section 13. Failure to do so is an offence in terms of section 25(3), unless he has been exempted by the Minister in terms of section 15.

Fighting Preparedness

There is also a further duty on landowners to have equipment, protective clothing and trained personnel available in the eventuality that there may be fire on their property (section 17). Failure to meet this requirement is an offence in terms of section 25(4).

- **Conservation of Agricultural Resources Act, 1983 (No 43 of 1983)**

Purpose

CARA is an act of the National Department of Agriculture and makes provision for the conservation of the natural agricultural resources of South Africa through:

1. Maintaining the production potential of land;
2. Combating and preventing erosion;
3. Preventing the weakening or destruction of water sources;
4. Protecting the vegetation; and
5. Combating weeds and invader plants.

Applicable CapeNature policies

- Nature Conservation Ordinance (19/1974)
- Western Cape Nature Conservation Board Act No 15 of 1998
- Nature and Environmental Conservation Regulations (Provincial Notice 955/1975)
- CNC WC Fire Management Plan and Guidelines
- CNC Guidelines for the management of leopard management areas
- CNC Baseline and monitoring manual
- CNC guideline for river maintenance
- Policy on the re-establishment of Cape Mountain Zebra Populations
- Policy on the certificates of adequate enclosure
- Hunting Proclamation
- National Water Act, 1998 (No 36 of 1998)

Other Relevant Legislation:

- Municipal Systems Act
- National Water Act, 1998 (No 36 of 1998)
- Constitution of the Republic of South Africa Act, 1996 (No 108 of 1996)
- Environment Conservation Act No 73 of 1989
- Forest Act No 122 of 1984
- National Environmental Management Act, 1998 (No 107 of 1998)
- National Heritage Resources Act, 1999 (No 25 of 1999)
- World Heritage Convention Act, 1999 (No 109 of 1999)
- Western Cape Tourism Act, No. 3 of 1997
- Mountain Catchment Areas Act, 1970 (Act No. 63 of 1970)
- The administration of the Act has been assigned to the Board by virtue of Act 3 of 2000 as published in Provincial Gazette Extraordinary No. 5442 dated 24 March 2000
- Land Use Planning Ordinance 15/1985 (section 29)

(THERE MIGHT BE OTHER LEGISLATION APPLICABLE TO THE CONTRACT NATURE RESERVE AND IT IS THE LANDOWNER'S RESPONSIBILITY TO DETERMINE THIS IF NECESSARY.)

Appendix B

COPY OF GOURIKWA RESERVE PROCLAMATION

PROVINCIAL NOTICE

P.N. 30/2022 **11 March 2022**

DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING

NATIONAL ENVIRONMENTAL MANAGEMENT: PROTECTED AREAS ACT, 2003 (ACT 57 OF 2003)

DECLARATION OF GOURIKWA NATURE RESERVE

I, Anton Wilhelm Bredell, Provincial Minister of Local Government, Environmental Affairs and Development Planning in the Western Cape, under section 23(1)*(a)*(i) of the National Environmental Management: Protected Areas Act, 2003 (Act 57 of 2003), declare a nature reserve on:

Portion 15 of the Farm Buffelshoek No. 455, situated in the Hessequa Municipality, Division of Riversdale, Western Cape Province;
In extent: 2 455, 4711 (Two Thousand Four Hundred and Fifty-Five comma Four Seven One One) hectares;
Held by Deed of Transfer No. T66753/2015.

I assign the name **"Gourikwa Nature Reserve"** to the reserve, of which the boundaries are reflected on Surveyor-General Diagram 8463/1985, as set out in the Schedule. The Surveyor-General Diagram may also be viewed at *https://www.capenature.co.za/care-for-nature/stewardship/*.

Signed at Cape Town on this 2nd day of March 2022.

AW BREDELL
PROVINCIAL MINISTER OF LOCAL GOVERNMENT, ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING

PROVINSIALE KENNISGEWING

P.K. 30/2022 **11 Maart 2022**

DEPARTEMENT VAN OMGEWINGSAKE EN ONTWIKKELINGSBEPLANNING

"NATIONAL ENVIRONMENTAL MANAGEMENT: PROTECTED AREAS ACT, 2003" (WET 57 VAN 2003)

VERKLARING VAN GOURIKWA NATUURRESERVAAT

Ek, Anton Wilhelm Bredell, Provinsiale Minister van Plaaslike Regering, Omgewingsake en Ontwikkelingsbeplanning in die Wes-Kaap, kragtens artikel 23(1)*(a)*(i) van die "National Environmental Management: Protected Areas Act, 2003" (Wet 57 van 2003), verklaar 'n natuurreservaat op:

Gedeelte 15 van die Plaas Buffelshoek Nr. 455, geleë in die Hessequa Munisipaliteit, Afdeling Riversdale, Provinsie Wes-Kaap;
Groot: 2 455, 4711 (Twee Duisend Vier Honderd Vyf-en-Vyftig komma Vier Sewe Een Een) hektaar;
Gehou kragtens Transportakte Nr. T66753/2015.

Ek ken die naam **"Gourikwa Natuurreservaat"** toe aan die reservaat, waarvan die grense weergegee word op die Landmeter-generaaldiagram 8463/1985 soos uiteengesit in die Bylae. Die Landmeter-generaaldiagram kan ook gevind word by *https://www.capenature.co.za/care-for-nature/stewardship/*.

Geteken te Kaapstad op hierdie 2de dag van Maart 2022.

AW BREDELL
PROVINSIALE MINISTER VAN PLAASLIKE REGERING, OMGEWINGSAKE EN ONTWIKKELINGSBEPLANNING

SPECIES LISTS

Flora species

Species	*Conservation Status*
Ophioglossum nudicaule L.f.	Least Concern
Cyathea capensis (L.f.) Sm.	Not Threatened
Asplenium adiantum-nigrum L.	
Gleichenia polypodioides (L.) Sm.	Least Concern
Elaphoglossum angustatum (Schrad.) Hieron.	Least Concern
Todea barbara (L.) T.Moore	Least Concern
Microsorium ensiforme (Thunb.) Schelpe	
Cheilanthes viridis viridis	Least Concern
Pellaea calomelanos (Sw.) Link	
Pteris dentata Forssk.	Least Concern
Rumohra adiantiformis (G.Forst.) Ching	Least Concern
Pteridium aquilinum (L.) Kuhn	
Schizaea pectinata (L.) Sw.	Least Concern
Blechnum attenuatum giganteum (Kaulf.) Bonap.	
Blechnum punctulatum Sw.	
Blechnum tabulare (Thunb.) Kuhn	Least Concern
Asparagus scandens Thunb.	Least Concern
Aristea africana (L.) Hoffmanns.	Least Concern
Aristea capitata (L.) Ker Gawl.	Least Concern
Aristea racemosa Baker	
Aristea sp.	
Bobartia macrocarpa Strid	Vulnerable (A2c; B1ab)
Bobartia macrospatha macrospatha	Least Concern
Bobartia orientalis J.B.Gillett	
Bobartia parva J.B.Gillett	Rare
Freesia sparrmannii (Thunb.) N.E.Br.	Rare
Geissorhiza burchellii R.C.Foster	Least Concern
Geissorhiza grandiflora Goldblatt	Least Concern
Geissorhiza inconspicua Baker	Least Concern
Gladiolus hirsutus Jacq.	Least Concern
Gladiolus rogersii Baker	Least Concern
Gladiolus vaginatus F. Bolus	Vulnerable (B1ab)
Moraea tripetala (L.f.) Ker Gawl.	Least Concern
Nivenia argentea Goldblatt	Least Concern
Tritoniopsis antholyza (Poir.) Goldblatt	Least Concern
Tritoniopsis caffra (Ker Gawl. ex Baker) Goldblatt	Least Concern
Tritoniopsis ramosa (Eckl. ex Klatt) G.J.Lewis	
Tritoniopsis triticea (Burm.f.) Goldblatt	Least Concern
Watsonia angusta Ker Gawl.	Least Concern
Aloe ciliaris Haw.	
Bulbinella nutans turfosicola (P.L.Perry) P.L.Perry	Least Concern
Kniphofia uvaria (L.) Oken	Least Concern
Corycium carnosum (Lindl.) Rolfe	Least Concern
Disa glandulosa Burch. ex Lindl.	Least Concern
Disa graminifolia Ker Gawl. ex Spreng.	Least Concern
Disa obliqua clavigera (Lindl.) Bytebier	Least Concern
Disa sagittalis (L.f.) Sw.	Least Concern
Disa vasselotii Bolus ex Schltr.	Least Concern
Disperis paludosa Harv. ex Lindl.	Least Concern

Lanaria lanata (L.) T.Durand & Schinz	Least Concern
Caesia contorta (L.f.) T.Durand & Schinz	Least Concern
Agapanthus africanus (L.) Hoffmanns.	
Capeochloa arundinacea (P.J.Bergius) N.P.Barker & H.P.Linder	
Cymbopogon marginatus (Steud.) Stapf ex Burtt Davy	Least Concern
Ehrharta dura Nees ex Trin.	Least Concern
Ehrharta ramosa (Thunb.) Thunb.	
Ehrharta rupestris Nees ex Trin.	
Ehrharta setacea Nees	
Ehrharta sp.	
Geochloa rufa (Nees) N.P.Barker & H.P.Linder (Nees) N. P. Barker & H. P.	
Pentameris macrocalycina (Steud.) Schweick.	Least Concern
Pentaschistis acinosa Stapf	Least Concern
Pentaschistis colorata (Steud.) Stapf	Least Concern
Pentaschistis eriostoma (Nees) Stapf	Least Concern
Pentaschistis malouinensis (Steud.) Clayton	Least Concern
Tenaxia stricta (Schrad.) N.P.Barker & H.P.Linder	
Tribolium brachystachyum (Nees) Renvoize	Least Concern
Anthochortus crinalis (Mast.) H.P.Linder	Least Concern
Cannomois parviflora (Thunb.) Pillans	Least Concern
Cannomois scirpoides (Kunth) Mast.	Least Concern
Elegia asperiflora (Nees) Kunth	Least Concern
Elegia capensis (Burm.f.) Schelpe	Least Concern
Elegia equisetacea (Mast.) Mast.	Least Concern
Elegia filacea Mast.	Least Concern
Elegia galpinii N.E.Br.	Least Concern
Elegia juncea L.	Least Concern
Elegia mucronata (Nees) Kunth	Least Concern
Elegia stokoei Pillans	Least Concern
Hypodiscus albo-aristatus (Nees) Mast.	Least Concern
Hypodiscus argenteus (Thunb.) Mast.	Least Concern
Hypodiscus aristatus (Thunb.) C.Krauss	Least Concern
Hypodiscus laevigatus (Kunth) H.P.Linder	Least Concern
Hypodiscus striatus (Kunth) Mast.	Least Concern
Mastersiella purpurea (Pillans) H.P.Linder	Least Concern
Platycaulos acutus Esterh.	Vulnerable (D2)
Platycaulos anceps (Mast.) H.P.Linder	Least Concern
Platycaulos compressus (Rottb.) H.P.Linder	Least Concern
Platycaulos major (Mast.) H.P.Linder	Least Concern
Restio capensis (L.) H.P.Linder & C.R.Hardy	Least Concern
Restio decipiens (N.E.Br.) H.P.Linder	Least Concern
Restio filiformis Poir.	Least Concern
Restio fragilis Esterh.	Least Concern
Restio gaudichaudianus Kunth	Least Concern
Restio implicatus Esterh.	Critically Rare
Restio inconspicuus Esterh.	Least Concern
Restio laniger Kunth	Least Concern
Restio monostylis H.P.Linder & C.R.Hardy	
Restio ocreatus Kunth	Least Concern
Restio paniculatus Rottb.	Least Concern
Restio pedicellatus Mast.	Least Concern
Restio perplexus Kunth	Least Concern
Restio scaber Mast.	Vulnerable (D2)

Restio sieberi Kunth	Least Concern
Restio stokoei Pillans	Least Concern
Restio strictus N.E.Br.	Least Concern
Rhodocoma arida H.P.Linder & Vlok	Least Concern
Rhodocoma fruticosa (Thunb.) H.P.Linder	Least Concern
Rhodocoma gigantea (Kunth) H.P.Linder	Least Concern
Staberoha cernua (L.f.) T.Durand & Schinz	Least Concern
Thamnochortus cinereus H.P.Linder	Least Concern
Thamnochortus insignis Mast.	Least Concern
Thamnochortus karooica H.P.Linder	Vulnerable (D2)
Willdenowia bolusii Pillans	Least Concern
Willdenowia glomerata (Thunb.) H.P.Linder	Least Concern
Willdenowia teres Thunb.	Least Concern
Dilatris ixioides Lam.	Least Concern
Wachendorfia paniculata Burm.	Least Concern
Capeobolus brevicaulis (C.B.Clarke) Browning	Least Concern
Chrysitrix capensis L.	
Epischoenus quadrangularis (Boeck.) C.B.Clarke	Least Concern
Epischoenus sp.	
Ficinia deusta (P.J.Bergius) Levyns	Least Concern
Ficinia fascicularis Nees	Least Concern
Ficinia filiformis (Lam.) Schrad.	Least Concern
Ficinia gracilis Schrad.	Least Concern
Ficinia laciniata (Thunb.) Nees	Least Concern
Ficinia macowanii C.B.Clarke	Least Concern
Ficinia monticola Kunth	Least Concern
Ficinia nigrescens (Schrad.) J.Raynal	Least Concern
Ficinia trichodes (Schrad.) Benth. & Hook.f.	Least Concern
Ficinia zeyheri Boeck.	Least Concern
Schoenoxiphium lanceum (Thunb.) Kük.	Least Concern
Tetraria brachyphylla Levyns	Least Concern
Tetraria bromoides (Lam.) Pfeiff.	Least Concern
Tetraria burmannii (Vahl.) C.B.Clarke	Least Concern
Tetraria capillacea (Thunb.) C.B.Clarke	Least Concern
Tetraria compar (L.) T.Lestib.	Least Concern
Tetraria crassa Levyns	Data Deficient - Taxonomically Problematic
Tetraria cuspidata (Rottb.) C.B.Clarke	
Tetraria fasciata (Rottb.) C.B.Clarke	Least Concern
Tetraria fimbriolata (Nees) C.B.Clarke	Least Concern
Tetraria flexuosa (Thunb.) C.B.Clarke	Least Concern
Tetraria involucrata (Rottb.) C.B.Clarke	Least Concern
Tetraria pillansii Levyns	Least Concern
Tetraria robusta (Kunth) C.B.Clarke	Least Concern
Tetraria thermalis (L.) C.B.Clarke	Least Concern
Tetraria triangularis (Boeck.) C.B.Clarke	Least Concern
Tetraria ustulata (L.) C.B.Clarke	Least Concern
Peperomia retusa (L.f.) A.Dietr.	
Myrica kraussiana Buchinger ex Meisn.	
Aulax pallasia Stapf	Near Threatened (A4c)
Brabejum stellatifolium L.	Least Concern
Hakea sericea Schrad. & J.C.Wendl.	
Leucadendron album (Thunb.) Fourc.	Least Concern
Leucadendron barkerae I.Williams	Least Concern

Leucadendron ericifolium R.Br.	Least Concern
Leucadendron eucalyptifolium H.Buek ex Meisn.	Least Concern
Leucadendron meridianum I.Williams	Least Concern
Leucadendron nervosum E.Phillips & Hutch.	Near Threatened (A3d+4d)
Leucadendron radiatum E.Phillips & Hutch.	Endangered (B1abc+2abc)
Leucadendron rubrum Burm.f.	Least Concern
Leucadendron salicifolium (Salisb.) I.Williams	Least Concern
Leucadendron salignum P.J.Bergius	Least Concern
Leucadendron spirale (Salisb. ex Knight) I.Williams	Extinct
Leucadendron spissifolium spissifolium	Least Concern
Leucadendron tinctum I.Williams	Near Threatened (A4c)
Leucadendron tradouwense I.Williams	Critically Endangered (B1bc)
Leucospermum calligerum (Salisb. ex Knight) Rourke	Least Concern
Leucospermum cuneiforme (Burm.f.) Rourke	Least Concern
Leucospermum erubescens Rourke	Rare
Leucospermum mundii Meisn.	Rare
Leucospermum wittebergense Compton	Least Concern
Mimetes cucullatus (L.) R.Br.	Least Concern
Mimetes splendidus Salisb. ex Knight	Endangered (B1abc+2abc; C2ab)
Paranomus adiantifolius Salisb. ex Knight	Endangered (B1ac+2ac)
Paranomus candicans (Thunb.) Kuntze	Least Concern
Paranomus dispersus Levyns	Least Concern
Paranomus dregei (H.Buek ex Meisn.) Kuntze	Least Concern
Paranomus spathulatus N.E.Br.	Near Threatened (A3c+4c)
Protea acaulos (L.) Reichard	Least Concern
Protea aurea (Burm.f.) Rourke	
Protea aurea aurea	Least Concern
Protea cordata Thunb.	Least Concern
Protea coronata Lam.	Near Threatened (A2c+3c+4c)
Protea cynaroides (L.) L.	Least Concern
Protea eximia (Salisb. ex Knight) Fourc.	Least Concern
Protea eximia X grandiceps	
Protea grandiceps Tratt.	Near Threatened (B1ac+2ac)
Protea humiflora Andrews	Least Concern
Protea lorea R.Br.	Near Threatened (D2)
Protea lorifolia (Salisb. ex Knight) Fourc.	Least Concern
Protea magnifica Link	Least Concern
Protea neriifolia R.Br.	Least Concern
Protea neriifolia X nitida	
Protea nitida Mill.	Least Concern
Protea nitida X speciosa	
Protea piscina Rourke	Least Concern
Protea punctata Meisn.	Least Concern
Protea repens (L.) L.	Least Concern
Protea scolopendriifolia (Salisb. ex Knight) Rourke	Least Concern
Protea speciosa (L.) L.	Least Concern
Protea subulifolia (Salisb. ex Knight) Rourke	Least Concern
Serruria balanocephala Rourke	Near Threatened (A3c+4c)
Serruria fasciflora Salisb. ex Knight	Near Threatened (A2c+4c)
Spatalla colorata Meisn.	Endangered (B1ac+2ac)
Spatalla nubicola Rourke	Near Threatened (D2)
Spatalla parilis Salisb. ex Knight	Least Concern
Thesidium fragile (Thunb.) Sond.	Least Concern
Thesidium microcarpum (A.DC.) A.DC.	

Thesium carinatum DC.	
Thesium ericaefolium A.DC.	Least Concern
Thesium euphorbioides L.	Least Concern
Thesium subnudum Sond.	
Thesium virgatum Lam.	Least Concern
Grubbia rosmarinifolia rosmarinifolia	Vulnerable (B1ab+2ab)
Grubbia rosmarinifolia rosmarinifolia rosmarinifolia	Least Concern
Grubbia tomentosa (Thunb.) Harms	Least Concern
Drosera aliciae Raym.-Hamet	Least Concern
Berzelia abrotanoides (L.) Brongn.	Least Concern
Berzelia burchellii Dummer	Vulnerable (B1ab)
Berzelia intermedia (D.Dietr.) Schltdl.	Least Concern
Brunia alopecuroides Thunb.	Least Concern
Brunia neglecta Schltr.	Least Concern
Brunia noduliflora Goldblatt & J.C.Manning	Least Concern
Linconia alopecuroidea L.	Endangered (D)
Mniothamnea callunoides (Oliv.) Nied.	Vulnerable (D2)
Raspalia variabilis Pillans	Least Concern
Raspalia virgata (Brongn.) Pillans	Least Concern
Cliffortia alata N.E.Br.	Vulnerable (D2)
Cliffortia atrata Weim.	Least Concern
Cliffortia discolor Weim.	Data Deficient - Taxonomically Problematic
Cliffortia ferruginea L.f.	Least Concern
Cliffortia pulchella L.f.	
Cliffortia sericea Eckl. & Zeyh.	Least Concern
Cliffortia serpyllifolia Cham. & Schltdl.	Least Concern
Cliffortia strobilifera L.	Least Concern
Cliffortia tuberculata (Harv.) Weim.	
Phylica axillaris Lam.	
Phylica axillaris microphylla (Eckl. & Zeyh.) Pillans	Least Concern
Phylica ericoides L.	
Phylica mairei Pillans	Rare
Phylica pinea Thunb.	Least Concern
Pelargonium cordifolium (Cav.) Curtis	Least Concern
Pelargonium fruticosum (Cav.) Willd.	Least Concern
Pelargonium myrrhifolium (L.) L'Hér.	
Pelargonium ovalifolium (Sweet) DC.	
Pelargonium tomentosum Jacq.	Least Concern
Pelargonium tricolor Curtis	Least Concern
Laurophyllus capensis Thunb.	Least Concern
Searsia lucens (Hutch.) Moffett	
Cassine schinoides (Spreng.) R.H.Archer	Least Concern
Maytenus acuminata (L.f.) Loes.	
Pterocelastrus rostratus (Thunb.) Walp.	Declining
Acmadenia nivea I.Williams	Vulnerable (D2)

Mammals

TaxonName	EnglishName	AfrikaansName	IUCN_Name	RDB_Name	CITES	Ordinance
Nycteris thebaica	Egyptian slit-faced bat	Egiptiese spleetneusvlermuis	Least Concern	Least Concern		Schedule II
Rhinolophus clivosus	Geoffroy's horseshoe bat	Geoffroy-saalneusvlermuis	Least Concern	Near Threatened		Schedule II
Cercopithecus pygerythrus	vervet monkey	blouaap				
Papio hamadryas	Chacma baboon	Kaapse bobbejaan	Least Concern	Least Concern	Appendix II	
Lepus capensis	Cape hare	Vlakhaas	Least Concern	Least Concern		
Lepus saxatilis	Scrub hare	Kolhaas	Least Concern	Least Concern		
Cryptomys hottentotus	Common molerat	Knaagdiermol	Least Concern	Least Concern		
Acomys subspinosus	Cape spiny mouse	Kaapse stekelmuis	Least Concern	Least Concern		
Dendromus mesomelas	Brants' climbing mouse	Brants-klimmuis	Least Concern	Least Concern		
Mus minutoides	Pygmy mouse	Dwergmuis	Least Concern	Least Concern		
Myomyscus verreauxii	Verreaux's mouse	Verreaux-muis	Least Concern	Least Concern		
Otomys irroratus	Vlei rat	Vleirot	Least Concern	Least Concern		
Otomys laminatus	Laminate vlei rat	Bergvleirot	Least Concern	Least Concern		
Otomys unisulcatus	Bush vlei rat	Boskaroorot	Least Concern	Least Concern		
Parotomys brantsii	Brants's whistling rat	Brants-fluitrot	Least Concern	Least Concern		
Rhabdomys pumilio	Striped mouse	Streepmuis	Least Concern	Least Concern		
Panthera pardus	Leopard	Luiperd	Near Threatened	Least Concern	Appendix II	Schedule II
Canis mesomelas	Black-backed jackal	Rooijakkals	Least Concern	Least Concern		
Genetta genetta	Small-spotted genet	Kleinkolmuskejaatkat	Least Concern	Least Concern		
Genetta tigrina	Large-spotted genet	Grootkolmuskejaatkat	Least Concern	Least Concern		
Cynictis penicillata	Yellow mongoose	Witkwasmuishond	Least Concern	Least Concern		
Procavia capensis	Rock dassie	Klipdassie	Least Concern	Least Concern		
Oreotragus oreotragus	Klipspringer	Klipspringer	Least Concern	Least Concern		Schedule II
Pelea capreolus	Grey rhebuck	Vaalribbok	Least Concern	Least Concern		Schedule II
Raphicerus melanotis	Grysbok	Grysbok	Least Concern	Least Concern		Schedule II
Tragelaphus scriptus	Bushbuck	Bosbok	Least Concern	Least Concern		Schedule II
Potamochoerus larvatus	bushpig		Least Concern			
Amblysomus corriae	Fynbos golden mole	Fynbosgouemol	Near Threatened	Near Threatened		
Chrysochloris asiatica	Cape golden mole	Kaapse gouemol	Least Concern	Data Deficient		
Crocidura cyanea	Reddish-grey musk shrew	Rooigrysskeerbek	Least Concern	Data Deficient		Schedule II
Crocidura flavescens	Greater red musk shrew	Groter skeerbek	Least Concern	Data Deficient		Schedule II
Myosorex cafer	Dark-footed forest shrew	Donkerpoot-bosskeerbek	Least Concern	Data Deficient		
Myosorex longicaudatus	Long-tailed forest shrew	Langstert-bosskeerbek	Vulnerable (B1ab)	Near Threatened		Schedule II
Myosorex varius	Forest shrew	Bosskeerbek	Least Concern	Data Deficient		Schedule II

Suncus varilla	Lesser dwarf shrew	Kleiner dwergskeerbek	Least Concern	Data Deficient	Schedule II
Canis mesomelas	Black-backed jackal	Rooijakkals	Least Concern	Least Concern	
Ictonyx striatus	Striped polecat	Stinkmuishond	Least Concern	Least Concern	
Galerella pulverulenta	Cape grey mongoose	Kleingrysmuishond	Least Concern	Least Concern	
Antidorcas marsupialis	Springbuck	Springbok	Least Concern	Least Concern	Schedule II
Pelea capreolus	Grey rhebuck	Vaalribbok	Least Concern	Least Concern	Schedule II
Raphicerus campestris	Steenbok	Steenbok	Least Concern	Least Concern	Schedule II
Raphicerus melanotis	Grysbok	Grysbok	Least Concern	Least Concern	Schedule II
Sylvicapra grimmia	Common duiker	Gewone duiker	Least Concern	Least Concern	Schedule II
Taphozous mauritianus	Mauritian tomb bat	Witlyfvlermuis	Least Concern	Least Concern	Schedule II
Hystrix africaeaustralis	Porcupine	Ystervark	Least Concern	Least Concern	
Myomyscus verreauxii	Verreaux's mouse	Verreaux-muis	Least Concern	Least Concern	
Pelea capreolus	Grey rhebuck	Vaalribbok	Least Concern	Least Concern	Schedule II
Raphicerus melanotis	Grysbok	Grysbok	Least Concern	Least Concern	Schedule II
Sylvicapra grimmia	Common duiker	Gewone duiker	Least Concern	Least Concern	Schedule II

Avifauna (Birds)

TaxonName	EnglishName	AfrikaansName	IUCN_Name
Phalacrocorax africanus	Reed Cormorant	Rietduiker	Least Concern
Anhinga rufa	African Darter	Slanghalsvoël	Least Concern
Bostrychia hagedash	Hadeda Ibis	Hadeda	Least Concern
Platalea alba	African Spoonbill	Lepelaar	Least Concern
Threskiornis aethiopicus	African Sacred Ibis	Skoorsteenveër	Least Concern
Ardea cinerea	Grey Heron	Bloureier	Least Concern
Ardea melanocephala	Black-headed Heron	Swartkopreier	Least Concern
Bubulcus ibis	Cattle Egret	Veereier	Least Concern
Scopus umbretta	Hamerkop	Hamerkop	Least Concern
Ciconia ciconia	White Stork	Witooievaar	Least Concern
Ciconia nigra	Black Stork	Grootswartooievaar	Least Concern
Alopochen aegyptiaca	Egyptian Goose	Kolgans	Least Concern
Anas sparsa	African Black Duck	Swarteend	Least Concern
Anas undulata	Yellow-billed Duck	Geelbekeend	Least Concern
Plectropterus gambensis	Spur-winged Goose	Wildemakou	Least Concern
Tadorna cana	South African Shelduck	Kopereend	Least Concern
Falco biarmicus	Lanner Falcon	Edelvalk	Least Concern
Falco naumanni	Lesser Kestrel	Kleinrooivalk	Vulnerable (A2bce+3bce)
Falco peregrinus	Peregrine Falcon	Swerfvalk	Least Concern
Falco rupicolus	Rock Kestrel	Rooivalk	Least Concern
Falco subbuteo	Eurasian Hobby	Europese Boomvalk	Least Concern
Accipiter melanoleucus	Black Sparrowhawk	Swart Sperwer	Least Concern
Accipiter minullus	Little Sparrowhawk	Kleinsperwer	Least Concern
Accipiter rufiventris	Rufous-chested Sparrowhawk	Rooiborssperwer	Least Concern
Accipiter tachiro	African Goshawk	Afrikaanse Sperwer	Least Concern
Aquila pennatus	Booted Eagle	Dwergarend	Least Concern
Aquila verreauxii	Verreaux's Eagle	Witkruisarend	Least Concern
Buteo rufofuscus	Jackal Buzzard	Rooborsjakkalsvoël	Least Concern
Buteo trizonatus	Forest Buzzard	Bosjakkalsvoël	Least Concern
Buteo vulpinus	Steppe Buzzard	Bruinjakkelsvoël	Least Concern
Circus maurus	Black Harrier	Witkruispaddavreter	Vulnerable (D1)
Circus ranivorus	African Marsh-Harrier	Afrikaanse Paddavreter	Least Concern
Elanus caeruleus	Black-shouldered Kite	Blouvalk	Least Concern
Gyps coprotheres	Cape Vulture	Kransaasvoël	Vulnerable (C1+2a)
Haliaeetus vocifer	African Fish-Eagle	Visarend	Least Concern
Melierax canorus	Southern Pale Chanting Goshawk	Bleeksingvalk	Least Concern
Polemaetus bellicosus	Martial Eagle	Breëkoparend	Near Threatened
Polyboroides typus	African Harrier-Hawk	Kaalwangvalk	Least Concern
Stephanoaetus coronatus	African Crowned Eagle	Kroonarend	Least Concern
Sagittarius serpentarius	Secretary Bird	Sekretarisvoël	Vulnerable (A4acd)
Coturnix coturnix	Common Quail	Afrikaanse Kwartel	Least Concern
Pternistis afer	Red-necked Spurfowl	Rooikeelfisant	Least Concern
Pternistis capensis	Cape Spurfowl	Kaapse Fisant	Least Concern
Scleroptila africanus	Grey-winged Francolin	Bergpatrys	Least Concern
Scleroptila levaillantii	Red-winged Francolin	Rooivlerkpatrys	Least Concern
Numida meleagris	Helmeted Guineafowl	Gewone Tarentaal	Least Concern
Afrotis afra	Southern Black Korhaan	Swartkorhaan	Least Concern
Eupodotis vigorsii	Karoo Korhaan	Vaalkorhaan	Least Concern
Neotis denhami	Denham's Bustard	Veldpou	Near Threatened
Anthropoides paradiseus	Blue Crane	Bloukraanvoël	Vulnerable (A2acde)
Amaurornis flavirostra	Black Crake	Swartriethaan	Least Concern
Fulica cristata	Red-knobbed Coot	Bleshoender	Least Concern
Gallinula chloropus	Common Moorhen	Waterhoender	Least Concern
Sarothrura affinis	Striped Flufftail	Gestreepte Vleikuiken	Least Concern
Sarothrura elegans	Buff-spotted Flufftail	Gevlekte Vleikuiken	Least Concern

Sarothrura rufa	Red-chested Flufftail	Rooiborsvleikuiken	Least Concern
Burhinus capensis	Spotted Thick-knee	Dikkop	Least Concern
Actitis hypoleucos	Common Sandpiper	Gewone Ruiter	Least Concern
Tringa nebularia	Common Greenshank	Groenpootruiter	Least Concern
Charadrius tricollaris	Three-banded Plover	Driebandstrandkiewiet	Least Concern
Vanellus armatus	Blacksmith Lapwing	Bontkiewiet	Least Concern
Vanellus coronatus	Crowned Lapwing	Kroonkiewiet	Least Concern
Pterocles namaqua	Namaqua Sandgrouse	Kelkiewyn	Least Concern
Aplopelia larvata	Lemon Dove	Kaneelduifie	Least Concern
Columba arquatrix	African Olive-pigeon	Geelbekbosduif	Least Concern
Columba guinea	Speckled Pigeon	Kransduif	Least Concern
Columba livia	Rock Dove	Tuinduif	
Oena capensis	Namaqua Dove	Namakwaduifie	Least Concern
Streptopelia capicola	Cape Turtle-dove	Gewone Tortelduif	Least Concern
Streptopelia semitorquata	Red-eyed Dove	Grootringduif	Least Concern
Streptopelia senegalensis	Laughing Dove	Rooiborsduif	Least Concern
Turtur tympanistria	Tambourine Dove	Witborsduifie	Least Concern
Chrysococcyx caprius	Diderick Cuckoo	Diederikkie	Least Concern
Chrysococcyx cupreus	African Emerald Cuckoo	Mooimeisie	Least Concern
Chrysococcyx klaas	Klaas's Cuckoo	Meitjie	Least Concern
Clamator jacobinus	Jacobin Cuckoo	Bontnuwejaarsvoël	Least Concern
Cuculus clamosus	Black Cuckoo	Swartkoekoek	Least Concern
Cuculus solitarius	Red-chested Cuckoo	Piet-my-vrou	Least Concern
Centropus burchellii	Burchell's Coucal	Gewone Vleiloerie	
Bubo africanus	Spotted Eagle-owl	Gevlekte Ooruil	Least Concern
Bubo capensis	Cape Eagle-owl	Kaapse Ooruil	Least Concern
Strix woodfordii	African Wood-owl	Bosuil	Least Concern
Tyto alba	Barn Owl	Nonnetjie-uil	Least Concern
Caprimulgus pectoralis	Fiery-necked Nightjar	Afrikaanse Naguil	Least Concern
Caprimulgus rufigena	Rufous-cheecked Nightjar	Rooiwangnaguil	Least Concern
Apus affinis	Little Swift	Kleinwindswael	Least Concern
Apus barbatus	African Black Swift	Swartwindswael	Least Concern
Apus caffer	White-rumped Swift	Witkruiswindswael	Least Concern
Apus horus	Horus Swift	Horuswindswael	Least Concern
Tachymarptis melba	Alpine Swift	Witpenswindswael	Least Concern
Colius colius	White-backed Mousebird	Witkruismuisvoël	Least Concern
Colius striatus	Speckled Mousebird	Gevlekte Muisvoël	Least Concern
Urocolius indicus	Red-faced Mousebird	Rooiwangmuisvoël	Least Concern
Apaloderma narina	Narina Trogon	Bosloerie	Least Concern
Merops apiaster	European Bee-eater	Europese Byvreter	Least Concern
Alcedo cristata	Malachite Kingfisher	Kuifkopvisvanger	Least Concern
Alcedo semitorquata	Half-collared Kingfisher	Blouvisvanger	Least Concern
Coracias garrulus	European Roller	Europese Troupant	Near Threatened
Ceryle rudis	Pied Kingfisher	Bontvisvanger	Least Concern
Megaceryle maxima	Giant Kingfisher	Reuse Visvanger	Least Concern
Halcyon albiventris	Brown-hooded Kingfisher	Bruinkopvisvanger	Least Concern
Tricholaema leucomelas	Acacia Pied Barbet	Bonthoutkapper	Least Concern
Indicator indicator	Greater Honeyguide	Grootheuningwyser	Least Concern
Indicator minor	Lesser Honeyguide	Kleinheuningwyser	Least Concern
Indicator variegatus	Scaly-throated Honeyguide	Gevlekte Heuningwyser	Least Concern
Campethera notata	Knysna Woodpecker	Knysnaspeg	Near Threatened
Dendropicos fuscescens	Cardinal Woodpecker	Kardinaalspeg	Least Concern
Dendropicos griseocephalus	Olive Woodpecker	Gryskopspeg	Least Concern
Geocolaptes olivaceus	Ground Woodpecker	Grondspeg	Least Concern
Andropadus importunus	Sombre Greenbul	Gewone Willie	Least Concern
Phyllastrephus terrestris	Terrestrial Brownbul	Boskrapper	Least Concern

Pycnonotus capensis	Cape Bulbul	Kaapse Tiptol	Least Concern
Acrocephalus baeticatus	African Reed-Warbler	Kleinrietsanger	
Acrocephalus gracilirostris	Lesser Swamp Warbler	Kaapse Rietsanger	Least Concern
Bradypterus baboecala	Little Rush-Warbler	Kaapse Vleisanger	Least Concern
Bradypterus sylvaticus	Knysna Warbler	Knysnaruigtesanger	Vulnerable (B1ab; C2a)
Cryptillas victorini	Victorin's Warbler	Rooiborsruigtesanger	Least Concern
Parisoma layardi	Layard's Tit-Babbler	Grystjeritik	Least Concern
Parisoma subcaeruleum	Chestnut-vented Tit-Babbler	Bosveldtjeriktik	Least Concern
Phylloscopus trochilus	Willow Warbler	Hofsanger	Least Concern
Sphenoeacus afer	Cape Grassbird	Grasvoël	Least Concern
Sylvietta rufescens	Long-billed Crombec	Bosveldstompstert	Least Concern
Anthus cinnamomeus	African Pipit	Gewone Koester	Least Concern
Anthus crenatus	African Rock Pipit	Klipkoester	Least Concern
Anthus leucophrys	Plain-backed Pipit	Donkerkoester	Least Concern
Anthus similis	Long-billed Pipit	Nicholsonse Koester	Least Concern
Macronyx capensis	Cape Longclaw	Oranjekeelkalkoentjie	Least Concern
Motacilla capensis	Cape Wagtail	Gewone Kwikkie	Least Concern
Batis capensis	Cape Batis	Kaapse Bosbontrokkie	Least Concern
Laniarius ferrugineus	Southern Boubou	Suidelike Waterfiskaal	Least Concern
Telophorus olivaceus	Olive Bush-Shrike	Olyfboslaksman	Least Concern
Telophorus zeylonus	Bokmakierie	Bokmakierie	Least Concern
Creatophora cinerea	Wattled Starling	Lelspreeu	Least Concern
Onychognathus morio	Red-winged Starling	Rooivlerkspreeu	Least Concern
Spreo bicolor	Pied Starling	Witgatspreeu	Least Concern
Sturnus vulgaris	Common Starling	Europese Spreeu	
Cercomela familiaris	Familiar Chat	Gewone Spekvreter	Least Concern
Cercomela schlegelii	Karoo Chat	Karoospekvreter	Least Concern
Cercotrichas coryphaeus	Karoo Scrub-Robin	Slangverklikker	Least Concern
Cossypha caffra	Cape Robin-Chat	Gewone Janfrederik	Least Concern
Monticola explorator	Sentinel Rock-Thrush	Langtoonkliplyster	Least Concern
Monticola rupestris	Cape Rock-Thrush	Kaapse Kliplyster	Least Concern
Muscicapa adusta	African Dusky Flycatcher	Donkervlieëvanger	Least Concern
Muscicapa striata	Spotted Flycatcher	Europese Vlieëvanger	Least Concern
Saxicola torquatus	African Stonechat	Gewone Bontrokkie	Least Concern
Sigelus silens	Fiscal Flycatcher	Fiskaalvlieëvanger	Least Concern
Turdus olivaceus	Olive Thrush	Olyflyster	Least Concern
Promerops cafer	Cape Sugarbird	Kaapse Suikervoël	Least Concern
Anthobaphes violacea	Orange-breasted Sunbird	Oranjeborssuikerbekkie	Least Concern
Chalcomitra amethystina	Amethyst Sunbird	Swartsuikerbekkie	Least Concern
Cinnyris afer	Greater Double-collared Sunbird	Groot-rooibandsuikerbekkie	Least Concern
Cinnyris chalybeus	Southern Double-collared Sunbird	Klein-rooibandsuikerbekkie	Least Concern
Nectarinia famosa	Malachite Sunbird	Jangroentjie	Least Concern
Zosterops virens	Cape White-eye	Kaapse Glasogie	
Euplectes capensis	Yellow Bishop	Kaapse Flap	Least Concern
Euplectes orix	Southern Red Bishop	Rooivink	Least Concern
Ploceus capensis	Cape Weaver	Kaapse Wewer	Least Concern
Ploceus velatus	Southern Masked-Weaver	Swartkeelgeelvink	Least Concern
Coccopygia melanotis	Swee Waxbill	Suidelike Swie	Least Concern
Estrilda astrild	Common Waxbill	Rooibeksysie	Least Concern
Ortygospiza atricollis	African Quailfinch	Gewone Kwartelvinkie	Least Concern
Vidua macroura	Pin-tailed Whydah	Koningrooibekkie	Least Concern
Crithagra albogularis	White-throated Canary	Witkeelkanarie	Least Concern
Crithagra flaviventris	Yellow Canary	Geelkanarie	Least Concern
Crithagra gularis	Streaky-headed Seedeater	Streepkopkanarie	Least Concern
Crithagra scotops	Forest Canary	Gestreepte Kanarie	Least Concern
Crithagra sulphuratus	Brimstone Canary	Dikbekkanarie	Least Concern

Crithagra totta	Cape Siskin	Kaapse Pietjiekanarie	Least Concern
Emberiza capensis	Cape Bunting	Rooivlerkstreepkoppie	Least Concern
Emberiza impetuani	Lark-like Bunting	Vaalstreepkoppie	Least Concern
Serinus canicollis	Cape Canary	Kaapse Kanarie	Least Concern
Galerida magnirostris	Large-billed Lark	Dikbeklewerik	Least Concern
Mirafra apiata	Cape Clapper Lark	Kaapseklappertjie	Least Concern
Lanius collaris	Common Fiscal	Fiskaallaksman	Least Concern
Delichon urbicum	Common House-Martin	Huisswael	Least Concern
Hirundo albigularis	White-throated Swallow	Witkeelswael	Least Concern
Hirundo cucullata	Greater Striped Swallow	Grootstreepswael	Least Concern
Hirundo dimidiata	Pearl-breasted Swallow	Pêrelborsswael	Least Concern
Hirundo fuligula	Rock Martin	Kransswael	Least Concern
Hirundo rustica	Barn Swallow	Europese Swael	Least Concern
Psalidoprocne holomelas	Black Saw-wing	Swartsaagvlerkswael	Least Concern
Riparia cincta	Banded Martin	Gebande Oewerswael	Least Concern
Riparia paludicola	Brown-throated Martin	Afrikaanse Oewerswael	Least Concern
Coracina caesia	Grey Cuckooshrike	Bloukatakoeroe	Least Concern
Dicrurus adsimilis	Fork-tailed Drongo	Mikstertbyvanger	Least Concern
Oriolus larvatus	Black-headed Oriole	Swartkopwielewaal	Least Concern
Corvus albicollis	White-necked Raven	Withalskraai	Least Concern
Corvus albus	Pied Crow	Witborskraai	Least Concern
Corvus capensis	Black Crow	Swartkraai	Least Concern
Anthoscopus minutus	Cape Penduline-Tit	Kaapse Kapokvoël	Least Concern
Parus afer	Grey Tit	Piet-tjou-tjou-grysmees	Least Concern
Terpsiphone viridis	African Paradise-Flycatcher	Paradysvlieëvanger	Least Concern
Trochocercus cyanomelas	Blue-mantled Crested Flycatcher	Bloukuifvlieëvanger	Least Concern
Passer domesticus	House Sparrow	Huismossie	
Passer melanurus	Cape Sparrow	Gewone Mossie	Least Concern
Apalis thoracica	Bar-throated Apalis	Bandkeelkleinjantjie	Least Concern
Cisticola fulvicapilla	Neddicky	Neddikkie	Least Concern
Cisticola juncidis	Zitting Cisticola	Landeryklopkloppie	Least Concern
Cisticola subruficapilla	Grey-backed Cisticola	Grysrugtinktinkie	Least Concern
Cisticola textrix	Cloud Cisticola	Gevlekte Klopkloppie	Least Concern
Cisticola tinniens	Levaillant's Cisticola	Vleitinktinkie	Least Concern
Malcorus pectoralis	Rufous-eared Warbler	Rooioorlangstertjie	Least Concern
Phragmacia substriata	Namaqua Warbler	Namakwalangstertjie	Least Concern
Prinia maculosa	Karoo Prinia	Karoolangstertjie	Least Concern
Chaetops frenatus	Cape Rock-jumper	Kaapse Berglyster	Least Concern
Upupa africana	African Hoopoe	Hoephoep	Least Concern
Buteo rufofuscus	Jackal Buzzard	Rooborsjakkalsvoël	Least Concern
Falco naumanni	Lesser Kestrel	Kleinrooivalk	Vulnerable (A2bce+3bce)
Buteo rufofuscus	Jackal Buzzard	Rooborsjakkalsvoël	Least Concern
Polemaetus bellicosus	Martial Eagle	Breëkoparend	Near Threatened
Sterna paradisaea	Arctic Tern	Arktiese Seeswael	Least Concern
Saxicola torquatus	African Stonechat	Gewone Bontrokkie	Least Concern
Cinnyris chalybeus	Southern Double-collared Sunbird	Klein-rooibandsuikerbekkie	Least Concern
Mirafra apiata	Cape Clapper Lark	Kaapseklappertjie	Least Concern
Lanius collaris	Common Fiscal	Fiskaallaksman	Least Concern
Dicrurus adsimilis	Fork-tailed Drongo	Mikstertbyvanger	Least Concern
Apalis thoracica	Bar-throated Apalis	Bandkeelkleinjantjie	Least Concern
Upupa africana	African Hoopoe	Hoephoep	Least Concern

Herpfuana (Reptiles)

TaxonName	EnglishName	AfrikaansName	RDB_Name
Agama atra	southern rock agama	suidelike rotskoggelmander	Least Concern
Agama atra atra Daudin	southern rock agama	suidelike rotskoggelmander	Least Concern
Bradypodion gutturale	Robertson dwarf chameleon	Robertson-dwergverkleurmannetjie	Least Concern
Dispholidus typus typus	boomslang	boomslang	Least Concern
Duberria lutrix lutrix	common slug eater	gewone slakvreter	Least Concern
Cordylus cordylus	Cape girdled lizard	Kaapse gordelakkedis	Least Concern
Hemicordylus capensis	graceful crag lizard	grasieuse kransakkedis	Least Concern
Ninurta coeruleopunctatus	blue-spotted girdled lizard	bloukolgordelakkedis	Least Concern
Pseudocordylus microlepidotus microlepidotus	Cape crag lizard		Least Concern
Hemachatus haemachatus	Rinkhals	Rinkhals	Least Concern
Naja nivea	Cape cobra	Kaapse kobra	Least Concern
Afrogecko porphyreus	marbled leaf-toed gecko	marmer blaartoongeitjie	Least Concern
Chondrodactylus bibronii	Bibron's gecko	Bibron geitjie	Least Concern
Goggia lineata	striped leaf-toed gecko	gestreepte blaartoongeitjie	Least Concern
Tetradactylus seps	short-legged seps		Least Concern
Pedioplanis burchelli	Burchell's sand lizard	Burchell sand akkedis	Least Concern
Pedioplanis lineoocellata pulchella	spotted sand lizard		Least Concern
Tropidosaura gularis	Cape mountain lizard	Kaapse bergakkedis	Least Concern
Tropidosaura montana montana	common mountain lizard		Least Concern
Leptotyphlops nigricans	black thread snake	swartdraadslang	Least Concern
Trachylepis homalocephala	red-sided skink	rooi-sy skink	Least Concern
Trachylepis sulcata	western rock skink	Westelike rots skink	Least Concern
Bitis arietans arietans	puff adder	pofadder	Least Concern
Bitis atropos	berg adder	bergadder	Least Concern
Lycodonomorphus rufulus	common brown water snake	bruin waterslang	Least Concern
Psammophis notostictus	Karoo Whip Snake	karoo sweepslang	Least Concern
Hemicordylus capensis	graceful crag lizard	grasieuse kransakkedis	Least Concern
Ninurta coeruleopunctatus	blue-spotted girdled lizard	bloukolgordelakkedis	Least Concern
Lamprophis inornatus	olive house snake	olyfkleurige huisslang	
Dasypeltis scabra	common egg eater	gewone eiervreter	Least Concern
Afrogecko porphyreus	marbled leaf-toed gecko	marmer blaartoongeitjie	Least Concern

Amphibians

TaxonName	EnglishName	AfrikaansName	IUCN_Name	RDB_Name	Ordinance
Amietophrynus rangeri (Hewitt, 1935)	raucous toad	heespadda			Schedule II
Capensibufo tradouwi (Hewitt, 1926)	Tradouw mountain toad	Tradouw-bergskurwepadda			Schedule II
Vandijkophrynus gariepensis gariepensis	Karoo toad	Karoo-skurwepadda			
Heleophryne orientalis FitzSimons, 1946	eastern ghost frog	oostlike spookpadda			
Hyperolius marmoratus Rapp, 1842	painted reed frog	geskilderde rietpadda			Schedule II
Semnodactylus wealii (Boulenger, 1882)	rattling frog	ratelpadda			Schedule II
Xenopus laevis laevis	common platanna	gewone platanna			
Amietia fuscigula (Duméril and Bibron, 1841)	Cape river frog	Kaapse rivierpadda			Schedule II
Amietia vandijki (Visser and Channing, 1997)	van Dijk's river frog	van Dijk se rivierpadda	Least Concern	Least Concern	Schedule II
Cacosternum boettgeri (Boulenger, 1882)	common caco	gewone blikslanertjie			Schedule II
Cacosternum nanum Boulenger, 1887	bronze caco	bronskleurblikslanertjie			Schedule II
Strongylopus bonaespei (Dubois, 1980)	banded stream frog	bandgestreepte stroompadda			Schedule II
Strongylopus fasciatus (Smith, 1849)	striped stream frog	gestreepte stroompadda			Schedule II
Strongylopus grayii (Smith, 1849)	clicking stream frog	kliekpadda			Schedule II
Breviceps acutirostris Poynton, 1963	strawberry rain frog	rooirugreenpadda			Schedule II
Breviceps fuscus Hewitt, 1925	plain rain frog	gewone reenpadda			Schedule II
Semnodactylus wealii (Boulenger, 1882)	rattling frog	ratelpadda			Schedule II
Amietia fuscigula (Duméril and Bibron, 1841)	Cape river frog	Kaapse rivierpadda			Schedule II
Breviceps montanus Power, 1926	Cape mountain rain frog	Kaapse bergreenpadda			Schedule II