



# Ramsar Information Sheet

Published on 26 August 2019

## South Africa

### Kgaswane Mountain Reserve



Designation date	29 March 2019
Site number	2385
Coordinates	25°43'31"S 27°12'25"E
Area	4 952,40 ha

## Color codes

Fields back-shaded in light blue relate to data and information required only for RIS updates.

Note that some fields concerning aspects of Part 3, the Ecological Character Description of the RIS (tinted in purple), are not expected to be completed as part of a standard RIS, but are included for completeness so as to provide the requested consistency between the RIS and the format of a 'full' Ecological Character Description, as adopted in Resolution X.15 (2008). If a Contracting Party does have information available that is relevant to these fields (for example from a national format Ecological Character Description) it may, if it wishes to, include information in these additional fields.

## 1 - Summary

### Summary

Kgaswane is part of the Magaliesberg protected area which has been declared as one of the World Heritage Sites in South Africa. It's home to the following endemic species: *aloe peglarae*.

This site is located south of Rustenburg town on the Magaliesberg Mountain range. This mountain range is considered to be the second oldest in the world and extends 120 km from Bronkhorstspuit Dam east of Pretoria to Rustenburg in the west, where it separates the highveld grasslands in the south from the bushveld savannah in the north.

The reserve is situated on the summit, eastern slopes and foothills of the Magaliesberg. Two distinct geomorphological regions can be distinguished on the reserve; the high-lying plateaus and the low-lying valleys. The high-lying plateau contains a flat, convex area of exposed quartzite, at an altitude of 1 500 m - 1 650 m. This high-lying plateau descends southwards into a basin of deep alluvial soil and marsh land which forms the largest natural wetland on the Magaliesberg. The wetland is at altitudes 1 425 m - 1 440 m. The rim emerges at altitudes of 1 440 m in the south and at 1 500 m in the north, east and west.

## 2 - Data & location

### 2.1 - Formal data

#### 2.1.1 - Name and address of the compiler of this RIS

##### Compiler 1

Name	Idah Maroo
Institution/agency	NORTH WEST PARKS BOARD (NWPB)
Postal address	P. O. Box 20382 Protea Park 0305
E-mail	idah@nwpb.org.za
Phone	+27145332050
Fax	+27145330397

##### Compiler 2

Name	Phenya Tshenkeng
Institution/agency	NWPB
Postal address	P O Box 4488 Mafikeng 2745
E-mail	ptshenkeng@nwpb.org.za
Phone	0183971500

#### 2.1.2 - Period of collection of data and information used to compile the RIS

From year	2009
To year	2018

#### 2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Kgaswane Mountain Reserve
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## 2.2 - Site location

### 2.2.1 - Defining the Site boundaries

b) Digital map/image  
<1 file(s) uploaded>

Former maps	0
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#### Boundaries description

The site boundary is defined by the physical boundary of the Kgaswane Mountain Reserve (KMR), and the area is completely contained within the Magaliesberg Natural Protected Environment, a Unesco registered world biosphere reserve. This site is located south of Rustenburg town on the Magaliesberg Mountain range. This mountain range is considered to be the second oldest in the world and extends 120 km from Bronkhorstspuit Dam east of Pretoria to Rustenburg in the west, where it separates the highveld grasslands in the south from the bushveld savannah in the north.

### 2.2.2 - General location

a) In which large administrative region does the site lie?	North West Province
b) What is the nearest town or population centre?	Rustenburg

### 2.2.3 - For wetlands on national boundaries only

- a) Does the wetland extend onto the territory of one or more other countries? Yes  No
- b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes  No

2.2.4 - Area of the Site

Official area, in hectares (ha): 4952.4

Area, in hectares (ha) as calculated from GIS boundaries 4956.325

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
WWF Terrestrial Ecoregions	
Marine Ecoregions of the World (MEOW)	
Other scheme (provide name below)	
Freshwater Ecoregions of the World (FEOW)	

Other biogeographic regionalisation scheme

The reserve is situated in Rustenburg. This scenic reserve lies on the summit and against the northern slopes of the Magaliesberg. The reserve is known for its prolific bird and animal life which can be viewed while exploring the two-day hiking trail traversing the reserve. It is in the area of the Magaliesberg Mountains that the first recorded sable in southern Africa was sighted and shot. Located a few kilometers to the south-west of Rustenburg, this reserve is on the summit and against the northern slopes of the scenic Magaliesberg. The topography offers game viewing at an altitude of 1200 – 1750 m above sea level. The geology of this area consists predominately by quartzites, conglomerates and some shale horizons of the Magaliesberg, Daspoort and Silverton formations and the Hospital Hill, Turffontein and Government subgroups. Soils are shallow, gravel lithosols of the Mispah and Glenrosa forms.

### 3 - Why is the Site important?

#### 3.1 - Ramsar Criteria and their justification

- Criterion 1: Representative, rare or unique natural or near-natural wetland types

Hydrological services provided

The Magaliesberg serves as catchment for numerous little streams. The absence of notable vegetation cover on the crest and upper slopes, increases runoff from these surfaces, which flows into cracks and crevices in the underlying rock strata only to emerge through seepage sites further down the northern slopes. Small streams are therefore abundant in the Magaliesberg, especially on the northern slopes. The reserve's boundary includes the upper catchment of the Waterkloofspruit. This catchment comprises a 17 km<sup>2</sup> area on the northern plateau and central basin. The stream flows through a unique *Phragmites australis* reed marsh in the central basin area of the reserve, drops over a 60 m high waterfall and flows further through the farm Baviaanskrans to join the Hex River north of the reserve. A weak correlation (top measure plate:  $r^2 = 0.518$ ; bottom measure plate:  $r^2 = 0.465$ ) exist between rainfall and runoff. This is due to the considerable potential of the underlying substrate to absorb a high percentage of rainfall water, while only floodwater runs down the streams.

Other reasons

The reserve caters for day visitors who wish to visit the park. It has four hiking trails. The Vlei trail is a short 2 km track ideal for viewing birds, the Peglarae Trail is approximately 5,5 km with terrain being steep and rocky, the last two are overnight hiking trails with the Summit Route of 25,3 km and include natural pools for swimming and the Baviaanskrans Route is 19,5 km and has a waterfall view and a Garden of Remembrance and amenities in two huts to accommodate hikers on both trails.

- Criterion 2 : Rare species and threatened ecological communities

- Criterion 3 : Biological diversity

Justification

The site has endemic plant species such as *Frithia pulchra* and *Aloe peglerae*. The reserve has over 500 antelopes which include klipspringer, the grey duiker, bushbuck, kudu, oribi, mountain reedbuck, impala, red hartebeest, zebra, springbok, steenbok, sable antelope and the waterbuck. The reserve also has a few predators like the caracal, aardwolf, jackal and leopard. 320 species of birdlife has been recorded in the reserve, and includes martial and black eagle which is facing a high risk of extinction in the wild. Other interesting species include Red-winged Francolin, the African black swift, the Sentinel rock thrush and regular migratory birds such as a tree-pipit. The reserve consists of grassland, shrub, mixed woodland, and pockets of fynbos. 115 tree and bush species are said to grow in the reserve and includes some rare plants.

#### 3.2 - Plant species whose presence relates to the international importance of the site

Scientific name	Common name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
<i>Aloe peglerae</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EN	<input type="checkbox"/>	endemic	endemic
<i>Frithia pulchra</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	WU	<input type="checkbox"/>	endemic	endemic

These two species are endemic to Magaliesberg.

3.3 - Animal species whose presence relates to the international importance of the site

Phylum	Scientific name	Common name	Species qualifies under criterion			Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence <sup>1)</sup>	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7								
<b>Birds</b>																	
CHORDATA / AVES	<i>Anthus trivialis</i>	Tree Pipit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		The reserve is an important home for this least concern bird species, although not a focus of species conservation.
CHORDATA / AVES	<i>Apus barbatus</i>	African Black Swift	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		The reserve is an important home for this least concern bird species, although not a focus of species conservation.
CHORDATA / AVES	<i>Ardea cinerea</i>	Grey Heron	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		The reserve is an important home for this least concern bird species, although not a focus of species conservation.
CHORDATA / AVES	<i>Aviceda cuculoides</i>	African Cuckoo-Hawk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		The reserve is an important home for this least concern bird species, although not a focus of species conservation.
CHORDATA / AVES	<i>Gyps coprotheres</i>	Cape Vulture	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				EN	<input type="checkbox"/>	<input checked="" type="checkbox"/>		The reserve is a breeding site for this species
CHORDATA / AVES	<i>Pernis apivorus</i>	European Honey Buzzard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		The reserve is an important home for this least concern bird species, although not a focus of species conservation.
CHORDATA / AVES	<i>Polemaetus belliosus</i>	Martial Eagle	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU	<input type="checkbox"/>	<input type="checkbox"/>		The reserve is a breeding site for this species
CHORDATA / AVES	<i>Sarothrura rufa</i>	Red-chested Flufftail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		The reserve is an important home for this least concern bird species, although not a focus of species conservation.
<b>Others</b>																	
CHORDATA / MAMMALIA	<i>Alcelaphus buselaphus</i>	hartebeest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		The reserve is an important home for this least concern species, although not a focus of species conservation.
CHORDATA / MAMMALIA	<i>Antidorcas marsupialis</i>	springbok	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		The reserve is an important home for this least concern species, although not a focus of species conservation.
CHORDATA / MAMMALIA	<i>Caracal caracal</i>	Caracal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input checked="" type="checkbox"/>	<input type="checkbox"/>		The reserve is an important home for this least concern species, although not a focus of species conservation.
CHORDATA / MAMMALIA	<i>Equus zebra</i>	Mountain Zebra; Cape mountain zebra	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU	<input type="checkbox"/>	<input type="checkbox"/>		The reserve is an important home for this vulnerable species
CHORDATA / MAMMALIA	<i>Hippotragus equinus</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		The reserve is an important home for this least concern species, although not a focus of species conservation.
CHORDATA / MAMMALIA	<i>Hippotragus niger</i>	sable antelope	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		The reserve is an important home for this least concern species, although not a focus of species conservation.
CHORDATA / MAMMALIA	<i>Kobus ellipsiprymnus</i>	waterbuck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		The reserve is an important home for this least concern species, although not a focus of species conservation.
CHORDATA / MAMMALIA	<i>Ourebia ourebi</i>	oribi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		The reserve is an important home for this least concern species, although not a focus of species conservation.

Phylum	Scientific name	Common name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence <sup>1)</sup>	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
CHORDATA / MAMMALIA	<i>Panthera pardus</i>	Leopard	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU	<input checked="" type="checkbox"/>	<input type="checkbox"/>		The reserve is an important home for this vulnerable species	
CHORDATA / MAMMALIA	<i>Proteles cristata</i>	Aardwolf	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		The reserve is an important home for this least concern species, although not a focus of species conservation.	
CHORDATA / MAMMALIA	<i>Raphicerus campestris</i>	steenbok	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		The reserve is an important home for this least concern species, although not a focus of species conservation.	
CHORDATA / MAMMALIA	<i>Redunca fulvorufula</i>	mountain reedbuck	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				EN	<input type="checkbox"/>	<input type="checkbox"/>		The reserve provides a home for this endangered species	
CHORDATA / MAMMALIA	<i>Sylvicapra grimmia</i>	bush duiker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		The reserve is an important home for this least concern species, although not a focus of species conservation.	
CHORDATA / MAMMALIA	<i>Tragelaphus strepsiceros</i>	greater kudu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		The reserve is an important home for this least concern species, although not a focus of species conservation.	

1) Percentage of the total biogeographic population at the site

### 3.4 - Ecological communities whose presence relates to the international importance of the site

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
Bulbostylis burchellii - Themeda triandra Short Open Grassland	<input type="checkbox"/>		
Englerophytum magalimontanum - Ancylobotrys capensis Tall Open Shrubland	<input type="checkbox"/>	This community is generally confined to the steep northern and north eastern slopes of the reserve and extends onto the banks of the deeply in-sized ravines, characteristic of the northern face of the Magaliesberg.	
Eragrostis nindensis - Cyperus rupestris Short Open Grassland	<input type="checkbox"/>	The largest part of the summit plateau and the south western brim of the central Vei area is covered by this community. It is situated on the warm, dry northeastern and southeastern gentle and relative flat slopes on the reserve.	
Tristachya biseriata -Protea caffra Short Sparse Woodland	<input type="checkbox"/>	This community is spread on the slopes of the valley between the summit and the eastern range of quartzite ridges running through the reserve. The Tristachya biseriata - Protea caffra Short Sparse Woodland is confined to the shallow Glenrosa soils on the	

Optional text box to provide further information



## 4 - What is the Site like? (Ecological character description)

### 4.1 - Ecological character

The reserve is situated on the summit, eastern slopes and foothills of the Magaliesberg. Two distinct geomorphological regions can be distinguished on the reserve; the high-lying plateaus and the low-lying valleys. The high-lying plateau contains a flat, convex area of exposed quartzite, at an altitude of 1 500 m - 1 650 m. This high-lying plateau descends southwards into a basin of deep alluvial soil and marsh land which forms the largest natural wetland on the Magaliesberg. The wetland is at altitudes 1 425 m - 1 440 m. The rim emerges at altitudes of 1 440 m in the south and at 1 500 m in the north, east and west.

### 4.2 - What wetland type(s) are in the site?

#### Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Fresh water > Flowing water >> M Permanent rivers/ streams/ creeks	Kgaswane	2	488	Representative

#### Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Moot Plains Bushveld which is vulnerable	152
The Gold Reef Mountain Bushveld	4200
Northern Afrotropical	67

(EOD) Habitat connectivity

### 4.3 - Biological components

#### 4.3.1 - Plant species

##### Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
<i>Protea caffra</i>	proteas	rare
<i>Themeda triandra</i>	red grass	

##### Invasive alien plant species

Scientific name	Common name	Impacts	
<i>Campuloclinium macrocephalum</i>	Pompom	Actually (major impacts)	No change
<i>Eucalyptus globulus</i>	blue gum	Actually (minor impacts)	No change
<i>Lantana camara</i>	Lantana	Actually (major impacts)	No change

Optional text box to provide further information

#### 4.3.2 - Animal species

##### Other noteworthy animal species

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	% occurrence	Position in range / endemism / other
CHORDATA/MAMMALIA	<i>Aepyceros melampus</i>	impala	120	20	50	LC
CHORDATA/MAMMALIA	<i>Hippotragus niger niger</i>	sable antelope	40	20	55	LC
CHORDATA/MAMMALIA	<i>Oreotragus oreotragus</i>	klipspringer	8	20	10	LC
CHORDATA/MAMMALIA	<i>Taurotragus oryx</i>	eland	80	25	60	LC

Optional text box to provide further information

There are no invasive alien animal species

### 4.4 - Physical components

#### 4.4.1 - Climate

Climatic region	Subregion
B: Dry climate	BSh: Subtropical steppe (Low-latitude dry)

Since 2009, the rainfall has been above average and could potentially be linked to better foraging conditions that are allowing the sable population to be stable again. Rainfall was again below average for 2013 (559 mm) and 2014 (556 mm). The regional climate where Kgaswane Mountain Reserve lies is a warm – temperate with summer rainfall and dry winters.

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

- Entire river basin
- Upper part of river basin
- Middle part of river basin
- Lower part of river basin
- More than one river basin
- Not in river basin
- Coastal

Please name the river basin or basins. If the site lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean.

Waterkloofspruit

4.4.3 - Soil

- Mineral
- Organic
- No available information

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)? Yes  No

Please provide further information on the soil (optional)

Soil can be viewed as a mixture of mineral and organic particles of varying size and composition with regards to plant growth. Soil interacts with plants through a combination of chemical exchanges and physical effects and provides it with water, nutrients and oxygen, as well as all essential elements for growth and subsistence. The nutrients in soil primarily influences plant nutrition, while its physical characteristics' plays a crucial role in plant water supply.

4.4.4 - Water regime

Water permanence

Presence?	
Usually permanent water present	No change

Source of water that maintains character of the site

Presence?	Predominant water source	
Water inputs from groundwater	<input type="checkbox"/>	No change

Water destination

Presence?	
To downstream catchment	No change

Stability of water regime

Presence?	
Water levels fluctuating (including tidal)	No change

Please add any comments on the water regime and its determinants (if relevant). Use this box to explain sites with complex hydrology.

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(ECD) Connectivity of surface waters and of groundwater .

(ECD) Stratification and mixing regime

4.4.5 - Sediment regime

- Significant erosion of sediments occurs on the site
- Significant accretion or deposition of sediments occurs on the site
- Significant transportation of sediments occurs on or through the site
- Sediment regime is highly variable, either seasonally or inter-annually
- Sediment regime unknown

4.4.6 - Water pH

- Acid (pH<5.5)
- Circumneutral (pH: 5.5-7.4)
- Alkaline (pH>7.4)

Unknown

4.4.7 - Water salinity

- Fresh (<0.5 g/l)
- Mxohaline (brackish)/Mxosaline (0.5-30 g/l)
- Euhaline/Eusaline (30-40 g/l)
- Hyperhaline/Hypersaline (>40 g/l)
- Unknown

4.4.8 - Dissolved or suspended nutrients in water

- Eutrophic
- Mesotrophic
- Oligotrophic
- Dystrophic
- Unknown

4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the i) broadly similar  ii) significantly different  site itself.

- Surrounding area has greater urbanisation or development
- Surrounding area has higher human population density
- Surrounding area has more intensive agricultural use
- Surrounding area has significantly different land cover or habitat types

Please describe other ways in which the surrounding area is different:

Rustenburg town is growing rapidly due to industrialization and mining. However, this is not negatively impacting on the site. Similarly, the population around the site is also growing.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Fresh water	Drinking water for humans and/or livestock	High

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	High
Erosion protection	Soil, sediment and nutrient retention	Medium

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Picnics, outings, touring	High
Spiritual and inspirational	Cultural heritage (historical and archaeological)	Medium
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	High

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganisms, the genes they contain, and the ecosystems of which they form a part	High

Optional text box to provide further information

Other ecosystem service(s) not included above:

Within the site:

Outside the site:

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes  No  Unknown

Where economic studies or assessments of economic valuation have been undertaken at the site, it would be helpful to provide information on where the results of such studies may be located (e.g. website links, citation of published literature):

Studies are conducted internally regularly and can be made available upon request

4.5.2 - Social and cultural values

- i) the site provides a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland
- ii) the site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland
- iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples

Description if applicable

Local communities collect water from the reserve for religious, spiritual and cultural purposes.

- iv) relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland

4.6 - Ecological processes

(ECD) Primary production	
(ECD) Nutrient cycling	
(ECD) Carbon cycling	

## 5 - How is the Site managed? (Conservation and management)

### 5.1 - Land tenure and responsibilities (Managers)

#### 5.1.1 - Land tenure/ownership

##### Public ownership

Category	Within the Ramsar Site	In the surrounding area
Provincial/region/state government	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

##### Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

##### Other

Category	Within the Ramsar Site	In the surrounding area
No information available	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

#### 5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site:

North West Parks Board

Provide the name and title of the person or people with responsibility for the wetland:

IDAH MAROO, RESERVE MANAGER

Postal address:

P O Box 20382  
Protea Park  
0305

E-mail address:

idah@nwpb.org.za

## 5.2 - Ecological character threats and responses (Management)

### 5.2.1 - Factors (actual or likely) adversely affecting the Site's ecological character

#### Human settlements (non agricultural)

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Tourism and recreation areas	Low impact	unknown impact	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Canalisation and river regulation	Low impact	Low impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Non specified	Low impact	Low impact	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Energy production and mining

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Unspecified	Low impact	Low impact	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Transportation and service corridors

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Utility and service lines (e.g., pipelines)	Low impact	Low impact	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Unspecified	unknown impact	unknown impact	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Recreational and tourism activities	Medium impact	Low impact	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Fire and fire suppression	High impact	High impact	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Invasive non-native/ alien species	High impact	High impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Unspecified	Low impact	Low impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Geological events

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Unspecified	Low impact	Low impact	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Storms and flooding	High impact	High impact	<input checked="" type="checkbox"/>	<input type="checkbox"/>

5.2.2 - Legal conservation status

Global legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
UNESCO Biosphere Reserve	Magaliesberg Biosphere Reserve	<a href="https://www.sa-venues.com/game-reserves/magaliesberg-biosphere-reserve.php">https://www.sa-venues.com/game-reserves/magaliesberg-biosphere-reserve.php</a>	partly

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
NEMPAA	Kgaswane Mountain Reserve		whole

5.2.3 - IUCN protected areas categories (2008)

- Ia Strict Nature Reserve
- Ib Wilderness Area: protected area managed mainly for wilderness protection
- II National Park: protected area managed mainly for ecosystem protection and recreation
- III Natural Monument: protected area managed mainly for conservation of specific natural features
- IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention
- V Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation
- VI Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems

5.2.4 - Key conservation measures

Legal protection

Measures	Status
Legal protection	Implemented

Habitat

Measures	Status
Catchment management initiatives/controls	Implemented

Species

Measures	Status
Control of invasive alien plants	Implemented

Human Activities

Measures	Status
Regulation/management of recreational activities	Implemented
Communication, education, and participation and awareness activities	Partially implemented

5.2.5 - Management planning

Is there a site-specific management plan for the site? No

Has a management effectiveness assessment been undertaken for the site? Yes  No

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning processes with another Contracting Party? Yes  No

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? Yes, there is a plan

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Plant species	Implemented
Birds	Implemented
Animal species (please specify)	Implemented
Water quality	Implemented

## 6 - Additional material

### 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

Carruthers V.1990. The Magaliesberg. Southern Book Publishers. Johannesburg.

Coetzee B. J. 1975. Phytosociological classification of Rustenburg Nature Reserve. Bothalia Volume 11: 561 - 580.

Mucina L and Rutherford M. C. 2006. The vegetation of South Africa, Lesotho and Swaziland. (Eds.) Strelitzia 19. South African Biodiversity Institute, Pretoria, South Africa.

Nel H. P. 2000. Ecological management objectives and monitoring procedures for Rustenburg Nature Reserve, North West Province. MSc Thesis, University of Pretoria, Pretoria, South Africa.

Parrini F. 2006. Nutritional and Social Ecology of Sable Antelope in a Magaliesberg Nature Reserve. Ph.D. thesis, University of Witwatersrand, Johannesburg, South Africa.

Tshenkeng P. P. 2017. Possible predictors of sable antelope (*Hippotragus niger*) decline in Kgaswane Mountain Reserve. MSc. Thesis, University of Witwatersrand, Johannesburg, South Africa.

Tshenkeng P. 2017. KMR Ecological Status Report 2017. Ecological Services, North West Parks and Tourism Board, Rustenburg.

#### 6.1.2 - Additional reports and documents

- i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)  
<no file available>
- ii. a detailed Ecological Character Description (ECD) (in a national format)  
<no file available>
- iii. a description of the site in a national or regional wetland inventory  
<no file available>
- iv. relevant Article 3.2 reports  
<no file available>
- v. site management plan  
<1 file(s) uploaded>
- vi. other published literature  
<3 file(s) uploaded>

#### 6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Collaring of Sable Antelope ( Phenya Tshenkeng, 29-07-2015 )



Mei, Kgaswane Mountain Reserve ( Phenya Tshenkeng, 01-04-2011 )



Kgaswane ( Idah Marco, 18-02-2019 )



Eland, Kgaswane Mountain Reserve ( Idah Marco, 18-02-2019 )



Frithia pulchra, Kgaswane Mountain Reserve ( Idah Marco, 18-02-2019 )

#### 6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation