

# BIODIVERSITY ASSESSMENT

FOR THE PROPOSED UPGRADE OF THE ROCKY DRIFT WWTW,  
MBOMBELA LOCAL MUNICIPALITY, EHLANZENI DISTRICT,  
MPUMALANGA



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**January 2021  
DRAFT REPORT**

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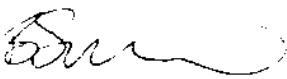

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## Specialist Details & Declaration

This report has been prepared in accordance with Section 13: General Requirements for Environmental Assessment Practitioners (EAPs) and Specialists as well as per Appendix 6 of GNR 982 – Environmental Impact Assessment Regulations and the National Environmental Management Act (NEMA, No. 107 of 1998 as amended 2017) and Government Notice 704 (GN 704). It has been prepared independently of influence or prejudice by any parties.

The details of Specialists are as follows –

Table 1 Details of Specialist

Specialist	Task	Qualification and accreditation	Client	Signature
Bruce Scott-Shaw NatureStamp	Fieldwork & Report	PhD, Hydrology	SLR Consulting (Africa) (Pty) Ltd	 Date: 05/01/2021
Ross Goode	Fieldwork & Taxonomy	Diploma	SLR Consulting (Africa) (Pty) Ltd	 Date: 30/12/2020

### Details of Authors:

Bruce is a hydrologist, whose focus is broadly on hydrological perspectives of land use management and climate change. He completed his MSc under Prof. Roland Schulze in the School of Bioresources Engineering and Environmental Hydrology (BEEH) at the University of KwaZulu-Natal, South Africa. Throughout his university career he has mastered numerous models and tools relating to hydrology, soil science and GIS. Some of these include ACRU, SWAT, ArcMap, Idrisi, SEBAL, MatLab and Loggernet. He has some basic programming skills on the Java and CR Basic platforms. Bruce completed his PhD at the Center for Water Resources Research (UKZN), which focused on rehabilitation of alien invaded riparian zones and catchments using indigenous trees. Bruce is currently affiliated to the University of KwaZulu-Natal where he is a post-doctoral student where he runs and calibrates hydrological and soil erosion models. Bruce has presented his research around the world, including the European Science Foundation (Amsterdam, 2010), COP17 (Durban, 2011), World Water Forum (Marseille, 2012), MatLab advanced modelling (Luxembourg, 2013), World Water Week (Singapore, 2014), Forests & Water, British Columbia, (Canada, 2015), World Forestry Congress (Durban, 2015), Society for Ecological Restoration (Brazil, 2017). Conservation Symposium (Howick, South Africa, 2018) and SWAT modelling in Siem Reap (Cambodia, 2019). As a consultant, Bruce is the director and principal hydrologist of NatureStamp (PTY) Ltd. In this capacity he undertakes flood studies, calculates

hydrological flows, performs general hydrological modelling, stormwater design, dam designs, wetland assessments, water quality assessments, groundwater studies and soil surveys.

Ross Goode is a vegetation ecologist with years of experience in the field. He is well known in the grassland ecology community and spends most of his time identifying grass species and implementing fire management plans. Ross has undertaken projects throughout the country including the Kruger National Park and most of northern KwaZulu-Natal. Ross is involved in training staff for fire burning regimes. He also has a close relationship with tertiary education units through which he has co-authored scientific papers.

# 1. INTRODUCTION

## 1.1 Project Background and Description of the Activity

The project area is located approximately 12km north of the city of Nelspruit, Mbombela Municipality, Mpumalanga Province (Figure 2). The project area is located in the X22F quaternary catchment, within the Inkomati-Usuthu Water Management Area (Husted, 2017).

The dimensions of the road and associated infrastructure are as follows-

- Proposed 500mm uPVC Bulk Sewer Pipe; and
- Existing 160 Ø Bulk Sewer Pipeline to be upgraded to 500 Ø and realigned.

There are two small watercourses that the proposed sewer pipeline would traverse. Studies have already been undertaken at these sites. However, they did not include the full extent of the recently included pipeline.

Undeveloped areas are valuable in providing habitat, forage areas and breeding grounds for faunal species. These areas are often associated with drainage lines and wetland systems which are often undevelopable, and provide the necessary ecological corridors linking habitats.

The presence of fauna is of vital importance in maintaining ecological diversity and ecosystem health. Indicator species are species which tend to decrease in presence and diversity when the ecological state of the system is under pressure. Additionally, species of conservation concern and Red Data species are protected on a provincial, national and international level and the presence of such species needs to be verified.

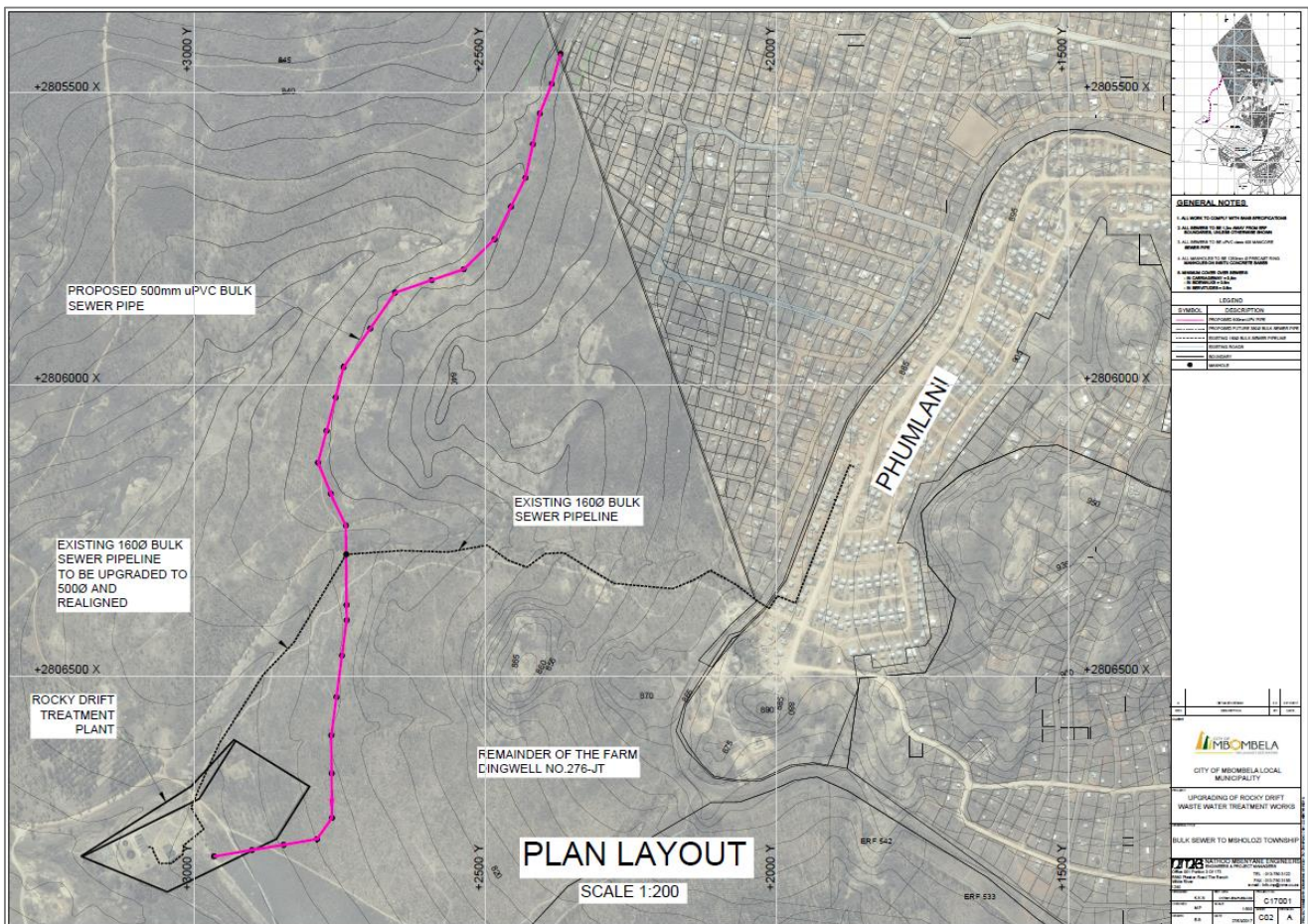
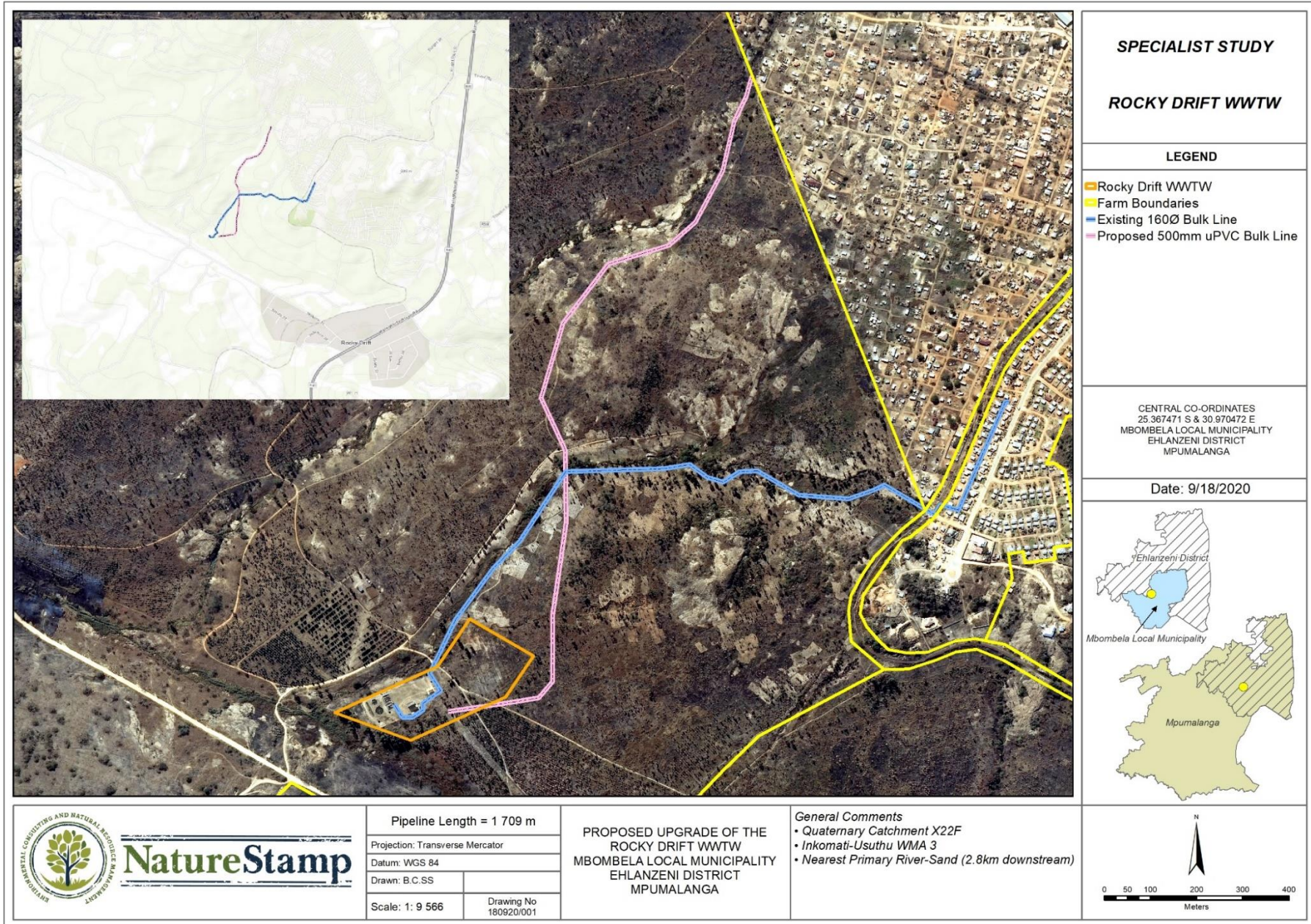


Figure 1 Layout of the proposed bulk sewer line



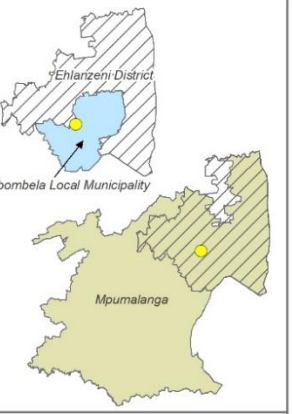
**SPECIALIST STUDY**  
**ROCKY DRIFT WWTW**

**LEGEND**

- ▭ Rocky Drift WWTW
- ▭ Farm Boundaries
- ▭ Existing 1600 Bulk Line
- ▭ Proposed 500mm uPVC Bulk Line

CENTRAL CO-ORDINATES  
25.367471 S & 30.970472 E  
MBOMBELA LOCAL MUNICIPALITY  
EHLANZENI DISTRICT  
MPUMALANGA

Date: 9/18/2020



Pipeline Length = 1 709 m	
Projection: Transverse Mercator	
Datum: WGS 84	
Drawn: B.C.SS	
Scale: 1 : 9 566	Drawing No 180920/001

**PROPOSED UPGRADE OF THE  
ROCKY DRIFT WWTW  
MBOMBELA LOCAL MUNICIPALITY  
EHLANZENI DISTRICT  
MPUMALANGA**

*General Comments*

- Quaternary Catchment X22F
- Inkomati-Usuthu WMA 3
- Nearest Primary River-Sand (2.8km downstream)

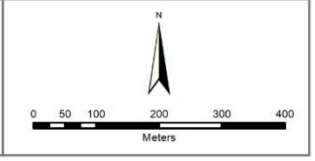


Figure 2 Locality map of the Rocky Drift WWTW upgrade

## 1.2 Terms of Reference

The terms of reference are as follows -

### i. **Biodiversity Assessment and Alien Plant Control Plan**

- Use databases to identify fauna and flora possibly occurring on site.
- Determine the faunal and floral species present within the site extent.
- Determine the presence of species of conservation concern.
- Determine the ecological state of the faunal and floral diversity within the site extent.
- Compile a report with all findings, including mapping of sensitive ecological areas.

## 1.3 Legislation Guiding this Assessment

There are a number of regulations and legislation governing this report and are listed below: The relevant sections of the regulations legislation are found in greater detail in Appendix 1.

- National Environmental Management Act, Act 108 of 1998 (NEMA) as amended in 2014
- National Forests Act (Act No. 84 of 1998)
- National Environmental Management: Biodiversity Act (Act No. 10 of 2004)
- Conservation of Agricultural Resources (Act No. 43 of 1983) As Amended in 2001

### **National Environmental Management Act, Act No. 107 of 1998 (NEMA)**

NEMA requires, *inter alia*, that:

- “Development must be socially, environmentally, and economically sustainable”,
- “Disturbance of ecosystems and loss of biological diversity are avoided, or, where they cannot be altogether avoided, are minimised and remedied.”
- “A risk-averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions”,

NEMA also states that;

*“The environment is held in public trust for the people, the beneficial use of environmental resources must serve the public interest and the environment must be protected as the people’s common heritage.”*

### **National Environmental Management: Biodiversity Act (Act No. 10 of 2004)**

In terms of the Biodiversity Act, the developer has a responsibility for:

- *The conservation of endangered ecosystems and restriction of activities according to the categorisation of the area (not just by listed activity as specified in the EIA regulations).*
- *Promote the application of appropriate environmental management tools in order to ensure integrated environmental management of activities thereby ensuring that all development within the area are in line with ecological sustainable development and protection of biodiversity.*
- *Limit further loss of biodiversity and conserve endangered ecosystems.*

### **Environment Conservation Act No. 73 of 1989, Amendment Notice No. R1183 of 1997**

In terms of the ECA:

Development must be environmentally, socially and economically sustainable. Sustainable development requires the consideration of *inter alia* the following factors:

- *that the pollution and degradation of the environment is avoided, or, where they cannot be altogether avoided, are minimised and remedied;*
- *that the use and exploitation of non-renewable natural resources is responsible and equitable, and takes into account the consequences of the depletion of the resource;*

- that the development, use and exploitation of renewable resources and the ecosystems of which they are part do not exceed the level beyond which their integrity is jeopardised; and
- that the negative impacts on the environment and on people's environmental rights be anticipated and prevented, and where they cannot be altogether prevented are minimised and remedied.

The developer is required to undertake Environmental Impact Assessments (EIA) for all projects listed as a Schedule 1 activity in the EIA regulations in order to control activities which might have a detrimental effect on the environment. Such activities will only be permitted with written authorisation from a competent authority.

Protected indigenous fauna (birds, mammals, amphibians, invertebrates and reptiles) in general are controlled under the relevant provincial Ordinances or Acts dealing with nature conservation.

### **Mpumalanga Nature Conservation Act 10 of 1998**

This Act controls and manages nature conservation activities in Mpumalanga Province. It is administered by the Mpumalanga Parks Board. The Mpumalanga Nature Conservation Act 10 of 1998 provides for the following:

- Protection of wild animals with regards to hunting, capturing, purchasing and transporting of wild animals;
- Control of problem animals;
- Regulation of fisheries activities;
- Protection of indigenous plants and the use, possession, trade and transportation thereof and for the control of invader weeds and plants;
- Protection and prohibition of acts pertaining to endangered and rare fauna and flora species;

In terms of this Act, a permit must be obtained from *Mpumalanga Tourism and Parks Agency – Wildlife Protection Services* to remove or destroy any plants listed in the Ordinance.

## **2. STUDY SITE**

The site is located 12 km north of Nelspruit in Mpumalanga. The existing development area sits within Quaternary Catchment (QC) X22F of the Crocodile River catchment (Inkomati-Usuthu).

The site sits on a non-perennial tributary of the Sand, approximately 2.44 km to the north. The site has been significantly modified for settlements, brick/granite factories and agricultural activities. According to desktop information (DWS, 2017), the activities in the area and local land uses have impacted the aquatic system, which have rendered the system as moderately modified. The associated watercourse is predominantly representative of a wetland system, but a site was selected for the analysis of water (in situ) and to collect a water sample. However, this study assessed the reach of the watercourse adjacent to the WwTW (JG Afrika, 2017).

According to Mucina and Rutherford (2006), the area is dominated by Legogote Sour Bushveld (SVi 9), which falls under the lowveld Savanna (SV) bioregion. The vegetation type has been classified as 'endangered', and 1.6 % receives formal protection. Of the remaining 50 % only a small percentage is statutorily protected in reserves.

Rainfall is not variable throughout the small catchment area (9 km<sup>2</sup>) with 720 mm occurring during an average year at the site (Table 2). Temperatures range from an average of 19.3 °C [41 – 9.6 °C max range] in the summer to 14 °C [30.9 – -3.3 °C min range] in the winter months. The soils within the property boundary range from Mispah, to Hutton and Clovelly forms, which dominate most of the site. Some Oakleaf forms occur within the wetland edges. The underlying geological formation is intrusive Mpuluzi Granite of the Archaean Eon and the Swazian Era.



Table 2 Mean monthly rainfall and temperature observed near Rocky Drift (derived from historical data)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean Rainfall (mm)	139.4	107.8	88.4	41.8	15.0	7.0	9.8	7.1	21.6	60.3	100.4	121.9	<b>720.6</b>
Mean Temperature (°C)	23.2	23.0	22.1	19.6	16.7	14.1	14.1	15.9	18.7	20.0	21.1	22.5	<b>19.3</b>

### 3. METHODOLOGY

The assessment can be broken down into two sections, a desktop assessment and site verification.

Databases allow for the rapid assessment of species which are predicted to occur in an area. These databases are compiled using verified citizen science observations, as well as correlating species and their habitat requirements and assigning the result to a habitat type. This results in species predicted for an area. This may often result in a wide paucity in data as no previous observations have been made in an area, resulting in no predicted data for that species in that area. This means that verification of faunal data is essential in filling in gaps that may occur at desktop level.

A site visit was conducted on the 20<sup>th</sup> of October 2020 to conduct necessary in-field procedures to verify the presence of fauna within the study area.

#### 3.1 Desktop assessment

##### 3.1.1 Department of Environment Forestry and Fisheries online screening tool

The DEFF have release an online screening tool for the purpose of highlighting environmental sensitivities of the proposed development. This tool allows for identification of proposed developments intersected with the most up to date databases, allowing for potential sensitivities to be identified.

##### 3.1.2 Critically Biodiverse Areas

Critical Biodiversity Areas (CBAs) can be divided into two subcategories, namely Irreplaceable and Optimal. Each of these can in turn be subdivided into additional subcategories. The CBA categories are based on the optimised outputs derived using systematic conservation planning software, with the Planning Units (PU) identified representing the localities for which the conservation targets for one or more of the biodiversity features contained within can be achieved.

##### 3.1.3 Mpumalanga Biodiversity Sector Plan (2014)

As per the Mpumalanga Biodiversity Sector Plan Technical Report by Lötter (2015): "The MBSP comprises two spatial components: maps of terrestrial and freshwater critical biodiversity areas (CBAs); and, a set of land-use guidelines that are important for maintaining and supporting the inherent biodiversity values of these critical biodiversity areas."

##### 3.1.4 Protected and conservation areas of South Africa

The Department of Environment Forestry and Fisheries (DEFF) have released an online map tool detailing the protected areas and associated 5km / 10km buffer. The majority of the site falls outside of any protected areas according to the Protected Areas Register, however the northern portion of the pipeline falls within the 5km buffer of the White River Nature Reserve. No Important Bird Areas are intersected by the proposed development.

### 3.1.5 South African Bird Atlas Project 2

The South African Bird Atlas Project 2 (SABAP2) is the most important regional decision making tool for avian conservation. The results of this project lead to the potential red listing on a regional and international scale. The project uses five minute by five minute pentads with citizen scientists providing birding checklists for those pentads. The output is a tool which recites species seen within those pentads. A copy of the species presence according to SABAP 2 can be found in Annexure A.

### 3.1.6 Animal Demographic Unit databases

The Animal Demographic Units (ADU) Virtual Museum tool was used to identify presence of amphibians (FrogMAP), reptiles (ReptileMAP), mammals (MammalMAP) and butterflies (LepiMAP). The ADU use citizen science to contribute species lists and locations which get added to one degree grids. A copy of the species presence according to the various MAPs can be found from Annexure B.

## 3.2 Site Verification

Brief faunal sampling occurred on the 31<sup>st</sup> of July 2020. Weather conditions were overcast but warm. Data collection involved fixed point avifaunal observations at various points around the site, which were chosen based on the habitat types present on site. At each of these points, both visual observations and identification through bird calls was deemed sufficient in noting a bird species. Additionally, at each point and along the length of the line, opportunistic observations of fauna were made, and if possible, photographs of the individuals were taken. Time and budgetary constraints limited the use of pitfall traps and night time herpetofaunal sampling.

## 4. LIMITATIONS AND ASSUMPTIONS

In order to apply generalized and often rigid scientific methods or techniques to natural, dynamic environments, a number of assumptions are made. Furthermore, a number of limitations exist when assessing such complex ecological systems. The following constraints may have affected this assessment –

- Fauna are mobile by nature and absence of species does not necessarily mean that the species does not occur there. As such, various databases are used in assisting the specialist in establishing species presence.
- This study has only focused on the identification of faunal species that may occur on site, or were noted on site during a site visit. Night time surveying was not undertaken due to budgetary and time constraints.
- Faunal assessments dealing with reptiles and birds are best undertaken during the warmer months of the year, as these species hibernate and migrate during the winter months. Sampling has occurred in late Spring to early Summer, which is considered sufficient as migratory avifauna and hibernating herpetofauna have become active. However, activity is still dependant on weather conditions experienced on the day of sampling.

## 5. RESULTS AND DISCUSSION

The following results were used as input to the selected models and have been provided here.

### 5.1 Desktop Assessment (Vegetation)

A number of databases have been interrogated in the process of undertaking the Desktop Analysis (found in greater detail in Appendix 2), these include:

- Mpumalanga Conservation and Biodiversity Plan (MCBP, 2014);
- Department of Agriculture's (1998) Land Types
- Department of Environmental Affairs and Tourism's (2007) the Environmental Potential Atlas (ENPAT);
- Mucina and Rutherford's Vegetation Assessment (2007);
- National Freshwater Ecosystem Priority Areas (NFEPA) (2010)

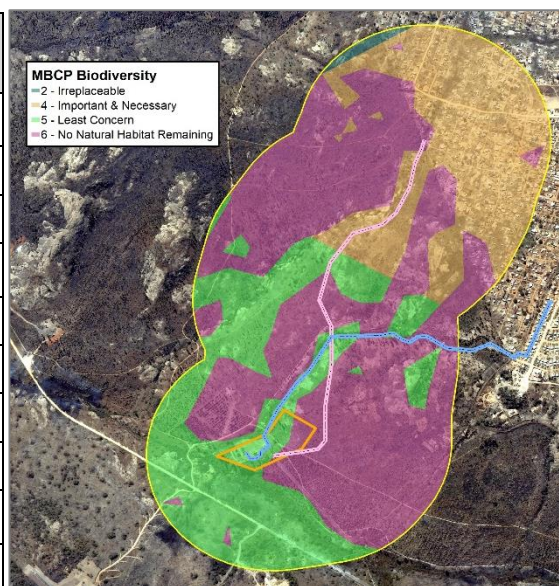
A summary of the methodology utilised for the generation of each of the databases are included in Appendix 2 for further interest. Below are the results of the Desktop assessment:

#### 5.1.1 Mpumalanga Conservation and Biodiversity Plan

There are several features within the MCBP database present within the footprint which are considered to be of conservation importance (MCBP). These are included in Table 3. During the site visit and subsequent ground truth, it was noted that the site was severely and almost entirely modified. The site is considered to be Category 4 (Important and Necessary). The proposed bulk line crosses some important/Necessary, some least concern and some no natural remaining areas. Under these classes, linear structures are partially permitted.

Table 3 Class category derived from the MCBP

Activity	Irreplaceable	Important & Necessary	Least Concern	No Natural Habitat Remaining
<b>Conservation &amp; Game Farming</b>	Permitted	Permitted	Permitted	Permitted
<b>Livestock</b>	Permitted	Permitted	Permitted	Permitted
<b>Settlement</b>	Not permitted	Restricted	Restricted	Permitted
<b>Crop (Dryland) &amp; Farming</b>	Not permitted	Not permitted	Permitted	Permitted
<b>Irrigation</b>	Not permitted	Not permitted	Permitted	Permitted
<b>Timber</b>	Not permitted	Not permitted	Restricted	Restricted
<b>Urban</b>	Not permitted	Not permitted	Restricted	Permitted
<b>Linear Structure</b>	Restricted	Restricted	Restricted	Permitted
<b>Mining (Underground)</b>	Not permitted	Restricted	Permitted	Permitted
<b>Mining (Surface)</b>	Not permitted	Not permitted	Restricted	Restricted



From the desktop analysis undertaken, a very small part, 490 meters away from the site is considered **irreplaceable**, i.e. these planning units are referred to as totally irreplaceable and the conservation of the features within them is critical to meet conservation targets. However, the actual state of the site where the bulk line traverses is transformed. The transformed area has increased since the previous assessments and has likely been further transformed due to continual plot clearing (Figure 3). This is a major concern and is likely to become an area of conflict during the implementation of this project.



Figure 3 Transformed state of the proposed site with household plots being cleared along the site footprint

### 5.1.2 Critical Biodiversity Areas (CBA)

The CBA data (Figure 4) indicates that a small part of the site is considered to be 'other natural areas', with most of the proposed bulk line being heavily modified. However, during the ground truthing exercise it was found that the natural area has recently become heavily transformed, and has very few undisturbed areas, but instead land plots and alien vegetation plant species interspersed.

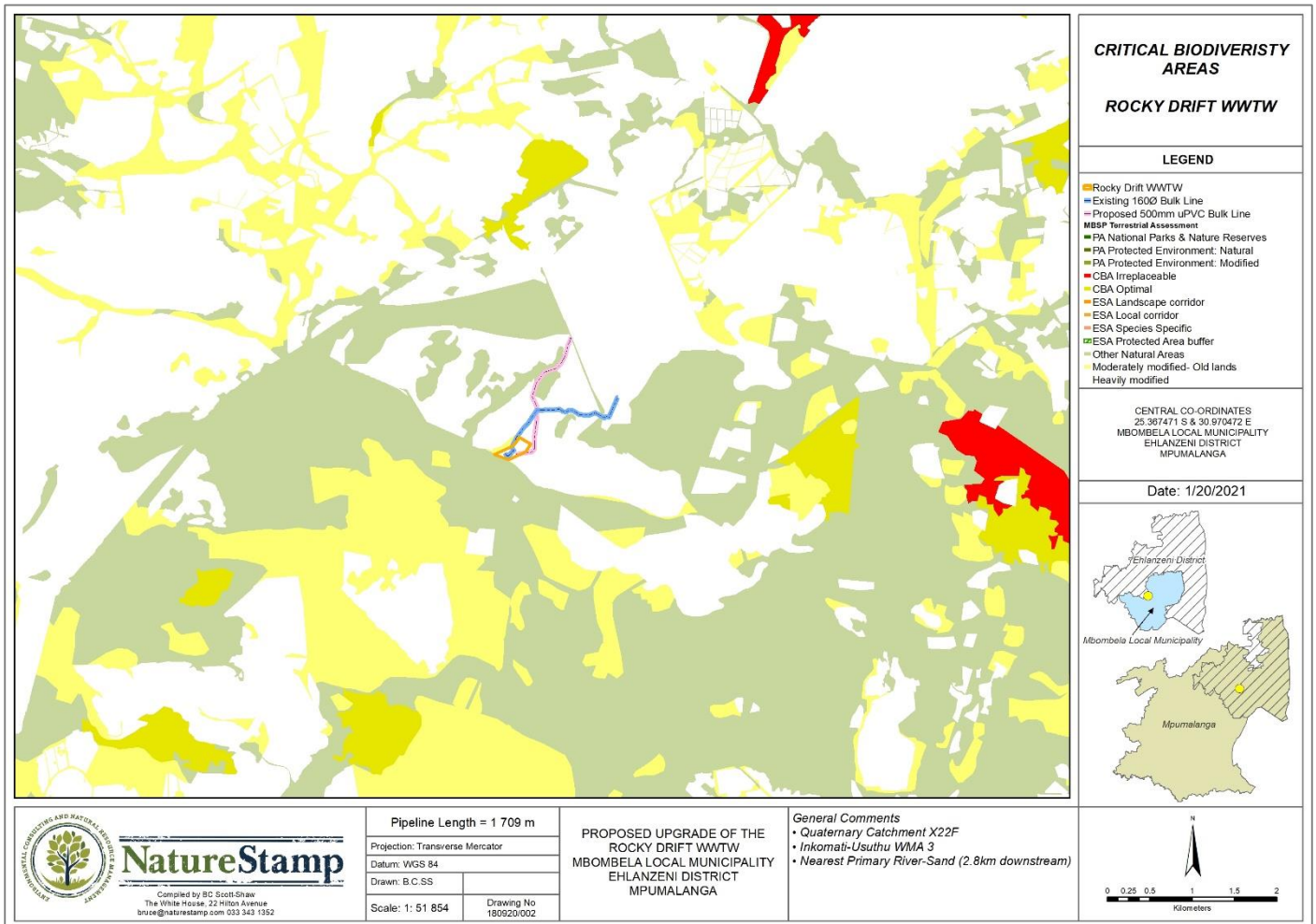


Figure 4 CBA map for the proposed development site

### 5.1.3 Vegetation- Mucina and Rutherford (2006)

This site is dominated by Legogote Sour Bushveld (SVI 9, Mucina and Rutherford, 2006). This occurs within the lowveld savanna biome. The desktop analysis revealed that the area is endangered, with the potential for some flagged fauna and flora (e.g. red data species and endangered wildlife) being found from the C-plan, SEA and MINSET databases. The following information was collected for the vegetation unit SVI 9 (Mucina & Rutherford, 2006). The characteristics of this grassland are described as:

- The vegetation type occurs on gently to moderately sloping upper pediment slopes with dense woodland including many medium to large shrubs often dominated *Parinari curatellifolia* and *Bauhinia galpinii* with *Hyperthelia dissolute* and *Panicum maximum* in the undergrowth.
- Short thicket dominated by *Acacia ataxacantha* occurs on less rocky sites.
- Exposed granite outcrops have low vegetation cover, typically with *Englerophytum magalismsontanum*, *Aloe petricola* and *Myrothamnus flabellifolia*.
- It has been greatly transformed, mainly by plantations and also cultivated areas and urban development.
- Scattered alien plants include *Lantana camara*, *Psidium guajava* and *Solanum mauritianum*.
- Important taxa includes:
  - Tall trees: *Pterocarpus angolensis* (d), *Sclerocarya birrea* subsp. *caffra* (d);
  - small trees: *Acacia davyi* (d), *A. sieberiana* var. *woodii* (d), *Combretum zeyheri* (d), *Erythrina latissima* (d), *Parinari curatellifolia* (d), *Terminalia sericea* (d), *Trichilia emetica* (d), *Verononia amygdalina* (d), *Acacia caffra*, *Antidesma venosum*, *Erythroxylum emarginatum*, *Faurea rochetiana*, *F. saligna*, *Ficus burkei*, *F. glumosa*, *F. ingens*, *F. petersii*, *Heteropyxis natalensis*, *Peltoporum africanum*, *Piliostigma thonningii*, *Pterocarpus rotundifolius*, *Schotia brachypetala*;
  - succulent tree: *Euphorbia ingens*;
  - tall shrubs: *Diospyros lycioides* subsp. *sericea*, *Erythroxylum delagoense*, *Olea europaea* subsp. *africana*, *Pachystigma macrocalyx*, *Pseudarthria hookeri* var. *hookeri*, *Rhus pentheri*;
  - low shrubs: *Diospyros galpinii* (d), *Flemingia grahamiana* (d), *Agathisanthemum bojeri*, *Eriosema psoraleoides*, *Gymnosporia heterophylla*, *Hemizygia punctata*, *Indigofera filipes*, *Myrothamnus flabellifolius*, *Rhus rogersii*; succulent shrubs: *Aloe petricola*, *Euphorbia vandermerwei*, *Huernia kirkii*;
  - woody climbers: *Acacia ataxacantha* (d), *Bauhinia galpinii* (d), *Helinus intergrifolius*, *Sphedamnocarpus pruriens* subsp. *Pruriens*;
  - graminoids: *Bothriochloa bladhii* (d), *Cymbopogon caesius* (d), *C. nardus* (d), *Hyparrhenia cymbaria* (d), *H. poecilotricha* (d), *Hyperthelia dissolute* (d), *Panicum maximum* (d), *Andropogon schirensis*, *Paspalum scrobiculatum*, *Schizachyrium sanguineum*;
  - herbs: *Gerbera ambigua*, *G. viridifolia*, *Hemizygia persimilis*, *Hibiscus sidiformis*, *Ocimum gratissimum*, *Waltheria indica*; succulent herbs: *Orbea carnosia* subsp. *carnosia*, *Stapelia gigantean*; and geophytic herbs: *Gladiolus hollandii*, *Hypoxis rigidula*.
  - Endemic Taxon: Succulent herb: *Aloe simii*.

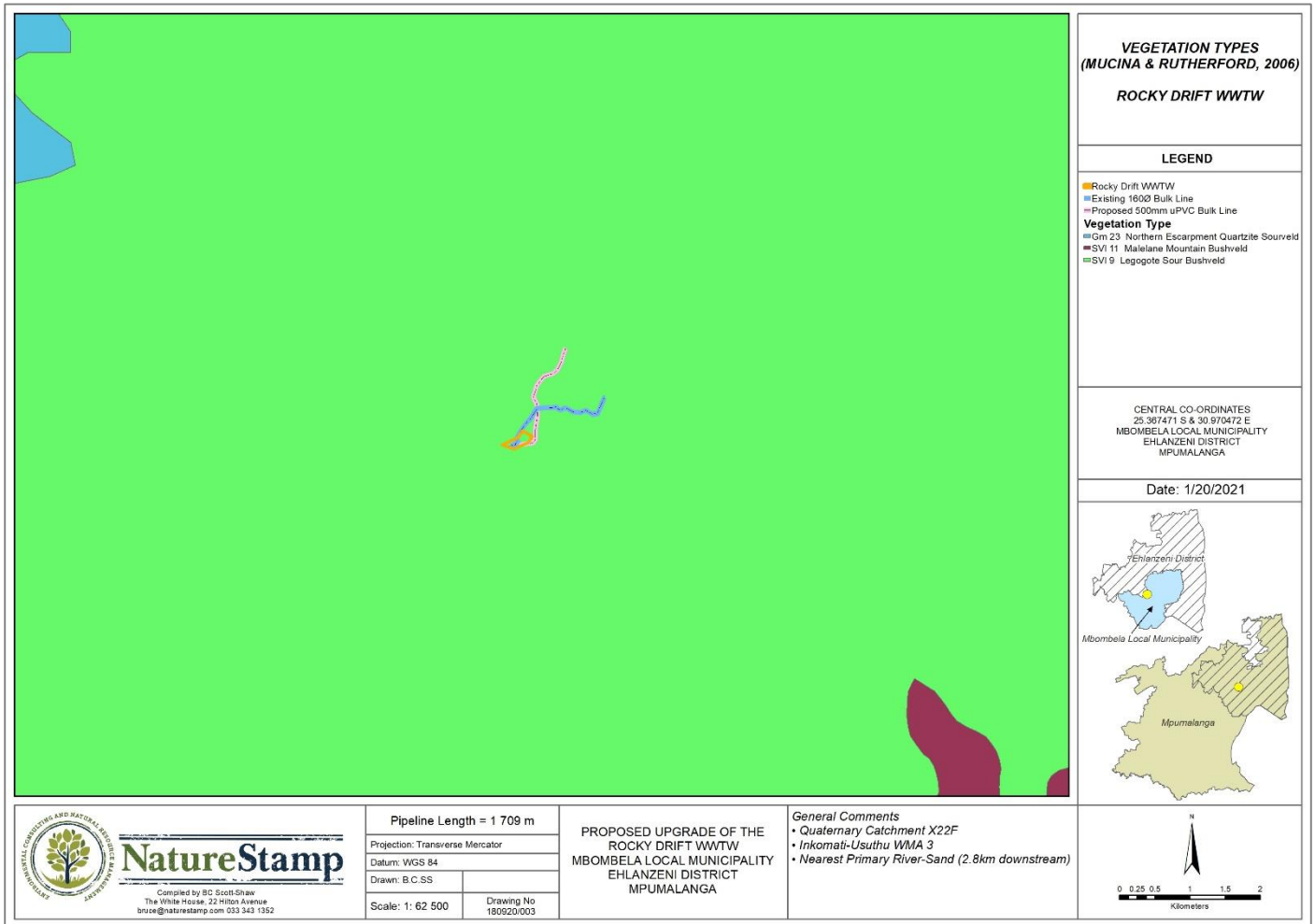


Figure 5 Vegetation type on the proposed development site

#### 5.1.4 Land Type Unit within the Study Area

The land unit consists of a typically red, structureless and highly weathered soil (Ab42). This land type is moderately to heavily textured, commonly of the Hutton form. This land type is considered to be of high agricultural potential. However, it is typically on steeper slopes, in excess of 30° and has a high clay content, which may be a limiting factor for cultivation.

Soil depths range from 600 – 1 200 mm and is usually sandy-clay. Rainfall associated with this land type is typically low to moderate.

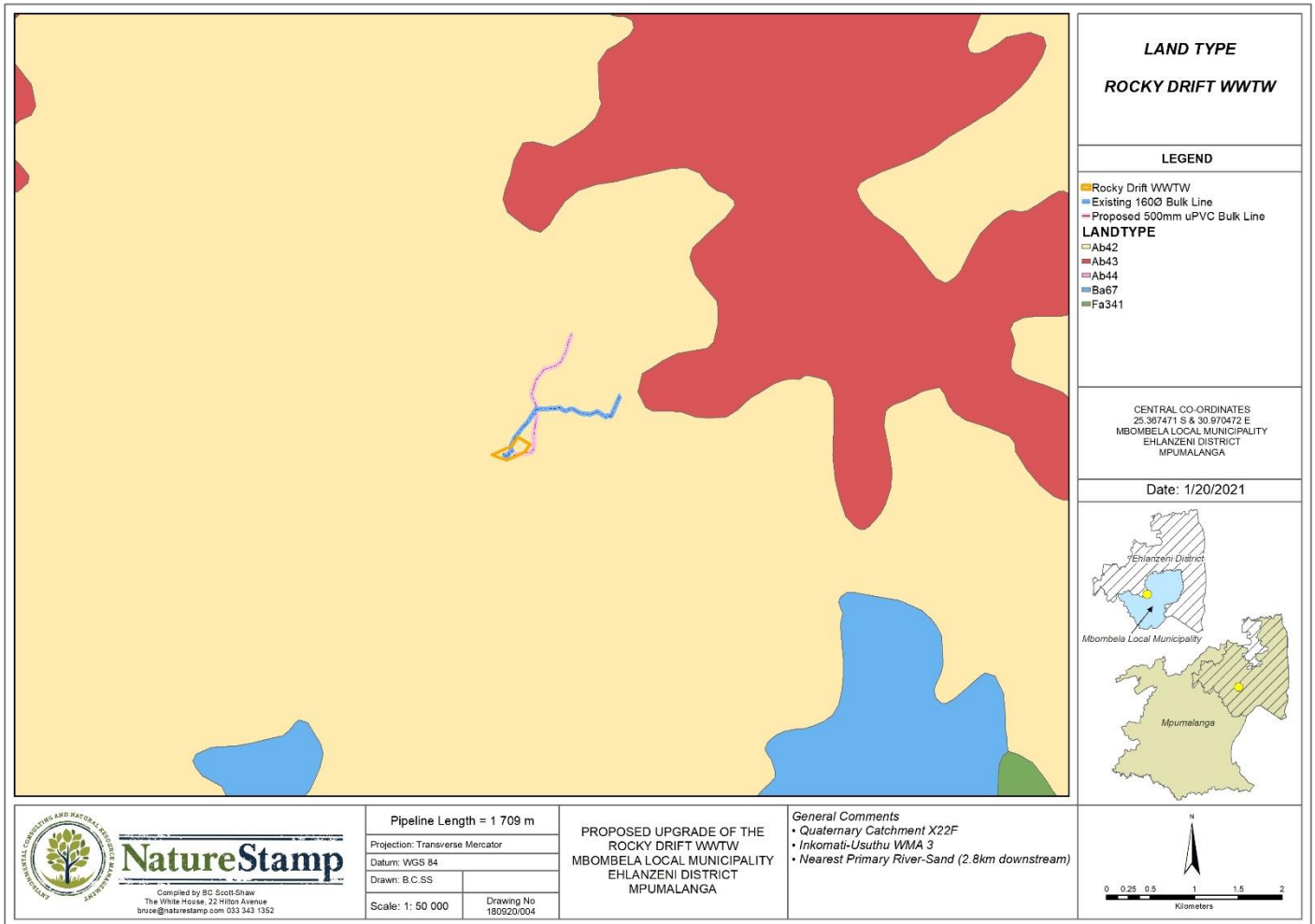


Figure 6 Land type units of the proposed development site

### 5.1.5 Proximity to Protected Areas

The proposed site does not fall within 5 km of any protected area, nor within 10km of a heritage site. The site is approximately 23 km from Barberton reserve and 25 km from Kruger National Park.

## 5.2 Desktop Assessment (Faunal)

### 5.2.1 Mpumalanga Biodiversity Sector Plan (2014)

The site has been classified as heavily modified according to the Mpumalanga Biodiversity Sector Plan (2014). This includes areas that are significantly modified from the natural state, and in which biodiversity pattern and ecological function has been lost to the point that it is not worth considering these areas for any kind of conservation action due to their poor ecological state. The degraded state of the study site falls in line with the CBA description from the Mpumalanga BSP.

### 5.2.2 DEFF online screening tool

According to the DEFF online screening tool, the site has an animal theme sensitivity rating of medium (Figure 7). The tool predicts the presence of the mammal Rough-haired Golden Mole (*Chrysospalax villosus* - Vulnerable), the reptile Natal hinge-back Tortoise (*Kinixys natalensis* – Vulnerable) and the insect Jambila Seedpod Shieldback (*Thoracistus jambila* – Endangered).

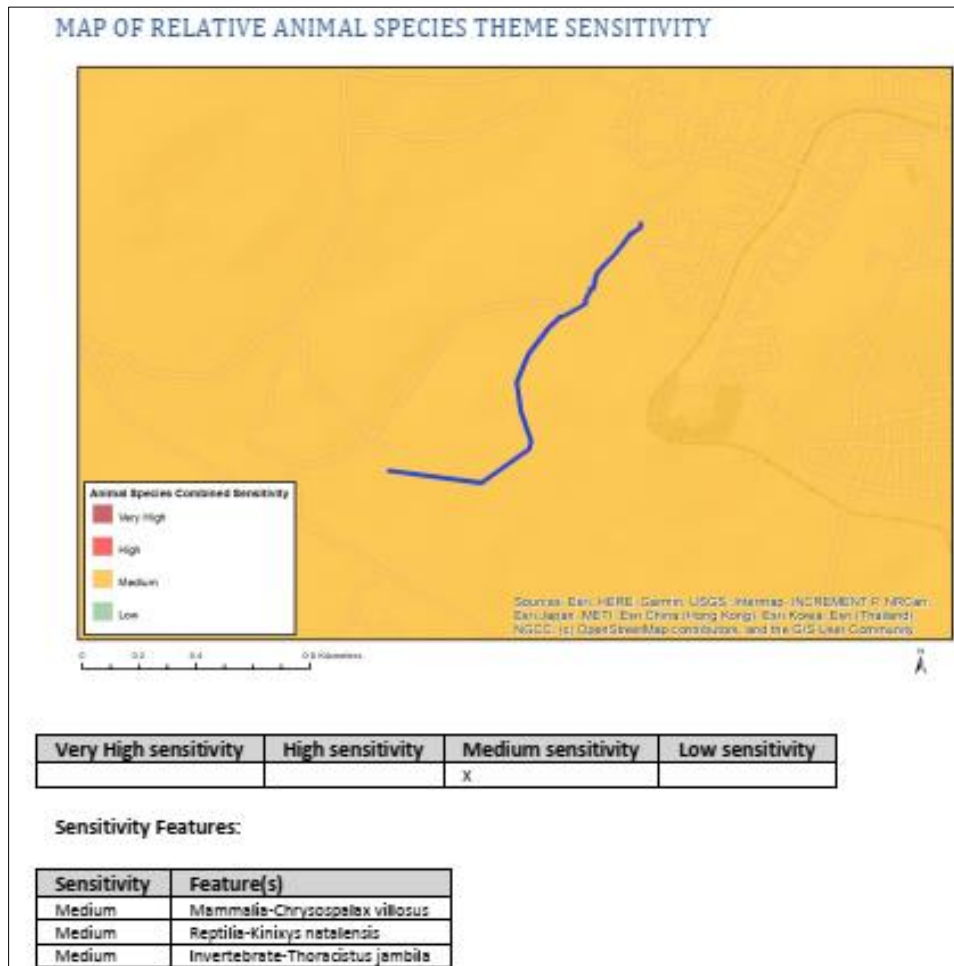


Figure 7 Animal species theme sensitivity according to the DEFF online screening tool

### 5.2.3 South African Bird Atlas Project 2

Five species of conservation concern occur within the pendant according to SABAP 2 (Table 4). The likelihood of these species occurring on site is low as the habitat requirements (mostly aquatic species) are not met along the proposed pipeline routing. However, Lanner Falcon and Forest Buzzard may occur as these species are highly mobile. Forest Buzzard's prefer Afromontane Forests or plantations, of which there are none on the proposed routing, thereby reducing the likelihood of Forest Buzzard occurring.

Table 4 Avifaunal species of conservation concern according to SABAP 2

Scientific Name	Common name	Red List Status (regional, global)	Full Protocol	Full Protocol Last Recorded
<i>Buteo trizonatus</i>	Forest Buzzard	LC, NT	1.2658	2014/12/21
<i>Alcedo semitorquata</i>	Half-collared Kingfisher	NT, LC	1.2658	2009/06/04
<i>Falco biarmicus</i>	Lanner Falcon	VU, LC	3.7975	2009/12/23
<i>Podica senegalensis</i>	African Finfoot	VU, LC	1.2658	2016/01/07
<i>Gorsachius leuconotus</i>	White-backed Night-Heron	VU, LC	1.2658	2014/06/15

### 5.2.4 Animal Demographic Unit databases

FrogMAP shows that no species of conservation concern are predicted to occur on site. A full list of predicted species can be found in Annexure B.



According to MammalMAP, 6 mammal species of conservation concern may occur in the area (Table 5). Of these species, it is likely that Serval and Cape Clawless Otter could potentially occur within the site boundary, although the probability is low due to the transformed nature of the study area. The recent sighting of the Serval is likely to have occurred within communal farmlands in the surrounding areas, and the nature of a linear activity means that the disturbance won't result in a major loss in habitat in the medium to long term. The Cape Clawless Otter could occur in the rivers surrounding the proposed development, however the proposed development should have no adverse effect on this species.

Table 5 Mammal species of conservation concern potentially occurring on site according to the ADU MammalMAP

Scientific Name	Common Name	Red List Category	Number of Records	Last Recorded
<i>Cephalophus natalensis</i>	Red Duiker	Near Threatened (2016)	1	2015/07/11
<i>Cercopithecus albogularis erythrarchus</i>	Samango Monkey (subsp. erythrarchus)	Near Threatened (2016)	2	2014/09/11
<i>Leptailurus serval</i>	Serval	Near Threatened (2016)	4	2020/05/05
<i>Aonyx capensis</i>	African Clawless Otter	Near Threatened (2016)	1	2017/08/24
<i>Panthera pardus</i>	Leopard	Vulnerable (2016)	1	2010/04/21
<i>Lycaon pictus</i>	African wild dog	Endangered (2016)	1	1998/11/24

According to ReptileMAP, three reptile species of conservation concern are predicted to occur within the site (Table 6). Of these species, the Striped Harlequin Snake and Nile Crocodile could potentially occur on site. Sightings of Striped Harlequin Snakes species are rare as they are partly fossorial and tend to favor termite mounds in grassland / savanna areas. Nile Crocodiles will be limited to water bodies and rivers in the area, and are unlikely to inhabit areas with high human habitation due to human wildlife conflict, therefore temporary presence of Nile Crocodiles is predicted and limited to the river.

Table 6 Reptile species of conservation concern potentially occurring on site according to the ADU ReptileMAP

Scientific Name	Common Name	Red List Category	Number of Records	Last Recorded
<i>Chamaesaura macrolepis</i>	Large-scaled Grass Lizard	Near Threatened (SARCA 2014)	4	1900/06/15
<i>Homoroselaps dorsalis</i>	Striped Harlequin Snake	Near Threatened (SARCA 2014)	4	1983/04/11
<i>Crocodylus niloticus</i>	Nile Crocodile	VU (SARCA 2014); LC (global, IUCN 2019)	1	2010/05/25

LepiMAP shows that no species of conservation concern are predicted to occur on site. A full list of predicted species can be found in Annexure B.

### 5.2.5 Probability of Occurrence

The probability of occurrence looks at the potential for faunal species to occur on site based on habitat availability of species of conservation concern, as highlighted in SABAP2 and the ADU databases. It must be noted, this assessment does not guarantee the presence of a species on site, rather it estimates the probability of the species and therefore should only be used as a guide.

Table 7 estimates that species predicted to occur on site are Lanner Falcon and the Rough-haired Golden Mole.

Table 7 Faunal Probability of Occurrence

Taxa	Scientific Name	Common Name	Threat Status (regional, global)	Habitat Requirements / Preferences (IUCN, 2017)	Requirements Met	POC
Aves	<i>Buteo trizonatus</i>	Forest Buzzard	LC, NT	This species inhabits native temperate forests from sea level up to 1,000 m. It can also be found in plantations, though usually near to areas of native forest	No - plantations / forested areas are not present close to site	Unlikely
	<i>Alcedo semitorquata</i>	Half-collared Kingfisher	NT, LC	Wetlands (inland), Marine Coastal/Supratidal, Marine Neritic, Forest	No - wetland areas are unlikely to be traversed	Unlikely
	<i>Falco biarmicus</i>	Lanner Falcon	VU, LC	Forest, Savanna, Shrubland, Grassland, Rocky areas (eg. inland cliffs, mountain peaks), Desert, Artificial/Terrestrial	Yes - a wide variety of habitats and wide range is available for this species	Likely flying over the general area
	<i>Podica senegalensis</i>	African Finfoot	VU, LC	Occurs in forest and wooded savanna along permanent streams, along secluded thickly wooded rivers, on the edges of pools, lakes and dams with well-vegetated banks	No - permanent rivers are unlikely to be crossed	Unlikely
	<i>Gorsachius leuconotus</i>	White-backed Night Heron	VU, LC	The species inhabits densely vegetated forest, tree-fringed streams, mangroves, islands in large rivers and lakes, and occasionally reedbeds	No - permanent rivers are unlikely to be crossed	Unlikely
Mammal	<i>Cephalophus natalensis</i>	Red Duiker	Near Threatened (2016)	Inhabits evergreen forest, tropical/subtropical forest patches, coastal scrub, and riverine thickets.	No - habitat not present	Unlikely
	<i>Cercopithecus albogularis erythrarchus</i>	Samango Monkey (subsp. erythrarchus)	Near Threatened (2016)	Lives in many forest types, including lowland and montane tropical moist forest, riverine, gallery forest, delta forest, mangrove forest and bamboo forest. Also found in sand forest, secondary forest, logged forest and thickets.	No - habitat not present	Unlikely
	<i>Leptailurus serval</i>	Serval	Near Threatened (2016)	Associated with mesic grasslands and wetlands within alpine, montane and sub-montane regions, typically occurring in dense vegetation in close proximity to water.	No - disturbed nature of site unlikely to house serval. Presence in pentad likely a result of protected area to the North.	Unlikely
	<i>Aonyx capensis</i>	African Clawless Otter	Near Threatened (2016)	Freshwater rivers, streams and dams	No - permanent water bodies unlikely to be crossed	Unlikely
	<i>Panthera pardus</i>	Leopard	Vulnerable	Forest, Savanna, Shrubland, Grassland, Rocky areas (eg. inland cliffs, mountain peaks), Desert	No - potentially moving through however unlikely to establish in area	Unlikely
	<i>Lycaon pictus</i>	African Wild Dog	Endangered	Range of habitats including short-grass plains, semi-desert, bushy savannas and upland forest	No - mostly restricted to protected areas	Unlikely
	<i>Chrysoxipalax villosus</i>	Rough-haired Golden Mole	Vulnerable	Found on sandy soils in grasslands, meadows and along edges of marshes in Savanna and Grassland biomes of South Africa	Potentially yes - depending of the type of soil present	Potentially likely
Reptile	<i>Chamaesaura macrolepis</i>	Large-scaled Grass Lizard	Near Threatened (SARCA 2014)	Occurs in the savanna, Indian Ocean Coastal Belt and Grassland Biomes in dry, open, sandy grasslands near the coast and on the Lebombo Mountains	No - disturbed nature of site unlikely to house species	Unlikely
	<i>Homoroselaps dorsalis</i>	Striped Harlequin Snake	Near Threatened (SARCA 2014)	Partially fossorial and known to inhabit old termitaria in grassland habitat. Most of its range is at moderately high altitudes, reaching 1,800 m in Mpumalanga and Swaziland, but it is also found at elevations as low as about 100 m in KwaZulu-Natal	No - disturbed nature of site unlikely to house species	Unlikely
	<i>Crocodylus niloticus</i>	Nile Crocodile	VU (SARCA 2014); LC (global, IUCN 2019)	Marine and inland water bodies	No - permanent rivers are unlikely to be crossed	Unlikely
	<i>Kinixys natalensis</i>	KwaZulu-Natal Hinged-back Tortoise	Vulnerable (2018)	Dry rocky habitat in thornveld, valley bushveld, dry thicket or bushveld savanna at elevations between 50 and 1,200 m and is generally absent from coastal regions, deep sand and forest	Potentially yes - however disturbed nature of site and potential poaching reduces the likelihood of occurrence	Unlikely
Insect	<i>Thoracistus jambila</i>	Jambila Seedpod Shieldback	Endangered (2014)	This species is associated with open, tall grassy habitats.	No - habitat not present	Unlikely

### 5.3 Vegetation On-site/ Vegetation Overview

The site is mapped as by Legogote Sour Bushveld (SVI 9) which is endangered. There were few to no indicators of this vegetation type remaining along the proposed line. A cursory walk through the area was conducted to gain a general overview of the integrity and vegetation assemblage present within the site boundary.

The extent of the site is heavily invaded by alien species, with high volumes of litter and waste from nearby settlements. A previous assessment undertaken by The Biodiversity Company (2017), indicates that more indigenous species were present during this period as much of the site has since been cleared for plots. No important or protected species were identified during the site visit (such as Aloes). It is not anticipated that the proposed activity will not have major negative consequences for the natural environment or the integrity of the Critical Biodiversity area nor the aquatic Ecological Support Area.

#### 5.3.1 Invasive Alien Plants (IAPs)/Exotic Species

Rocky Drift area has historically been surrounded by cultivated lands, granite mining and extensive settlements. The current vegetation cover consists predominantly of alien species. The site is in a very poor state with extensive areas of invasion. As invasive plants are good pioneers, re-vegetation must be implemented along the bulk line to ensure these pioneers do not grow in these disturbed areas.



Figure 8 Photos indicating gum trees, mango trees and banana trees at the end of the bulk line route

#### 5.3.2 Grassland, Sedge & Forb Composition

Some small areas of grassland exist within the bulk line extent. These areas are not intact and much of the site has been transformed. The forb and grassland species are typical for this area. *Imperata* and *Symbopogon* are common grass species found throughout the site. Similarly, grass species such as *Zornia* and *Ipomoea* were common throughout the site. Figure 9 shows some species identified during a previous assessment (The Biodiversity Company, 2017).

*Cyperus dives*, *Schoenoplectus corymbosus* and *Phragmites australis* were abundant along the drainage lines.



Figure 9 Dominant forb species found on-site

### 5.3.3 Woody Tree Composition

Although the site is largely bare with extensive areas of open ground and rock, some indigenous trees were noted. *Vachellia sieberana*, *Vachellia robusta* and *Syzigium cordatum*, were the key species identified on site. These species indicate that they would be the most suitable trees to plant for future management as they grow well under these conditions and are indigenous to the area.

Aloe species, which were not noted, should be encouraged to return to the area but may have been harvested in this area.



Figure 10 Some indigenous woody species found on-site

### 5.3.4 Species List

A limited species list was compiled and can be found in Table 8. Numerous category invasive species were identified. The key species which have shown signs of redistribution (seedlings noted on-site) are *Eucalyptus grandis* which dominate the landscape. These species should be removed or ringbarked on the site. All of the indigenous species identified on-site could be used for rehabilitation purposes although most of these species would re-grow naturally assuming that alien species are prevented from growing.

Table 8 List of species identified along the proposed Rocky Drift bulk line

Species name	Common name	Category
<b>Grasses &amp; Sedges</b>		
* <i>Paspalum dialatum</i>	Dallisgrass	Alien grass
<i>Imperata cylindrical</i>	Cotton wool grass	Indigenous
<i>Cyperus dives</i>	Cyperus	Indigenous
<i>Schoenoplectus corymbosus</i>	Common sedge basket grass	Indigenous
<i>Cymbopogon caesius</i>	Broad leaf turpentine grass	Indigenous
<i>Hyparrhenia cymbaria</i>	Thatch grass	Indigenous
<i>Eragrostis curvula</i>	Weeping love grass	Indigenous
<b>Herbs</b>		
* <i>Ipomoea crassipes cf.</i>	Morning Glory	Alien Creeper (1b)
* <i>Verbena sp.</i>	Vervain	Alien (1b)
* <i>Persicaria lapathifolia</i>	Pale smartweed	Alien
<i>Dicerocaryum senecioides</i>	Boot protectors	Indigenous
<i>Zornia glochidiata</i>	#N/A	Indigenous Herb
<i>Thunbergia atriplicifolia</i>	#N/A	Indigenous
<i>Lippia javanica</i>	Lemon bush	Indigenous
<i>Hypoxis hemerocallidea</i>	Yellow Stars	Indigenous
<b>Trees &amp; Shrubs</b>		
* <i>Acacia longifolia</i>	Long leaved wattle	1b
* <i>Solanum mauritianum Scop.</i>	Bugweed	1b
* <i>Eucalyptus grandis (hybrid)</i>	Gum	1b
* <i>Musa acuminata</i>	Domestic banana	Alien (cultivar)
* <i>Mangifera indica L.</i>	Mango tree	Alien
* <i>Ricinus communis</i>	Castor oil plant	Alien shrub
* <i>Lantana camara</i>	Tick berry	1b
* <i>Psidium guajava</i>	Guava tree	Alien
<i>Vachellia robusta (Burch.)</i>	Broadpod robust thorn	Indigenous
<i>Vachellia sieberiana (DC.)</i>	Paperbark thorn	Indigenous
<i>Phragmites australis (Cav.) Steud.</i>	Common reed	Indigenous
<i>Bauhinia galpinii</i>	Pride-of-De-Kaap	Indigenous
<i>Syzygium cordatum</i>	Umdoni	Indigenous

\*denotes an alien species

## 5.4 Alien Plant Control Plan

Invasive and other noxious plants must be managed as per the requirements of the –

- Conservation of Agricultural Resources Act (Act 43 of 1983, as amended in March 2001) Regulations
- Notice No. R. 1048 of 25 May 1984, as amended by Government Notice No. R. 2687 of 6 December 1985) pertaining to weeds and invader plants control. As such, the following measures shall apply:
  - All growth forms of Category 1 weeds and invader plants shall actively be removed from all works areas, at all times; and
  - All Category 2 and 3 weeds and invader plants shall be actively removed all prior to flowering (See Appendix A for Alien Plant Removal and Control Methodology).
- The Department of Environmental Affairs (DEA) under the National Environmental Management: Biodiversity (NEMBA) Act 10 of 2004.

A set of Control guidelines for alien plant removal can be found for the most common alien invasive species found on the site (WESSA, 2008).

### 5.4.1 Re-establishment of Vegetation Assemblage

It is important to prepare the soil for vegetation rehabilitation. Once the soil has been prepared, appropriate seeds or rescued plants should be used for the rehabilitation process. This is only relevant if the development breaks new grassland, indigenous trees or riparian/wetland habitats.

There are several other methods / techniques available for employment in re-establishing the site. Through understanding the site and the problems posed, options have been identified as the correct methods to employ re-establishment. The planting methods are expanded upon below. Please note that re-vegetation planting must be undertaken in spring if possible to ensure that establishment is successful.

Table 9 Grass and sedge species selected for the baseline Graminoid assemblage, proportions and position in the landscape.

Grass species	Proportions	Kgs/hectare	Landscape position
<i>Schoenoplectus corymbosus</i>	7.50%	2.25	Ecotone& Riparian Areas Only
<i>Cymbopogon caesius</i>	10%	3	
<i>Hyparrhenia cymbaria</i>	5%	1.5	
<i>Eragrostis capensis</i>	10.00%	3	
<i>Imperata cylindrica</i>	15.00%	4.5	Ecotone& Riparian Areas Only
<i>Melinis nerviglumis</i>	10.00%	3	
<i>Melinis repens</i>	7.50%	2.25	
<i>Cyperus dives</i>	10%	3	Ecotone& Riparian Areas Only
<i>Monocymbium ceresiiforme</i>	7.50%	2.25	
<i>Setaria sphacelata</i>	5%	1.5	Ecotone& Riparian Areas Only
<i>Sporobolus pyramidalis</i>	10%	3	
<i>Themeda triandra</i>	20.00%	6	
<i>Tristachya leucothrix</i>	5%	1.5	
<b>Total</b>	<b>100%</b>	<b>30</b>	

If the above seed mix stated is not available, the following species may be included, as they are commercially available. However, this should be avoided if possible as *Eragrostis tef* and *Chloris gayana* are alien species but have been included due to their ease of establishment and soil stabilising attributes.

- *Eragrostis tef* 3kg/ha
- *Digitaria eriantha* 6kg/ha
- *Panicum maximum* 4 kg/ha
- *Chloris gayana* 6kg/ha
- *Cynodon dactylon* 6kg/ha

According to Everson *et al.* (2008): Vetiver is a perennial grass that is used in soil and water conservation. It is a non-invasive plant as it has sterile seeds. It has a massive root system that holds soil together and when planted in hedgerows forms an effective barrier against water runoff. Vetiver should be planted early in the wet season. The roots of the plants are trimmed to about 5 cm and the shoots to 10 cm. Slips of 2-3 shoots (tillers) are planted 10-15 cm apart in a furrow about 20 cm deep with fertilizer and lime. The crown of the plant is buried 6-7 cm below the soil surface. The trimmed leaves are used to cover the base of the plants to form a mulch. Distance between vertical rows is about 2 m. The slips should be watered for the first 2 weeks after establishment. Vetiver should only be used as a secondary option where indigenous species cannot survive.

In order to properly implement the re-vegetation component, the following general planting guidelines have been adopted to drive the rehabilitation process.

- Non-woody portions must be returned to either hygrophilous vegetation (sedges, bulrushes) or to graminoid assemblages which favour relevant specific habitats.
- Wherever alien woody vegetation is removed, indigenous trees can be planted back at a density equal to that of the surrounding indigenous areas (Table 9).
- Removal of existing alien species must be consistently undertaken.
- Rehabilitation of disturbed areas after the construction of the proposed expansion must be done as soon as possible after construction is completed.
- If it is necessary to import soil onto the site, the material; must be checked to ensure that it is not contaminated by weeds or invasive plants.

The following species or subgroup thereof would be the ideal for the establishment of the vegetative component. Given that this class of area is relatively terrestrial we would propose that the area be hydro-seeded and the more hygrophilous species of sedge and other wetland/riparian plants will establish themselves over time in the areas where the conditions will suit their establishment.

Grasses -

- *Setaria sphacelata*
- *Cymbopogon caesius*
- *Hyparrhenia cymbaria*
- *Imperata cylindrica*

Sedges (sourced from nearby wetlands in a non-destructive manner/small quantities)-

- *Cyperus dives*
- *Schoenoplectus corymbosus*

#### 5.4.2 Hydraulic Seeding/Hydro Seeding

This method of seeding is quick and effective especially on steep, critical slopes and inaccessible areas that cannot practically be seeded by other methods. Hydro-seeding includes seed, water, fertilizer and a small amount of mulch in a slurry transported in a tank, either truck or trailer mounted and sprayed over prepared ground in a uniform layer.

Although hydraulic planting is more expensive than manual seeding and mulching, it has many benefits. With hydraulic planting, the seed blend can be distributed uniformly, the added mass increases accuracy and throw distance, especially in exposed, windy areas, while pre-soaking and water accelerates germination and enhances the chance of survival.

#### 5.4.3 Use of Plugs

Plugs should be applied where immediate cover is required for stabilisation. Particular areas would be drainage channels and very steep banks. Plugs should be –

- Planted at 10 cm centres
- Over a pegged artificial mesh (e.g. a light polypropylene, UV stabilised mesh with about 20mm openings) in areas of very high water velocity;

- Watered immediately to enhance establishment;
- Watered regularly for the first seven days or as required to effect establishment.

In areas where steep slopes require stabilisation a requirement may arise for the soils to be stabilised through the use of Geotextiles. Ideally, vegetation is the best form of erosion control, with Geotextiles only used for temporary stabilization purposes until this can establish. In coastal areas, Geotextiles are only superior to hydro-mulching in the following situations:

- When the growing season is short or unfavourable and plants cannot stabilize a slope quickly;
- When surfaces are so unstable or contours so channelled that a heavy rain could result in significant and costly erosion damage.

### 5.5 General Faunal Overview

No species of conservation concern were identified during the site visit. An estimated 242 bird species, 25 frog species, 304 butterfly species, 46 mammal species and 76 reptile species have been recorded in the pentad. In terms of species of conservation concern, 5 bird species, no frog species, no butterfly species, 6 mammal species and 3 reptile species have been recorded in the pentad. The DEFF Screening Tool predicts the presence of one mammal, one reptile and one insect species, with the mammal species (Rough-haired Golden Mole) potentially occurring on site.

The site potentially provides habitat for reproducing fauna, although unlikely for species of conservation concern (see probability of occurrence in Table 7 **Error! Reference source not found.**). The linear nature of the proposed activities reduces the likelihood of affecting fauna on site, as disturbance will occur in a small corridor.

The site may act as an ecological corridor linking drainage lines and wetlands in the greater area. It must be noted that the disturbance is already in place and ecological functioning is at a low level. The Mpumalanga Biodiversity Sector Plan has highlighted this area as heavily modified, and the site assessment concurs with this assessment. If the area is functioning as an ecological corridor, the small area of disturbance of a linear activity will not substantially degrade the functioning of the system. Additionally, rehabilitation and maintenance of the vegetation would likely increase the faunal diversity on site if done correctly and in line with the EMPr.



## 6. CONCLUSION

A biodiversity assessment was undertaken for the proposed 500mm uPVC Bulk Sewer Pipe. Previous assessments showed that the site is of a very low biological and ecological sensitivity.

The key findings and recommendations from the vegetation assessment are as follows -

- The site is transformed according to the CBA database and is very degraded and transformed;
- The overall area, as indicated from the desktop assessment, would have been Legogote Sour Bushveld which is considered endangered, however the species composition no longer is indicative of this vegetation type;
- The site is not within 5km of a nature reserve;
- The most sensitive area within the foot print are the watercourse crossing areas;
- The lack of veld management/alien plant control and illegal dumping has prevented the veld from re-establishing to a natural condition.
- A revegetation plan has been proposed. This would involve implementing an alien invader vegetation control program, maintenance of sensitive habitats and the return of indigenous species.

The key findings and recommendations from the faunal assessment are as follows -

- The desktop assessment identified avian, reptile, and mammalian species of conservation importance. However, no species of conservation importance were identified during the site visit. It must be noted that fauna is mobile by nature, and the lack of identified species of conservation importance does not mean that those species do not use the site.
- Potential for Lanner Falcon and Rough-haired Golden Mole to occur on site is there. A search and rescue operation for Rough-haired Golden Mole will need to be done before site clearance is to occur.
- The site has available habitat for species of conservation concern, even with a high level of alien and invasive vegetation and disturbance.
- The site could be used as a foraging and breeding ground for fauna although unlikely for species of conservation concern. Ecological corridors connecting to drainage lines in the greater area may be partially intact, however the functioning of the corridor is expected to be low due to the level of disturbance and alien and invasive infestations.
- Permits for the removal and relocation of plants and animals must be in place before any construction can commence.
- A search and rescue operation, undertaken by a suitably qualified person, must be undertaken before construction commences.
- Community outreach regarding poaching of fauna should be undertaken.
- Rehabilitation of vegetation communities would improve faunal diversity across the site.
- The faunal sensitivity is deemed to be low by the specialist and not medium as suggested by the DEFF online screening tool.
- The proposed development should not negatively impact on fauna provided general conditions of the EMP are adhered to.

There is a pending area of conflict where very recent plots (assumably illegal) have been cleared along the riparian area and where some of the proposed line would traverse. These plots have completely cleared partially indigenous areas and may interfere with the proposed line.

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## ANNEXURE A SABAP 2 SPECIES LIST

Scientific Name	Common Name	Red List Status (regional, global)	fp	fpn	fp_last
<i>Buteo trizonatus</i>	Forest Buzzard	LC, NT	1.2658	1	2014/12/21
<i>Alcedo semitorquata</i>	Half-collared Kingfisher	NT, LC	1.2658	1	2009/06/04
<i>Falco biarmicus</i>	Lanner Falcon	VU, LC	3.7975	3	2009/12/23
<i>Podica senegalensis</i>	African Finfoot	VU, LC	1.2658	1	2016/01/07
<i>Gorsachius leuconotus</i>	White-backed Night-Heron	VU, LC	1.2658	1	2014/06/15
<i>Apalis thoracica</i>	Bar-throated Apalis	LC	59.4937	47	2020/09/06
<i>Apalis flavida</i>	Yellow-breasted Apalis	LC	55.6962	44	2020/09/06
<i>Turdoides jardineii</i>	Arrow-marked Babbler	LC	68.3544	54	2019/04/09
<i>Tricholaema leucomelas</i>	Acacia Pied Barbet	LC	13.9241	11	2017/05/31
<i>Lybius torquatus</i>	Black-collared Barbet	LC	77.2152	61	2020/09/06
<i>Trachyphonus vaillantii</i>	Crested Barbet	LC	79.7468	63	2020/09/06
<i>Batis capensis</i>	Cape Batis	LC	3.7975	3	2017/10/01
<i>Batis molitor</i>	Chinspot Batis	LC	1.2658	1	2008/04/27
<i>Merops apiaster</i>	European Bee-eater	LC	41.7722	33	2019/04/09
<i>Merops pusillus</i>	Little Bee-eater	LC	21.519	17	2020/09/06
<i>Merops bullockoides</i>	White-fronted Bee-eater	LC	81.0127	64	2019/04/09
<i>Euplectes orix</i>	Southern Red Bishop	LC	74.6835	59	2020/09/06
<i>Laniarius ferrugineus</i>	Southern Boubou	LC	92.4051	73	2020/09/06
<i>Phyllastrephus terrestris</i>	Terrestrial Brownbul	LC	8.8608	7	2015/10/16
<i>Nilaus afer</i>	Brubru Brubru	LC	53.1646	42	2018/08/01
<i>Pycnonotus tricolor</i>	Dark-capped Bulbul	LC	97.4684	77	2020/09/06
<i>Emberiza tahapisi</i>	Cinnamon-breasted Bunting	LC	18.9873	15	2020/01/25
<i>Emberiza flaviventris</i>	Golden-breasted Bunting	LC	20.2532	16	2020/09/06
<i>Telophorus quadricolor</i>	Gorgeous Bush-shrike	LC	25.3165	20	2020/09/06
<i>Malaconotus blanchoti</i>	Grey-headed Bush-shrike	LC	12.6582	10	2020/09/06
<i>Telophorus olivaceus</i>	Olive Bush-shrike	LC	15.1899	12	2017/10/01
<i>Telophorus sulfureopectus</i>	Orange-breasted Bush-shrike	LC	53.1646	42	2020/09/06
<i>Turnix sylvaticus</i>	Kurrichane Buttonquail	LC	5.0633	4	2018/06/18
<i>Buteo rufofuscus</i>	Jackal Buzzard	LC	6.3291	5	2016/01/21
<i>Kaupifalco monogrammicus</i>	Lizard Buzzard	LC	1.2658	1	2018/06/18
<i>Buteo vulpinus</i>	Steppe Buzzard	LC	22.7848	18	2017/02/14
<i>Camaroptera brachyura</i>	Green-backed Camaroptera	LC	65.8228	52	2020/09/06
<i>Crithagra atrogularis</i>	Black-throated Canary	LC	1.2658	1	2011/03/19
<i>Crithagra sulphuratus</i>	Brimstone Canary	LC	59.4937	47	2020/09/06
<i>Serinus canicollis</i>	Cape Canary	LC	25.3165	20	2017/05/31
<i>Crithagra mozambicus</i>	Yellow-fronted Canary	LC	98.7342	78	2020/09/06
<i>Cercomela familiaris</i>	Familiar Chat	LC	2.5316	2	2016/06/15
<i>Cisticola natalensis</i>	Croaking Cisticola	LC	51.8987	41	2017/02/14
<i>Cisticola aberrans</i>	Lazy Cisticola	LC	68.3544	54	2020/01/25
<i>Cisticola tinniens</i>	Levaillant's Cisticola	LC	43.038	34	2017/10/01
<i>Cisticola chiniana</i>	Rattling Cisticola	LC	3.7975	3	2019/04/09

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<i>Cisticola erythrops</i>	Red-faced Cisticola	LC	83.5443	66	2019/04/09
<i>Cisticola juncidis</i>	Zitting Cisticola	LC	31.6456	25	2017/05/25
<i>Thamnolaea cinnamomeiventris</i>	Mocking Cliff-chat	LC	13.9241	11	2020/01/25
<i>Phalacrocorax africanus</i>	Reed Cormorant	LC	22.7848	18	2020/09/06
<i>Phalacrocorax carbo</i>	White-breasted Cormorant	LC	1.2658	1	2009/06/04
<i>Centropus burchellii</i>	Burchell's Coucal	LC	50.6329	40	2019/04/09
<i>Amaurornis flavirostris</i>	Black Crane	LC	36.7089	29	2017/02/14
<i>Sylvietta rufescens</i>	Long-billed Crombec	LC	43.038	34	2020/09/06
<i>Corvus albus</i>	Pied Crow	LC	13.9241	11	2016/11/18
<i>Cuculus clamosus</i>	Black Cuckoo	LC	26.5823	21	2016/10/25
<i>Chrysococcyx caprius</i>	Diderick Cuckoo	LC	41.7722	33	2020/01/25
<i>Clamator jacobinus</i>	Jacobin Cuckoo	LC	2.5316	2	2014/12/29
<i>Chrysococcyx klaas</i>	Klaas's Cuckoo	LC	10.1266	8	2015/01/20
<i>Clamator levaillantii</i>	Levaillant's Cuckoo	LC	2.5316	2	2020/01/25
<i>Cuculus solitarius</i>	Red-chested Cuckoo	LC	36.7089	29	2016/11/18
<i>Campephaga flava</i>	Black Cuckoo-shrike	LC	29.1139	23	2019/04/09
<i>Anhinga rufa</i>	African Darter	LC	1.2658	1	2017/05/25
<i>Streptopelia senegalensis</i>	Laughing Dove	LC	69.6203	55	2020/09/06
<i>Alopelia larvata</i>	Lemon Dove	LC	1.2658	1	2012/11/10
<i>Streptopelia semitorquata</i>	Red-eyed Dove	LC	84.8101	67	2020/09/06
<i>Columba livia</i>	Rock Dove	LC	6.3291	5	2018/08/01
<i>Turtur tympanistria</i>	Tambourine Dove	LC	37.9747	30	2019/01/05
<i>Dicrurus adsimilis</i>	Fork-tailed Drongo	LC	65.8228	52	2020/09/06
<i>Anas sparsa</i>	African Black Duck	LC	6.3291	5	2015/01/21
<i>Anas platyrhynchos</i>	Mallard Duck	LC	1.2658	1	2011/08/14
<i>Dendrocygna viduata</i>	White-faced Duck	LC	7.5949	6	2014/11/12
<i>Lophaetus occipitalis</i>	Long-crested Eagle	LC	25.3165	20	2018/06/18
<i>Aquila wahlbergi</i>	Wahlberg's Eagle	LC	2.5316	2	2014/12/15
<i>Bubo africanus</i>	Spotted Eagle-owl	LC	2.5316	2	2017/10/01
<i>Bubulcus ibis</i>	Cattle Egret	LC	35.443	28	2018/08/01
<i>Falco amurensis</i>	Amur Falcon	LC	6.3291	5	2017/02/14
<i>Falco peregrinus</i>	Peregrine Falcon	LC	2.5316	2	2013/11/26
<i>Anomalospiza imberbis</i>	Cuckoo Finch	LC	2.5316	2	2014/12/29
<i>Amadina fasciata</i>	Cut-throat Finch	LC	5.0633	4	2020/09/06
<i>Lagonosticta rubricata</i>	African Firefinch	LC	73.4177	58	2020/09/06
<i>Lagonosticta senegala</i>	Red-billed Firefinch	LC	2.5316	2	2017/10/01
<i>Lanius collaris</i>	Common (Southern) Fiscal	LC	94.9367	75	2020/01/25
<i>Haliaeetus vocifer</i>	African Fish-eagle	LC	6.3291	5	2017/05/25
<i>Sarothrura elegans</i>	Buff-spotted Flufftail	LC	6.3291	5	2014/12/29
<i>Sarothrura rufa</i>	Red-chested Flufftail	LC	7.5949	6	2017/05/31
<i>Muscicapa adusta</i>	African Dusky Flycatcher	LC	6.3291	5	2020/01/25
<i>Muscicapa caerulea</i>	Ashy Flycatcher	LC	11.3924	9	2020/09/06
<i>Melaenornis pammelaina</i>	Southern Black Flycatcher	LC	43.038	34	2020/09/06

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<i>Muscicapa striata</i>	Spotted Flycatcher	LC	15.1899	12	2018/02/22
<i>Dendroperdix sephaena</i>	Crested Francolin	LC	2.5316	2	2018/06/18
<i>Alopochen aegyptiacus</i>	Egyptian Goose	LC	32.9114	26	2018/08/01
<i>Plectropterus gambensis</i>	Spur-winged Goose	LC	7.5949	6	2015/01/20
<i>Accipiter tachiro</i>	African Goshawk	LC	12.6582	10	2020/09/06
<i>Sphenoeacus afer</i>	Cape Grassbird	LC	68.3544	54	2018/06/18
<i>Tachybaptus ruficollis</i>	Little Grebe	LC	5.0633	4	2014/06/15
<i>Andropadus importunus</i>	Sombre Greenbul	LC	84.8101	67	2020/09/06
<i>Treron calvus</i>	African Green-pigeon	LC	15.1899	12	2020/09/06
<i>Numida meleagris</i>	Helmeted Guineafowl	LC	56.962	45	2020/09/06
<i>Scopus umbretta</i>	Hamerkop Hamerkop	LC	29.1139	23	2017/05/25
<i>Polyboroides typus</i>	African Harrier-Hawk	LC	1.2658	1	2008/04/27
<i>Aquila spilogaster</i>	African Hawk-eagle	LC	1.2658	1	2018/08/01
<i>Aquila ayresii</i>	Ayres's Hawk-eagle	LC	2.5316	2	2018/08/01
<i>Ardea melanocephala</i>	Black-headed Heron	LC	7.5949	6	2014/12/29
<i>Butorides striata</i>	Green-backed Heron	LC	2.5316	2	2014/11/01
<i>Ardea cinerea</i>	Grey Heron	LC	1.2658	1	2014/01/11
<i>Falco subbuteo</i>	Eurasian Hobby	LC	3.7975	3	2015/01/21
<i>Prodotiscus regulus</i>	Brown-backed Honeybird	LC	8.8608	7	2015/01/20
<i>Indicator indicator</i>	Greater Honeyguide	LC	3.7975	3	2014/03/09
<i>Indicator minor</i>	Lesser Honeyguide	LC	17.7215	14	2019/04/09
<i>Indicator variegatus</i>	Scaly-throated Honeyguide	LC	13.9241	11	2017/05/25
<i>Upupa africana</i>	African Hoopoe	LC	25.3165	20	2020/09/06
<i>Tockus nasutus</i>	African Grey Hornbill	LC	1.2658	1	2008/08/30
<i>Tockus alboterminatus</i>	Crowned Hornbill	LC	1.2658	1	2020/09/06
<i>Tockus leucomelas</i>	Southern Yellow-billed Hornbill	LC	2.5316	2	2011/09/28
<i>Delichon urbicum</i>	Common House-martin	LC	10.1266	8	2017/01/04
<i>Bostrychia hagedash</i>	Hadedda Ibis	LC	70.8861	56	2020/09/06
<i>Vidua funerea</i>	Dusky Indigobird	LC	17.7215	14	2020/01/25
<i>Actophilornis africanus</i>	African Jacana	LC	1.2658	1	2012/04/29
<i>Halcyon albiventris</i>	Brown-hooded Kingfisher	LC	74.6835	59	2020/09/06
<i>Megaceryle maximus</i>	Giant Kingfisher	LC	3.7975	3	2011/08/14
<i>Alcedo cristata</i>	Malachite Kingfisher	LC	20.2532	16	2017/02/14
<i>Ceryle rudis</i>	Pied Kingfisher	LC	3.7975	3	2016/01/07
<i>Halcyon senegalensis</i>	Woodland Kingfisher	LC	6.3291	5	2017/01/04
<i>Elanus caeruleus</i>	Black-shouldered Kite	LC	44.3038	35	2019/04/09
<i>Milvus aegyptius</i>	Yellow-billed Kite	LC	2.5316	2	2019/01/05
<i>Vanellus senegallus</i>	African Wattled Lapwing	LC	16.4557	13	2018/06/18
<i>Vanellus armatus</i>	Blacksmith Lapwing	LC	8.8608	7	2014/12/15
<i>Vanellus coronatus</i>	Crowned Lapwing	LC	5.0633	4	2017/05/25
<i>Mirafra rufocinnamomea</i>	Flappet Lark	LC	2.5316	2	2012/04/28
<i>Mirafra africana</i>	Rufous-naped Lark	LC	58.2278	46	2019/04/09
<i>Macronyx croceus</i>	Yellow-throated Longclaw	LC	72.1519	57	2019/04/09

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<i>Spermestes cucullatus</i>	Bronze Mannikin	LC	88.6076	70	2020/09/06
<i>Spermestes nigriceps</i>	Red-backed Mannikin	LC	1.2658	1	2011/03/19
<i>Riparia paludicola</i>	Brown-throated Martin	LC	6.3291	5	2012/05/30
<i>Ploceus intermedius</i>	Lesser Masked-weaver	LC	6.3291	5	2019/01/05
<i>Ploceus velatus</i>	Southern Masked-weaver	LC	50.6329	40	2018/06/18
<i>Gallinula chloropus</i>	Common Moorhen	LC	12.6582	10	2015/01/13
<i>Urocolius indicus</i>	Red-faced Mousebird	LC	17.7215	14	2020/01/25
<i>Colius striatus</i>	Speckled Mousebird	LC	88.6076	70	2020/01/25
<i>Acridotheres tristis</i>	Common Myna	LC	59.4937	47	2018/06/18
<i>Cisticola fulvicapilla</i>	Neddicky Neddicky	LC	88.6076	70	2019/04/09
<i>Caprimulgus pectoralis</i>	Fiery-necked Nightjar	LC	5.0633	4	2020/01/25
<i>Caprimulgus tristigma</i>	Freckled Nightjar	LC	6.3291	5	2020/09/06
<i>Anastomus lamelligerus</i>	African Openbill	LC	1.2658	1	2015/12/14
<i>Oriolus larvatus</i>	Black-headed Oriole	LC	39.2405	31	2018/08/01
<i>Struthio camelus</i>	Common Ostrich	LC	1.2658	1	2011/09/28
<i>Cypsiurus parvus</i>	African Palm-swift	LC	72.1519	57	2020/09/06
<i>Terpsiphone viridis</i>	African Paradise-flycatcher	LC	39.2405	31	2020/09/06
<i>Vidua paradisaea</i>	Long-tailed Paradise-whydah	LC	1.2658	1	2019/01/05
<i>Pavo cristatus</i>	Common Peacock	LC	0	0	-
<i>Anthoscopus caroli</i>	Grey Penduline-tit	LC	5.0633	4	2013/11/26
<i>Petronia superciljaris</i>	Yellow-throated Petronia	LC	2.5316	2	2020/01/25
<i>Anthus cinnamomeus</i>	African Pipit	LC	12.6582	10	2018/08/01
<i>Anthus lineiventris</i>	Striped Pipit	LC	7.5949	6	2014/12/06
<i>Charadrius tricollaris</i>	Three-banded Plover	LC	30.3797	24	2017/02/14
<i>Prinia subflava</i>	Tawny-flanked Prinia	LC	93.6709	74	2020/09/06
<i>Dryoscopus cubla</i>	Black-backed Puffback	LC	65.8228	52	2020/09/06
<i>Ispidina picta</i>	African Pygmy-Kingfisher	LC	3.7975	3	2014/12/15
<i>Coturnix delegorguei</i>	Harlequin Quail	LC	1.2658	1	2018/02/22
<i>Ortygospiza atricollis</i>	African Quailfinch	LC	1.2658	1	2012/04/29
<i>Quelea quelea</i>	Red-billed Quelea	LC	10.1266	8	2018/02/22
<i>Rallus caerulescens</i>	African Rail	LC	1.2658	1	2015/11/18
<i>Corvus albicollis</i>	White-necked Raven	LC	0	0	-
<i>Acrocephalus baeticatus</i>	African Reed-warbler	LC	35.443	28	2017/02/14
<i>Acrocephalus arundinaceus</i>	Great Reed-warbler	LC	7.5949	6	2016/02/04
<i>Cossypha caffra</i>	Cape Robin-chat	LC	59.4937	47	2019/04/09
<i>Cossypha natalensis</i>	Red-capped Robin-chat	LC	24.0506	19	2017/10/01
<i>Cossypha heuglini</i>	White-browed Robin-chat	LC	78.481	62	2020/09/06
<i>Cossypha humeralis</i>	White-throated Robin-chat	LC	25.3165	20	2020/09/06
<i>Bradypterus baboecala</i>	Little Rush-warbler	LC	58.2278	46	2019/04/09
<i>Psalidoprocne holomelaena</i>	Black (Southern race) Saw-wing	LC	41.7722	33	2020/01/25
<i>Rhinopomastus cyanomelas</i>	Common Scimitarbill	LC	17.7215	14	2020/09/06
<i>Cercotrichas leucophrys</i>	White-browed Scrub-robin	LC	70.8861	56	2020/09/06
<i>Criithagra gularis</i>	Streaky-headed Seedeater	LC	86.0759	68	2020/09/06

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<i>Lanius collurio</i>	Red-backed Shrike	LC	7.5949	6	2019/04/09
<i>Circaetus cinereus</i>	Brown Snake-eagle	LC	8.8608	7	2019/04/09
<i>Passer domesticus</i>	House Sparrow	LC	62.0253	49	2018/08/01
<i>Passer diffusus</i>	Southern Grey-headed Sparrow	LC	72.1519	57	2020/09/06
<i>Accipiter melanoleucus</i>	Black Sparrowhawk	LC	5.0633	4	2016/01/21
<i>Accipiter minullus</i>	Little Sparrowhawk	LC	1.2658	1	2009/12/23
<i>Platalea alba</i>	African Spoonbill	LC	1.2658	1	2012/11/10
<i>Pternistis natalensis</i>	Natal Spurfowl	LC	77.2152	61	2020/01/25
<i>Lamprotornis nitens</i>	Cape Glossy Starling	LC	68.3544	54	2020/09/06
<i>Onychognathus morio</i>	Red-winged Starling	LC	10.1266	8	2020/09/06
<i>Cinnyricinclus leucogaster</i>	Violet-backed Starling	LC	37.9747	30	2020/01/25
<i>Creatophora cinerea</i>	Wattled Starling	LC	1.2658	1	2012/11/10
<i>Saxicola torquatus</i>	African Stonechat	LC	48.1013	38	2018/06/18
<i>Ciconia ciconia</i>	White Stork	LC	1.2658	1	2014/12/29
<i>Chalcomitra amethystina</i>	Amethyst Sunbird	LC	83.5443	66	2020/09/06
<i>Hedydipna collaris</i>	Collared Sunbird	LC	20.2532	16	2019/04/09
<i>Cinnyris afer</i>	Greater Double-collared Sunbird	LC	15.1899	12	2020/09/06
<i>Chalcomitra senegalensis</i>	Scarlet-chested Sunbird	LC	49.3671	39	2020/09/06
<i>Cinnyris chalybeus</i>	Southern Double-collared Sunbird	LC	1.2658	1	2013/02/12
<i>Cinnyris talatala</i>	White-bellied Sunbird	LC	87.3418	69	2020/01/25
<i>Hirundo rustica</i>	Barn Swallow	LC	59.4937	47	2020/01/25
<i>Hirundo cucullata</i>	Greater Striped Swallow	LC	21.519	17	2019/01/05
<i>Pseudhirundo griseopyga</i>	Grey-rumped Swallow	LC	18.9873	15	2019/04/09
<i>Hirundo abyssinica</i>	Lesser Striped Swallow	LC	77.2152	61	2020/09/06
<i>Hirundo albigularis</i>	White-throated Swallow	LC	27.8481	22	2017/10/01
<i>Hirundo smithii</i>	Wire-tailed Swallow	LC	32.9114	26	2019/04/09
<i>Acrocephalus gracilirostris</i>	Lesser Swamp-warbler	LC	48.1013	38	2019/04/09
<i>Apus barbatus</i>	African Black Swift	LC	1.2658	1	2007/11/30
<i>Tachymarptis melba</i>	Alpine Swift	LC	1.2658	1	2007/11/30
<i>Apus affinis</i>	Little Swift	LC	32.9114	26	2017/01/04
<i>Apus caffer</i>	White-rumped Swift	LC	32.9114	26	2019/04/09
<i>Tchagra senegalus</i>	Black-crowned Tchagra	LC	64.557	51	2020/09/06
<i>Tchagra australis</i>	Brown-crowned Tchagra	LC	3.7975	3	2013/11/26
<i>Burhinus capensis</i>	Spotted Thick-knee	LC	5.0633	4	2020/09/06
<i>Psophocichla litsipsirupa</i>	Groundscraper Thrush	LC	3.7975	3	2016/01/21
<i>Turdus libonyanus</i>	Kurrichane Thrush	LC	70.8861	56	2020/09/06
<i>Pogoniulus chrysoconus</i>	Yellow-fronted Tinkerbird	LC	53.1646	42	2019/04/09
<i>Pogoniulus bilineatus</i>	Yellow-rumped Tinkerbird	LC	13.9241	11	2018/02/22
<i>Parus niger</i>	Southern Black Tit	LC	31.6456	25	2020/09/06
<i>Myioparus plumbeus</i>	Grey Tit-flycatcher	LC	3.7975	3	2020/09/06
<i>Gallirex porphyreolophus</i>	Purple-crested Turaco	LC	78.481	62	2020/09/06
<i>Streptopelia capicola</i>	Cape Turtle-dove	LC	87.3418	69	2020/09/06
<i>Mandingoa nitidula</i>	Green Twinspot	LC	2.5316	2	2015/01/20

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<i>Motacilla aguimp</i>	African Pied Wagtail	LC	21.519	17	2019/01/05
<i>Motacilla capensis</i>	Cape Wagtail	LC	35.443	28	2018/02/22
<i>Schoenicola brevirostris</i>	Broad-tailed Warbler	LC	6.3291	5	2014/12/29
<i>Chloropeta natalensis</i>	Dark-capped Yellow Warbler	LC	49.3671	39	2019/04/09
<i>Acrocephalus palustris</i>	Marsh Warbler	LC	15.1899	12	2016/02/26
<i>Phylloscopus trochilus</i>	Willow Warbler	LC	29.1139	23	2017/02/14
<i>Uraeginthus angolensis</i>	Blue Waxbill	LC	15.1899	12	2020/09/06
<i>Estrilda astrild</i>	Common Waxbill	LC	77.2152	61	2019/04/09
<i>Amandava subflava</i>	Orange-breasted Waxbill	LC	16.4557	13	2018/02/22
<i>Coccygia melanotis</i>	Sweet Waxbill	LC	3.7975	3	2014/12/29
<i>Ploceus capensis</i>	Cape Weaver	LC	39.2405	31	2020/09/06
<i>Ploceus xanthops</i>	Golden Weaver	LC	75.9494	60	2020/09/06
<i>Anaplectes rubriceps</i>	Red-headed Weaver	LC	2.5316	2	2020/09/06
<i>Ploceus ocularis</i>	Spectacled Weaver	LC	78.481	62	2020/09/06
<i>Amblyospiza albifrons</i>	Thick-billed Weaver	LC	60.7595	48	2020/09/06
<i>Ploceus cucullatus</i>	Village Weaver	LC	68.3544	54	2020/09/06
<i>Oenanthe pileata</i>	Capped Wheatear	LC	1.2658	1	2010/11/21
<i>Zosterops virens</i>	Cape White-eye	LC	88.6076	70	2020/09/06
<i>Vidua macroura</i>	Pin-tailed Whydah	LC	74.6835	59	2020/09/06
<i>Euplectes axillaris</i>	Fan-tailed Widowbird	LC	65.8228	52	2018/08/01
<i>Euplectes ardens</i>	Red-collared Widowbird	LC	84.8101	67	2020/01/25
<i>Euplectes albonotatus</i>	White-winged Widowbird	LC	8.8608	7	2016/02/04
<i>Turtur chalcospilos</i>	Emerald-spotted Wood-dove	LC	73.4177	58	2020/09/06
<i>Phoeniculus purpureus</i>	Green Wood-hoopoe	LC	16.4557	13	2020/01/25
<i>Strix woodfordii</i>	African Wood-owl	LC	2.5316	2	2017/10/01
<i>Dendropicos namaquus</i>	Bearded Woodpecker	LC	7.5949	6	2015/01/21
<i>Dendropicos fuscescens</i>	Cardinal Woodpecker	LC	48.1013	38	2018/08/01
<i>Campethera abingoni</i>	Golden-tailed Woodpecker	LC	41.7722	33	2020/09/06
<i>Jynx ruficollis</i>	Red-throated Wryneck	LC	54.4304	43	2020/01/25



## ANNEXURE B ADU SPECIES LISTS

### FrogMAP

Scientific Name	Common Name	Red List Category	Number of Records	Last Recorded
<i>Leptopelis mossambicus</i>	Brownbacked Tree Frog	Least Concern	5	2008/11/24
<i>Breviceps adspersus</i>	Bushveld Rain Frog	Least Concern	6	2009/11/14
<i>Schismaderma carens</i>	Red Toad	Least Concern	8	1998/04/06
<i>Sclerophrys capensis</i>	Raucous Toad	Least Concern	1	1981/09/26
<i>Sclerophrys garmani</i>	Olive Toad	Least Concern (IUCN, 2016)	2	1997/12/27
<i>Sclerophrys gutturalis</i>	Guttural Toad	Least Concern (IUCN, 2016)	17	2016/04/02
<i>Sclerophrys pusilla</i>	Flatbacked Toad	Least Concern (IUCN, 2016)	3	2018/12/26
<i>Hadromophryne natalensis</i>	Natal Cascade Frog	Least Concern	1	1987/04/26
<i>Hyperolius marmoratus</i>	Painted Reed Frog	Least Concern (IUCN ver 3.1, 2013)	14	2017/01/24
<i>Hyperolius marmoratus taeniatus</i>	Painted Reed Frog (subsp. taeniatus)	Least Concern (IUCN ver 3.1, 2013)	1	2020/01/23
<i>Hyperolius pusillus</i>	Water Lily Frog	Least Concern	2	1997/12/27
<i>Hyperolius semidiscus</i>	Yellowstriped Reed Frog	Least Concern	1	
<i>Hyperolius tuberilinguis</i>	Tinker Reed Frog	Least Concern	2	1997/12/27
<i>Kassina senegalensis</i>	Bubbling Kassina	Least Concern	7	1997/12/27
<i>Phrynomantis bifasciatus</i>	Banded Rubber Frog	Least Concern	1	1998/01/30
<i>Phrynobatrachus mababiensis</i>	Dwarf Puddle Frog	Least Concern (IUCN, 2014)	1	
<i>Phrynobatrachus natalensis</i>	Snoring Puddle Frog	Least Concern (IUCN, 2013)	11	1998/12/28
<i>Xenopus laevis</i>	Common Platanna	Least Concern	1	
<i>Ptychadena anchietae</i>	Plain Grass Frog	Least Concern	1	1997/12/26
<i>Ptychadena oxyrhynchus</i>	Sharpnosed Grass Frog	Least Concern	2	1998/01/30
<i>Amietia delalandii</i>	Delalande's River Frog	Least Concern (2017)	8	2018/11/10
<i>Cacosternum parvum</i>	Mountain Caco	Least Concern (2013)	1	
<i>Tomopterna marmorata</i>	Russetbacked Sand Frog	Least Concern	1	1996/01/02
<i>Tomopterna natalensis</i>	Natal Sand Frog	Least Concern	11	2018/11/10
<i>Chiromantis xerampelina</i>	Southern Foam Nest Frog	Least Concern (2013)	3	2016/11/12

## LepiMAP

Family	Scientific Name	Common Name	Red List Category	Number of Records	Last Recorded
ADELIDAE	<i>Ceromitia trigoniferella</i>		Not listed	2	2013/10/04
CRAMBIDAE	<i>Achyra coelatalis</i>		Not listed	1	2016/01/15
CRAMBIDAE	<i>Bocchoris inspersalis</i>		Not listed	1	2018/05/26
CRAMBIDAE	<i>Diaphania indica</i>		Not listed	2	2014/05/17
CRAMBIDAE	<i>Diasemia disjectalis</i>		Not listed	1	2014/05/26
CRAMBIDAE	<i>Glyphodes bicolor</i>		Not listed	1	2012/11/09
CRAMBIDAE	<i>Obtusipalpis pardalis</i>		Not listed	2	2013/10/07
CRAMBIDAE	<i>Palpita unionalis</i>		Not listed	1	2014/04/25
CRAMBIDAE	<i>Spoladea recurvalis</i>		Not listed	1	2017/01/01
CRAMBIDAE	<i>Synclera traducalis</i>		Not listed	1	2014/05/06
EREBIDAE	<i>Acantharctia latifasciata</i>		Not listed	1	2013/10/09
EREBIDAE	<i>Amerila bauri</i>		Not listed	2	2008/12/22
EREBIDAE	<i>Amphicallia bellatrix</i>		Not listed	1	2008/06/13
EREBIDAE	<i>Anoba plumipes</i>		Not listed	1	2006/02/07
EREBIDAE	<i>Asota speciosa</i>		Not listed	1	2008/09/01
EREBIDAE	<i>Bamra marmorifera</i>		Not listed	1	2007/02/02
EREBIDAE	<i>Chalciope pusilla</i>		Not listed	1	2013/11/08
EREBIDAE	<i>Cyligramma latona</i>		Not listed	4	2017/01/01
EREBIDAE	<i>Dysgonia angularis</i>		Not listed	2	2016/01/15
EREBIDAE	<i>Dysgonia torrida</i>		Not listed	2	2016/04/02
EREBIDAE	<i>Eilema sanguicosta</i>		Not listed	1	2016/01/15
EREBIDAE	<i>Erebus walkeri</i>		Not listed	1	2013/09/23
EREBIDAE	<i>Eublemma anachoresis</i>		Not listed	2	2019/03/01
EREBIDAE	<i>Euproctis bicolor</i>		Not listed	1	2016/01/15
EREBIDAE	<i>Grammodes stolidia</i>		Not listed	2	2020/01/23
EREBIDAE	<i>Hypopyra capensis</i>		Not listed	5	2014/04/17
EREBIDAE	<i>Ilemodes astriga</i>		Not listed	1	2013/10/28
EREBIDAE	<i>Metarctia lateritia</i>			1	2015/10/29
EREBIDAE	<i>Parachalciope mahura</i>		Not listed	1	2008/12/24
EREBIDAE	<i>Plecopterodes moderata</i>		Not listed	2	2012/11/09
EREBIDAE	<i>Pseudonaclia puella</i>		Not listed	1	2013/11/29
EREBIDAE	<i>Rhanidophora cinctigutta</i>		Not listed	1	2013/11/10
EREBIDAE	<i>Siccia caffra</i>		Not listed	1	2005/01/07
EREBIDAE	<i>Sphingomorpha chlorea</i>		Not listed	2	2015/11/27
EREBIDAE	<i>Teracotona rhodophaea</i>		Not listed	1	2015/11/24
EUPTEROTIDAE	<i>Tantaliana tantalus</i>			1	2008/02/13
EUPTEROTIDAE	<i>Tissanga pretoriae</i>		Not listed	1	2013/12/06
EUTELIIDAE	<i>Eutelia subrubens</i>		Not listed	1	2007/02/02
GEOMETRIDAE	<i>Acanthovalva inconspicuaria</i>		Not Threatened (NT) [not an IUCN category]	1	2014/05/22
GEOMETRIDAE	<i>Afrophyla vethi</i>		Not Threatened (NT) [not an IUCN category]	1	2008/10/18

Family	Scientific Name	Common Name	Red List Category	Number of Records	Last Recorded
GEOMETRIDAE	<i>Chiasmia observata</i>		Not Threatened (NT) [not an IUCN category]	1	2015/05/17
GEOMETRIDAE	<i>Chiasmia subcurvaria</i>		Not listed	5	2019/03/02
GEOMETRIDAE	<i>Isturgia arizeloides</i>		Not Threatened (NT) [not an IUCN category]	1	2012/11/09
GEOMETRIDAE	<i>Mixocera frustratoria</i>		Not Threatened (NT) [not an IUCN category]	1	2007/02/02
GEOMETRIDAE	<i>Problepsis digammata</i>		Not Threatened (NT) [not an IUCN category]	1	2013/10/05
HEPIALIDAE	<i>Eudalaca ammon</i>		Not listed	1	2015/11/19
HESPERIIDAE	<i>Abantis paradisea</i>	Paradise skipper	Least Concern (SABCA 2013)	1	1938/10/05
HESPERIIDAE	<i>Abantis venosa</i>	Veined skipper	Least Concern (SABCA 2013)	1	1983/12/21
HESPERIIDAE	<i>Acleros mackeenii mackeenii</i>	Macken's dart	Least Concern (SABCA 2013)	23	2015/12/19
HESPERIIDAE	<i>Afrogegenes hottentota</i>	Masked dodger	Least Concern (SABCA 2013)	15	2006/06/11
HESPERIIDAE	<i>Afrogegenes letterstedti</i>	Brown dodger	Least Concern (SABCA 2013)	1	2008/07/19
HESPERIIDAE	<i>Borbo fallax</i>	False swift	Least Concern (SABCA 2013)	2	1986/03/12
HESPERIIDAE	<i>Borbo fatuellus fatuellus</i>	Long-horned swift	Least Concern (SABCA 2013)	19	2018/08/17
HESPERIIDAE	<i>Caprona pillaana</i>	Ragged skipper	Least Concern (SABCA 2013)	1	1983/12/21
HESPERIIDAE	<i>Coeliades forestan forestan</i>	Striped policeman	Least Concern (SABCA 2013)	4	2019/05/13
HESPERIIDAE	<i>Coeliades keithloa</i>	Red-tab policeman	Least Concern (SABCA 2013)	2	1990/01/01
HESPERIIDAE	<i>Coeliades pisistratus</i>	Two-pip policeman	Least Concern (SABCA 2013)	1	1983/12/27
HESPERIIDAE	<i>Eretis djaelaelae</i>	Marbled elf	Least Concern (SABCA 2013)	1	1983/01/27
HESPERIIDAE	<i>Eretis umbra umbra</i>	Small marbled elf	Least Concern (SABCA 2013)	3	1997/09/06
HESPERIIDAE	<i>Gegenes pumilio gambica</i>	Dark dodger	Least Concern (SABCA 2013)	1	1918/05/15
HESPERIIDAE	<i>Kedestes callicles</i>	Pale ranger	Least Concern (SABCA 2013)	2	1992/03/15
HESPERIIDAE	<i>Kedestes wallengrenii wallengrenii</i>	White-streaked ranger	Least Concern (SABCA 2013)	2	1996/09/08
HESPERIIDAE	<i>Larsenia gemella</i>	Twin swift	Least Concern (SABCA 2013)	2	2014/03/29
HESPERIIDAE	<i>Metisella meninx</i>	Marsh sylph	Least Concern (SABCA 2013)	1	1903/12/15
HESPERIIDAE	<i>Netrobalane canopus</i>	Buff-tipped skipper	Least Concern (SABCA 2013)	1	1964/03/12
HESPERIIDAE	<i>Parnara monasi</i>	Water watchman	Least Concern (SABCA 2013)	3	1993/03/21
HESPERIIDAE	<i>Pelopidas mathias</i>	Black-branded swift	Least Concern (SABCA 2013)	1	2013/05/22
HESPERIIDAE	<i>Pelopidas thrax</i>	White-branded swift	Least Concern (SABCA 2013)	2	2014/04/09
HESPERIIDAE	<i>Platylesches ayresii</i>	Peppered hopper	Least Concern (SABCA 2013)	10	1996/09/10
HESPERIIDAE	<i>Platylesches dolomitica</i>	Spring hopper	Least Concern (SABCA 2013)	4	1979/09/06

Family	Scientific Name	Common Name	Red List Category	Number of Records	Last Recorded
HESPERIIDAE	<i>Platylesches galesa</i>	White-tail hopper	Least Concern (SABCA 2013)	1	2010/08/07
HESPERIIDAE	<i>Platylesches moritili</i>	Honey hopper	Least Concern (SABCA 2013)	2	1918/05/15
HESPERIIDAE	<i>Platylesches neba</i>	Flower-girl hopper	Least Concern (SABCA 2013)	1	1997/09/06
HESPERIIDAE	<i>Platylesches picanini</i>	Banded hopper	Least Concern (SABCA 2013)	3	1983/12/30
HESPERIIDAE	<i>Platylesches robustus robustus</i>	Robust hopper	Least Concern (SABCA 2013)	2	1938/12/16
HESPERIIDAE	<i>Sarangesa motozi</i>	Forest elfin	Least Concern (SABCA 2013)	3	2014/09/12
HESPERIIDAE	<i>Sarangesa phidyle</i>	Small elfin	Least Concern (SABCA 2013)	2	1918/05/15
HESPERIIDAE	<i>Sarangesa seineri seineri</i>	Dark elfin	Least Concern (SABCA 2013)	6	2014/09/24
HESPERIIDAE	<i>Spialia depauperata australis</i>	Wandering sandman	Least Concern (SABCA 2013)	1	1994/01/29
HESPERIIDAE	<i>Spialia dromus</i>	Forest sandman	Least Concern (SABCA 2013)	4	2014/03/30
HESPERIIDAE	<i>Spialia ferax</i>	Striped sandman	Least Concern (SABCA 2013)	5	1996/09/07
HESPERIIDAE	<i>Spialia secessus</i>	Wolkberg sandman	Least Concern (SABCA 2013)	5	1954/07/10
HESPERIIDAE	<i>Spialia spio</i>	Mountain sandman	Least Concern (SABCA 2013)	2	2016/04/01
HESPERIIDAE	<i>Tagiades flesus</i>	Clouded flat	Least Concern (SABCA 2013)	36	2019/09/20
HESPERIIDAE	<i>Tsitana tsita</i>	Dismal sylph	Least Concern (SABCA 2013)	7	1983/12/30
HESPERIIDAE	<i>Zenonia zeno</i>	Orange-spotted hopper	Least Concern (SABCA 2013)	1	2010/12/21
HESPERIIDAE	<i>Zophopetes dysmephila</i>	Palm-tree night-fighter	Least Concern (SABCA 2013)	14	1963/11/15
LIMACODIDAE	<i>Latoia latistriga</i>		Not listed	1	2020/02/14
LIMACODIDAE	<i>Micraphe lateritia</i>		Not listed	1	2013/10/11
LIMACODIDAE	<i>Parapluda inevitabilis</i>		Not listed	1	2007/02/02
LYCAENIDAE	<i>Actizera lucida</i>	Rayed blue	Least Concern (SABCA 2013)	1	2014/04/09
LYCAENIDAE	<i>Aloeides aranda</i>	Yellow russet	Least Concern (SABCA 2013)	2	1983/12/27
LYCAENIDAE	<i>Aloeides damarensis mashona</i>	Damara russet	Least Concern (SABCA 2013)	1	1993/03/21
LYCAENIDAE	<i>Aloeides dryas</i>	Transvaal russet	Least Concern (SABCA 2013)	3	1983/12/27
LYCAENIDAE	<i>Aloeides molomo coalescens</i>	Mottled russet		1	1973/09/15
LYCAENIDAE	<i>Aloeides molomo molomo</i>	Mottled russet	Least Concern (SABCA 2013)	7	1973/09/15
LYCAENIDAE	<i>Aloeides swanepoeli</i>	Grassveld russet	Least Concern (SABCA 2013)	1	1974/11/02
LYCAENIDAE	<i>Anthene amarah amarah</i>	Black-striped ciliate blue	Least Concern (SABCA 2013)	11	2016/12/20
LYCAENIDAE	<i>Anthene definita definita</i>	Steel-blue-ciliate blue	Least Concern (SABCA 2013)	3	2013/09/07
LYCAENIDAE	<i>Anthene livida livida</i>	Pale ciliate blue	Least Concern (SABCA 2013)	5	2014/07/25
LYCAENIDAE	<i>Axiocerses amanga amanga</i>	Bush scarlet	Least Concern (SABCA 2013)	3	2011/03/20
LYCAENIDAE	<i>Axiocerses tjoane tjoane</i>	Eastern scarlet	Least Concern (SABCA 2013)	13	2016/02/04
LYCAENIDAE	<i>Azanus jesous</i>	Topaz babul blue	Least Concern (SABCA 2013)	6	2016/02/04

Family	Scientific Name	Common Name	Red List Category	Number of Records	Last Recorded
LYCAENIDAE	<i>Azanus mirza</i>	Pale babul blue	Least Concern (SABCA 2013)	6	2015/12/02
LYCAENIDAE	<i>Azanus natalensis</i>	Natal babul blue	Least Concern (SABCA 2013)	14	2017/01/24
LYCAENIDAE	<i>Azanus ubaldus</i>	Velvet-spotted babul blue	Least Concern (SABCA 2013)	1	2010/02/06
LYCAENIDAE	<i>Cacyreus lingeus</i>	Bush bronze	Least Concern (SABCA 2013)	13	2015/05/15
LYCAENIDAE	<i>Cacyreus marshalli</i>	Common geranium bronze	Least Concern (SABCA 2013)	4	2014/09/12
LYCAENIDAE	<i>Cacyreus virilis</i>	Mocker bronze	Least Concern (SABCA 2013)	9	2018/05/26
LYCAENIDAE	<i>Chilades trochylus</i>	Grass jewel blue	Least Concern (SABCA 2013)	1	1974/11/02
LYCAENIDAE	<i>Cigaritis ella</i>	Ella's silverline	Least Concern (SABCA 2013)	2	1996/09/07
LYCAENIDAE	<i>Cigaritis mozambica</i>	Mozambique silverline	Least Concern (SABCA 2013)	2	1983/12/21
LYCAENIDAE	<i>Cigaritis natalensis</i>	Natal silverline	Least Concern (SABCA 2013)	11	2019/05/13
LYCAENIDAE	<i>Crudaria leroma</i>	Silver-spotted grey	Least Concern (SABCA 2013)	2	1938/10/06
LYCAENIDAE	<i>Cupidopsis cissus cissus</i>	Meadow blue	Least Concern (SABCA 2013)	3	1986/03/12
LYCAENIDAE	<i>Deudorix antalus</i>	Brown playboy	Least Concern (SABCA 2013)	9	2016/12/19
LYCAENIDAE	<i>Durbania amakosa ayresi</i>	Amakoza rocksitter	Least Concern (SABCA 2013)	1	1983/12/20
LYCAENIDAE	<i>Eicochrysops hippocrates</i>	White-tipped ash blue	Least Concern (SABCA 2013)	19	2020/01/23
LYCAENIDAE	<i>Eicochrysops messapus mahallakoaena</i>	Cupreous ash blue	Least Concern (SABCA 2013)	3	2013/05/22
LYCAENIDAE	<i>Euchrysops malathana</i>	Grey smoky blue	Least Concern (SABCA 2013)	18	2016/04/01
LYCAENIDAE	<i>Euchrysops osiris</i>	Osiris smoky blue	Least Concern (SABCA 2013)	5	2010/04/11
LYCAENIDAE	<i>Hemiolaus caeculus caeculus</i>	Azure hairstreak	Least Concern (SABCA 2013)	1	1983/12/28
LYCAENIDAE	<i>Hypolycaena philippus philippus</i>	Purple-brown hairstreak	Least Concern (SABCA 2013)	17	2019/03/02
LYCAENIDAE	<i>Iolais pallene</i>	Saffron sapphire	Least Concern (SABCA 2013)	1	1941/12/15
LYCAENIDAE	<i>Iolais silarus silarus</i>	Straight-line sapphire	Least Concern (SABCA 2013)	5	2019/05/13
LYCAENIDAE	<i>Iolais trimeni</i>	Protea sapphire	Least Concern (SABCA 2013)	1	1995/09/10
LYCAENIDAE	<i>Lachnocnema bibulus</i>	Common woolly legs	Least Concern (SABCA 2013)	5	1993/03/21
LYCAENIDAE	<i>Lachnocnema laches</i>	Southern pied woolly legs	Least Concern (SABCA 2013)	1	2015/05/15
LYCAENIDAE	<i>Lampides boeticus</i>	Pea blue	Least Concern (SABCA 2013)	8	2014/04/17
LYCAENIDAE	<i>Lepidochrysops glauca</i>	Silvery giant cupid	Least Concern (SABCA 2013)	2	1992/03/15
LYCAENIDAE	<i>Lepidochrysops ignota</i>	Zulu giant cupid	Least Concern (SABCA 2013)	1	1963/09/24
LYCAENIDAE	<i>Lepidochrysops patricia</i>	Patrician giant cupid	Least Concern (SABCA 2013)	1	1959/12/15
LYCAENIDAE	<i>Lepidochrysops plebeia plebeia</i>	Twin-spot giant cupid	Least Concern (SABCA 2013)	3	1983/12/27

Family	Scientific Name	Common Name	Red List Category	Number of Records	Last Recorded
LYCAENIDAE	<i>Lepidochrysops procera</i>	Potchefstro om giant cupid	Least Concern (SABCA 2013)	1	1989/01/27
LYCAENIDAE	<i>Lepidochrysops tantalus</i>	King giant cupid	Least Concern (SABCA 2013)	2	1963/10/02
LYCAENIDAE	<i>Leptomyrina gorgias gorgias</i>	Lilac-based black-eye	Least Concern (SABCA 2013)	11	2019/03/02
LYCAENIDAE	<i>Leptomyrina hirundo</i>	Tailed black-eye	Least Concern (SABCA 2013)	39	2019/05/19
LYCAENIDAE	<i>Leptotes babaulti</i>	Babault's zebra blue	Least Concern (SABCA 2013)	2	1918/04/15
LYCAENIDAE	<i>Leptotes brevidentatus</i>	Short- toothed zebra blue	Least Concern (SABCA 2013)	2	1988/03/12
LYCAENIDAE	<i>Leptotes jeanneli</i>	Jeannel's zebra blue	Least Concern (SABCA 2013)	1	1974/11/02
LYCAENIDAE	<i>Leptotes pirithous pirithous</i>	Common zebra blue	Least Concern (SABCA 2013)	36	2013/05/23
LYCAENIDAE	<i>Myrina dermaptera dermaptera</i>	Lesser fig tree blue	Least Concern (SABCA 2013)	1	1963/12/24
LYCAENIDAE	<i>Myrina silenus ficedula</i>	Common fig tree blue	Least Concern (SABCA 2013)	5	2018/01/14
LYCAENIDAE	<i>Pentila tropicalis fuscipunctata</i>	Spotted buff	Least Concern (SABCA 2013)	2	2011/04/16
LYCAENIDAE	<i>Pentila tropicalis tropicalis</i>	Spotted buff	Least Concern (SABCA 2013)	2	2011/04/22
LYCAENIDAE	<i>Pseudonacaduba sichela sichela</i>	Dusky line blue	Least Concern (SABCA 2013)	2	2020/01/23
LYCAENIDAE	<i>Tarucus sybaris sybaris</i>	Dotted pierrot	Least Concern (SABCA 2013)	1	1983/12/27
LYCAENIDAE	<i>Tuxentius calice</i>	White pie	Least Concern (SABCA 2013)	2	1996/09/07
LYCAENIDAE	<i>Tuxentius melaena melaena</i>	Black pie	Least Concern (SABCA 2013)	5	2013/05/22
LYCAENIDAE	<i>Uranotauma nubifer nubifer</i>	Black heart	Least Concern (SABCA 2013)	2	1974/11/02
LYCAENIDAE	<i>Deudorix dinochares</i>	Apricot playboy	Least Concern (SABCA 2013)	3	2019/05/13
LYCAENIDAE	<i>Deudorix diocles</i>	Orange- barred playboy	Least Concern (SABCA 2013)	3	2019/05/13
LYCAENIDAE	<i>Zintha hintza hintza</i>	Hintza pierrot	Least Concern (SABCA 2013)	2	2016/12/20
LYCAENIDAE	<i>Zizeeria knysna knysna</i>	African grass blue	Least Concern (SABCA 2013)	42	2019/03/02
LYCAENIDAE	<i>Zizina otis antanossa</i>	African clover blue	Least Concern (SABCA 2013)	4	2019/03/01
LYCAENIDAE	<i>Zizula hylax</i>	Tiny grass blue	Least Concern (SABCA 2013)	7	2020/01/23
NOCTUIDAE	<i>Acontia guttifera</i>		Not listed	1	2016/12/15
NOCTUIDAE	<i>Agoma trimenii</i>		Not listed	2	2015/11/04
NOCTUIDAE	<i>Chrysodeixis chalcites</i>		Not listed	1	2014/05/17
NOCTUIDAE	<i>Schausia corydoni</i>		Not listed	1	2016/12/19
NOLIDAE	<i>Earias biplaga</i>		Not listed	1	2006/03/05
NOLIDAE	<i>Neaxestis rhoda</i>		Not listed	1	2016/01/15
NOLIDAE	<i>Risoba diplogramma</i>		Not listed	1	2007/02/02
NOTODONTIDAE	<i>Anaphe reticulata</i>		Not listed	1	2014/01/16
NYMPHALIDAE	<i>Acraea acara acara</i>	Acara acraea	Least Concern (SABCA 2013)	10	1994/01/29
NYMPHALIDAE	<i>Acraea aganice aganice</i>	Dark wanderer	Least Concern (SABCA 2013)	7	2010/03/06

Family	Scientific Name	Common Name	Red List Category	Number of Records	Last Recorded
NYMPHALIDAE	<i>Acraea aglaonice</i>	Clear-spotted acraea	Least Concern (SABCA 2013)	5	2014/04/09
NYMPHALIDAE	<i>Acraea anemosa</i>	Broad-bordered acraea	Least Concern (SABCA 2013)	4	1983/12/26
NYMPHALIDAE	<i>Acraea axina</i>	Little acraea	Least Concern (SABCA 2013)	2	2015/03/07
NYMPHALIDAE	<i>Acraea horta</i>	Garden acraea	Least Concern (SABCA 2013)	6	2009/01/23
NYMPHALIDAE	<i>Acraea natalica</i>	Black-based acraea	Least Concern (SABCA 2013)	7	1993/07/15
NYMPHALIDAE	<i>Acraea neobule neobule</i>	Wandering donkey acraea	Least Concern (SABCA 2013)	4	2015/05/15
NYMPHALIDAE	<i>Acraea nohara nohara</i>	Light red acraea	Least Concern (SABCA 2013)	19	1983/12/29
NYMPHALIDAE	<i>Acraea oncaea</i>	Window acraea	Least Concern (SABCA 2013)	44	2019/03/01
NYMPHALIDAE	<i>Acraea rabbaiae rabbaiae</i>	Clear-wing acraea		1	1938/10/06
NYMPHALIDAE	<i>Acraea violarum</i>	Speckled red acraea	Least Concern (SABCA 2013)	5	1984/01/15
NYMPHALIDAE	<i>Amauris albimaculata albimaculata</i>	Layman	Least Concern (SABCA 2013)	17	2019/09/20
NYMPHALIDAE	<i>Amauris albimaculata chirindana</i>	Layman		1	1984/01/02
NYMPHALIDAE	<i>Amauris echeria echeria</i>	Chief	Least Concern (SABCA 2013)	13	2019/09/20
NYMPHALIDAE	<i>Bicyclus anynana anynana</i>	Squinting bush brown	Least Concern (SABCA 2013)	18	2016/04/02
NYMPHALIDAE	<i>Bicyclus ena</i>	Grizzled bush brown	Least Concern (SABCA 2013)	10	1996/04/12
NYMPHALIDAE	<i>Bicyclus safitza safitza</i>	Black-haired bush brown	Least Concern (SABCA 2013)	39	2019/04/07
NYMPHALIDAE	<i>Brakefieldia perspicua perspicua</i>	Marsh patroller	Least Concern (SABCA 2013)	12	2014/04/09
NYMPHALIDAE	<i>Byblia anvatarata acheloia</i>	African joker	Least Concern (SABCA 2013)	2	1993/03/18
NYMPHALIDAE	<i>Byblia ilithyia</i>	Spotted joker	Least Concern (SABCA 2013)	1	1959/12/15
NYMPHALIDAE	<i>Cassionympha cassius</i>	Rainforest dull brown	Least Concern (SABCA 2013)	1	2019/02/23
NYMPHALIDAE	<i>Catacroptera cloanthe cloanthe</i>	Pirate	Least Concern (SABCA 2013)	4	1983/12/30
NYMPHALIDAE	<i>Charaxes achaemenes achaemenes</i>	Bushveld charaxes	Least Concern (SABCA 2013)	5	2019/05/13
NYMPHALIDAE	<i>Charaxes brutus natalensis</i>	White-barred charaxes	Least Concern (SABCA 2013)	4	2008/02/23
NYMPHALIDAE	<i>Charaxes candiope</i>	Green-veined charaxes	Least Concern (SABCA 2013)	1	2009/11/30
NYMPHALIDAE	<i>Charaxes cithaeron cithaeron</i>	Blue-spotted charaxes	Least Concern (SABCA 2013)	1	1973/12/15
NYMPHALIDAE	<i>Charaxes druceanus moerens</i>	Silver barred charaxes	Least Concern (SABCA 2013)	2	1974/11/15
NYMPHALIDAE	<i>Charaxes jahlusa rex</i>	Pearl-spotted charaxes	Least Concern (SABCA 2013)	1	2019/05/13
NYMPHALIDAE	<i>Charaxes saturnus saturnus</i>	Foxy charaxes	Least Concern (SABCA 2013)	2	1983/12/30
NYMPHALIDAE	<i>Charaxes vansoni</i>	Van Son's charaxes	Least Concern (SABCA 2013)	1	2015/05/15

Family	Scientific Name	Common Name	Red List Category	Number of Records	Last Recorded
NYMPHALIDAE	<i>Charaxes varanes varanes</i>	Pearl charaxes	Least Concern (SABCA 2013)	11	2019/05/19
NYMPHALIDAE	<i>Charaxes xiphares draconis</i>	Forest king charaxes	Least Concern (SABCA 2013)	2	1983/12/30
NYMPHALIDAE	<i>Danaus chrysippus orientis</i>	African plain tiger	Least Concern (SABCA 2013)	6	2015/05/16
NYMPHALIDAE	<i>Eurytela dryope angulata</i>	Golden piper	Least Concern (SABCA 2013)	9	2019/05/19
NYMPHALIDAE	<i>Eurytela hiarbas angustata</i>	Pied piper	Least Concern (SABCA 2013)	1	1940/01/13
NYMPHALIDAE	<i>Hamanumida daedalus</i>	Guineafowl	Least Concern (SABCA 2013)	1	1970/12/16
NYMPHALIDAE	<i>Hypolimnas anthedon wahlbergi</i>	Variable diadem	Least Concern (SABCA 2013)	2	2015/05/15
NYMPHALIDAE	<i>Hypolimnas misippus</i>	Common diadem	Least Concern (SABCA 2013)	10	2015/07/16
NYMPHALIDAE	<i>Junonia hierta cebrene</i>	Yellow pansy	Least Concern (SABCA 2013)	45	2020/01/23
NYMPHALIDAE	<i>Junonia natalica natalica</i>	Brown commodore	Least Concern (SABCA 2013)	11	2020/01/23
NYMPHALIDAE	<i>Junonia oenone oenone</i>	Dark blue pansy	Least Concern (SABCA 2013)	39	2020/01/26
NYMPHALIDAE	<i>Junonia orithya madagascariensis</i>	African blue pansy	Least Concern (SABCA 2013)	2	2010/12/21
NYMPHALIDAE	<i>Junonia terea elgiva</i>	Soldier pansy	Least Concern (SABCA 2013)	50	2020/03/06
NYMPHALIDAE	<i>Lachnoptera ayresii</i>	Blotched leopard	Least Concern (SABCA 2013)	1	2019/09/27
NYMPHALIDAE	<i>Libythea labdaca laius</i>	African snout	Least Concern (SABCA 2013)	9	2013/09/07
NYMPHALIDAE	<i>Melanitis leda</i>	Common evening brown	Least Concern (SABCA 2013)	9	2017/09/02
NYMPHALIDAE	<i>Neita extensa</i>	Savanna large ringlet	Least Concern (SABCA 2013)	2	1917/11/15
NYMPHALIDAE	<i>Neptis laeta</i>	Common barred sailer	Least Concern (SABCA 2013)	26	2018/08/17
NYMPHALIDAE	<i>Neptis penningtoni</i>	Pennington's sailer		1	1979/05/02
NYMPHALIDAE	<i>Neptis saclava marpessa</i>	Spotted sailer	Least Concern (SABCA 2013)	5	2019/05/19
NYMPHALIDAE	<i>Pardopsis punctatissima</i>	Polka dot	Least Concern (SABCA 2013)	5	1956/05/28
NYMPHALIDAE	<i>Phalanta eurytis eurytis</i>	Forest leopard	Least Concern (SABCA 2013)	4	2016/04/02
NYMPHALIDAE	<i>Phalanta phalantha aethiopica</i>	African leopard	Least Concern (SABCA 2013)	16	2020/01/23
NYMPHALIDAE	<i>Physcaeneura panda</i>	Dark-webbed ringlet	Least Concern (SABCA 2013)	2	1963/05/07
NYMPHALIDAE	<i>Precis antilope</i>	Darker commodore	Least Concern (SABCA 2013)	1	1956/05/10
NYMPHALIDAE	<i>Precis archesia archesia</i>	Garden inspector	Least Concern (SABCA 2013)	7	2017/12/18
NYMPHALIDAE	<i>Precis ceryne ceryne</i>	Marsh commodore	Least Concern (SABCA 2013)	4	2015/03/11
NYMPHALIDAE	<i>Precis octavia sesamus</i>	Southern gaudy commodore	Least Concern (SABCA 2013)	9	2010/08/18
NYMPHALIDAE	<i>Precis tugela tugela</i>	Dry-leaf commodore	Least Concern (SABCA 2013)	5	2010/12/21



Family	Scientific Name	Common Name	Red List Category	Number of Records	Last Recorded
NYMPHALIDAE	<i>Protogoniomorpha anacardii nebulosa</i>	Clouded Mother-of-pearl	Least Concern (SABCA 2013)	2	1983/12/30
NYMPHALIDAE	<i>Protogoniomorpha parhassus</i>	Common Mother-of-pearl	Least Concern (SABCA 2013)	28	2019/09/27
NYMPHALIDAE	<i>Pseudacraea boisduvalii trimenii</i>	Boisduval's false acraea	Least Concern (SABCA 2013)	14	2014/09/24
NYMPHALIDAE	<i>Pseudacraea eurytus imitator</i>	False wanderer	Least Concern (SABCA 2013)	1	2015/05/16
NYMPHALIDAE	<i>Sevenia boisduvali boisduvali</i>	Boisduval's tree nymph	Least Concern (SABCA 2013)	4	2019/05/19
NYMPHALIDAE	<i>Sevenia natalensis</i>	Bronze tree nymph	Least Concern (SABCA 2013)	1	1984/01/02
NYMPHALIDAE	<i>Telchinia burni</i>	Pale-yellow telchinia	Least Concern (SABCA 2013)	4	1922/10/15
NYMPHALIDAE	<i>Telchinia cabira</i>	Yellow-banded telchinia	Least Concern (SABCA 2013)	4	2015/09/23
NYMPHALIDAE	<i>Telchinia encedon encedon</i>	White-barred telchinia	Least Concern (SABCA 2013)	23	2018/06/01
NYMPHALIDAE	<i>Telchinia esebria</i>	Dusky telchinia	Least Concern (SABCA 2013)	15	2016/12/20
NYMPHALIDAE	<i>Telchinia rahira rahira</i>	Marsh telchinia	Least Concern (SABCA 2013)	4	1991/04/08
NYMPHALIDAE	<i>Telchinia serena</i>	Dancing telchinia	Least Concern (SABCA 2013)	17	2011/03/20
NYMPHALIDAE	<i>Vanessa cardui</i>	Painted lady	Least Concern (SABCA 2013)	4	2018/05/26
NYMPHALIDAE	<i>Ypthima asterope asterope</i>	African three-ring	Least Concern (SABCA 2013)	6	2007/12/16
NYMPHALIDAE	<i>Ypthima impura paupera</i>	Impure three-ring	Least Concern (SABCA 2013)	3	1940/01/04
PAPILIONIDAE	<i>Graphium angolanus angolanus</i>	Angola white lady	Least Concern (SABCA 2013)	22	2016/04/01
PAPILIONIDAE	<i>Graphium antheus</i>	Large striped swordtail	Least Concern (SABCA 2013)	1	2008/09/09
PAPILIONIDAE	<i>Graphium leonidas leonidas</i>	Veined swordtail	Least Concern (SABCA 2013)	1	1983/12/26
PAPILIONIDAE	<i>Graphium morania</i>	White lady	Least Concern (SABCA 2013)	2	1984/01/02
PAPILIONIDAE	<i>Papilio constantinus constantinus</i>	Shade swallowtail	Least Concern (SABCA 2013)	14	2019/03/02
PAPILIONIDAE	<i>Papilio dardanus cenea</i>	Mocker swallowtail	Least Concern (SABCA 2013)	32	2019/05/19
PAPILIONIDAE	<i>Papilio demodocus demodocus</i>	Citrus swallowtail	Least Concern (SABCA 2013)	27	2019/05/19
PAPILIONIDAE	<i>Papilio echerioides echerioides</i>	White-banded swallowtail	Least Concern (SABCA 2013)	6	2011/10/02
PAPILIONIDAE	<i>Papilio nireus lyaeus</i>	Narrow green-banded swallowtail	Least Concern (SABCA 2013)	25	2019/05/13
PIERIDAE	<i>Afrodryas leda</i>	Autumn-leaf vagrant	Least Concern (SABCA 2013)	1	1994/08/15
PIERIDAE	<i>Belenois aurota</i>	Pioneer caper white	Least Concern (SABCA 2013)	14	2019/03/02
PIERIDAE	<i>Belenois creona severina</i>	African caper white	Least Concern (SABCA 2013)	52	2020/01/26
PIERIDAE	<i>Belenois gidica abyssinica</i>	African veined white	Least Concern (SABCA 2013)	5	2012/11/09

Family	Scientific Name	Common Name	Red List Category	Number of Records	Last Recorded
PIERIDAE	<i>Belenois zochalia zochalia</i>	Forest caper white	Least Concern (SABCA 2013)	1	1946/05/14
PIERIDAE	<i>Catopsilia florella</i>	African migrant	Least Concern (SABCA 2013)	13	2019/04/07
PIERIDAE	<i>Colotis annae annae</i>	Scarlet tip	Least Concern (SABCA 2013)	1	1984/01/02
PIERIDAE	<i>Colotis antevippe gavis</i>	Red tip	Least Concern (SABCA 2013)	3	2010/12/20
PIERIDAE	<i>Colotis euipe omphale</i>	Southern round-winged orange tip	Least Concern (LC)	23	2019/05/19
PIERIDAE	<i>Colotis ione</i>	Bushveld purple tip	Least Concern (SABCA 2013)	9	2019/03/02
PIERIDAE	<i>Colotis regina</i>	Queen purple tip	Least Concern (SABCA 2013)	1	1983/12/18
PIERIDAE	<i>Colotis vesta argillaceus</i>	Southern veined arab	Least Concern (SABCA 2013)	2	1995/08/15
PIERIDAE	<i>Dixeia pigea</i>	Small ant-heap white	Least Concern (SABCA 2013)	5	2015/05/15
PIERIDAE	<i>Dixeia spilleri</i>	Sulphur ant-heap white	Least Concern (SABCA 2013)	6	1900/06/15
PIERIDAE	<i>Eronia cleodora</i>	Vine-leaf vagrant	Least Concern (SABCA 2013)	2	2008/07/08
PIERIDAE	<i>Eurema brigitta brigitta</i>	Broad-bordered grass yellow	Least Concern (SABCA 2013)	8	2012/08/04
PIERIDAE	<i>Eurema desjardinsii regularis</i>	Angled grass yellow	Least Concern (SABCA 2013)	14	2008/10/17
PIERIDAE	<i>Eurema hecabe solifera</i>	Lowveld yellow	Least Concern (SABCA 2013)	14	2019/09/27
PIERIDAE	<i>Leptosia alcesta inalcesta</i>	African wood white	Least Concern (SABCA 2013)	6	2015/05/16
PIERIDAE	<i>Mylothris agathina agathina</i>	Eastern dotted border	Least Concern (SABCA 2013)	14	2018/10/27
PIERIDAE	<i>Mylothris rueppellii haemus</i>	Twin dotted border	Least Concern (SABCA 2013)	4	2019/05/13
PIERIDAE	<i>Nepheronia argia variegata</i>	Large vagrant	Least Concern (SABCA 2013)	5	2000/05/10
PIERIDAE	<i>Pinacopteryx eriphia eriphia</i>	Zebra white	Least Concern (SABCA 2013)	3	2016/04/02
PIERIDAE	<i>Teracolus eris eris</i>	Banded gold tip	Least Concern (SABCA 2013)	2	2006/06/11
PYRALIDAE	<i>Mittonia hamptoni</i>			2	2016/12/24
SATURNIIDAE	<i>Argema mimosae</i>		Not listed	1	2006/02/07
SATURNIIDAE	<i>Bunaea alcinoe</i>		Not listed	3	2015/11/29
SATURNIIDAE	<i>Cirina forda</i>			1	2007/02/02
SATURNIIDAE	<i>Epiphora mythimnia</i>		Not listed	2	2010/11/25
SATURNIIDAE	<i>Urota sinope</i>		Not listed	1	2015/10/19
SPHINGIDAE	<i>Acherontia atropos</i>		Not listed	2	2011/04/04
SPHINGIDAE	<i>Basiothia medea</i>		Not listed	1	2008/02/25
SPHINGIDAE	<i>Daphnis nerii</i>		Not listed	1	2009/05/31
SPHINGIDAE	<i>Euchloron megaera</i>		Not listed	1	2010/04/19
SPHINGIDAE	<i>Hippotion celerio</i>		Not listed	1	2012/10/20
SPHINGIDAE	<i>Nephele vau</i>		Not listed	1	2011/03/27
SPHINGIDAE	<i>Pseudoclanis postica</i>		Not listed	1	2008/02/11
URANIIDAE	<i>Acropteryx illiturata</i>		Not listed	4	2012/01/03

Family	Scientific Name	Common Name	Red List Category	Number of Records	Last Recorded
YPONOMEUTIDAE	<i>Yponomeuta fumigata</i>		Not listed	1	2014/05/22

## MammalMAP

Scientific Name	Common Name	Red List Category	Number of Records	Last Recorded
<i>Cephalophus natalensis</i>	Red Duiker	Near Threatened (2016)	1	2015/07/11
<i>Cercopithecus albogularis erythrarchus</i>	Samango Monkey (subsp. erythrarchus)	Near Threatened (2016)	2	2014/09/11
<i>Leptailurus serval</i>	Serval	Near Threatened (2016)	4	2020/05/05
<i>Aonyx capensis</i>	African Clawless Otter	Near Threatened (2016)	1	2017/08/24
<i>Panthera pardus</i>	Leopard	Vulnerable (2016)	1	2010/04/21
<i>Lycaon pictus</i>	African wild dog	Endangered (2016)	1	1998/11/24
<i>Tragelaphus scriptus</i>	Bushbuck	Least Concern	1	2013/11/14
<i>Graphiurus (Graphiurus) murinus</i>	Forest African Dormouse	Least Concern	1	1974/11/15
<i>Hystrix africaeaustralis</i>	Cape Porcupine	Least Concern	3	2020/06/09
<i>Lepus saxatilis</i>	Scrub Hare	Least Concern	1	2017/09/02
<i>Aethomys namaquensis</i>	Namaqua Rock Mouse	Least Concern	1	1966/09/26
<i>Mus (Nannomys) minutoides</i>	Southern African Pygmy Mouse	Least Concern	1	1966/09/25
<i>Rattus rattus</i>	Roof Rat	Least Concern	2	1983/02/03
<i>Neoromicia nana</i>	Banana Pipistrelle	Least Concern	5	1966/09/26
<i>Genetta maculata</i>	Common Large-spotted Genet	Least Concern	9	2020/06/09
<i>Chlorocebus pygerythrus pygerythrus</i>	Vervet Monkey (subspecies pygerythrus)	Least Concern (2008)	2	2012/08/04
<i>Sylvicapra grimmia</i>	Bush Duiker	Least Concern (2016)	3	2020/05/01
<i>Canis adustus</i>	Side-striped Jackal	Least Concern (2016)	3	2020/05/10
<i>Chlorocebus pygerythrus</i>	Vervet Monkey	Least Concern (2016)	6	2020/05/11
<i>Papio ursinus</i>	Chacma Baboon	Least Concern (2016)	1	2016/03/03
<i>Caracal caracal</i>	Caracal	Least Concern (2016)	2	1972/03/25
<i>Otolemur crassicaudatus</i>	Brown Greater Galago	Least Concern (2016)	1	2016/06/11
<i>Atilax paludinosus</i>	Marsh Mongoose	Least Concern (2016)	8	2020/05/20
<i>Helogale parvula</i>	Common Dwarf Mongoose	Least Concern (2016)	2	2015/12/19
<i>Herpestes sanguineus</i>	Slender Mongoose	Least Concern (2016)	9	2020/05/21
<i>Ichneumia albicauda</i>	White-tailed Mongoose	Least Concern (2016)	4	2020/05/07
<i>Mungos mungo</i>	Banded Mongoose	Least Concern (2016)	2	2013/10/24
<i>Rhynchogale melleri</i>	Meller's Mongoose	Least Concern (2016)	1	2001/01/25
<i>Hippopotamus amphibius</i>	Common Hippopotamus	Least Concern (2016)	1	2006/03/22
<i>Aethomys ineptus</i>	Tete Veld Aethomys	Least Concern (2016)	2	1966/09/25
<i>Gerbilliscus leucogaster</i>	Bushveld Gerbil	Least Concern (2016)	1	1948/08/14
<i>Mellivora capensis</i>	Honey Badger	Least Concern (2016)	3	2020/05/02

Scientific Name	Common Name	Red List Category	Number of Records	Last Recorded
<i>Saccostomus campestris</i>	Southern African Pouched Mouse	Least Concern (2016)	3	1988/04/27
<i>Nycteris thebaica</i>	Egyptian Slit-faced Bat	Least Concern (2016)	2	2004/09/17
<i>Epomophorus crypturus</i>	Epomophorus crypturus	Least Concern (2016)	6	1962/09/04
<i>Epomophorus wahlbergi</i>	Wahlberg's Epauletted Fruit Bat	Least Concern (2016)	8	2016/06/11
<i>Crocidura flavescens</i>	Greater Red Musk Shrew	Least Concern (2016)	1	
<i>Crocidura hirta</i>	Lesser Red Musk Shrew	Least Concern (2016)	1	1959/09/25
<i>Potamochoerus larvatus</i>	Bush-pig	Least Concern (2016)	5	2020/05/29
<i>Thryonomys swinderianus</i>	Greater Cane Rat	Least Concern (2016)	1	2020/06/06
<i>Miniopterus fraterculus</i>	Lesser Long-fingered Bat	Least Concern (2016)	4	1966/09/26
<i>Miniopterus natalensis</i>	Natal Long-fingered Bat	Least Concern (2016)	24	1987/11/04
<i>Neoromicia capensis</i>	Cape Serotine	Least Concern (2016)	7	
<i>Scotophilus dinganii</i>	Yellow-bellied House Bat	Least Concern (2016)	1	2008/10/25
<i>Civettictis civetta</i>	African Civet	Least Concern (2016)	2	2020/05/03
<i>Genetta tigrina</i>	Cape Genet (Cape Large-spotted Genet)	Least Concern (2016)	3	1944/08/31

## ReptileMAP

Scientific Name	Common Name	Red List Category	Number of Records	Last Recorded
<i>Chamaesaura macrolepis</i>	Large-scaled Grass Lizard	Near Threatened (SARCA 2014)	4	1900/06/15
<i>Homoroselaps dorsalis</i>	Striped Harlequin Snake	Near Threatened (SARCA 2014)	4	1983/04/11
<i>Crocodylus niloticus</i>	Nile Crocodile	VU (SARCA 2014); LC (global, IUCN 2019)	1	2010/05/25
<i>Acanthocercus atricollis</i>	Southern Tree Agama	Least Concern (SARCA 2014)	8	2017/01/01
<i>Agama aculeata distanti</i>	Distant's Ground Agama	Least Concern (SARCA 2014)	6	1982/11/24
<i>Zygaspis vandami</i>	Van Dam's Dwarf Worm Lizard	Least Concern (SARCA 2014)	2	1900/06/15
<i>Bradypodion transvaalense</i>	Wolkberg Dwarf Chameleon	Least Concern (SARCA 2014)	3	1900/06/15
<i>Chamaeleo dilepis</i>	Common Flap-neck Chameleon	Least Concern (SARCA 2014)	8	2006/05/01
<i>Crotaphopeltis hotamboeia</i>	Red-lipped Snake	Least Concern (SARCA 2014)	5	2006/10/13
<i>Dasypeltis inornata</i>	Southern Brown Egg-eater	Least Concern (SARCA 2014)	3	1996/01/15
<i>Dasypeltis scabra</i>	Rhombic Egg-eater	Least Concern (SARCA 2014)	4	2003/02/15
<i>Philothamnus hoplogaster</i>	South Eastern Green Snake	Least Concern (SARCA 2014)	3	2000/09/03
<i>Philothamnus occidentalis</i>	Western Natal Green Snake	Least Concern (SARCA 2014)	3	2003/10/31
<i>Philothamnus semivariegatus</i>	Spotted Bush Snake	Least Concern (SARCA 2014)	4	2019/12/20
<i>Telescopus semiannulatus semiannulatus</i>	Eastern Tiger Snake	Least Concern (SARCA 2014)	4	1919/12/03
<i>Thelotornis capensis capensis</i>	Southern Twig Snake	Least Concern (SARCA 2014)	20	2019/03/02
<i>Chamaesaura anguina anguina</i>	Cape Grass Lizard	Least Concern (SARCA 2014)	1	1900/06/15
<i>Cordylus jonesii</i>	Jones' Girdled Lizard	Least Concern (SARCA 2014)	2	1900/06/15
<i>Cordylus vittifer</i>	Common Girdled Lizard	Least Concern (SARCA 2014)	7	1986/10/01

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<i>Platysaurus intermedius wilhelmi</i>	Wilhelm's Flat Lizard	Least Concern (SARCA 2014)	48	2020/09/19
<i>Pseudocordylus melanotus melanotus</i>	Common Crag Lizard	Least Concern (SARCA 2014)	4	2006/01/01
<i>Smaug barbertonensis</i>	Baberton Girdled Lizard	Least Concern (SARCA 2014)	9	2008/05/24
<i>Dendroaspis polylepis</i>	Black Mamba	Least Concern (SARCA 2014)	28	2012/11/15
<i>Elapsoidea boulengeri</i>	Boulenger's Garter Snake	Least Concern (SARCA 2014)	1	1908/03/10
<i>Hemachatus haemachatus</i>	Rinkhals	Least Concern (SARCA 2014)	1	1900/06/15
<i>Naja annulifera</i>	Snouted Cobra	Least Concern (SARCA 2014)	7	2003/03/10
<i>Naja mossambica</i>	Mozambique Spitting Cobra	Least Concern (SARCA 2014)	21	2013/02/27
<i>Chondrodactylus turneri</i>	Turner's Gecko	Least Concern (SARCA 2014)	1	2001/10/11
<i>Hemidactylus mabouia</i>	Common Tropical House Gecko	Least Concern (SARCA 2014)	6	2016/01/15
<i>Homopholis wahlbergii</i>	Wahlberg's Velvet Gecko	Least Concern (SARCA 2014)	7	2013/09/06
<i>Lygodactylus capensis</i>	Common Dwarf Gecko	Least Concern (SARCA 2014)	17	2019/03/02
<i>Pachydactylus affinis</i>	Transvaal Gecko	Least Concern (SARCA 2014)	1	1900/06/15
<i>Pachydactylus vansoni</i>	Van Son's Gecko	Least Concern (SARCA 2014)	8	2013/06/20
<i>Gerrhosaurus flavigularis</i>	Yellow-throated Plated Lizard	Least Concern (SARCA 2014)	2	1981/09/26
<i>Matobosaurus validus</i>	Common Giant Plated Lizard	Least Concern (SARCA 2014)	7	2016/04/02
<i>Meroles squamulosus</i>	Common Rough-scaled Lizard	Least Concern (SARCA 2014)	2	1900/06/15
<i>Nucras ornata</i>	Ornate Sandveld Lizard	Least Concern (SARCA 2014)	4	1981/09/23
<i>Amblyodipsas concolor</i>	Natal Purple-glossed Snake	Least Concern (SARCA 2014)	2	2001/11/26
<i>Amblyodipsas polylepis polylepis</i>	Common Purple-glossed Snake	Least Concern (SARCA 2014)	2	2000/06/15
<i>Amplorhinus multimaculatus</i>	Many-spotted Snake	Least Concern (SARCA 2014)	2	1900/06/15
<i>Aparallactus capensis</i>	Black-headed Centipede-eater	Least Concern (SARCA 2014)	6	2016/12/19
<i>Atractaspis bibronii</i>	Bibron's Stiletto Snake	Least Concern (SARCA 2014)	10	2003/11/25
<i>Boaedon capensis</i>	Brown House Snake	Least Concern (SARCA 2014)	9	2015/11/05
<i>Duberria lutrix lutrix</i>	South African Slug-eater	Least Concern (SARCA 2014)	2	1900/06/15
<i>Gracillima nyassae</i>	Black File Snake	Least Concern (SARCA 2014)	1	1900/06/15
<i>Homoroselaps lacteus</i>	Spotted Harlequin Snake	Least Concern (SARCA 2014)	1	1900/06/15
<i>Inyoka swazicus</i>	Swazi Rock Snake	Least Concern (SARCA 2014)	1	1982/11/26
<i>Lamprophis guttatus</i>	Spotted House Snake	Least Concern (SARCA 2014)	9	2008/06/23
<i>Limaformosa capensis</i>	Common File Snake	Least Concern (SARCA 2014)	3	1900/06/15
<i>Lycodonomorphus laevisimus</i>	Dusky-bellied Water Snake	Least Concern (SARCA 2014)	1	1900/06/15
<i>Lycodonomorphus rufulus</i>	Brown Water Snake	Least Concern (SARCA 2014)	3	2001/09/12
<i>Lycophidion capense capense</i>	Cape Wolf Snake	Least Concern (SARCA 2014)	2	1982/11/24
<i>Prosymna stuhlmannii</i>	East African Shovel-snout	Least Concern (SARCA 2014)	2	2020/10/14
<i>Psammophis brevirostris</i>	Short-snouted Grass Snake	Least Concern (SARCA 2014)	1	2009/02/03
<i>Psammophis mossambicus</i>	Olive Grass Snake	Least Concern (SARCA 2014)	1	1900/06/15
<i>Pseudaspis cana</i>	Mole Snake	Least Concern (SARCA 2014)	2	1900/06/15
<i>Leptotyphlops incognitus</i>	Incognito Thread Snake	Least Concern (SARCA 2014)	4	1981/09/23
<i>Leptotyphlops jacobseni</i>	Jacobsen's Thread Snake	Least Concern (SARCA 2014)	3	1981/09/26
<i>Python natalensis</i>	Southern African Python	Least Concern (SARCA 2014)	3	2010/01/31

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<i>Acontias plumbeus</i>	Giant Legless Skink	Least Concern (SARCA 2014)	7	2004/03/21
<i>Panaspis wahlbergi</i>	Wahlberg's Snake-eyed Skink	Least Concern (SARCA 2014)	5	1900/06/15
<i>Scelotes mirus</i>	Montane Dwarf Burrowing Skink	Least Concern (SARCA 2014)	6	1982/06/21
<i>Scelotes mossambicus</i>	Mozambique Dwarf Burrowing Skink	Least Concern (SARCA 2014)	1	1900/06/15
<i>Trachylepis margaritifera</i>	Rainbow Skink	Least Concern (SARCA 2014)	24	2019/03/02
<i>Trachylepis striata</i>	Striped Skink	Least Concern (SARCA 2014)	6	2019/03/01
<i>Trachylepis varia sensu lato</i>	Common Variable Skink Complex	Least Concern (SARCA 2014)	9	2018/06/13
<i>Stigmochelys pardalis</i>	Leopard Tortoise	Least Concern (SARCA 2014)	1	2003/02/06
<i>Afrotrophlops bibronii</i>	Bibron's Blind Snake	Least Concern (SARCA 2014)	5	2017/11/01
<i>Afrotrophlops schlegelii</i>	Schlegel's Beaked Blind Snake	Least Concern (SARCA 2014)	2	1900/06/15
<i>Varanus niloticus</i>	Water Monitor	Least Concern (SARCA 2014)	5	2018/05/29
<i>Bitis arietans arietans</i>	Puff Adder	Least Concern (SARCA 2014)	15	2018/11/07
<i>Causus defilippii</i>	Snouted Night Adder	Least Concern (SARCA 2014)	3	1973/12/05
<i>Causus rhombeatus</i>	Rhombic Night Adder	Least Concern (SARCA 2014)	8	2008/05/10
<i>Dispholidus typus viridis</i>	Northern Boomslang	Not evaluated	9	2006/10/14
<i>Leptotyphlops scutifrons conjunctus</i>	Eastern Thread Snake		7	1900/06/15
<i>Leptotyphlops scutifrons scutifrons</i>	Peters' Thread Snake		3	2002/11/18