

**FAUNAL, FLORAL AND WETLAND ASSESSMENT AS PART OF
THE ENVIRONMENTAL ASSESSMENT AND AUTHORISATION
PROCESS OF THE IMPALA 18 SHAFT AND ASSOCIATED
INFRASTRUCTURE, NORTH WEST PROVINCE**

Prepared for

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SECTION B – Floral Assessment

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1. INTRODUCTION

1.1 *Background*

Scientific Aquatic Services (SAS) was appointed to conduct a faunal, floral and wetland ecological assessment as part of the environmental assessment and authorisation process for the proposed Impala 18 Shaft Project, hereafter referred to as the “study area” (Section A: Figures 1 & 2). The study area consists of the proposed Impala 18 Shaft, linear infrastructure including roads, railway lines, power lines and pipelines as well as a sewage pipeline and associated sewage treatment plant (STP). The study area is located to the east of the R565 roadway and to the west of the R510 roadway and is located approximately 16km to the north of Rustenberg within the North West Province. The study area is surrounded by properties in which agricultural and mining activities as well as rural development dominate, leaving the surrounding areas largely transformed. The ecological assessment was therefore confined to the study area and its immediate surrounds and did not include an ecological assessment of surrounding properties. The surrounding area was however considered as part of the desktop assessment of the area.

This report, after consideration and the description of the ecological integrity of the study area, must guide the Environmental Assessment Practitioner (EAP), regulatory authorities and mining proponent, by means of the presentation of results and recommendations, as to the ecological viability of the proposed development activities.

2. GENERAL SITE SURVEY

Field assessments were undertaken during March 2013, in order to determine the ecological status of the study area. A reconnaissance ‘walkabout’ was initially undertaken to determine the general habitat types found throughout the study area and, following this, specific study sites were chosen that were representative of the habitats found within the area - special emphasis was placed on areas that may potentially support Red Data Listed (RDL) species. Sites were investigated on foot in order identify the occurrence of the dominant plant species and habitat diversities.



3 FLORAL ASSESSMENT METHODOLOGY

3.1 Red and Orange Data Listed Flora

Prior to the field visit, a record of RDL plant species and their habitat requirements was acquired from the South African National Biodiversity Institute (SANBI) for the quarter degree squares (QDS) 2527AC, 2527CA and 2527CB (Appendix A). Throughout the floral assessment, special attention was paid to the identification of any of these RDL species as well as identification of suitable habitat that could potentially sustain these species.

The Probability of Occurrence (POC) for each floral species of concern (2527AC, 2527CA and 2527CB) was determined using the following calculations wherein the habitat requirements and habitat disturbance were considered. The accuracy of the calculation is based on the available knowledge about the species in question, with many of the species lacking in-depth habitat research. Therefore, it is important that the literature available is also considered during the calculation.

Each factor contributes an equal value to the calculation.

Literature availability

	No Literature available					Literature available
Site score						
Score	0	1	2	3	4	5

Habitat availability

	No Habitat available				Habitat available	
Site score						
Score	0	1	2	3	4	5

Habitat disturbance

	0	Very Low	Low	Moderately	High	Very High
Site score						
Score	5	4	3	2	1	0

$$[\text{Literature availability} + \text{Habitat availability} + \text{Habitat disturbance}] / 15 \times 100 = \text{POC}\%$$



3.2 **Vegetation Surveys**

Vegetation surveys were undertaken by first identifying different habitat units and then analysing the floral species composition. Vegetation analyses were conducted within areas that were perceived to best represent the various plant communities. Species were recorded and a species list was compiled for each habitat unit. These species lists were also compared with the vegetation expected to be found within the relevant vegetation types as described in Section 4.3, which serves to provide an accurate indication of the ecological integrity and conservational value of each habitat unit.

3.3 **Vegetation Index Score**

The Vegetation Index Score (VIS) was designed to determine the ecological state of each habitat unit defined within an assessment site. This enables an accurate and consistent description of the Present Ecological State (PES) concerning the study area in question. The information gathered during these assessments also significantly contributes to sensitivity mapping, leading to a more truthful representation of ecological value and sensitive habitats.

Each defined habitat unit is assessed using separate data sheets (Appendix B) and all the information gathered then contributes to the final VIS score. The VIS is derived using the following formulas:

$$\text{VIS} = [(\text{EVC}) + ((\text{SI} \times \text{PVC}) + (\text{RIS}))]$$

Where:

1. **EVC** is extent of vegetation cover;
2. **SI** is structural intactness;
3. **PVC** is percentage cover of indigenous species and
4. **RIS** is recruitment of indigenous species.

Each of these contributing factors is individually calculated as discussed below. All scores and tables indicated in blue are used in the final score calculation for each contributing factor.

1. **$EVC = \frac{EVC1 + EVC2}{2}$**
EVC 1 - Percentage natural vegetation cover:



Vegetation cover %	0%	1-5%	6-25%	26-50%	51-75%	76-100%
Site score						
EVC 1 score	0	1	2	3	4	5

EVC2 - Total site disturbance score:

Disturbance score	0	Very Low	Low	Moderately	High	Very High
Site score						
EVC 2 score	5	4	3	2	1	0

2. $SI = (SI1 + SI2 + SI3 + SI4) / 4$

	Trees (SI1)		Shrubs (SI2)		Forbs (SI3)		Grasses (SI4)	
Score:	Present State	Perceived Reference State	Present State	Perceived Reference State	Present State	Perceived Reference State	Present State	Perceived Reference State
Continuous								
Clumped								
Scattered								
Sparse								

Present State (P/S) = Currently applicable for each habitat unit

Perceived Reference State (PRS) = If in pristine condition

Each SI score is determined with reference to the following scoring table of vegetation distribution for present state versus perceived reference state.

Perceived Reference state (PRS)	Present state (P/S)			
	Continuous	Clumped	Scattered	Sparse
Continuous	3	2	1	0
Clumped	2	3	2	1
Scattered	1	2	3	2
Sparse	0	1	2	3



3. $PVC = [(EVC) - ((exotic \times 0.7) + (bare \ ground \times 0.3))$

Percentage vegetation cover (exotic):

	0%	1-5%	6-25%	26-50%	51-75%	76-100%
Vegetation cover %						
PVC Score	0	1	2	3	4	5

Percentage vegetation cover (bare ground):

	0%	1-5%	6-25%	26-50%	51-75%	76-100%
Vegetation cover %						
PVC Score	0	1	2	3	4	5

4. *RIS*

Extent of indigenous species recruitment	0	Very Low	Low	Moderate	High	Very High
RIS	0	1	2	3	4	5

The final VIS scores for each habitat unit are then categorised as follows:

Vegetation Index Score	Assessment Class	Description
22 to 25	A	Unmodified, natural
18 to 22	B	Largely natural with few modifications.
14 to 18	C	Moderately modified
10 to 14	D	Largely modified
5 to 10	E	The loss of natural habitat extensive
<5	F	Modified completely



4 FLORAL DESCRIPTION

4.1 Biome and bioregion

Biomes are broad ecological units that represent major life zones extending over large natural areas (Rutherford, 1997). This assessment site falls within the Savanna biome (Rutherford & Westfall, 1994) (Figure 1). Biomes are further divided into bioregions, which are spatial terrestrial units possessing similar biotic and physical features, and processes at a regional scale. This assessment site is situated within the Central Bushveld Bioregion (Mucina & Rutherford, 2006) (Figure 2).



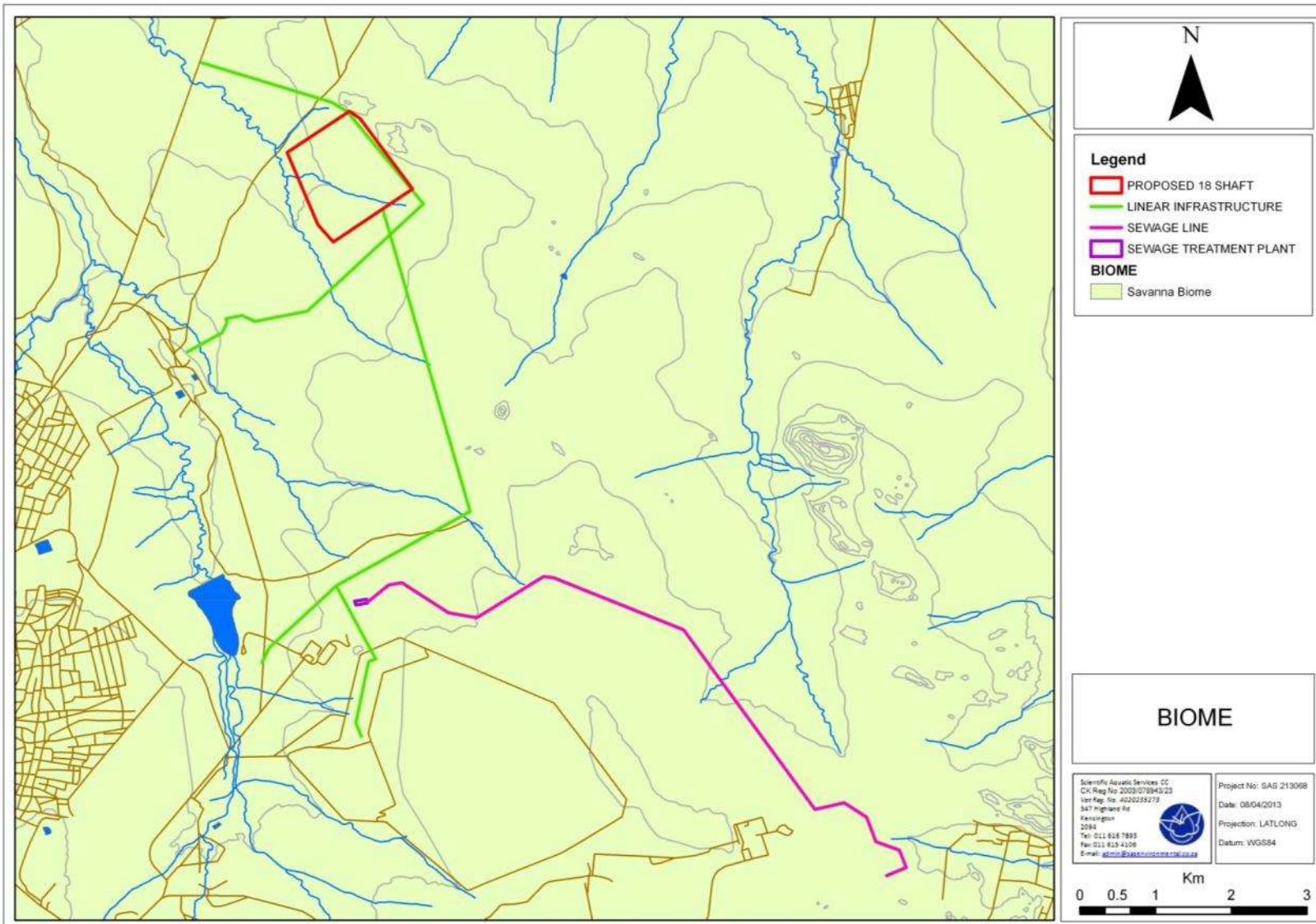


Figure 1: Biome associated with the study area (Mucina and Rutherford, 2006).



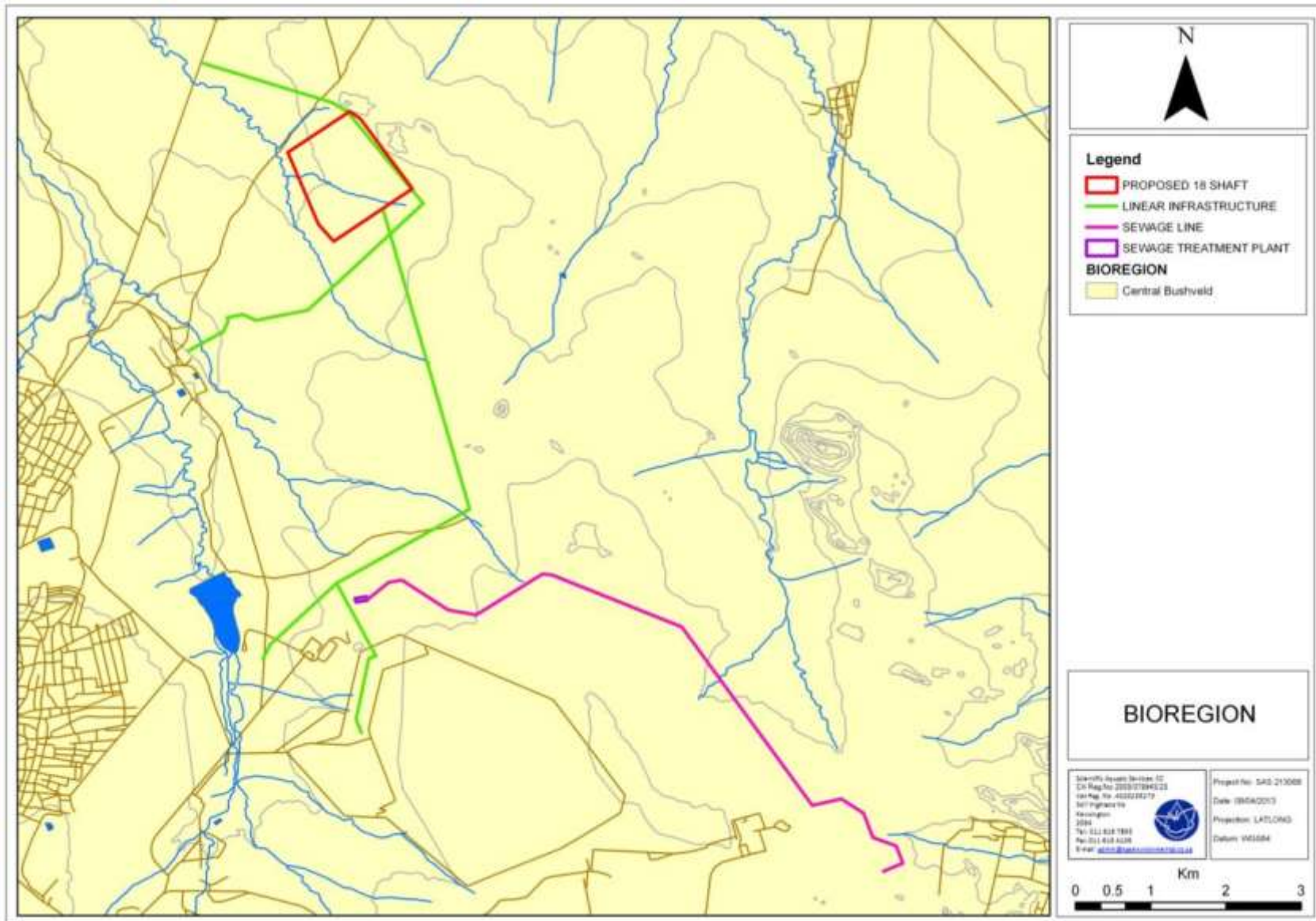


Figure 2: Bioregion associated with the study area (Mucina & Rutherford, 2006).



4.2 *Vegetation Type and Landscape Characteristics*

While biomes and bioregions are valuable as they describe broad ecological patterns, they provide limited information on the actual species that are expected to be found in an area. Knowing which vegetation type an area belongs to provides an indication of the floral composition that would be found if the assessment site was in a pristine condition, which can then be compared to the observed floral list and so give an accurate and timely description of the ecological integrity of the assessment site. When the boundary of the assessment site is superimposed on the vegetation types of the surrounding area (Figure 3), it is evident that the study area falls within two vegetation types namely Marikana Thornveld and Zeerust Thornveld vegetation types (Mucina & Rutherford, 2006).



4.3 MarikanaThornveld

4.3.1 Distribution

MarikanaThornveld occurs in the North West and Gauteng Provinces. It occurs on plains from the Rustenburg area in the west, through Marikana and Brits to the Pretoria area in the east. Altitude ranges from 1050 – 1450m (Mucina & Rutherford, 2006).

4.3.2 Climate

Marikana Thornveld is characterised by summer rainfalls with very dry winters. Mean Annual Precipitation (MAP) ranges between 600 and 700mm and frost is fairly frequent in winter. Mean monthly maximum and minimum temperatures for Brits are 35.3°C and -3.3°C for January and June respectively. Corresponding values are 35.3°C and -1.4°C for Rustenburg (November and July) and 32.8°C and -1.0°C for Pretoria University Experimental Farm (Jan and July) (Mucina & Rutherford, 2006).

4.3.3 Geology and soils

Most of the area is underlain by the mafic intrusive rock of the Rustenburg layered suite of the Bushveld Igneous Complex. Rocks include gabbro, norite, pyroxenite and anorthosite. The shales and quartzites of the Pretoria group also contribute. The soils mainly consist of vertic melanic clay with some dystrophic or mesotrophic plinthic catenas and some freely drained, deep soils. Land types are mainly Ea, Ba and Ae (Mucina & Rutherford, 2006).

4.3.4 Conservation

MarikanaThornveld is considered to be an Endangered vegetation type. The conservation target for the area is 19% and less than 1% is statutorily conserved in for example, Magaliesberg Nature Area. More of the vegetation type is conserved in other reserves such as De Onderstepoort Nature Reserve. The vegetation type is considerably impacted. With 48% transformed, mainly by cultivation and urban or built up areas. Most agricultural development of this area is in the western regions towards Rustenburg, while in the east industrial development is a greater threat. Erosion is very low to moderate. Alien invasive floral species occur localised in high densities, especially along drainage lines (Mucina & Rutherford, 2006).

4.3.5 Taxa of the Marikana Thornveld

In terms of recent vegetation classifications, the assessed area occurs within the MarikanaThornveld vegetation type (Mucina & Rutherford, 2006). This vegetation occurs



as open *Acacia karroo* woodland, in valleys and slightly undulating plains and some lowland hills. Shrubs are more dense along drainage lines, on termitaria and rocky outcrops or in other habitats protected from fire.

Key indicator species of this vegetation type include:

- Tall tree: *Acacia burkei*;
- Small trees: *Acacia caffra* (d), *A. gerrardii*, *A. karroo* (d), *A. nilotica*, *A. tortilis* subsp. *heteracantha*, *Combretum molle* (d), *Rhus lancea* (d), *Ziziphus mucronata* (d), *Pappea capensis*, *Dombeya rotundifolia*, *Peltophorum africanum*, *Celtis africana*, *Terminalia sericea*;
- Tall shrubs: *Euclea crispa* subsp. *crispa* (d), *Olea europaea* subsp. *africana* (d), *Rhus pyroides* var. *pyroides* (d), *Diospyros lycoides* subsp. *guerkei*, *Ehretia rigida* subsp. *rigida*, *Euclea undulata*, *Grewia flava*, *Pavetta gardeniifolia*;
- Low shrubs: *Asparagus cooperi* (d), *Rhynchosia nitens* (d), *Indigofera zeyheri*, *Justicia flava*;
- Woody climbers: *Clematis brachiata* (d), *Helinus integrifolius*;
- Herbaceous climber: *Cyphostemma cirrhosum*, *Pentarrhium insipidum* (d);
- Graminoids: *Elionurus muticus* (d), *Eragrostis lehmanniana* (d), *Setaria sphacelata* (d), *Themeda triandra* (d), *Aristida scabrivalvis* subsp. *scabrivalvis*, *Fingerhuthia Africana*, *Heteropogon contortus*, *Hyperthelia dissoluta*, *Melinis nerviglumis*, *Pogonarthria squarrosa*;
- Herb: *Hermannia depressa* (d), *Ipomoea obscura* (d), *Vernonia oligocephala*;
- Geophytic herbs: *Ledebouria revoluta*, *Ornithogalum tenuifolium*, *Sansevieria aethiopica*.

*(d = dominant species)

4.4 Zeerust Thornveld

4.4.1 Distribution

Zeerust Thornveld occurs in the North West Province extending along the plains from the Lobatsi River in the west via Zeerust, Groot Marico and Mabaalstad to the flats between the Pilanesberg and the western end of the Magaliesberg in the east. Altitude ranges from 1000 – 1250m (Mucina & Rutherford, 2006).

4.4.2 Climate

Zeerust Thornveld is characterised by summer rainfalls with very dry winters. MAP has a relatively narrow range of 550-600 mm. Frost is fairly frequent in winter and the mean



monthly maximum and minimum temperature for the Marico-Irr weather station is 36.7°C and -0.4°C for January and June, respectively (Mucina & Rutherford, 2006).

4.4.3 Geology and soils

The area is characterised by sediments of mostly shale with less quartzite and conglomerate. Carbonates, volcanic rock, breccias and diamictites also occur. Bronzite, harzburgite, gabbro and norite are also found in the area. Soils are mostly deep, red-yellow, apedal and freely drained with high base status and with some vertic or melanic clays. The land types of the area are mainly Ae and Ea (Mucina & Rutherford, 2006).

4.4.4 Conservation

Zeerust Thornveld is considered to be Least Threatened. The conservation target for the area is 19% and less than 4% is statutorily conserved, spreading between four reserves including the Pienaar and Marico Bushveld Nature Reserves. Some 16% of the vegetation type has been transformed, mainly by cultivation, with some urban or built up areas. A few areas are scattered with plants of the alien *Cereus jamacaru* and several other alien species are scattered elsewhere. Erosion of the area is mainly low to very low (Mucina & Rutherford, 2006).

4.4.5 Taxa of the Zeerust Thornveld

In terms of recent vegetation classifications, the assessed area occurs within the Zeerust Thornveld vegetation type (Mucina & Rutherford, 2006). This vegetation occurs as deciduous, open to dense short thorny woodland, dominated by *Acacia* species with a herbaceous layer of mainly grasses. It occurs on deep, high base-status and some clay soils on plains and lowlands as well as between rocky ridges.

Key indicator species of this vegetation type include:

- Tall trees: *Acacia burkei* (d), *A. erioloba* (d),
- Small trees: *Acacia melifera* subsp. *detinens* (d), *A. nilotica* (d), *A. tortilis* subsp. *heteracantha* (d), *Rhus lancea* (d), *Acacia fleckii*, *Peltophorum africanum*, *Terminalia sericea*;
- Tall shrubs: *Diospyros lycioides* subsp. *lycioides*, *Grewia flava*, *Mystroxylon aethiopicum* subsp. *burkeanum*;
- Low shrubs: *Rhus maricoana* (d), *Agathisanthemum bojeri*, *Chaetacanthus costatus*, *Clerodendrum ternatum*, *Indigofera filipes*, *Rhus grandidens*, *Sida chrysantha*, *Stylosanthes fruticos*;
- Grass: *Eragrostis lehmanniana* (d), *Panicum pospischilii*;



-
- Herbs: *Blepharis integrifolia*, *Chamaecrista absus*, *C. mimosoides*, *Cleome maculate*, *Dicoma anomala*, *Kyphocarpa angustifolia*, *Limeum viscosum*, *Lophiocarpus tenuissimus*.

*(d = dominant species)



5 RESULTS OF FLORAL INVESTIGATION

Vegetation associated with the development of the proposed Impala 18 Shaft and related infrastructure comprises four broad habitat units, namely the Impacted Bushveld Habitat Unit, the Rocky Outcrop Habitat Unit, the Wetland Habitat Unit and the Transformed Habitat Unit (Figures 4 to 7)

The Impacted Bushveld Habitat Unit includes areas where historical and current crop cultivation activities have led to loss of natural vegetation, bush encroachment and changes in vegetation structure, as well as areas where edge effects from current mining activities have taken place, which have also impacted on the natural vegetation. The Impacted Bushveld Habitat Unit covers the majority of the study area and in its present state consists of secondary bushveld, referring to the reestablishment of indigenous vegetation after clearing/ disturbance of original vegetation has occurred, with a lower than expected floral species diversity. Included in the Impacted Bushveld Habitat Unit are limited areas that have not previously been cultivated, due to rocky soils and low exposed rocks being present. These areas, together with previously cultivated areas, are however currently utilised as communal grazing areas, which has affected the vegetation integrity of these areas.

The Rocky Outcrop Habitat Unit comprises scattered rocky outcrops adjacent to the proposed linear infrastructure, within the Impala 18 Shaft development footprint and to the northeast of the proposed 18 Shaft. The vegetation occurring within these areas are notably different from that of the surrounding Impacted Bushveld Habitat Unit.

The Wetland Habitat Unit occurs throughout the study area and is associated with a number of non-perennial tributaries of the Leragana and Molapongwamongana Rivers to the west and east of the study area.

The Transformed Habitat Unit is limited to the areas directly associated with mining activity, such as the proposed linear infrastructure situated in the immediate vicinity of the existing tailings facility.





Figure 4: Habitat units identified within the northern portion of the study area, which includes the proposed 18 Shaft, roads and powerlines.





Figure 5: Habitat units identified within the central portion of the study area, which includes the north-south linear infrastructure corridor.



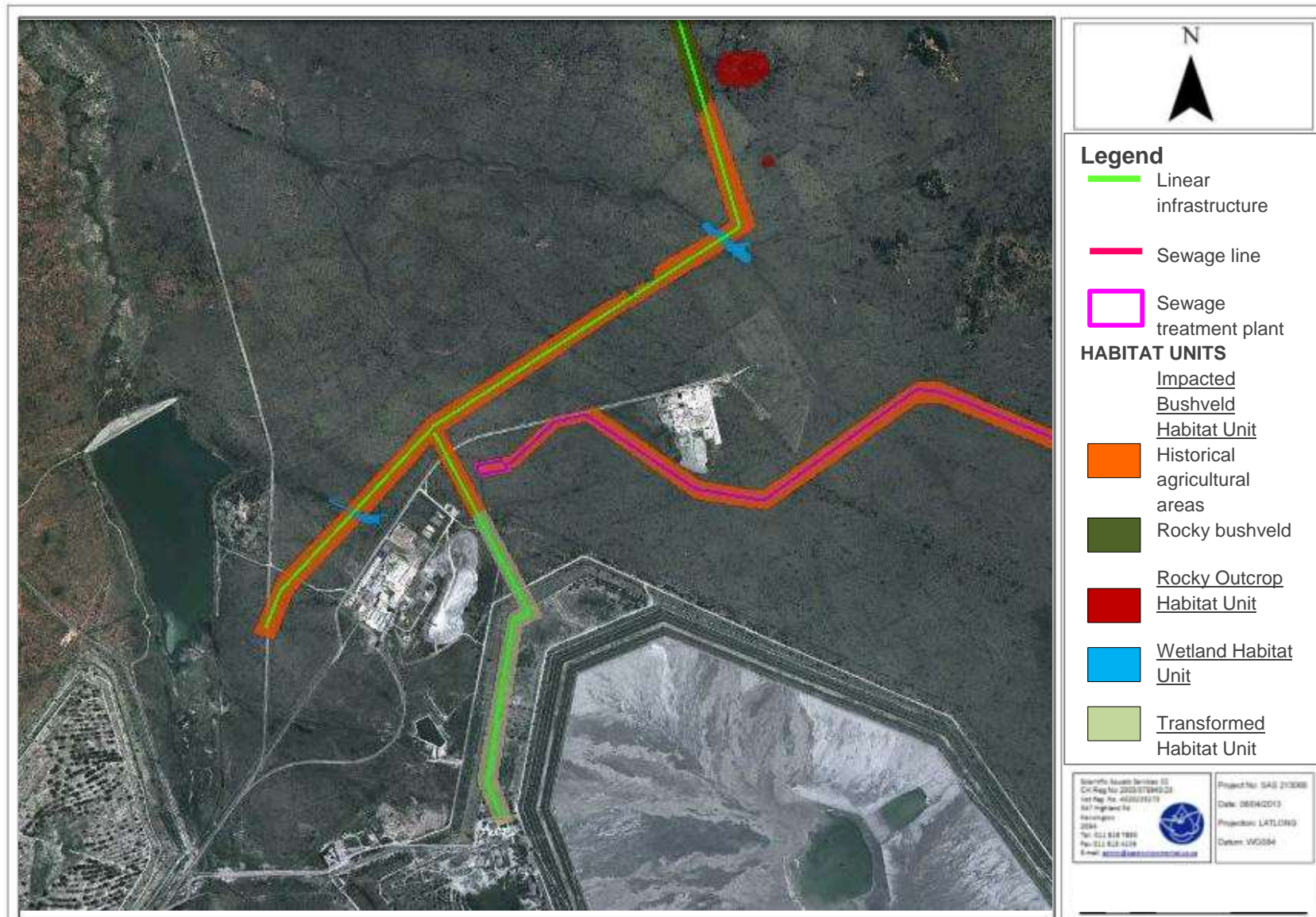


Figure 6: Habitat units identified within the central portion of the study area, which includes linear infrastructure such as the proposed railway line and powerlines.



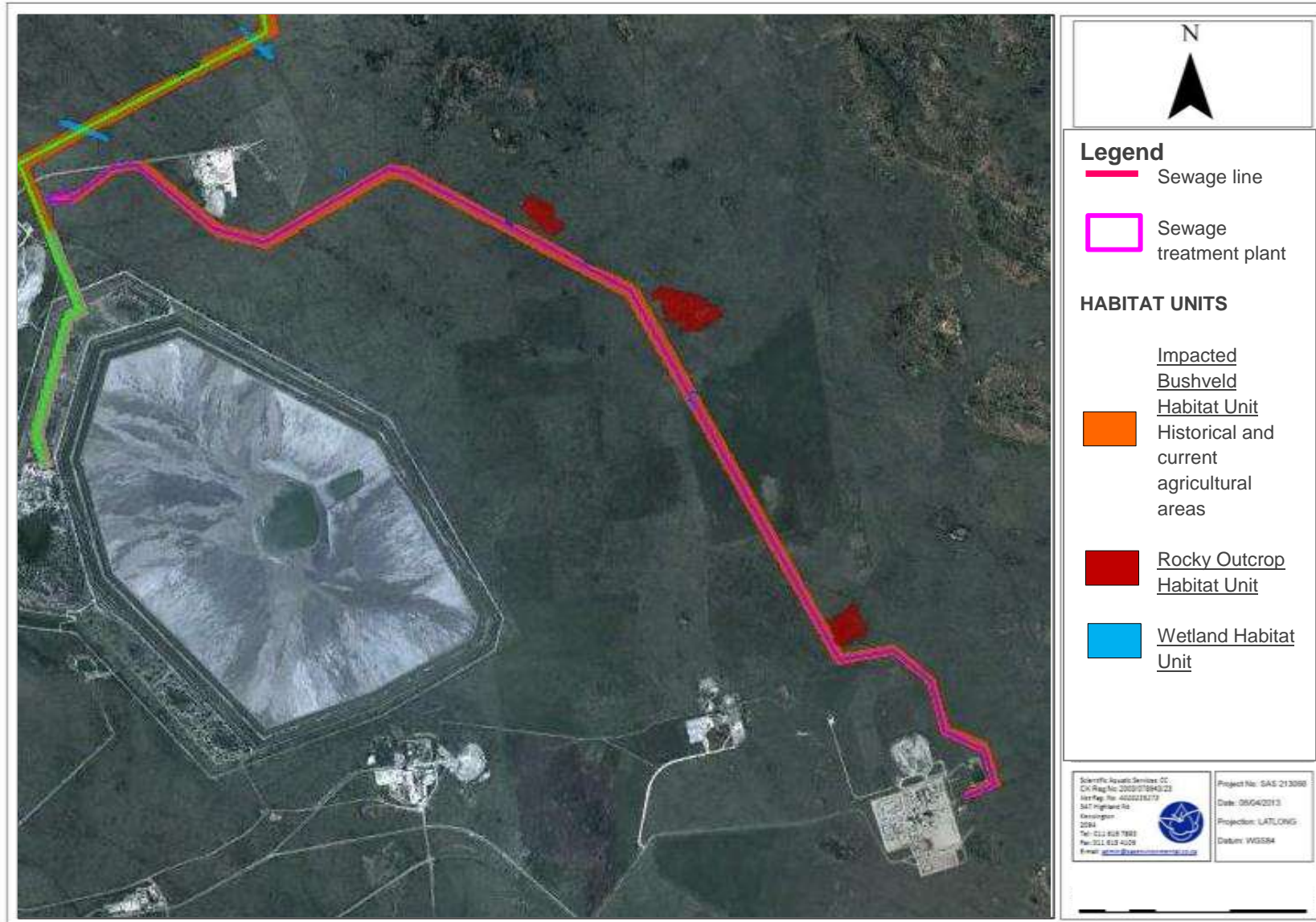


Figure 7: Habitat units identified within the southern portion of the study area, which includes the proposed sewage line and sewage treatment plant.



5.1 Habitat Unit 1: Impacted Bushveld Habitat Unit



Figure 8: The Impacted Bushveld Habitat Unit is present within the majority of the study area.



Figure 9: Portions of the Impacted Bushveld Habitat Unit comprises rocky bushveld with exposed surface rocks and rocky soils present.

The Impacted Bushveld Habitat Unit covers the majority of the study area and comprises areas where historic and current agricultural activities in the form of crop cultivation have taken place (Figure 8). This habitat unit also includes areas where rocky soils and low exposed rocks have prevented such activities (Figure 9). The entire habitat unit is currently utilised as communal grazing land, with resulting livestock trampling and bush encroachment by species such as *Dichrostachys cinerea* and *Asparagus larycinus* being evident.

Dominant plant species within the Impacted Bushveld Habitat Unit include the woody species *Acacia karroo*, *A. caffra*, *A. tortilis*, *Grewia flava* and *Dichrostachys cinerea*, *Acacia melifera* and *A. nilotica* as well as subclimax grasses such as *Aristida bipartita* and *Eragrostis lehmanniana*. These species are often associated with disturbance. A number

of herbaceous species are present in this habitat unit and includes *Cucumis zeyheri*, *Turbina elongata*, *Crabbea hirsuta* and alien species such as *Hibiscus trionum*, *Zinnia peruviana*, *Schkuhria pinnata* and *Sesbania bispinosa*. The rocky bushveld areas, which occur scattered throughout the habitat unit are characterised by species more typical of rocky areas such as *Sclerocarya birrea* subsp. *africana*, *Vitex zeyheri*, *Rhoicissus tridentata*, *Dombeya rotundifolia* and *Peltophorum africanum*.

The table below lists the dominant floral species encountered within the Impacted Bushveld Habitat Unit during the field assessment.

Table 1: Dominant floral species encountered in the Impacted Bushveld Habitat Unit. Alien species are indicated with an asterisk and crops with a double asterisk.

Grass/sedge/reed species	Forb species	Tree/Shrub Species
<i>Andropogon schirensis</i>	* <i>Hibiscus trionum</i>	<i>Acacia caffra</i>
<i>Aristida bipartita</i>	* <i>Mirabilis jalapa</i>	<i>Acacia karroo</i>
<i>Aristida congesta</i> subsp <i>barbicollis</i>	* <i>Schkuhria pinnata</i>	<i>Acacia melifera</i>
<i>Aristida congesta</i> subsp <i>congesta</i>	* <i>Sesbania bispinosa</i>	<i>Acacia nilotica</i>
<i>Chloris gayana</i>	* <i>Tagetes minuta</i>	<i>Dichrostachys cinerea</i>
<i>Cymbopogon plurinoides</i>	* <i>Zinnia peruviana</i>	<i>Dombeya rotundifolia</i>
<i>Cynodon dactylon</i>	** <i>Helianthus annuus</i>	<i>Grewia flava</i>
<i>Digitaria eriantha</i>	<i>Asclepias fruticosa</i>	<i>Peltophorum africanum</i>
<i>Eragrostis chloromelas</i>	<i>Asparagus larinus</i>	<i>Rhoicissus tridentata</i>
<i>Eragrostis curvula</i>	<i>Commelina africana</i>	<i>Sclerocarya birrea</i> subsp. <i>africana</i>
<i>Eragrostis lehmanniana</i>	<i>Commelina erecta</i>	<i>Searsia lancea</i>
<i>Heteropogon contortus</i>	<i>Convolvulus sagittatus</i>	<i>Searsia leptodictya</i>
<i>Hyparrhenia hirta</i>	<i>Crabbea hirsuta</i>	<i>Searsia pyroides</i>
<i>Melinis repens</i>	<i>Cucumis zeyheri</i>	<i>Vitex zeyherii</i>
<i>Panicum maximum</i>	<i>Elephantorrhiza elephantina</i>	<i>Ziziphus mucronata</i>
<i>Setaria pallide-fusca</i>	<i>Gladiolus crassifolius</i>	
<i>Setaria sphacelata</i>	<i>Gladiolus dalenii</i>	
<i>Sorghum versicolor</i>	<i>Hibiscus calyphyllus</i>	
<i>Themeda triandra</i>	<i>Hypoxis rigidula</i>	
	<i>Indigofera comosa</i>	
	<i>Indigofera daleoides</i>	
	<i>Ledebouria cooperi</i>	
	<i>Ledebouria revoluta</i>	
	<i>Monsonia angustifolia</i>	
	<i>Polygala hottentotta</i>	
	<i>Rhynchosia caribea</i>	
	<i>Rhynchosia minima</i>	
	<i>Solanum panduriforme</i>	
	<i>Tephrosia capensis</i>	
	<i>Turbina oblongata</i>	
	<i>Vernonia oligocephala</i>	

A decrease in floral diversity has occurred as a result of edge effects from mining activities to the south and urbanisation to the west of the study area, as well as due to ploughing and crop cultivation, overgrazing, livestock trampling and timber harvesting. The majority of the Impacted Bushveld Habitat Unit is therefore considered to have a low ecological

sensitivity and low conservation value due to the alteration in expected floral species composition and vegetation structure as a result of the abovementioned impacts.

The rocky bushveld portions of the study area that have not been previously cultivated due to more rocky soils, are considered to have a higher PES in relation to the remainder of the Impacted Bushveld Habitat Unit. It should therefore be noted that although these areas have seen less disturbance, it occurs as patches within the larger landscape and have also been impacted by livestock trampling, timber harvesting and bush encroachment. The rocky bushveld areas are furthermore well represented within the region, and loss thereof a result of the proposed mining development, will not significantly affect floral conservation in the region. These areas are considered to have a moderate ecological sensitivity.

No RDL floral species were observed during the assessment of these areas and the probability that RDL floral species occur here is low. A few specimens of *Sclerocarya birrea* subsp. *africana* were noted along the north-south linear infrastructure corridor. This species is protected under the National Forests Act of 1998 (Act 84 of 1998) and licenses need to be obtained for their removal or relocation (refer to Section 5.5).

5.2 Habitat Unit 2: Rocky Outcrop Habitat Unit



Figure 10: The Rocky Outcrop Habitat Unit.

The Rocky Outcrop Habitat Unit (Figure 10) occurs along the proposed linear infrastructure corridor, with a small rocky outcrop being present within the proposed 18 Shaft development footprint and a rocky outcrop of significant extent being located to the northeast and bordering the proposed 18 Shaft.

The floral species occurring within this habitat unit are typical of the rocky outcrops and rocky ridges of the area, and although not classified by Mucina & Rutherford (2006) as falling within the Norite Koppies Bushveld vegetation type, hosts the typical species assemblages for this vegetation type. Dominant floral species include *Sclerocarya birrea* subsp. *africana*, *Pappea capensis*, *Combretum molle*, *Peltophorum africanum*, *Rhus leptodictya*, *Vangueria infausta*, *Faurea saligna*, *Croton grattissimus* and *Ziziphus mucronata*, amongst others.

Shrubs and forbs associated with the Rocky Outcrop Habitat Unit include *Rhoicissus tridentata*, *Pallea calamelanos* and *Grewia flavescens*, while the grass layer is dominated by species such as *Themeda triandra*, *Heteropogon contortus*, *Cymbopogon plurinoides*, *Elionurus muticus* and *Panicum maximum*.

The table below lists the dominant floral species found within this habitat unit during the site assessment.

Table 2: Dominant species encountered in the Rocky Outcrop Habitat Unit. Alien species are indicated with an asterisk.

Grass/sedge/reed species	Forb species	Tree/Shrub Species
<i>Aristida bipartita</i>	* <i>Schkuhria pinnata</i>	<i>Acacia caffra</i>
<i>Aristida congesta</i>	* <i>Zinnia peruviana</i>	<i>Acacia tortilis</i>
<i>Aristida congesta</i> subsp <i>barbicollis</i>	<i>Abutilon angulatum</i>	<i>Combretum molle</i>
<i>Aristida congesta</i> subsp <i>congesta</i>	<i>Aloe tranvaalensis</i>	<i>Croton grattissimus</i>
<i>Botriochloa insculpta</i>	<i>Asparagus cooperi</i>	<i>Dichrostachys cinerea</i>
<i>Cymbopogon plurinoides</i>	<i>Asparagus lariginus</i>	<i>Diospyros lycioides</i>
<i>Elionurus muticus</i>	<i>Asparagus setaceus</i>	<i>Dombeya rotundifolia</i>
<i>Eragrostis biflora</i>	<i>Cheilanthes hirta</i>	<i>Ehretia rigida</i>
<i>Eragrostis curvula</i>	<i>Clematis brachiata</i>	<i>Fauria saligna</i>
<i>Eragrostis superba</i>	<i>Commelina erecta</i>	<i>Grewia flava</i>
<i>Fingerhuthia africana</i>	<i>Cucumis zeyheri</i>	<i>Grewia flavescens</i>
<i>Heteropogon contortus</i>	<i>Dicoma zeyheri</i>	<i>Gymnosproia buxifolia</i>
<i>Hyparrhenia hirta</i>	<i>Elephanthoriza elephantina</i>	<i>Pappea capensis</i>
<i>Melinis nerviglumis</i>	<i>Evolvulus alsinoides</i>	<i>Peltophorum africanum</i>
<i>Melinis repens</i>	<i>Felicia muricata</i>	<i>Rhoicissus tridentata</i>
<i>Pogonarthria squarrosa</i>	<i>Geigeria burkei</i> subsp <i>burkei</i>	<i>Sclerocarya birrea</i> subsp. <i>africana</i>
<i>Setaria sphacelata</i> var. <i>sphacelata</i>	<i>Ipomoea obscura</i> var <i>fragilis</i>	<i>Scolopia zeyheri</i>
<i>Themeda triandra</i>	<i>Leonotis dysophylla</i>	<i>Searsia lancea</i>
	<i>Palleae calomelanos</i>	<i>Searsia pyroides</i>
	<i>Raphionacme galpinii</i>	<i>Vangueria infausta</i>
	<i>Solanum panduriforme</i>	<i>Viscum rotundifolium</i>
	<i>Sphedamnocarpus galphimiifolius</i>	<i>Vitex zeyherii</i>
	<i>Teucrium trifidum</i>	<i>Ximenia caffra</i>
	<i>Thunberghia neglecta</i>	<i>Ziziphus mucronata</i>
	<i>Vernonia oligocephala</i>	
	<i>Wahlenbergia caledonica</i>	
	<i>Walafrida tenuifolia</i>	

The high ecological functionality and intact habitat integrity of the Rocky Outcrop Habitat Unit combine to increase the ecological sensitivity and conservation value of this habitat unit. Should RDL floral species, such as *Aloe peglerae*, *Frithia pulchra* or *Andromischus umbraticola* subsp. *umbraticola* be present within the study area, it is likely that these species will occur within the Rocky Outcrop Habitat Unit. In addition, the Rocky Outcrop Habitat Unit provides habitat for high diversity of faunal species, which may include RDL avifaunal and reptile species. In addition, these areas contribute to providing faunal migratory habitat within the area. It has been determined that the Rocky Outcrop Habitat Unit hosts a number of *Sclerocarya birrea* subsp. *africana* specimens, which are a protected floral species in terms of the National Forests Act, 1998 (refer to Section 5.5).

The Rocky Outcrop Habitat Unit is therefore deemed to be of high ecological sensitivity and these areas, as well as a 50m buffer zone around the large rocky outcrop to the northeast, should be excluded from development if possible. Care should be taken to avoid encroachment into the Rocky Outcrop Habitat Unit as represented by the outcrop areas bordering the linear infrastructure footprints.

5.3 Habitat Unit 3: Wetland Habitat Unit



Figure 11: The Wetland Habitat Unit.

Various wetlands associated with non-perennial drainage lines traverse the study area and are associated with a number of non-perennial tributaries of the Leragana and Molapongwamongana Rivers to the west and east of the study area. One of the tributaries of the Leragana River, originating to the southeast of the proposed 18 Shaft development footprint, traverses the 18 Shaft area, draining in a northwestern direction. In addition, the various proposed linear infrastructure components of the project crosses wetlands and drainage lines in seven different localities.

The vegetation present within the Wetland Habitat Unit (Figure 11) contains many species observed within the Impacted Bushveld Habitat Unit, and includes limited obligate wetland species. Vegetation within the various wetland areas tend to be open and grassy as a result of various disturbances, such as grazing and historic crop production. A number of alien plant species are present throughout this habitat unit and includes *Datura stramonium*, *Sesbania bispinosa* and *Tagetes minuta*

The table below outlines the dominant floral species encountered within the Wetland Habitat Unit.

Table 3: Dominant species encountered in the Wetland Habitat Unit. Alien species are indicated with an asterisk.

Grass/sedge/reed species	Forb species	Tree/Shrub Species
<i>Andropogon schirensis</i>	* <i>Datura stramonium</i>	* <i>Opuntia ficus-indica</i>
<i>Aristida bipartita</i>	* <i>Sesbania bispinosa</i>	<i>Acacia karroo</i>
<i>Aristida congesta</i> subsp <i>barbicollis</i>	* <i>Tagetes minuta</i>	<i>Acacia melifera</i>
<i>Aristida congesta</i> subsp <i>congesta</i>	* <i>Zinnia peruviana</i>	<i>Acacia nilotica</i>
<i>Botriochloa insculpta</i>	<i>Asparagus loricunus</i>	<i>Acacia tortilis</i>
<i>Brachiaria serrata</i>	<i>Commelina africana</i>	<i>Dichrostachys cinerea</i>
<i>Chloris gayana</i>	<i>Corchorus confusus</i>	<i>Diospyros lycioides</i>
<i>Cymbopogon plurinoides</i>	<i>Crabbea ovalifolia</i>	<i>Grewia flava</i>
<i>Cynodon dactylon</i>	<i>Gladiolus crassifolius</i>	<i>Searsia lancea</i>
<i>Digitaria eriantha</i>	<i>Hypoxis rigidula</i>	<i>Searsia pyroides</i>
<i>Eragrostis chloromelas</i>	<i>Indigofera daleoides</i>	<i>Ziziphus mucronata</i>
<i>Eragrostis gummiflua</i>	<i>Ledebouria cooperi</i>	
<i>Eragrostis suberba</i>	<i>Ledebouria revoluta</i>	
<i>Eragrotis curvula</i>	<i>Polygala hottentotta</i>	
<i>Eragrotis lehmanniana</i>	<i>Scabiosa columbaria</i>	
<i>Eragrotis plana</i>	<i>Solanum panduriforme</i>	
<i>Heteropogon contortus</i>	<i>Turbina oblongata</i>	
<i>Hyparrhenia hirta</i>	<i>Vernonia oligocephala</i>	
<i>Ischaemum fasciculatum</i>	<i>Vernonia poskeana</i>	
<i>Panicum maximum</i>	<i>Waltheria indica</i>	
<i>Panicum schinzii</i>		
<i>Setaria pallide-fusca</i>		
<i>Setaria sphacelata</i>		
<i>Sorghum versicolor</i>		
<i>Sporobolus africanus</i>		
<i>Themeda triandra</i>		

The Wetland Habitat Unit is considered to be of high ecological sensitivity due to the contribution of the various wetland features to faunal migratory connectivity, wetland eco-services provision and the unique habitat provided for faunal and floral species. No RDL floral species were encountered within this habitat unit, and the possibility of such species being present is considered to be low, with the exception of the IUCN Orange listed

species *Boophane disticha*. Should these species be encountered within the development footprint areas, such specimens should be relocated to similar suitable habitat.

5.4 **Habitat Unit 4: Transformed Habitat Unit**



Figure 12: The Transformed Habitat Unit comprising mainly of existing mining infrastructure.

The Transformed Habitat Unit (Figure 12) includes the areas where the vegetation has been completely transformed by existing mining activity. Vegetation within these areas has a low ecological sensitivity and conservation value.

Few indigenous plant species occur within this habitat unit with the majority of species being typical of transformed habitats. A number of the common alien and invasive floral species as listed in Section 5.7 occur in these areas.

In terms of conservation value, this habitat unit provides poor habitat and limited ecological functionality, which lowers the ecological sensitivity of these areas.

5.5 **RDL Floral and Protected Tree Status Assessments**

An assessment considering the presence of any plant species of concern, as well as suitable habitat to support any such species, was undertaken. The complete PRECIS (Pretoria Computer Information Systems) RDL floral lists for the grid references (2527AC, 2527CA and 2527CB) were enquired from SANBI - see table below.

Table 4: IUCN Red Data List Categories – Version 3.1 as supplied by SANBI

Category	Definition
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EX	Extinct
EW	Extinct in the wild
CR	Critically endangered
EN	Endangered
VU	Vulnerable
NT	Near threatened
LC	Least concern
DD	Data deficient
NE	Not evaluated

Table 5: PRECIS plant list for the QDS 2527CA (Raimondo *et al.*, 2009; SANBI, www.sanbi.org).

Family	Species	Threat status	Growthforms	Habitat
AMARYLLIDACEAE	<i>Boophone disticha</i> (L.f.) Herb.	Declining	Geophyte, succulent	Dry grassland and rocky areas.
AQUIFOLIACEAE	<i>Ilex mitis</i> (L.) Radlk. var. <i>mitis</i>	Declining	Shrub, tree	Along rivers and streams in forest and thickets, sometimes in the open. Found from sea level to inland mountain slopes.
ASPHODELACEAE	<i>Aloe peglerae</i> Schönland	EN	Dwarf shrub, herb, succulent	Magaliesberg and Witwatersrand. Grassland, in shallow, gravelly quartzitic soils on rocky north-facing slopes or summits of ridges
CRASSULACEAE	<i>Adromischus umbraticola</i> C.A.Sm. subsp. <i>umbraticola</i>	NT	Dwarf shrub, lithophyte, succulent	South-facing rock crevices on ridges, restricted to Gold Reef Mountain Bushveld in the northern parts of its range, and Andesite Mountain Bushveld in the south.
GUNNERACEAE	<i>Gunnera perpensa</i> L.	Declining	Herb, hydrophyte	Damp marshy area and vleis from coast to 2400 m.
HYACINTHACEAE	<i>Drimia sanguinea</i> (Schinz) Jessop	NT	Geophyte	Open veld and scrubby woodland in a variety of soil types.
MESEMBRYANTHEMACEAE	<i>Frithia pulchra</i> N.E.Br.	Rare	Succulent	Magaliesberg. Coarse shallow, quartzitic soils and sandstones.
MYRSINACEAE	<i>Rapanea melanophloeos</i> (L.) Mez	Declining	Tree	Coastal, swamp and mountain forest, on forest margins and bush clumps, often in damp areas from coast to mountains.
ROSACEAE	<i>Prunus africana</i> (Hook.f.) Kalkman	VU	Tree	Evergreen forests near the coast, inland mistbelt forests and afro-montane

forests up to 2100 m.

Table 6: PRECIS plant list for the QDS 2527CB (Raimondo *et al.*, 2009; SANBI, www.sanbi.org).

Family	Species	Threat status	Growth form	Habitat
ASPHODELACEAE	<i>Aloe peglerae</i> Schönland	EN	Dwarf shrub, herb, succulent	Magaliesberg and Witwatersrand. Grassland, in shallow, gravelly quartzitic soils on rocky north-facing slopes or summits of ridges.
MESEMBRYANTHEMACEAE	<i>Frithia pulchra</i> N.E.Br.	Rare	Succulent	Magaliesberg. Coarse shallow, quartzitic soils and sandstones.

No RDL species were indicated for the QDS 2527AC.

The POC of each of the species listed above was calculated (table below) with reference to habitat suitability found during the assessment of each of the proposed sites.

Table 7: POC for floral species of concern.

Species	Literature	Habitat	Disturbance	POC	Motivation
<i>Aloe peglerae</i>	2	1	2	33%	If present, these species will be confined to the Rocky Outcrop Habitat Unit.
<i>Frithia pulchra</i>	2	1	2	33%	If present, these species will be confined to the Rocky Outcrop Habitat Unit.
<i>Boophone disticha</i>	4	3	3	73%	If present these species is likely to occur within less impacted areas associated with the Impacted Bushveld and Wetland Habitat Units
<i>Ilex mitis</i>	2	1	2	33%	If present, these species will occur in the Wetland Habitat Unit.
<i>Adromischus umbraticola</i> subsp. <i>umbraticola</i>	1	1	1	20%	No suitable habitat is available for this species, but if present, these species will be confined to the Rocky Outcrop Habitat Unit.
<i>Gunnera perpensa</i>	2	1	2	33%	If present, these species will occur in the Wetland Habitat Unit.
<i>Drimia sanguinea</i>	1	1	1	20%	No suitable habitat is available for this species, but if present, these species is likely to occur within less impacted areas associated with the Impacted Bushveld Habitat Units
<i>Rapanea</i>	2	1	2	33%	No suitable habitat is

<i>melanophloeos</i>					available for this species, but if present these species will occur in the vicinity of the Wetland and Rocky Outcrop Habitat Units.
<i>Prunus africana</i>	1	0	0	6%	No suitable habitat is available for this species

From the above assessment, it is clear that of all the RDL plant species listed for the various QDS, only *Boophane disticha* has a probability of occurring within the study area. If present, these species will occur within the less disturbed portions of the Impacted Bushveld and Wetland Habitat Units. Should these species be encountered within the development footprints, such specimens should be relocated to similar suitable habitat.

The tree species *Sclerocarya birrea* subsp. *africana* (Marula) is present on the study area (Figure 13), within the Rocky Outcrop Habitat Unit and in the rocky bushveld areas within the Impacted Bushveld Habitat Unit. The locations of these trees are indicated in Figure 14. This tree species is protected under the National Forests Act of 1998 (Act 84 of 1998). In terms of this act, protected tree species may not be cut, disturbed, damaged or destroyed and their products may not be possessed, collected, removed, transported, exported, donated, purchased or sold - except under licence granted by the Department of Water Affairs (or a delegated authority). Applications for such activities should be made to the responsible official in each province. Each application is evaluated on merit (including site visits) before a decision is taken whether or not to issue a licence (with or without conditions). Such decisions must be in line with national policy and guidelines.

Marula trees are difficult to transplant once mature, due to the risk of damaging the relatively shallow root system. Should transplanting prove unsuccessful, additional Marula trees are to be planted to offset potential loss of marula trees due to infrastructure development. For each Marula tree destroyed, two additional trees of the same species are to be planted.



Figure 13: *Sclerocarya birrea* subsp. *africana* (Marula trees) noted within the study area.

In addition, *Spirostachys africana* (Tamboti) trees are known to occur in the area. These trees are provincially protected under the Transvaal Nature Conservation Ordinance of 1983, but it is unclear whether this act is still applicable. The North West Province Biodiversity Conservation Bill, which was published for comments under Notice Nr. 394, Provincial Gazette 6719, dated 23 December 2009, incorporates the old Transvaal Nature Conservation Ordinance of 1983, but the status of this Bill is also currently unclear. It is therefore recommended that the relevant competent authority provides clarity on this issue in the Record of Decision (ROD).

5.6 Vegetation Index Score

The information gathered during the assessment of the study area was used to determine the Vegetation Index Score (VIS) - see Appendix B for calculations. Due to variation between the different habitat units within each site, all habitat units were assessed separately. The table below lists the results of each habitat unit.

Table 8: Scoring for the Vegetation Index Score

Vegetation Index Score	Assessment Class	Description
22 to 25	A	Unmodified, natural
18 to 22	B	Largely natural with few modifications.
14 to 18	C	Moderately modified
10 to 14	D	Largely modified
5 to 10	E	The loss of natural habitat extensive
<5	F	Modified completely

Table 9: Vegetation Index Score

Habitat unit	Score	Class	Motivation
Impacted Bushveld Habitat Unit	14	D – Largely modified	These areas have been impacted significantly by past agricultural activities and current grazing, trampling, bush encroachment and timber harvesting.
Rocky Outcrop Habitat Unit	22	B – largely natural with few modifications	These areas have high levels of ecological function, intact habitat, low alien invasion, very low disturbance.
Wetland Habitat Unit	15	C – Moderately modified	Some evidence of bush encroachment, overgrazing and alien plant species invasion was noted, although overall functioning is still largely intact.
Transformed Habitat Unit	3	F – Modified completely	These areas have been disturbed extensively due to mining activities.

5.7 Alien and Invasive Floral Species

Alien invaders plants are plants that are of exotic origin and are invading previously pristine areas or ecological niches (Bromilow, 2001). Not all weeds are exotic in origin but, as these exotic plant species have very limited natural “check” mechanisms within the natural environment, they are often the most opportunistic and aggressively growing species within the ecosystem. Therefore, they are often the most dominant and noticeable within an area. Disturbances of the ground through trampling, excavations or landscaping often leads to the dominance of exotic pioneer species that rapidly dominate the area. Under natural conditions, these pioneer species are overtaken by sub-climax and climax species through natural veld succession. This process, however, takes many years to occur, with the natural vegetation never reaching the balanced, pristine species composition prior to the disturbance. There are many species of indigenous pioneer plants, but very few indigenous species can out-compete their more aggressively growing exotic counterparts.

Alien vegetation invasion causes degradation of the ecological integrity of an area, causing (Bromilow, 2001):

- A decline in species diversity;
- Local extinction of indigenous species;
- Ecological imbalance;
- Decreased productivity of grazing pastures and
- Increased agricultural input costs.

During the floral study of each site, all alien and weed species were identified and are listed in the table below.

Table 10: Dominant alien vegetation species identified during the general area assessment.

Species	English name	Origin	Category*
Trees/ shrubs			
<i>Opuntia ficus indica</i>	Prickly pear	Mexico	1
Forbs/ Grasses			
<i>Datura stramonium</i>	Common thorn-apple	North America	1
<i>Sesbania bispinosa</i>	Spiny sesbania	Asia, North Africa	N/A
<i>Schkuhria pinnata</i>	Dwarf marigold	South America	N/A
<i>Zinnia peruviana</i>	Redstar zinnia	South Americas	N/A
<i>Tagetes minuta</i>	Tall khakiweed	South America	N/A
<i>Hibiscus trionum</i>	Bladder hibiscus	Meidterranean	N/A
<i>Tithonia rotundifolia</i>	Red sunflower	South America	1
<i>Mirabilis jalapa</i>	Four-o'-clocks	Tropical America	1

Category 1 – Declared weeds. Prohibited plants, which must be controlled or eradicated.

Category 2 – Declared invader plants with a value. “Invaders” with certain useful qualities (i.e. commercial). Only allowed in controlled, demarcated areas.

Category 3 – Mostly ornamental plants. Alien plants presently growing in, or having escaped from, areas such as gardens, but are proven invaders. No further planting or trade in propagative material is allowed (Bromilow, 2001).

From the table above it is clear that a low diversity of alien species occurs on the study area. Furthermore, the species encountered were sparse and no significant populations or colonies were present. The majority of alien plant species are present within the Transformed and Wetland Habitat Units.

5.8 Medicinal Plant Species

Medicinal plant species are not necessarily indigenous species, with many of them regarded as alien invasive weeds. The medicinal species are all commonly occurring species and are not confined to the study area.

The table below presents a list of plant species with traditional medicinal value, plant parts traditionally used and their main applications, which were identified during the field assessment.

Table 11: Traditional medicinal plants identified during the field assessment. Medicinal applications and application methods are also presented (van Wyk, et al., 1997; van Wyk and Gericke, 2000; van Wyk and Wink, 2004; van Wyk, Oudtshoorn, Gericke, 2009).

Species	Name	Plant parts used	Medicinal uses
<i>Acacia karroo</i>	Sweet thorn	Bark, leaves and gum	Remedy for diarrhoea and dysentery.

Species	Name	Plant parts used	Medicinal uses
<i>Asclepias fruticosa</i>	Milkweed	Leaves, sometimes roots	Used as snuff to treat headaches and tuberculosis.
<i>Datura stramonium</i>	Thornapple	Leaves and green fruit	Mainly used to relieve asthma and to reduce pain. Weak infusions are used as hypnotics by the elderly and as aphrodisiacs by adults.
<i>Dichrostachys cinerea</i>	Sickle bush	Root and often stems bark, leaves and pods	Root infusions have been used to treat body pain, backache, toothache, elephantiasis, syphilis, leprosy and as a styptic, diuretic, purgative and aphrodisiac.
<i>Dombeya rotundifolia</i>	Wild pear	Mainly bark, sometimes roots	Infusions are used orally or as enemas to treat internal ulcers, haemorrhoids, diarrhoea and stomach problems.
<i>Elephantorrhiza elephantina</i>	Elandsbean	Underground rhizomes	Traditional remedy for a wide range of ailments, including diarrhoea and dysentery, stomach disorders, haemorrhoids and perforated peptic ulcers, and as emetics. It is popular for the treatment of skin diseases and acne.
<i>Pallaea calomelanos</i>	Hard fern	Leaves and rhizomes	Leaves are smoked for head olds, chest olds and asthma.
<i>Rhoicissus tridentata</i>	Bushman's grape	Roots	Used to induce labour.
<i>Scabiosa columbaria</i>	Wild scabious	Leaves and fleshy roots	Remedy for colic and heartburn, dried roots are made into a wound-healing ointment and powered roots are also used as a pleasant-smelling baby powder.
<i>Sclerocarya birrea</i> subsp. <i>africana</i>	Marula	Bark, roots and leaves	Diarrhoea, dysentery and unspecific stomach problems are treated with the bark. Also used as a general tonic, in combatting fever and in the treatment of malaria.
<i>Tagetes minuta</i>	Tall khaki bush	Leaves, flowers	The repellent properties of essential oil have been known for a long time and were found to be effective in preventing sheep from becoming infected with blow-fly larvae. Many gardeners use warm water extracts of the fresh plant to keep roses and other garden plants free from insects and fungal diseases. The essential oil is used in perfumery and as a flavourant in food, beverages and tobacco.
<i>Vernonia oligocephala</i>	Groenamara	Leaves and twigs	Infusions are taken as stomach bitters to treat abdominal pain and colic
<i>Ziziphus mucronata</i>	Buffalo thorn	Roots, bark or leaves used separately or in combination.	Warm bark infusions (sometimes together with roots or leaves added) are used as expectorants (also as emetics) in cough and chest problems, while root infusions are a popular remedy for diarrhoea and dysentery. Decoctions of roots and leaves (or chewed leaves) are applied externally to boils, sores and glandular swellings, to promote healing and as an analgesic.

6 SENSITIVITY MAPPING

A sensitivity map was created with the use of the floral integrity and diversity encountered during the assessment of the study area. From the assessment it is clear that portions of

the study area consist of Rocky Outcrop Habitat Unit with intact habitat structure and good ecological functioning. A 50m buffer zone is recommended around the large rocky outcrop to the northeast of the Impala 18 shaft development footprint and care should be taken to avoid encroachment of the construction footprint into the Rocky Outcrop Habitat Unit as represented by the outcrop areas bordering the proposed linear infrastructure.

From the assessment, it is also clear that a number of wetlands are present throughout the study area, mainly being associated with the various drainage lines traversing the study area. All wetland areas are regarded as being of high ecological sensitivity due to the contribution of the various wetland features to faunal migratory connectivity, wetland eco-services provision and the unique habitat provided for faunal and floral species. A 32m buffer zone is deemed adequate to conserve the various wetland features encountered within the study area, while a 100m buffer zone is indicated around all wetland features as advocated by Regulation GN 704 of the National Water Act, 1998.

The rocky bushveld areas that have seen fewer disturbances than the surrounding historical agricultural fields, comprising the Impacted Bushveld Habitat Unit, are deemed to be of moderate ecological sensitivity, due to habitat structure being largely intact. Protected *Sclerocarya birrea* subsp. *africana* trees associated with these areas (as well as within the Rocky Outcrop Habitat Unit) were noted within and adjacent to the study area during the field assessment – the location of these species, potentially affected by the proposed development are indicated in Figure 14.

The Impacted Bushveld Habitat Unit, covering the largest portion of the study area and the Transformed Habitat Unit has a low ecological sensitivity. These areas were mapped and a sensitivity map was produced for the Impala 18 Shaft development, indicating areas of moderate and high ecological sensitivity, which is presented below.

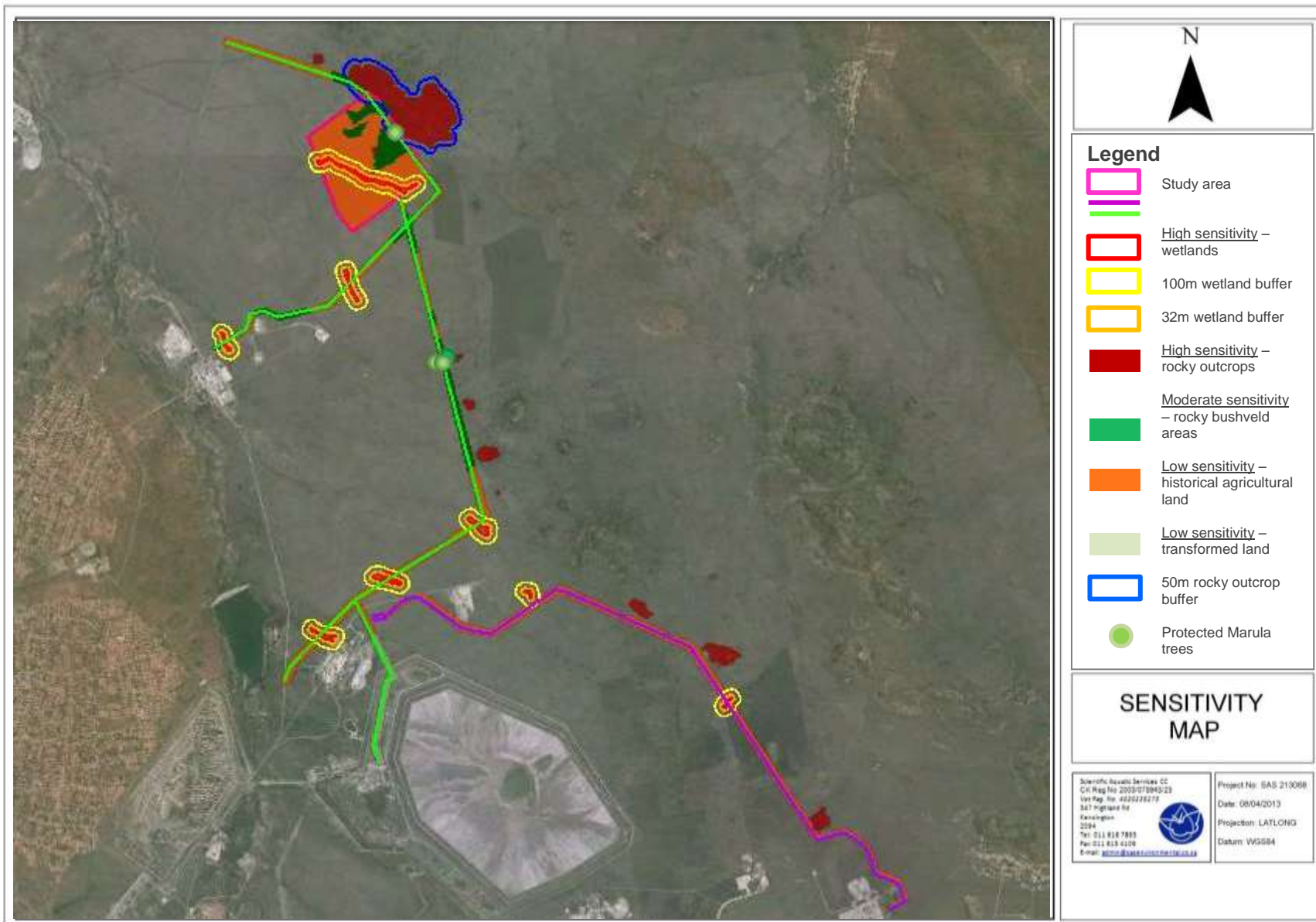


Figure 14: Sensitivity Map for the study area.



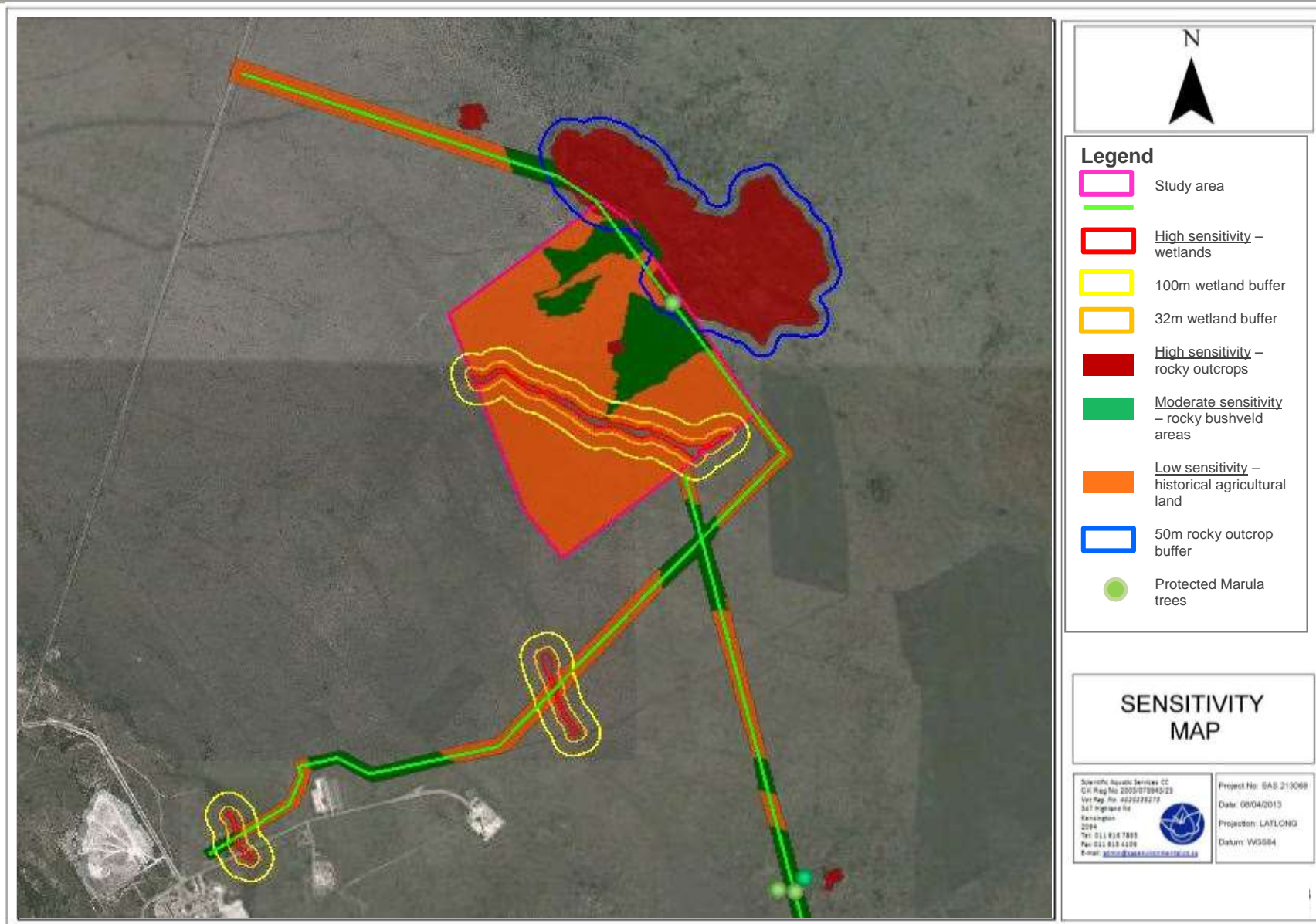


Figure 15: Sensitivity Map for the northern portion of the study area, which includes the proposed 18 Shaft, roads and powerlines.

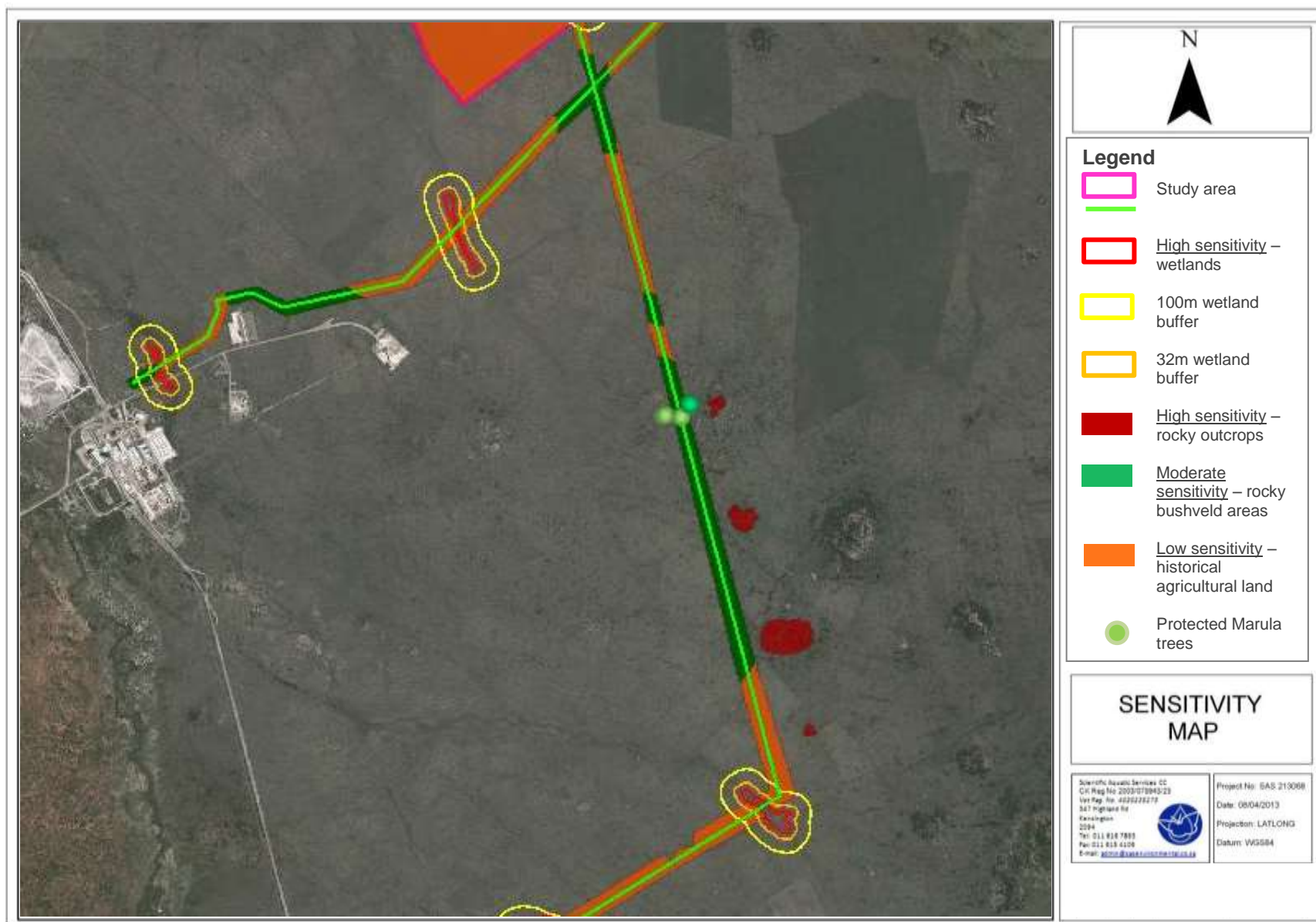


Figure 16: Sensitivity Map for the central portion of the study area, which includes the north-south linear infrastructure corridor.

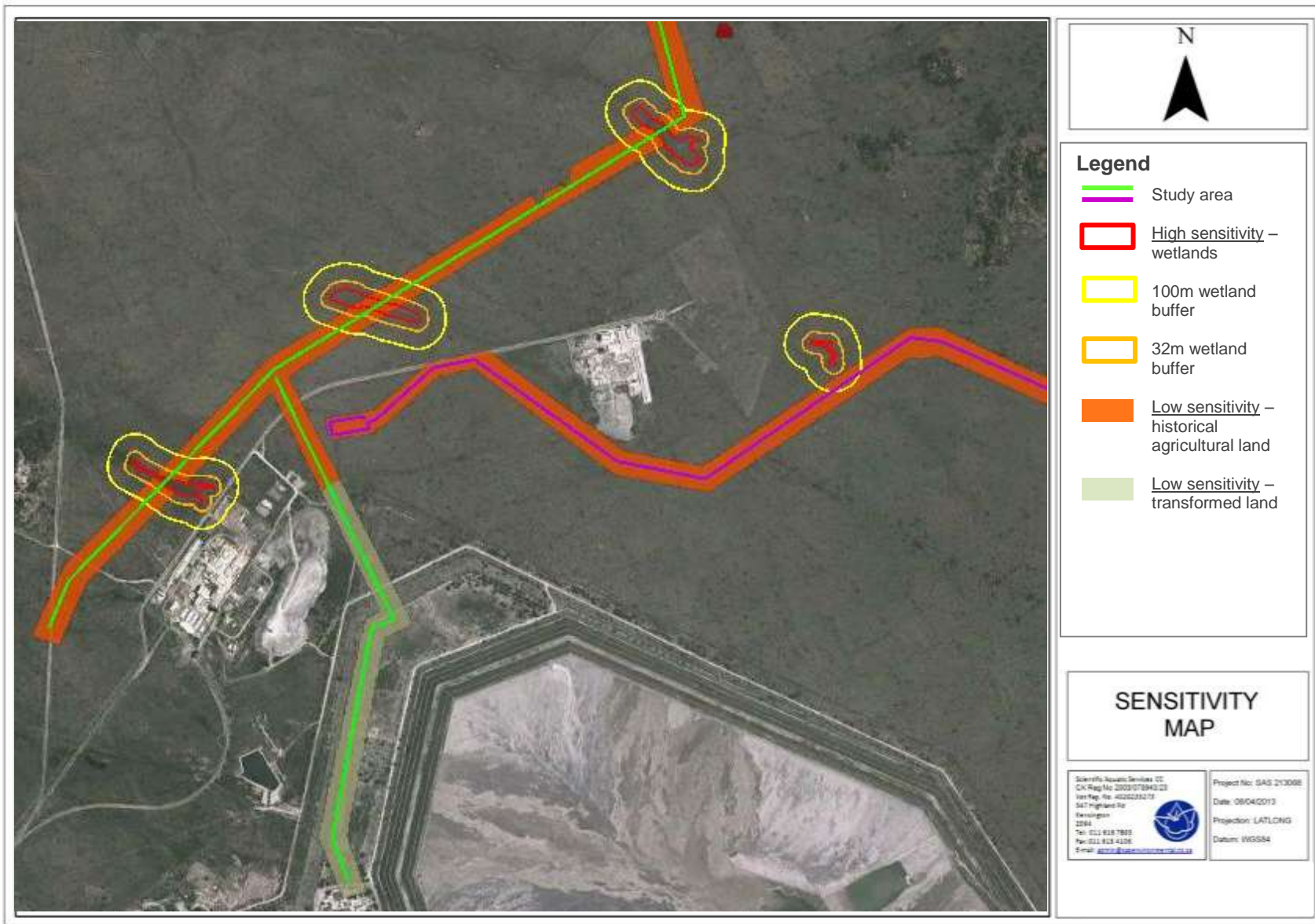


Figure 17: Sensitivity Map for the central portion of the study area, which includes linear infrastructure such as the proposed railway line and powerlines.



Figure 18: Sensitivity Map for the southern portion of the study area, which includes the proposed sewage line and sewage treatment plant.

7 IMPACT ASSESSMENT

The tables below serve to summarise the significance of potential impacts on the floral features occurring on or directly adjacent to the study area. A summary of all potential pre-construction, construction, operational, decommissioning and post-closure phase impacts is provided in Section 7.2 of this document. The sections below present the impact assessment according to the method described in Section A. In addition, it also indicates the required mitigatory and management measures needed to minimise potential ecological impacts and presents an assessment of the significance of the impacts taking into consideration the available mitigatory measures, assuming that they are fully implemented.

7.1 Impact Discussion

All proposed development activities that may impact on the floral communities of the study area are discussed below.

IMPACT 1: IMPACT ON HABITAT FOR FLORAL SPECIES

Activities leading to impact

Pre-Construction	Construction	Operational	Decommissioning & Closure
Poor planning of infrastructure placement and design leading to overall loss of floral habitat	Site clearing and the removal of vegetation leading to loss of floral habitat	Ongoing disturbance of soils with general operational activities leading to altered floral habitat	Ineffective rehabilitation of exposed and impacted areas and failure to implement a comprehensive alien floral control plan may lead to ongoing loss of floral habitat
Inadequate design of infrastructure leading to pollution of soils and ground water	Site clearing and the disturbance of soils leading to increased erosion	Increased introduction and proliferation of alien plant species and further transformation of natural habitat	Disturbance of soils as part of demolition activities may alter floral habitat
Inadequate design of infrastructure leading changes in floral habitat	Movement of construction vehicles and access road construction impacting of habitat	Risk of discharge and contamination from all operational facilities may pollute receiving environment	Ongoing seepage and runoff may affect the groundwater regime beyond closure
	Dumping of material leading to loss of floral habitat	Seepage affecting soils and the groundwater regime	Ongoing risk of discharge from mining facilities beyond closure



	Dumping of material leading to alien plant species proliferation	Runoff and seepage from operation facilities may lead to habitat loss	Potential contamination from decommissioning of the plant and other mining facilities
	Compaction of soils affecting habitat	Ongoing disturbance may lead to erosion and sedimentation	Insufficient aftercare and maintenance leading to post closure impacts on floral habitat due to poor management
			Ineffective monitoring of rehabilitation due to poor management
			Insufficient aftercare and maintenance leading to erosion and sedimentation

Aspects of floral ecology affected

Pre-Construction	Construction	Operational	Decommissioning & Closure
	Direct impact on floral habitat	Direct impact on floral habitat	Direct impact on floral habitat during decommissioning
	Loss of floral biodiversity	Loss of floral biodiversity	Loss of floral biodiversity
	Contamination of soils	Contamination of soils	Ongoing contamination of soils
	Contamination of ground and surface water on which floral species are reliant	Contamination of ground and surface water	Ongoing contamination of ground and surface water
	Compaction and loss of soils	Compaction and loss of soils	Compaction and loss of soils during decommissioning
	Sedimentation and erosion leading to altered habitats	Sedimentation and erosion leading to altered habitats	Sedimentation and erosion leading to altered habitats
	Changes to the floral communities due to alien invasion vegetation leading to altered habitat conditions	Changes to the floral communities due to alien invasion vegetation leading to altered habitat conditions	Changes to the floral communities due to alien invasive vegetation leading to altered habitat conditions



Management level	Probability of Impact	Sensitivity of receiving environment	Severity	Spatial scale	Duration of impact	Likelihood	Consequence	Significance
Unmanaged	4	3	4	4	5	7	13	91 (Medium-High)

Essential mitigation measures:

- A sensitivity map has been developed for the study area, indicating wetland and rocky areas which are considered to be of increased ecological importance. It is recommended that this sensitivity map be considered during all development phases to aid in the conservation of floral habitat within the study area.
- All development footprint areas and areas affected by the proposed development activities should remain as small as possible and should not encroach onto surrounding more sensitive wetland and rocky areas and the associated buffer zones. It must be ensured that these areas are off-limits to construction vehicles and personnel.
- Proliferation of alien and invasive species is expected within any disturbed areas. These species should be eradicated and controlled to prevent their spread beyond the development footprint. Alien plant seed dispersal within the top layers of the soil within footprint areas, that will have an impact on future rehabilitation, has to be controlled.
- All soils compacted as a result of construction activities falling outside of development footprint areas should be ripped and profiled. Special attention should be paid to alien and invasive control within these areas. Alien and invasive vegetation control should take place throughout all development and decommissioning phases to prevent loss of floral habitat.
- To prevent the erosion of top soils, management measures may include berms, soil traps, hessian curtains and stormwater diversion away from areas susceptible to erosion. It must be ensured that topsoil stockpiles are located outside of any drainage lines and areas susceptible to erosion. Stockpiles should be placed away from areas known to contain hazardous substances such as fuel and if any soils are contaminated, it should be stripped and disposed of at a registered hazardous waste dumping site.
- Upon closure and decommissioning of mining facilities, or as soon as possible in the case of buried infrastructure, reseeded with indigenous grasses should be implemented in all affected areas and strategic planting of bushveld tree species should take place to re-establish microclimates and niche habitats.

Recommended mitigation measures

- During the construction and operational phases of the proposed mining expansion erosion berms may be installed to prevent gully formation and siltation of the wetland resources. The following points should serve to guide the placement of erosion berms:
 - Where the track has a slope of less than 2%, berms every 50m should be installed.



- Where the track slopes between 2% and 10%, berms every 25m should be installed.
- Where the track slopes between 10% and 15%, berms every 20m should be installed.
- Where the track has a slope greater than 15%, berms every 10m should be installed.

Management level	Probability of Impact	Sensitivity of receiving environment	Severity	Spatial scale	Duration of impact	Likelihood	Consequence	Significance
Managed	2	3	2	2	2	5	6	30 (Low)

Probable latent impacts:

- Proliferation of alien and weed species in disturbed areas will lead to altered vegetation communities within the study area.
- Loss of floral habitat may lead to altered floral biodiversity.
- Decrease in floral species diversity may occur throughout the study area due to habitat transformation as a result of development activities.
- Ineffective rehabilitation may lead to permanent transformation of floral habitat.

IMPACT 2: IMPACT ON FLORAL DIVERSITY

Activities leading to impact

Pre-Construction	Construction	Operational	Decommissioning & Closure
Poor planning of infrastructure placement and design leading to overall loss of floral species	Site clearance and removal of vegetation leading to a loss of species diversity	An increase in alien plant species leading to altered plant community structure and composition	Ineffective rehabilitation of exposed and impacted areas and failure to implement a comprehensive alien floral control plan leading to ongoing loss of floral biodiversity
Inadequate design of infrastructure leading to pollution of soils and ground water which may lead to a decrease in plant species diversity	Construction of infrastructure and access roads through natural areas leading to a loss of plant species diversity	Erosion and sedimentation as a result of operational activities leading to a loss of floral species diversity	Erosion and sedimentation as a result of closure and decommissioning activities leading to a loss of species diversity
	Proliferation of alien species may alter plant community structure.	Ongoing edge effects from mining operations impacting on plant species diversity	New disturbances during decommissioning and closure
	Soil compaction as a result of construction activities altering plant community structure and composition	Increased vehicular and pedestrian movement may lead to loss of floral species	Failure to monitor rehabilitation efforts and implement the alien floral control plan



	Heavy vehicle movement through natural areas impacting on floral biodiversity	Increased fire frequency and intensity, as well as uncontrolled fires during mining operations due to increased human activity impacting on floral communities	Increased fire frequency and intensity, as well as uncontrolled fires during closure and decommissioning impacting on floral communities
	Increased fire frequency and intensity, as well as uncontrolled fires due to increased human activity may impact on plant communities	Potential blasting and drilling during the construction phase will lead to an increase in dust, which may alter floral community structure and composition	
	Potential blasting and drilling during the construction phase will lead to an increase in dust, which may alter floral community structure and composition		

Aspects of floral ecology affected

Pre-Construction	Construction	Operational	Decommissioning & Closure
	Direct impact on floral biodiversity	Direct impact on floral biodiversity	Direct impact on floral biodiversity during decommissioning
	Loss of floral biodiversity	Loss of floral biodiversity	Loss of floral biodiversity
	Contamination of soils	Contamination of soils	Ongoing contamination of soils
	Contamination of ground and surface water on which wetland floral species are reliant	Contamination of ground and surface water	Ongoing contamination of ground and surface water
	Compaction and loss of soils leading to loss of floral biodiversity	Compaction and loss of soils leading to loss of floral biodiversity	Compaction and loss of soils during decommissioning
	Sedimentation and erosion leading to loss of floral biodiversity	Sedimentation and erosion leading to loss of floral biodiversity	Sedimentation and erosion leading to loss of floral biodiversity
	Alteration of floral community structure due to alien invasion vegetation leading to loss of floral biodiversity	Alteration of floral community structure due to alien invasion vegetation leading to loss of floral biodiversity	Alteration of floral community structure due to alien invasion vegetation leading to loss of floral biodiversity



Management level	Probability of Impact	Sensitivity of receiving environment	Severity	Spatial scale	Duration of impact	Likelihood	Consequence	Significance
Unmanaged	4	3	4	3	5	8	12	96 (Medium-High)

Essential mitigation measures:

- A sensitivity map has been developed for the study area, indicating wetland and rocky areas which are considered to be of increased ecological importance. It is recommended that this sensitivity map be considered during all development phases to aid in the conservation of floral habitat within the study area.
- All development footprint areas and areas affected by the proposed mine development should remain as small as possible and should not encroach onto surrounding more sensitive wetland and rocky areas and the associated buffer zones. It must be ensured that these areas are off-limits to construction vehicles and personnel.
- Planning of temporary roads and access routes should take the site sensitivity plan into consideration. If possible, such roads should be constructed a distance from the more sensitive wetland and rocky outcrop areas and not directly adjacent thereto.
- Removal of the alien and weed species encountered on the property must take place in order to comply with existing legislation (amendments to the regulations under the Conservation of Agricultural Resources Act, 1983 and Section 28 of the National Environmental Management Act, 1998). Removal of species should take place throughout the construction, operational, closure/decommissioning and rehabilitation/ maintenance phases.
- Species specific and area specific eradication recommendations:
 - Care should be taken with the choice of herbicide to ensure that no additional impact and loss of indigenous plant species occurs due to the herbicide used.
 - Footprint areas should be kept as small as possible when removing alien plant species.
 - No vehicles should be allowed to drive through designated sensitive wetland areas during the eradication of alien and weed species.
- Informal fires in the vicinity of the study area should be prohibited during all development phases.

Recommended mitigation measures

- It must be ensured that all roads and construction areas are regularly sprayed with water in order to curb dust generation. This is particularly necessary during the dry season when increased levels of dust generation can be expected. These areas should not be over-sprayed causing water run-off and subsequent sediment loss into waterways and drainage lines in the vicinity of the study area.
- The local communities residing within and in the vicinity of the study area, as well as mining and



construction personnel, should be informed about fire control and prevention measures to reduce the frequency of uncontrolled veld fires in areas surrounding and within the study area.

Management level	Probability of Impact	Sensitivity of receiving environment	Severity	Spatial scale	Duration of impact	Likelihood	Consequence	Significance
Managed	2	3	3	3	2	6	8	48 (Low)

Probable latent impacts

- Proliferation of alien and weed species in disturbed areas will lead to lowered vegetation biodiversity within the study area.
- Loss of floral habitat may lead to altered floral biodiversity.
- A decrease in floral species diversity may occur throughout the study area due to habitat transformation as a result of development activities.
- Ineffective rehabilitation may lead to permanent loss of floral biodiversity.



IMPACT 3: IMPACT ON IMPORTANT SPECIES

Activities leading to impact

Pre-Construction	Construction	Operational	Decommissioning & Closure
Poor planning of infrastructure placement and design leading to overall loss of medicinal plant species and potential RDL/ protected plant species	Site clearance and removal of vegetation leading to a loss of medicinal plant species and potential RDL/ protected plant species	An increase in alien plant species leading to loss of medicinal plant species and potential RDL/ protected plant species by outcompeting these species	Ineffective rehabilitation of exposed and impacted areas and failure to implement a comprehensive alien floral control plan leading to ongoing loss of medicinal plant species and potential RDL/ protected plant species
Inadequate design of infrastructure leading to pollution of soils and ground water which may lead to a loss of important plant species	Construction of infrastructure and access roads through natural areas leading to a loss of important plant species	Erosion and sedimentation as a result of operational activities leading to a loss of important plant species	Continued erosion and sedimentation during closure and decommissioning leading to a loss of important plant species
	Vehicles accessing site through natural veld and more sensitive wetland and rocky areas		

Aspects of floral ecology affected

Pre-Construction	Construction	Operational	Decommissioning & Closure
	Direct impact on medicinal plant species and potential RDL/ protected plant species	Direct impact on medicinal plant species and potential RDL/ protected plant species	Direct impact on medicinal plant species and potential RDL/ protected plant species during decommissioning
	Sedimentation and erosion leading to loss of important plant species	Loss of important plant species	Loss of important plant species
	Alteration of floral community structure due to alien invasion vegetation leading to loss of important plant species	Sedimentation and erosion leading to loss of important plant species	Sedimentation and erosion leading to loss of important plant species
		Alteration of floral community structure due to alien invasion vegetation leading to loss of important plant species	Alteration of floral community structure due to alien invasion vegetation leading to loss of important plant species



Management level	Probability of Impact	Sensitivity of receiving environment	Severity	Spatial scale	Duration of impact	Likelihood	Consequence	Significance
Unmanaged	3	3	4	3	5	6	12	72 (Medium-Low)

Essential mitigation measures:

- A sensitivity map has been developed for the study area, indicating wetland and rocky areas which are considered to be of increased ecological importance. It is recommended that this sensitivity map be considered during all development phases, to aid in the conservation of floral habitat within the study area.
- All development footprint areas and areas affected by the proposed mine development should remain as small as possible and should not encroach onto surrounding more sensitive wetland and rocky areas and the associated buffer zones. It must be ensured that these areas are off-limits to construction vehicles and personnel.
- Sensitive floral species, if discovered, are to be handled with care and the relocation of sensitive plant species is to be overseen by a botanist.
- Should any RDL or other protected plant species be encountered within the study area in the future, the following should be ensured:
 - If any threatened species will be disturbed, ensure effective relocation of individuals to suitable similar habitat.
 - All rescue and relocation plans should be overseen by a suitably qualified specialist.
 - In the case of *Sclerocarya birrea* subsp. *africana*, two new Marula trees are to be planted in suitable habitat for each tree destroyed, should relocation be unsuccessful. If these trees fall within the development footprint or will be affected by closure and decommissioning activities, special authorisation is to be obtained from relevant authorities for such trees to be cut, disturbed, damaged or destroyed. Applications for such activities should be made to the responsible official within the North-West Province.

Recommended mitigation measures:

- All sensitive open space areas are to be demarcated.
- Any specimens of the protected tree species, *Sclerocarya birrea* subsp. *africana*, known to occur in the region potentially impacted by development and closure activities, are to be fenced for the duration of the activity.



Management level	Probability of Impact	Sensitivity of receiving environment	Severity	Spatial scale	Duration of impact	Likelihood	Consequence	Significance
Managed	2	3	2	3	2	6	7	35 (Low)

Probable latent impacts

- A decrease in potential RDL/ protected faunal species diversity may lead to a loss of species richness over time within the region.

7.2 Impact Assessment Conclusion

Based on the above assessment it is evident that there are three possible impacts on the floral ecology within the study area. The table below summarises the findings indicating the significance of the impact before management takes place and the likely impact if management and mitigation takes place. In the consideration of mitigation it is assumed that a high level of mitigation takes place but which does not lead to prohibitive costs. From the table it is evident that prior to management measures being put in place, all of the impacts are medium high and medium-low level impacts. If effective management takes place, all impacts will be reduced to low level impacts.

Table 12: A summary of the results obtained from the assessment of floral ecological impacts

Impact	Unmanaged	Managed
1A: Impact on habitat for floral species	Medium-High	Low
1B: Impact on floral diversity	Medium-High	Low
1C: Impact on important species	Medium-Low	Low



8 RECOMMENDATIONS

After conclusion of this assessment, it is the opinion of the ecologists that the proposed mining of the 'study area' be considered favourably provided that the recommendations below are adhered to:

Development footprint

- A sensitivity map has been developed for the study area, indicating wetland and rocky areas which are considered to be of increased ecological importance. It is recommended that this sensitivity map be considered during all development phases to aid in the conservation of floral habitat within the study area.
- All development footprint areas and areas affected by the proposed development activities should remain as small as possible and should not encroach onto surrounding more sensitive wetland and rocky outcrop areas and the associated buffer zones. It must be ensured that these areas are off-limits to construction vehicles and personnel.
- Planning of temporary roads and access routes should take the site sensitivity plan into consideration. If possible, such roads should be constructed a distance from the more sensitive wetland and rocky outcrop areas and not directly adjacent thereto.

Alien floral species

- Proliferation of alien and invasive species is expected within any disturbed areas. These species should be eradicated and controlled to prevent their spread beyond the development footprint. Alien plant seed dispersal within the top layers of the soil within footprint areas, that will have an impact on future rehabilitation, has to be controlled.
- Removal of the alien and weed species encountered on the property must take place in order to comply with existing legislation (amendments to the regulations under the Conservation of Agricultural Resources Act, 1983 and Section 28 of the National Environmental Management Act, 1998). Removal of species should take place throughout the construction, operational, closure/decommissioning and rehabilitation/ maintenance phases.
- Species specific and area specific eradication recommendations:
 - Care should be taken with the choice of herbicide to ensure that no additional impact and loss of indigenous plant species occurs due to the herbicide used.
 - Footprint areas should be kept as small as possible when removing alien plant species.



- No vehicles should be allowed to drive through designated sensitive wetland areas during the eradication of alien and weed species.

Soils

- All soils compacted as a result of construction activities falling outside of development footprint areas should be ripped and profiled. Special attention should be paid to alien and invasive control within these areas. Alien and invasive vegetation control should take place throughout all development and decommissioning phases to prevent loss of floral habitat.
- To prevent the erosion of top soils, management measures may include berms, soil traps, hessian curtains and stormwater diversion away from areas susceptible to erosion. It must be ensured that topsoil stockpiles are located outside of any drainage lines and areas susceptible to erosion. Stockpiles should be placed away from areas known to contain hazardous substances such as fuel and if any soils are contaminated, it should be stripped and disposed of at a registered hazardous waste dumping site.
- During the construction and operational phases of the proposed mining expansion erosion berms may be installed to prevent gully formation and siltation of the wetland resources. The following points should serve to guide the placement of erosion berms:
 - Where the track has a slope of less than 2%, berms every 50m should be installed.
 - Where the track slopes between 2% and 10%, berms every 25m should be installed.
 - Where the track slopes between 10% and 15%, berms every 20m should be installed.
 - Where the track has a slope greater than 15%, berms every 10m should be installed.

Rehabilitation

- Upon closure and decommissioning of mining facilities, or as soon as possible in the case of buried infrastructure, reseedling with indigenous grasses should be implemented in all affected areas and strategic planting of bushveld tree species should take place to re-establish microclimates and niche habitats.

Fires

- Informal fires in the vicinity of the study area should be prohibited during all development phases.
- It is recommended that the local communities residing within and in the vicinity of the study area, as well as mining and construction personnel, should be informed about fire control



and prevention measures to reduce the frequency of uncontrolled veld fires in areas surrounding and within the study area.

Dust control

- It is recommended that all roads and construction areas are regularly sprayed with water in order to curb dust generation. This is particularly necessary during the dry season when increased levels of dust generation can be expected. These areas should not be over-sprayed causing water run-off and subsequent sediment loss into waterways and drainage lines in the vicinity of the study area.

RDL and Protected floral species

- Sensitive floral species, if discovered, are to be handled with care and the relocation of sensitive plant species is to be overseen by a botanist. Such species include *Boophane disticha*, an IUCN Orange-listed species that may potentially occur within the study area.
- Should any RDL or other protected plant species be encountered within the study area in the future, the following should be ensured:
 - If any threatened species will be disturbed, ensure effective relocation of individuals to suitable similar habitat.
 - All rescue and relocation plans should be overseen by a suitably qualified specialist.
 - In the case of *Sclerocarya birrea* subsp. *africana*, two new Marula trees are to be planted in suitable habitat for each tree destroyed, should relocation be unsuccessful. If these trees fall within the development footprint or will be affected by closure and decommissioning activities, special authorisation is to be obtained from relevant authorities for such trees to be cut, disturbed, damaged or destroyed. Applications for such activities should be made to the responsible official within the North-West Province.
- Any specimens of the protected tree species, *Sclerocarya birrea* subsp. *africana*, known to occur in the region potentially impacted by development and closure activities, may be fenced for the duration of the activity.
- *Spirostachys africana* (Tamboti) trees are known to occur in the area. These trees are provincially protected under the Transvaal Nature Conservation Ordinance of 1983, but it is unclear whether this act is still applicable. The North West Province Biodiversity Conservation Bill, which was published for comments under Notice Nr. 394, Provincial Gazette 6719, dated 23 December 2009, incorporates the old Transvaal Nature Conservation Ordinance of 1983, but the status of this Bill is also currently unclear. It is



therefore recommended that the relevant competent authority provides clarity on this issue in the Record of Decision (ROD).



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Appendix A
Expected floral species list for QDS 2527AC,
QDS 2527CA and QDS 2527CB



Table 13: Expected floral species list for the QDS 2527AC supplied by Sanbi Precis Database.

Family	Species	Threat status	Growth forms
ACANTHACEAE	<i>Barleria bremekampii</i> Oberm.	LC	Dwarf shrub, shrub
ACANTHACEAE	<i>Barleria pretoriensis</i> C.B.Clarke	LC	Dwarf shrub, herb
ACANTHACEAE	<i>Blepharis serrulata</i> (Nees) Ficalho & Hiern	LC	Dwarf shrub, herb
ACANTHACEAE	<i>Crabbea angustifolia</i> Nees	LC	Herb
ACANTHACEAE	<i>Justicia betonica</i> L.	LC	Dwarf shrub, herb
ACANTHACEAE	<i>Justicia flava</i> (Vahl) Vahl	LC	Dwarf shrub, herb
ACANTHACEAE	<i>Ruellia cordata</i> Thunb.	LC	Dwarf shrub, herb
ACANTHACEAE	<i>Ruellioopsis setosa</i> (Nees) C.B.Clarke	LC	Herb
ACANTHACEAE	<i>Thunbergia atriplicifolia</i> E.Mey. ex Nees	LC	Dwarf shrub, herb
ACANTHACEAE	<i>Thunbergia neglecta</i> Sond.	LC	Herb, scrambler
AMARANTHACEAE	<i>Achyranthes aspera</i> L. var. <i>aspera</i>	Not Evaluated	Herb
AMARANTHACEAE	<i>Aerva leucura</i> Moq.	LC	Herb
AMARANTHACEAE	<i>Gomphrena celosioides</i> Mart.	Not Evaluated	Herb
AMARANTHACEAE	<i>Hermbstaedtia odorata</i> (Burch.) T.Cooke var. <i>albi-rosea</i> Suess.	LC	Herb
AMARANTHACEAE	<i>Ozoroa paniculosa</i> (Sond.) R. & A.Fern. var. <i>salicina</i> (Sond.) R. & A.Fern.	LC	Shrub, tree
ANACARDIACEAE	<i>Searsia discolor</i> (E.Mey. ex Sond.) Moffett	LC	Dwarf shrub, shrub
ANACARDIACEAE	<i>Searsia lancea</i> (L.f.) F.A.Barkley	LC	Shrub, tree
ANACARDIACEAE	<i>Searsia pallens</i> (Eckl. & Zeyh.) Moffett	LC	Shrub, tree
ANACARDIACEAE	<i>Searsia pyroides</i> (Burch.) Moffett var. <i>gracilis</i> (Engl.) Moffett	LC	Shrub, tree
ANTHERICACEAE	<i>Chlorophytum galpinii</i> (Baker) Kativu var. <i>galpinii</i>	LC	Herb
ANTHERICACEAE	<i>Chlorophytum transvaalense</i> (Baker) Kativu <i>Heteromorpha arborescens</i> (Spreng.) Cham. & Schltld. var. <i>abyssinica</i> (Hochst. ex A.Rich.) H.Wolff	LC	Herb
APIACEAE	<i>H.Wolff</i>	LC	Shrub, tree
APOCYNACEAE	<i>Acokanthera oppositifolia</i> (Lam.) Codd	LC	Shrub, tree
APOCYNACEAE	<i>Ancylobotrys capensis</i> (Oliv.) Pichon	LC	Climber, shrub
APOCYNACEAE	<i>Asclepias aurea</i> (Schltr.) Schltr.	LC	Herb
APOCYNACEAE	<i>Asclepias fallax</i> (Schltr.) Schltr.	LC	Herb
APOCYNACEAE	<i>Aspidoglossum lamellatum</i> (Schltr.) Kupicha	LC	Herb, succulent
APOCYNACEAE	<i>Cryptolepis oblongifolia</i> (Meisn.) Schltr.	LC	Scrambler, shrub
APOCYNACEAE	<i>Duvalia polita</i> N.E.Br.	LC	Succulent
APOCYNACEAE	<i>Sarcostemma viminale</i> (L.) R.Br. subsp. <i>viminale</i> <i>Asparagus flavicaulis</i> (Oberm.) Fellingham & N.L.Mey. subsp. <i>flavicaulis</i>	LC	Climber, succulent
ASPARAGACEAE	<i>N.L.Mey. subsp. flavicaulis</i>	LC	Shrub
ASTERACEAE	<i>Aster squamatus</i> (Spreng.) Hieron.	Not Evaluated	Herb
ASTERACEAE	<i>Athrixia elata</i> Sond.	LC	Dwarf shrub
ASTERACEAE	<i>Berkheya radula</i> (Harv.) De Wild.	LC	Herb
ASTERACEAE	<i>Dicoma anomala</i> Sond. subsp. <i>gerrardii</i> (Harv. ex F.C.Wilson) S.Ortiz & Rodr.Oubiña	LC	Herb
ASTERACEAE	<i>Felicia clavipilosa</i> Grau subsp. <i>clavipilosa</i>	LC	Shrub
ASTERACEAE	<i>Felicia muricata</i> (Thunb.) Nees subsp. <i>muricata</i>	LC	Shrub
ASTERACEAE	<i>Geigeria burkei</i> Harv. subsp. <i>burkei</i> var. <i>burkei</i>	LC	Herb
ASTERACEAE	<i>Geigeria burkei</i> Harv. subsp. <i>burkei</i> var. <i>zeyheri</i> (Harv.) Merxm.	LC	Herb



Family	Species	Threat status	Growth forms
ASTERACEAE	<i>Helichrysum cerastioides</i> DC. var. <i>cerastioides</i>	LC	Herb
ASTERACEAE	<i>Helichrysum harveyanum</i> Wild	LC	Herb
ASTERACEAE	<i>Helichrysum nudifolium</i> (L.) Less. var. <i>nudifolium</i>	LC	Herb
ASTERACEAE	<i>Helichrysum rugulosum</i> Less.	LC	Herb
ASTERACEAE	<i>Hirpicium bechuanense</i> (S.Moore) Roessler	LC	Dwarf shrub
ASTERACEAE	<i>Litogyne gariepina</i> (DC.) Anderb.	LC	Dwarf shrub, herb
ASTERACEAE	<i>Nidorella hottentotica</i> DC.	LC	Herb
ASTERACEAE	<i>Nidorella microcephala</i> Steetz	LC	Herb
ASTERACEAE	<i>Osteospermum muricatum</i> E.Mey. ex DC. subsp. <i>muricatum</i>	LC	Herb
ASTERACEAE	<i>Philyrophyllum schinzii</i> O.Hoffm.	LC	Herb
ASTERACEAE	<i>Pseudognaphalium luteo-album</i> (L.) Hilliard & B.L.Burt		Herb
ASTERACEAE	<i>Senecio inornatus</i> DC.	LC	Herb
ASTERACEAE	<i>Xanthium strumarium</i> L.	Not Evaluated	Herb
ASTERACEAE	<i>Zinnia peruviana</i> (L.) L.	Not Evaluated	Herb
AYTONIACEAE	<i>Mannia capensis</i> (Steph.) S.W.Arnell		Bryophyte
BORAGINACEAE	<i>Ehretia alba</i> Retief & A.E.van Wyk	LC	Shrub
BORAGINACEAE	<i>Ehretia rigida</i> (Thunb.) Druce subsp. <i>nervifolia</i> Retief & A.E.van Wyk	LC	Shrub
BRYACEAE	<i>Bryum argenteum</i> Hedw.		Bryophyte
BRYACEAE	<i>Bryum capillare</i> Hedw.		Bryophyte
BURSERACEAE	<i>Commiphora schimperi</i> (O.Berg) Engl.	LC	Shrub, tree
CAMPANULACEAE	<i>Wahlenbergia undulata</i> (L.f.) A.DC.	LC	Herb
CAPPARACEAE	<i>Boscia albitrunca</i> (Burch.) Gilg & Gilg-Ben. <i>Boscia foetida</i> Schinz subsp. <i>rehmanniana</i> (Pestal.) Toelken	LC	Shrub, tree
CAPPARACEAE	<i>Maerua angolensis</i> DC. subsp. <i>angolensis</i>	LC	Shrub, tree
CARYOPHYLLACEAE	<i>Dianthus zeyheri</i> Sond. subsp. <i>zeyheri</i>	Not Evaluated	Herb
CELASTRACEAE	<i>Gymnosporia maranguensis</i> (Loes.) Loes.	LC	Shrub, tree
CELASTRACEAE	<i>Gymnosporia tenuispina</i> (Sond.) Szyzyl.	LC	Shrub
CELTIDACEAE	<i>Celtis africana</i> Burm.f.	LC	Shrub, tree
COMBRETACEAE	<i>Terminalia sericea</i> Burch. ex DC. <i>Commelina africana</i> L. var. <i>krebsiana</i> (Kunth)	LC	Tree
COMMELINACEAE	<i>C.B. Clarke</i>	LC	Herb
COMMELINACEAE	<i>Commelina erecta</i> L.	LC	Herb
COMMELINACEAE	<i>Commelina livingstonii</i> C.B. Clarke	LC	Herb
CONVOLVULACEAE	<i>Evolvulus alsinoides</i> (L.) L.	LC	Herb
CONVOLVULACEAE	<i>Ipomoea crassipes</i> Hook. var. <i>crassipes</i>	LC	Herb, succulent
CONVOLVULACEAE	<i>Ipomoea magnusiana</i> Schinz	LC	Herb
CONVOLVULACEAE	<i>Ipomoea oblongata</i> E.Mey. ex Choisy	LC	Herb, succulent
CYPERACEAE	<i>Bulbostylis burchellii</i> (Ficalho & Hiern) C.B. Clarke	LC	Cyperoid, herb, mesophyte
CYPERACEAE	<i>Cyperus longus</i> L. var. <i>tenuiflorus</i> (Rottb.) Boeck.	LC	Cyperoid, helophyte, herb
CYPERACEAE	<i>Cyperus margaritaceus</i> Vahl var. <i>margaritaceus</i>	LC	Cyperoid, herb, mesophyte
CYPERACEAE	<i>Kyllinga alba</i> Nees	LC	Cyperoid, herb, mesophyte
CYPERACEAE	<i>Pycnus mundii</i> Nees	LC	Cyperoid, emergent hydrophyte, helophyte, herb, sudd hydrophyte



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DIPSACACEAE	<i>Cephalaria zeyheriana</i> Szabó	LC	Herb
DIPSACACEAE	<i>Scabiosa columbaria</i> L.	LC	Herb
EBENACEAE	<i>Diospyros lycioides</i> Desf. subsp. <i>lycioides</i>	LC	Shrub
EBENACEAE	<i>Euclea crispa</i> (Thunb.) Gürke subsp. <i>crispa</i>	LC	Shrub, tree
EBENACEAE	<i>Euclea undulata</i> Thunb.	LC	Shrub, tree
ELATINACEAE	<i>Bergia decumbens</i> Planch. ex Harv.	LC	Dwarf shrub
ERIOSPERMACEAE	<i>Eriospermum flagelliforme</i> (Baker) J.C.Manning	LC	Geophyte
EUPHORBIACEAE	<i>Acalypha glabrata</i> Thunb. var. <i>pilosa</i> Pax	LC	Shrub, tree
EUPHORBIACEAE	<i>Clutia pulchella</i> L. var. <i>franksiae</i> Prain	LC	Dwarf shrub
EUPHORBIACEAE	<i>Croton gratissimus</i> Burch. var. <i>gratissimus</i>	LC	Shrub, tree
EUPHORBIACEAE	<i>Dalechampia capensis</i> A.Spreng.	LC	Dwarf shrub Dwarf shrub, herb,
EUPHORBIACEAE	<i>Jatropha zeyheri</i> Sond.	LC	succulent
EUPHORBIACEAE	<i>Spirostachys africana</i> Sond.	LC	Shrub, tree Climber, dwarf shrub, herb,
EUPHORBIACEAE	<i>Tragia rupestris</i> Sond.	LC	shrub
FABACEAE	<i>Acacia galpinii</i> Burt Davy	LC	Tree
FABACEAE	<i>Acacia karroo</i> Hayne	LC	Shrub, tree
FABACEAE	<i>Acacia robusta</i> Burch. subsp. <i>robusta</i>	LC	Tree
FABACEAE	<i>Acacia senegal</i> (L.) Willd. var. <i>rostrata</i> Brenan	LC	Shrub, tree
FABACEAE	<i>Alysicarpus zeyheri</i> Harv.	LC	Herb
FABACEAE	<i>Bauhinia galpinii</i> N.E.Br.	LC	Climber, shrub
FABACEAE	<i>Caesalpinia gilliesii</i> (Wall. ex Hook.) D.Dietr.	Not Evaluated	Shrub
FABACEAE	<i>Chamaecrista biensis</i> (Steyaert) Lock	LC	Herb
FABACEAE	<i>Dalbergia sissoo</i> Roxb. ex . DC.	Not Evaluated	Shrub, tree
FABACEAE	<i>Eriosema psoraleoides</i> (Lam.) G.Don <i>Indigofera daleoides</i> Benth. ex Harv. var. <i>daleoides</i>	LC	Dwarf shrub, shrub Herb
FABACEAE	<i>Indigofera vicioides</i> Jaub. & Spach var. <i>vicioides</i>	LC	Herb
FABACEAE	<i>Listia heterophylla</i> E.Mey.	LC	[No lifeform defined]
FABACEAE	<i>Rhynchosia confusa</i> Burt Davy <i>Rhynchosia densiflora</i> (Roth) DC. subsp. <i>chrysadenia</i> (Taub.) Verdc.	Not Evaluated LC	Climber, herb Climber, herb
FABACEAE	<i>Rhynchosia minima</i> (L.) DC. var. <i>prostrata</i> (Harv.) Meikle	LC	Climber, herb
FABACEAE	<i>Sesbania bispinosa</i> (Jacq.) W.Wight var. <i>bispinosa</i>	Not Evaluated	Herb, tree
FABACEAE	<i>Stylosanthes fruticosa</i> (Retz.) Alston	LC	Dwarf shrub, herb
FABACEAE	<i>Vigna vexillata</i> (L.) A.Rich. var. <i>vexillata</i>	LC	Climber, herb
FABACEAE	<i>Zornia milneana</i> Mohlenbr. <i>Chironia palustris</i> Burch. subsp. <i>transvaalensis</i>	LC	Herb
GENTIANACEAE	(Gilg) I.Verd. <i>Chironia purpurascens</i> (E.Mey.) Benth. & Hook.f. subsp. <i>humilis</i> (Gilg) I.Verd.	LC	Herb
GENTIANACEAE	<i>Monsonia angustifolia</i> E.Mey. ex A.Rich.	LC	Herb
HYACINTHACEAE	<i>Albuca glauca</i> Baker	LC	Geophyte
HYACINTHACEAE	<i>Drimia intricata</i> (Baker) J.C.Manning & Goldblatt	LC	Geophyte
HYACINTHACEAE	<i>Ledebouria leptophylla</i> (Baker) S.Venter	LC	[No lifeform defined]



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HYPERICACEAE	<i>Hypericum aethiopicum</i> Thunb. subsp. <i>sonderi</i> (Bredell) N.Robson	LC	Herb
ICACINACEAE	<i>Apodytes dimidiata</i> E.Mey. ex Arn. subsp. <i>dimidiata</i>	LC	Shrub, tree
LAMIACEAE	<i>Ocimum americanum</i> L. var. <i>americanum</i>	LC	Herb
LAMIACEAE	<i>Rotheca hirsuta</i> (Hochst.) R.Fern.	LC	Herb
LAMIACEAE	<i>Rotheca louwalbertsii</i> (P.P.J.Herman) P.P.J.Herman & Retief	LC	Herb
LAMIACEAE	<i>Salvia reflexa</i> Hornem.	Not Evaluated	Herb
LAMIACEAE	<i>Salvia runcinata</i> L.f.	LC	Herb
LAMIACEAE	<i>Teucrium trifidum</i> Retz.	LC	Herb
MALPIGHIACEAE	<i>Sphedamnocarpus pruriens</i> (A.Juss.) Szyszyl. subsp. <i>galphimifolius</i> (A.Juss.) P.D.de Villiers & D.J.Botha	LC	Climber, shrub
MALPIGHIACEAE	<i>Sphedamnocarpus pruriens</i> (A.Juss.) Szyszyl. subsp. <i>pruriens</i>	LC	Climber, shrub
MALVACEAE	<i>Grewia flavescens</i> Juss.	LC	Shrub
MALVACEAE	<i>Grewia monticola</i> Sond.	LC	Shrub, tree
MALVACEAE	<i>Grewia occidentalis</i> L. var. <i>occidentalis</i>	LC	Shrub, tree
MALVACEAE	<i>Grewia retinervis</i> Burret	LC	Shrub
MALVACEAE	<i>Hermannia burkei</i> Burt & Davy	LC	Climber, herb
MALVACEAE	<i>Hermannia cernua</i> Thunb.	LC	Herb
MALVACEAE	<i>Hermannia depressa</i> N.E.Br.	LC	Herb
MALVACEAE	<i>Hibiscus aethiopicus</i> L. var. <i>ovatus</i> Harv.	LC	Herb
MALVACEAE	<i>Hibiscus calyphyllus</i> Cav.	LC	Dwarf shrub, herb
MALVACEAE	<i>Hibiscus microcarpus</i> Garcke	LC	Herb
MALVACEAE	<i>Melhania prostrata</i> DC.	LC	Dwarf shrub
MALVACEAE	<i>Sida cordifolia</i> L. subsp. <i>cordifolia</i>	LC	Dwarf shrub
MALVACEAE	<i>Triumfetta sonderi</i> Ficalho & Hiern	LC	Dwarf shrub
MALVACEAE	<i>Waltheria indica</i> L.	LC	Herb
MELIACEAE	<i>Turraea obtusifolia</i> Hochst.	LC	Climber, shrub, tree
MYROTHAMNACEAE	<i>Myrothamnus flabellifolius</i> Welw.	DDT	Dwarf shrub, shrub
OLEACEAE	<i>Menodora heterophylla</i> Moric. ex DC. var. <i>australis</i> Steyererm.	LC	Dwarf shrub, herb
OLEACEAE	<i>Olea europaea</i> L. subsp. <i>africana</i> (Mill.) P.S.Green	LC	Shrub, tree
OROBANCHACEAE	<i>Cycnium adonense</i> E.Mey. ex Benth.	LC	Herb, parasite
OROBANCHACEAE	<i>Striga asiatica</i> (L.) Kuntze	LC	Herb, parasite
OROBANCHACEAE	<i>Striga bilabiata</i> (Thunb.) Kuntze subsp. <i>bilabiata</i>	LC	Herb, parasite
OROBANCHACEAE	<i>Striga elegans</i> Benth.	LC	Herb, parasite
PAPAVERACEAE	<i>Argemone ochroleuca</i> Sweet subsp. <i>ochroleuca</i>	Not Evaluated	Herb
PEDALIACEAE	<i>Dicerocaryum senecioides</i> (Klotzsch) Abels	LC	Herb
PEDALIACEAE	<i>Pterodiscus luridus</i> Hook.f.	LC	Herb, succulent
PHYLLANTHACEAE	<i>Bridelia mollis</i> Hutch.	LC	Shrub, tree
PHYLLANTHACEAE	<i>Flueggea virosa</i> (Roxb. ex Willd.) Voigt subsp. <i>virosa</i>	LC	Shrub, tree
PHYLLANTHACEAE	<i>Phyllanthus incurvus</i> Thunb.	LC	Dwarf shrub, herb
PHYLLANTHACEAE	<i>Phyllanthus maderaspatensis</i> L.	LC	Herb



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PHYSICIACEAE	<i>Pyxine petricola</i> Nyl. var. <i>petricola</i>		Lichen
POACEAE	<i>Anthephora pubescens</i> Nees	LC	Graminoid
POACEAE	<i>Aristida bipartita</i> (Nees) Trin. & Rupr.	LC	Graminoid
POACEAE	<i>Aristida canescens</i> Henrard subsp. <i>canescens</i>	LC	Graminoid
POACEAE	<i>Aristida congesta</i> Roem. & Schult. subsp. <i>barbicollis</i> (Trin. & Rupr.) De Winter	LC	Graminoid
POACEAE	<i>Aristida congesta</i> Roem. & Schult. subsp. <i>congesta</i>	LC	Graminoid
POACEAE	<i>Bewsia biflora</i> (Hack.) Gooss.	LC	Graminoid
POACEAE	<i>Bothriochloa bladhii</i> (Retz.) S.T.Blake	LC	Graminoid
POACEAE	<i>Bothriochloa insculpta</i> (Hochst. ex A.Rich.) A.Camus	LC	Graminoid
POACEAE	<i>Brachiaria nigropedata</i> (Ficalho & Hiern) Stapf	LC	Graminoid
POACEAE	<i>Cenchrus ciliaris</i> L.	LC	Graminoid
POACEAE	<i>Chrysopogon serrulatus</i> Trin.	LC	Graminoid
POACEAE	<i>Cymbopogon pospischilii</i> (K.Schum.) C.E.Hubb.	Not Evaluated	Graminoid
POACEAE	<i>Cynodon hirsutus</i> Stent	LC	Graminoid
POACEAE	<i>Digitaria argyrograpta</i> (Nees) Stapf	LC	Graminoid
POACEAE	<i>Digitaria eriantha</i> Steud.	LC	Graminoid
POACEAE	<i>Diheteropogon amplexens</i> (Nees) Clayton var. <i>amplexens</i>	LC	Graminoid
POACEAE	<i>Elionurus muticus</i> (Spreng.) Kunth	LC	Graminoid
POACEAE	<i>Enneapogon scoparius</i> Stapf	LC	Graminoid
POACEAE	<i>Eragrostis chloromelas</i> Steud.	LC	Graminoid
POACEAE	<i>Eragrostis curvula</i> (Schrad.) Nees	LC	Graminoid
POACEAE	<i>Eragrostis gummiflua</i> Nees	LC	Graminoid
POACEAE	<i>Eragrostis racemosa</i> (Thunb.) Steud.	LC	Graminoid
POACEAE	<i>Eragrostis rigidior</i> Pilg.	LC	Graminoid
POACEAE	<i>Eragrostis rotifer</i> Rendle	LC	Graminoid
POACEAE	<i>Eragrostis superba</i> Peyr.	LC	Graminoid
POACEAE	<i>Eustachys paspaloides</i> (Vahl) Lanza & Mattei	LC	Graminoid
POACEAE	<i>Fingerhuthia africana</i> Lehm.	LC	Graminoid
POACEAE	<i>Heteropogon contortus</i> (L.) Roem. & Schult.	LC	Graminoid
POACEAE	<i>Hyparrhenia anamesa</i> Clayton	LC	Graminoid
POACEAE	<i>Hyperthelia dissoluta</i> (Nees ex Steud.) Clayton	LC	Graminoid
POACEAE	<i>Ischaemum afrum</i> (J.F.Gmel.) Dandy	LC	Graminoid
POACEAE	<i>Loudetia flavida</i> (Stapf) C.E.Hubb.	LC	Graminoid
POACEAE	<i>Loudetia simplex</i> (Nees) C.E.Hubb.	LC	Graminoid
POACEAE	<i>Melinis repens</i> (Willd.) Zizka subsp. <i>grandiflora</i> (Hochst.) Zizka	LC	Graminoid
POACEAE	<i>Panicum coloratum</i> L. var. <i>coloratum</i>	LC	Graminoid
POACEAE	<i>Panicum maximum</i> Jacq.	LC	Graminoid
POACEAE	<i>Perotis patens</i> Gand.	LC	Graminoid
POACEAE	<i>Pogonarthria squarrosa</i> (Roem. & Schult.) Pilg.	LC	Graminoid
POACEAE	<i>Schmidtia pappophoroides</i> Steud.	LC	Graminoid
POACEAE	<i>Setaria incrassata</i> (Hochst.) Hack.	LC	Graminoid
POACEAE	<i>Setaria lindenberghiana</i> (Nees) Stapf	LC	Graminoid



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POACEAE	<i>Setaria nigrirostris</i> (Nees) T.Durand & Schinz	LC	Graminoid
POACEAE	<i>Sporobolus fimbriatus</i> (Trin.) Nees	LC	Graminoid
POACEAE	<i>Sporobolus pyramidalis</i> P.Beauv.	LC	Graminoid
POACEAE	<i>Tarigidia aequiglumis</i> (Gooss.) Stent	LC	Graminoid
POACEAE	<i>Trachypogon spicatus</i> (L.f.) Kuntze	LC	Graminoid
POACEAE	<i>Tragus berteronianus</i> Schult.	LC	Graminoid
POACEAE	<i>Tricholaena monachne</i> (Trin.) Stapf & C.E.Hubb.	LC	Graminoid
POACEAE	<i>Trichoneura grandiglumis</i> (Nees) Ekman	LC	Graminoid
POACEAE	<i>Urochloa mosambicensis</i> (Hack.) Dandy	LC	Graminoid
POLYGONACEAE	<i>Persicaria hystricula</i> (J.Schust.) Soják	LC	Herb
POTTIACEAE	<i>Syntrichia laevipila</i> Brid.		Bryophyte, epiphyte
POTTIACEAE	<i>Trichostomum brachydontium</i> Bruch		Bryophyte
PROTEACEAE	<i>Faurea saligna</i> Harv.	LC	Tree
PSORACEAE	<i>Eremastrella crystallifera</i> (Taylor) Gotth.Schneid.		Lichen
RHAMNACEAE	<i>Ziziphus zeyheriana</i> Sond.	LC	Dwarf shrub
RICCIACEAE	<i>Riccia atropurpurea</i> Sim		Bryophyte
RICCIACEAE	<i>Riccia cavernosa</i> Hoffm. emend. Raddi		Bryophyte
RICCIACEAE	<i>Riccia okahandjana</i> S.W.Arnell		Bryophyte
RICCIACEAE	<i>Riccia volkii</i> S.W.Arnell		Bryophyte
RUBIACEAE	<i>Afrocantium mundianum</i> (Cham. & Schldl.) Lantz	LC	[No lifeform defined]
RUBIACEAE	<i>Agathisanthemum bojeri</i> Klotzsch subsp. <i>bojeri</i> <i>Kohautia caespitosa</i> Schnizl. subsp. <i>brachyloba</i> (Sond.) D.Mantell	LC	Herb, shrub
RUBIACEAE	<i>Kohautia virgata</i> (Willd.) Bremek.	LC	Herb
RUBIACEAE	<i>Pavetta eylesii</i> S.Moore	LC	Shrub, tree
SALICACEAE	<i>Dovyalis zeyheri</i> (Sond.) Warb. <i>Salix mucronata</i> Thunb. subsp. <i>woodii</i> (Seemen) Immelman	LC	Shrub, tree
SALICACEAE	<i>Scolopia zeyheri</i> (Nees) Harv.	LC	Shrub, tree
SANTALACEAE	<i>Thesium rasum</i> (A.W.Hill) N.E.Br.	LC	Herb, parasite, shrub
SANTALACEAE	<i>Thesium resedoides</i> A.W.Hill	LC	Herb, parasite, shrub
SAPINDACEAE	<i>Erythrophysa transvaalensis</i> I.Verd.	LC	Shrub, tree
SAPOTACEAE	<i>Mimusops zeyheri</i> Sond.	LC	Shrub, tree
SCROPHULARIACEAE	<i>Aptosimum elongatum</i> Engl.	LC	Dwarf shrub
SCROPHULARIACEAE	<i>Chaenostoma leve</i> (Hiern) Kornhall	LC	Herb
SCROPHULARIACEAE	<i>Craterostigma plantagineum</i> Hochst.	LC	Herb, succulent
SCROPHULARIACEAE	<i>Jamesbrittenia aurantiaca</i> (Burch.) Hilliard	LC	Herb
SCROPHULARIACEAE	<i>Jamesbrittenia montana</i> (Diels) Hilliard	LC	Herb
SINOPTERIDACEAE	<i>Cheilanthes eckloniana</i> (Kunze) Mett.	LC	Geophyte, herb, lithophyte
SINOPTERIDACEAE	<i>Cheilanthes hirta</i> Sw. var. <i>hirta</i>	LC	Geophyte, herb, lithophyte
SINOPTERIDACEAE	<i>Pellaea calomelanos</i> (Sw.) Link var. <i>calomelanos</i>	LC	Geophyte, herb, lithophyte
SOLANACEAE	<i>Datura ferox</i> L.	Not Evaluated	Herb, shrub
SOLANACEAE	<i>Lycium cinereum</i> Thunb.	LC	Dwarf shrub, shrub
STRYCHNACEAE	<i>Strychnos pungens</i> Soler.	LC	Shrub, tree
VAHLIACEAE	<i>Vahlia capensis</i> (L.f.) Thunb. subsp. <i>capensis</i>	LC	Herb



Family	Species	Threat status	Growth forms
VERBENACEAE	<i>Chascanum hederaceum</i> (Sond.) Moldenke var. <i>hederaceum</i>	LC	Herb
VERBENACEAE	<i>Lantana camara</i> L.	Not Evaluated	Shrub
VERBENACEAE	<i>Lantana mearnsii</i> Moldenke var. <i>latibracteolata</i> Moldenke	LC	Shrub
VERBENACEAE	<i>Lantana rugosa</i> Thunb.	LC	Shrub
VERBENACEAE	<i>Lippia javanica</i> (Burm.f.) Spreng.	LC	Shrub
VERBENACEAE	<i>Verbena aristigera</i> S.Moore	Not Evaluated	Herb
VERBENACEAE	<i>Verbena bonariensis</i> L.	Not Evaluated	Herb
VITACEAE	<i>Rhoicissus tridentata</i> (L.f.) Wild & R.B.Drumm. subsp. <i>tridentata</i>	Not Evaluated	Shrub
ZYGOPHYLLACEAE	<i>Tribulus terrestris</i> L.	LC	Herb

Table 14: Expected floral species list for the QDS 2527CA supplied by Sanbi Precis Database.

Family	Species	Threat status	Growth forms
ACANTHACEAE	<i>Barleria macrostegia</i> Nees	LC	Herb
ACANTHACEAE	<i>Barleria pretoriensis</i> C.B.Clarke	LC	Dwarf shrub, herb
ACANTHACEAE	<i>Blepharis angusta</i> (Nees) T.Anderson	LC	Herb
ACANTHACEAE	<i>Blepharis leendertziae</i> Oberm.	LC	Herb
ACANTHACEAE	<i>Chaetacanthus costatus</i> Nees	LC	Dwarf shrub, herb
ACANTHACEAE	<i>Chaetacanthus setiger</i> (Pers.) Lindl.	LC	Dwarf shrub, herb, shrub
ACANTHACEAE	<i>Crabbea hirsuta</i> Harv.	LC	Herb
ACANTHACEAE	<i>Crabbea ovalifolia</i> Ficalho & Hiern	LC	Herb
ACANTHACEAE	<i>Dicliptera eenii</i> S.Moore	LC	Dwarf shrub, herb
ACANTHACEAE	<i>Hypoestes forskoolii</i> (Vahl) R.Br.	LC	Herb
ACANTHACEAE	<i>Isoglossa grantii</i> C.B.Clarke	LC	Dwarf shrub, herb, shrub
ACANTHACEAE	<i>Justicia heterocarpa</i> T.Anderson subsp. <i>dinteri</i> (S.Moore) Hedr	LC	Herb
ACANTHACEAE	<i>Ruellia cordata</i> Thunb.	LC	Dwarf shrub, herb
ACANTHACEAE	<i>Thunbergia atriplicifolia</i> E.Mey. ex Nees	LC	Dwarf shrub, herb
ACANTHACEAE	<i>Thunbergia neglecta</i> Sond.	LC	Herb, scrambler
ACHARIACEAE	<i>Kiggelaria africana</i> L.	LC	Shrub, tree
ALLIACEAE	<i>Tulbaghia acutiloba</i> Harv.	LC	Herb
AMARANTHACEAE	<i>Achyranthes aspera</i> L. var. <i>aspera</i>	NE	Herb
AMARANTHACEAE	<i>Alternanthera pungens</i> Kunth	NE	Herb
AMARANTHACEAE	<i>Amaranthus hybridus</i> L. subsp. <i>hybridus</i> var. <i>hybridus</i>	NE	Herb
AMARANTHACEAE	<i>Cyathula cylindrica</i> Moq. var. <i>cylindrica</i>	LC	Herb
AMARANTHACEAE	<i>Guilleminea densa</i> (Willd. ex Roem. & Schult.) Moq.	NE	Herb
AMARANTHACEAE	<i>Hermbsstaedtia odorata</i> (Burch.) T.Cooke var. <i>odorata</i>	LC	Herb
AMARANTHACEAE	<i>Kyphocarpa angustifolia</i> (Moq.) Lopr.	LC	Herb
AMARANTHACEAE	<i>Pupalia lappacea</i> (L.) A.Juss. var. <i>lappacea</i>	LC	Herb
AMARYLLIDACEAE	<i>Ammocharis coranica</i> (Ker Gawl.) Herb.	LC	Geophyte
AMARYLLIDACEAE	<i>Boophone disticha</i> (L.f.) Herb.	Declining	Geophyte, succulent
AMARYLLIDACEAE	<i>Haemanthus humilis</i> Jacq. subsp. <i>humilis</i>	LC	Geophyte
AMARYLLIDACEAE	<i>Nerine laticoma</i> (Ker Gawl.) T.Durand & Schinz	LC	Geophyte



Family	Species	Threat status	Growth forms
AMARYLLIDACEAE	<i>Scadoxus puniceus</i> (L.) Friis & Nordal	LC	Geophyte, herb
ANACARDIACEAE	<i>Lannea discolor</i> (Sond.) Engl.	LC	Tree
ANACARDIACEAE	<i>Lannea edulis</i> (Sond.) Engl. var. <i>edulis</i>	LC	Dwarf shrub
ANACARDIACEAE	<i>Ozoroa paniculosa</i> (Sond.) R. & A.Fern. var. <i>paniculosa</i>	LC	Shrub, tree
ANACARDIACEAE	<i>Ozoroa paniculosa</i> (Sond.) R. & A.Fern. var. <i>salicina</i> (Sond.) R. & A.Fern.	LC	Shrub, tree
ANACARDIACEAE	<i>Sclerocarya birrea</i> (A.Rich.) Hochst. subsp. <i>caffra</i> (Sond.) Kokwaro	LC	Tree
ANACARDIACEAE	<i>Searsia discolor</i> (E.Mey. ex Sond.) Moffett	LC	Dwarf shrub, shrub
ANACARDIACEAE	<i>Searsia lancea</i> (L.f.) F.A.Barkley	LC	Shrub, tree
ANACARDIACEAE	<i>Searsia leptodictya</i> (Diels) T.S.Yi, A.J.Mill. & J.Wen forma <i>leptodictya</i>	NE	Shrub, tree
ANACARDIACEAE	<i>Searsia magalismontana</i> (Sond.) Moffett subsp. <i>magalismontana</i>	LC	Dwarf shrub
ANACARDIACEAE	<i>Searsia pyroides</i> (Burch.) Moffett var. <i>gracilis</i> (Engl.) Moffett	LC	Shrub, tree
ANACARDIACEAE	<i>Searsia pyroides</i> (Burch.) Moffett var. <i>pyroides</i>	LC	[No lifeform defined]
ANACARDIACEAE	<i>Searsia rigida</i> (Mill.) F.A.Barkley var. <i>margaretae</i> (Burt Davy ex Moffett) Moffett	LC	Shrub
ANACARDIACEAE	<i>Searsia rigida</i> (Mill.) F.A.Barkley var. <i>rigida</i>	LC	Shrub
ANEMIACEAE	<i>Mohria vestita</i> Baker	LC	Geophyte, herb, lithophyte
ANOMODONTACEAE	<i>Anomodon pseudotristis</i> (M?Il.Hal.) Kindb.		Bryophyte
ANTHERICACEAE	<i>Chlorophytum bowkeri</i> Baker	LC	Herb
ANTHERICACEAE	<i>Chlorophytum cooperi</i> (Baker) Nordal	LC	Herb
ANTHERICACEAE	<i>Chlorophytum fasciculatum</i> (Baker) Kativu	LC	Herb
ANTHERICACEAE	<i>Chlorophytum transvaalense</i> (Baker) Kativu	LC	Herb
APIACEAE	<i>Berula thunbergii</i> (DC.) H.Wolff		Herb, hydrophyte
APIACEAE	<i>Heteromorpha arborescens</i> (Spreng.) Cham. & Schltld. var. <i>abyssinica</i> (Hochst. ex A.Rich.) H.Wolff	LC	Shrub, tree
APOCYNACEAE	<i>Acokanthera oppositifolia</i> (Lam.) Codd	LC	Shrub, tree
APOCYNACEAE	<i>Ancylobotrys capensis</i> (Oliv.) Pichon	LC	Climber, shrub
APOCYNACEAE	<i>Asclepias aurea</i> (Schltr.) Schltr.	LC	Herb
APOCYNACEAE	<i>Asclepias brevipes</i> (Schltr.) Schltr.	LC	Herb
APOCYNACEAE	<i>Asclepias densiflora</i> N.E.Br.	LC	Herb
APOCYNACEAE	<i>Asclepias fallax</i> (Schltr.) Schltr.	LC	Herb
APOCYNACEAE	<i>Aspidoglossum glabrescens</i> (Schltr.) Kupicha	LC	Herb, succulent
APOCYNACEAE	<i>Aspidoglossum lamellatum</i> (Schltr.) Kupicha	LC	Herb, succulent
APOCYNACEAE	<i>Brachystelma barberae</i> Harv. ex Hook.f.	LC	Geophyte, succulent
APOCYNACEAE	<i>Brachystelma circinatum</i> E.Mey.	LC	Geophyte, succulent
APOCYNACEAE	<i>Brachystelma nanum</i> (Schltr.) N.E.Br.	LC	Geophyte, succulent
APOCYNACEAE	<i>Catharanthus roseus</i> (L.) G.Don	NE	Herb, shrub
APOCYNACEAE	<i>Cryptolepis cryptolepidioides</i> (Schltr.) Bullock	LC	Climber, shrub
APOCYNACEAE	<i>Cryptolepis oblongifolia</i> (Meisn.) Schltr.	LC	Scrambler, shrub
APOCYNACEAE	<i>Diplorhynchus condylocarpon</i> (M?Il.Arg.) Pichon	LC	Shrub, tree
APOCYNACEAE	<i>Gomphocarpus glaucophyllus</i> Schltr.	LC	Herb
APOCYNACEAE	<i>Gomphocarpus physocarpus</i> E.Mey.	LC	Herb
APOCYNACEAE	<i>Pachycarpus schinzianus</i> (Schltr.) N.E.Br.	LC	Herb, succulent



Family	Species	Threat status	Growth forms
APOCYNACEAE	<i>Pentarrhinum insipidum</i> E.Mey.	LC	Climber
APOCYNACEAE	<i>Raphionacme hirsuta</i> (E.Mey.) R.A.Dyer	LC	Geophyte, herb, succulent
APOCYNACEAE	<i>Raphionacme velutina</i> Schltr.	LC	Geophyte, herb, succulent
APOCYNACEAE	<i>Rauvolfia caffra</i> Sond.	LC	Tree
APOCYNACEAE	<i>Sarcostemma viminale</i> (L.) R.Br. subsp. <i>viminale</i>	LC	Climber, succulent
APOCYNACEAE	<i>Secamone filiformis</i> (L.f.) J.H.Ross	LC	Climber
AQUIFOLIACEAE	<i>Ilex mitis</i> (L.) Radlk. var. <i>mitis</i>	Declining	Shrub, tree
ARALIACEAE	<i>Cussonia paniculata</i> Eckl. & Zeyh. subsp. <i>paniculata</i>	LC	Succulent, tree
ARALIACEAE	<i>Cussonia spicata</i> Thunb.	LC	Succulent, tree
ARALIACEAE	<i>Cussonia transvaalensis</i> Reyneke	LC	Succulent, tree
ARCHIDIACEAE	<i>Archidium ohioense</i> Schimp. ex M?ll.Hal.		Bryophyte
ASPARAGACEAE	<i>Asparagus cooperi</i> Baker	LC	Dwarf shrub, shrub
ASPARAGACEAE	<i>Asparagus flavicaulis</i> (Oberm.) Fellingham & N.L.Mey. subsp. <i>flavicaulis</i>	LC	Shrub
ASPARAGACEAE	<i>Asparagus laricinus</i> Burch.	LC	Shrub
ASPARAGACEAE	<i>Asparagus suaveolens</i> Burch.	LC	Shrub
ASPARAGACEAE	<i>Asparagus transvaalensis</i> (Oberm.) Fellingham & N.L.Mey.	LC	Shrub
ASPARAGACEAE	<i>Asparagus virgatus</i> Baker	LC	Shrub
ASPHODELACEAE	<i>Aloe arborescens</i> Mill.	LC	Shrub, succulent
ASPHODELACEAE	<i>Aloe greatheadii</i> Sch?nland var. <i>davyana</i> (Sch?nland) Glen & D.S.Hardy	LC	Herb, succulent
ASPHODELACEAE	<i>Aloe marlothii</i> A.Berger subsp. <i>marlothii</i>	LC	Succulent, tree Dwarf shrub, herb, succulent
ASPHODELACEAE	<i>Aloe peglerae</i> Sch?nland	EN	Succulent
ASPHODELACEAE	<i>Aloe zebrina</i> Baker	LC	Herb, succulent Geophyte, herb, succulent
ASPHODELACEAE	<i>Bulbine angustifolia</i> Poelln.	LC	Geophyte, herb, succulent
ASPHODELACEAE	<i>Bulbine capitata</i> Poelln.	LC	Geophyte, herb, succulent
ASPHODELACEAE	<i>Bulbine favosa</i> (Thunb.) Schult. & Schult.f	LC	Geophyte, herb, succulent
ASPHODELACEAE	<i>Kniphofia ensifolia</i> Baker subsp. <i>ensifolia</i>	LC	Herb
ASPHODELACEAE	<i>Trachyandra asperata</i> Kunth var. <i>basutoensis</i> (Poelln.) Oberm.	LC	Geophyte, succulent
ASPHODELACEAE	<i>Trachyandra saltii</i> (Baker) Oberm. var. <i>saltii</i>	LC	Geophyte, succulent
ASPHODELACEAE	<i>Trachyandra saltii</i> (Baker) Oberm. var. <i>secunda</i> (K.Krause & Dinter) Oberm.	LC	Geophyte, succulent Epiphyte, geophyte, herb, lithophyte
ASPLENIACEAE	<i>Asplenium aethiopicum</i> (Burm.f.) Bech.	LC	[No lifeform defined] Geophyte, herb, lithophyte
ASPLENIACEAE	<i>Asplenium capense</i> (Kunze) Bir, Fraser-Jenk. & Lovis		[No lifeform defined] Geophyte, herb, lithophyte
ASPLENIACEAE	<i>Asplenium cordatum</i> (Thunb.) Sw.	LC	Geophyte, herb, lithophyte
ASPLENIACEAE	<i>Asplenium inaequilaterale</i> Willd.	LC	Geophyte, herb, lithophyte
ASTERACEAE	<i>Adenostemma caffrum</i> DC.sens.lat.	LC	Herb, hydrophyte
ASTERACEAE	<i>Artemisia afra</i> Jacq. ex Willd. var. <i>afra</i>	LC	Herb, shrub
ASTERACEAE	<i>Aster harveyanus</i> Kuntze	LC	Herb
ASTERACEAE	<i>Athrixia elata</i> Sond.	LC	Dwarf shrub



Family	Species	Threat status	Growth forms
ASTERACEAE	<i>Berkheya carlinopsis</i> Welw. ex O.Hoffm. subsp. magalismsontana (Bolus) Roessler	LC	Shrub
ASTERACEAE	<i>Berkheya zeyheri</i> Oliv. & Hiern subsp. <i>zeyheri</i>	LC	Herb
ASTERACEAE	<i>Bidens bipinnata</i> L.	NE	Herb
ASTERACEAE	<i>Bidens pilosa</i> L.	NE	Herb
ASTERACEAE	<i>Blumea dregeanoides</i> Sch.Bip. ex A.Rich.	LC	Herb
ASTERACEAE	<i>Brachylaena rotundata</i> S.Moore	LC	Shrub, tree
ASTERACEAE	<i>Centaurea melitensis</i> L.	NE	Herb
ASTERACEAE	<i>Chrysocoma ciliata</i> L.	LC	Shrub
ASTERACEAE	<i>Cineraria parvifolia</i> Burttt Davy	LC	Herb
ASTERACEAE	<i>Cirsium vulgare</i> (Savi) Ten.	NE	Herb
ASTERACEAE	<i>Conyza aegyptiaca</i> (L.) Aiton	LC	Herb
ASTERACEAE	<i>Conyza bonariensis</i> (L.) Cronquist	NE	Herb
ASTERACEAE	<i>Conyza podocephala</i> DC.	LC	Herb
ASTERACEAE	<i>Conyza scabrida</i> DC.	LC	Shrub
ASTERACEAE	<i>Conyza ulmifolia</i> (Burm.f.) Kuntze	LC	Herb
ASTERACEAE	<i>Denekia capensis</i> Thunb.	LC	Herb
ASTERACEAE	<i>Dicoma anomala</i> Sond. subsp. <i>gerrardii</i> (Harv. ex F.C.Wilson) S.Ort?z & Rodr.Oubi?a	LC	Herb
ASTERACEAE	<i>Dimorphotheca spectabilis</i> Schltr.	LC	Herb
ASTERACEAE	<i>Felicia muricata</i> (Thunb.) Nees subsp. <i>muricata</i>	LC	Shrub
ASTERACEAE	<i>Galinsoga parviflora</i> Cav.	NE	Herb
ASTERACEAE	<i>Gazania krebsiana</i> Less. subsp. <i>serrulata</i> (DC.) Roessler	LC	Herb
ASTERACEAE	<i>Geigeria burkei</i> Harv. subsp. <i>burkei</i> var. <i>intermedia</i> (S.Moore) Merxm.	LC	Herb
ASTERACEAE	<i>Geigeria burkei</i> Harv. subsp. <i>burkei</i> var. <i>zeyheri</i> (Harv.) Merxm.	LC	Herb
ASTERACEAE	<i>Gerbera ambigua</i> (Cass.) Sch.Bip.	LC	Herb
ASTERACEAE	<i>Gerbera piloselloides</i> (L.) Cass.	LC	Herb
ASTERACEAE	<i>Haplocarpha scaposa</i> Harv.	LC	Herb
ASTERACEAE	<i>Helichrysum argyrosphaerum</i> DC.	LC	Herb
ASTERACEAE	<i>Helichrysum aureonitens</i> Sch.Bip.	LC	Herb
ASTERACEAE	<i>Helichrysum aureum</i> (Houtt.) Merr. var. <i>monocephalum</i> (DC.) Hilliard	LC	Herb
ASTERACEAE	<i>Helichrysum caespititium</i> (DC.) Harv.	LC	Herb
ASTERACEAE	<i>Helichrysum cephaloideum</i> DC.	LC	Herb
ASTERACEAE	<i>Helichrysum cerastioides</i> DC. var. <i>cerastioides</i>	LC	Herb
ASTERACEAE	<i>Helichrysum difficile</i> Hilliard	LC	Herb
ASTERACEAE	<i>Helichrysum epapposum</i> Bolus	LC	Herb
ASTERACEAE	<i>Helichrysum harveyanum</i> Wild	LC	Herb
ASTERACEAE	<i>Helichrysum kraussii</i> Sch.Bip.	LC	Shrub
ASTERACEAE	<i>Helichrysum lepidissimum</i> S.Moore	LC	Herb, shrub
ASTERACEAE	<i>Helichrysum mundtii</i> Harv.	LC	Herb
ASTERACEAE	<i>Helichrysum nudifolium</i> (L.) Less. var. <i>nudifolium</i>	LC	Herb
ASTERACEAE	<i>Helichrysum paronychioides</i> DC.	LC	Dwarf shrub, herb
ASTERACEAE	<i>Helichrysum polycladum</i> Klatt	LC	Herb



Family	Species	Threat status	Growth forms
ASTERACEAE	<i>Helichrysum rugulosum</i> Less.	LC	Herb
ASTERACEAE	<i>Helichrysum setosum</i> Harv.	LC	Herb, shrub
ASTERACEAE	<i>Helichrysum stenopterum</i> DC.	LC	Herb
ASTERACEAE	<i>Hilliardiella aristata</i> (DC.) H.Rob.		Herb
ASTERACEAE	<i>Hilliardiella hirsuta</i> (DC.) H.Rob.		Herb
ASTERACEAE	<i>Kleinia longiflora</i> DC.	LC	Shrub, succulent
ASTERACEAE	<i>Lactuca inermis</i> Forssk.	LC	Herb
ASTERACEAE	<i>Laggera crispata</i> (Vahl) Hepper & J.R.I.Wood	LC	Herb
ASTERACEAE	<i>Litogyne gariepina</i> (DC.) Anderb.	LC	Dwarf shrub, herb
ASTERACEAE	<i>Macladium zeyheri</i> (Sond.) S.Ort?z subsp. <i>zeyheri</i>	LC	Herb
ASTERACEAE	<i>Nidorella anomala</i> Steetz	LC	Herb
ASTERACEAE	<i>Nidorella auriculata</i> DC.	LC	Herb
ASTERACEAE	<i>Nidorella hottentotica</i> DC.	LC	Herb
ASTERACEAE	<i>Nolletia rarifolia</i> (Turcz.) Steetz	LC	Suffrutex
ASTERACEAE	<i>Osteospermum muricatum</i> E.Mey. ex DC. subsp. <i>muricatum</i>	LC	Herb
ASTERACEAE	<i>Phymaspermum athanasioides</i> (S.Moore) K?llersj?	LC	Shrub
ASTERACEAE	<i>Pseudognaphalium luteo-album</i> (L.) Hilliard & B.L.Burt	NE	Herb
ASTERACEAE	<i>Pseudognaphalium oligandrum</i> (DC.) Hilliard & B.L.Burt	LC	Herb
ASTERACEAE	<i>Psiadia punctulata</i> (DC.) Vatke	LC	Shrub
ASTERACEAE	<i>Schistostephium crataegifolium</i> (DC.) Fenzl ex Harv.	LC	Herb, suffrutex
ASTERACEAE	<i>Schkuhria pinnata</i> (Lam.) Kuntze ex Thell.	NE	Herb
ASTERACEAE	<i>Senecio affinis</i> DC.	LC	Herb
ASTERACEAE	<i>Senecio erubescens</i> Aiton var. <i>erubescens</i>	LC	Herb
ASTERACEAE	<i>Senecio harveianus</i> MacOwan	LC	Dwarf shrub, herb
ASTERACEAE	<i>Senecio hieracioides</i> DC.	LC	Herb
ASTERACEAE	<i>Senecio inornatus</i> DC.	LC	Herb
ASTERACEAE	<i>Senecio isatideus</i> DC.	LC	Herb
ASTERACEAE	<i>Senecio latifolius</i> DC.	LC	Herb
ASTERACEAE	<i>Senecio matricariifolius</i> DC.	LC	Herb
ASTERACEAE	<i>Senecio oxyriifolius</i> DC. subsp. <i>oxyriifolius</i>	LC	Herb, succulent
ASTERACEAE	<i>Senecio pentactinus</i> Klatt	LC	Herb, shrub Climber, shrub, succulent
ASTERACEAE	<i>Senecio pleistocephalus</i> S.Moore	LC	
ASTERACEAE	<i>Senecio pterophorus</i> DC.	LC	Herb, shrub
ASTERACEAE	<i>Senecio purpureus</i> L.	LC	Herb
ASTERACEAE	<i>Senecio striatifolius</i> DC.	LC	Herb
ASTERACEAE	<i>Senecio venosus</i> Harv.	LC	Herb
ASTERACEAE	<i>Seriphium plumosum</i> L.	NE	Shrub
ASTERACEAE	<i>Sonchus dregeanus</i> DC.	LC	Herb
ASTERACEAE	<i>Sonchus integrifolius</i> Harv. var. <i>integrifolius</i>	LC	Herb
ASTERACEAE	<i>Sonchus oleraceus</i> L.	NE	Herb
ASTERACEAE	<i>Tagetes minuta</i> L.	NE	Herb
ASTERACEAE	<i>Tarchonanthus camphoratus</i> L.	LC	Shrub, tree
ASTERACEAE	<i>Tarchonanthus parvicapitulatus</i> P.P.J.Herman	LC	Shrub, tree



Family	Species	Threat status	Growth forms
ASTERACEAE	<i>Tolpis capensis</i> (L.) Sch.Bip.	LC	Herb
ASTERACEAE	<i>Ursinia nana</i> DC. subsp. <i>leptophylla</i> Prassler	LC	Herb
ASTERACEAE	<i>Vernonia galpinii</i> Klatt	LC	Herb
ASTERACEAE	<i>Vernonia staehelinoides</i> Harv.	LC	Shrub, suffrutex
ASTERACEAE	<i>Vernonia sutherlandii</i> Harv.	LC	Herb
ASTERACEAE	<i>Xanthium spinosum</i> L.	NE	Herb
AYTONIACEAE	<i>Asterella wilmsii</i> (Steph.) S.W.Arnell		Bryophyte
AYTONIACEAE	<i>Mannia capensis</i> (Steph.) S.W.Arnell		Bryophyte
AYTONIACEAE	<i>Plagiochasma microcephalum</i> (Steph.) Steph. var. <i>microcephalum</i>		Bryophyte
AYTONIACEAE	<i>Plagiochasma rupestre</i> (J.R. & G.Forst.) Steph. var. <i>rupestre</i>		Bryophyte
BARTRAMIACEAE	<i>Breutelia microdonta</i> (Mitt.) Broth.		Bryophyte
BARTRAMIACEAE	<i>Philonotis africana</i> (M?II.Hal.) Rehmman ex Paris		Bryophyte
BARTRAMIACEAE	<i>Philonotis dregeana</i> (M?II.Hal.) A.Jaeger		Bryophyte
BARTRAMIACEAE	<i>Philonotis globosa</i> (M?II.Hal.) D.G.Griffin & W.R.Buck		Bryophyte
BARTRAMIACEAE	<i>Philonotis hastata</i> (Duby) Wijk & Margad.		Bryophyte
BLECHNACEAE	<i>Blechnum attenuatum</i> (Sw.) Mett.	LC	Epiphyte, geophyte, herb, lithophyte
BLECHNACEAE	<i>Blechnum australe</i> L. subsp. <i>australe</i>	LC	Geophyte, herb, lithophyte
BORAGINACEAE	<i>Ehretia rigida</i> (Thunb.) Druce subsp. <i>rigida</i>	LC	Shrub, tree
BORAGINACEAE	<i>Heliotropium nelsonii</i> C.H.Wright	LC	Herb
BORAGINACEAE	<i>Heliotropium ovalifolium</i> Forssk.	LC	Herb
BORAGINACEAE	<i>Trichodesma angustifolium</i> Harv. subsp. <i>angustifolium</i>	LC	Dwarf shrub, herb
BRASSICACEAE	<i>Heliophila rigidiuscula</i> Sond.	LC	Herb
BRYACEAE	<i>Brachymenium acuminatum</i> Harv.		Bryophyte
BRYACEAE	<i>Bryum alpinum</i> Huds. ex With.		Bryophyte
BRYACEAE	<i>Bryum argenteum</i> Hedw.		Bryophyte
BRYACEAE	<i>Bryum capillare</i> Hedw.		Bryophyte
BRYACEAE	<i>Bryum pseudotriquetrum</i> (Hedw.) P.Gaertn., B.Mey. & Scherb.		Bryophyte
BRYACEAE	<i>Bryum pycnophyllum</i> (Dixon) Mohamed		Bryophyte, epiphyte
BRYACEAE	<i>Bryum torquescens</i> Bruch ex De Not.		Bryophyte, epiphyte
BUDDLEJACEAE	<i>Buddleja saligna</i> Willd.	LC	Shrub, tree
BUDDLEJACEAE	<i>Buddleja salviifolia</i> (L.) Lam.	LC	Shrub, tree
BUDDLEJACEAE	<i>Nuxia congesta</i> R.Br. ex Fresen.	LC	Shrub, tree
BUDDLEJACEAE	<i>Nuxia glomerulata</i> (C.A.Sm.) I.Verd.	LC	Shrub, tree
BURMANNIACEAE	<i>Burmannia madagascariensis</i> Mart.	LC	Herb
BURSERACEAE	<i>Commiphora angolensis</i> Engl.	LC	Dwarf shrub, shrub, tree
BURSERACEAE	<i>Commiphora schimperi</i> (O.Berg) Engl.	LC	Shrub, tree
CALYPOGEIACEAE	<i>Calypogeia arguta</i> Nees & Mont.		Bryophyte
CAMPANULACEAE	<i>Wahlenbergia banksiana</i> A.DC.	LC	Herb
CAMPANULACEAE	<i>Wahlenbergia denticulata</i> (Burch.) A.DC. var. <i>denticulata</i>	LC	Herb
CAMPANULACEAE	<i>Wahlenbergia undulata</i> (L.f.) A.DC.	LC	Herb
CAPPARACEAE	<i>Boscia albitrunca</i> (Burch.) Gilg & Gilg-Ben.	LC	Shrub, tree
CAPPARACEAE	<i>Cadaba termitaria</i> N.E.Br.	LC	Shrub
CAPPARACEAE	<i>Cleome gynandra</i> L.	LC	Herb



Family	Species	Threat status	Growth forms
CAPPARACEAE	<i>Cleome oxyphylla</i> Burch. var. <i>oxyphylla</i>	LC	Herb
CAPPARACEAE	<i>Maerua cafra</i> (DC.) Pax <i>Dianthus mooiensis</i> F.N.Williams subsp. <i>mooiensis</i> var. <i>mooiensis</i>	LC	Shrub, tree
CARYOPHYLLACEAE	<i>Pollichia campestris</i> Aiton	NE	Herb
CARYOPHYLLACEAE	<i>Silene burchellii</i> Otth var. <i>angustifolia</i> Sond.	LC	Herb
CELASTRACEAE	<i>Gymnosporia buxifolia</i> (L.) Szyszyl.	NE	Herb
CELASTRACEAE	<i>Gymnosporia tenuispina</i> (Sond.) Szyszyl.	LC	Shrub, tree
CELASTRACEAE	<i>Maytenus undata</i> (Thunb.) Blakelock	LC	Shrub, tree
CELASTRACEAE	<i>Pterocelastrus echinatus</i> N.E.Br.	LC	Shrub, tree
CELASTRACEAE	<i>Salacia rehmannii</i> Schinz	LC	Dwarf shrub
CELTIDACEAE	<i>Celtis africana</i> Burm.f.	LC	Shrub, tree
CELTIDACEAE	<i>Trema orientalis</i> (L.) Blume	LC	Shrub, tree
CHENOPODIACEAE	<i>Chenopodium album</i> L.	NE	Herb
CHENOPODIACEAE	<i>Chenopodium carinatum</i> R.Br.	NE	Herb
CHENOPODIACEAE	<i>Chenopodium schraderianum</i> Roem. & Schult.	NE	Herb
CHRYSOBALANACEAE	<i>Parinari capensis</i> Harv. subsp. <i>capensis</i> <i>Colchicum melanthoides</i> (Willd.) J.C.Manning & Vinn. subsp. <i>melanthoides</i>	LC	Dwarf shrub
COLCHICACEAE	<i>Combretum erythrophyllum</i> (Burch.) Sond.	LC	Geophyte
COMBRETACEAE	<i>Combretum imberbe</i> Wawra	LC	Shrub, tree
COMBRETACEAE	<i>Combretum molle</i> R.Br. ex G.Don	LC	Tree
COMBRETACEAE	<i>Combretum zeyheri</i> Sond. <i>Commelina africana</i> L. var. <i>krebsiana</i> (Kunth) C.B.Clarke	LC	Shrub, tree
COMMELINACEAE	<i>Commelina africana</i> L. var. <i>lancispatha</i> C.B.Clarke	LC	Herb
COMMELINACEAE	<i>Commelina benghalensis</i> L.	LC	Herb
COMMELINACEAE	<i>Commelina eckloniana</i> Kunth	LC	Herb
COMMELINACEAE	<i>Commelina livingstonii</i> C.B.Clarke	LC	Herb
COMMELINACEAE	<i>Commelina modesta</i> Oberm.	LC	Herb
COMMELINACEAE	<i>Cyanotis speciosa</i> (L.f.) Hassk. <i>Floscopa glomerata</i> (Willd. ex Schult. & J.H.Schult.) Hassk.	LC	Herb, succulent
COMMELINACEAE	<i>Convolvulus sagittatus</i> Thunb.	LC	Helophyte, herb
CONVOLVULACEAE	<i>Convolvulus thunbergii</i> Roem. & Schult.	LC	Herb
CONVOLVULACEAE	<i>Cuscuta campestris</i> Yunck.	LC	Herb
CONVOLVULACEAE	<i>Evolvulus alsinoides</i> (L.) L.	NE	Herb, parasite
CONVOLVULACEAE	<i>Ipomoea bathycolpos</i> Hallier f.	LC	Herb
CONVOLVULACEAE	<i>Ipomoea bolusiana</i> Schinz	LC	Dwarf shrub, herb, succulent
CONVOLVULACEAE	<i>Ipomoea crassipes</i> Hook. var. <i>crassipes</i>	LC	Herb, succulent
CONVOLVULACEAE	<i>Ipomoea magnusiana</i> Schinz	LC	Herb
CONVOLVULACEAE	<i>Ipomoea oblongata</i> E.Mey. ex Choisy	LC	Herb, succulent
CONVOLVULACEAE	<i>Ipomoea obscura</i> (L.) Ker Gawl. var. <i>obscura</i>	LC	Herb
CONVOLVULACEAE	<i>Ipomoea ommanneyi</i> Rendle	LC	Herb, succulent
CONVOLVULACEAE	<i>Ipomoea transvaalensis</i> A.Meeuse	LC	Herb, succulent
CONVOLVULACEAE	<i>Merremia palmata</i> Hallier f.	LC	Herb



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CONVOLVULACEAE	<i>Xenostegia tridentata</i> (L.) D.F.Austin & Staples subsp. <i>angustifolia</i> (Jacq.) Lejoly & Lisowski	LC	Herb Dwarf shrub, lithophyte,
CRASSULACEAE	<i>Adromischus umbraticola</i> C.A.Sm. subsp. <i>umbraticola</i>	NT	succulent
CRASSULACEAE	<i>Cotyledon orbiculata</i> L. var. <i>oblonga</i> (Haw.) DC.	LC	Dwarf shrub, succulent
CRASSULACEAE	<i>Crassula lanceolata</i> (Eckl. & Zeyh.) Endl. ex Walp. subsp. <i>lanceolata</i>	LC	Herb, succulent
CRASSULACEAE	<i>Crassula lanceolata</i> (Eckl. & Zeyh.) Endl. ex Walp. subsp. <i>transvaalensis</i> (Kuntze) Toelken	LC	Herb, succulent
CRASSULACEAE	<i>Crassula obovata</i> Haw. var. <i>obovata</i>	LC	Dwarf shrub, succulent
CRASSULACEAE	<i>Crassula setulosa</i> Harv. var. <i>jenkinsii</i> Sch?nland	LC	Herb, lithophyte, succulent
CRASSULACEAE	<i>Crassula setulosa</i> Harv. var. <i>setulosa</i> forma <i>setulosa</i>	NE	Herb, succulent
CRASSULACEAE	<i>Kalanchoe paniculata</i> Harv.	LC	Shrub, succulent
CRASSULACEAE	<i>Kalanchoe rotundifolia</i> (Haw.) Haw.	LC	Dwarf shrub, succulent
CUCURBITACEAE	<i>Coccinia adoensis</i> (A.Rich.) Cogn.	LC	Climber, herb, succulent
CUCURBITACEAE	<i>Kedrostis hirtella</i> (Naudin) Cogn.	LC	Climber, herb, succulent
CUCURBITACEAE	<i>Momordica balsamina</i> L.	LC	Climber, herb, succulent
CYATHEACEAE	<i>Alsophila dregei</i> (Kunze) R.M.Tryon		Tree
CYPERACEAE	<i>Ascolepis capensis</i> (Kunth) Ridl.	LC	Cyperoid, herb
CYPERACEAE	<i>Bulbostylis burchellii</i> (Ficalho & Hiern) C.B.Clarke	LC	Cyperoid, herb, mesophyte
CYPERACEAE	<i>Bulbostylis contexta</i> (Nees) M.Bodard	LC	Cyperoid, herb, mesophyte
CYPERACEAE	<i>Bulbostylis oritrephes</i> (Ridl.) C.B.Clarke	LC	Cyperoid, herb, mesophyte
CYPERACEAE	<i>Bulbostylis schoenoides</i> (Kunth) C.B.Clarke	LC	Cyperoid, helophyte, herb, mesophyte
CYPERACEAE	<i>Carex cognata</i> Kunth	LC	Cyperoid, helophyte, herb
CYPERACEAE	<i>Carex spicatopaniculata</i> Boeckeler ex C.B.Clarke	LC	Cyperoid, herb, mesophyte
CYPERACEAE	<i>Coleochloa setifera</i> (Ridl.) Gilly	LC	Cyperoid, herb, mesophyte
CYPERACEAE	<i>Cyperus albostrigatus</i> Schrad.	LC	Cyperoid, herb, mesophyte
CYPERACEAE	<i>Cyperus capensis</i> (Steud.) Endl.	LC	Cyperoid, herb, mesophyte
CYPERACEAE	<i>Cyperus cyperoides</i> (L.) Kuntze subsp. <i>pseudoflavus</i> (K?k.) Lye	LC	Cyperoid, herb, mesophyte
CYPERACEAE	<i>Cyperus margaritaceus</i> Vahl var. <i>margaritaceus</i>	LC	Cyperoid, herb, mesophyte
CYPERACEAE	<i>Cyperus obtusiflorus</i> Vahl var. <i>obtusiflorus</i>	LC	Cyperoid, herb, mesophyte
CYPERACEAE	<i>Cyperus procerus</i> Rottb.	LC	Cyperoid, helophyte, herb
CYPERACEAE	<i>Cyperus pseudoleptocladus</i> K?k.	LC	Cyperoid, herb, mesophyte
CYPERACEAE	<i>Cyperus rotundus</i> L. subsp. <i>rotundus</i>	LC	Cyperoid, herb, mesophyte
CYPERACEAE	<i>Cyperus rupestris</i> Kunth var. <i>rupestris</i>	LC	Cyperoid, herb, mesophyte
CYPERACEAE	<i>Cyperus sphaerospermus</i> Schrad.	LC	Cyperoid, herb, mesophyte
CYPERACEAE	<i>Cyperus uitenhagensis</i> (Steud.) C.Archer & Goetgh.		Cyperoid, herb,



Family	Species	Threat status	Growth forms
			mesophyte
CYPERACEAE	<i>Eleocharis dregeana</i> Steud.	LC	Cyperoid, helophyte, herb
CYPERACEAE	<i>Fimbristylis dichotoma</i> (L.) Vahl subsp. <i>dichotoma</i>	LC	Cyperoid, helophyte, herb, mesophyte
CYPERACEAE	<i>Fimbristylis ferruginea</i> (L.) Vahl	LC	Cyperoid, helophyte, herb
CYPERACEAE	<i>Fuirena pubescens</i> (Poir.) Kunth var. <i>pubescens</i>	LC	Cyperoid, helophyte, herb, mesophyte
CYPERACEAE	<i>Fuirena stricta</i> Steud. var. <i>stricta</i>	LC	Cyperoid, helophyte, herb, sudd hydrophyte
CYPERACEAE	<i>Isolepis costata</i> Hochst. ex A.Rich.	LC	Cyperoid, helophyte, herb
CYPERACEAE	<i>Isolepis fluitans</i> (L.) R.Br. var. <i>fluitans</i>	LC	Cyperoid, emergent hydrophyte, helophyte, herb
CYPERACEAE	<i>Isolepis sepulcralis</i> Steud.	LC	Cyperoid, helophyte, herb
CYPERACEAE	<i>Kyllinga alba</i> Nees	LC	Cyperoid, herb, mesophyte
CYPERACEAE	<i>Kyllinga melanosperma</i> Nees	LC	Cyperoid, helophyte, herb
CYPERACEAE	<i>Pycreus flavescens</i> (L.) P.Beauv. ex Rchb.	LC	Cyperoid, helophyte, herb
CYPERACEAE	<i>Pycreus macranthus</i> (Boeckeler) C.B. Clarke	LC	Cyperoid, helophyte, herb
CYPERACEAE	<i>Pycreus nitidus</i> (Lam.) J.Raynal	LC	Cyperoid, helophyte, herb, sudd hydrophyte
CYPERACEAE	<i>Rhynchospora brownii</i> Roem. & Schult.	LC	Cyperoid, helophyte, herb
CYPERACEAE	<i>Schoenoplectus brachyceras</i> (Hochst. ex A.Rich.) Lye	LC	Cyperoid, emergent hydrophyte, helophyte, herb
CYPERACEAE	<i>Schoenoplectus muriculatus</i> (K?k.) Browning	LC	Cyperoid, emergent hydrophyte, helophyte, herb
CYPERACEAE	<i>Schoenoxiphium sparteam</i> (Wahlenb.) C.B. Clarke	LC	Cyperoid, herb, mesophyte
CYPERACEAE	<i>Scirpoides burkei</i> (C.B. Clarke) Goetgh., Muasya & D.A. Simpson	LC	Cyperoid, herb, mesophyte
CYPERACEAE	<i>Scleria bulbifera</i> Hochst. ex A.Rich.	LC	Cyperoid, geophyte, herb, mesophyte
CYPERACEAE	<i>Scleria distans</i> Poir.	LC	Cyperoid, helophyte, herb
DICHAPETALACEAE	<i>Dichapetalum cymosum</i> (Hook.) Engl.	LC	Dwarf shrub
DICRANACEAE	<i>Campylopus flaccidus</i> Renauld & Cardot		Bryophyte
DICRANACEAE	<i>Campylopus introflexus</i> (Hedw.) Brid.		Bryophyte
DICRANACEAE	<i>Campylopus pilifer</i> Brid. var. <i>pilifer</i>		Bryophyte
DICRANACEAE	<i>Campylopus pyriformis</i> (F.W.Schultz) Brid.		Bryophyte
DICRANACEAE	<i>Campylopus robillardei</i> Besch.		Bryophyte
DICRANACEAE	<i>Campylopus savannarum</i> (M?ll.Hal.) Mitt.		Bryophyte
DIOSCOREACEAE	<i>Dioscorea quartiniana</i> A.Rich.	LC	Climber, geophyte, succulent
DIPSACACEAE	<i>Cephalaria zeyheriana</i> Szab?	LC	Herb
DIPSACACEAE	<i>Scabiosa columbaria</i> L.	LC	Herb



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DITRICHACEAE	<i>Ditrichum brachypodum</i> (M?ll.Hal.) Broth.		Bryophyte
DROSERACEAE	<i>Drosera burkeana</i> Planch.	LC	Carnivore, herb
DROSERACEAE	<i>Drosera collinsiae</i> N.E.Br. ex Burt Davy	LC	Carnivore, herb
DROSERACEAE	<i>Drosera madagascariensis</i> DC.	LC	Carnivore, herb
EBENACEAE	<i>Diospyros lycioides</i> Desf. subsp. <i>guerkei</i> (Kuntze) De Winter	LC	Shrub, tree
EBENACEAE	<i>Diospyros lycioides</i> Desf. subsp. <i>lycioides</i>	LC	Shrub
EBENACEAE	<i>Diospyros whyteana</i> (Hiern) F.White	LC	Shrub, tree
EBENACEAE	<i>Euclea crispa</i> (Thunb.) G?rke subsp. <i>crispa</i>	LC	Shrub, tree
EBENACEAE	<i>Euclea natalensis</i> A.DC. subsp. <i>angustifolia</i> F.White	LC	Shrub, tree
EBENACEAE	<i>Euclea undulata</i> Thunb.	LC	Shrub, tree
ELATINACEAE	<i>Bergia decumbens</i> Planch. ex Harv.	LC	Dwarf shrub
EQUISETACEAE	<i>Equisetum ramosissimum</i> Desf. subsp. <i>ramosissimum</i>	LC	Herb, hydrophyte
ERICACEAE	<i>Erica drakensbergensis</i> Guthrie & Bolus	LC	Shrub
ERICACEAE	<i>Erica woodii</i> Bolus var. <i>woodii</i>	LC	Dwarf shrub
ERIOCAULACEAE	<i>Eriocaulon sonderianum</i> K?rn.	LC	Herb, hydrophyte, tenagophyte
ERIOSPERMACEAE	<i>Eriospermum mackenii</i> (Hook.f.) Baker subsp. <i>galpinii</i> (Schinz) P.L.Perry	NE	Geophyte
ERIOSPERMACEAE	<i>Eriospermum mackenii</i> (Hook.f.) Baker subsp. <i>mackenii</i>	NE	Geophyte, herb
ERIOSPERMACEAE	<i>Eriospermum porphyrium</i> Archibald	LC	Geophyte
ERPODIACEAE	<i>Aulacopilum trichophyllum</i> ?ngstr.		Bryophyte, epiphyte
ERPODIACEAE	<i>Erpodium coronatum</i> (Hook.f. & Wilson) Mitt. subsp. <i>transvaaliense</i> (Broth. & Wager) Magill		Bryophyte, epiphyte
EUPHORBIACEAE	<i>Acalypha angustata</i> Sond.	LC	Dwarf shrub, herb
EUPHORBIACEAE	<i>Acalypha caperonioides</i> Baill. var. <i>caperonioides</i>	DDT	Dwarf shrub, herb
EUPHORBIACEAE	<i>Acalypha glabrata</i> Thunb. var. <i>glabrata</i>	LC	Shrub, tree
EUPHORBIACEAE	<i>Acalypha glabrata</i> Thunb. var. <i>pilosa</i> Pax	LC	Shrub, tree
EUPHORBIACEAE	<i>Acalypha segetalis</i> M?ll.Arg.	LC	Dwarf shrub, herb
EUPHORBIACEAE	<i>Acalypha villicaulis</i> Hochst.	LC	Dwarf shrub, herb, shrub
EUPHORBIACEAE	<i>Clutia pulchella</i> L. var. <i>pulchella</i>	LC	Dwarf shrub, herb, shrub
EUPHORBIACEAE	<i>Croton gratissimus</i> Burch. var. <i>gratissimus</i>	LC	Shrub, tree
EUPHORBIACEAE	<i>Croton gratissimus</i> Burch. var. <i>subgratissimus</i> (Prain) Burt Davy	LC	Shrub, tree
EUPHORBIACEAE	<i>Dalechampia capensis</i> A.Spreng.	LC	Dwarf shrub
EUPHORBIACEAE	<i>Euphorbia clavarioides</i> Boiss. var. <i>truncata</i> (N.E.Br.) A.C.White, R.A.Dyer & B.Sloane	LC	Dwarf shrub, shrub, succulent
EUPHORBIACEAE	<i>Euphorbia cooperi</i> N.E.Br. ex A.Berger var. <i>cooperi</i>	LC	Succulent, tree
EUPHORBIACEAE	<i>Euphorbia inaequilatera</i> Sond. var. <i>inaequilatera</i>	LC	Dwarf shrub, herb
EUPHORBIACEAE	<i>Euphorbia ingens</i> E.Mey. ex Boiss.	LC	Succulent, tree
EUPHORBIACEAE	<i>Euphorbia pseudotuberosa</i> Pax	LC	Dwarf shrub, succulent
EUPHORBIACEAE	<i>Euphorbia schinzii</i> Pax	LC	Dwarf shrub, shrub, succulent
EUPHORBIACEAE	<i>Spirostachys africana</i> Sond.	LC	Shrub, tree
EUPHORBIACEAE	<i>Tragia rupestris</i> Sond.	LC	Climber, dwarf shrub, herb, shrub
EXORMOTHECACEAE	<i>Exormotheca pustulosa</i> Mitt.		Bryophyte
FABACEAE	<i>Abrus laevigatus</i> E.Mey.	LC	Climber



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FABACEAE	<i>Acacia ataxacantha</i> DC.	LC	Climber, shrub, tree
FABACEAE	<i>Acacia burkei</i> Benth.	LC	Tree
FABACEAE	<i>Acacia caffra</i> (Thunb.) Willd.	LC	Shrub, tree
FABACEAE	<i>Acacia karroo</i> Hayne	LC	Shrub, tree
FABACEAE	<i>Acacia nilotica</i> (L.) Willd. ex Delile subsp. <i>kraussiana</i> (Benth.) Brenan	LC	Tree
FABACEAE	<i>Acacia robusta</i> Burch. subsp. <i>robusta</i>	LC	Tree
FABACEAE	<i>Acacia tortilis</i> (Forssk.) Hayne subsp. <i>heteracantha</i> (Burch.) Brenan	LC	Shrub, tree
FABACEAE	<i>Alysicarpus zeyheri</i> Harv.	LC	Herb
FABACEAE	<i>Argyrolobium tuberosum</i> Eckl. & Zeyh.	LC	Herb
FABACEAE	<i>Astragalus atropilosulus</i> (Hochst.) Bunge subsp. <i>burkeanus</i> (Harv.) J.B.Gillett var. <i>burkeanus</i>	LC	Herb
FABACEAE	<i>Burkea africana</i> Hook.	LC	Tree
FABACEAE	<i>Chamaecrista biensis</i> (Steyaert) Lock	LC	Herb
FABACEAE	<i>Chamaecrista comosa</i> E.Mey. var. <i>capricornia</i> (Steyaert) Lock	LC	Herb
FABACEAE	<i>Chamaecrista mimosoides</i> (L.) Greene	LC	Herb
FABACEAE	<i>Crotalaria distans</i> Benth. subsp. <i>distans</i>	LC	Herb
FABACEAE	<i>Desmodium repandum</i> (Vahl) DC.	LC	Herb, shrub
FABACEAE	<i>Dichilus lebeckioides</i> DC.	LC	Dwarf shrub, herb
FABACEAE	<i>Dichrostachys cinerea</i> (L.) Wight & Arn. subsp. <i>africana</i> Brenan & Brummitt var. <i>africana</i>	LC	Shrub, tree
FABACEAE	<i>Dumasia villosa</i> DC. var. <i>villosa</i>	LC	Climber, herb
FABACEAE	<i>Elephantorrhiza burkei</i> Benth.	LC	Shrub, tree Dwarf shrub, shrub, suffrutex
FABACEAE	<i>Elephantorrhiza elephantina</i> (Burch.) Skeels	LC	
FABACEAE	<i>Eriosema burkei</i> Benth. ex Harv. var. <i>burkei</i>	LC	Herb
FABACEAE	<i>Eriosema cordatum</i> E.Mey.	LC	Herb
FABACEAE	<i>Eriosema psoraleoides</i> (Lam.) G.Don	LC	Dwarf shrub, shrub
FABACEAE	<i>Eriosema salignum</i> E.Mey.	LC	Herb
FABACEAE	<i>Erythrina lysistemon</i> Hutch.	LC	Tree
FABACEAE	<i>Indigofera comosa</i> N.E.Br.	LC	Shrub
FABACEAE	<i>Indigofera daleoides</i> Benth. ex Harv. var. <i>daleoides</i>	LC	Herb
FABACEAE	<i>Indigofera dregeana</i> E.Mey.	LC	Dwarf shrub
FABACEAE	<i>Indigofera filipes</i> Benth. ex Harv.	LC	Dwarf shrub, herb, shrub
FABACEAE	<i>Indigofera heterotricha</i> DC.	LC	Dwarf shrub, herb
FABACEAE	<i>Indigofera hiliaris</i> Eckl. & Zeyh. var. <i>hiliaris</i>	LC	Herb
FABACEAE	<i>Indigofera melanadenia</i> Benth. ex Harv.	LC	Herb, shrub
FABACEAE	<i>Indigofera mollicoma</i> N.E.Br.	LC	Herb
FABACEAE	<i>Indigofera oxalidea</i> Welw. ex Baker	LC	Herb
FABACEAE	<i>Indigofera oxytropis</i> Benth. ex Harv.	LC	Herb
FABACEAE	<i>Lotononis laxa</i> Eckl. & Zeyh.	LC	Herb
FABACEAE	<i>Mundulea sericea</i> (Willd.) A.Chev. subsp. <i>sericea</i>	LC	Shrub, tree
FABACEAE	<i>Neonotonia wightii</i> (Wight. ex Arn.) J.A.Lackey	LC	Climber
FABACEAE	<i>Ophrestia oblongifolia</i> (E.Mey.) H.M.L.Forbes var. <i>oblongifolia</i>	LC	Herb
FABACEAE	<i>Pearsonia sessilifolia</i> (Harv.) Dummer subsp. <i>sessilifolia</i>	LC	Dwarf shrub, herb



Family	Species	Threat status	Growth forms
FABACEAE	<i>Pearsonia uniflora</i> (Kensit) Polhill	LC	Herb
FABACEAE	<i>Rhynchosia adenodes</i> Eckl. & Zeyh.	LC	Herb
FABACEAE	<i>Rhynchosia caribaea</i> (Jacq.) DC. <i>Rhynchosia densiflora</i> (Roth) DC. subsp. <i>chrysadenia</i> (Taub.) Verdc.	LC	Climber, herb
FABACEAE	<i>Rhynchosia minima</i> (L.) DC. var. <i>prostrata</i> (Harv.) Meikle	LC	Climber, herb
FABACEAE	<i>Rhynchosia monophylla</i> Schltr.	LC	Herb
FABACEAE	<i>Rhynchosia nervosa</i> Benth. ex Harv. var. <i>nervosa</i>	LC	Herb
FABACEAE	<i>Rhynchosia nitens</i> Benth. ex Harv.	LC	Shrub
FABACEAE	<i>Rhynchosia reptabunda</i> N.E.Br.	LC	Climber, herb
FABACEAE	<i>Rhynchosia totta</i> (Thunb.) DC. var. <i>totta</i>	LC	Climber, herb
FABACEAE	<i>Rhynchosia venulosa</i> (Hiern) K.Schum.	LC	Climber, herb
FABACEAE	<i>Sesbania bispinosa</i> (Jacq.) W.Wight var. <i>bispinosa</i>	NE	Herb, tree
FABACEAE	<i>Sesbania transvaalensis</i> J.B.Gillett	LC	Herb
FABACEAE	<i>Sphenostylis angustifolia</i> Sond.	LC	Dwarf shrub, herb
FABACEAE	<i>Tephrosia capensis</i> (Jacq.) Pers. var. <i>capensis</i>	LC	Dwarf shrub, herb, shrub
FABACEAE	<i>Tephrosia elongata</i> E.Mey. var. <i>elongata</i>	LC	Dwarf shrub, herb, shrub
FABACEAE	<i>Tephrosia longipes</i> Meisn. subsp. <i>longipes</i> var. <i>longipes</i>	LC	Dwarf shrub, herb, shrub
FABACEAE	<i>Tephrosia multijuga</i> R.G.N.Young	LC	Dwarf shrub, herb, shrub
FABACEAE	<i>Tephrosia rhodesica</i> Baker f. var. <i>rhodesica</i> <i>Tephrosia villosa</i> (L.) Pers. subsp. <i>ehrenbergiana</i> (Schweinf.) Brummitt var. <i>ehrenbergiana</i>	LC	Dwarf shrub, herb
FABACEAE	<i>Tylosema esculentum</i> (Burch.) A.Schreib.	LC	Shrub, succulent
FABACEAE	<i>Zornia linearis</i> E.Mey.	LC	Herb
FABACEAE	<i>Zornia milneana</i> Mohlenbr.	LC	Herb
FABRONIACEAE	<i>Fabronia pilifera</i> Hornsch.		Bryophyte, epiphyte
FISSIDENTACEAE	<i>Fissidens asplenioides</i> Hedw.		Bryophyte
FISSIDENTACEAE	<i>Fissidens borgenii</i> Hampe		Bryophyte, epiphyte
FISSIDENTACEAE	<i>Fissidens bryoides</i> Hedw.		Bryophyte
FISSIDENTACEAE	<i>Fissidens erosulus</i> (M?ll.Hal.) Paris		Bryophyte
FISSIDENTACEAE	<i>Fissidens ovatus</i> Brid.		Bryophyte, hydrophyte
FISSIDENTACEAE	<i>Fissidens plumosus</i> Hornsch.		Bryophyte
FISSIDENTACEAE	<i>Fissidens pseudoserratus</i> (M?ll.Hal.) A.Jaeger		Bryophyte, epiphyte
FISSIDENTACEAE	<i>Fissidens rufescens</i> Hornsch.		Bryophyte
FISSIDENTACEAE	<i>Fissidens sciophyllus</i> Mitt.		Bryophyte
FLACOURTIACEAE	<i>Flacourtia indica</i> (Burm.f.) Merr.	LC	Shrub, tree
FOSSOMBRONIACEAE	<i>Fossombronia crispa</i> Nees		Bryophyte
FOSSOMBRONIACEAE	<i>Fossombronia glenii</i> Perold		Bryophyte
FUNARIACEAE	<i>Funaria hygrometrica</i> Hedw. <i>Chironia purpurascens</i> (E.Mey.) Benth. & Hook.f. subsp. <i>humilis</i> (Gilg) I.Verd.	LC	Bryophyte
GENTIANACEAE	<i>Monsonia angustifolia</i> E.Mey. ex A.Rich.	LC	Herb
GERANIACEAE	<i>Monsonia burkeana</i> Planch. ex Harv.	LC	Herb
GERANIACEAE	<i>Monsonia transvaalensis</i> R.Knuth	LC	Herb
GERANIACEAE	<i>Pelargonium luridum</i> (Andrews) Sweet	LC	Geophyte, succulent



Family	Species	Threat status	Growth forms
GLEICHENIACEAE	<i>Gleichenia polypodioides</i> (L.) Sm.	LC	Herb, scrambler
GUNNERACEAE	<i>Gunnera perpensa</i> L.	Declining	Herb, hydrophyte
HALORAGACEAE	<i>Laurembergia repens</i> (L.) P.J.Bergius subsp. <i>brachypoda</i> (Welw. ex Hiern) Oberm.	LC	Herb
HYACINTHACEAE	<i>Albuca setosa</i> Jacq.	LC	Geophyte
HYACINTHACEAE	<i>Dipcadi gracillimum</i> Baker	LC	Geophyte
HYACINTHACEAE	<i>Dipcadi viride</i> (L.) Moench	LC	Geophyte
HYACINTHACEAE	<i>Drimia calcarata</i> (Baker) Stedje	LC	Geophyte
HYACINTHACEAE	<i>Drimia elata</i> Jacq.	DDT	Geophyte
HYACINTHACEAE	<i>Drimia intricata</i> (Baker) J.C.Manning & Goldblatt	LC	Geophyte
HYACINTHACEAE	<i>Drimia sanguinea</i> (Schinz) Jessop	NT	Geophyte
HYACINTHACEAE	<i>Drimia uniflora</i> J.C.Manning & Goldblatt	LC	Geophyte, succulent
HYACINTHACEAE	<i>Drimiopsis burkei</i> Baker subsp. <i>burkei</i>	LC	Geophyte
HYACINTHACEAE	<i>Eucomis autumnalis</i> (Mill.) Chitt. subsp. <i>clavata</i> (Baker) Reyneke	NE	Geophyte
HYACINTHACEAE	<i>Ledebouria cooperi</i> (Hook.f.) Jessop	LC	Geophyte
HYACINTHACEAE	<i>Ledebouria inquinata</i> (C.A.Sm.) Jessop	LC	Geophyte
HYACINTHACEAE	<i>Ledebouria leptophylla</i> (Baker) S.Venter		[No lifeform defined]
HYACINTHACEAE	<i>Ledebouria marginata</i> (Baker) Jessop	LC	Geophyte
HYACINTHACEAE	<i>Ledebouria ovatifolia</i> (Baker) Jessop	LC	Geophyte
HYACINTHACEAE	<i>Ledebouria revoluta</i> (L.f.) Jessop	LC	Geophyte
HYACINTHACEAE	<i>Ornithogalum juncifolium</i> Jacq. var. <i>juncifolium</i>	LC	Geophyte, succulent
HYACINTHACEAE	<i>Ornithogalum tenuifolium</i> F.Delaroche subsp. <i>tenuifolium</i>	LC	Geophyte
HYACINTHACEAE	<i>Schizocarphus nervosus</i> (Burch.) Van der Merwe	LC	Geophyte
HYPERICACEAE	<i>Hypericum aethiopicum</i> Thunb. subsp. <i>sonderi</i> (Bredell) N.Robson	LC	Herb
HYPERICACEAE	<i>Hypericum lalandii</i> Choisy	LC	Herb
HYPNACEAE	<i>Isopterygium leucophanes</i> (Hampe ex M?ll.Hal.) A.Jaeger		Bryophyte, epiphyte
HYPOXIDACEAE	<i>Hypoxis argentea</i> Harv. ex Baker var. <i>sericea</i> Baker	LC	Geophyte
HYPOXIDACEAE	<i>Hypoxis iridifolia</i> Baker	LC	Geophyte
HYPOXIDACEAE	<i>Hypoxis rigidula</i> Baker var. <i>pilosissima</i> Baker	LC	Geophyte
ICACINACEAE	<i>Apodytes dimidiata</i> E.Mey. ex Arn. subsp. <i>dimidiata</i>	LC	Shrub, tree
ICACINACEAE	<i>Cassinopsis ilicifolia</i> (Hochst.) Kuntze	LC	Shrub, tree
IRIDACEAE	<i>Babiana bainesii</i> Baker	LC	Geophyte, herb
IRIDACEAE	<i>Babiana hypogaea</i> Burch.	LC	Geophyte, herb
IRIDACEAE	<i>Dierama mossii</i> (N.E.Br.) Hilliard	LC	Geophyte, herb
IRIDACEAE	<i>Gladiolus antholyzoides</i> Baker	LC	Geophyte, herb
IRIDACEAE	<i>Gladiolus crassifolius</i> Baker	LC	Geophyte, herb
IRIDACEAE	<i>Gladiolus elliotii</i> Baker	LC	Geophyte, herb
IRIDACEAE	<i>Gladiolus permeabilis</i> D.Delaroche subsp. <i>edulis</i> (Burch. ex Ker Gawl.) Oberm.	LC	Geophyte, herb
IRIDACEAE	<i>Hesperantha coccinea</i> (Backh. & Harv.) Goldblatt & J.C.Manning	LC	Geophyte, herb
IRIDACEAE	<i>Hesperantha longicollis</i> Baker	LC	Geophyte, herb
IRIDACEAE	<i>Lapeirousia sandersonii</i> Baker	LC	Geophyte, herb
IRIDACEAE	<i>Moraea stricta</i> Baker	LC	Geophyte, herb



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IRIDACEAE	<i>Tritonia nelsonii</i> Baker	LC	Geophyte, herb
JUNCACEAE	<i>Juncus dregeanus</i> Kunth subsp. <i>dregeanus</i>	LC	Helophyte, herb
JUNCACEAE	<i>Juncus exsertus</i> Buchenau	LC	Helophyte, herb
JUNCACEAE	<i>Juncus oxycarpus</i> E.Mey. ex Kunth	LC	Helophyte, herb
JUNCACEAE	<i>Juncus punctorius</i> L.f.	LC	Helophyte, herb
KIRKIAEAE	<i>Kirkia wilmsii</i> Engl.	LC	Tree
LAMIACEAE	<i>Acrotome hispida</i> Benth.	LC	Herb Dwarf shrub, herb,
LAMIACEAE	<i>Aeollanthus buchnerianus</i> Briq.	LC	succulent
LAMIACEAE	<i>Leucas martinicensis</i> (Jacq.) R.Br.	LC	Herb
LAMIACEAE	<i>Ocimum americanum</i> L. var. <i>americanum</i>	LC	Herb
LAMIACEAE	<i>Ocimum angustifolium</i> Benth.	LC	Herb, shrub
LAMIACEAE	<i>Ocimum gratissimum</i> L. subsp. <i>gratissimum</i> var. <i>gratissimum</i>	LC	Herb
LAMIACEAE	<i>Ocimum obovatum</i> E.Mey. ex Benth. subsp. <i>obovatum</i> var. <i>obovatum</i>	LC	Herb
LAMIACEAE	<i>Premna mooiensis</i> (H.Pearson) W.Piep.	LC	Tree
LAMIACEAE	<i>Pycnostachys reticulata</i> (E.Mey.) Benth.	LC	Herb
LAMIACEAE	<i>Rothea hirsuta</i> (Hochst.) R.Fern.	LC	Herb
LAMIACEAE	<i>Rothea louwalbertsii</i> (P.P.J.Herman) P.P.J.Herman & Retief	LC	Herb
LAMIACEAE	<i>Satureja biflora</i> (Buch.-Ham. ex D.Don) Briq.	LC	Herb
LAMIACEAE	<i>Syncolostemon canescens</i> (G?rke) D.F.Otieno	LC	Herb
LAMIACEAE	<i>Syncolostemon elliottii</i> (Baker) D.F.Otieno	LC	Herb
LAMIACEAE	<i>Tetradenia brevispicata</i> (N.E.Br.) Codd	LC	Shrub, succulent, tree
LAMIACEAE	<i>Teucrium trifidum</i> Retz.	LC	Herb
LENTIBULARIACEAE	<i>Utricularia livida</i> E.Mey.	LC	Carnivore, herb
LENTIBULARIACEAE	<i>Utricularia welwitschii</i> Oliv.	LC	Carnivore, herb
LEPTODONTACEAE	<i>Leptodon smithii</i> (Hedw.) F.Weber & D.Mohr		Bryophyte, epiphyte
LOBELIACEAE	<i>Cyphia assimilis</i> Sond.	LC	Climber, herb
LOBELIACEAE	<i>Lobelia erinus</i> L.	LC	Herb
LOBELIACEAE	<i>Lobelia flaccida</i> (C.Presl) A.DC. subsp. <i>mossiana</i> (R.D.Good) Thulin	LC	Herb
LOBELIACEAE	<i>Lobelia thermalis</i> Thunb.	LC	Herb
LOBELIACEAE	<i>Monopsis decipiens</i> (Sond.) Thulin	LC	Herb
LOBELIACEAE	<i>Agelanthus natalitius</i> (Meisn.) Polhill & Wiens subsp. <i>zeyheri</i> (Harv.) Polhill & Wiens	LC	Parasite, shrub, succulent
LORANTHACEAE	<i>Tapinanthus quequensis</i> (Weim.) Polhill & Wiens	LC	Parasite, shrub
LORANTHACEAE	<i>Tapinanthus rubromarginatus</i> (Engl.) Danser	LC	Parasite, shrub, succulent
LYCOPODIACEAE	<i>Lycopodiella cernua</i> (L.) Pic.Serm.	LC	Geophyte, herb
LYCOPODIACEAE	<i>Lycopodiella sarcocaulon</i> (A.Braun & Welw. ex Kuhn) Pic.Serm.	LC	Geophyte, herb
MALPIGHIACEAE	<i>Sphedamnocarpus pruriens</i> (A.Juss.) Szyszyl. subsp. <i>galphimifolius</i> (A.Juss.) P.D.de Villiers & D.J.Botha	LC	Climber, shrub
MALPIGHIACEAE	<i>Sphedamnocarpus pruriens</i> (A.Juss.) Szyszyl. subsp. <i>pruriens</i>	LC	Climber, shrub
MALPIGHIACEAE	<i>Triaspis glaucophylla</i> Engl.	LC	Climber, shrub
MALVACEAE	<i>Abutilon austro-africanum</i> Hochr.	LC	Dwarf shrub



Family	Species	Threat status	Growth forms
MALVACEAE	<i>Abutilon piloso-cinereum</i> A.Meeuse	LC	Herb, shrub
MALVACEAE	<i>Abutilon pycnodon</i> Hochr.	LC	Herb, shrub
MALVACEAE	<i>Corchorus asplenifolius</i> Burch.	LC	Herb
MALVACEAE	<i>Dombeya rotundifolia</i> (Hochst.) Planch. var. <i>rotundifolia</i>	LC	Shrub, tree
MALVACEAE	<i>Grewia bicolor</i> Juss. var. <i>bicolor</i>	LC	Shrub, tree
MALVACEAE	<i>Grewia flava</i> DC.	LC	Shrub
MALVACEAE	<i>Grewia flavescens</i> Juss.	LC	Shrub
MALVACEAE	<i>Grewia monticola</i> Sond.	LC	Shrub, tree
MALVACEAE	<i>Grewia occidentalis</i> L. var. <i>occidentalis</i>	LC	Shrub, tree
MALVACEAE	<i>Hermannia burkei</i> Burt Davy	LC	Climber, herb
MALVACEAE	<i>Hermannia depressa</i> N.E.Br.	LC	Herb
MALVACEAE	<i>Hermannia martiniana</i> A.Rich.	LC	Herb
MALVACEAE	<i>Hibiscus aethiopicus</i> L. var. <i>ovatus</i> Harv.	LC	Herb
MALVACEAE	<i>Hibiscus calyphyllus</i> Cav.	LC	Dwarf shrub, herb
MALVACEAE	<i>Hibiscus engleri</i> K.Schum.	LC	Herb
MALVACEAE	<i>Hibiscus lunarifolius</i> Willd.	LC	Herb
MALVACEAE	<i>Hibiscus micranthus</i> L.f. var. <i>micranthus</i>	LC	Herb, shrub
MALVACEAE	<i>Hibiscus microcarpus</i> Garcke	LC	Herb
MALVACEAE	<i>Hibiscus mutatus</i> N.E.Br.	LC	Shrub
MALVACEAE	<i>Hibiscus subreniformis</i> Burt Davy	LC	Dwarf shrub, herb
MALVACEAE	<i>Hibiscus trionum</i> L.	NE	Herb
MALVACEAE	<i>Melhania prostrata</i> DC.	LC	Dwarf shrub
MALVACEAE	<i>Pavonia burchellii</i> (DC.) R.A.Dyer	LC	Dwarf shrub
MALVACEAE	<i>Pavonia columella</i> Cav.	LC	Herb, shrub
MALVACEAE	<i>Pavonia transvaalensis</i> (Ulbr.) A.Meeuse	LC	Dwarf shrub, herb
MALVACEAE	<i>Sida chrysantha</i> Ulbr.	LC	Dwarf shrub
MALVACEAE	<i>Sida cordifolia</i> L. subsp. <i>cordifolia</i>	LC	Dwarf shrub
MALVACEAE	<i>Sida dregei</i> Burt Davy	LC	Dwarf shrub, herb
MALVACEAE	<i>Sida pseudocordifolia</i> Hochr.	LC	Herb, shrub
MALVACEAE	<i>Sida rhombifolia</i> L. subsp. <i>rhombifolia</i>	LC	Dwarf shrub, herb, shrub
MALVACEAE	<i>Triumfetta angolensis</i> Sprague & Hutch.	LC	Herb
MALVACEAE	<i>Triumfetta annua</i> L. forma <i>annua</i>	NE	Herb
MALVACEAE	<i>Triumfetta pilosa</i> Roth var. <i>effusa</i> (E.Mey. ex Harv.) Wild	LC	Shrub
MALVACEAE	<i>Triumfetta pilosa</i> Roth var. <i>tomentosa</i> Szyszyl. ex Sprague & Hutch.	LC	Shrub
MALVACEAE	<i>Triumfetta sonderi</i> Ficalho & Hiern	LC	Dwarf shrub
MARCHANTIACEAE	<i>Dumortiera hirsuta</i> (Sw.) Nees		Bryophyte
MARCHANTIACEAE	<i>Marchantia pappeana</i> Lehm. subsp. <i>pappeana</i>		Bryophyte
MELASTOMATAACEAE	<i>Antherotoma debilis</i> (Sond.) Jacq. -F?!	LC	Herb
MELIACEAE	<i>Melia azedarach</i> L.	NE	Tree
MELIACEAE	<i>Turraea obtusifolia</i> Hochst.	LC	Climber, shrub, tree
MESEMBRYANTHEMACEAE	<i>Frithia pulchra</i> N.E.Br.	Rare	Succulent
MESEMBRYANTHEMACEAE	<i>Khadia acutipetala</i> (N.E.Br.) N.E.Br.	LC	Succulent
METEORACEAE	<i>Squamidium brasiliense</i> (Hornsch.) Broth.		Bryophyte, epiphyte
MNIACEAE	<i>Mielichhoferia bryoides</i> (Harv.) Wijk & Margad.		Bryophyte



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MNIACEAE	<i>Pohlia baronii</i> Wijk & Margad.		Bryophyte
MOLLUGINACEAE	<i>Limeum viscosum</i> (J.Gay) Fenzl subsp. <i>viscosum</i> var. <i>glomeratum</i> (Eckl. & Zeyh.) Friedrich	LC	Herb
MOLLUGINACEAE	<i>Psammotropha myriantha</i> Sond.	LC	Herb
MORACEAE	<i>Ficus abutilifolia</i> (Miq.) Miq.	LC	Shrub, tree
MORACEAE	<i>Ficus ingens</i> (Miq.) Miq.	LC	Tree
MORACEAE	<i>Ficus salicifolia</i> Vahl	LC	Tree
MYRICACEAE	<i>Morella pilulifera</i> (Rendle) Killick	LC	Shrub, tree
MYRICACEAE	<i>Morella serrata</i> (Lam.) Killick	LC	Shrub, tree
MYROTHAMNACEAE	<i>Myrothamnus flabellifolius</i> Welw.	DDT	Dwarf shrub, shrub
MYRSINACEAE	<i>Myrsine africana</i> L.	LC	Shrub
MYRSINACEAE	<i>Rapanea melanophloeos</i> (L.) Mez	Declining	Tree
NECKERACEAE	<i>Neckera valentiniana</i> Besch.		Bryophyte, epiphyte
OCHNACEAE	<i>Ochna holstii</i> Engl.	LC	Tree
OCHNACEAE	<i>Ochna natalitia</i> (Meisn.) Walp.	LC	Shrub, tree
OCHNACEAE	<i>Ochna pretoriensis</i> E.Phillips	LC	Shrub, tree
OCHNACEAE	<i>Ochna pulchra</i> Hook.f.	LC	Shrub, tree
OLACACEAE	<i>Ximenia caffra</i> Sond. var. <i>caffra</i> <i>Chionanthus foveolatus</i> (E.Mey.) Stearn subsp. <i>foveolatus</i>	LC	Shrub, tree
OLEACEAE	<i>Olinia emarginata</i> Burt Davy	LC	Tree
ONAGRACEAE	<i>Epilobium capense</i> Buchinger ex Hochst.	LC	Herb
ONAGRACEAE	<i>Epilobium salignum</i> Hausskn.	LC	Herb
OPHIOGLOSSACEAE	<i>Ophioglossum polyphyllum</i> A.Braun var. <i>polyphyllum</i>	LC	Geophyte, herb
ORCHIDACEAE	<i>Bonatea antennifera</i> Rolfe	LC	[No lifeform defined]
ORCHIDACEAE	<i>Disa polygonoides</i> Lindl.	LC	Geophyte, herb
ORCHIDACEAE	<i>Eulophia clitellifera</i> (Rchb.f.) Bolus	LC	Geophyte, herb, succulent
ORCHIDACEAE	<i>Eulophia milnei</i> Rchb.f.	LC	Geophyte, herb
ORCHIDACEAE	<i>Eulophia ovalis</i> Lindl. var. <i>bainesii</i> (Rolfe) P.J.Cribb & la Croix	LC	Geophyte, herb
ORCHIDACEAE	<i>Satyrium cristatum</i> Sond. var. <i>cristatum</i>	LC	Geophyte, herb
OROBANCHACEAE	<i>Alectra orobanchoides</i> Benth.	LC	[No lifeform defined]
OROBANCHACEAE	<i>Alectra sessiliflora</i> (Vahl) Kuntze var. <i>sessiliflora</i>	LC	Herb, parasite
OROBANCHACEAE	<i>Buchnera simplex</i> (Thunb.) Druce	LC	Herb, parasite
OROBANCHACEAE	<i>Cycnium adonense</i> E.Mey. ex Benth.	LC	Herb, parasite
OROBANCHACEAE	<i>Graderia subintegra</i> Mast.	LC	Herb, parasite, suffrutex
OROBANCHACEAE	<i>Melasma scabrum</i> P.J.Bergius var. <i>scabrum</i>	LC	Herb, parasite
OROBANCHACEAE	<i>Sopubia cana</i> Harv. var. <i>glabrescens</i> Diels	LC	Herb
OROBANCHACEAE	<i>Striga asiatica</i> (L.) Kuntze	LC	Herb, parasite
OROBANCHACEAE	<i>Striga bilabiata</i> (Thunb.) Kuntze subsp. <i>bilabiata</i>	LC	Herb, parasite
OROBANCHACEAE	<i>Striga elegans</i> Benth.	LC	Herb, parasite
OROBANCHACEAE	<i>Striga forbesii</i> Benth.	LC	Herb, parasite
OROBANCHACEAE	<i>Striga gesnerioides</i> (Willd.) Vatke	LC	Herb, parasite
OSMUNDACEAE	<i>Osmunda regalis</i> L.	LC	Geophyte, herb, lithophyte
OXALIDACEAE	<i>Oxalis obliquifolia</i> Steud. ex A.Rich.	LC	Geophyte



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PALLAVICINIACEAE	<i>Pallavicinia lyellii</i> (Hook.) Carruth.		Bryophyte
PALLAVICINIACEAE	<i>Symphyogyna brasiliensis</i> Nees & Mont.		Bryophyte
PALLAVICINIACEAE	<i>Symphyogyna podophylla</i> (Thunb.) Nees & Mont.		Bryophyte
PAPAVERACEAE	<i>Papaver aculeatum</i> Thunb.	LC	Herb
PASSIFLORACEAE	<i>Adenia digitata</i> (Harv.) Engl.	LC	Climber, dwarf shrub, shrub, succulent
PASSIFLORACEAE	<i>Passiflora coerulea</i> L.	NE	Climber
PEDALIACEAE	<i>Ceratotheca triloba</i> (Bernh.) Hook.f.	LC	Herb
PEDALIACEAE	<i>Dicerocaryum senecioides</i> (Klotzsch) Abels	LC	Herb
PEDALIACEAE	<i>Pterodiscus speciosus</i> Hook.	LC	Succulent, suffrutex
PEDALIACEAE	<i>Sesamum alatum</i> Thonn.	LC	Herb
PHYLLANTHACEAE	<i>Bridelia mollis</i> Hutch.	LC	Shrub, tree
PHYLLANTHACEAE	<i>Phyllanthus incurvus</i> Thunb.	LC	Dwarf shrub, herb
PHYLLANTHACEAE	<i>Phyllanthus maderaspatensis</i> L.	LC	Herb
PHYLLANTHACEAE	<i>Phyllanthus parvulus</i> Sond. var. <i>parvulus</i>	LC	Dwarf shrub, herb
PHYLLANTHACEAE	<i>Pseudolachnostylis maprouneifolia</i> Pax var. <i>glabra</i> (Pax) Brenan	LC	Tree
PHYLLANTHACEAE	<i>Pseudolachnostylis maprouneifolia</i> Pax var. <i>maprouneifolia</i>		Shrub, tree
PHYSICIACEAE	<i>Dermatiscum thunbergii</i> (Ach.) Nyl.		Lichen
PILOTTRICHACEAE	<i>Callicostella tristis</i> (M?Il.Hal.) Broth.		Bryophyte, epiphyte
PIPERACEAE	<i>Peperomia retusa</i> (L.f.) A.Dietr. var. <i>retusa</i>	LC	Herb, succulent
PITTOSPORACEAE	<i>Pittosporum viridiflorum</i> Sims	LC	Shrub, tree
PLUMBAGINACEAE	<i>Plumbago zeylanica</i> L.	NE	Shrub
POACEAE	<i>Agrostis continuata</i> Stapf	LC	Graminoid
POACEAE	<i>Agrostis lachnantha</i> Nees var. <i>lachnantha</i>	LC	Graminoid
POACEAE	<i>Andropogon appendiculatus</i> Nees	LC	Graminoid
POACEAE	<i>Andropogon chinensis</i> (Nees) Merr.	LC	Graminoid
POACEAE	<i>Andropogon huillensis</i> Rendle	LC	Graminoid
POACEAE	<i>Andropogon schirensis</i> Hochst. ex A.Rich.	LC	Graminoid
POACEAE	<i>Anthephora pubescens</i> Nees	LC	Graminoid
POACEAE	<i>Aristida aequiglumis</i> Hack.	LC	Graminoid
POACEAE	<i>Aristida bipartita</i> (Nees) Trin. & Rupr.	LC	Graminoid
POACEAE	<i>Aristida congesta</i> Roem. & Schult. subsp. <i>barbicollis</i> (Trin. & Rupr.) De Winter	LC	Graminoid
POACEAE	<i>Aristida junciformis</i> Trin. & Rupr. subsp. <i>junciformis</i>	LC	Graminoid
POACEAE	<i>Aristida spectabilis</i> Hack.	LC	Graminoid
POACEAE	<i>Aristida stipitata</i> Hack. subsp. <i>graciliflora</i> (Pilg.) Melderis	LC	Graminoid
POACEAE	<i>Arundinella nepalensis</i> Trin.	LC	Graminoid
POACEAE	<i>Bewsia biflora</i> (Hack.) Gooss.	LC	Graminoid
POACEAE	<i>Bothriochloa bladhii</i> (Retz.) S.T.Blake	LC	Graminoid
POACEAE	<i>Bothriochloa insculpta</i> (Hochst. ex A.Rich.) A.Camus	LC	Graminoid
POACEAE	<i>Brachiaria brizantha</i> (A.Rich.) Stapf	LC	Graminoid
POACEAE	<i>Brachiaria nigropedata</i> (Ficalho & Hiern) Stapf	LC	Graminoid
POACEAE	<i>Brachiaria serrata</i> (Thunb.) Stapf	LC	Graminoid
POACEAE	<i>Cenchrus ciliaris</i> L.	LC	Graminoid
POACEAE	<i>Chloris virgata</i> Sw.	LC	Graminoid



Family	Species	Threat status	Growth forms
POACEAE	<i>Chrysopogon serrulatus</i> Trin.	LC	Graminoid
POACEAE	<i>Cymbopogon pospischilii</i> (K.Schum.) C.E.Hubb.	NE	Graminoid
POACEAE	<i>Diandrochloa namaquensis</i> (Nees) De Winter	LC	Graminoid
POACEAE	<i>Dichanthium annulatum</i> (Forssk.) Stapf var. <i>papillosum</i> (A.Rich.) de Wet & Harlan	LC	Graminoid
POACEAE	<i>Digitaria diagonalis</i> (Nees) Stapf var. <i>diagonalis</i>	LC	Graminoid
POACEAE	<i>Digitaria eriantha</i> Steud.	LC	Graminoid
POACEAE	<i>Digitaria longiflora</i> (Retz.) Pers.	LC	Graminoid
POACEAE	<i>Digitaria monodactyla</i> (Nees) Stapf	LC	Graminoid
POACEAE	<i>Digitaria tricholaenoides</i> Stapf	LC	Graminoid
POACEAE	<i>Diheteropogon amplexens</i> (Nees) Clayton var. <i>amplexens</i>	LC	Graminoid
POACEAE	<i>Dinebra retroflexa</i> (Vahl) Panz. var. <i>condensata</i> S.M.Phillips	LC	Graminoid
POACEAE	<i>Echinochloa holubii</i> (Stapf) Stapf	LC	Graminoid
POACEAE	<i>Ehrharta erecta</i> Lam. var. <i>erecta</i>	LC	Graminoid
POACEAE	<i>Ehrharta erecta</i> Lam. var. <i>natalensis</i> Stapf	LC	Graminoid
POACEAE	<i>Elionurus muticus</i> (Spreng.) Kunth	LC	Graminoid
POACEAE	<i>Enneapogon cenchroides</i> (Licht. ex Roem. & Schult.) C.E.Hubb.	LC	Graminoid
POACEAE	<i>Enneapogon pretoriensis</i> Stent	LC	Graminoid
POACEAE	<i>Enneapogon scoparius</i> Stapf	LC	Graminoid
POACEAE	<i>Eragrostis acraea</i> De Winter	LC	Graminoid
POACEAE	<i>Eragrostis capensis</i> (Thunb.) Trin.	LC	Graminoid
POACEAE	<i>Eragrostis cilianensis</i> (All.) Vignolo ex Janch.	LC	Graminoid
POACEAE	<i>Eragrostis curvula</i> (Schrad.) Nees	LC	Graminoid
POACEAE	<i>Eragrostis gummiflua</i> Nees	LC	Graminoid
POACEAE	<i>Eragrostis inamoena</i> K.Schum.	LC	Graminoid
POACEAE	<i>Eragrostis lehmanniana</i> Nees var. <i>lehmanniana</i>	LC	Graminoid
POACEAE	<i>Eragrostis nindensis</i> Ficalho & Hiern	LC	Graminoid
POACEAE	<i>Eragrostis patentipilosa</i> Hack.	LC	Graminoid
POACEAE	<i>Eragrostis planiculmis</i> Nees	LC	Graminoid
POACEAE	<i>Eragrostis racemosa</i> (Thunb.) Steud.	LC	Graminoid
POACEAE	<i>Eragrostis rigidior</i> Pilg.	LC	Graminoid
POACEAE	<i>Eragrostis rotifer</i> Rendle	LC	Graminoid
POACEAE	<i>Eragrostis stapfii</i> De Winter	LC	Graminoid
POACEAE	<i>Eragrostis superba</i> Peyr.	LC	Graminoid
POACEAE	<i>Eriochloa fatmensis</i> (Hochst. & Steud.) Clayton	LC	Graminoid
POACEAE	<i>Eustachys paspaloides</i> (Vahl) Lanza & Mattei	LC	Graminoid
POACEAE	<i>Harpochloa falx</i> (L.f.) Kuntze	LC	Graminoid
POACEAE	<i>Heteropogon contortus</i> (L.) Roem. & Schult.	LC	Graminoid
POACEAE	<i>Hyparrhenia filipendula</i> (Hochst.) Stapf var. <i>pilosa</i> (Hochst.) Stapf	LC	Graminoid
POACEAE	<i>Hyparrhenia hirta</i> (L.) Stapf	LC	Graminoid
POACEAE	<i>Hyparrhenia tamba</i> (Steud.) Stapf	LC	Graminoid
POACEAE	<i>Hyperthelia dissoluta</i> (Nees ex Steud.) Clayton	LC	Graminoid
POACEAE	<i>Imperata cylindrica</i> (L.) Rausch.	LC	Graminoid



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POACEAE	<i>Ischaemum afrum</i> (J.F.Gmel.) Dandy	LC	Graminoid
POACEAE	<i>Ischaemum fasciculatum</i> Brongn.	LC	Graminoid
POACEAE	<i>Loudetia flavida</i> (Stapf) C.E.Hubb.	LC	Graminoid
POACEAE	<i>Loudetia simplex</i> (Nees) C.E.Hubb.	LC	Graminoid
POACEAE	<i>Melinis nerviglumis</i> (Franch.) Zizka	LC	Graminoid
POACEAE	<i>Melinis repens</i> (Willd.) Zizka subsp. <i>repens</i>	LC	Graminoid
POACEAE	<i>Microchloa caffra</i> Nees	LC	Graminoid
POACEAE	<i>Miscanthus junceus</i> (Stapf) Pilg.	LC	Graminoid
POACEAE	<i>Monocymbium ceresiiforme</i> (Nees) Stapf	LC	Graminoid
POACEAE	<i>Oplismenus hirtellus</i> (L.) P.Beauv.	LC	Graminoid, scrambler
POACEAE	<i>Panicum coloratum</i> L. var. <i>coloratum</i>	LC	Graminoid
POACEAE	<i>Panicum maximum</i> Jacq.	LC	Graminoid
POACEAE	<i>Panicum natalense</i> Hochst.	LC	Graminoid
POACEAE	<i>Panicum schinzii</i> Hack.	LC	Graminoid
POACEAE	<i>Paspalum scrobiculatum</i> L.	LC	Graminoid
POACEAE	<i>Pennisetum thunbergii</i> Kunth	LC	Graminoid
POACEAE	<i>Perotis patens</i> Gand.	LC	Graminoid
POACEAE	<i>Phragmites australis</i> (Cav.) Steud.	LC	Graminoid
POACEAE	<i>Phragmites mauritianus</i> Kunth	LC	Graminoid
POACEAE	<i>Pogonarthria squarrosa</i> (Roem. & Schult.) Pilg.	LC	Graminoid
POACEAE	<i>Sacciolepis chevalieri</i> Stapf	LC	Graminoid
POACEAE	<i>Schizachyrium jeffreysii</i> (Hack.) Stapf	LC	Graminoid
POACEAE	<i>Schizachyrium sanguineum</i> (Retz.) Alston	LC	Graminoid
POACEAE	<i>Setaria incrassata</i> (Hochst.) Hack.	LC	Graminoid
POACEAE	<i>Setaria lindenbergiana</i> (Nees) Stapf	LC	Graminoid
POACEAE	<i>Setaria megaphylla</i> (Steud.) T.Durand & Schinz	LC	Graminoid
POACEAE	<i>Setaria nigrirostris</i> (Nees) T.Durand & Schinz	LC	Graminoid
POACEAE	<i>Setaria sphacelata</i> (Schumach.) Stapf & C.E.Hubb. ex <i>M.B.Moss</i> var. <i>sericea</i> (Stapf) Clayton	LC	Graminoid
POACEAE	<i>Setaria sphacelata</i> (Schumach.) Stapf & C.E.Hubb. ex <i>M.B.Moss</i> var. <i>torta</i> (Stapf) Clayton	LC	Graminoid
POACEAE	<i>Sorghum bicolor</i> (L.) Moench subsp. <i>arundinaceum</i> (Desv.) de Wet & Harlan	LC	Graminoid
POACEAE	<i>Sorghum halepense</i> (L.) Pers.	NE	Graminoid
POACEAE	<i>Sorghum versicolor</i> Andersson	LC	Graminoid
POACEAE	<i>Sporobolus africanus</i> (Poir.) Robyns & Tournay	LC	Graminoid
POACEAE	<i>Sporobolus fimbriatus</i> (Trin.) Nees	LC	Graminoid
POACEAE	<i>Stiburus alopecuroides</i> (Hack.) Stapf	LC	Graminoid
POACEAE	<i>Stipa dregeana</i> Steud. var. <i>elongata</i> (Nees) Stapf	LC	Graminoid
POACEAE	<i>Stipagrostis uniplumis</i> (Licht.) De Winter var. <i>uniplumis</i>	LC	Graminoid
POACEAE	<i>Themeda triandra</i> Forssk.	LC	Graminoid
POACEAE	<i>Trachypogon spicatus</i> (L.f.) Kuntze	LC	Graminoid
POACEAE	<i>Tragus berteronianus</i> Schult.	LC	Graminoid
POACEAE	<i>Tricholaena monachne</i> (Trin.) Stapf & C.E.Hubb.	LC	Graminoid
POACEAE	<i>Trichoneura grandiglumis</i> (Nees) Ekman	LC	Graminoid
POACEAE	<i>Triraphis andropogonoides</i> (Steud.) E.Phillips	LC	Graminoid



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POACEAE	<i>Tristachya biseriata</i> Stapf	LC	Graminoid
POACEAE	<i>Tristachya leucothrix</i> Trin. ex Nees	LC	Graminoid
POACEAE	<i>Tristachya rehmannii</i> Hack.	LC	Graminoid
POACEAE	<i>Urelytrum agropyroides</i> (Hack.) Hack.	LC	Graminoid
POACEAE	<i>Urochloa brachyura</i> (Hack.) Stapf	LC	Graminoid
POACEAE	<i>Urochloa panicoides</i> P.Beauv.	NE	Graminoid
POLYGALACEAE	<i>Polygala hottentotta</i> C.Presl	LC	Dwarf shrub, herb
POLYGALACEAE	<i>Polygala houtboshiana</i> Chodat	LC	Herb
POLYGALACEAE	<i>Polygala krumanina</i> Burch. ex Ficalho & Hiern	LC	Shrub
POLYGALACEAE	<i>Polygala leptophylla</i> Burch. var. <i>leptophylla</i>	LC	Dwarf shrub
POLYGALACEAE	<i>Polygala producta</i> N.E.Br.	LC	Dwarf shrub, herb
POLYGALACEAE	<i>Polygala rehmannii</i> Chodat	LC	Herb
POLYGALACEAE	<i>Polygala transvaalensis</i> Chodat subsp. <i>transvaalensis</i>	LC	Herb
POLYGALACEAE	<i>Securidaca longepedunculata</i> Fresen. var. <i>longepedunculata</i>	LC	Shrub, tree
POLYGONACEAE	<i>Oxygonum dregeanum</i> Meisn. subsp. <i>canescens</i> (Sond.) Germish. var. <i>canescens</i>	LC	Herb
POLYGONACEAE	<i>Persicaria attenuata</i> (R.Br.) Soj?k subsp. <i>africana</i> K.L.Wilson	LC	Helophyte, herb, hydrophyte
POLYGONACEAE	<i>Persicaria decipiens</i> (R.Br.) K.L.Wilson	LC	Helophyte, herb
POLYGONACEAE	<i>Persicaria lapathifolia</i> (L.) Gray	NE	Helophyte, herb, hydrophyte
POLYGONACEAE	<i>Persicaria meisneriana</i> (Cham. & Schltld.) M.G?mez	LC	Helophyte, herb, hydrophyte
POLYGONACEAE	<i>Rumex lanceolatus</i> Thunb.	LC	Herb
POLYGONACEAE	<i>Rumex woodii</i> N.E.Br.	LC	Herb
POLYTRICHACEAE	<i>Atrichum androgynum</i> (M?II.Hal.) A.Jaeger		Bryophyte
POLYTRICHACEAE	<i>Polytrichum commune</i> Hedw.		Bryophyte
PORTULACACEAE	<i>Portulaca kermesina</i> N.E.Br.	LC	Herb, succulent
PORTULACACEAE	<i>Portulaca quadrifida</i> L.	LC	Herb, succulent
POTTIACEAE	<i>Barbula eubryum</i> M?II.Hal.		Bryophyte
POTTIACEAE	<i>Hyophila involuta</i> (Hook.) A.Jaeger		Bryophyte
POTTIACEAE	<i>Hypodontium dregei</i> (Hornsch.) M?II.Hal.		Bryophyte, epiphyte
POTTIACEAE	<i>Syntrichia ammonsiana</i> (H.A.Crum & L.E.Anderson) Ochyra		Bryophyte, epiphyte
POTTIACEAE	<i>Syntrichia laevipila</i> Brid.		Bryophyte, epiphyte
POTTIACEAE	<i>Trichostomum brachydontium</i> Bruch		Bryophyte
PROTEACEAE	<i>Faurea saligna</i> Harv.	LC	Tree
PROTEACEAE	<i>Protea gagedi</i> J.F.Gmel.	LC	Shrub, tree
PROTEACEAE	<i>Protea nitida</i> Mill.	LC	Tree
PROTEACEAE	<i>Protea welwitschii</i> Engl.	LC	Dwarf shrub, shrub
PTERIDACEAE	<i>Adiantum poiretii</i> Wikstr.	LC	Geophyte, herb, lithophyte
PTERIDACEAE	<i>Pityrogramma argentea</i> (Willd.) Domin	LC	Geophyte, herb, lithophyte
PTERIDACEAE	<i>Pteris buchananii</i> Baker ex Sim	LC	Geophyte, herb, hydrophyte
PTERIDACEAE	<i>Pteris vittata</i> L.	LC	Geophyte, herb, lithophyte
RACOPILACEAE	<i>Racopilum capense</i> M?II.Hal. ex Broth.		Bryophyte, epiphyte



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RANUNCULACEAE	<i>Clematis brachiata</i> Thunb.	LC	Climber
RANUNCULACEAE	<i>Ranunculus multifidus</i> Forssk.	NE	Herb
RHAMNACEAE	<i>Berchemia zeyheri</i> (Sond.) Grubov	LC	Tree
RHAMNACEAE	<i>Helinus integrifolius</i> (Lam.) Kuntze	LC	Climber, shrub
RHAMNACEAE	<i>Phyllica paniculata</i> Willd.	LC	Shrub, tree
RHAMNACEAE	<i>Ziziphus mucronata</i> Willd. subsp. <i>mucronata</i>	LC	Shrub, tree
RHAMNACEAE	<i>Ziziphus zeyheriana</i> Sond.	LC	Dwarf shrub
RICCIACEAE	<i>Riccia albolimbata</i> S.W.Arnell		Bryophyte
RICCIACEAE	<i>Riccia atropurpurea</i> Sim		Bryophyte
RICCIACEAE	<i>Riccia cavernosa</i> Hoffm. emend. Raddi		Bryophyte
RICCIACEAE	<i>Riccia congoana</i> Steph.		Bryophyte
RICCIACEAE	<i>Riccia microciliata</i> O.H.Volk & Perold		Bryophyte
RICCIACEAE	<i>Riccia okahandjana</i> S.W.Arnell		Bryophyte
ROSACEAE	<i>Agrimonia procera</i> Wallr.	LC	Herb
ROSACEAE	<i>Cliffortia linearifolia</i> Eckl. & Zeyh.	LC	Shrub
ROSACEAE	<i>Prunus africana</i> (Hook.f.) Kalkman	VU	Tree
ROSACEAE	<i>Rubus rigidus</i> Sm.	LC	Shrub
RUBIACEAE	<i>Agathisanthemum bojeri</i> Klotzsch subsp. <i>bojeri</i>	LC	Herb, shrub
RUBIACEAE	<i>Anthospermum hispidulum</i> E.Mey. ex Sond.	LC	Dwarf shrub
RUBIACEAE	<i>Anthospermum rigidum</i> Eckl. & Zeyh. subsp. <i>pumilum</i> (Sond.) Puff	LC	Dwarf shrub
RUBIACEAE	<i>Anthospermum rigidum</i> Eckl. & Zeyh. subsp. <i>rigidum</i>	LC	Dwarf shrub
RUBIACEAE	<i>Canthium suberosum</i> Codd	LC	Shrub
RUBIACEAE	<i>Fadogia homblei</i> De Wild.	LC	Herb
RUBIACEAE	<i>Galopina circaeoides</i> Thunb.	LC	Herb
RUBIACEAE	<i>Hyperacanthus amoenus</i> (Sims) Bridson	LC	Shrub
RUBIACEAE	<i>Kohautia amatymbica</i> Eckl. & Zeyh.	LC	Herb
RUBIACEAE	<i>Kohautia caespitosa</i> Schnizl. subsp. <i>brachyloba</i> (Sond.) D.Mantell	LC	Herb
RUBIACEAE	<i>Kohautia cynanchica</i> DC.	LC	Herb
RUBIACEAE	<i>Oldenlandia herbacea</i> (L.) Roxb. var. <i>herbacea</i>	LC	Herb
RUBIACEAE	<i>Oldenlandia rupicola</i> (Sond.) Kuntze var. <i>rupicola</i>	LC	Herb
RUBIACEAE	<i>Otiophora calycophylla</i> (Sond.) Schltr. & K.Schum. subsp. <i>calycophylla</i>	LC	Herb
RUBIACEAE	<i>Pachystigma macrocalyx</i> (Sond.) Robyns	LC	Shrub, tree
RUBIACEAE	<i>Pachystigma pygmaeum</i> (Schltr.) Robyns	LC	Dwarf shrub
RUBIACEAE	<i>Pavetta eylesii</i> S.Moore	LC	Shrub, tree
RUBIACEAE	<i>Pavetta harborii</i> S.Moore	LC	Shrub
RUBIACEAE	<i>Pavetta zeyheri</i> Sond. subsp. <i>zeyheri</i>	LC	Shrub, tree
RUBIACEAE	<i>Pentanisia angustifolia</i> (Hochst.) Hochst.	LC	Herb
RUBIACEAE	<i>Psydrax livida</i> (Hiern) Bridson	LC	Shrub, tree
RUBIACEAE	<i>Pygmaeothamnus zeyheri</i> (Sond.) Robyns var. <i>zeyheri</i>	LC	Dwarf shrub
RUBIACEAE	<i>Richardia brasiliensis</i> Gomes	NE	Herb
RUBIACEAE	<i>Rothmannia capensis</i> Thunb.	LC	Tree
RUBIACEAE	<i>Rubia horrida</i> (Thunb.) Puff	LC	Herb
RUBIACEAE	<i>Rubia petiolaris</i> DC.	LC	Scrambler



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RUBIACEAE	<i>Spermacoce natalensis</i> Hochst.	LC	Herb
RUBIACEAE	<i>Spermacoce senensis</i> (Klotzsch) Hiern	LC	Herb
RUBIACEAE	<i>Tricalysia cacondensis</i> Hiern	LC	Dwarf shrub
RUBIACEAE	<i>Tricalysia lanceolata</i> (Sond.) Burt Davy	LC	Shrub, tree
RUBIACEAE	<i>Vangueria infausta</i> Burch. subsp. <i>infausta</i>	LC	Tree
RUBIACEAE	<i>Vangueria parvifolia</i> Sond.		Tree
RUTACEAE	<i>Zanthoxylum capense</i> (Thunb.) Harv.	LC	Shrub, tree
SALICACEAE	<i>Dovyalis zeyheri</i> (Sond.) Warb.	LC	Shrub, tree
SALICACEAE	<i>Scolopia zeyheri</i> (Nees) Harv.	LC	Shrub, tree
SANTALACEAE	<i>Osyris lanceolata</i> Hochst. & Steud.	LC	Shrub
SANTALACEAE	<i>Thesium magalismontanum</i> Sond.	LC	Herb, parasite, shrub Dwarf shrub, herb, parasite
SANTALACEAE	<i>Thesium transvaalense</i> Schltr.	LC	Herb, parasite
SANTALACEAE	<i>Thesium utile</i> A.W.Hill	LC	Herb, parasite
SAPINDACEAE	<i>Pappea capensis</i> Eckl. & Zeyh.	LC	Shrub, tree
SAPOTACEAE	<i>Englerophytum magalismontanum</i> (Sond.) T.D.Penn.	LC	Shrub, tree
SAPOTACEAE	<i>Mimusops zeyheri</i> Sond.	LC	Shrub, tree
SCROPHULARIACEAE	<i>Aptosimum elongatum</i> Engl.	LC	Dwarf shrub
SCROPHULARIACEAE	<i>Aptosimum procumbens</i> (Lehm.) Steud.	LC	Herb
SCROPHULARIACEAE	<i>Chaenostoma leve</i> (Hiern) Kornhall	LC	Herb
SCROPHULARIACEAE	<i>Craterostigma wilmsii</i> Engl. ex Diels	LC	Herb, succulent
SCROPHULARIACEAE	<i>Halleria lucida</i> L.	LC	Shrub, tree
SCROPHULARIACEAE	<i>Jamesbrittenia burkeana</i> (Benth.) Hilliard	LC	Shrub, suffrutex
SCROPHULARIACEAE	<i>Limosella maior</i> Diels	LC	Herb, hydrophyte
SCROPHULARIACEAE	<i>Melanospermum foliosum</i> (Benth.) Hilliard	LC	Herb
SCROPHULARIACEAE	<i>Nemesia fruticans</i> (Thunb.) Benth.	LC	Dwarf shrub, suffrutex
SCROPHULARIACEAE	<i>Nemesia rupicola</i> Hilliard	LC	Herb
SCROPHULARIACEAE	<i>Selago mixta</i> Hilliard	LC	Herb
SELAGINELLACEAE	<i>Selaginella caffrorum</i> (Milde) Hieron. var. <i>caffrorum</i>	LC	Geophyte, herb, lithophyte
SELAGINELLACEAE	<i>Selaginella dregei</i> (C.Presl) Hieron.	LC	Geophyte, herb, lithophyte
SELAGINELLACEAE	<i>Selaginella mittenii</i> Baker	LC	Geophyte, herb, lithophyte
SEMATOPHYLLACEAE	<i>Sematophyllum brachycarpum</i> (Hampe) Broth.		Bryophyte, epiphyte
SEMATOPHYLLACEAE	<i>Sematophyllum sphaeropyxis</i> (M?II.Hal.) Broth.		Bryophyte, epiphyte
SEMATOPHYLLACEAE	<i>Sematophyllum subpinnatum</i> (Brid.) E.Britton		Bryophyte, epiphyte
SEMATOPHYLLACEAE	<i>Sematophyllum wageri</i> C.H.Wright ex Wager		Bryophyte, epiphyte
SINOPTERIDACEAE	<i>Cheilanthes eckloniana</i> (Kunze) Mett.	LC	Geophyte, herb, lithophyte
SINOPTERIDACEAE	<i>Cheilanthes hirta</i> Sw. var. <i>hirta</i>	LC	Geophyte, herb, lithophyte
SINOPTERIDACEAE	<i>Cheilanthes multifida</i> (Sw.) Sw. subsp. <i>lacerata</i> N.C.Anthony & Schelpe		Herb
SINOPTERIDACEAE	<i>Cheilanthes viridis</i> (Forssk.) Sw. var. <i>glauca</i> (Sim)		Geophyte, herb, lithophyte
SINOPTERIDACEAE	Schelpe & N.C.Anthony	LC	Geophyte, herb, lithophyte
SINOPTERIDACEAE	<i>Cheilanthes viridis</i> (Forssk.) Sw. var. <i>macrophylla</i>	LC	Geophyte, herb, lithophyte
SINOPTERIDACEAE	(Kunze) Schelpe & N.C.Anthony	LC	Geophyte, herb, lithophyte
SINOPTERIDACEAE	<i>Cheilanthes viridis</i> (Forssk.) Sw. var. <i>viridis</i>	LC	Geophyte, herb, lithophyte



Family	Species	Threat status	Growth forms
SINOPTERIDACEAE	<i>Doryopteris concolor</i> (Langsd. & Fisch.) Kuhn	LC	Geophyte, herb
SINOPTERIDACEAE	<i>Pellaea calomelanos</i> (Sw.) Link var. <i>calomelanos</i>	LC	Geophyte, herb, lithophyte
SINOPTERIDACEAE	<i>Pellaea pectiniformis</i> Baker	LC	Geophyte, herb, lithophyte
SOLANACEAE	<i>Datura stramonium</i> L.	NE	Herb, shrub
SOLANACEAE	<i>Lycium horridum</i> Thunb.	LC	Dwarf shrub, shrub
SOLANACEAE	<i>Solanum giganteum</i> Jacq.	LC	Shrub, tree
SOLANACEAE	<i>Solanum lichtensteinii</i> Willd.	LC	Dwarf shrub, shrub
SOLANACEAE	<i>Solanum panduriforme</i> E.Mey.	LC	Dwarf shrub, herb, shrub
SOLANACEAE	<i>Solanum retroflexum</i> Dunal	LC	Herb
SOLANACEAE	<i>Solanum rigescens</i> Jacq.	NE	[No lifeform defined]
SOLANACEAE	<i>Withania somnifera</i> (L.) Dunal	LC	Dwarf shrub, herb, shrub
SPHAGNACEAE	<i>Sphagnum truncatum</i> Hornsch.		Bryophyte, hydrophyte
STRYCHNACEAE	<i>Strychnos pungens</i> Soler.	LC	Shrub, tree
THELYPTERIDACEAE	<i>Christella gueinziana</i> (Mett.) Holttum	LC	Geophyte, herb, lithophyte
THELYPTERIDACEAE	<i>Thelypteris confluens</i> (Thunb.) C.V.Morton	LC	Geophyte, herb, hydrophyte
THYMELAEACEAE	<i>Gnidia microcephala</i> Meisn.	LC	Dwarf shrub, shrub
THYMELAEACEAE	<i>Gnidia sericocephala</i> (Meisn.) Gilg ex Engl.	LC	Dwarf shrub, shrub
URTICACEAE	<i>Obetia tenax</i> (N.E.Br.) Friis	LC	Shrub, succulent, tree
URTICACEAE	<i>Pouzolzia mixta</i> Solms var. <i>mixta</i>	LC	Shrub, succulent, tree
VAHLIACEAE	<i>Vahlia capensis</i> (L.f.) Thunb. subsp. <i>capensis</i>	LC	Herb
VELLOZIACEAE	<i>Xerophyta viscosa</i> Baker	LC	Herb
VERBENACEAE	<i>Chascanum adenostachyum</i> (Schauer) Moldenke <i>Chascanum hederaceum</i> (Sond.) Moldenke var. <i>hederaceum</i>	LC	Herb
VERBENACEAE	<i>Duranta erecta</i> L.	NE	Shrub
VERBENACEAE	<i>Lantana rugosa</i> Thunb.	LC	Shrub
VERBENACEAE	<i>Lippia javanica</i> (Burm.f.) Spreng.	LC	Shrub
VERBENACEAE	<i>Lippia scaberrima</i> Sond.	LC	Herb
VERBENACEAE	<i>Priva meyeri</i> Jaub. & Spach var. <i>meyeri</i>	LC	Herb
VERBENACEAE	<i>Verbena bonariensis</i> L.	NE	Herb
VISCACEAE	<i>Viscum combreticola</i> Engl.	LC	Parasite, shrub, succulent
VISCACEAE	<i>Viscum verrucosum</i> Harv.	LC	Parasite, shrub, succulent
VITACEAE	<i>Cissus cactiformis</i> Gilg <i>Cyphostemma cirrhosum</i> (Thunb.) Desc. ex Wild & R.B.Drumm. subsp. <i>transvaalense</i> (Szyszyl.) Wild & R.B.Drumm.	LC	Climber, succulent
VITACEAE	<i>Cyphostemma lanigerum</i> (Harv.) Desc. ex Wild & R.B.Drumm.	LC	Climber, succulent
VITACEAE	<i>Cyphostemma simulans</i> (C.A.Sm.) Wild & R.B.Drumm.	LC	Climber, succulent
VITACEAE	<i>Cyphostemma spinosopilosum</i> (Gilg & M.Brandt) Desc.	LC	Scrambler, succulent
VITACEAE	<i>Cyphostemma woodii</i> (Gilg & M.Brandt) Desc. <i>Rhoicissus tridentata</i> (L.f.) Wild & R.B.Drumm. subsp. <i>tridentata</i>	LC	Herb, succulent
VITACEAE		NE	Shrub



Family	Species	Threat status	Growth forms
XYRIDACEAE	<i>Xyris capensis</i> Thunb.	LC	Helophyte, herb, hydrophyte
XYRIDACEAE	<i>Xyris congensis</i> B?ttner	LC	Helophyte, herb, hydrophyte
XYRIDACEAE	<i>Xyris gerrardii</i> N.E.Br.	LC	Helophyte, herb, hydrophyte
ZYGOPHYLLACEAE	<i>Tribulus terrestris</i> L.	LC	Herb

Table 15: Expected floral species list for the QDS 2527CB supplied by Sanbi Precis Database.

Family	Species	Threat status	Growth forms
ACANTHACEAE	<i>Barleria pretoriensis</i> C.B.Clarke	LC	Dwarf shrub, herb
ACANTHACEAE	<i>Crabbea hirsuta</i> Harv.	LC	Herb
ACANTHACEAE	<i>Hypoestes forskaoilii</i> (Vahl) R.Br.	LC	Herb
ACANTHACEAE	<i>Isoglossa grantii</i> C.B.Clarke	LC	Dwarf shrub, herb, shrub
ACANTHACEAE	<i>Justicia anagalloides</i> (Nees) T.Anderson	LC	Herb
ACANTHACEAE	<i>Ruellia cordata</i> Thunb.	LC	Dwarf shrub, herb
ACANTHACEAE	<i>Thunbergia atriplicifolia</i> E.Mey. ex Nees <i>Hermboetia odorata</i> (Burch.) T.Cooke var. <i>odorata</i>	LC	Dwarf shrub, herb
AMARANTHACEAE	<i>Crinum graminicola</i> I.Verd.	LC	Herb
AMARYLLIDACEAE	<i>Cyrtanthus breviflorus</i> Harv.	LC	Geophyte
AMARYLLIDACEAE	<i>Ozoroa paniculosa</i> (Sond.) R. & A.Fern. var. <i>paniculosa</i>	LC	Shrub, tree
ANACARDIACEAE	<i>Ozoroa paniculosa</i> (Sond.) R. & A.Fern. var. <i>salicina</i> (Sond.) R. & A.Fern.	LC	Shrub, tree
ANACARDIACEAE	<i>Searsia chirindensis</i> (Baker f.) Moffett	LC	Shrub, tree
ANACARDIACEAE	<i>Searsia lancea</i> (L.f.) F.A.Barkley	LC	Shrub, tree
ANACARDIACEAE	<i>Searsia magalismsontana</i> (Sond.) Moffett subsp. <i>magalismsontana</i>	LC	Dwarf shrub
ANACARDIACEAE	<i>Searsia pyroides</i> (Burch.) Moffett var. <i>pyroides</i>	LC	Dwarf shrub
APIACEAE	<i>Deverra burchellii</i> (DC.) Eckl. & Zeyh.	LC	Shrub
APOCYNACEAE	<i>Acokanthera oppositifolia</i> (Lam.) Codd	LC	Shrub, tree
APOCYNACEAE	<i>Asclepias densiflora</i> N.E.Br.	LC	Herb
APOCYNACEAE	<i>Aspidoglossum glabrescens</i> (Schltr.) Kupicha	LC	Herb, succulent Geophyte, succulent
APOCYNACEAE	<i>Brachystelma gracile</i> E.A.Bruce	LC	Herb, succulent
APOCYNACEAE	<i>Carissa bispinosa</i> (L.) Desf. ex Brenan	LC	Shrub
APOCYNACEAE	<i>Raphionacme galpinii</i> Schltr.	LC	Geophyte, herb, succulent
APOCYNACEAE	<i>Sarcostemma viminalis</i> (L.) R.Br. subsp. <i>viminalis</i>	LC	Climber, succulent
ARALIACEAE	<i>Cussonia spicata</i> Thunb.	LC	Succulent, tree
ASPARAGACEAE	<i>Asparagus virgatus</i> Baker	LC	Shrub
ASPHODELACEAE	<i>Aloe peglerae</i> Schönland	EN	Dwarf shrub, herb, succulent
ASPHODELACEAE	<i>Bulbine angustifolia</i> Poelln.	LC	Geophyte,



Family	Species	Threat status	Growth forms
			herb, succulent
ASPHODELACEAE	Kniphofia ensifolia Baker subsp. ensifolia	LC	Herb
ASTERACEAE	Dicoma macrocephala DC.	LC	Herb
ASTERACEAE	Doellia cafra (DC.) Anderb.	LC	Herb
ASTERACEAE	Geigeria burkei Harv. subsp. burkei var. zeyheri (Harv.) Merxm.	LC	Herb
ASTERACEAE	Helichrysum argyrosphaerum DC.	LC	Herb
ASTERACEAE	Helichrysum cerastioides DC. var. cerastioides	LC	Herb
ASTERACEAE	Helichrysum kraussii Sch.Bip.	LC	Shrub
ASTERACEAE	Helichrysum mixtum (Kuntze) Moeser var. mixtum	LC	Herb
ASTERACEAE	Schistostephium heptalobum (DC.) Oliv. & Hiern	LC	Shrub
ASTERACEAE	Senecio lydenburgensis Hutch. & Burt Davy	LC	Herb
ASTERACEAE	Senecio venosus Harv.	LC	Herb
ASTERACEAE	Sonchus maritimus L.	NE	Herb
ASTERACEAE	Tagetes minuta L.	NE	Herb
ASTERACEAE	Ursinia nana DC. subsp. leptophylla Prassler	LC	Herb
ASTERACEAE	Vernonia fastigiata Oliv. & Hiern	LC	Herb Shrub,
ASTERACEAE	Vernonia staehelinoides Harv.	LC	suffrutex
BARTRAMIACEAE	Philonotis africana (Müll.Hal.) Rehm ex Paris		Bryophyte Geophyte,
BLECHNACEAE	Blechnum australe L. subsp. australe	LC	herb, lithophyte Bryophyte, epiphyte
BRYACEAE	Bryum pycnophyllum (Dixon) Mohamed		
BUDDLEJACEAE	Buddleja saligna Willd.	LC	Shrub, tree
BURMANNIACEAE	Burmannia madagascariensis Mart.	LC	Herb
CAPPARACEAE	Boscia albitrunca (Burch.) Gilg & Gilg-Ben. Corrigiola litoralis L. subsp. litoralis var. litoralis	LC	Shrub, tree
CARYOPHYLLACEAE			Herb
CELASTRACEAE	Maytenus undata (Thunb.) Blakelock	LC	Shrub, tree
CELASTRACEAE	Pterocelastrus echinatus N.E.Br. Colchicum melanthoides (Willd.) J.C.Manning & Vinn. subsp. melanthoides	LC	Shrub, tree Geophyte
COLCHICACEAE			Geophyte
COMBRETACEAE	Combretum molle R.Br. ex G.Don	LC	Tree
COMBRETACEAE	Combretum zeyheri Sond.	LC	Shrub, tree
COMMELINACEAE	Commelina africana L. var. krebsiana (Kunth) C.B.Clarke	LC	Herb
COMMELINACEAE	Commelina livingstonii C.B.Clarke	LC	Herb
COMMELINACEAE	Floscopa glomerata (Willd. ex Schult. & J.H.Schult.) Hassk.	LC	Helophyte, herb
CONVOLVULACEAE	Convolvulus sagittatus Thunb.	LC	Herb
CONVOLVULACEAE	Evolvulus alsinoides (L.) L.	LC	Herb Dwarf shrub,
CONVOLVULACEAE	Ipomoea bolusiana Schinz	LC	herb, succulent
CONVOLVULACEAE	Ipomoea coscinosperma Hochst. ex Choisy	LC	Herb
CONVOLVULACEAE	Ipomoea oblongata E.Mey. ex Choisy	LC	Herb, succulent
CONVOLVULACEAE	Ipomoea obscura (L.) Ker Gawl. var. obscura	LC	Herb



Family	Species	Threat status	Growth forms
CONVOLVULACEAE	<i>Xenostegia tridentata</i> (L.) D.F.Austin & Staples subsp. <i>angustifolia</i> (Jacq.) Lejoly & Lisowski	LC	Herb
CRASSULACEAE	<i>Crassula setulosa</i> Harv. var. <i>setulosa</i> forma <i>setulosa</i>	NE	Herb, succulent Climber, herb, succulent
CUCURBITACEAE	<i>Momordica balsamina</i> L.	LC	Cyperoid, herb
CYPERACEAE	<i>Ascolepis capensis</i> (Kunth) Ridl.	LC	Cyperoid, herb, mesophyte
CYPERACEAE	<i>Carex spicato-paniculata</i> C.B.Clarke	LC	Cyperoid, helophyte, herb
CYPERACEAE	<i>Cyperus congestus</i> Vahl	LC	Cyperoid, geophyte, herb, mesophyte
CYPERACEAE	<i>Cyperus esculentus</i> L. var. <i>esculentus</i>	LC	Cyperoid, herb, mesophyte
CYPERACEAE	<i>Cyperus leptocladus</i> Kunth	LC	Cyperoid, emergent hydrophyte, helophyte, herb
CYPERACEAE	<i>Isolepis fluitans</i> (L.) R.Br. var. <i>fluitans</i>	LC	Cyperoid, herb, mesophyte
CYPERACEAE	<i>Kyllinga alba</i> Nees	LC	Cyperoid, emergent hydrophyte, helophyte, herb
CYPERACEAE	<i>Schoenoplectus brachyceras</i> (Hochst. ex A.Rich.) Lye	LC	Cyperoid, emergent hydrophyte, helophyte, herb
CYPERACEAE	<i>Schoenoplectus muricinux</i> (C.B.Clarke) J.Raynal	LC	Cyperoid, emergent hydrophyte, helophyte, herb
DICRANACEAE	<i>Campylopus pilifer</i> Brid. var. <i>pilifer</i>		Bryophyte Climber, geophyte, succulent
DIOSCOREACEAE	<i>Dioscorea retusa</i> Mast.	LC	Herb
DIPSACACEAE	<i>Scabiosa columbaria</i> L.	LC	Carnivore, herb
DROSERACEAE	<i>Drosera collinsiae</i> N.E.Br. ex Burt Davy	LC	Shrub
EBENACEAE	<i>Diospyros lycioides</i> Desf. subsp. <i>lycioides</i>	LC	Dwarf shrub, herb
EUPHORBIACEAE	<i>Acalypha angustata</i> Sond.	LC	Dwarf shrub, herb, shrub
EUPHORBIACEAE	<i>Acalypha indica</i> L. var. <i>indica</i>	LC	Dwarf shrub, herb, shrub
EUPHORBIACEAE	<i>Acalypha villicaulis</i> Hochst.	LC	Dwarf shrub, herb, shrub
EUPHORBIACEAE	<i>Clutia pulchella</i> L. var. <i>pulchella</i>	LC	herb, shrub
EUPHORBIACEAE	<i>Croton gratissimus</i> Burch. var. <i>subgratissimus</i> (Prain) Burt Davy	LC	Shrub, tree Dwarf shrub, shrub, succulent
EUPHORBIACEAE	<i>Euphorbia clavarioides</i> Boiss. var. <i>truncata</i> (N.E.Br.) A.C.White, R.A.Dyer & B.Sloane	LC	Climber
FABACEAE	<i>Abrus laevigatus</i> E.Mey.	LC	Tree
FABACEAE	<i>Acacia burkei</i> Benth.	LC	Shrub, tree
FABACEAE	<i>Acacia caffra</i> (Thunb.) Willd.	LC	Shrub, tree
FABACEAE	<i>Acacia karroo</i> Hayne	LC	Shrub, tree



Family	Species	Threat status	Growth forms
FABACEAE	<i>Acacia robusta</i> Burch. subsp. <i>robusta</i>	LC	Tree
FABACEAE	<i>Alysicarpus zeyheri</i> Harv.	LC	Herb
FABACEAE	<i>Burkea africana</i> Hook.	LC	Tree
FABACEAE	<i>Chamaecrista biensis</i> (Steyaert) Lock	LC	Herb
FABACEAE	<i>Eriosema burkei</i> Benth. ex Harv. var. <i>burkei</i>	LC	Herb
FABACEAE	<i>Eriosema pauciflorum</i> Klotzsch var. <i>pauciflorum</i>	LC	Herb
FABACEAE	<i>Erythrina lysistemon</i> Hutch.	LC	Tree Dwarf shrub,
FABACEAE	<i>Indigofera heterotricha</i> DC.	LC	herb
FABACEAE	<i>Indigofera hiliaris</i> Eckl. & Zeyh. var. <i>hiliaris</i>	LC	Herb Creeper, herb,
FABACEAE	<i>Indigofera pongolana</i> N.E.Br.	LC	shrub
FABACEAE	<i>Lotononis calycina</i> (E.Mey.) Benth.	LC	Herb
FABACEAE	<i>Mundulea sericea</i> (Willd.) A.Chev. subsp. <i>sericea</i>	LC	Shrub, tree
FABACEAE	<i>Ophrestia oblongifolia</i> (E.Mey.) H.M.L.Forbes var. <i>oblongifolia</i>	LC	Herb
FABACEAE	<i>Pearsonia sessilifolia</i> (Harv.) Dummer subsp. <i>sessilifolia</i>	LC	Dwarf shrub, herb Dwarf shrub,
FABACEAE	<i>Rhynchosia albissima</i> Gand.	LC	herb
FABACEAE	<i>Rhynchosia caribaea</i> (Jacq.) DC.	LC	Climber, herb
FABACEAE	<i>Rhynchosia crassifolia</i> Benth. ex Harv.	LC	Climber, herb
FABACEAE	<i>Rhynchosia totta</i> (Thunb.) DC. var. <i>totta</i>	LC	Climber, herb
FABACEAE	<i>Rhynchosia venulosa</i> (Hiern) K.Schum.	LC	Climber, herb Dwarf shrub,
FABACEAE	<i>Sphenostylis angustifolia</i> Sond.	LC	herb Dwarf shrub,
FABACEAE	<i>Stylosanthes fruticosa</i> (Retz.) Alston	LC	herb
FABACEAE	<i>Tephrosia capensis</i> (Jacq.) Pers. var. <i>capensis</i>	LC	Dwarf shrub, herb, shrub Dwarf shrub,
FABACEAE	<i>Tephrosia multijuga</i> R.G.N.Young	LC	herb, shrub
FABACEAE	<i>Tephrosia villosa</i> (L.) Pers. subsp. <i>ehrenbergiana</i> (Schweinf.) Brummitt var. <i>ehrenbergiana</i>	LC	Dwarf shrub, herb Shrub,
FABACEAE	<i>Tylosema esculentum</i> (Burch.) A.Schreib.	LC	succulent
FABACEAE	<i>Zornia linearis</i> E.Mey.	LC	Herb Bryophyte, hydrophyte
FISSIDENTACEAE	<i>Fissidens ovatus</i> Brid.		
GENTIANACEAE	<i>Chironia purpurascens</i> (E.Mey.) Benth. & Hook.f. subsp. <i>humilis</i> (Gilg) I.Verd.	LC	Herb Herb,
GLEICHENIACEAE	<i>Gleichenia polypodioides</i> (L.) Sm.	LC	scrambler
HYACINTHACEAE	<i>Dipcadi marlothii</i> Engl.	LC	Geophyte
HYACINTHACEAE	<i>Dipcadi papillatum</i> Oberm.	LC	Geophyte
HYACINTHACEAE	<i>Dipcadi viride</i> (L.) Moench	LC	Geophyte
HYACINTHACEAE	<i>Ledebouria cooperi</i> (Hook.f.) Jessop	LC	Geophyte
HYPERICACEAE	<i>Hypericum lalandii</i> Choisy	LC	Herb
ICACINACEAE	<i>Apodytes dimidiata</i> E.Mey. ex Arn. subsp. <i>dimidiata</i>	LC	Shrub, tree



Family	Species	Threat status	Growth forms
IRIDACEAE	<i>Gladiolus permeabilis</i> D.Delaroche subsp. <i>edulis</i> (Burch. ex Ker Gawl.) Oberm.	LC	Geophyte, herb
IRIDACEAE	<i>Lapeirousia sandersonii</i> Baker	LC	Geophyte, herb
IRIDACEAE	<i>Tritonia nelsonii</i> Baker	LC	Geophyte, herb
LAMIACEAE	<i>Acrotome hispida</i> Benth.	LC	Herb
LAMIACEAE	<i>Ocimum gratissimum</i> L. subsp. <i>gratissimum</i> var. <i>gratissimum</i>	LC	Herb
LAMIACEAE	<i>Ocimum obovatum</i> E.Mey. ex Benth. subsp. <i>obovatum</i> var. <i>obovatum</i>	LC	Herb
LAMIACEAE	<i>Orthosiphon suffrutescens</i> (Thonn.) J.K.Morton	LC	Herb
LAMIACEAE	<i>Pycnostachys reticulata</i> (E.Mey.) Benth.	LC	Herb Shrub,
LAMIACEAE	<i>Tetradenia brevispicata</i> (N.E.Br.) Codd	LC	succulent, tree
LAMIACEAE	<i>Vitex zeyheri</i> Sond.	LC	Tree
LOBELIACEAE	<i>Cyphia assimilis</i> Sond.	LC	Climber, herb
LOBELIACEAE	<i>Monopsis decipiens</i> (Sond.) Thulin	LC	Herb
LOPHIOCARPACEAE	<i>Corbichonia decumbens</i> (Forssk.) Exell	LC	Herb, succulent
LORANTHACEAE	<i>Agelanthus natalitius</i> (Meisn.) Polhill & Wiens subsp. <i>natalitius</i>	LC	Parasite, shrub, succulent
LYCOPODIACEAE	<i>Lycopodiella cernua</i> (L.) Pic.Serm.	LC	Geophyte, herb
MALPIGHIACEAE	<i>Sphedamnocarpus pruriens</i> (A.Juss.) Szyszyl. subsp. <i>galphimifolius</i> (A.Juss.) P.D.de Villiers & D.J.Botha	LC	Climber, shrub
MALPIGHIACEAE	<i>Sphedamnocarpus pruriens</i> (A.Juss.) Szyszyl. subsp. <i>pruriens</i>	LC	Climber, shrub
MALVACEAE	<i>Abutilon angulatum</i> (Guill. & Perr.) Mast. var. <i>angulatum</i>	LC	Shrub
MALVACEAE	<i>Corchorus argillicola</i> M.J.Moeaha & P.J.D.Winter		Herb
MALVACEAE	<i>Corchorus asplenifolius</i> Burch.	LC	Herb
MALVACEAE	<i>Grewia flava</i> DC.	LC	Shrub
MALVACEAE	<i>Grewia monticola</i> Sond.	LC	Shrub, tree
MALVACEAE	<i>Grewia occidentalis</i> L. var. <i>occidentalis</i>	LC	Shrub, tree
MALVACEAE	<i>Grewia subspathulata</i> N.E.Br.	LC	Shrub
MALVACEAE	<i>Hermannia burkei</i> Burt Davy	LC	Climber, herb Dwarf shrub, shrub
MALVACEAE	<i>Hermannia floribunda</i> Harv.	LC	Dwarf shrub
MALVACEAE	<i>Hermannia grisea</i> Schinz	LC	Dwarf shrub
MALVACEAE	<i>Hermannia quartiniana</i> A.Rich.	LC	Herb
MALVACEAE	<i>Hibiscus engleri</i> K.Schum.	LC	Herb
MALVACEAE	<i>Hibiscus lunarifolius</i> Willd.	LC	Herb
MALVACEAE	<i>Hibiscus marlothianus</i> K.Schum.	LC	Herb
MALVACEAE	<i>Hibiscus pusillus</i> Thunb.	LC	Herb
MALVACEAE	<i>Hibiscus sidiformis</i> Baill.	LC	Herb Dwarf shrub, herb
MALVACEAE	<i>Hibiscus subreniformis</i> Burt Davy	LC	Dwarf shrub
MALVACEAE	<i>Sida chrysantha</i> Ulbr.	LC	Dwarf shrub
MALVACEAE	<i>Triumfetta annua</i> L. forma <i>piligera</i> Sprague & Hutch.	NE	Herb
MALVACEAE	<i>Waltheria indica</i> L.	LC	Herb



Family	Species	Threat status	Growth forms
MELIACEAE	<i>Turraea obtusifolia</i> Hochst.	LC	Climber, shrub, tree
MESEMBRYANTHEMACEAE	<i>Frithia pulchra</i> N.E.Br.	Rare	Succulent
MESEMBRYANTHEMACEAE	<i>Khadia acutipetala</i> (N.E.Br.) N.E.Br. <i>Limeum viscosum</i> (J.Gay) Fenzl subsp.	LC	Succulent
MOLLUGINACEAE	<i>viscosum</i> var. <i>viscosum</i>	LC	Herb
MOLLUGINACEAE	<i>Mollugo nudicaulis</i> Lam.	NE	Herb
MORACEAE	<i>Ficus ingens</i> (Miq.) Miq.	LC	Tree
MORACEAE	<i>Ficus salicifolia</i> Vahl	LC	Tree
MYRICACEAE	<i>Morella serrata</i> (Lam.) Killick	LC	Shrub, tree
OCHNACEAE	<i>Ochna pulchra</i> Hook.f.	LC	Shrub, tree Dwarf shrub, herb
OLEACEAE	<i>Menodora africana</i> Hook. <i>Olea capensis</i> L. subsp. <i>enervis</i> (Harv. ex C.H.Wright) I.Verd.	LC	Shrub
OLEACEAE	<i>Bonatea saundersioides</i> (Kraenzl. & Schltr.) Cortesi	LC	Geophyte, herb
ORCHIDACEAE	<i>Satyrium hallackii</i> Bolus subsp. <i>ocellatum</i> (Bolus) A.V.Hall	LC	Geophyte, herb
ORCHIDACEAE	<i>Striga forbesii</i> Benth.	LC	Herb, parasite Geophyte, herb, lithophyte
OSMUNDACEAE	<i>Osmunda regalis</i> L. <i>Flueggea virosa</i> (Roxb. ex Willd.) Voigt subsp. <i>virosa</i>	LC	Shrub, tree Dwarf shrub, herb
PHYLLANTHACEAE	<i>Phyllanthus incurvus</i> Thunb.	LC	Shrub, tree
PITOSPORACEAE	<i>Pittosporum viridiflorum</i> Sims	LC	Shrub
PLUMBAGINACEAE	<i>Plumbago zeylanica</i> L.	NE	Graminoid
POACEAE	<i>Aristida adscensionis</i> L.	LC	Graminoid
POACEAE	<i>Aristida aequiglumis</i> Hack.	LC	Graminoid
POACEAE	<i>Aristida bipartita</i> (Nees) Trin. & Rupr.	LC	Graminoid
POACEAE	<i>Arundinella nepalensis</i> Trin. <i>Brachiaria deflexa</i> (Schumach.) C.E.Hubb. ex Robyns	LC	Graminoid
POACEAE	<i>Chrysopogon serrulatus</i> Trin.	LC	Graminoid
POACEAE	<i>Cynodon dactylon</i> (L.) Pers. <i>Dichanthium annulatum</i> (Forssk.) Stapf var. <i>papillosum</i> (A.Rich.) de Wet & Harlan	LC	Graminoid
POACEAE	<i>Enneapogon cenchroides</i> (Licht. ex Roem. & Schult.) C.E.Hubb.	LC	Graminoid
POACEAE	<i>Eragrostis capensis</i> (Thunb.) Trin.	LC	Graminoid
POACEAE	<i>Eragrostis cilianensis</i> (All.) Vignolo ex Janch.	LC	Graminoid
POACEAE	<i>Eragrostis curvula</i> (Schrad.) Nees	LC	Graminoid
POACEAE	<i>Eragrostis heteromera</i> Stapf	LC	Graminoid
POACEAE	<i>Eragrostis hierniana</i> Rendle	LC	Graminoid
POACEAE	<i>Fingerhuthia africana</i> Lehm.	LC	Graminoid
POACEAE	<i>Hyparrhenia dregeana</i> (Nees) Stapf ex Stent	LC	Graminoid
POACEAE	<i>Imperata cylindrica</i> (L.) Raeusch.	LC	Graminoid
POACEAE	<i>Melinis repens</i> (Willd.) Zizka subsp. <i>repens</i>	LC	Graminoid
POACEAE	<i>Setaria incrassata</i> (Hochst.) Hack.	LC	Graminoid



Family	Species	Threat status	Growth forms
POACEAE	<i>Sporobolus stapfianus</i> Gand.	LC	Graminoid
POACEAE	<i>Stiburus alopecuroides</i> (Hack.) Stapf	LC	Graminoid
POACEAE	<i>Tragus berteronianus</i> Schult.	LC	Graminoid
POACEAE	<i>Urochloa panicoides</i> P.Beauv.	NE	Graminoid Dwarf shrub,
POLYGALACEAE	<i>Polygala hottentotta</i> C.Presl	LC	herb Helophyte,
POLYGONACEAE	<i>Persicaria decipiens</i> (R.Br.) K.L.Wilson	LC	herb
PORTULACACEAE	<i>Portulaca oleracea</i> L.	NE	Herb, succulent
PROTEACEAE	<i>Faurea saligna</i> Harv.	LC	Tree
PROTEACEAE	<i>Protea gaguedi</i> J.F.Gmel.	LC	Shrub, tree
RHAMNACEAE	<i>Berchemia zeyheri</i> (Sond.) Grubov	LC	Tree
RHAMNACEAE	<i>Helinus integrifolius</i> (Lam.) Kuntze	LC	Climber, shrub
RHAMNACEAE	<i>Ziziphus mucronata</i> Willd. subsp. <i>mucronata</i> <i>Afrocanthium mundianum</i> (Cham. & Schltdl.)	LC	Shrub, tree
RUBIACEAE	Lantz	LC	
RUBIACEAE	<i>Canthium suberosum</i> Codd	LC	Shrub
RUBIACEAE	<i>Kohautia caespitosa</i> Schnizl. subsp. <i>brachyloba</i> (Sond.) D.Mantell	LC	Herb
RUBIACEAE	<i>Pavetta gardeniifolia</i> A.Rich. var. <i>subtomentosa</i> K.Schum.	LC	Shrub, tree
RUBIACEAE	<i>Pentanisia angustifolia</i> (Hochst.) Hochst.	LC	Herb
RUBIACEAE	<i>Vangueria infausta</i> Burch. subsp. <i>infausta</i>	LC	Tree
RUBIACEAE	<i>Vangueria parvifolia</i> Sond.		Tree
RUTACEAE	<i>Zanthoxylum capense</i> (Thunb.) Harv.	LC	Shrub, tree
SAPINDACEAE	<i>Erythrophysa transvaalensis</i> I.Verd.	LC	Shrub, tree Geophyte,
SINOPTERIDACEAE	<i>Cheilanthes viridis</i> (Forssk.) Sw. var. <i>viridis</i>	LC	herb, lithophyte
SINOPTERIDACEAE	<i>Pellaea calomelanos</i> (Sw.) Link var. <i>calomelanos</i>	LC	Geophyte, herb, lithophyte
SOLANACEAE	<i>Solanum panduriforme</i> E.Mey.	LC	Dwarf shrub, herb, shrub
SPHAGNACEAE	<i>Sphagnum truncatum</i> Hornsch.		Bryophyte, hydrophyte
STRYCHNACEAE	<i>Strychnos pungens</i> Soler.	LC	Shrub, tree Dwarf shrub,
THYMELAEACEAE	<i>Gnidia capitata</i> L.f.	LC	shrub Shrub,
URTICACEAE	<i>Pouzolzia mixta</i> Solms var. <i>mixta</i> <i>Vahlia capensis</i> (L.f.) Thunb. subsp. <i>vulgaris</i>	LC	succulent, tree
VAHLIACEAE	<i>Bridson var. linearis</i> E.Mey. ex Bridson <i>Chascanum hederaceum</i> (Sond.) Moldenke	LC	Herb
VERBENACEAE	var. <i>hederaceum</i> <i>Cyphostemma puberulum</i> (C.A.Sm.) Wild & R.B.Drumm.	LC	Herb Climber,
VITACEAE	<i>Cyphostemma sulcatum</i> (C.A.Sm.) J.J.M.van der Merwe	LC	succulent Scrambler,
VITACEAE		LC	succulent



Appendix B

Vegetation Index Score



Vegetation Index Score – Impacted Bushveld Habitat Unit

1. $EVC = \frac{EVC1 + EVC2}{2}$

EVC 1 - Percentage natural vegetation cover:

Vegetation cover %	0%	1-5%	6-25%	26-50%	51-75%	76-100%
Site score					X	
EVC 1 score	0	1	2	3	4	5

EVC2 - Total site disturbance score:

Disturbance score	0	Very Low	Low	Moderately	High	Very High
Site score					X	
EVC 2 score	5	4	3	2	1	0

2. $SI = \frac{SI1 + SI2 + SI3 + SI4}{4}$

Score:	Trees (SI1)		Shrubs (SI2)		Forbs (SI3)		Grasses (SI4)	
	Present State	Perceived Reference State	Present State	Perceived Reference State	Present State	Perceived Reference State	Present State	Perceived Reference State
Continuous								X
Clumped		X		X				
Scattered	X		X			X	X	
Sparse					X			

Present State (P/S) = Currently applicable for each habitat unit

Perceived Reference State (PRS) = If in pristine condition

Each SI score is determined with reference to the following scoring table of vegetation distribution for present state versus perceived reference state.

Perceived Reference state (PRS)	Present state (P/S)			
	Continuous	Clumped	Scattered	Sparse
Continuous	3	2	1	0
Clumped	2	3	2	1



Scattered	1	2	3	2
Sparse	0	1	2	3

3. $PVC = [(EVC) - ((exotic \times 0.7) + (bare \ ground \times 0.3))$

Percentage vegetation cover (exotic):

	0%	1-5%	6-25%	26-50%	51-75%	76-100%
Vegetation cover %			X			
PVC Score	0	1	2	3	4	5

Percentage vegetation cover (bare ground):

	0%	1-5%	6-25%	26-50%	51-75%	76-100%
Vegetation cover %				X		
PVC Score	0	1	2	3	4	5

4. **RIS**

Extent of indigenous species recruitment	0	Very Low	Low	Moderate	High	Very High
				X		
RIS	0	1	2	3	4	5

$VIS = [(EVC) + ((SixPVC) + (RIS))] = 14$

The final VIS scores for each habitat unit are then categorised as follows:

Vegetation Index Score	Assessment Class	Description
22 to 25	A	Unmodified, natural
18 to 22	B	Largely natural with few modifications.
14 to 18	C	Moderately modified
10 to 14	D	Largely modified
5 to 10	E	The loss of natural habitat extensive
<5	F	Modified completely



Vegetation Index Score – Rocky Outcrop Habitat Unit

1. $EVC = \frac{EVC1 + EVC2}{2}$

EVC 1 - Percentage natural vegetation cover:

Vegetation cover %	0%	1-5%	6-25%	26-50%	51-75%	76-100%
Site score						X
EVC 1 score	0	1	2	3	4	5

EVC2 - Total site disturbance score:

Disturbance score	0	Very Low	Low	Moderately	High	Very High
Site score		X				
EVC 2 score	5	4	3	2	1	0

2. $SI = \frac{SI1 + SI2 + SI3 + SI4}{4}$

Score:	Trees (SI1)		Shrubs (SI2)		Forbs (SI3)		Grasses (SI4)	
	Present State	Perceived Reference State	Present State	Perceived Reference State	Present State	Perceived Reference State	Present State	Perceived Reference State
Continuous	X	X						
Clumped			X	X	X	X	X	X
Scattered								
Sparse								

Present State (P/S) = Currently applicable for each habitat unit

Perceived Reference State (PRS) = If in pristine condition

Each SI score is determined with reference to the following scoring table of vegetation distribution for present state versus perceived reference state.

Perceived Reference state (PRS)	Present state (P/S)			
	Continuous	Clumped	Scattered	Sparse
Continuous	3	2	1	0
Clumped	2	3	2	1



Scattered	1	2	3	2
Sparse	0	1	2	3

3. $PVC = [(EVC) - ((exotic \times 0.7) + (bare \ ground \times 0.3))$

Percentage vegetation cover (exotic):

	0%	1-5%	6-25%	26-50%	51-75%	76-100%
Vegetation cover %		X				
PVC Score	0	1	2	3	4	5

Percentage vegetation cover (bare ground):

	0%	1-5%	6-25%	26-50%	51-75%	76-100%
Vegetation cover %		X				
PVC Score	0	1	2	3	4	5

4. **RIS**

Extent of indigenous species recruitment	0	Very Low	Low	Moderate	High	Very High
						X
RIS	0	1	2	3	4	5

$VIS = [(EVC) + ((SixPVC) + (RIS))] = 22$

The final VIS scores for each habitat unit are then categorised as follows:

Vegetation Index Score	Assessment Class	Description
22 to 25	A	Unmodified, natural
18 to 22	B	Largely natural with few modifications.
14 to 18	C	Moderately modified
10 to 14	D	Largely modified
5 to 10	E	The loss of natural habitat extensive
<5	F	Modified completely



Vegetation Index Score - Wetland Habitat Unit

1. $EVC = \frac{EVC1 + EVC2}{2}$

EVC 1 - Percentage natural vegetation cover:

Vegetation cover %	0%	1-5%	6-25%	26-50%	51-75%	76-100%
Site score					X	
EVC 1 score	0	1	2	3	4	5

EVC2 - Total site disturbance score:

Disturbance score	0	Very Low	Low	Moderately	High	Very High
Site score			X			
EVC 2 score	5	4	3	2	1	0

2. $SI = \frac{SI1 + SI2 + SI3 + SI4}{4}$

	Trees (SI1)		Shrubs (SI2)		Forbs (SI3)		Grasses (SI4)	
Score:	Present State	Perceived Reference State	Present State	Perceived Reference State	Present State	Perceived Reference State	Present State	Perceived Reference State
Continuous								
Clumped		X	X	X		X		X
Scattered	X				X		X	
Sparse								

Present State (P/S) = Currently applicable for each habitat unit

Perceived Reference State (PRS) = If in pristine condition

Each SI score is determined with reference to the following scoring table of vegetation distribution for present state versus perceived reference state.

Perceived Reference state (PRS)	Present state (P/S)			
	Continuous	Clumped	Scattered	Sparse
Continuous	3	2	1	0
Clumped	2	3	2	1



Scattered	1	2	3	2
Sparse	0	1	2	3

3. $PVC = [(EVC) - ((exotic \times 0.7) + (bare \ ground \times 0.3))$

Percentage vegetation cover (exotic):

	0%	1-5%	6-25%	26-50%	51-75%	76-100%
Vegetation cover %			X			
PVC Score	0	1	2	3	4	5

Percentage vegetation cover (bare ground):

	0%	1-5%	6-25%	26-50%	51-75%	76-100%
Vegetation cover %			X			
PVC Score	0	1	2	3	4	5

4. **RIS**

Extent of indigenous species recruitment	0	Very Low	Low	Moderate	High	Very High
				X		
RIS	0	1	2	3	4	5

$VIS = [(EVC) + ((SixPVC) + (RIS))] = 15$

The final VIS scores for each habitat unit are then categorised as follows:

Vegetation Index Score	Assessment Class	Description
22 to 25	A	Unmodified, natural
18 to 22	B	Largely natural with few modifications.
14 to 18	C	Moderately modified
10 to 14	D	Largely modified
5 to 10	E	The loss of natural habitat extensive
<5	F	Modified completely



Vegetation Index Score – Transformed Habitat Unit

5. $EVC = \frac{EVC1 + EVC2}{2}$

EVC 1 - Percentage natural vegetation cover:

Vegetation cover %	0%	1-5%	6-25%	26-50%	51-75%	76-100%
Site score				X		
EVC 1 score	0	1	2	3	4	5

EVC2 - Total site disturbance score:

Disturbance score	0	Very Low	Low	Moderately	High	Very High
Site score						X
EVC 2 score	5	4	3	2	1	0

6. $SI = \frac{SI1 + SI2 + SI3 + SI4}{4}$

	Trees (SI1)		Shrubs (SI2)		Forbs (SI3)		Grasses (SI4)	
Score:	Present State	Perceived Reference State	Present State	Perceived Reference State	Present State	Perceived Reference State	Present State	Perceived Reference State
Continuous								X
Clumped		X		X	X			
Scattered	X		X			X	X	
Sparse								

Present State (P/S) = Currently applicable for each habitat unit

Perceived Reference State (PRS) = If in pristine condition

Each SI score is determined with reference to the following scoring table of vegetation distribution for present state versus perceived reference state.

Perceived Reference state (PRS)	Present state (P/S)			
	Continuous	Clumped	Scattered	Sparse
Continuous	3	2	1	0
Clumped	2	3	2	1



Scattered	1	2	3	2
Sparse	0	1	2	3

7. $PVC = [(EVC) - ((exotic \times 0.7) + (bare \ ground \times 0.3))$

Percentage vegetation cover (exotic):

	0%	1-5%	6-25%	26-50%	51-75%	76-100%
Vegetation cover %				X		
PVC Score	0	1	2	3	4	5

Percentage vegetation cover (bare ground):

	0%	1-5%	6-25%	26-50%	51-75%	76-100%
Vegetation cover %				X		
PVC Score	0	1	2	3	4	5

8. **RIS**

Extent of indigenous species recruitment	0	Very Low	Low	Moderate	High	Very High
	X					
RIS	0	1	2	3	4	5

$VIS = [(EVC) + ((SixPVC) + (RIS))] = 3$

The final VIS scores for each habitat unit are then categorised as follows:

Vegetation Index Score	Assessment Class	Description
22 to 25	A	Unmodified, natural
18 to 22	B	Largely natural with few modifications.
14 to 18	C	Moderately modified
10 to 14	D	Largely modified
5 to 10	E	The loss of natural habitat extensive
<5	F	Modified completely

