Ecological (Terrestrial and Aquatic) Specialist Report for the layout of the proposed Iziduli Energy Facility

WALKTHROUGH REPORT

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Acronyms and Abbreviations

BCP	Biodiversity Conservation Plan
CARA	Conservation of Agricultural Resources Acr
CBA	Critical Biodiversity Area
EA	Environmental Authorisation
ECO	Environmental Compliance Officer
ESA	Ecological Support Area
EWFRE	Emoyeni Wind Farm Renewable Energy Pty Ltd
LOO	Likelihood of Occurrence
NPAES	National Protected Area Expansion Strategy
NBA	National Biodiversity Assessment
OHPs	Overhead Powerlines
RLE	Red List of Ecosystems
SE	Savannah Environmental
SSC	Species of Special Concern
TBC	The Biodiversity Company
WTG	Wind Turbine Generator

1. Introduction

Scherman Environmental cc. was contracted by Nala Environmental to conduct a "walkthrough" of the 84MW Iziduli Wind Energy Facility (WEF) site on behalf of Emoyeni Wind Farm Renewable Energy Pty Ltd (EWFRE). EWFRE is developing the Iziduli WEF and is currently finalizing the required layouts and authorisations. An Environmental Authorisation (EA) exists for the windfarm, but designs, including final numbers of turbines and MW outputs, are now to be finalized. Updated layouts were provided to the team (dated 12.05.2022), as well as a request to ensure the following buffer areas were covered during the walkthrough.

- Roads & medium voltage (MV) cables: 150m either side of centreline
- Wind Turbine Generators (WTGs): 200m radius around turbine base

A property list was also provided. The walkthrough notes shown below are based on a rapid site survey undertaken on 12-13 (vegetation team) and 14 (aquatic specialist) April and 23-24 May 2022. The following specialists undertook the assessment. The walkthrough notes were subsequently used to assist in micro-siting of WEF infrastructure outside of high sensitivity areas as identified by the specialist during the on-site surveys. The final layout has been provided in the Addendum letter attached to this walkthrough report.

The following specialists undertook the assessment:

Member	Company/organization	Task
Dr Patsy Scherman	Scherman Environmental	Aquatic assessment
Michael Powell	Rhodes Restoration Research Group	Vegetation assessment
Dr Chad Keates	Rhodes University Entomology Dept	Terrestrial fauna
Nicholaus Huchzermeyer	Scherman Environmental Associate	Vegetation assessment, GIS and mapping

The following limitations are noted for the assessment:

- The surveys undertaken were restricted to the time available due to hunting on the properties, but the team is confident that the properties were surveyed at a high enough level of confidence to satisfy the requirements of the walkthrough assessment.
- Recommendations and input on relocation and realignment or micro-siting of infrastructure have been limited to what is considered feasible by the specialist team. Final sensitivity mapping will be prepared for Walkthrough reports.

Figure 1.1 and **Table 1.1** below can be used to refer to the numbering and location of infrastructure throughout the report for ease of reference.

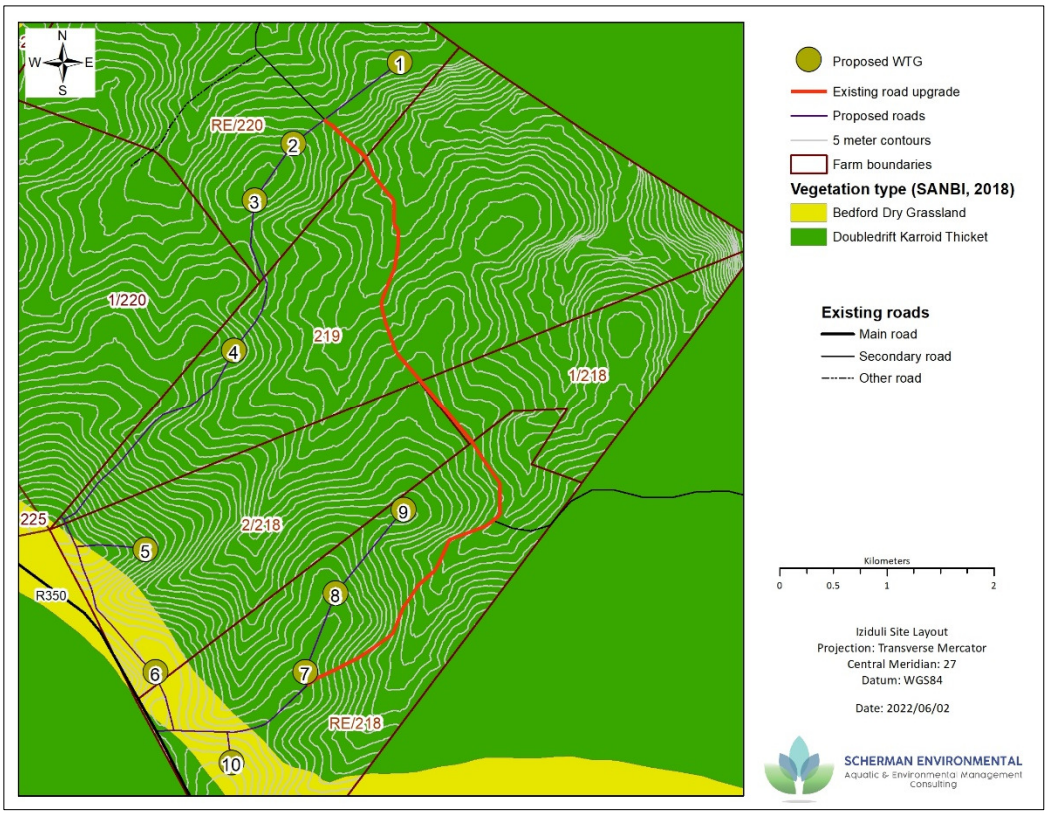

Figure 1.1. Proposed layout for the Iziduli WEF and associated features

Table 1.1. Co-ordinates for each WTG in the current layout.

WTG number	Latitude	Longitude		WTG number	Latitude	Longitude
1	32°53'17.21"S	26° 9'2.10"E		6	32°56'21.52"S	26° 7'32.48"E
2	32°53'41.56"S	26° 8'23.78"E		7	32°56'21.81"S	26° 8'26.34"E
3	32°53'58.67"S	26° 8'9.54"E		8	32°55'58.20"S	26° 8'37.58"E
4	32°54'44.23"S	26° 8'1.64"E		9	32°55'33.12"S	26° 9'2.28"E
5	32°55'44.43"S	26° 7'29.35"E		10	32°56'49.06"S	26° 7'59.57"E

2. Terrestrial Assessment

2.1. Terrestrial flora

2.1.1. Introduction

The location of the properties for the Iziduli WEF development are located roughly 30km south of Bedford in the Eastern Cape. In this general area, overgrazing has had a distinct impact on bushclumps (**Figure 2.1**) as well as the grasslands. The widespread and extensive overgrazing and over-browsing has left a significant and long-lasting impact on the ecological status of the grasslands and will no doubt have negatively impacted on the population viability of some of the rare and endemic plants. The sustained and heavy overgrazing has also led to significant sheet erosion (loss of valuable topsoil), as well as rill and gully erosion in places. Vlok and Euston Brown (2002) contend that the injudicious use of fires in this area have has also reduced the bushclumps in size and species richness. Clearly, the land needs rest.

The botanical Species of Special Concern (SSC) listed in previous assessments should also be relevant to these properties (see Hoare 2010; Savannah Environmental 2014, Scherman Colloty & Associates 2017, Nkurenkuru 2018, The Biodiversity Company 2020).

Figure 2.1. Drastic over-browsing has decimated the natural bushclumps

2.1.2. Methodology

The layout of the proposed WEF was provided to the specialist team. A desktop assessment was conducted in which a thorough assessment of plant species listed for the associated vegetation types in the national plant classification systems was conducted. In addition, previous reports pertaining to the Amakhala, Mesenge and Iziduli Wind Energy Facilities were reviewed for additional plant species that may have been classified as SSC.

A field survey of the proposed infrastructure was conducted to familiarise the team with the terrain, the vegetation types, the habitat types, the species found in the proposed footprints and to assess the ecological status of the landscape. All SSC were listed. Potential SSC were systematically evaluated for Likelihood of Occurrence (LOO) based on distribution descriptions from the literature, various field guides, and botanical reference books.

2.1.3. Results and Discussion

General

All the properties investigated showed signs of sustained heavy grazing and browse pressure (Vlok and Euston Brown 2002) – see **Figure 2.3** below. Although the 2014-2019 drought needs to be taken into account, we believe that the pastoralism being practiced is not ecologically sustainable. Decades of sheet erosion have reduced large areas to pedestalled grass and shrubs, losing the majority of the soil nutrients in the process. There are a number of cases of the beginning stages of donga erosion, with no signs of remediation or

mitigation activities. **Figure 2.2** indicates the need for both a change in the livestock management regime as well as carefully designed stormwater and road runoff plans when construction commences.

Figure 2.2. Signs of erosion from the loss of vegetation cover on Portion 2 of Farm 218

To compound the problem, heavy and sustained grazing pressure has changed the grass species composition (loss of "palatables" and increase in "less-palatables"). In severe cases all the grasses have been lost and a woody-shrub encroached patch has resulted (typified by *Stachys scabrida*, *Trichodiadema*[1] sp. *Penztia incana* and other karroid shrubs). In some areas localized increase in *Asparagus striatus* is also evident (**Figure 2.3**).

Figure 2.3. Systematic overgrazing with insufficient rest periods has resulted in loss of vegetation cover, reduction in the percentage of palatable species, an increase in less palatable species and significant sheet erosion and topsoil loss

The fieldwork yielded nearly 200 species in the limited number of field days that were budgeted for (see **Appendix 1** for the full species list). It should be emphasized that this list is a composite for the areas located

[1] This genus as well as *Ruschia* spp are all protected under the provincial ordinance.

in the Msenege BAR for the deviation of the OHPs, the Msenge WEF as well as the iziDuli WEF properties. The reason for this is that the probability of any species occurring on one property and not the other, when a mere fence separates them, is extremely low. The list of species would have been considerably improved had the fieldwork taken place in late spring or early summer.

General Vegetation

The vegetation classification for this study area has seen significant changes over the years. **Figure 2.4** below gives the location of the various infrastructure according to the Acocks (1988) vegetation classification. The bulk of the development footprint is covered with **Eastern Province Grassveld,** and typified by a wide range of grass species, isolated *V. karoo*[2] and a limited number of karroid shrubs (*Pentzia incana*, *Pelargonium abrantofolium*, *Euryops anthemoides*, *Cyanotis speciosa*, *Selago saxatilis*, *Nenax microphylla*, *Felicia muricata* and *Helichrysum dregeana*) which tend to increase with over-grazing. Acocks mentions no SSC mentioned for this vegetation type. Acocks lists *Crassula capitella* subsp. *thrysifolia*[3] as a key succulent species. A small section of **False Karroid Broken Veld** occurs in the far south east corner of the study area. Typical species include *Euclea undulata*, *Pappea capensis*, *Cussonia spicata*, *V. karoo*, *Schotia afra* var. *afra*, *Aloe ferox*, *Pentzia incana*, *Chrysochoma ciliata*, *Ocimum*[4] *burchelliana*, *Asparagus striatus*, *Drosanthemum lique* and *Drosanthemum hispidum*[5].

[2] Species underlined in text indicate species listed in Appendix 1.
[3] Listed as Protected but not found in the fieldwork.
[4] Previously *Becium burchellianum*
[5] Species in red are currently listed as SSC.

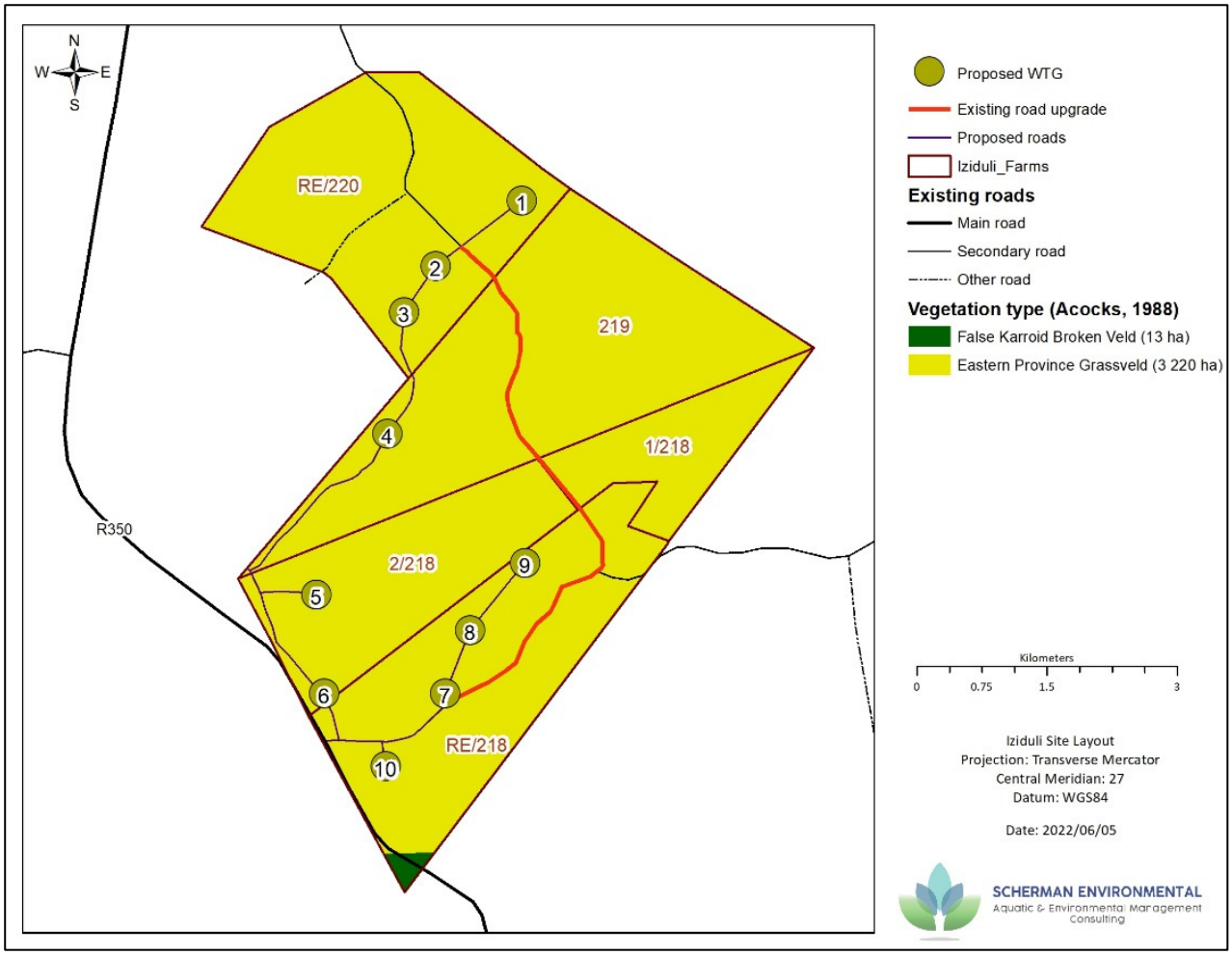

Figure 2.4. The vegetation classification for the study area as defined by Acocks (1988)

The work of Low & Rebelo (1996) saw the creation of the new Subtropical Thicket Biome. The vegetation types in Low & Rebelo are outlined in **Figure 2.5**, but we were not able to locate the original descriptive texts.

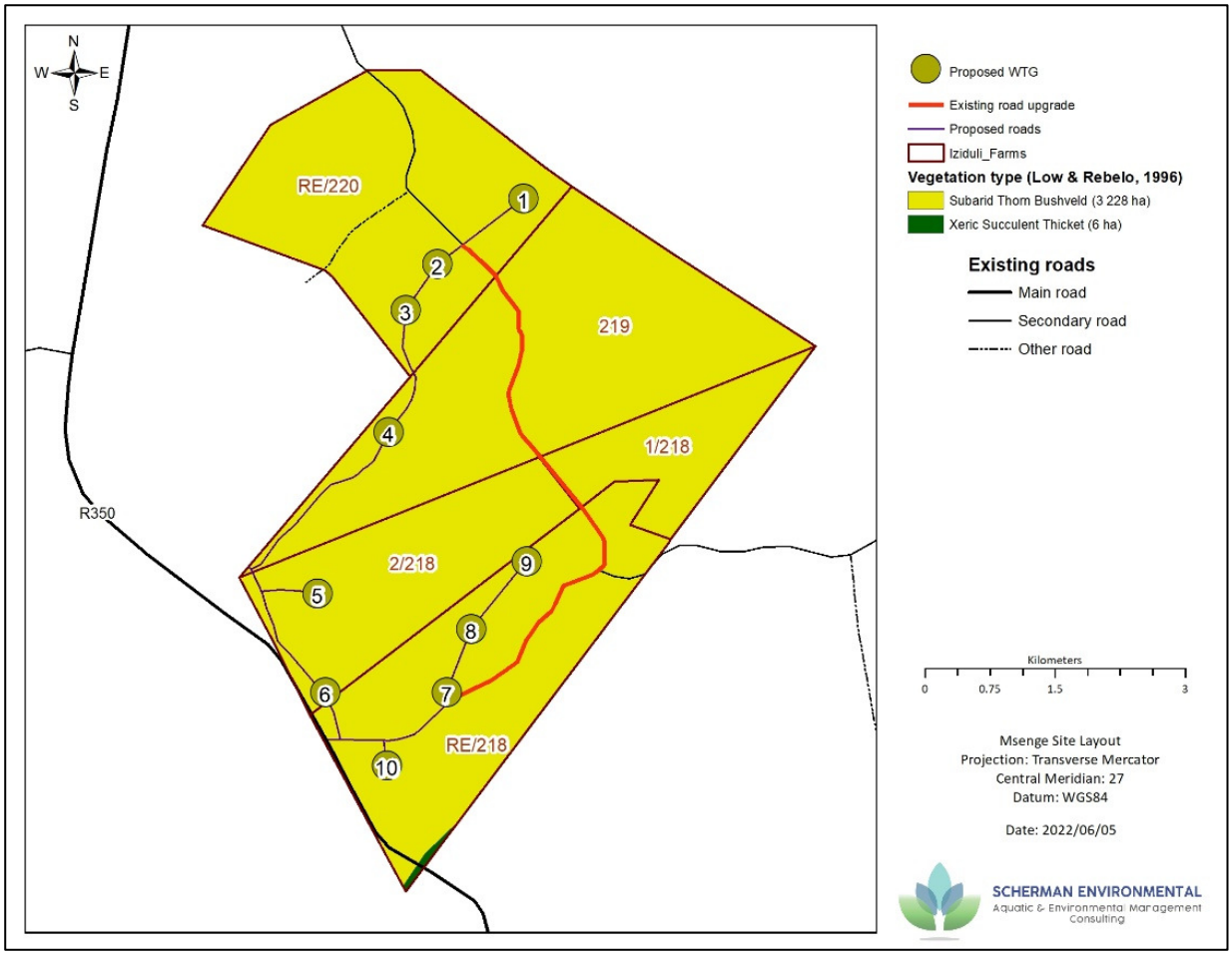

Figure 2.5. The vegetation classification for the study area as defined by Low and Rebelo (1996)

Hoare *et al*. (2006) list this vegetation type as a synonym for their "Eastern Cape Escarpment Thicket" and list the following as key species: *Aloe ferox*[6], *Euphorbia tetragona*, *Vachellia karroo*, *Cussonia spicata*, *Olea europaea* subsp. *africana*, *Scutia myrtina*, *Buddleja 11uriculata*, *Euclea crispa*, *E. undulata*, *Grewia occidentalis*, *Gymnosporia heterophylla*, *Hippobromus pauciflorus*, *Leucosidea sericea*[7], *Myrsine africana*, *Rhus dentata*, *R. lucida*, *R. tomentosa*, *Scolopia zeyheri*, *Anthospermum rigidum* subsp. *pumilum*, *Argyrolobium collinum*, *Asparagus striatus*, *Chaetacanthus setiger*[8], *Felicia filifolia*, *F. muricata*, *Hermannia althaeoides*, *Lantana rugosa*, *Pelargonium alchemilloides*, *Phyllanthus maderaspatensis*, *Polygala fruticosa*, *Selago corymbosa*, *Solanum rigescens*, *Bergeranthus artus*, *Crassula obovata*, *Viscum rotundifolium*, *Asparagus aethiopicus*, *Plumbago auriculata*, *Senecio deltoideus* and a host of grass species.

Interestingly, the following succulents and bulbs are listed: *Stapelia glabricaulis*, *Drimia uniflora, Bulbine asphodeloides*, *Bulbine narcissifolia*, *Drimia intricata*. The key forbs include: *Cyanotis speciosa*, *Amaranthus praetermissus*, *Blepharis integrifolia,* var. *clarkei*, *Commelina africana*, *Dianthus caespitosus*, *Gerbera piloselloides*, *Hibiscus aethiopicus*, *H. pusillus*[9], *Hypoestes aristata*, *Senecio retrorsus*, and *Sida ternata*. The key species in terms of SSC status are: 1) *Bergaranthus artus* whose range is Queenstown to Elliot and listed

[6] Species underlined in text indicate species listed in Appendix 1.
[7] The elevation at this study site is too low for this species.
[8] Species changed to *Dyschoriste setigera* and is Least Concern (Kamandi 2006).
[9] Species underlined in text indicate species listed in Appendix 1.

as **Vulnerable** (Dold & Victor 2005), and 2) *Stapelia glabricaulis* (which was reclassified as one of the 5 variations of *Stapelia hirsuta,* all of which are Least Concern).

The following milestone in South African vegetation classification (for this area) was from the Subtropical Thicket Ecosystem Project (STEP), which sought to improve on the spatial delineation and classification of the vegetation for the new Subtropical Thicket Biome. **Figure 2.6** below outlines these changes as detailed by Vlok *et al*. (2003).

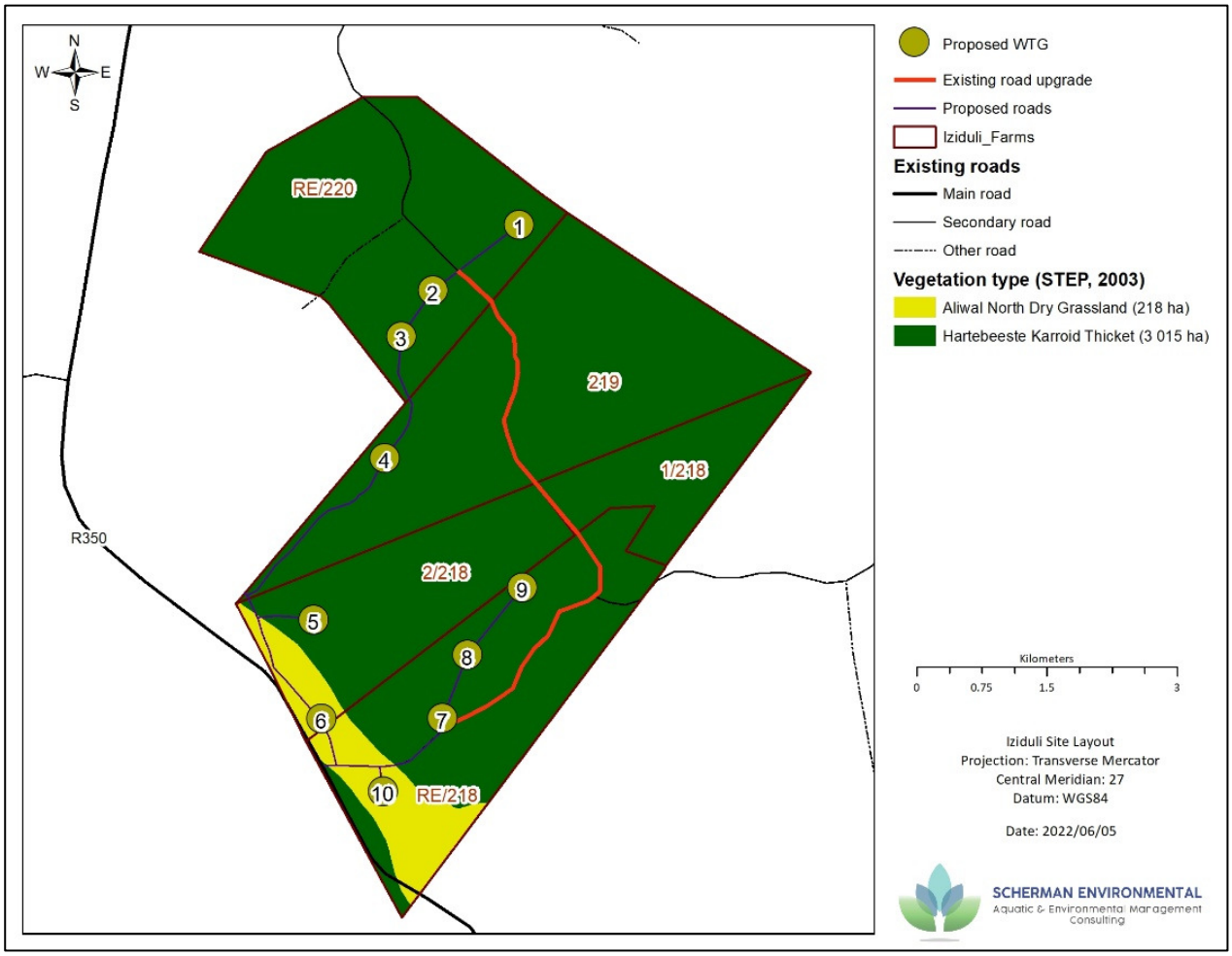

Figure 2.6. The distribution of vegetation types from the Subtropical Thicket Ecosystem Programme (STEP) Project (Vlok et al. 2003), in relation to the planned infrastructure

The Vlok *et al*. (2003) publication only provides the following:
Hartebeeste Karroid Thicket, 1) Character Species – *Papea capensis* and *Ocimum burchelliana*, and 2) dominant species – *Pentzia incana* and *Ocimum burchelliana*.
Vlok & Euston Brown (2002) provide slightly more information: The vegetation type is one of the mosaic forms with isolated bushclumps containing *P. capensis* and *Euphorbia tetragona*. They contend that most of the spekboom (*Portulacaria afra*) has been eliminated, together with the palatable grasses, due to injudicious livestock management. *V. karoo*[10] occurs sporadically[11], but the dominant vegetation is a karroid shrubland with *O. burchellianum*, *Gnidia cuneata*, *Eriocephalus africanus* and *Petzia incana*. No SSC are mentioned.

[10] Species underlined in text indicate species listed in Appendix 1.
[11] Supports our contention that *V. karoo* is becoming a bush encroachment problem.

The seminal work of Mucina & Rutherford (2006) significantly improved the national vegetation mapping efforts. Unfortunately, the fine resolution of the STEP mapping for Subtropical Thicket (122 distinct Thicket types Vlok *et al*. 2003) was lost and spatially distilled into 14 Thicket types. The biome was also renamed the **Albany Thicket Biome** (Hoare *et al*. 2006). **Figure 2.7** below indicates that the entire development footprint for this report is restricted to **Bedford Dry Grasslands** and **Great Fish Thicket** (Mucina *et al*. 2006). The **Bedford Dry Grasslands** vegetation type is listed as by Mucina (*et al*. 2006) and Department of Forestry, Fisheries and Environment (2021) as Least Threatened. **Great Fish Thicket** is listed as Least Concern by Mucina et al. (2006) but has subsequently been re-divided to reflect a host of vegetations classes: Fish Spekboom Thicket, Fish Thicket, Fish Valley Thicket, and the associated mosaic thicket types of Vlok *et al*. (2003): Crossroads Grassland Thicket, Doubledrift Karroid Thicket and Hartebeest Karroid Thicket. There are considerable areas of **Albany Alluvial Vegetation** in areas previously classified as Great Fish Thicket (see below).

Bedford Dry Grasslands have, no formal conservation areas and only 1% of the vegetation conserved in private nature reserves. The typical species listed are very similar to those of Acocks (1988): A host of grass species, *Blepharis integrifolia, Commelina africana, Emex australis, Gazania krebsiana,* subsp. *krebsiana, Oxalis depressa, P. sidoides, Helichrysum rugulosum, Crassula expansa, V. karoo, Helichrysum dregeana, N. microphylla, Asparagus striatus, Chrysocoma ciliata, Euryops anthemoides, Hermannia anthemoides, F. muricata, Indigofera sessifololia, Jamesbittiana microphylla, Lycium cinereum, Molobodium burchellii, Pelargonium aridum, Talinum arnotii, Pentzia globosa, Selago fruiticosa, S. saxatilis, Cotyledon orbiculata, Tephrosia capensis* var. *acutifolia* and *Limeun aethiopicum* and *Mestoklema tuberosum*[12].

Great Fish Thicket has 96% habitat remaining, is poorly conserved (6%) with the following species (Hoare *et al*. 2006):
Cyphostemma quinatum, *Pelargonium peltatum*, *Sarcostemma viminale*, *Asparagus multiflorus*, *A. racemosus*, *Capparis sepiaria* var. *citrifolia*, *Jasminum angulare*, *Plumbago auriculata*, *Rhoicissus digitata*, *Cyanotis speciosa*, *Hypoestes aristata*, *Salvia scabra*, *Abutilon sonneratianum*, *Aizoon glinoides*, *Hibiscus pusillus*, *Lepidium africanum*, *Sida ternatam, Crassula expansa, Senecio radicans*, *Sansevieria hyacinthoides*, *Euphorbia triangularis*, *Aloe ferox*, *Euphorbia tetragona*, *Papea capensis*, *Vachellia natalitia*, *Boscia oleoides*[13], *Brachylaena ilicifolia*, *Cussonia spicata*, *Ozoroa mucronata*, *Ptaeroxylon obliquum*, *Schotia afra var. afra*, *Zanthoxylum capense*, *Euclea undulata*, *Allophylus decipiens*, *Azima tetracantha*, *Carissa bispinosa* subsp. *bispinosa*, *Coddia rudis*, *Diospyros scabrida* var. *cordata*, *Ehretia rigida*, *Flueggea verrucosa*, *Grewia occidentalis*, *Grewia robusta*, *Gymnosporia capitata*, *G. heterophylla*, *Hippobromus pauciflorus*, *Mystroxylon aethiopicum*, *Olea europaea* subsp. *africana*, *Putterlickia pyracantha*, *Searsia incisa*, *Searsia refracta*, *Scolopia zeyheri*, *Scutia myrtina*, *Asparagus striatus*, *Chaetacanthus setiger*, *Chrysocoma ciliata*, *Asparagus subulatus*, *Felicia muricata*, *Hermannia althaeoides*, *Indigofera sessilifolia*, *Leucas capensis*, *Limeum aethiopicum*, *Lycium cinereum*, *Phyllanthus maderaspatensis*, *Selago fruticose*, *Crassula cordata*, *C. ovata*, *Portulacaria afra*[14], *Aloiampelos tenuior*[15], *Delosperma ecklonis*, *Kalanchoe rotundifolia*, *Mestoklema tuberosum*, *Tetradenia barberae*[16], *Viscum rotundifolium*, and *Crassula perforata*.

[12] Species in red are currently listed as SSC.
[13] Hoare *et al*. (2006) lists *Boscia albitruca* but this species does not occur in the Eastern Cape.
[14] Species underlined in text indicate species listed in Appendix 1.
[15] Species in red are currently listed as SSC.
[16] This species is listed as Rare (Van Jaarsveld & Potter), but restricted to dry coastal thickets between the Mbashe River and Fish River – hence unlikely in this study area.

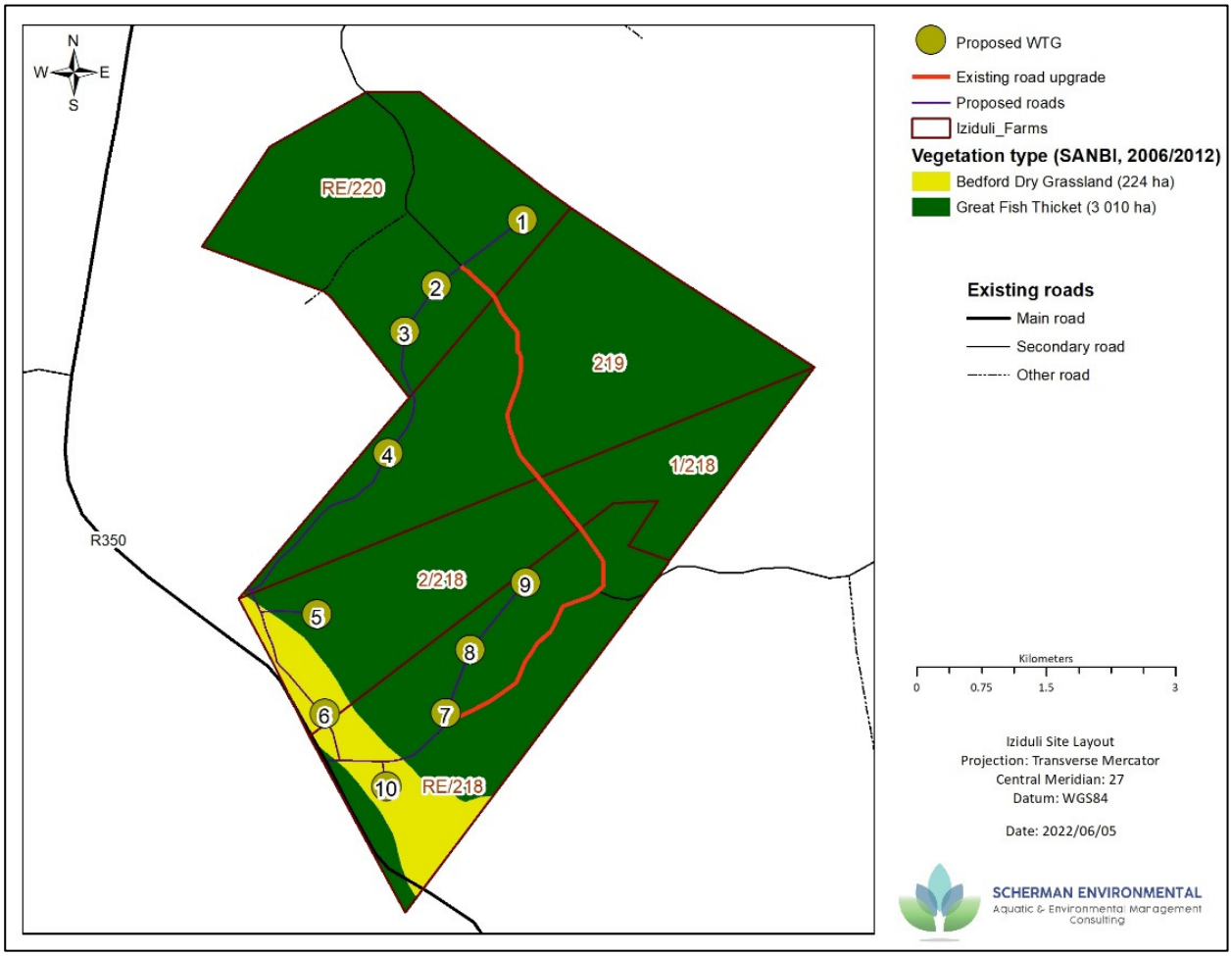

Figure 2.7. The distribution of vegetation types from the SANBI VegMap Project (Mucina & Rutherford 2006), in relation to the planned infrastructure

The recent changes to the national vegetation mapping for the Eastern Cape have largely been concentrated in the Albany Thicket Biome. The 14 thicket types listed by Hoare *et al*. (2006), have been expanded to 44 to reincorporate some of the thicket classes defined by Vlok[17] *et al*. (2003). The study area does not reflect any solid thicket types in the development footprint (**Figure 2.8**), but lists the mosaic thicket type: Double Drift Karroid Thicket. This was previously absorbed into Great Fish Thicket (Hoare *et al*. 2006), but the boundaries for this vegetation type would be the same as in Mucina *et al*. (2006).

The same species listed Bedford Dry Grassland (Mucina *et al*. 2006), can be found listed above.

Double Drift Karroid Thicket (Grobler *et al*. 2018) has the following species:
Pappea capensis[18], *Euphorbia tetragona*, *Schotia afra*, *Vachellia karoo*, *Portulacaria afra*, *Aloe striata*, *Aloiampelos tenuior*[19], *Bulbine frutescens*, *Euphorbia curvirama*, *Euphorbia stellata*[20], *Haworthia cooperi*, *Aloe ferox*, *Bulbine narcissifolia*, *Trachyandra giffenii*, *Aristida congesta*, *Digitaria argyrograpta*, *Themedea*

[17] Largely restricted the "mosaic" thicket types.
[18] Species underlined in text indicate species listed in Appendix 1.
[19] Species in red are currently listed as SSC.
[20] We would consider this species to be included as a SSC.

triandra, Ocimum burchellianum, Eriocephalus africanus, Lasiosiphon meiserianus, Penztia incana, Pteronia incana.

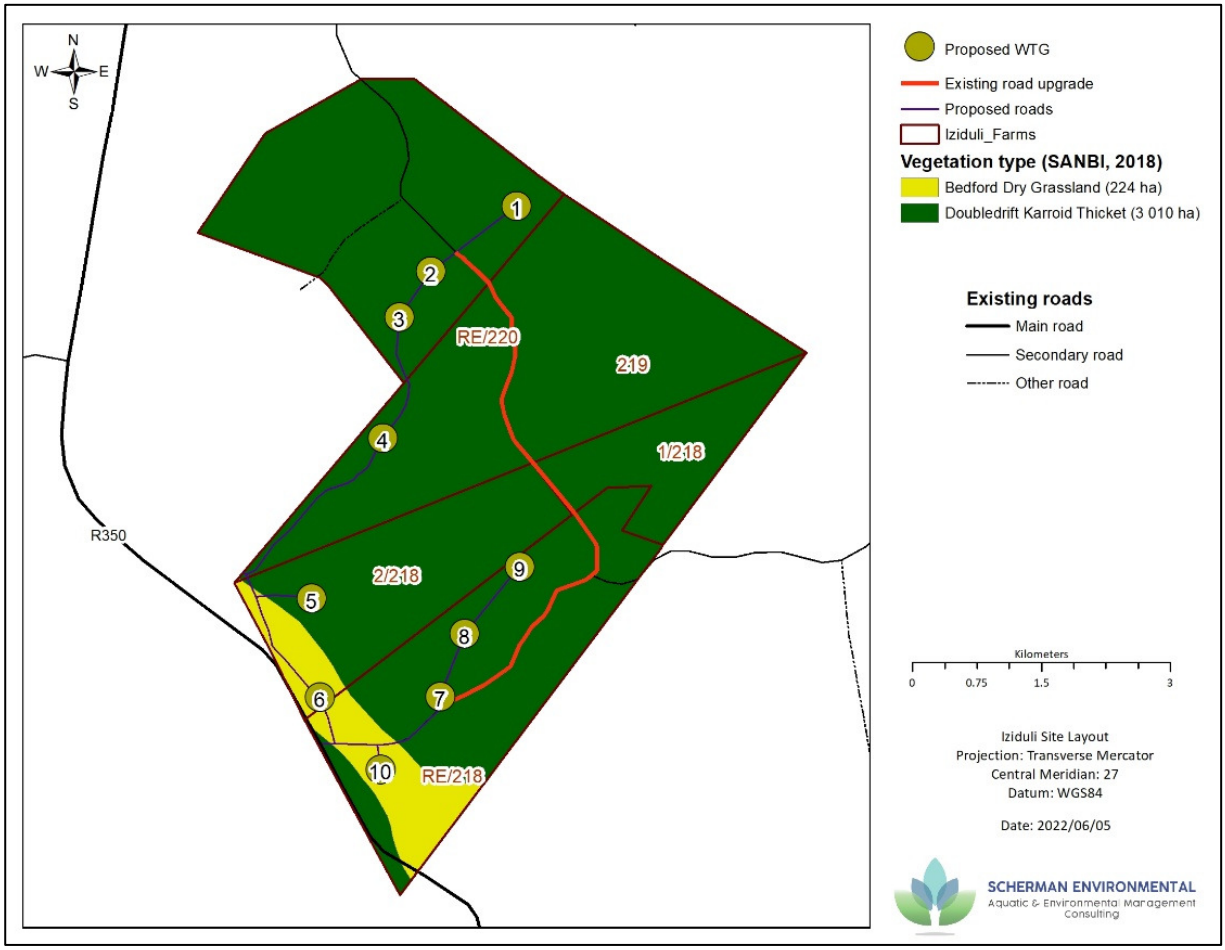

Figure 2.8. The distribution of vegetation types from the SANBI VegMap Project (SANBI 2018), in relation to the planned infrastructure

Threatened Vegetation Types

Department of Forestry, Fisheries and the Environment (2021) recently published a national assessment of the treat status of the country's vegetation classes. Both Bedford Dry Grasslands and Double Drift Karroid Thicket are listed as Least Concern. Bedford Grasslands is endemic to the Eastern Cape, has 98% of the habitat remaining in "natural extent" with low levels of habitat loss and hence a "low risk" class in terms of ecosystem collapse (Department of Forestry, Fisheries and Environment 2021). Skowno *et al*. (2019) assessed the terrestrial threat status changes between 2011 and 2018 (National Biodiversity Assessments or NBAs) and concluded that Bedford Dry grasslands had undergone "no change"[21] and could be classified as "least concern" when it came to Red List of Ecosystems (RLE) classes.

Double Drift Karroid Thicket has similarly experienced low rates of transformation, is an Eastern Cape endemic, has 88% of the habitat in natural extent but is poorly protected (Department of Forestry, Fisheries and Environment 2021). The assessment of RLE status Double Drift Karroid Thicket (Skowno *et al*. 2019), could not detect change (2011-2018) as the vegetation was a new ecosystem type.

[21] It is worth noting that these assessments only focus on landcover class changes or transformation of vegetation, and therefore excludes the bulk of the degradation gradient.

Recent work by RRRG and Jan Vlok has raised the possibility of the study site containing significant components of the Albany Alluvial Vegetation type. This vegetation is endemic to the Eastern Cape, has lost 55% of its natural habitat and is as **Endangered** (Department of Forestry, Fisheries and the Environment 2021). It has a narrow distribution along drainage lines, and is prone to habitat conversion, and hence in danger of ecosystem collapse (Department of Forestry, Fisheries and Environment 2021). The National Biodiversity Assessment records the vegetation type as poorly protected (Skowno 2018). Albany Alluvial Vegetation is strongly associated with the Albany Thicket Biome (Hoare *et al*. 2006). The biome in general has the thicket vegetation types distributed as follows across the threat classes: Critically Endangered, 0.9%, Endangered 1.6%, Vulnerable 17.3%, Least Concern 80.2% (Skowno & Monyeki 2021).

Species of Special Concern

There are limitations with regard to detecting some species. Many of the geophytes listed in previous reports for the general area were not in flower at the time of surveying. There are a host of species that are associated with bushclumps, and are extremely cryptic and difficult to find (*Ceropegia*, *Brachystelma* etc). **Table 2.2** lists the SSC noted on the properties, and surrounds during the 2022 surveys.

Listed species from the EIAR (TBC 2020) and what was found on site are shown in **Appendices 1** and **2** respectively. One of the more important plant species that will require extensive search and rescue is *Euphorbia meloformis*. The species does not have a specific niche requirement and hence is not limited to rocky outcrops or bushclumps. The rapid assessment of this survey has recorded the plant in many areas across the properties (**Figure 2. 9**).

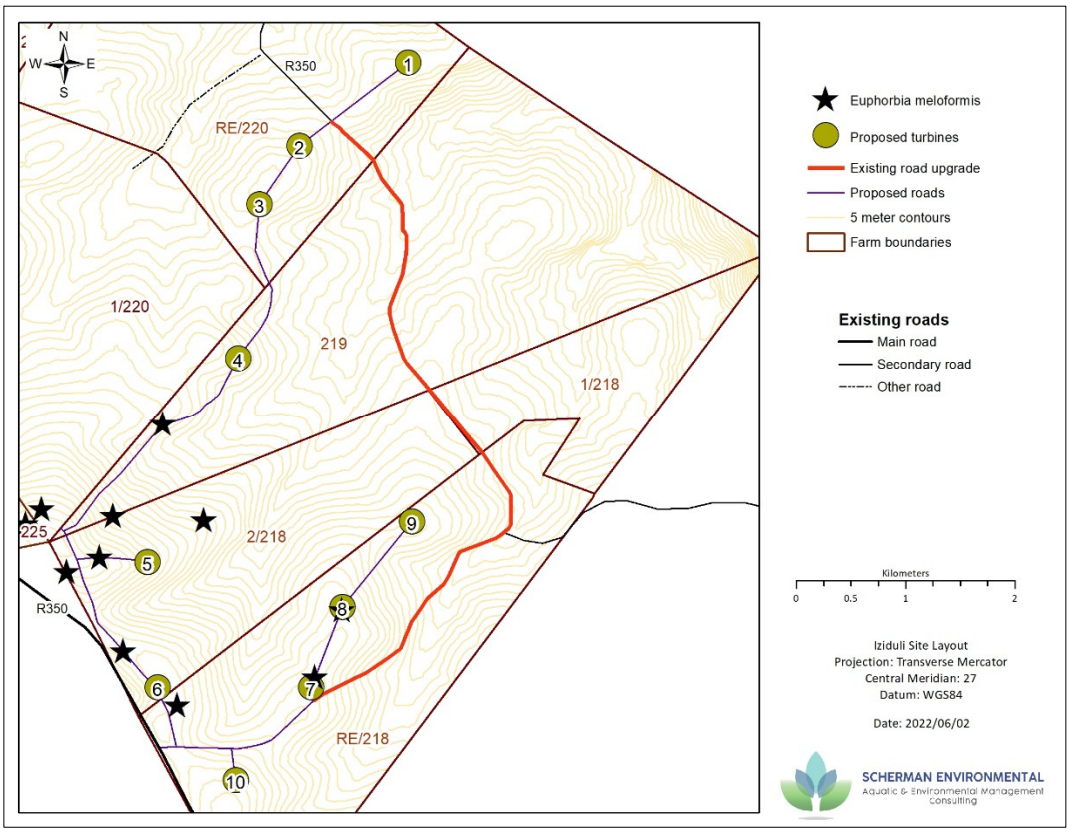

Figure 2. 9. The localities of *E. meloformis* on the proposed Iziduli WEF

Hoare (2010) listed a number of Protected Tree species, according to the National Forest Act (NFA).

Table 2.1. Protected Trees according to the National Forest Act, and predicted to possibly occur in the study site (Hoare 2010).

No	Genus	Species	SubSpecies	Family	Provincial Conservation Status	SANBI Status	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
1	*Catha*	*edulis*		Celastraceae		Least Concern	Found in dry woodland and on rocky outcrops.	HIGH	**NO**	Geldenhuys, C.J. & Victor, J.E. 2004. Catha edulis (Vahl) Forssk. ex Endl. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25. Pooley 1997. The Complete Guide to Trees of Natal, Zululand and Transkei. Natal
2	*Curtisia*	*dentata*				Near Threatened A2d	Study area farms too dry to support this species	LOW	**NO**	Williams, V.L., Raimondo, D., Crouch, N.R., Cunningham, A.B., Scott-Shaw, C.R., Lötter, M. & Ngwenya, A.M. 2008. Curtisia dentata (Burm.f.) C.A.Sm. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
3	*Ocotea*	*bullata*				Endangered A2bd	Wide national distribution across many vegetation types but limited to cool dry evergreen forests, this site is too dry.	LOW	**NO**	Williams, V.L., Raimondo, D., Crouch, N.R., Cunningham, A.B., Scott-Shaw, C.R., Lötter, M., Ngwenya, A.M. & Dold, A.P. 2008. Ocotea bullata (Burch.) Baill. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
4	*Pittosporum*	*viridifolium*				Least Concern		LOW	**NO**	Foden, W. & Potter, L. 2005. Pittosporum viridiflorum Sims. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/06/02

No	Genus	Species	SubSpecies	Family	Provincial Conservation Status	SANBI Status	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
5	*Podocarpus*	*falcatus*		Podocarpaceae		Least Concern	Wide national distribution but limited to perrenial rivers and moist forest. This study site is too dry	LOW	**NO**	Foden, W. & Potter, L. 2005. Podocarpus falcatus (Thunb.) R.Br. ex Mirb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
6	*Podocarpus*	*latifolius*		Podocarpaceae		Least Concern	Wide national distribution but limited to perrenial rivers and moist forest. This study site is too dry	LOW	**NO**	Foden, W. & Potter, L. 2005. Podocarpus latifolius (Thunb.) R.Br. ex Mirb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
7	*Prunus*	*africana*		Rosaceae		Vulnerable A4acd; C1+2a(i)	Wide national distribution across many vegetation types but limited to moist and coastal forests, this site is too dry.	LOW	**NO**	Williams, V.L., Raimondo, D., Crouch, N.R., Cunningham, A.B., Scott-Shaw, C.R., Lötter, M. & Ngwenya, A.M. 2008. Prunus africana (Hook.f.) Kalkman. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/2
8	*Sideroxylon*	*inerme*	*inerme*	Sapotaceae		Least Concern	Wide coastal distribution from N of Cape across the east coast into Mozambique	HIGH	**NO**	Foden, W. & Potter, L. 2005. Sideroxylon inerme L. subsp. inerme. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25

The same argument could be made for the stapeliad species. We only found a single species[22] (*Huernia thuretii*)[23], which was last assessed in 2005. *Euphorbia micracantha*[24] was almost exclusively seen in the protective environment of rocks and cracks. Similary, *E. tridentata* was also situated in and around rocks, in dense grass tufts or under nurse plants (e.g. *Lycium* spp). *E. tridentata* is exceptionally sensitive to disturbance and the populations will have suffered with sustained high density grazing due to hoof action.

A number of plant species protected under the provincial legislation are located on the properties (e.g. *Tritonia strictifolia* and *Mestoklema tuberosum*). When assessing the previous fieldwork in terms of plant species, there appears to be a low level of overlap in terms of species listed (especially when it comes to the SSC). The Savannah Environmental (2010) report only list one species (*Encephalartos lehmanii*, the Karoo cycad).Many of the species (including SSC) listed in previous studies were not sighted (e.g. *Euphorbia globosa*).

A major key challenge for all but those at the murky frontlines of deep taxonomy, is to reconcile the outdated legislation for protected species (The Eastern Cape Provincial Ordinance of 1974), and the current taxonomy. It has led to some confusion in previous reports. The approach of providing banket protection at the **plant family** level, makes it difficult to be compliant to the full extent of the law. A good example is the registration of Asclepiadaceae as "Protected". When the taxonomist decided to move/change/rename the entire family to Apocyanaceae it becomes tricky to differentiate which species are now protected unless it was purely a family name change (which is often less likely). This implies back-tracking and sorted out the old-Asclepiadaceae from the old-Apocyanaceae.

To complicate matters further, a plant family could have a number of guilds all of which do not need formal protection. The Asclepiadaceae again provide a good example. While a significant portion of the genera and species in Apocyanaceae warrant formal protection (e.g. *Hoodia* spp.), others are close to weedy (e.g. *Cynachum*[25] spp.). The other problem family is Mesembranthemaceae which is now Aizoaceae.

Although the Iridaceae, Orchidaceae and Amaryllidaceae have not "moved" taxonomically, they have a large number of genera and species that could potentially occur in the development footprints.

Table 2.2 is a list of SSC identified on, or adjacent to, the properties surveyed by this team during 2022. **Figure 2.10** shows examples of SSC found in the WEF footprint. It should be kept in mind that many of the species list as either sighted or could potentially occur in the previous studies warrant closer scrutiny for probability of occurring in the development zone. Other species such as *Euphorbia gorgonis* have not been assessed nationally and the precautionary principle should apply. These are sought after for the illegal plant trade and should be treated as a Species of Special Concern.

[22] *Stapelia grandiflora* was located on the Iziduli WEF
[23] Conservation status – Least Concern
[24] Conservation status – not listed on the SANBI (South African National Biodiversity Institute) database but Least Concern according to Möller & Becker (2019)
[25] *C. meyeri* and *C. zeyheri* are both listed as Vulnerable.

Figure 2.10. Examples of SSC in the WEF footprint

Table 2.2. Plant Species of Special Concern identified on or adjacent to the properties during the RRRG 2022 field visits.

No	Genus	species	Family	Provincial Conservation Status	Current Threat Status SANBI	Comment
1	*Aloe*	*maculata*	Asphodelaceae	Protected	Least Concern	
2	*Aloe*	*striata*	Asphodelaceae	Protected	Least Concern	
3	*Aloiampelos*	*tenuior*	Asphodelaceae	Protected	Least Concern	
4	*Anacampseros*	*arachnoides*	Anacampserotaceae	Protected	Least Concern	
5	*Boophane*	*disticha*	Amaryllidaceae	Protected	Least Concern	
6	*Chasmatophyllum*	*musculinum*	Aizoaceae	Protected	Least Concern	
7	*Diascia*	*cuneata*	Scrophulariaceae	Protected	Least Concern	
8	*Duvalia*	*caespitosa*	Apocyanaceae	Protected	Least Concern	
9	*Duvalia*	*modesta*	Apocyanaceae	Protected	Least Concern	
10	*Euphorbia*	*meloformis*	Euphorbiaceae	Protected	Near Threatened. Protected under NEMBA (2007).	
11	*Faucaria*	*tuberculosa*	Aizoaceare	Protected	Least Concern	T. Dold believes the populations to be much more in danger and would classify them as Vulnerable
12	*Huernii*	*thurettii*	Apocyanaceae	Protected	Least Concern	
13	*Mestoklema*	*albanicum*	Aizoaceae	Protected	Neat Threatened	
14	*Mestoklema*	*tuberosum*	Aizoaceae	Protected	Least Concern	
15	*Radamanthus*	*New species*	Hyacinthaceae		Not Determined	
16	*Rushcia*	*britteniae*	Aizoaceae	Protected	Least Concern	Being an undescribed species, T. Dold recommends Data Deficient
17	*Rushcia*	*cradockensis*	Aizoaceae	Protected	Least Concern	
18	*Stapelia*	*grandiflora*	Apocynaceae	Protected	Least Concern	
19	*Syringodea*	*bifucata*	Iridiaceae	Protected	Least Concern	
20	*Trichodiadema*	*introrsum*	Aizoaceae	Protected	Data Deficient	
21	*Trichodiadema*	*pomeridianum*	Aizoaceae	Protected	Least Concern	
22	*Trichodiadema*	*sp1.*	Aizoaceae	Protected		
23	*Tritonia*	*securigera*	Iridaceae	Protected	Least Concern	

The critical key message is that there are no species that are of Special Concern[26] that could not be relocated to a suitable site during the Search and Rescue Phase and hence there is no infrastructure that cannot proceed.

We would advocate that a number of species not currently listed as Species of SSC, that we found infield, also be included in search and rescue effort. The species are 1) highly susceptible to trampling from livestock and game, 2) have slow recruitment and limited dispersal capabilities, 3 popular in the illegal plant collectors trade, 4) national threat status is very outdated in many cases. *F. tuberculosa* and *H. thurettii*, are listed in the Table above but a complete list will be provided in the BAR. Key species such as *Euphorbia gorgonis* and *Euphorbia micracantha* have not yet been evaluated for conservation status.

Similarly, there will be species not listed as threatened or SSC, found by previous studies that we would advocate be included in a search and rescue programme.
Due to seasonality and the low probability of finding cryptic species during short field visits, the most prudent approach is to compile a composite list of all SCC encountered during all field visits, plus an inclusion of those species that are deemed highly likely to occur in the study area. For e.g. *Ceropegia linearis*, *Brachystelma huttonae*, *Ophiosnella arcuata* and *Ornithogalum nannoides* are all highly likely to occur in the study area, but have not yet been recorded (see **Table 2.3**) – (T. Dold pers comm).

[26] This would exclude *Sideroxylon inerme*.

Table 2.3. Species of Special Concern recorded in the Msenge-Iziduli field study sites from 2010 to 2022.

No	Genus	Species	Sub-species / Variation	RRRG (2022)	The Biodiversity Company (2020)	Scherman[27] Colloty (2017)	Nkurenkuru (2018)	Hoare (2010)[28]	Savannah Environmental (2014)	Comment
1	*Aloe*	*humilis*							X	
2	*Aloe*	*maculata*		X					X	
3	*Aloe*	*striata*		X	X	X			X	
4	*Aloiampelos*	*tenuior*		X					X	
5	*Aloe*	*ferox*							X	Savannah report lists the species as protected by CITIES, and the 2013 NEMBA regulations
6	*Aloe*	*pluridens*								
7	*Ammocharis*	*coranica*		X					X	
8	*Anacampseros*	*arachnoides*		X			X		X	
9	*Bergeranthus*	*addoensis*					X			
10	*Bergeranthus*	*sp.*							X	
11	*Boophane*	*distichia*		X	X				X	
12	*Bulbine*	*sp.*							X	
13	*Carpobrotus*	*edulis*				X				
14	*Brachystelma*	*sp.*							X	
15	*Brunsvigia*	*radulosa*							X	
16	*Brunsvigia*	*gregaria*						X	X	
17	*Ceropegia*	*fimbriata*								
18	*Chasmatophyllum*	*musculinum*		X					X	
19	*Corycium*	*tricuspidatum*						X		
20	*Crassula*	*decidua*						X		
21	*Crinum*	*macowanii*						X	X	
22	*Delosperma*	*sp.*				X				
23	*Cyrtanthus*	*contractus*			X					
24	*Drosanthemum*	*hispidum*			X				X	
25	*Delosperma*	*adelaidensis*		X						

[27] Only three Crassula sp. are protected by the provincial ordinance (*C. columnaris, C. perfoliata, C. pyramidalis*)

[28] Hoare (2014) does not provide a list of species identified on the Msenge WEF *per se*, but an exhaustive list all plant species recorded for the study area from his previous studies, as well as a suggested list of protected tree species (National Forest Act) that are likely to occur. These will be assessed in detail in the Basic Assessment Report.

No	Genus	Species	Sub-species / Variation	RRRG (2022)	The Biodiversity Company (2020)	Scherman[27] Colloty (2017)	Nkurenkuru (2018)	Hoare (2010)[28]	Savannah Environmental (2014)	Comment
26	*Drimia*	*altissima*								Least concern and abundant (not protected provincially)
27	*Diascia*	*cuneata*		**X**						Listed as Least Concern (Williams et al. 2016)
28	*Duvalia*	*caespitosa*		**X**						Less than 5 remaining populations, Uitenhage to Port Elizabeth, 20km from the
29	*Duvalia*	*sp.*			**X**					
30	*Duvalia*	*modesta*		**X**					**X**	Mistaken for *E. tridentata*.
31	*Encephalartos*	*lehmannii*						X		
32	*Euphorbia*	*globosa*			**X**					
33	*Euphorbia*	*gatbergensis*							**X**	Mistaken for *E. gorgonis*.
34	*Euphorbia*	*mauritanica*							**X**	Not protected with the Provincial Ordinance
35	*Euphorbia*	*gorgonis*		**X**						
36	*Euphorbia*	*meloformis*		**X**	**X**		**X**	**X**	**X**	
37	*Euphorbia*	*micracantha*		**X**			**X**		**X**[29]	
38	*Euphorbia*	*stellata*		**X**						
39	*Faucaria*	*tuberculosa*		**X**			**X**		**X**	
40	*Gasteria*	*sp.*							**X**	Only *Gasteria beckeri* is protected
41	*Glotiphyllum*	*longum*		**X**						
42	*Gomphocarpus*	*physocarpus*			**X**					
43	*Haemanthus*	*montanus*							**X**	
44	*Haemanthus*	*albibos*		**X**	**X**[30]					
45	*Haworthia*	*bolusii*							**X**	
46	*Hereroa*	*granulata*		**X**						
47	*Hermannia*	*violacea*						**X**		Listed as Rare, EC endemic and a narrow range
48	*Holothrix*	*sp.*			**X**					

[29] Listed as *E. micrantha*.

[30] Only listed as *Haemanthus* sp. but most likely *H. albiflos*.

No	Genus	Species	Sub-species / Variation	RRRG (2022)	The Biodiversity Company (2020)	Scherman[27] Colloty (2017)	Nkurenkuru (2018)	Hoare (2010)[28]	Savannah Environmental (2014)	Comment
49	*Holothrix*	*macowaniana*						X		
50	*Huernia*	*brevirostris*			X		X			
51	*Huernia*	*kennedyana*						X		
52	*Huernia*	*thuretii*		X						
53	*Mestoklema*	*sp.*							X	
54	*Mestoklema*	*albanucum*		X						
55	*Mestoklema*	*tuberosum*		X						
56	*Moraea*	*sp.*			X				X	
57	*Nerine*	*huttonae*						X		
58	*Orbea*	*sp.*							X	
59	*Pachycarpus*	*Cf.*							X	
60	*Pachypodium*	*succulentum*		X			X		X	
61	*Pelargonium*	*sidoides*[31]			X		X		X[32]	Listed as Least Concern (De Castro et al. 2005)
62	*Radamanthus*	*sp.*		X						
63	*Ruschia*	*sp.*			X				X	
64	*Ruschia*	*brittinae*		X						
65	*Ruschia*	*cradockensis*		X						
66	*Scadoxus*	*puniceus*							X	
67	*Sideroxlon*	*inerme*	*inerme*			X				
68	*Stapelia*	*grandiflora*		X						
69	*Syringodea*	*bifucata*		X						
70	*Trichodiadema*	*introrosum*		X						
71	*Trichodiadema*	*sp.*							X	
72	*Trichodiadema*	*orientalis*					X			
73	*Trichodiadema*	*pormeridianum*		X						
74	*Tritonia*	*laxifolia*							X	
75	*Tritonia*	*securigera*		X						

[31]Although listed in numerous reports as Protected – the species is Declining but has not other threat status.

[32] Savanna 2014 Environmental report suggests *P. sidoides* to be Protected in the NEMBA 2013 revised regulations.

Alien Invader Plants and Weeds

All the properties showed alarming incidence of jointed-cactus (*Opuntia aurantiaca*) invasions, with no signs of a systematic clearing programme[33]. *Opuntia ficus-indica* populations are less widespread and the majority of the individuals are in the small size classes, which indicates a historical effort at controlling this species. *Opuntia megapotamica* is less widespread on these properties. All *Opuntia* spp. are listed as Category 1 Alien Invaders according to the Conservation of Agricultural Resources (CARA) regulations and are legally required to be removed.

Bush Encroachment

Large areas of the properties are experiencing several stages of bush encroachment (e.g. by *Vachellia karoo*), which will require a Bush Encroachment Management Plan. The excessive overgrazing has led to large areas of the property exhibiting disproportionately high % cover for the karroid bush species (*Chrysochoma ciliata*, *Pentzia incana*, *Eriocephalus sp.*, *Ruschia spp*. and *Ocimum burchellii* and *Stachys scabrida*). There has also been a steady reduction in the ratio of "increaser" to "decreaser" grass species resulting in lower productivity.

2.1.4. Conclusion

Species of Special Concern

- The rocky outcrops harbour a disproportionate number of rare and threatened species and the location of road networks, OHP pylons, WTGs and substations needs to be modified to avoid these as far as practically possible. Roads also need to be less linear and direct to avoid rocky areas, if required.
- Bushclumps are also important refugia for rare species such as *Ceropegia bowkeri Harv.* subsp*. sororia,* and contain protected species like *Tritonia strictifolia*. Layouts should attempt to avoid bushclumps.
- Buffer sizes could be reduced to aid removal and relocation of SSC.
- To account for the cryptic and other species that have limited flowering times, a field photo guide should be compiled for the WEF managers and Environmental Compliance Officers (ECOs). Protected and endangered species that get identified within the construction footprint, could then be marked and relocated before damage occurs.
- The person responsible for the environmental monitoring and compliance needs to have GPS, GIS and botanical training to be able to develop spatial layers for all the SSC. This will enable the continued collection of spatial data and provide guidance for further developments (e.g. additional WGTs or OHPs or substations – but more importantly be in a position to track and monitor the status of populations such as *F. tuberculosa*, *E. meloformis* and other SSC.

As mentioned above, the seasonality of surveys plays a significant role in finding geophytes and other cryptic species. The following species, although never listed in all the reports spanning 12 years, should also be viewed as highly likely to occur in the study area: *Ceropegia linearis*, *Brachystelma huttonae*, *Ophiosnella arcuata*, *Ornithogalum nannoides* (T. Dold, Albany Museum, Makhanda, pers. comm.).

2.2. Terrestrial fauna

2.2.1. Introduction

The Iziduli WEF has the been the focus of several previous studies (Savannah Environmental (SE), 2017 and The Biodiversity Company (TBC), 2020), which were undertaken to elucidate the effect that the proposed infrastructure would have on the biotic and abiotic elements of the natural environment. This report, which

[33] The populations of *O. aurantiaca* did show low levels of biocontrol.

focusses on the terrestrial fauna (mammals, herpetofauna, scorpions) seeks to determine the overall impact of the proposed infrastructure using previous reports and newly acquired field data.

The majority of the proposed infrastructure, within the Iziduli WEF, has been placed within Double Drift Karooid Thicket (SANBI 2018) (Figure 1). While sections of the infrastructure are placed within Bedford Dry grassland, the habitat is expected to harbour higher densities and diversities of fauna given the increased availability of microsites due to the increased heterogeneity associated with Double Drift Karooid Thicket and its transitional zones. Irrespective of this the area is classified as an 'Other Natural Area', or 'ONA' (ECBCP, 2019) according to DEDEAT. This means that under the current ECBCP Plan, the site has not been considered a priority area. Irrespective of this, the area is still expected to support biodiversity and provide crucial ecosystem services (ECBCP, 2019). This necessitates a thorough and comprehensive review of the both the area and the literature to ensure no unnecessary damage is brought to the natural areas found within the infrastructure footprint of the proposed wind farm.

2.2.2. Methodology

The main objective of the assessment was to assess the impact that the planned construction would have on the terrestrial fauna communities found near the wind turbines, road networks, overhead lines, substations, and all other infrastructure associated with the proposed project. The methodology is characterised by two main sections, the desktop assessment, and the field survey.

The desktop assessment of the area was produced using a multiplicity of sources, that include, but are not limited to citizen science platforms, virtual museum records, previous reports, and published literature. The species list's compiled in the results section showcase the species that are likely to be found in the area. Whilst comprehensive, the lists provided represent an attempt to estimate the diversity of the area. Given that our understanding of the species compositions of the area is based largely on peoples understanding of the area, it is safe to assume that some species may be missing from the list. Extra effort has thus gone into assessing the Likelihood of Occurrence (LOO) for any species of conservation concern.

The field surveys were conducted during the months of March, April, and May 2022. The area around the proposed construction site was ground-truthed by foot to determine the relative faunal diversity and density of the area. The species accounts that follow represent an attempt to validate the desktop data and ground-truthing undertaken by previous consultants. It must be noted that due to time constraints, trapping was not conducted during this project. Small and meso-fauna such as rodents, reptiles and frogs were highly likely under-estimated during the field component of this study.

2.2.3. Results and Discussion

Previous Reports

Savannah Environmental 2017

Using the sources afforded to them, Savannah Environmental listed 52 mammal species that could occur in the area. On a global scale, this represented one endangered, two vulnerable and two near threatened mammals, at the time of the study. The field surveys undertaken by TBC yielded 16 mammal records with no mammals of a global conservation concern being recorded in the area. From a reptile perspective, Savannah Environmental's desktop assessment yielded fifty species. At the time of the study, this represented three

animals of conservation concern (Two vulnerable, one near threatened). Field surveys of the area recorded eight species of reptile. None of these were of conservation concern either. Additionally, the desktop assessment of the amphibian communities found in the area yielded 13 potential species. None of these were of conservation concern. Field surveys of the area also yielded four spices of amphibian.

The Biodiversity Company 2020

Although originally constructed for the Msenge Windfarm, there is substantial overlap between this report and the area covered by the proposed Iziduli WEF. For this reason, the TBC (2020) has been considered in this walkthrough report. The report created by The Biodiversity Company was the most thorough report done thus far with the most comprehensive desktop assessment and field survey. Using the sources afforded to them, the Biodiversity Company listed 81 mammal species that could occur in the area. On a regional basis, this represented one endangered (EN), four vulnerable (VU) and six near threatened (NT) mammals (SANBI, 2016). On a global scale, this represented one endangered, two vulnerable and five near threatened mammals (IUCN, 2017). The field surveys undertaken by TBC yielded 17 mammal records with two mammals of a global conservation concern being recorded in the area (IUCN 2017). These included the Mountain Reedbuck (*EN - Redunca fulvorufula) and* Leopard (VU - *Panthera pardus).* From a reptile perspective, the TBC's desktop assessment yielded eight species. None of these were of conservation concern. Field surveys of the area recorded seven species of reptile. None of these were of conservation concern either. Additionally, the desktop assessment of the amphibian communities found in the area yielded 25 potential species. According to IUCN (2017), three of these were of conservation concern, *Anhydrophryne rattrayi* (VU), *Cacosternum thorini* (EN) and *Vandijkophrynus amatolicus* (CR). The field surveys conducted by the TBC did not yield a single frog species.

Mammals

All potential Species

The mammal list **(Table 2.4)** was compiled using the MammalMap (MammalMap, 2022), the IUCN Red List Spatial Data (IUCN, 2017), the Savannah Environmental Report (SE, 2017) and the Biodiversity Company report (TBC, 2020). It must be noted that the Biodiversity Company Report was incredibly comprehensive and thus formed a strong base upon which we built our species list of the area. All together 83 species of mammal could occur in the area.

Table 2.4. List of mammals that may be found in the project area

Species	Common name	Global conservation status (IUCN)
Amblysomus hottentotus	Hottentot's Golden Mole	LC
Antidorcas marsupialis	Springbok	LC
Aonyx capensis	Cape/African Clawless Otter	NT
Atilax paludinosus	Marsh/Water Mongoose	LC
Canis mesomelas	Black-backed Jackal	LC
Caracal caracal	Caracal	LC
Chlorocebus pygerythrus	Vervet monkey	LC
Crocidura cyanea	Reddish-grey Musk Shrew	LC
Cryptomys hottentotus	African Mole-rat	LC
Cynictis penicillata	Yellow Mongoose	LC

Species	Common name	Global conservation status (IUCN)
Dendrohyrax arboreus	Southern Tree Hyrax	LC
Dendromus melanotis	Grey Climbing Mouse	LC
Dendromus mesomelas	Brants' Climbing Mouse	LC
Desmodillus auricularis	Cape Short-eared Gerbil	LC
Eidolon helvum	African Straw-coloured Fruit-bat	NT
Elephantulus rupestris	Western Rock Sengi	LC
Felis nigripes	Black-footed Cat	VU
Felis silvestris	African Wildcat	LC
Galerlella pulverulenta	Cape Grey Mongoose	LC
Genetta genetta	Common/Small-spotted Genet	LC
Genetta tigrina	Cape Genet	LC
Georychus capensis	Cape Mole rat	LC
Grammomys cometes	Mozambique Woodland Mouse/ Mozambique Thicket Rat	LC
Graphiurus murinus	Woodland Dormouse	LC
Graphiurus ocularis	Spectacled Dormouse	LC
Herpestes ichneumon	Egyptian/Large Grey Mongoose	LC
Herpestes pulverulentus	Cape Grey Mongoose	LC
Hydrictis maculicollis	Spotted-necked Otter	NT
Hystrix africaeaustralis	Cape Porcupine	LC
Ichneumia albicauda	White-tailed Mongoose	LC
Ictonyx striatus	Striped Polecat/Zorilla	LC
Kerivoula lanosa	Lesser Woolly Bat	LC
Leptailurus serval	Serval	LC
Lepus saxatilis	Cape Scrub Hare	LC
Macroscelides proboscideus	Karoo Round-eared Sengi	LC
Mastomys natalensis	Natal Multimammate Mouse	LC
Mellivora capensis	Honey Badger	LC
Micaelamys (Aethomys) namaquensis	Namaqua rock rat	LC
Mus minutoides	African Pygmy Mouse	LC
Mus musculus	House Mouse	LC
Myosorex varius	Forest Shrew	LC
Myotis tricolor	Cape Hairy Bat	LC
Mystromys albicaudatus	White-tailed Rat	VU
Neoromicia capensis	Cape Bat	LC
Neoromicia zuluensis	Aloe/Zulu Pipistrelle Bat	LC
Nycteris thebaica	Egyptian Slit-faced/Cape Long-eared Bat	LC
Oreotragus oreotragus	Klipspringer	LC
Orycteropus afer	Aardvark	LC
Otocyon megalotis	Bat-eared Fox	LC
Otomys irroratus	Southern African Vlei Rat	LC
Otomys karoensis (saundersiae)	Roberts' Vlei Rat	LC
Otomys unisulcatus	Karoo Vlei Rat	LC
Panthera pardus	Leopard	VU

Species	Common name	Global conservation status (IUCN)
Papio ursinus	Chacma Baboon	LC
Parahyaena brunnea	Brown Hyena	NT
Pedetes capensis	Springhare	LC
Pelea capreolus	Grey Rhebok	NT
Phacochoerus africanus	Common Warthog	LC
Philantomba monticola	Blue Duiker	LC
Poecilogale albinucha	African Striped Weasel	LC
Potamochoerus larvatus	Bushpig	LC
Procavia capensis	Rock Hyrax	LC
Pronolagus saundersiae	Hewitt's Red Rock Hare	LC
Proteles cristata	Aardwolf	LC
Raphicerus campestris	Steenbok	LC
Raphicerus melanotis	Cape Grysbok	LC
Rattus rattus	House Rat	LC
Redunca fulvorufula	Mountain Reedbuck	EN
Rhabdomys pumilio	Four-striped Grass Mouse	LC
Rhinolophus capensis	Cape Horseshoe Bat	LC
Rhinolophus clivosus	Geoffroy's Horseshoe Bat	LC
Rousettus aegyptiacus	Egyptian Fruit Bat	LC
Saccostomus campestris	South African Pouched Mouse	LC
Scotophilus dinganii	African Yellow Bat	LC
Suncus varilla	Lesser Dwarf Shrew	LC
Suricata suricatta	Meerkat	LC
Sylvicapra grimmia	Common Duiker	LC
Syncerus caffer	African Buffalo	NT
Tadarida aegyptiaca	Egyptian Free-tailed Bat	LC
Thryonomys swinderianus	Greater Cane Rat	LC
Tragelaphus oryx	Common Eland	LC
Tragelaphus strepsiceros	Greater Kudu	LC
Vulpes chama	Cape Fox	LC

Species of concern

According to the most recent global assessment (IUCN, 2017) one mammal is endangered, three are vulnerable and six are near threatened. The likelihood of occurrence (LOO) for the globally threatened taxa are as follows: *Aonyx capensis* (high LOO), *Eidolon helvum* (medium LOO), *Felis nigripes* (high LOO)*, Hydrictis maculicollis* (high LOO)*, Mystromys albicaudatus* (low LOO)*, Panthera pardus* (high LOO)*, Parahyaena brunnea* (high LOO)*, Pelea capreolus* (high LOO)*, Redunca fulvorufula* (high LOO) and *Syncerus caffer* (low LOO). Our predicted LOO's are largely in agreement with those of TBC (2020), apart from the assessment of *Eidolon helvum,* which was assessed as having a low LOO according to TBC (2020).

Additionally, there are two differences between the global assessments of mammals between this report and TBC (2020). Firstly, TBC (2020) assessed the white-tailed rat (*Mystromys albicaudatus)* as endangered. Using the same source (IUCN, 2017), we recovered the species as vulnerable. We believe this to be the correct assessment as the species was downgraded from EN to VU in 1996, according to Avenant et al. (2019).

Secondly, the status of African buffalo has been amended and the species has been added to our list because according to IUCN SSC Antelope Specialist Group (2019), the species is considered near threatened. Due to this species' high commercial value however, it has an incredibly low LOO.

Savannah Environmental (2017) recognised five species of conservation concern in their assessment. Firstly, *Amblysomus corriae* (Fynbos Golden Mole) was listed as near threatened in the SE (2017) report. This species has not been considered in this report as it does not occur in the area. Secondly the SE (2017) listed four additional species of conservation concern, namely, *Mellivora capensis* (Honey Badger – NT), *Philantomba monticola* (blue duiker – VU), *Poecilogale albinucha* (African striped weasel - VU) and *Suncus infinitesimus* (least dwarf shrew – E). All four species have since been reassessed as least concern (IUCN, 2017).

Table 2.5. List of mammal species of Conservation Concern that may be found in the area with their associated global and conservation statuses.

Species	Common Name	Conservation Status IUCN (2017)	Likelihood of Occurrence (LOO)	
			TBC (2020)	Scherman Environmental (2022)
Aonyx capensis	Cape Clawless Otter	NT	High	High
Eidolon helvum	African Straw-colored Fruit Bat	NT	Low	Medium
Felis nigripes	Black-footed Cat	VU	High	High
Hydrictis maculicollis	Spotted-necked Otter	NT	High	High
Mystromys albicaudatus	White-tailed Rat	VU	Low	Low
Panthera pardus	Leopard	VU	High	High
Parahyaena brunnea	Brown Hyaena	NT	High	High
Pelea capreolus	Grey Rhebok	NT	High	High
Redunca fulvorufula	Mountain Reedbuck	EN	High	High
Syncerus caffer	African Buffalo	NT	Low	Low

Field Survey Results

Twenty-one species of mammal were recorded in the project area during the survey; see **Table 2.6**. These observations were based on either direct visual encounters of live animals or by tracks and/or other signs. Only one of the species of concern was encountered. This was *Redunca fulvorufula* which is considered endangered (IUCN, 2017). Many of the species on the list are extra-limital and have been introduced to the area, and although not naturally occurring in the area have been included on the list for completeness.

Table 2.6. List of mammals encountered in the project area. Assessment Encounter denotes whether a species was encountered during this survey or on surveys undertaken by previous consultants.

Species	Common Name	Conservation Status IUCN (2017)	Assessment Encounter		
			TBC (2020)	Scherman Environmental (2022)	SE (2017)
Aepyceros melampus	Impala	LC	Yes	Yes	
Antidorcas marsupialis	Springbok	LC	Yes	Yes	
Caracal caracal	Caracal	LC			Yes
Chlorocebus pygerythrus	Vervet Monkey	LC	Yes	Yes	Yes

Species	Common Name	Conservation Status IUCN (2017)	Assessment Encounter		
			TBC (2020)	Scherman Environmental (2022)	SE (2017)
Cryptomys hottentotus	African Mole Rat	LC			Yes
Cynictis penicillata	Yellow Mongoose	LC	Yes	Yes	Yes
Damaliscus pygargus phillipsi	Blesbok	LC		Yes	
Felis cattus	Deomestic Cat	Alien			Yes
Galerella pulverulenta	Cape Grey Mongoose	LC			Yes
Genetta genetta	Small-spotted Genet	LC	Yes		
Genetta tigrina	Large-spotted Genet	LC			Yes
Georychus capensis	Cape Mole Rat	LC			Yes
Hystrix africaeaustralis	Cape Porcupine	LC	Yes	Yes	Yes
Kobus ellipsiprymnus	Waterbuck	LC		Yes	
Lepus saxatilis	Scrub Hare	LC	Yes	Yes	Yes
Orycteropus afer	Aardvark	LC	Yes	Yes	Yes
Otocyon megalotis	Bat-eared fox	Lc		Yes	
Otomys irroratus	Vlei Rat				Yes
Panthera pardus	Leopard	VU	Yes		
Papio ursinus	Chacma Baboon	LC	Yes	Yes	
Potamochoerus larvatus	Bushpig	LC		Yes	Yes
Pedetes capensis	Springhare	LC	Yes	Yes	
Phacochoerus africanus	Common Warthog	LC	Yes	Yes	
Procavia capensis	Rock Hyrax	LC	Yes	Yes	
Raphicerus campestris	Steenbok	LC	Yes	Yes	
Raphicerus melanotis	Grysbok	LC			Yes
Redunca fulvorufula	Mountain Reedbuck	EN	Yes	Yes	
Rhabdomys pumilio	Four-striped Grass Mouse	LC			Yes
Suricata suricatta	Suricate	LC	Yes	Yes	
Sylvicapra grimmia	Common Duiker	LC	Yes	Yes	Yes
Tragelaphus strepsiceros	Greater Kudu	LC		Yes	
Tragelaphus scriptus	Bushbuck	LC		Yes	Yes
		Species Count	17	21	17

*Tentative records from Nkurenkuro (2018) based on a lack of definitive evidence. They have not been included in the species count as they are not confirmed.

Recommendations

Based on the desktop assessment, all previous reports and all field sampling, the area has the potential to harbour 83 species of mammal, ten of which are of conservation concern globally (IUCN, 2017). While every

effort should be made to protect the animals in this area, it must be noted that most of these animals will not be adversely affected by the planned infrastructure provided the mitigations, laid out in the Basic Assessment Report, are followed. This is because most of the animals of conservation concern are highly mobile and can avoid the dangers of construction given enough warning (mitigation: walkthrough to flush wildlife). Smaller mammals and fossorial mammals should also avoid harm provided they are removed from the immediate footprint of the project (mitigation: search and rescue).

Additionally, much of the small and meso-mammal diversity and density are concentrated in interspersed rocky outcrops and drainage lines. Provided these areas are appropriately buffered and avoided (as per the mitigations), these animals should avoid harm. This applies directly to *Aonyx capensis (NT)* and *Hydrictis maculicollis (NT)* that inhabit dams and drainage lines as well as *Mystromys albicaudatus,* which inhabits interspersed rocky outcrops and vegetation clumps (VU). Additionally, there seems to be higher densities of small mammals on the Iziduli WEF, as evidence by the findings of SE (2017, Table X.3). These animals can be found in both the heterogenous rocky outcrops, and the homogenous grasslands. Whilst this is true of both proposed wind farms, it appears to be more pronounced on the Iziduli WEF given the more pristine condition of the veld. Grassland rodents species' are thus expected to be more abundant on the Iziduli WEF meaning search and rescue, and habitat walkthroughs will play an even more crucial role on the property.

Reptiles

All potential Species

The reptile list **(Table 2.7)** was compiled using the application, HerpDistributionSA (Rebelo, 2021), which is an amalgamation of all the records from online repositories (ReptileMap, 2021 and iNaturalist, 2021) and physical specimen collections (Port Elizabeth Museum and McGregor Museum) collected before December 2021. All species recorded within QDS 3226CC on HerpDistributionSA were listed as potentially occurring within the study area. The list was also supplemented with species that may occur in the area based on their known distribution (Branch 1998, Marais 2004, Bates et al. 2014). Eighty-one species were listed for the area using the methodology listed above. Savannah Environmental (2017) proposed several more species (i.e. *Pseodocordylus microlepidotus, Nucras intertexta* and *Philothamnus hoplogaster*) for the area, which are not found in the list below. They have been omitted because they are not expected to be found in the area based on Rebelo (2022) and known distributions of the species (Branch 1998).

Table 2.7. List of reptiles that may be found in the project area.

Species	Common name	Conservation status (IUCN)
Acontias breviceps	Short-headed Legless Skink	LC
Acontias gracilicauda	Thin-tailed Legless Skink	LC
Acontias orientalis	Eastern Cape Legless Skink	LC
Afroedura amatolica	Amatola Flat Gecko	LC
Afroedura karroica	Karoo Flat Gecko	LC
Afroedura tembulica*	Tembu Flat Gecko	LC
Afrotyphlops bibronii	Bibron's Blind Snake	LC
Agama aculeata	Ground Agama	LC
Agama atra	Southern Rock Agama	LC
Amplorhinus multimaculatus	Many-spotted Snake	LC
Aparallactus capensis	Black-headed Centipede-eater	LC

Species	Common name	Conservation status (IUCN)
Aspidelaps lubricus	Coral Snake	LC
Bitis arietans	Puff Adder	LC
Boaedon capensis	Brown House Snake	LC
Bradypodion ventrale	Southern Dwarf Chameleon	LC
Causus rhombeatus	Rhombic Night Adder	LC
Chamaesaura aenea	Coppery Grass Lizard	LC
Chamaesaura anguina	Cape Snake Lizard	LC
Chersina angulate	Angulate Tortoise	LC
Chondrodactylus bibronii	Bibron's Gecko	LC
Cordylus cordylus	Cape Girdled Lizard	LC
Crotaphopeltis hotamboeia	Red-lipped Snake/ Red-lipped Herald	LC
Dasypeltis scabra	Rhombic Egg Eater	LC
Dispholidus typus	Boomslang	LC
Duberria lutrix	Common Slug Eater	LC
Gerrhosaurus flavigularis	Yellow-throated Plated Lizard	LC
Goggia essexi	Essexi Leaf-toed Gecko	LC
Hemachatus haemachatus	Rinkhals	LC
Hemidactylus mabouia	Common Tropical House Gecko	LC
Homopus areolatus	Parrot-beaked Tortoise/Padloper	LC
Homopus boulengeri	Karoo Padloper	NT
Homopus femoralis	Greater Padloper	LC
Homoroselaps lacteus	Spotted Harlequin Snake	LC
Karusasaurus polyzonus	Karoo Girdled Lizard	LC
Lamprophis aurora	Aurora Snake	LC
Lamprophis fuscus	Yellow-bellied House Snake	LC
Lamprophis guttatus	Spotted Rock Snake	LC
Leptotyphlops conjunctus	Cape Thread Snake	LC
Leptotyphlops nigricans	Black Thread Snake	LC
Leptotyphlops scutifrons	Peter's Thread Snake	LC
Lycodonomorphus inornatus	Olive Ground Snake	LC
Lycodonomorphus laevissimus	Dusky-bellied Water Snake	LC
Lycodonomorphus rufulus	Brown Water Snake	LC
Lycophidion capense	Cape Wolf Snake	LC
Lygodactylus capensis	Common Dwarf Gecko	LC
Macrelaps microlepidotus	Natal Black Snake	LC
Naja nivea	Cape Cobra	LC
Nucras lalandii	Delalande's Sandveld Lizard	LC
Nucras livida	Karoo Sandveld Lizard	LC
Nucras taeniolata	Albany Sandveld Lizard	LC
Pachydactylus capensis	Cape Gecko	LC
Pachydactylus maculatus	Spotted Gecko	LC
Pachydactylus mariquensis	Common Banded Gecko	LC
Pachydactylus oculatus	Golden Spotted Gecko	LC
Pedioplanis burchelli	Burchell's Sand Lizard	LC
Pedioplanis lineoocellata	Spotted Sand Lizard	LC
Pedioplanis namaquensis	Namaqua Sand Lizard	LC

Species	Common name	Conservation status (IUCN)
Pelomedusa galeata	South African Helmeted Terrapin	LC
Philothamnus occidentalis	South African Green Snake	LC
Philothamnus semivariegatus	Spotted Bush Snake	LC
Prosymna sundevalli	Sundevall's shovel-snut	LC
Psammobates tentorius	Tent Tortoise	LC
Psammophis crucifer	Cross-marked Whip Snake	LC
Psammophis notostictus	Karoo Sand Snake	LC
Psammophylax rhombeatus	Spotted Skaapsteker	LC
Pseudaspis cana	Mole Snake	LC
Pseudocordylus microlepidotus	Cape Crag Lizard	LC
Pseudocordylus subviridis	Drakensberg Crag Lizard	LC
Rhinotyphlops lalandei	Delalande's Beaked Blind Snake	LC
Stigmochelys pardalis	Leopard Tortoise	LC
Tetradactylus seps	Short-legged Seps	LC
Tetradactylus tetradactylus	Cape Long-tailed Seps	LC
Trachylepis capensis	Cape Skink	LC
Trachylepis homalocephala	Red-sided Skink	LC
Trachylepis punctatissima	Speckled Rock Skink	LC
Trachylepis sulcata	Western Rock Skink	LC
Trachylepis varia	Eastern Variable Skink	LC
Trachylepis variegata	Variegated Skink	LC
Tropidosaura montana	Common Mountain Lizard	LC
Varanus albigularis	Rock Monitor/White-throated Monitor	LC
Varanus niloticus	Nile Monitor	LC

Species of concern

Whilst TBC (2020) and SE (2017) severely under-estimated the reptile diversity of the region, our more comprehensive desktop assessment yielded only one species of conservation concern. The only species of conservation concern that may occur in the area is the karoo padloper (*Homopus boulengeri*) which has been historically found in the adjacent Quarter Degree Cell (Rebelo, 2022). This species needs to be considered during the construction and operational phases of the planned infrastructure as they can be sensitive to habitat fragmentation and destruction given their reduced mobility when compared to more mobile taxa.

The desktop surveys provided by Savannah Environmental (2017) highlighted three reptiles of conservation concern. None of these are recognized on our species of conservation concern. *Cordylus tasmani*, that is listed as vulnerable in Savannah Environmental (2017), no longer exists as it was synonymized with *Cordylus cordylus* (Reptile Database, 2022). *Lamprophis fuscus*, which was listed as near threatened is now listed as least concern (IUCN, 2017), and *Tetradactylus fitzsimonsi* does not occur in the area (Rebelo, 2022).

Field Survey Results

Fifteen species of reptile were recorded in the project area during the survey; see **Table 2.8**. These observations were based on either direct visual encounters of live animals or by the remains of deceased animals. Although the survey recovered substantially more reptile species than all previous reports, no species found were of conservation concern.

Table 2.8. List of reptiles encountered in the project area. Assessment Encounter denotes whether a species was encountered during this survey or on surveys undertaken by previous consultants.

Species	Common Name	Conservation Status IUCN (2017)	Assessment Encounter		
			TBC (2020)	Scherman Environmental (2022)	SE (2017)
Agama atra	Southern Rock Agama	LC	Yes	Yes	Yes
Boaedon capensis	Brown House Snake	LC	Yes		
Bitis arietans	Puff Adder	LC			Yes
Cordylus cordylus	Cape Girdles Lizard	LC	Yes	Yes	
Chersina angulata	Angulate tortoise	LC		Yes	Yes
Stigmochelys pardalis	Leopard Tortoise	LC	Yes	Yes	
Homopus areolatus	Parrot-beaked padloper	LC		Yes	
Karusasaurus polyzonus	Karoo Girded Lizard	LC		Yes	
Leptotyphlops nigricans	Black Thread Snake	LC		Yes	
Naja nivea	Cape Cobra	LC			Yes
Nucras lalandii	Delalandes' Sandveld Lizard	LC		Yes	
Pachydactylus maculatus	Spotted Gecko	LC	Yes	Yes	
Psammophis notostictus	Karoo Whip Snake	LC		Yes	
Psammophylax rhombeatus	Spotted Skaapsteker	LC		Yes	Yes
Pedioplanis lineoocellata pulchella	Common sand lizard	LC	Yes	Yes	
Pedioplanis burchelli	Burchell's Sand Lizard	LC		Yes	
Pseudocordylus microlepidotus fasciatus*	Karoo Crag Lizard	LC	Yes		
Trachylepis varia	Variable skink	LC		Yes	Yes
Trachylepis capensis	Cape skink	LC		Yes	Yes
Varanus albigularis	Rock Monitor	LC			Yes
		Species Count	7	15	8

* This record is most likely erroneous as the picture associated with the record is a mis-identified Karoo girdled lizard *(Karusasaurus polyzonus).*

Recommendations

Based on the desktop assessment, all previous reports and all field sampling, the area has the potential to harbour 81 species of reptile, one of which is of conservation concern globally. While every effort should be

made to protect the animals in this area, it must be noted that most of these animals will not be badly affected by the planned infrastructure provided the mitigations, laid out in the Basic Assessment Report, are followed. Unlike the mammals, which tend to be larger and more mobile, reptiles are smaller and often occupy smaller home ranges. This means that they are more at risk than mammals when it comes to the construction phase as they may not be able to escape the heavy machinery fast enough to avoid harm. This is especially true of slow-moving tortoises and rupiculous lizards and snakes that would opt rather to hide than to flee in an instance of danger. Mitigations such as search, and rescue and walkthroughs will be an integral part of preventing harm to these reptiles.

Additionally, many if not most of the reptiles found in this area are closely associated with rocky outcrops. Provided, these areas are avoided (as per the mitigations set out in the Basic Assessment Report), there should be no negative impact on a large proportion of the reptiles on the property. For grassland specialists, such as grass lizards (Chamaesaura), seps (seps), and whip snakes (psammophiids), a walkthrough of the proposed line will be important to flush these often-fast-moving reptiles out of the immediate area. For slower-moving, wide ranging species such as tortoises, and more specifically the near threatened karoo padloper, search and rescue will be important as it will allow the safe relocation of the animals. Lastly, it must be noted that the termite mounds that characterize the Bedford Dry Grasslands likely harbour high densities and diversities of reptile, especially in the winter months. The construction of this wind farm will thus necessitate the destruction of large densities of termite mounds. It is tantamount to the approval of this project that these termite mounds are dismantled in a controlled way, prior to construction, to ensure that any reptiles using this refugia can be relocated safely out of the construction footprint. This will be discussed at length in the Basic Assessment Report. All reptiles that inhabit the riparian zones and drainage lines should be buffered by the buffer zones imposed on these areas and thus they need not be discussed here.

Similarly, to the mammals, reptile diversity and diversity is likely to be higher on Iziudli, when compared to Msenge. This is because the area is more pristine, less intensely grazed and more heterogenous (more rocks and interspersed bush clumps), meaning that its more habitable for both grassland and rocky specialists. Search and rescue and habitat walkthrough prior to construction will be integral to reducing negative effects to local reptile populations.

Amphibians

All potential Species

The amphibian list (**Table 2.9**) was compiled using the application, HerpDistributionSA (Rebelo, 2021), which is an amalgamation of all the records from online repositories (FrogMap, 2021 and iNaturalist, 2021) and physical specimen collections (Port Elizabeth Museum and McGregor Museum) collected before December 2021. All species recorded within QDS's 3226CC were listed as potentially occurring within the study area. The desktop assessment resulted in the recovery of 27 species. Although *Anhydrophryne rattrayi* (VU), *Cacosternum thorini* (EN) and *Vandijkophrynus amatolicus* (CR) have bene recorded in the QDS, they are not considered to occur in the study area. They have been listed here to remain consistent with the above methodology. Whilst SE (2017) included *Vandijkophrynus angusticeps* in their report, it has been omitted in **Table 2.9** as it does not occur in the area.

Table 2.9. List of amphibians that may be found in the project area.

Species	Common name	Global conservation status (IUCN)
Amietia delalandii	Delalande's River Frog	LC
Amietia fuscigula	Dark-throated River Frog	LC
Amietia poyntoni	Poynton's River Frog	LC
Anhydrophryne rattrayi	Hogsback Frog/ Rattray's Forest Frog	VU
Breviceps pentheri	Thicket Rain Frog	LC
Breviceps verrucosus	Plaintive Rain Frog	LC
Cacosternum boettgeri	Boettger's Dainty Frog	LC
Cacosternum nanum	Bronze Caco	LC
Cacosternum thorini	Hogsback Caco	EN
Hyperolius marmoratus	Painted Reed Frog/ Marbled Reed Frog	LC
Hyperolius semidiscus	Yellow-striped Reed Frog	LC
Kassina senegalensis	Senegal Land Frog	LC
Phrynobatrachus natalensis	Natal Dwarf Puddle Frog	LC
Poyntonophrynus vertebralis	Southern Pygmy Toad	LC
Ptychadena anchietae	Plain Grass Frog	LC
Pyxicephalus adspersus	Giant Bullfrog	LC
Sclerophrys capensis	Raucous Toad	LC
Sclerophrys pardalis	Eastern Leopard Toad	LC
Semnodactylus wealii	Rattling Frog	LC
Strongylopus fasciatus	Striped Stream Frog	LC
Strongylopus grayii	Clicking Stream Frog/Gray's Stream Frog	LC
Tomopterna adiastola or tandyi	Confused Sand Frog	LC
Tomopterna delalandii	Cape Sand Frog	LC
Tomopterna natalensis	Natal Sand Frog	LC
Vandijkophrynus amatolicus	Amathole Toad	CR
Vandijkophrynus gariepensis	Karoo Toad	LC
Xenopus laevis	African Clawed Frog	LC

Species of concern

The Biodiversity Company (2020) recovered three amphibian species of conservation concern (*Anhydrophryne rattrayi*, *Cacosternum thorini* and *Vandijkophrynus amatolicus)*. Whilst all three species were recovered within the same QDS as the proposed windfarm (and have thus been include in **Table 2.9**) they are not considered to occur in the study site as they are amatola endemics that have specialised habitat requirements that are not supported by the proposed study area. We thus disagree with TBC's (2020) assignment of all three species to a low LOO. These species are not considered further in this report. Another thing to note for the area is the status of the giant bullfrog (*Pyxicephalus adspersus*) as natural populations of this species are decreasing according to the most recent IUCN assessment (IUCN 2017). The species is however considered least concern according to the most recent assessment (IUCN 2017). No species of concern were proposed for the area by SE (2017).

Field Survey Results

Six amphibians were recorded in the project area during the survey; see **Table 2.10**. These observations were based on direct visual encounters. No frog species of conservation concern was encountered; all five were of least concern (LC). No amphibians were recorded by previous specialists.

Table 2.10. List of amphibians encountered in the project area. Assessment Encounter denotes whether a species was encountered during this survey or on surveys undertaken by previous consultants.

Species	Common Name	Conservation Status IUCN (2017)	Assessment Encounter		
			TBC (2020)	Scherman Environmental (2022)	SE (2017)
Cacosternum boettgeri	Boettger's caco	LC		Yes	Yes
Kassina senegalensis	Bubbling kassina	LC			Yes
Semnodactylus wealii	Rattling frog	LC		Yes	
Tomopterna tandyi	Tandy's sand frog	LC		Yes	
Xenopus laevis	Common platanna	LC		Yes	
Sclerophrys capensis	Raucous Toad	LC		Yes	Yes
Vandijkophynus gariepensis	Karoo Toad	LC		Yes	
Xenopus laveis	Common Platanna	LC			Yes
		Species Count	0	6	4

Recommendations

Based on the desktop assessment, all previous reports and all field sampling, the area has the potential to harbour just over 25 species of frog, none of which are of conservation concern globally. While every effort should be made to protect the animals in this area, it must be noted that most of these animals will not be adversely affected by the planned infrastructure provided the mitigations, laid out in the Basic Assessment Report, are followed. Unlike both the mammals and the reptiles, the majority of the frogs found on the property will be restricted to drainage lines, natural wetlands, dams and the areas directly adjacent to these waterbodies. Because of this, most of the frogs found on the property will benefit from the mandatory buffers afforded to all aquatic bodies on the property. Whilst most frogs are protected within the buffers, there is still a substantial amount of amphibian biodiversity that can be found in the grasslands (i.e *Breviceps*) and rocky outcrops (i.e., *Sclerophrys, Cacosternum, Tomopterna*). To ensure the wellbeing of these animals, the mitigatory protocols (search and rescue, habitat walkthrough, rocky outcrop avoidance) discussed above, needs to be implemented across the property.

Roads that dissect watercourses need to strictly adhere to legislation to avoid siltation and water flow issues as this will severely impact the amphibian communities that rely on these systems for sustenance and to complete their life cycles. This is similarly true of aquatic invertebrates like fairy shrimp and copepods, which rely on the sporadic inundation within the drainage lines to complete their life cycles. Both the amphibians and the aquatic macroinvertebrates that can be found in the dwindling pockets of pristine habitat across the property (because of overgrazing, soil erosion, damming and siltation) should protected over the entire course of the project. These organisms contribute to nutrient cycling, ecosystem functioning and food web health meaning that mitigatory protocols must be strictly adhered to when on site.

Scorpions

All Potential Species

The scorpion list (**Table 2.11**) was compiled using ScorpionMap (QDS 3226CC; ScorpionMap, 2022), iNaturalist (iNaturalist, 2022) and published literature. The desktop assessment resulted in five potential species for the area.

Table 2.11. List of scorpions that may be found in the project area.

Species	Common Name	Conservation Status IUCN (2017)
Ophistothalmus latimanus	Sideclaw Burrowing Scorpion	N/A
Hadogenes gunningi	Gunning's Rock Scorpion	N/A
Parabuthus planicauda	Drab Thicktail Scorpion	N/A
Uroplectes triangulifer	Highveld Lesser-thicktail Scorpion	N/A
Uroplectes formosus	Fair Lesser-thick Scorpion	N/A

Species of Concern

None of the scorpion species from the proposed area have been assessed by the IUCN.

Field Survey Results

Four species of scorpion were recorded in the project area during the survey; see **Table 2.12.** These observations were based on direct visual encounters. No scorpions were recorded by previous specialists.

Table 2.12. List of scorpions encountered in the project area. Assessment Encounter denotes whether a species was encountered during this survey or on surveys undertaken by previous consultants

Species	Common Name	Conservation Status IUCN (2017)	Assessment Encounter		
			TBC (2020)	Scherman Environmental (2022)	SE (2017)
Ophistothalmus latimanus	Sideclaw Burrowing Scorpion	NA		Yes	
Hadogenes gunningi	Gunning's Rock Scorpion	NA		Yes	
Parabuthus planicauda	Drab Thicktail Scorpion	NA		Yes	
Uroplectes triangulifer	Highveld Lesser-thicktail Scorpion	NA		Yes	
		Species Count	0	4	0

Recommendations

Although no species of concern have ben recorded within the study area, it must be noted that scorpion density on the property is high, especially in the rocky areas. The scorpions found here likely contribute to ecosystem functioning and food web heath, making them an integral part of the ecosystem. It is thus

tantamount to the authorisation of the project that the mitigations highlighted in the Basic Assessment Report are adhered to ensure that harm is not brought to the scorpion communities within the infrastructure footprint. As most of the species are limited to the rocky outcrops it is important that these areas are avoided (mitigation: buffers around rocky outcrops) and where this is not possible, search and rescue is (mitigation: walkthrough of area prior to construction) implemented to relocate scorpions out of the infrastructure footprint. The windfarm's construction and operational phases will not have a substantial negative effect on scorpions' biodiversity provided the aforementioned mitigations are adhered to. Scorpion densities were noticeably higher (based on limited site visits) on Iziduli when compared to Msenge. This is likely a product of the increased habitat heterogeneity associated with Iziduli. Habitat walkthroughs and scorpion relocations (in areas where infrastructure is planned) will be integral to reducing scorpion mortality within the footprint of the project.

2.2.4. Conclusion

In keeping with the assertions made by the vegetation team (of this project) we provisionally concur with TBC's Ecological Assessment that a green energy development on this property is ecologically more sustainable and less destructive than sustained and heavy grazing by livestock – provided the green energy project is ethically and scientifically sound.

Ground-truthing on the Iziduli site revealed similar species assemblages when compared with the adjacent Msenge windfarm, which is likely a result of the close geographic proximity of the two windfarms. Irrespective of this, the Iziduli WEF is characterised by increased habitat heterogeneity given the predominance of the Double Drift Karroid Thicket biotype on the property. Whilst our limited sampling effort did not reveal apparent differences between the two properties, a more robust sampling strategy on both windfarms would likely reveal higher species diversity and density on Iziduli.

The Iziduli properties are characterised by increased habitat structure in the form of larger and more structurally complex rocky outcrops and vegetation clumps that provide ideal microhabitats for reptiles, amphibians, mammals and invertebrates. Whilst this bodes well for species diversity on the properties, it provides more logistical problems for the placement of roads and turbines. While it is understandably impossible to avoid all rocky outcrops and vegetation clumps, all efforts should be made in the placement of infrastructure to cause the least amount of damage. While this may result in the relocation of some turbines and the diversion of some road networks, it will have the best overall solution for not only the environment, but the contactors too given the massive logistical requirements of clearing, digging, and levelling heterogeneous structures.

To this end roads should be placed along existing farm roads to reduce the impact of creating new roads, resulting in the destruction of both fossorial and terrestrial habitat. Additionally, wetlands need to be avoided completely because they are rarely encountered on the property and thus likely harbour high levels of both vertebrate and invertebrate life. Termite mounds, burrows and mole heaps should be avoided where possible to ensure sheltering animals are not inadvertently harmed during the construction process. Where this is not possible, relocation of these animals needs to be facilitated.

In keeping with the recommendations of the vegetation team, it is recommended that search and rescue be implemented along the designated construction path. This applies to all road networks and turbine locations irrespective of homogeneity. This will include catching terrestrial fauna within the proposed construction zone and moving them to a suitable habitat adjacent to the construction site. An example of this would be the

controlled dismantling of termite mounds as they are well known to harbour high densities of fauna. This will be done in accordance with DEDEAT Operational Guideline 7 / 2003, that details the correct procedure for faunal and floral relocation.

Whilst the grasslands represent a less ecologically damaging construction site when compared to the rocky outcrops and drainage lines, it must be noted that several species of herpetofauna and mammal utilise these spaces and should thus be considered during construction. A prime example are the meso-mammals such as *Suricata suricatta, Pedetes capensis, Hystrix africaeaustralis* and *Orycteropus afer* that use the grasslands and the associated termite mounds for foraging and shelter. Reptiles, amphibians and scorpions should also be considered as many if not most of the grassland adapted species utilise termite mounds for shelter.

Whilst the mitigations discussed above will certainly reduce the impact on the mammalian communities, the habitat health of Iziduli WEF must be considered. The area is less impacted by over-grazing meaning novel infrastructure will have a larger effect when compared to Msenge (more degraded and overgrazed). Search and rescue is very important on the Iziduli site as the construction footprint will dissect more rocky outcrops and bush clumps because the area is more heterogenous and habitat destruction is less avoidable.

The walkthrough of the property resulted in the direct/indirect sighting of 21 mammal, 15 reptile, six frog and four scorpion species. The findings ratified many of the findings made by previous reports. It must however be noted that many of the mammals seen were extra-limital and were placed on the property as opposed to occurring there naturally. The only species of conservation concern encountered during walkthroughs was the Mountain Reedbuck (*Redunca fulvorufula*), which is considered endangered both regionally and internationally.

The planned construction and operation of the infrastructure need to adhere to the mitigations highlighted here, and in the Basic Assessment Report. If this is done it can be concluded with reasonable confidence that no terrestrial animal on the property will be unreasonably negatively affected by the construction of the Iziduli WEF.

2.3. Terrestrial sensitivity mapping and recommendations

2.3.1. National scale sensitivity

The National Protected Area Expansion Strategy (NPAES) presents a 20 year strategy for the expansion of protected areas in South Africa for improved ecosystem representation, ecological sustainability and resilience to climate change (DEA, 2016). The Iziduli WEF does not fall within the NPAES (**Figure 2.11**).

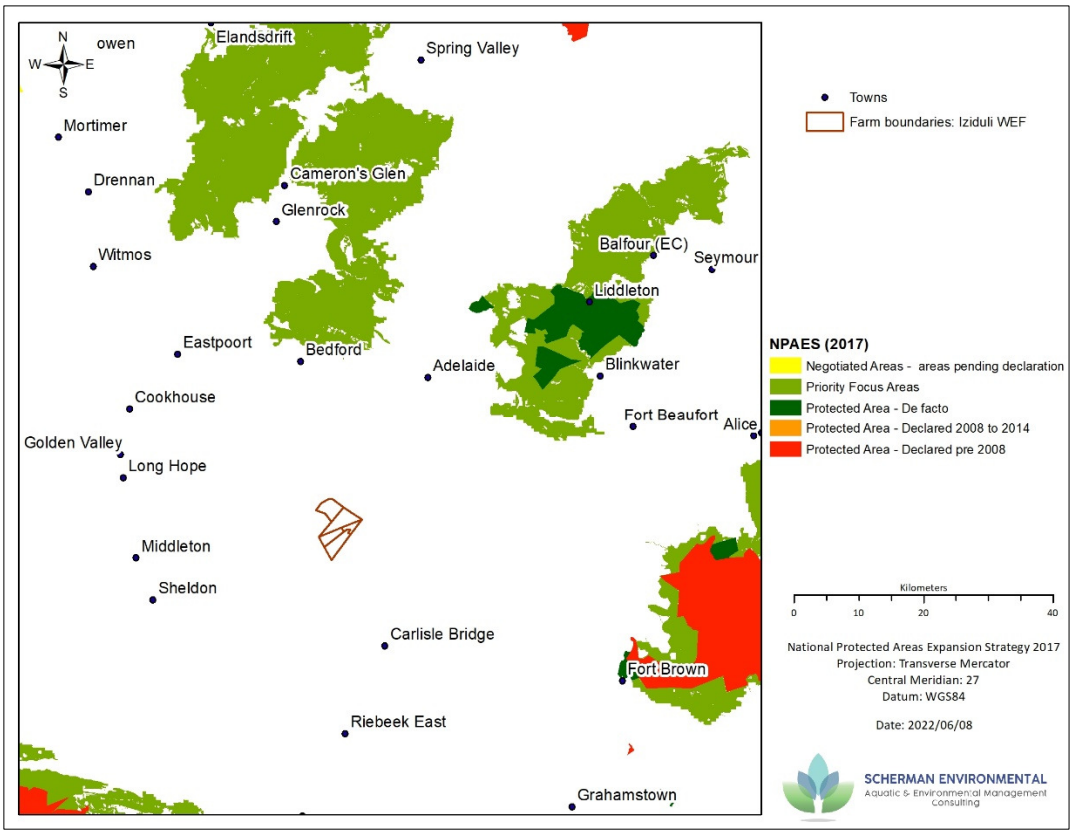

Figure 2.11. National Protected Area Expansion Strategy (2017) in relation to the Iziduli WEF

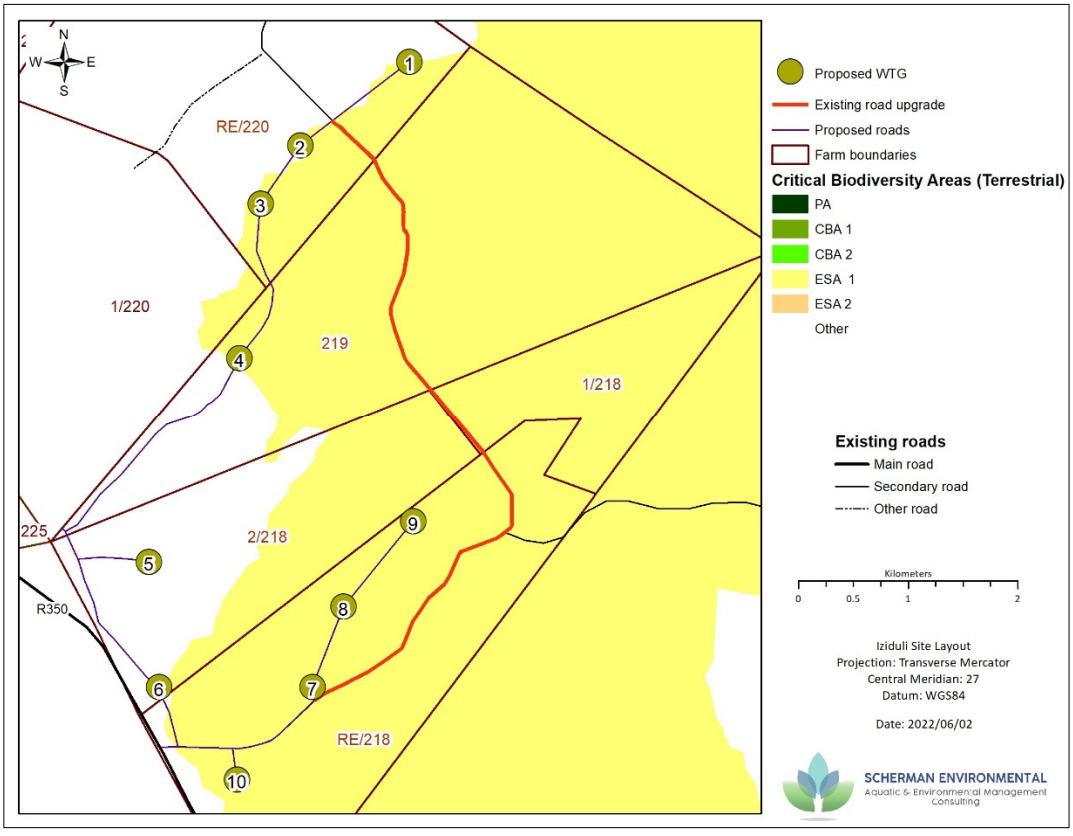

Figure 2.12. Critical Biodiversity Areas in relation to the Iziduli WEF

A Biodiversity Conservation Plan (BCP) is a provincial dataset that guides and informs land use and resource-use planning and decision making in order to preserve long-term functioning and health of priority areas outside of the protected areas network (ECBCP, 2019). These are known as Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs). The Iziduli WEF does not fall within a CBA but does fall within an ESA 1 area (**Figure 2.12**). ESA are areas that are not essential for meeting biodiversity targets but are essential areas in term of ensuring connectivity between CBAs, climate change resilience and are key to ecological functioning. The remaining areas of the Iziduli WEF fall within "Other Natural Areas" which are in a natural or near natural state but have not been identified as priority areas in the current BCP (ECBCP, 2019). These area still support biodiversity and deliver ecosystem services. Therefore, specialist's recommendations on biodiversity rich habitats based on observations taken in the field should be taken note of in both ESA 1 areas and in other natural areas.

2.3.2. Site locations and specialist recommendations

Roads

The road network seems to have been conducted at a desktop level without a good understanding of the micro-topography, micro-hydrolology and the spatial distribution of the biodiversity. In most cases the location of the farm road network was more logical (taking into account cost and biodiversity considerations).

There are a number of suggested road deviations that would reduce construction and maintenance costs, as well as long-term ecological impacts. In most cases the suggested roads have been located on existing farm tracks. In one case the rerouting of the road between WTG4 and WTG5 will avoid an extensive drainage system that is showing early signs of deep erosion from runoff. A similar deviation would prevent large scale destruction of woody species in a long thicket clump (between WGT8 and WGT9) that has been degraded (**Figure 2.15**). **Table 2.13** and Table **2.14** summarises the site location findings and the figures below provide spatially explicit recommended locations.

Roads play an important role in increasing the connectivity of runoff within a catchment. Increased concentration of runoff within a catchment that is already severely at risk of erosion (due to a lack of good vegetation cover) can quickly result in drastic gully erosion. Roads constructed in areas such as **Figure 2.13** and **Figure 2.14** need to be constructed with well-designed drainage to ensure that water is not concentrated into existing erosional areas. In addition, erosion mitigation measures will need to be implemented in these areas. Increased erosion from the proposed road network will have serious downstream ecological impacts, particularly through the siltation of seasonal puddles within the non-perennial stream channels, incision of the channel bed and bank erosion affecting riparian vegetation. It is recommended that roads do not run perpendicular to contours (directly down a slope) and that roads are rather constructed on the top of ridges where the road runoff can be equally distributed to each side, reducing the concentration of flow in one area or drainage line.

Figure 2.13. Lack of water runoff management on the Eskom Service roads

Figure 2.14. Gully erosion in the drainage lines between WTG8 and WTG9

Figure 2.15. The remnants of an extensive linear bushclumps (roughly 50m wide and 200m long)

Table 2.13. Summary of the field ecological findings for the roads for Iziduli WEF.

Unit	Overgrazed	Sheet erosion	High % soil cover	Low grass spp Diversity	AIPs present	Unit Location Suitable	Unit Location needs to move	Comment (see maps for location of suggested deviations)
WTG 1 to existing road	x	x		x			x	Road dissects several rocky outcrops and bushclumps. See WTG 1 comment for suggested layout
WTG 1 to WTG 2	x	x	x				x	Road dissects rocky outcrops and bushclumps.
WTG 2 to WTG 3	x	x	x	x			x	Road dissects rocky outcrops and bushclumps.
WTG 3 to WTG 4	x	x	x	x	x		x	Road dissects rocky outcrops, bushclumps and drainage lines. Suggest movement of road to the fence line and existing track at the top of the ridge
WTG 4 to top of ridge (tower)	x	x	x	x	x		x	Planned road would cut through extensive drainage line and bring high construction costs and long-term maintenance costs. Deviate road to fence line at the top of the ridge and join to proposed Msenge road network to avoid duplication of tracks.
Top of ridge (tower) to WTG 5	x			x	x		x	Reduce length of road to minimise cumulative impact on rocky outcrops and bushclumps
WTG 5 to WTG 6	x			x	x		x	Deviate along existing farm track to minimise cumulative impacts on rocky outcrops and bushclumps
Existing road to WTG 7	x			x	x		x	More direct route from existing road to WTG 7 to avoid bushclumps
Road WGT 7 to WTG 8	x		x	x	x		x	Due to a high number of bushclumps and rocky outcrops it is suggested to remove this road and service WTG 7 and WTG 8 separately from the existing road.
Road WGT 8 to WTG 9	x		x	x	x		x	Proposed road location exhibits signs of gully erosion, suggesting that proper site drainage management will be required. The road also dissects several rocky outcrops. Suggested to deviate along existing farm track along the fence line.
WTG 9 to existing road	x	x	x	x	x			This is a suggested addition to connect WTG to the existing road via an existing farm track. This will allow for the track between WTG 7 and 8 to fall away reducing the impact significantly.
Existing road to WTG 10	x			x	x		x	Deviate from existing track and along the top of the ridge to avoid making a road straight up the ridge and also to avoid rocky outcrops

AIP: Alien Invasive Plants

Table 2.14. Summary of findings for the Wind Turbine Generators.

Unit	Overgrazed	Sheet erosion	High % soil cover	Low grass spp Diversity	AIPs present	Unit Location Suitable	Unit Location needs to move	Comment
WTG 1	x	x	x	x	x		x	Site acceptable but access road problematic. Suggest moving location closer to existing road. Suggested location: 32°53'33.86"S; 26° 8'36.83"E
WTG 2	x			x	x		x	Move location onto existing farm track to align with suggested road deviation. Suggested location: 32°53'46.62"S; 26° 8'25.75"E
WTG 3	x	x	x	x	x	x		Micro-siting to avoid rocky outcrops and bushclumps.
WTG 4	x		x	x	x		x	Site acceptable but access road problematic. Suggest moving location to the top of the ridge. Suggested location: 32°54'40.44"S; 26° 7'53.40"E
WTG 5	x	x	x	x	x		x	Site located in a bushclump and rocky outcrop. Suggest moving the WTG higher up the slope. Suggested location: 32°55'44.35"S; 26° 7'10.63"E
WTG 6	x		x	x	x		x	Site located within a rocky outcrop. Suggest move to fenceline. Suggested location: 32°56'24.78"S; 26° 7'33.77"E
WTG 7	x		x	x	x	x		
WTG 8	x		x	x	x	x		
WTG 9	x					x		
WTG 10	x			x	x	x		

Areas that can proceed with no infrastructure amendments

WTG 3, 7, 8, 9, 10

Areas that require infrastructure amendments

WTG 1 and its associated road

The proposed road linking turbine one to the rest of the turbines dissects the most species-rich stretch of habitat on the property. A short survey of the proposed road yielded four species of lizard, two species of frog and three species of scorpion, in addition to countless mammal tracks from a multiplicity of species. It is recommended that the turbine be brought closer to the main road, which will result in substantial reduction in infrastructure, cost and a reduction in habitat destruction. An example of the habitat along the proposed path and some of the species found there can be seen **Figure 2.16.** The proposed turbine shift can be seen in **Figure 2.17**.

Figure 2.16. A karoo toad (*Vandijkophrynus gariepensis*) with inlay photos of a highveld lesser-thick-tailed scorpion (*Uroplectes triangulifer*) and a Boettger's caco (*Cacosternum boettgeri*) found along the proposed road for WTG 1.

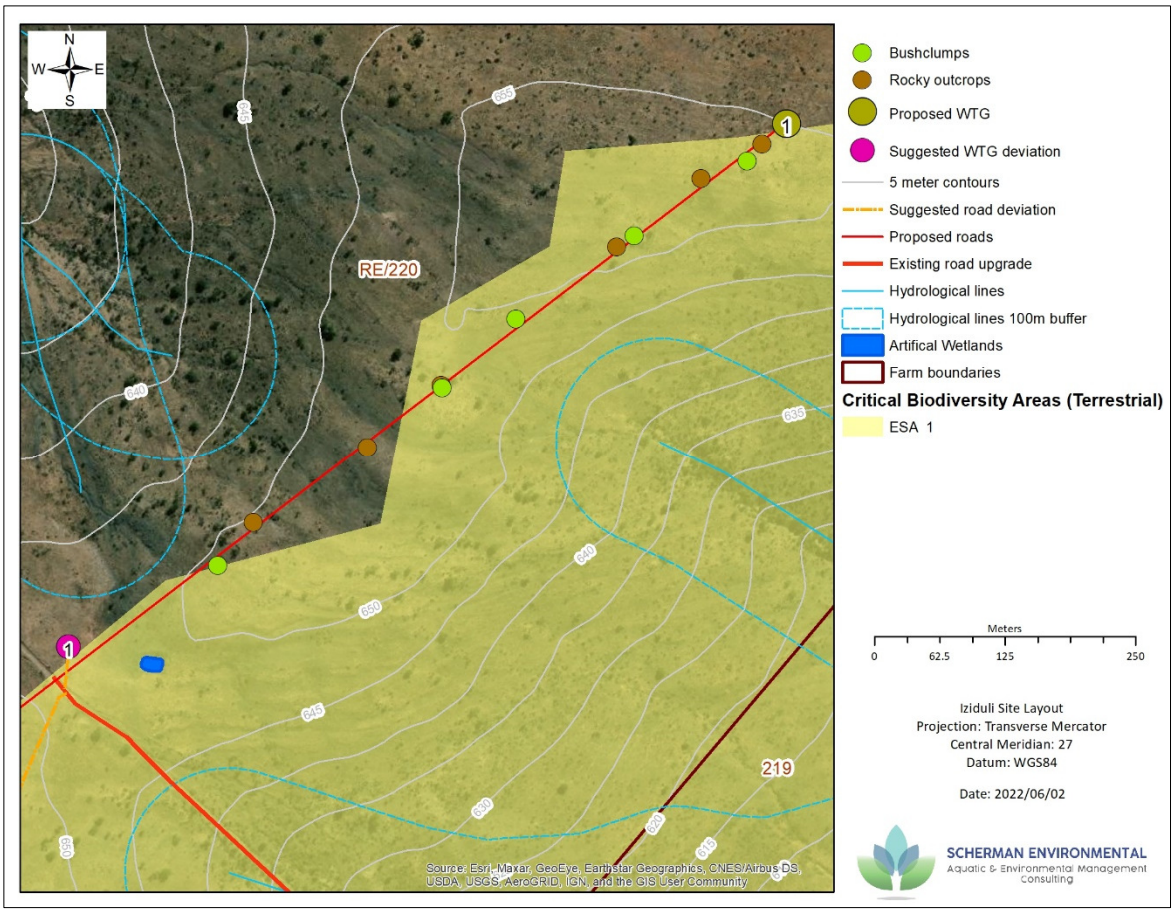

Figure 2.17. The proposed site for WTG 1 and suggested deviations

Road connecting WTG 2 to WTG 3

The proposed road dissects massive tracts of intact rocky outcrops **(Figure 2.18)** that represents an ideal habitat for rupiculous fauna. WTG 2 is similarly problematic because it has been placed in the middle of a substantial bush clump, which itself is adjacent to an old kraal. We propose amending the path of the road and the location of the turbine to avoid these features **(Figure 2.19)**. We recommend using the existing farm track as this will save time, infrastructure, and biodiversity.

Figure 2.18. The rocky outcrop that would be dissected by the proposed road connecting WTG 2 and 3

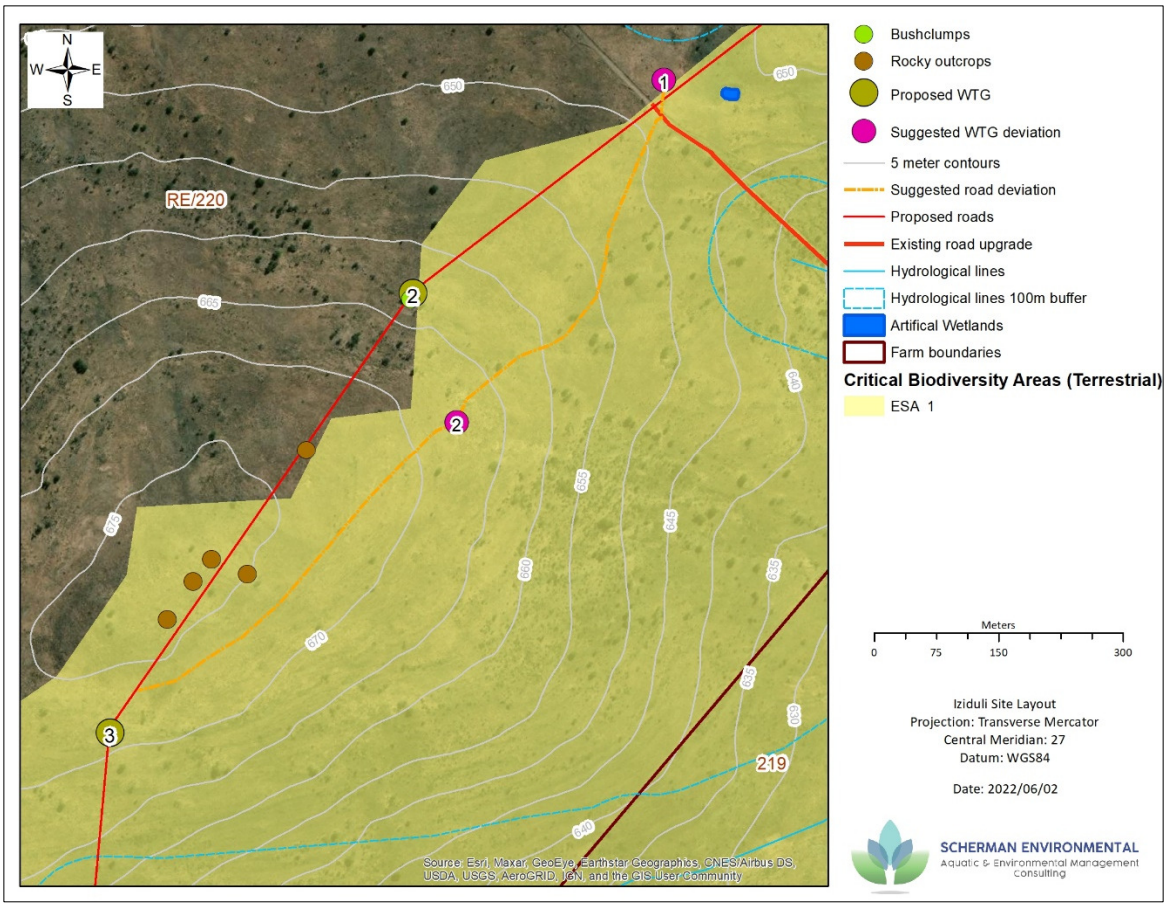

Figure 2.19. The proposed site for WTG 2 and suggested deviations

Road between WTG 3 and WTG 4

The relocation of WTG4 and its associated road to the top of the hill will necessitate the relocation of the road connecting WTG 4 to WTG 3 to the top of the hill as well **(Figure 2.21)**.We believe this will positively benefit both the biodiversity and the project as it will reduce logistics and production costs as well as avoiding

biodiversity associated with the drainage line. The drainage line pictured in **Figure 2.20** contained water at multiple points and thus represents an important part of the ecosystems for a wide range of vertebrates and invertebrates. Building a road here, as was proposed, may introduce hydrological impediments that could affect temporary pools within the drainage line. This would be especially harmful for amphibians and aquatic insects that rely on these systems to complete their life cycles.

Figure 2.20. Temporary pools found within the drainage line dissected by the proposed road between WTG 3 and 4

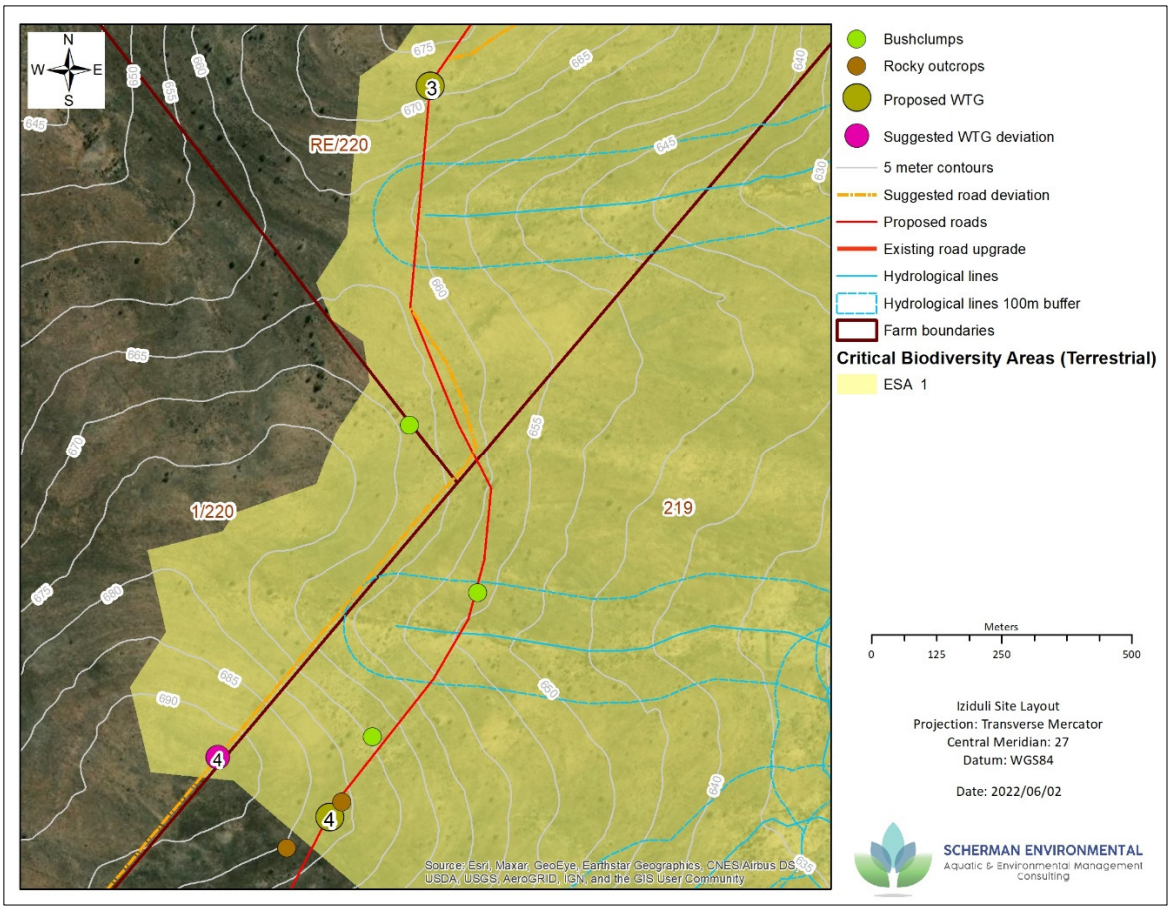

Figure 2.21. The proposed sites for WTG 3 & 4 and suggested deviations

WTG 4 and WTG 4 to Tower

We propose a substantial road deviation for this section of the property. The reason for this is that the proposed road dissects multiple drainage lines and pristine heterogenous habitats that were found to contain multiple species of small vertebrate during the survey. The proposed road will dissect multiple rocky outcrops both inside and outside the drainage lines. These areas are ideal habitats for a variety of rupiculous herpetofauna, invertebrates and mammals. The drainage lines also harbour higher densities of trees that form shelter for the various larger ungulates that utilise the property. Evidence of their utilisation of the drainage can be seen in the high densities of spoor in the area. The newly proposed road, shown in **Figure 2.22**, avoids these habitats while also mitigating legislative requirements of the project by staying above the drainage lines. This infrastructure change will necessitate the relocation of WTG 4 to the top of the hill **(Figure 2.21)**.

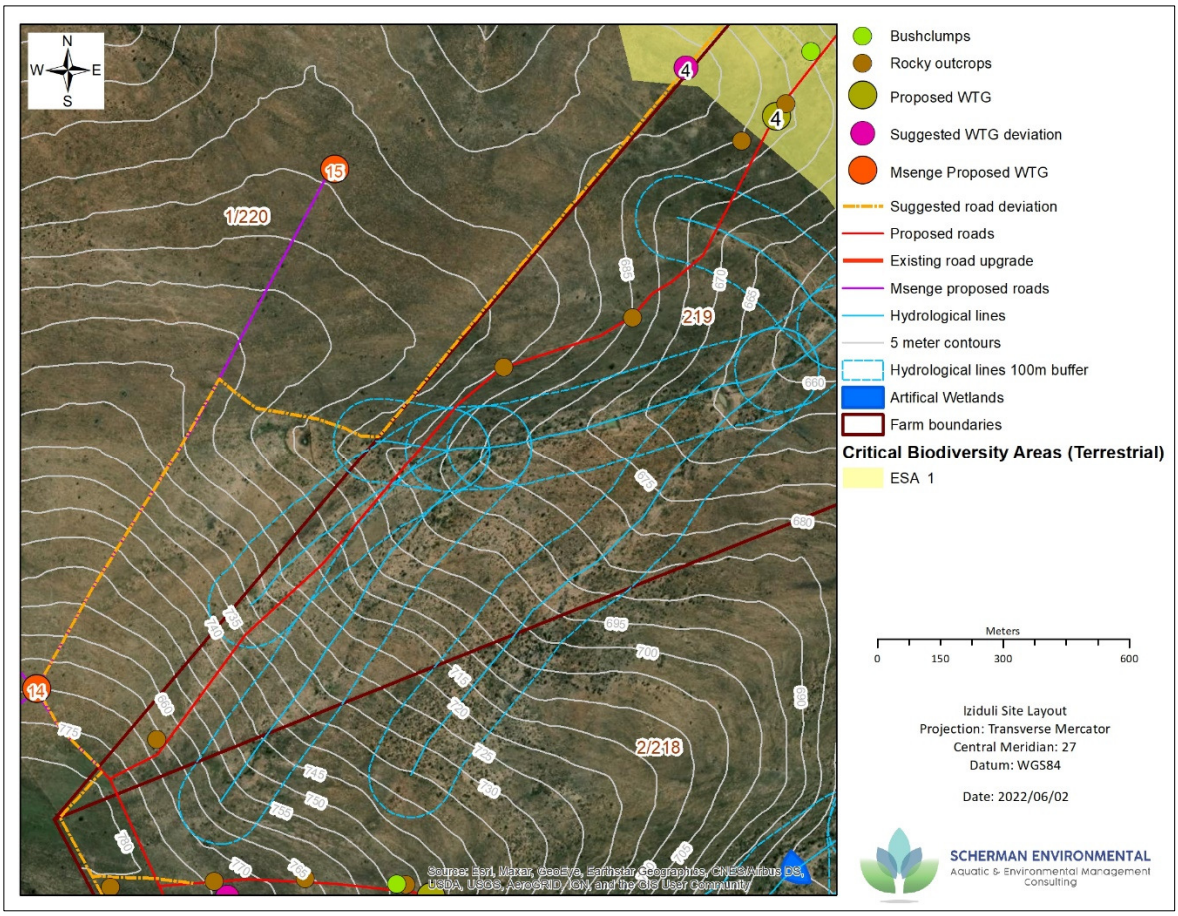

Figure 2.22. The suggested deviations from WTG 4 that links to Msenge WEF

WTG 5 and road to WTG 5

The proposed infrastructure requires the destruction of a substantial amount of pristine habitat in the forms of intercalated bush clumps and complex rocky outcrops. We propose moving the turbine further up the hill **(Figure 2.23)**. This will require a radical reduction in infrastructure and expenses for the developer whilst also reducing damage to the ecosystem. The newly proposed turbine location is also far more suitable because it is characterised by sheet erosion and thus harbours low biodiversity from both a faunal and floral perspective. The site will also require substantially less clearing as it is very homogenous.

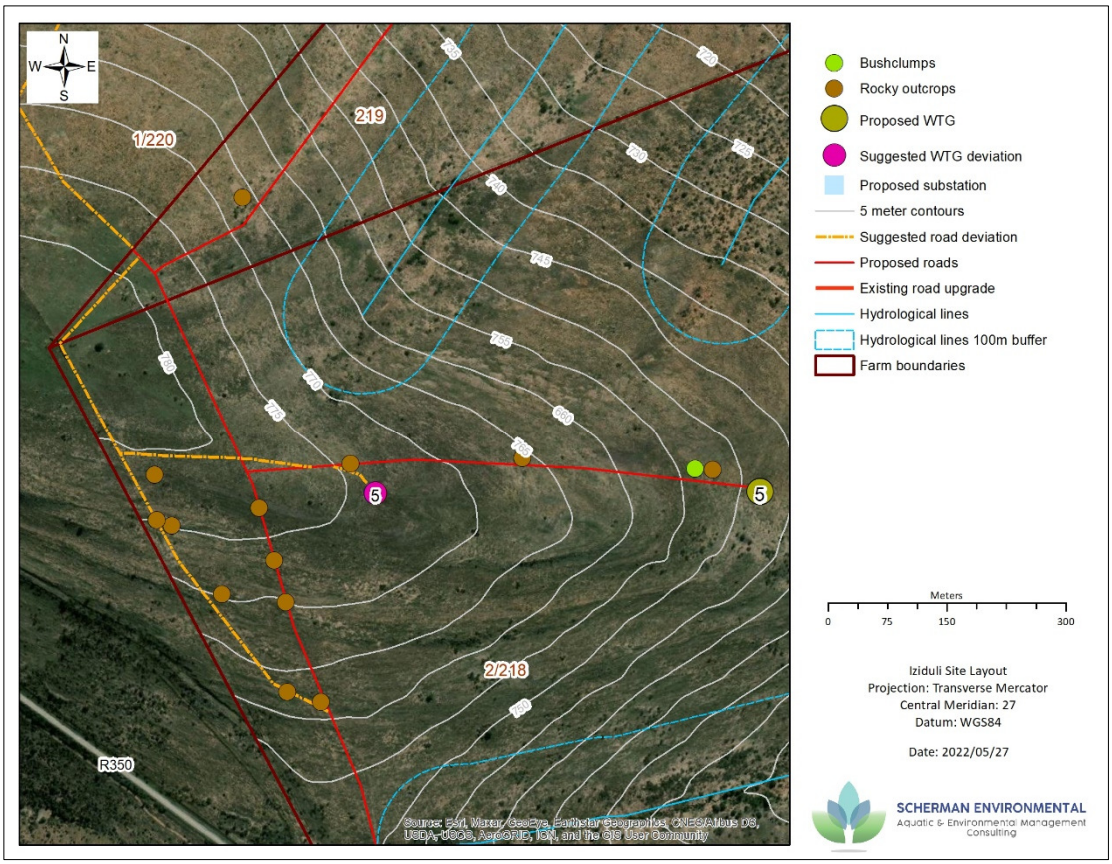

Figure 2.23. The proposed site for WTG 5 and suggested deviations

Road deviation by fence close to tower

The proposed infrastructure is suggesting a deviation off the existing road up the hill **(Figure 2.23)**. We propose using the existing road because it will mean that the pristine rocky outcrops along the proposed road will be left intact as the existing track has already been built through the rocky outcrop. This will avoid imparting more damage on the ecosystem by using existing infrastructure. This will also be the path of least resistance, which will save resources and time for construction while preserving intact habitat. Whilst the existing road already dissects the rocky outcrop, the road engineers still need to be careful during construction and not impart more damage on the rocky outcrop whilst upgrading the road. These rocky outcrops are bastions for a whole plethora of organisms **(Figure 2.24)**.

Figure 2.24. A rocky outcrop with an inlay of a spotted thick-toed gecko (Pachydactylus maculatus) found amongst the rocks

Road between WTG 6 and tower

The road already exists but in order to bring it up to specifications, the road will have to widen. This is problematic because the road is lined with stacks of rocks left after the completion of the original road. These rocks have created an incredibly heterogeneous environment and have been colonized by high densities and diversities of terrestrial fauna. The rocky belts created by the initial construction of the road likely harbours higher densities of fauna compared to the untouched habitat adjacent to the road because of the increased habitat, increased microsites, and additional niches afforded by the rock stacks. The rockiness adjacent to the road is most pronounced from WTG 6 to the quarry **(Figure 2.23)**, just above the drainage line - **see Figure 2.25.** For this reason, every effort should be made to reduce damage to these rocky outcrops by staying within the confines of the existing road. If this is not possible, it is critical that only the left side of the road be widened. This will protect at least half of the habitat whilst still facilitating the larger road.

Figure 2.25. Rocky outcrops created by existing road networks with an inlay image showcasing a rupiculous cape girdled lizard (Cordylus cordylus) found amongst the rocks

Water alongside road to tower

There are water pools next to the proposed road **(Figure 2.27)** that seem to be functioning naturally. Although they may be a product of the road's original construction, there are signs that the area is heavily utilised by medium and large-sized mammals. The water likely also supports amphibians in the warmer months and may be an important habitat for aquatic insects. Temporary pools like the one pictured in **Figure 2.26** need to be afforded the same protections as larger, more permanent waterbodies as they are an integral part of the environment for a multiplicity of organisms.

Figure 2.26. An example of a waterbody that has developed along the edges of roads

WTG 6

This turbine is in the middle of a rocky belt with interspersed stones and vegetation clumps that represent good habitat for terrestrial fauna. It is recommended that the turbine be moved in accordance with **Figure 2.27**.

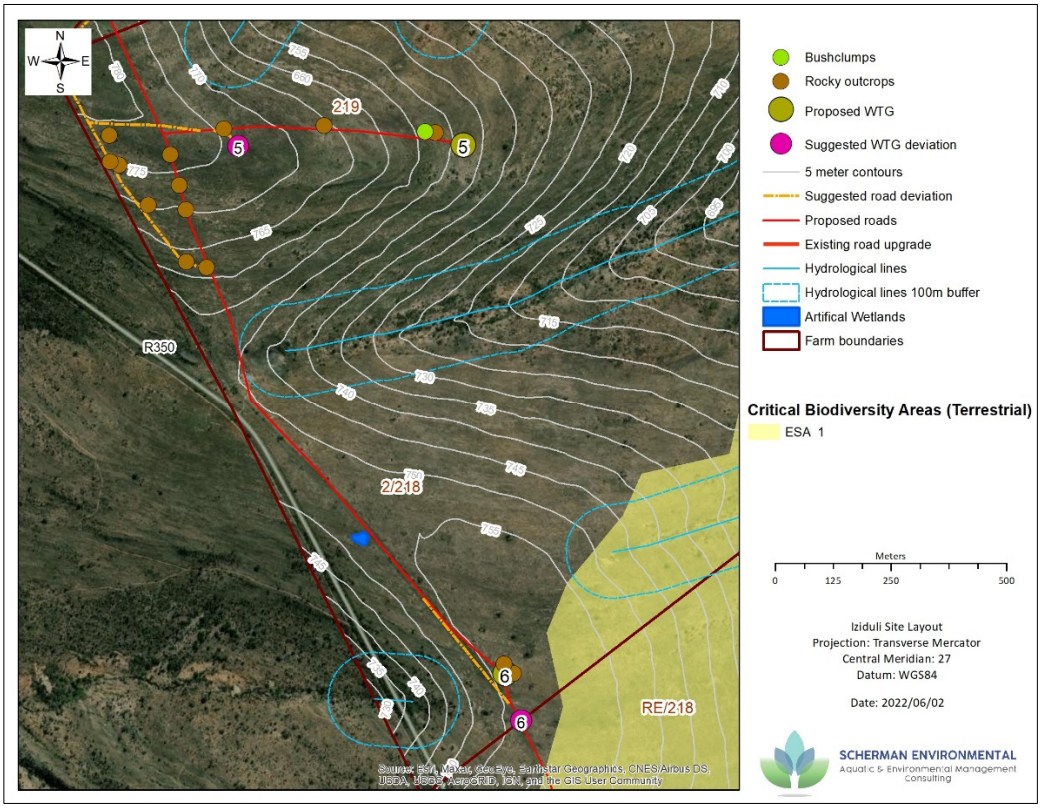

Figure 2.27. The proposed site for WTG6 and suggested deviations

WTG 7

A more direct route from the existing road can be taken to WTG 7 to avoid several large bush clumps (**Figure 2. 28**).

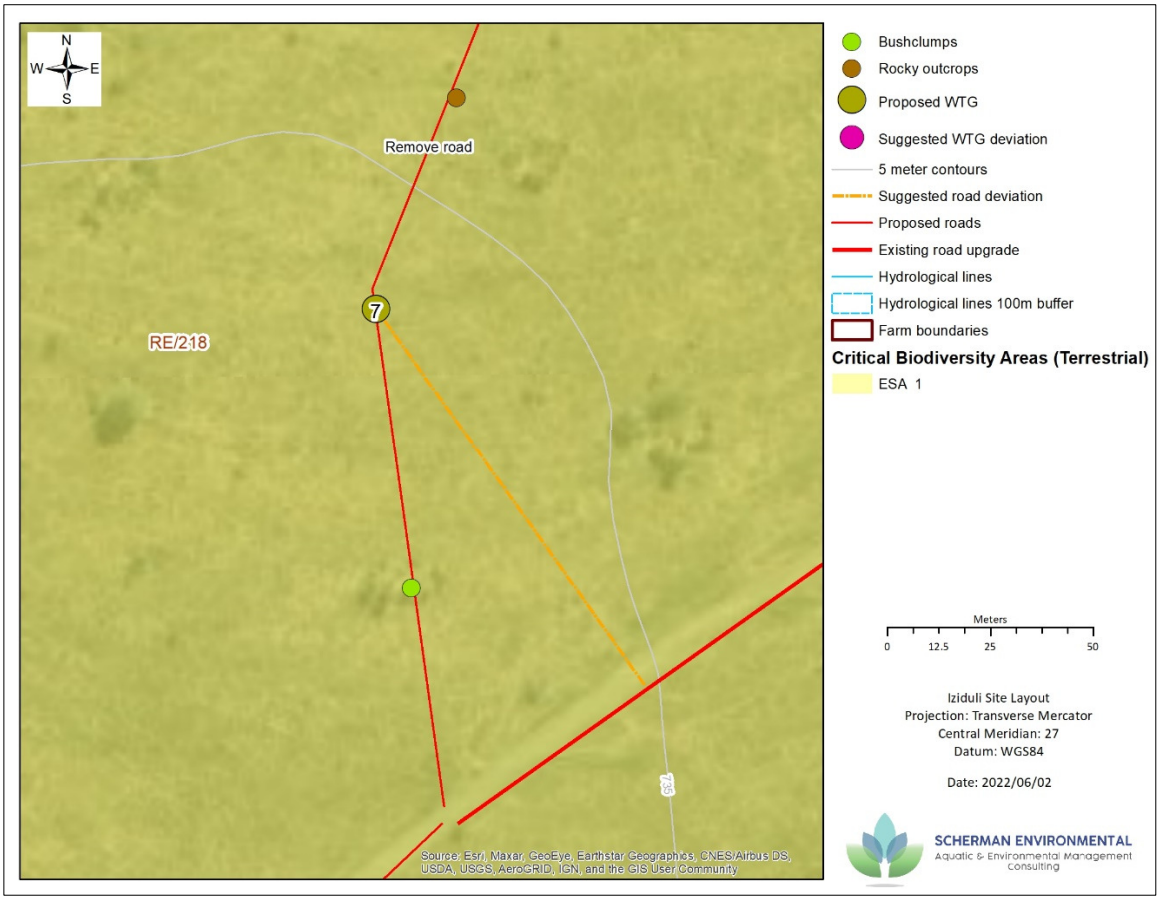

Figure 2. 28. The proposed site for WTG 7 and suggested deviations

Road connecting WTG 7 to WTG 8 to WTG 9

Whilst the turbine placements are acceptable, the roads connecting the three turbines are problematic. We thus suggest moving the road connecting turbine 8 to turbine 9, to the top of the hill. This will avoid multiple rocky outcrops and bushclumps and will necessitate the use of an existing farm track **(Figure 2.30)**, which will save time and resources on development. For the road connecting turbine 7 to turbine 8, we suggest removing this road entirely as it dissects a significant amount of pristine habitat **(Figure 2.29)**. This road can be removed because turbine 7 is connected to the main road network on the other side **(Figure 2. 28)** and turbines 8 and 9 can be accessed from the other side **(Figure 2.31)**. The suggestion laid out here would result in the greatest protection of habitat and biodiversity whilst having little to no effect on the accessibility of the turbines.

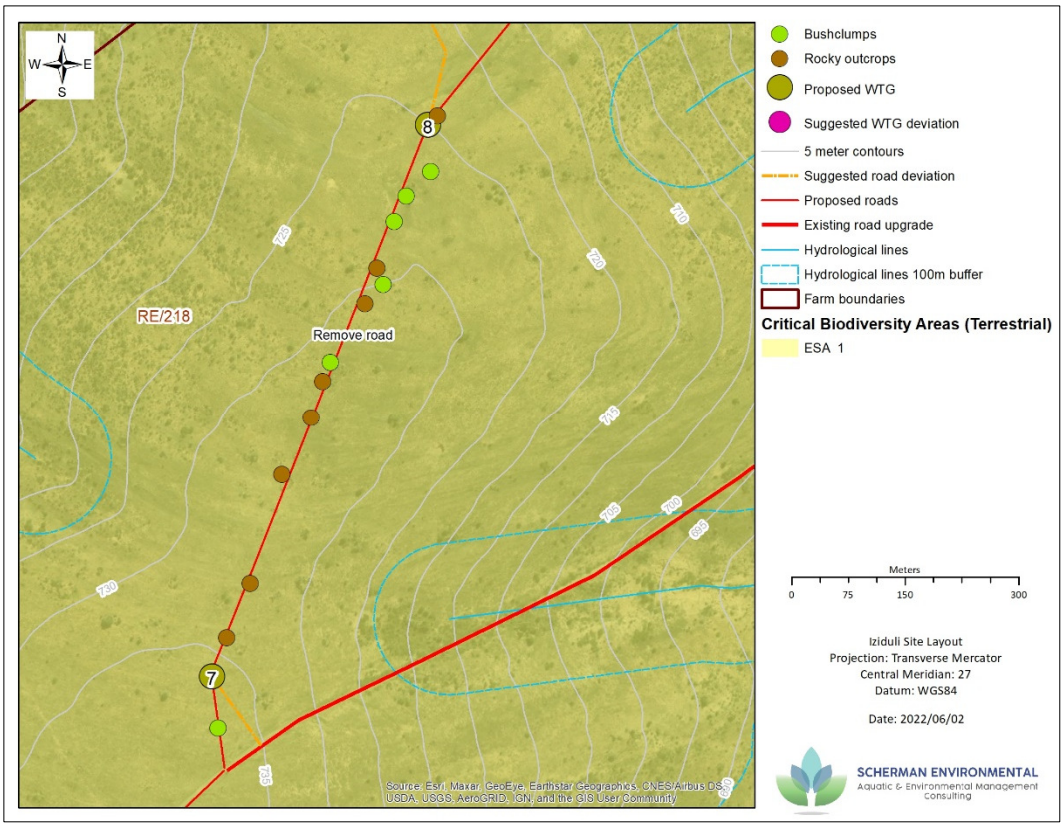

Figure 2.29. The proposed site for WTG 7 & 8 and proposed removal of road between WTG 7 & 8

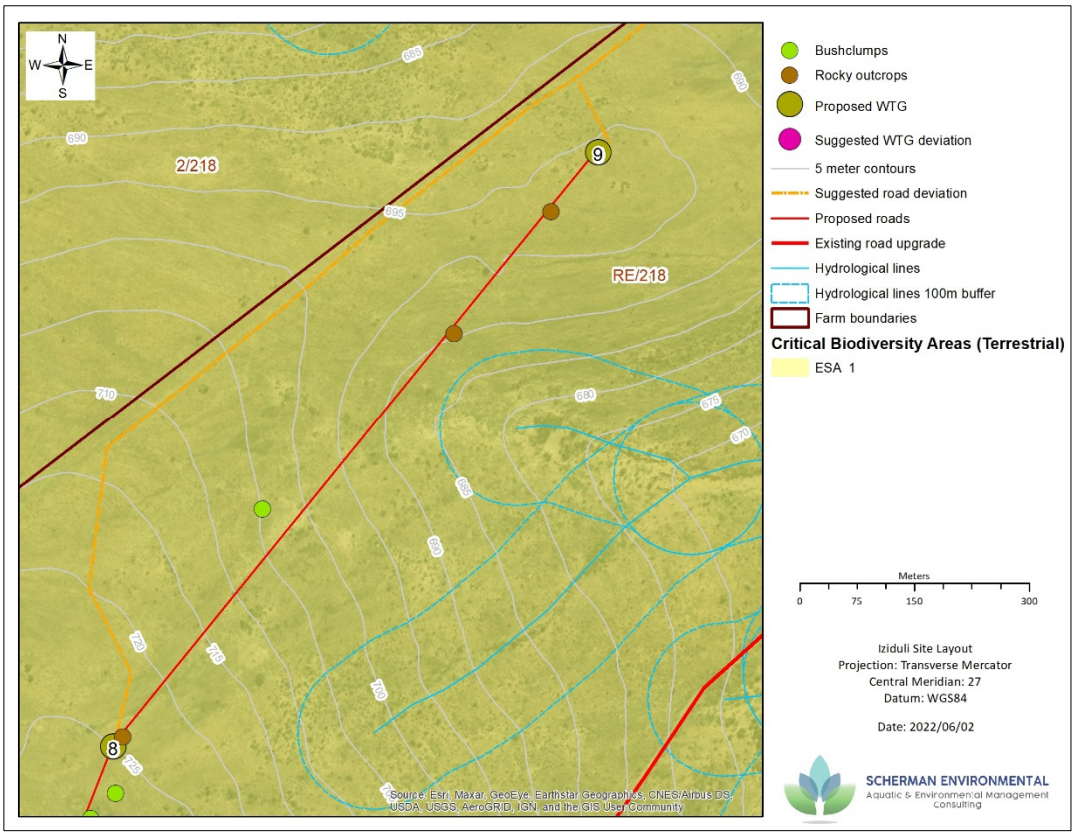

Figure 2.30. The proposed site for WTG 8 & 9 and suggested deviations

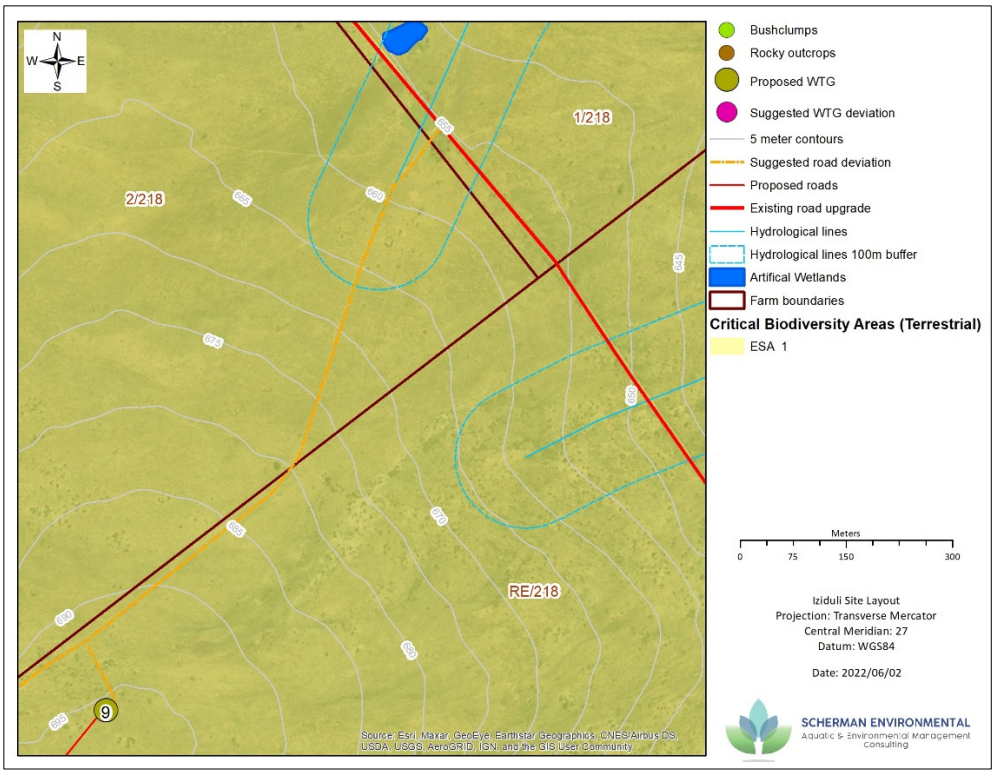

Figure 2.31. The suggested road addition to WTG 9

WTG 10 and road to WTG 10

Deviate from existing track and along the top of the ridge to avoid making a road straight up the ridge and also to avoid rocky outcrops (**Figure 2.32**).

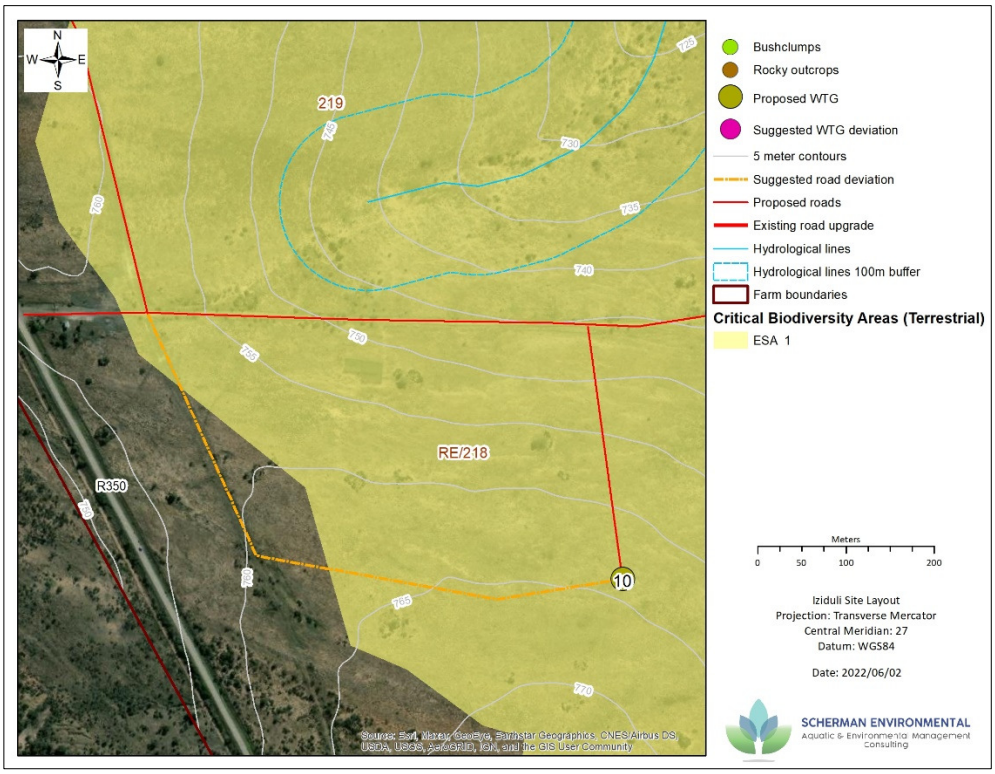

Figure 2.32. The proposed site for WTG 10 and suggested deviations

A note for all infrastructure

In keeping with the recommendations of the vegetation team, it is recommended that search and rescue be implemented along the designated construction path. This applies to all road networks and turbine locations irrespective of homogeneity. This will include catching terrestrial fauna within the proposed construction zone and moving them to a suitable habitat adjacent to the construction site. An example of this would be the controlled dismantling of termite mounds as they are well known to harbour high densities of fauna in habitat poor areas (much like the overgrazed homogenous turbine locations throughout the property). This will be done in accordance with DEDEAT Operational Guideline 7 / 2003, that details the correct procedure for faunal and floral relocation.

3. Aquatic Assessment

3.1. Introduction

The purpose of the aquatic assessment was to cover as much of the study area as possible and evaluate drainage features through ground-truthing, as compared to mapped features.

Hydrological features in the study area

Colloty identified the following systems during the BA undertaken in 2017, based on a site visit in June 2017 and subsequent summer rainfall surveys:

- Several minor non-perennial watercourses and drainage lines of the Goba/eNyara/Biesiesleegte systems in the Q92F quaternary catchment – see an example of a non-perennial drainage line on Farm 218 alongside.
- All watercourses are considered intact with biological significance, according to NFEPA.
- Upper foothill drainage lines, with no visible channels and limited inundation.
- Lower foothill streams, with visible channels, narrow riparian zones and small pools – see figure below.

- Farm dams, classified as man-made or artificial.
- No natural wetlands.
- Systems were defined as Moderately Modified. No species of special concern were noted.

3.2. Methodology

The following GE kmz files were prepared by N Huchzermeyer for the Iziduli properties and provided before the field survey.

- Topo Rivers Line from the CD: NGI dataset 2006
- National Freshwater Ecosystem Priority Areas (NFEPA) 2011 wetlands and wetland clusters (Nel et al. 2011)
- NBA (National Biodiversity Assessment) Artificial Wetlands 2018
- NBA NWM5 (National Wetland Map 5) 2018 was reviewed, but no alone-standing natural wetlands were mapped by NWM5 on the Iziduli properties. Only wetland areas associated with rivers and streams were shown on mapping.

The purpose of the 2022 walkthrough surveys were as follows:

- Assess as wide a range of drainage features as possible in the days assigned to the survey
- Evaluate whether wetland features mapped and seen in the landscape were artificial or natural
- Provide guidance on buffer zones needed around aquatic features and the purpose of these buffers
- Provide input to the mapping specialist in terms of defining sensitive areas related to aquatic ecosystems. These sensitive areas are represented by buffers delineated around streams, drainage lines and wetlands.
- Provide an assessment of the habitat continuity or fragmentation across the study area
- Provide an opinion on the ecological state of aquatic features across the study area

3.3. Results and Discussion

The 32m buffer generally used in the Eastern Cape for planning along rivers, streams and drainage lines (Berliner and Desmet, 2007) was applied in the mapping delivered before ground-truthing was undertaken. Due to the extensive number of instream farm dams across the properties surveyed, and the importance of sensitive riparian wetlands, as seen on Property 219 for example, it is recommended that 100m buffers be applied to all linear drainage features across the development area. **Figure 2.20** is a good example of critical aquatic habitats to maintain an already fragmented system. **Figure 3.1** is an example of a stream and associated riverine wetland on Property 218 considered important as a habitat for riparian vegetation and aquatic biota.

Figure 3.1. Important drainage features on Farm 218

Farm dams are numerous, meaning that functioning systems on Iziduli should be protected at all costs. The 100m buffer is also consider appropriate to the streams in the Double Drift Karroid Thicket as their riparian zones are narrow and do not offer much natural protection. Should infrastructure be required within 100m buffer zones, a site-specific assessment should be conducted to consider whether the 100m "protection" buffer can be downgraded to a 32m regulatory/planning buffe. Note that water use licensing will be triggered in this instance.

Artificial wetlands, e.g. dams and quarries, across the site are indicated on mapping. No alone-standing NWM5 wetlands were mapped or seen in the study area, other than those appearing as riparian wetlands along drainage lines.

3.4. Conclusion

The final conclusions are as follows:

- Apply 100m protection buffers around drainage lines and streams due to the impacted nature of most aquatic drainage features seen in the landscape, and as protection for the flowing water systems and riparian wetlands seen.
- Remove 500m buffers around artificial wetlands, but indicate them on mapping (as confirmed by Mr Wietsche Roets, Specialist Scientist, Directorate: Water Abstraction and In-stream Use, DWS)

3.5. Aquatic sensitivity mapping

The ESA 1 areas, which make up the whole of the Iziduli WEF are crucial for the maintenance of CBA Rivers and wetlands (ECBCP, 2019).

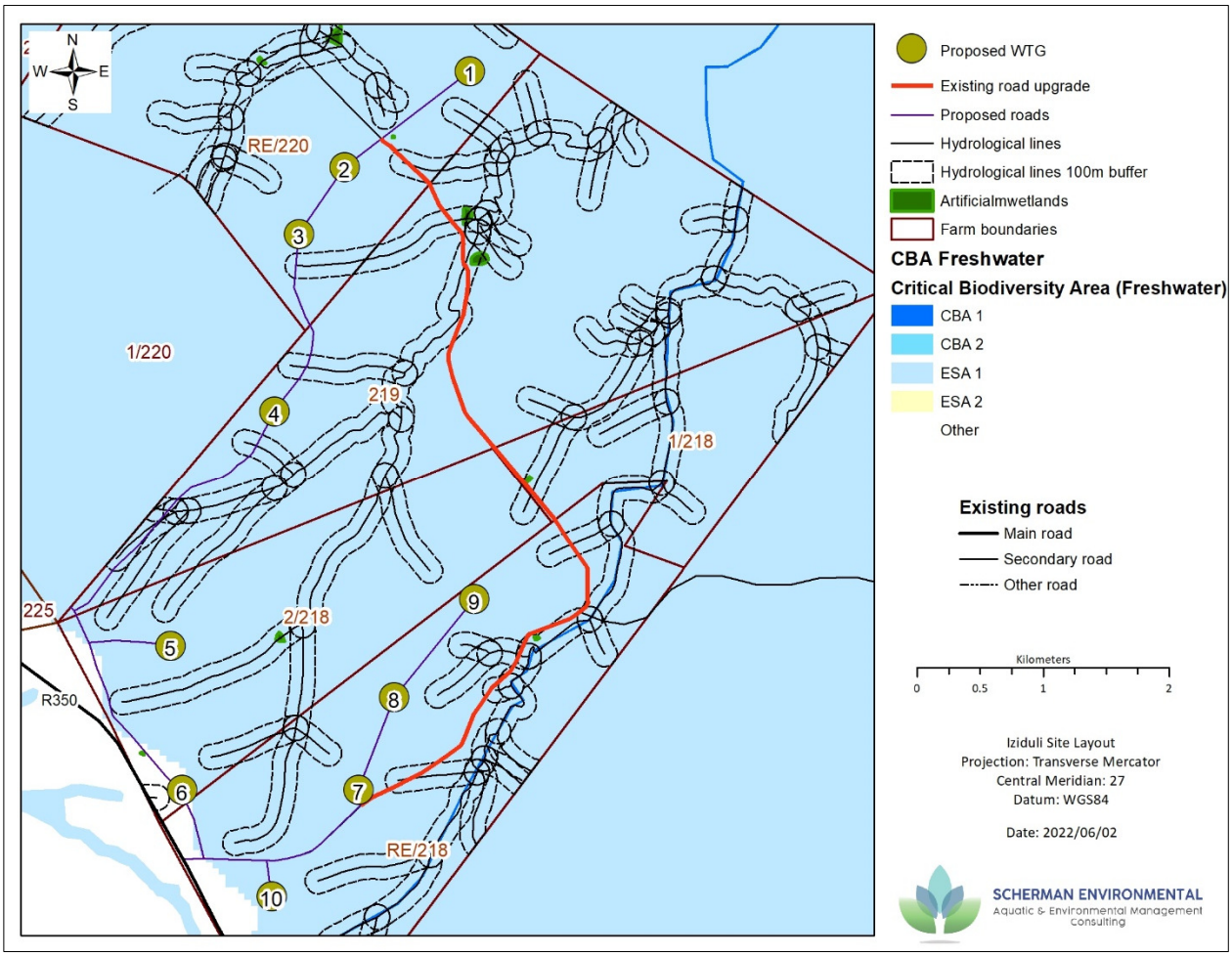

Figure 3.2. Critical Biodiversity Areas and important aquatic features and buffers within the Iziduli WEF.

4. Conclusions

Each section of the report has provided a concluding section. The purpose of the Walkthrough notes and report prepared is to utilize the information provided in each section of the report as input to the final layout. The final layout will then be reviewed by the specialist team.

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References

Avenant, N., Wilson, B., Power, J., Palmer, G. & Child, M.F. 2019. *Mystromys albicaudatus*. *The IUCN Red List of Threatened Species* 2019: e.T14262A22237378. https://dx.doi.org/10.2305/IUCN.UK.2019-1.RLTS.T14262A22237378.en. Accessed on 03 June 20

Bates, M. F., Branch, W. R., Bauer, A. M., Burger, M., Marais, J., Alesander, G. J., & De Villiers, M. S. (2014). *Atlas and red list of the reptiles of South Africa, Lesotho and Swaziland*. South African National Biodiversity Institute.

Berliner, D. & Desmet, P. 2007. Eastern Cape Biodiversity Conservation Plan: Technical Report. Department of Water Affairs and Forestry (DWAF). Project No. 2005-012. Pretoria. 1 August 2007.

Branch, B. 1998. *Field guide to snakes and other reptiles of southern Africa*. Struik.

Colloty, B. 2017. Ecological and Aquatic Impact Statement: Iziduli Emoyeni Wind Farm. Prepared for Savannah Environmental (Pty) Ltd. by Scherman Colloty & Associates. October 2017.

de Castro, A., Vlok, J.H., Newton, D., Motjotji, L. & Raimondo, D. 2012. Pelargonium sidoides DC. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22

Department of Environmental Affairs (DEA). 2016. *National Protected Areas Expansion Strategy of South Africa 2016.* Department of Environmental Affairs, Pretoria, South Africa.

Dold, A.P. & Victor, J.E. 2005. *Bergeranthus artus* L.Bolus. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/06/04 Department of Forestry, Fisheries and Environment, 2021. Red List of Terrestrial Ecosystems of South Africa Assessment details per ecosystem type version: 20210823. SANBI, Pretoria, South Africa.

Dold, T. 2022. Curator of the Schonland Herbarium, Albany Museum, Makhanda. T.dold@ru.ac.za

ECBCP (2019) Eastern Cape Biodiversity Conservation Plan Handbook. Department of Economic Development and Environmental Affairs (King Williams Town). Compiled by G. Hawley, P. Desmet and D. Berliner.

FitzPatrick Institute of African Ornithology. 2022. FrogMAP Virtual Museum. Accessed at https://vmus.adu.org.za/?vm=FrogMAP on 2022-04-14

Foden, W. & Potter, L. 2005a. *Pittosporum viridiflorum* Sims. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/06/02.

Foden, W. & Potter, L. 2005b. *Podocarpus falcatus* (Thunb.) R.Br. ex Mirb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25

Foden, W. & Potter, L. 2005c. *Podocarpus latifolius* (Thunb.) R.Br. ex Mirb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25.

Foden, W. & Potter, L. 2005d. *Sideroxylon inerme* L. subsp. inerme. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25.

FrogMap (2021). Fitzpatrick Institute of African Ornithology. Accessed at: http://vmus.adu.org.za/?vm=FrogMap on 2021-12-02

Geldenhuys, C.J. & Victor, J.E. 2004. *Catha edulis* (Vahl) Forssk. ex Endl. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25.

Government Gazette 1974. Nature and Environmental Conservation Ordinance, no 19 of 1974.

Government Gazette 2007. National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004): Public Lists of Critically Endangered, Endangered, Vulnerable and Protected Species.

Grobler, A., Vlok, J., Cowling, R, van der Merwe, S., Skowno, A.L., Dayaram, A. 2018. Technical Report: Integration of the Subtropical Thicket Ecosystem Project (STEP) vegetation types into the VEGMAP national vegetation map 2018.

Hoare, D. 2010. EIA Report. Specialist Ecological Study on the Potential Impacts of the Proposed Amakhala Emoyeni Wind Energy Facility Project, Eastern Cape. Report prepared for Savanna Environmental Pty Ltd.

Hoare, D., Mucina, L., Rutherford, M.C., Vlok, J.H.J., Euston-Brown, D.I.W., Palmer, A.R., Powrie, L.W., Lechemere-Oertel, R.G., Procheş, Ş.M., Dold, A.P., Ward, R.A. 2006. Albany Thicket Biome. In: Mucina, L. & Rutherford, M.C. (eds). The Vegetation of South Africa, Lesotho and Swaziland. Strelitzia 19. South African National Biodiversity Institute, Pretoria. Pg. 541–567

iNaturalist (2021). Accessed at http://iNaturalist.org on 2021-12-17

iNaturalist (2022). Accessed at http://iNaturalist.org on 2022-06-03

IUCN SSC Antelope Specialist Group. 2019. *Syncerus caffer*. *The IUCN Red List of Threatened Species* 2019: e.T21251A50195031. https://dx.doi.org/10.2305/IUCN.UK.2019-1.RLTS.T21251A50195031.en. Accessed on 03 June 2022.

IUCN. 2017. The IUCN Red List of Threatened Species. www.iucnredlist.org (Accessed: Sept 2020).

Kamundi, D.A. 2006. *Dyschoriste setigera* (Pers.) J.C.Manning & Goldblatt. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/06/04.

Low, A.B. & Rebelo, A.G. (eds). 1996. The Vegetation of South Africa, Lesotho and Swaziland. Department of Environmental Affairs and Tourism, Pretoria.

MammalMap (2022). Fitzpatrick Institute of African Ornithology. Accessed at: http://vmus.adu.org.za/?vm=MammalMap on 2022-06-03

Marais, J. 2004. *A complete guide to the snakes of southern Africa*. Penguin Random House South Africa.

Möller, A. & Becker. 2019. Field guide to the Succulent Euphorbias of Southern Africa. Briza, Pretoria, South Africa.

Mtshali, H. 2018. *Aloiampelos tenuior* (Haw.) Klopper & Gideon F.Sm. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/18.

Mucina, L., Hoare, D.B., Lotter, M.C., Du Preez, J., Rutherford, M.C., Scott-Shaw, R., Bredenkamp, G.J., Powrie, L.W., Scott, L., Camp, K,G.T., Cilliers, S.C., Bezuidenhout, H., Mostert, T.H., Siebert, S.J., Winter, P.J.D., Burrows, J.E.,Dobson, L., Ward, R.A., Stalmans, M., Oliver, E.G.H., Sibert,F., Schmidt, E., Kobisi, K., & Kose, L. 2006. Grassland Biome. In: Mucina, L. & Rutherford, M.C. (eds). The Vegetation of South Africa, Lesotho and Swaziland. *Strelitzia* 19. South African National Biodiversity Institute, Pretoria. Pg. 348 – 437.

Nel, J.L., Murray, K.M., Maherry, A.M., Petersen, C.P., Roux, D.J., Driver, A., Hill, L., van Deventer, H., Funke, N., Swartz, E.R., Smith-Adao, L.B., Mbona, N., Downsborough, L. & Nienaber, S. 2011. Technical Report for the National Freshwater Ecosystem Priority Areas Project. Water Research Commission Report No. 1801/2/11.

Nkurenkuru. 2018. Ecological Comments: Proposed Amendment to the Authorised Msenge Wind Energy Facility Wind Energy Facility (*sic*)[34] DEA Ref No. 12/12/20/1754/2) – amendments to the Turbines Specifications. Report prepared for Savanna Environmental Pty Ltd.

Rebelo, A. 2022. HerpDistributionSA Application on 2022-06-03

Reptile Database (2022). Accessed at THE REPTILE DATABASE (reptile-database.org) on 2022-06-05

ReptileMap (2021). Fitzpatrick Institute of African Ornithology. Accessed at: http://vmus.adu.org.za/?vm=ReptileMap on 2021-12-02

SANBI. (2016). Red List of South African Plants version 2017.1. Redlist.sanbi.org (Accessed: 3 June 2022).

SANBI (2018). The Vegetation Map of South Africa, Lesotho and Swaziland, Mucina, L., Rutherford, M.C. and Powrie, L.W. (Editors), Online, http://bgis.sanbi.org/Projects/Detail/186, Version 2018.

SARCA. 2014. Atlas and Red List of the Reptiles of South Africa, Lesotho and Swaziland. 2014. Edited by Michael F. Bates, William R. Branch, Aaron M. Bauer, Marius Burger, Johan Marais, Graham J. Alexander & Marienne S. de Villiers. SANBI, Pretoria. A product of the South African Reptile Conservation Assessment (SARCA).

Savannah Environmental. 2010. Environmental Impact Assessment Process Draft EIA Report: Proposed Amakhala Emoyeni Wind Energy Facility, Eastern Cape Province (DEA Ref No: 12/12/20/1754).

Savannah Environmental. 2017. Pre-commencement ecological footprint investigation Msenge Emoyeni wind energy facility near Cookhouse, Eastern Cape.

Savannah Environmental 2014. Precommencement Ecological Footprint Investigation. Msenge Emoyeni Wind Energy Facility, Near Cookhouse Eastern Cape. Eastern Cape Province. Report prepared for Amakhala Emoyeni Wind Energy Facility (Pty) Ltd.

Scherman Colloty & Associates. 2017. Ecological and Aquatic Impact Assessment: Iziduli Emoyeni Wind Farm, Eastern Cape Province. Report Prepared for Savanna Environmental Pty Ltd. by Brian Colloty.

ScorpionMap (2022). Fitzpatrick Institute of African Ornithology. Accessed at: http://vmus.adu.org.za/?vm=ScorpionMap on 2022-06-03

Skowno A. 2018. National Biodiversity Assessment 2018 – Technical reports: terrestrial habitat modification map (1990–2014) for South Africa. Version 5. March 2018. Pretoria: South African National Biodiversity Institute.

Skowno, A.L., Matlala M., Slingsby J., Kirkwood D, Raimondo D.C., von Staden L., Holness S.D., Lotter M., Pence G., Daniels F., Driver A., Desmet P.G., & Dayaram, A, 2019. Terrestrial ecosystem threat status assessment 2018 - comparison with 2011 assessment for provincial agencies. National Biodiversity Assessment 2018 Technical Report. South African National Biodiversity Institute, Pretoria.

Skowno, A.L. A.L.; Monyeki, M.S. 2021. South Africa's Red List of Terrestrial Ecosystems (RLEs). Land 2021, 10, 1048. https://doi.org/

The Biodiversity Company. 2020a. The Terrestrial Ecology and Desktop Soil Assessments for the Msenge Emoyeni Project. Report prepared for Savanna Environmental Pty Ltd.

The Biodiversity Company. 2020b. The Aquatic Ecology Baseline and Impact Assessments for the Msenge Emoyeni Project, Bedford, Eastern Cape. Prepared for Savannah Environmental, October 2020.

Williams, V.L., Raimondo, D., Crouch, N.R., Cunningham, A.B., Scott-Shaw, C.R., Lötter, M. & Ngwenya, A.M. 2008a. Curtisia dentata (Burm.f.) C.A.Sm. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25.

[34] The report does not have a title page and the reference used here comes from the letter-type heading as recorded.

Williams, V.L., Raimondo, D., Crouch, N.R., Cunningham, A.B., Scott-Shaw, C.R., Lötter, M. & Ngwenya, A.M. 2008b. Prunus africana (Hook.f.) Kalkman. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/2.

Williams, V.L., Raimondo, D., Crouch, N.R., Cunningham, A.B., Scott-Shaw, C.R., Lötter, M., Ngwenya, A.M. & Dold, A.P. 2008. Ocotea bullata (Burch.) Baill. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25.

Vlok, J.H.J., and Euston-Brown, D.I.W. 2002. The patterns within, and the ecological processes that sustain, the subtropical thicket vegetation in the planning domain of the Subtropical Thicket Ecosystem Planning (STEP) project. Terrestrial Ecology Research Unit Report No. 40, University of Port Elizabeth. Port Elizabeth, South Africa.

Appendix 1: Plants list from the field surveys in 2022[35]

No	Genus	species	Subsp/ Variation	Family	Provincial Conservation	Current Threat Status
1	*Aizoon*	*glinoides*		Aizoaceae	Protected	Least Concern
2	*Albuca*	*dalyae cf.*		Hyaninthaceae		Least Concern
3	*Aloe*	*ferox*		Asphodelaceae		Least Concern
4	*Aloe*	*maculata*		Asphodelaceae	Protected	Least Concern
5	*Aloe*	*striata*	*striata*	Asphodelaceae	Protected	Least Concern
6	*Aloiampelos*	*tenuior*		Asphodelaceae	Protected	Least Concern
7	*Alternantha*	*pungens*		Amaranthaceae	Naturalised Weed	Not Determined
8	*Ammocharis*	*coranica*		Amaryllidaceae	Protected	Least Concern
9	*Anacampseros*	*arachnoides*		Anacampserotaceae	Protected	Least Concern
10	*Aptosimum*	*procumbens*		Scrophulariaceae		Least Concern
11	*Aristida*	*congesta*		Poaceae		Least Concern
12	*Artctotis*	*arctotoides*		Asteraceae		Least Concern
13	*Asparagus*	*africanus*		Asparagaceae		Least Concern
14	*Asparagus*	*sauveolens*		Asparagaceae		least Concern
15	*Asparagus*	*striatus*		Asparagaceae		Least Concern
16	*Atriplex*	*semibacatta*		Amaranthaceae	Naturalised Weed	Not Determined
17	*Azima*	*tetracantha*		Salvadoraceae		Least Concern
18	*Barleria*	*pungens*		Acanthaceae		Least Concern
19	*Berkheya*	*decurrens*		Asteraceae		Least Concern
20	*Bidens*	*pilosa*		Asteraceae	Naturalised Weed	Not Determined
21	*Boophane*	*distichia*		Amaryllidaceae	Protected	Least Concern
22	*Boscia*	*aloeoides*		Brassicaceae		Least Concern
23	*Bulbine*	*frutescens*		Asphodelaceae		Least Concern
24	*Bulbine*	*narcissifolia*		Asphodelaceae		Least Concern
25	*Cadaba*	*aphylla*		Brassicaceae		Least Concern
26	*Capparis*	*sepiaria*	*citrifolia*	Brassicaceae		Least Concern
27	*Carrisa*	*haematocarpa*		Apocyanacreae		Least Concern
28	*Chasmatophyllum*	*musculinum*		Aizoaceae	Protected	Least Concern
29	*Cheilanthes*	*viridus*		Pteridaceae	Least Concern	Least Concern
30	*Chenopodium*	*carcinatum*		Amaranthaceae	Naturalised Weed	Not Determined
31	*Chloris*	*sp.*		Poaceae		
32	*Chlorophytum*	*bowkeri cf.*		Agavaceae		Least Concern
33	*Chlorophytum*	*comosum*		Agavaceae		Least Concern
34	*Chrysochoma*	*ciliata*		Asteraceae		Least Concern
35	*Cineraria*	*lobata*	*lobata*	Asteraceae		Least Concern
36	*Cissampelos*	*capensis*		Menispermaceae		Least Concern
37	*Commelina*	*africana*		Commelinaceae		Least Concern
38	*Cotyledon*	*campanulata*		Crassulaceae		Least Concern
39	*Crassula*	*corallina*	*corallina*	Crassulaceae		Least Concern
40	*Crassula*	*ericoides*	*ericoides*	Crassulaceae		Least Concern
41	*Crassula*	*mesembryanthemoides*	*mesembryanthemoides*	Crassulaceae		Least Concern
42	*Crassula*	*obovata*		Crassulaceae		Least Concern
43	*Crassula*	*capitella*	*thrysifolia*	Crassulaceae		Least Concern

[35] This species list is a composite for Msenge WEF and iziDuli WEF due to the close proximity of their respective study sites. It is highly unlikely that species found on Msenge WEF would not be found on iziDuli and *vice versa*.

No	Genus	species	Subsp/ Variation	Family	Provincial Conservation	Current Threat Status
44	*Cucmumis*	*myriocarpus*	*myriocarpus*	Cucurbitaceae		Least Concern
45	*Cuspida*	*cernua*	*cernua*	Asteraceae		Least Concern
46	*Cussonia*	*spicata*		Ariliaceae		Least Concern
47	*Cymbopogon sp*	*sp.*		Poaceae		
48	*Cynotis*	*speciosa*		Commelinaceae		Least Concern
49	*Cyperaceae*	*sp1.*		Cyperaceae		
50	*Cyphia*	*linearoides*		*Lobeliaceae*		Least Concern
51	*Datura*	*stramonium*		Solanaceae	Naturalised Weed	Not Determined
52	*Delosperma*	*adelaidensis*		Aizoaceae	Protected	Least Concern
53	*Dianthus*	*thunbergia*		Carophyllaceae		Least Concern
54	*Diascia*	*cuneata*		Scrophulariaceae	Protected	Least Concern
55	*Digitaria*			Poaceae		Least Concern
56	*Diospyros*	*lycoides*	*lycoides*	Ebenaceae		Least Concern
57	*Dolichos*	*hastaeformis*		Fabaceae		Least Concern
58	*Drimia*	*acrarophylla*		Hyaninthaceae		Least Concern
59	*Drimia*	*altissima*		Hycanthaceae		Least Concern
60	*Drimia*	*anomala*		Hyaninthaceae		Least Concern
61	*Drosanthemum*	*adelaidensis*		Apocyanaceae	Protected	Least Concern
62	*Duvalia*	*caespitosa*		Apocyanaceae	Protected	Least Concern
63	*Duvalia*	*modesta*		Apocyanaceae	Protected	Least Concern
64	*Ehretia*	*rigida*	*rigida*	Boraginaceae		Least Concern
65	*Eragrostis*	*capensis*		Poaceae		Least Concern
66	*Eragrostis*	*curvula*		Poaceae		Least Concern
67	*Eriocephalus*	*africanus*	*paniculatus*	Asteraceae		Least Concern
68	*Eriospermum*	*sp1.*		Ruscaceae		
69	*Eriospermum*	*sp2.*		Ruscaceae		
70	*Euclea*	*undulata*		Ebenaceae		Least Concern
71	*Euphorbia*	*gorgonis*		Euphorbiaceae		Not Determined
72	*Euphorbia*	*huttonae*		Euphorbiaceae		Least Concern
73	*Euphorbia*	*meloformis*		Euphorbiaceae	Protected	Vulnerable
74	*Euphorbia*	*micracantha*		Euphorbiaceae		Not Determined
75	*Euphorbia*	*rhombifolia*		Euphorbiaceae		Least Concern
76	*Euphorbia*	*stellata*		Euphorbiaceae		Least Concern
77	*Euphorbia*	*stolonifera*		Euphorbiaceae		Least Concern
78	*Euphorbia*	*tridentata*		Euphorbiaceae		Least Concern
79	*Euryops*	*sp1.*		Asteraceae		
80	*Euryops*	*sp2.*		Asteraceae		
81	*Exomis*	*mircophylla*		Amaranthanthaceae		Least Concern
82	*Faucaria*	*tuberculosa*		Aizoaceae	Protected	Least Concern
83	*Felicia*	*filifolia*		Asteraceae		Least Concern
84	*Felicia*	*microphylla*		Asteraceae		Least Concern
85	*Felicia*	*muricata*	*muricata*	Asteraceae		Least Concern
86	*Felicia*	*sp1.*		Asteraceae		
87	*Gasteria*	*bicolor*	*bicolor*	Asphodelaceae		Least Concern
88	*Gazania*	*krebsiana*		Asteraceae		Least Concern
89	*Glottiphyllum*	*longum*		Aizoaceae		Least Concern
90	*Gnidia*	*cuneata*		Thymelaeaceae		Least Concern
91	*Grewia*	*occidentalis*		Malvaceae		Least Concern

No	Genus	species	Subsp/ Variation	Family	Provincial Conservation	Current Threat Status
92	*Grewia*	*robusta*		Malvaceae		Least Concern
93	*Gymnosporia*	*capitata*		Celastraceae		Least Concern
94	*Gymnosporia*	*polyacantha*		Celastraceae		Least Concern
95	*Haemanthus*	*albiflos*		Amaryllidaceae	Protected	Least Concern
96	*Halocarpha*	*lyrata*		Asteraceae		Least Concern
97	*Helichrysum*	*rosum*	arcuatum	Asteraceae		Least Concern
98	*Helichrysum*	*rugulosum*		*Asteraceae*		Least Concern
99	*Heliophila*	*subulata cf.*		Brassicaceae		Least Concern
100	*Hereroa*	*granulata*		Aizoaceae	Protected	Least Concern
101	*Hermannia*	*althaeoides*		Malvaceae		Least Concern
102	*Hermannia*	*coccocarpa*		Malvaceae		Least Concern
103	*Hibiscus*	*pussilus*		Malvaceae		Least Concern
104	*Hibiscus*	*trionum*		Malvaceae		Least Concern
105	*Huernii*	*thurettii*		Apocyanaceae	Protected	Least Concern
106	*Ipomoea*	*crispa*		Ipomoeaceae		Least Concern
107	*Jamesbrittania*	*mircophylla*		Scrophulariaceae		Least Concern
108	*Kalanchoe*	*rotundifolia*		Crassulaceae		Least Concern
109	*Lasiosiphon*	*meisnerianus*		Thymelaeaceae		Least Concern
110	*Ledebouria*	*ensifolia*		Hyacinthaceae		Least Concern
111	*Ledebouria*	*fishriverensis*		Hyacinthaceae		Least Concern
112	*Ledebouria*	*revoluta*		Hyacinthaceae		Least Concern
113	*Leucas*	*capensis*		Lamiaceae		Least Concern
114	*Limeum*	*aethiopicum*		Molluginaceae		Least Concern
115	*Lithospermum*	*sp.*		Boraginaceae		
116	*Lotononis*	*laxa*		Fabaceae		Least Concern
117	*Lotononis*	*sp.*		Fabaceae		
118	*Lycium*	*africana*		Solanaceae		Least Concern
119	*Lycium*	*cinereum*		Solanaceae		Least Concern
120	*Lycium*	*oxycarpum*		Solanaceae		Least Concern
121	*Malva*	*parvifolia*		Malvaceae	Naturalised weed	Not Determined
122	*Melenis*	*repens*		Poaceae		Least Concern
123	*Mestoklema*	*albanicum*		Aizoaceae	Protected	Neat Threatened
124	*Mestoklema*	*tuberosum*		Aizoaceae	Protected	Least Concern
125	*Molobolium*	*microphyllum*		Fabaceae		
126	*Monsonia*	*angustifolia*		Gerianiaceae		
127	*Monsonia*	*vandertietiae*		Gerianiaceae		Least Concern
128	*Moquinella*	*rubra*		Loranthaceae		Least Concern
129	*Nemesia*	*fruiticans*		Scrophulariaceae		Least Concern
130	*Nenax*	*mircophylla*		Rubiaceae		Least Concern
131	*Ocimum*	*burchelliana*		Lamiaceae		
132	*Olea*	*europaea*	*africana*	Oleaceae		Least Concern
133	*Opuntia*	*auranriaca*		Cactaceae	Category 1 Invader	Not Determined
134	*Opuntia*	*ficus indica*		Cactaceae	Category 1 Invader	Not Determined
135	*Opuntia*	*megapotamica*		Cactaceae	Category 1 Invader	Not Determined
136	*Ornithogalum*	*longibracteum*		Hyaninthaceae		Least Concern
137	*Othonna*	*carnosa*		Asteraceae		Least Concern
138	*Oxalis*	*depressa*		Oxilidaceae		Least Concern
139	*Oxalis*	*smithiana*		Oxilidaceae		Least Concern

No	Genus	species	Subsp/ Variation	Family	Provincial Conservation	Current Threat Status
140	*Pachycarpus*	*dealbatus*		Apocynaceae	Protected	Least Concern
141	*Pappea*	*capensis*		Sapindaceae		Least Concern
142	*Pelargononium*	*abrorantifolium*		Gerianaceae		Least Concern
143	*Pelargononium*	*alchemilloides*		Gerianaceae		Least Concern
144	*Pelargononium*	*reniforme*		Gerianaceae		Least Concern
145	*Pelargononium*	*sidoides*		Gerianaceae		Least Concern
146	*Pelargononium*	*sp2.*		Gerianaceae		
147	*Pellaea*	*sp1.*		Pteridiaceae		
148	*Pentzia*	*incana*		Asteraceae		Least Concern
149	*Plantago*	*lancelolata*		Plantaginaceae		Least Concern
150	*Plumbago*	*auriculata*		Plumbaginaceae		Least Concern
151	*Polygala*	*illepidea cf.*		Polygalaceae		Least Concern
152	*Portulacaria*	*afra*		Didieraceae		Least Concern
153	*Rhadamanthus*	*new species to be described*		Hyacinthaceae	Possibly rare and data deficient	Not Determined
154	*Rhoicissus*	*digitata*		Vitaceae		Least Concern
155	*Rhynchosia*	*caribea*		Fabaceae		Least Concern
156	*Rhynchosia*	*totta*	*totta*	Fabaceae		Least Concern
157	*Rushcia*	*britteniae*		Aizoaceae	Protected	Least Concern
158	*Rushcia*	*cradockensis*	*cradockensis*	Aizoaceae	Protected	Least Concern
159	*Salsola*	*kali*		Amaranthaceae	Naturalised weed	Not Determined
160	*Sansieviera*	*aethiopica*		Ruscaceae		Least Concern.
161	*Sansieviera*	*hyacinthoides*		Ruscaceae		Least Concern.
162	*Sarcostemma*	*viminale*		Apocyanaceae	Protected	Least Concern
163	*Schkuhria*	*pinnata*		Asteraceae	Naturalised weed	Not Determined
164	*Schotia*	*afra*	*afra*	Fabaceae		Least Concern
165	*Searsia*	*dentata*		Anacardiaceae		Least Concern
166	*Searsia*	*lancea*		Anacardiaceae		Least Concern
167	*Searsia*	*longispina*		Anacaridaceae		Least Concern
168	*Searsia*	*refracta*		Anacardiaceae		Least Concern
169	*Selago*	*geniculata*		Scrophulariaceae		Least Concern
170	*Selago*	*saxatilis*		Scrophulariaceae		Least Concern
171	*Senecio*	*inaequidens*		Asteraceae		Least Concern
172	*Senecio*	*radicans*		Asteraceae		Least Concern
173	*Setaria*	*sp.*		Poaceae		
174	*Solanum*	*aculeastrum*		Solanaceae		Least Concern
175	*Solanum*	*nigrum*		Solanaceae	Naturalised weed	Naturalised Weed
176	*Solanum*	*sp2.*		Solanaceae		
177	*Solanum*	*tomentosum*		Solanaceae	Naturalised weed	Naturalised Weed
178	*Sporobolus*	*africanus*		Poaceae		Least Concern
179	*Stachys*	*scabrida*		Lamiaceae		Least Concern
180	*Stapelia*	*grandiflora*		Apocynaceae	Protected	Least Concern
181	*Sutera*	*halmifolia*		Scrophulariacee		
182	*Sutera*	*sp2.*		Scrophulariacee		
183	*Syringodea*	*bifucata*		Iridiaceae	Protected	Least Concern
184	*Tachyandra*	*asperata*	*asperata*	Asphodelaceae		Least Concern
185	*Tachyandra*	*sp1.*		Asphodelaceae		
186	*Tagetes*	*minuta*		Asteraceae	Naturalised weed	Naturalised Weed

No	Genus	species	Subsp/ Variation	Family	Provincial Conservation	Current Threat Status
187	*Tephrosia*	*capensis*		Fabaceae		Least Concern
188	*Themeda*	*triandra*		Poaceae		Least Concern
189	*Tribulus*	*terestrius*		Zygophyllaceae		Least Concern
190	*Trichodiadema*	*introrsum*		Aizoaceae		Data Deficient
191	*Trichodiadema*	*pomeridianum*		Aizoaceae	Protected	Least Concern
192	*Trichodiadema*	*sp1.*		Aizoaceae	Protected	Least Concern
193	*Tritonia*	*securigera*		Iridaceae	Protected	Least Concern
194	*Vachellia*	*karoo*		Fabaceae		Least Concern
195	*Verbena*	*bonariensis*		Verbenaceae	Naturalised weed	Naturalised Weed
196	*Viscum*	*rotundifolia*		Santalaceae		Least Concern
197	*Wahlenbergia*	*juncea*		Campalulaceae		Least Concern
198	*Wahlenbergia*	*nodosa*		Campalulaceae		Least Concern
199	*Xanthium*	*spinosum*		Asteraceae	Naturalised weed	Naturalised Weed

Appendix 2: Plants listed in the TBC 2020 Reports as Species of Special Concern

No	Genus	species	Subsp / Variation	TBC 2020 Threat Status	Family	Provincial Conservation Status	Current National Conservation Status	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
1	*Agathosma*	*gonaquensis*		Critcally Rare	Rutaceae		Critically Endangered B1ab(ii,iii,iv,v)	Localised endemic to the Gqeberha metropole	NIL	NO	Trinder-Smith, T. & Raimondo, D. 2006. Agathosma gonaquensis Eckl. & Zeyh. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
2	*Agathosma*	*minuta*		Endangered	Rutaceae		Endangered B1ab(ii,iii,iv,v)	Restricted to the shale geology in Renosterveld in the Western Cape	NIL	NO	Trinder-Smith, T., Helme, N.A., Euston-Brown, D.I.W. & Raimondo, D. 2006. Agathosma minuta Schltdl. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
3	*Aloe*	*micracantha*		Near threatened	Asphodelaceae	Protected	Near Threatened B1ab(ii,iii,iv,v)	Restricted to coastal fynbos mountains	LOW	NO	Mtshali, H. & von Staden, L. 2018. Aloe micracantha Haw. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
4	*Apodolirion*	*macowanii*		Vulnerable	Amaryllidaceae	Protected	Vulnerable A3c; B1ab(i,ii,iii,iv,v)	Known only from 6 populations, of which two have been lost. Widespread spp but more closely linked with Sundays Valley Thicket, Sundays Mesic Thicket, Grahamstown Grassland Thicket, Albany Bontveld and Fish Arid Thicket	LOW	NO	Dold, A.P., Snijman, D.A. & Raimondo, D. 2007. Apodolirion macowanii Baker. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
5	*Aspalathus*	*arenaria*		Vulnerable	Fabaceae		**Vulnerable B1ab(ii,iii,iv,v)**	Highly restricted range (705km^2) from Stilbaai to Gourtiz River Mouth. Strictly coastal in Hartenbos Strandveld, Canca Limestone Fynbos. Found in fynbos-thicket mosaic.	NIL	NO	Schutte-Vlok, A.L. & Raimondo, D. 2007. Aspalathus arenaria R.Dahlgren. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
6	*Aspalathus*	*gerradii*		Vulnerable	Fabaceae		**Vulnerable A2c**	Large range but from KZN southwards to Port St Johns	NIL	NO	von Staden, L. 2008. Aspalathus gerrardii Bolus. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
7	*Brachystelma*	*comptum*		Vulnerable	Apocyanaceae		**Vulnerable D2**	Known only from 5 locations between Uitenhage and Gqeberha. Favours Albany Bontveld, and Grahamstown Grassland Thicket. Local habitat is linked to quatzitic geology	LOW	NO	Victor, J.E. & Dold, A.P. 2007. Brachystelma comptum N.E.Br. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
8	*Brachystelma*	*luteum*		Vulnerable	Apocyanaceae		**Vulnerable D2**	Limited to 5 known populations that are harboured in Grahamstown Grassland Thicket and Albany Valley Thicket.	LOW	NO	Dold, A.P. & Victor, J.E. 2007. Brachystelma luteum Peckover. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24

No	Genus	species	Subsp / Variation	TBC 2020 Threat Status	Family	Provincial Conservation Status	Current National Conservation Status	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
9	*Ceropegia*	*fimbriata*	*fimbriata*	Vulnerable	Apocyanaceae		**Vulnerable D3**	Subspecies not listed in TBC 2020 report. Only 3 known locations. Favours Fish Arid Thicket, Albany Bontveld, Albany Arid Thicket.	**LOW**	**NO**	Peckover, R., Dold, A.P. & Victor, J.E. 2007. Ceropegia fimbriata E.Mey. subsp. fimbriata. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
	Ceropegia	*fimbriata*	*connivens*		Aizoaceae		**Data Deficient**	Subspecies not listed in TBC 2020 report. Limited information regarding distribution. Goldblatt & Manning (2000) record the distribution from Worchester to E Cape – limited to karroid scrub on flats and slopes.	??????	**NO**	Raimondo, D., Manyama, P.A. & Kamundi, D.A. 2007. Ceropegia fimbriata E.Mey. subsp. connivens (R.A.Dyer) Bruyns. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
10	*Corpuscularia*	*lehmannii*		Critcally Rare	Aizoaceae		Critically Endangered, B1ab(i,ii,iii,iv,v)+2ab(i,ii,iii,iv,v)	Most of the known populations have become extinct due to urbanisation and industrial development in the Geberha metropol. EOO<70km2, AOO <5km2. Only being reported in the following vegetation: Algoa Sandstone Fynbos, Sundays Valley Thicket, Motherwell Karroid Thicket, Bethelsdorp Bontveld.	NIL	**NO**	Raimondo, D. & Helme, N.A. 2006. Corpuscularia lehmannii (Eckl. & Zeyh.) Schwantes. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
11	*Crinum*	*campanulata*		Near threatened	Amaryllidaceae	Protected	Near Threatened B1ab(iii)	Species linked to freshwater systems, e.g. seasonal vleis in various types of thickets.	**HIGH**	**NO**	Dold, A.P., Snijman, D.A. & Victor, J.E. 2005. Crinum campanulatum Herb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
12	*Drosanthemum*	*jamesii*		Data Deficient	Aizoaceae	Protected	Data Deficient - Taxonomically Problematic	Limited information on distribution and habitat requirements.	??????	**NO**	Raimondo, D., Manyama, P.A. & Kamundi, D.A. 2008. Drosanthemum jamesii L.Bolus. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
13	*Erica*	*glumiflora*		Vulnerable	Ericaceae	Protected	Vulnerable B1ab(i,ii,iii,iv,v)	Wide distribution along the coast and inland to Makhanda, but limited to the following vegetation types: South Eastern Coastal Thornveld, Groot Brak Dune Strandveld, Algoa Sandstone Fynbos, South Outeniqua Sandstone Fynbos, Suurberg Quartzite Fynbos, Southern Cape Dune Fynbos, Knysna Sand Fynbos, St Francis Dune Thicket, Nanaga Savanna Thicket, Kasouga Dune	NIL	**NO**	Turner, R.C. 2008. Erica glumiflora Klotzsch ex Benth. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24

No	Genus	species	Subsp / Variation	TBC 2020 Threat Status	Family	Provincial Conservation Status	Current National Conservation Status	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
								Thicket, Goukamma Dune Thicket			
14	*Eriospermum*	*bracteatum*		Vulnerable	Ruscaceae	Protected	Vulnerable D2	Limited to Grahamstown Grassland Thicket and only two populations	NIL	NO	Helme, N.A. & Raimondo, D. 2007. Eriospermum bracteatum Archibald. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
15	*Disa*	*lugens*		Vulnerable	Orchidaceae	Protected	Vulnerable C2a(i)	Widely distributed in the Eastern and Western Cape and associated with a host of vegetation types	HIGH	NO	von Staden, L., Liltved, W.R., Oliver, E.G.H. & Oliver, T.A. 2012. Disa lugens Bolus var. lugens. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
16	*Euphorbia*	*meloformis*	*meloformis*	Near threatened	Euphorbiaceae	Protected	Near Threatened B1ab(i,ii,iii,iv,v). Listed as Protected in NEMBA 2007 (both in Feb and Dec Government Gazettes)	EOO = 4030 km2, but a dwindling meta-population due to collectors and over-grazing	100	YES	Raimondo, D., Dold, A.P., Berrington, W., Archer, R.H., Victor, J.E. & von Staden, L. 2014. Euphorbia meloformis Aiton. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
17	*Gladiolus*	*huttonii*		Vulnerable	Iridaceae	Protected	Vulnerable B1ab(i,ii,iii,iv,v)	Wide range (Plettenberg Bay to East London and inland to Makhana) but populations are declining. Restricted largely to the coastal plains	LOW	NO	Raimondo, D. & Vlok, J.H. 2008. Gladiolus huttonii (N.E.Br.) Goldblatt & M.P.de Vos. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
18	*Isoetes*	*wormaldii*		Critcally Rare	Isoetaceae		Critically Endangered C2a(i); D	Restricted to freshwater bodies in Grahamstown Grassland Thicket, and Crossroads Grassland Thicket.	LOW	NO	Victor, J.E. & Dold, A.P. 2007. Isoetes wormaldii Sim. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
19	*Lachenalia*	*convallarioides*		Critcally Rare	Hyacinthaceae	Protected	Critically Endangered D	Only 1 population left, restricted to Suurberg Quartzitic Fynbos.	NIL	NO	Victor, J.E. & Dold, A.P. 2005. Lachenalia convallarioides Baker. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
20	*Leucadendron*	*argenteum*		Endangered	Proteaceae	Protected	Endangered A2c	Restricted to Cape Town and Somerset West.	NIL	NO	Rebelo, A.G., Mtshali, H. & von Staden, L. 2006. Leucadendron argenteum (L.) R.Br. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
21	*Leucospermum*	*cordifolium*		Near threatened	Proteaceae	Protected	Near Threatened A2c+4d	Restricted to the fynbos vegetation between Kogelberg to Soetanysberg.	NIL	NO	Rebelo, A.G., Mtshali, H. & von Staden, L. 2005. Leucospermum cordifolium (Salisb. ex Knight) Fourc. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
22	*Leucospermum*	*praecox*		Vulnerable	Proteaceae	Protected	\Vulnerable A2c+3c+4c	Restricted to fynbos around Mosselbay.	NIL	NO	Rebelo, A.G., Mtshali, H. & von Staden, L. 2006. Leucospermum praecox Rourke. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24

No	Genus	species	Subsp / Variation	TBC 2020 Threat Status	Family	Provincial Conservation Status	Current National Conservation Status	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
23	*Leucospermum*	*vestitum*		Near threatened	Proteaceae	Protected	Near Threatened A2c	Fynbos endemic - Cederberg Mountains to Breede River Valley south of Wolseley, extinct from Paarl to Cape Peninsula.	NIL	NO	Rebelo, A.G., Mtshali, H. & von Staden, L. 2006. Leucospermum vestitum (Lam.) Rourke. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
24	*Mestoklema*	*albanicum*		Near threatened	Aizoaceae	Protected	Near Threatened D2	Wide distribution from Uitenhage to Graaff Reinet, linked to Albany Thickets. Threatened with overgrazing.	HIGH	NO	Victor, J.E. & Dold, A.P. 2004. Mestoklema albanicum N.E.Br. ex Glen. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
25	*Nerine*	*huttoniae*		Vulnerable	Amaryllidaceae	Protected	Vulnerable B1ab(iii,v)	Wide distribution in the Fish River Valley and linked to the following vegetation types: Eastern Upper Karoo, Southern Karoo Riveire and Fish Valley Thicket. If developments were to take place in sandy flood plains then the LOO rating would be high.	MEDIUM	NO	Dold, A.P., McMaster, C. & Raimondo, D. 2016. Nerine huttoniae Schönland. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
26	*Ornithogalum*	*britteniae*		Vulnerable	Hyacinthaceae		**Vulnerable D2**	Known only from 1 population just north of Grahamstown and linked to Saltaire Karooid Thicket.	NIL	NO	Victor, J.E., Dold, A.P. & Turner, R.C. 2006. Ornithogalum britteniae F.M.Leight. ex Oberm. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
27	*Orthopterum*	*waltoniae*		Near threatened	Aizoaceae	Protected	**Near Threatened D2**	Range is from Addo to Makhana and favours shales within Albany Thickets. Threatened from collecting and livestock. In the study area most likely linked to Double Drift Karroid Thickets.	MEDIUM	NO	Dold, A.P. & Raimondo, D. 2011. Orthopterum waltoniae L.Bolus. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
28	*Osteospermum*	*spathulatum*		Data Deficient	Asteraceae		**Data Deficient - Insufficient Information**	Range is listed as Makhanda to Uitenhage on dry karroid slopes in Albany Thicket. Last collected 1914.	LOW	NO	von Staden, L. 2016. Osteospermum spathulatum (DC.) Norl. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/2
29	*Pelargonium*	*campestre*		Data Deficient	Geraniaceae		**Data Deficient - Insufficient Information**	Insufficient knowledge on the species to predict distribution - but is likely a fynbos species.	LOW	NO	Manyama, P.A. & Kamundi, D.A. 2006. Pelargonium campestre (Eckl. & Zeyh.) Steud. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
30	*Searsia*	*albomarginata*		Critcally Rare	Anacardiaceae		Critically Endangered D	Known from a highly restricted population of 50 mature plants (EOO < 30km2). Only known west of Makhanda	NIL	NO	Victor, J.E. & Dold, A.P. 2005. Searsia albomarginata (Sond.) Moffett. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
31	*Senecio*	*hirtellus*		Data Deficient	Asteraceae		**Data Deficient - Taxonomically Problematic**	Very little information on distribution is available	????	NO	Matlamela, P.F., Raimondo, D. & Kamundi, D.A. 2008. Senecio hirtellus DC. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24

No	Genus	species	Subsp / Variation	TBC 2020 Threat Status	Family	Provincial Conservation Status	Current National Conservation Status	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
32	*Strelitzia*	*juncea*		Vulnerable	Strelitziaceae	Protected	Vulnerable B1ab(ii,iii,v	Restricted to the arid succulent thicket (Sundays Valley Thickey) between Patensie and Gqeberha	NIL	NO	Schutte-Vlok, A.L., Vlok, J.H., Dold, A.P. & Raimondo, D. 2008. Strelitzia juncea Link. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24

Appendix 3. Potential SSC as listed by Hoare (2014)

No	Genus	species	Subsp / Variation	Hoare 2010 Threat Status	Provincial Conservation Status	Current Threat Status SANBI	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
1	*Apodolirion*	*macowanii*				Vulnerable A3c; B1ab(i,ii,iii,iv,v)	Wide distribution and cryptic species associated with Thicket	**HIGH**		Dold, A.P., Snijman, D.A. & Raimondo, D. 2007. Apodolirion macowanii Baker. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/19
2	*Ceropegia*	*fimbriata*	*fimbriata*			Vulnerable D2	Only known from 3 populations and associated with arid Thicket	**LOW**		Peckover, R., Dold, A.P. & Victor, J.E. 2007. Ceropegia fimbriata E.Mey. subsp. fimbriata. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/19
3	*Corycium*	*tricuspidatum*			Protected EC Prov Ordinance 1974.	Not determined SANBI	Eastern Cape and KZN distribution, key threat is afforestation (site is dry). "Lower Risk" catergory in Golding 2002.	**MEDIUM**		Golding, J. 2002. South African Red Data Plant List. South African Biodiversity NetworkReport no 14. National Biodiversity Institute, Pretoria, South Africa.
4	*Crassula*	*decidua*				Near Threatened DT	Associated with low karroid vegetation amongst Euphorbias and in close proximity to rivers	**LOW**		Raimondo, D. 2005. Crassula decidua Schönland. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/19
5	*Crinum*	*macowanii*			Protected EC Prov Ordinance 1974.	Least Concern	Not endemic to South Africa, widely distributed and occurs in a number of biomes.	**MEDIUM**		Williams, V.L., Raimondo, D., Crouch, N.R., Cunningham, A.B., Scott-Shaw, C.R., Lötter, M., Ngwenya, A.M. & Brueton, V.J. 2016. Crinum macowanii Baker. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/19
6	*Drimia*	*altissima*				Least Concern	Exceptionally wide distribution and high numbers in the WEF	**HIGH**	**YES**	Williams, V.L., Raimondo, D., Crouch, N.R., Brueton, V.J., Cunningham, A.B., Scott-Shaw, C.R., Lötter, M. & Ngwenya, A.M. 2016. Drimia altissima (L.f.) Ker Gawl. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/20
7	*Encephalartos*	*lehmannii*			Protected EC Prov Ordinance 1974.	Near Threatened A2d	Wide distribution through a number of biomes. The species is declining and goats are listed as a key driver, with poaching as well. Nkurenkuru 2018 could not locate this species in the WEF	**MEDIUM**		Donaldson, J.S. 2009. Encephalartos lehmannii Lehm. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/20. Botha G. 2018. ECOLOGICAL COMMENTS: PROPOSED AMENDMENT TO THE AUTHORISED MSENGE WIND ENERGY FACILITY WIND ENERGY FACILITY (DEA REF 12/12/20/1754/2) – AMENDMENTS TO TURBINE SPECIFICATIONS.
8	*Hermannia*	*violacea*				Rare	Only know from 3 sites, typically found in grasslands near forest margins	**LOW**		Bredenkamp, C.L., Victor, J.E. & Raimondo, D. 2007. Hermannia violacea (Burch. ex DC.) K.Schum. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/20
9	*Holothrix*	*macowaniana*			Protected EC Prov Ordinance 1974.	Data deficient	Know from 3 collections (pre1900) and limited knowledge distribution but is known to favour forest ravines.	**LOW**		von Staden, L. & Victor, J.E. 2006. Holothrix macowaniana Rchb.f. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/2
10	*Huernia*	*kennedyana*				Least Concern	Species is rare with a restricted range (escarpment mountains between Cradock and Pearston)	**LOW**		Raimondo, D. & Dold, A.P. 2019. Huernia kennedyana Lavranos. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
11	*Nerine*	*huttoniae*			Protected EC Prov Ordinance 1974.	Vulnerable	Unlikely to be at risk from the proposed developments due to the riparian buffering. Species niche is alluvial floodplains.	**MEDIUM**		Dold, A.P., McMaster, C. & Raimondo, D. 2016. Nerine huttoniae Schönland. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/19

Appendix 4. The full list of species listed by Hoare (2010), with comments[36], updated taxonomic status, LOO ratings, located in situ data and relevant references for threat status.

No	Genus	species	Subsp / Variation	Family	Provincial Conservation Status	Current National Status SANBI	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
1	*Acalypha*	*caperonioides*	*caperonioides*	Euphorbiaceae		Data Deficient - Taxonomically problematic	Distribution limnited to the northern Provinces	**NIL**	**NO**	von Staden, L. & Archer, R.H. 2009. Acalypha caperonioides Baill. var. caperonioides. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
2	*Acalypha*	*caperonioides*	*galpinii*	Euphorbiaceae		Data Deficient - Taxonomically problematic	Limited to Mpumalanga	**NIL**	**NO**	von Staden, L. & Archer, R.H. 2009. Acalypha caperonioides Baill. var. galpinii Prain. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
3	*Acrotome*	*inflata*		Lamiaceae		Least Concern	Widely distributed weedy spp. Eastern Cape, Free State, Gauteng, Limpopo, Mpumalanga, Northern Cape, North West		**NO**	Foden, W. & Potter, L. 2005. Acrotome inflata Benth. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/2
4	*Adiantum*	*capillus-veneris*		Pteridaceae	Protected	Least Concern	Widely distributed fern spp.	HIGH	**NO**	Foden, W. & Potter, L. 2005. Adiantum capillus-veneris L. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
5	*Adiantum*	*poiretii*		Pteridaceae	Protected	Least Concern	Wide distribution but limited to very moist microsites	LOW	**NO**	Foden, W. & Potter, L. 2005. Adiantum poiretii Wikstr. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
6	*Agathosma*	*apiculata*		Rutaceae	Protected	Least Concern	Associated mostly with coastal areas: dune fybos and dune thicket.	LOW	**NO**	Foden, W. & Potter, L. 2005. Agathosma apiculata E.Mey. ex Bartl. & H.L.Wendl. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
7	*Agathosma*	*bicornuta*		Rutaceae	Protected	Endangered A2ac; B1ab(i,ii,iii,iv,v	Species distribution is limited to Grahamstown. Species found between grassy fynbos (on Ecca quartz) and Nama Karoo (on Dwyka formation) on	**NIL**	**NO**	Dold, A.P., Trinder-Smith, T. & Victor, J.E. 2006. Agathosma bicornuta R.A.Dyer. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25

[36] Yellow highlights indicate provincial or national threatened species. Red highlights indicate species UNLIKELY to occur in the study area. Orange indicates those species which have undergone taxonomic changes. Green indicates species found by RRRG in 2022.

No	Genus	species	Subsp / Variation	Family	Provincial Conservation Status	Current National Status SANBI	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
							south-facing ridge.			
8	*Agathosma*	*ovata*		Rutaceae	Protected	Least Concern	Wide distribution in the Eastern Cape	LOW	**NO**	Trinder-Smith, T. & Victor, J.E. 2002. Agathosma ovata (Thunb.) Pillans. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
9	*Agathosma*	*puberula*		Rutaceae	Protected	Least Concern	Range from Humansdorp to Grahamstown	LOW	**NO**	Foden, W. & Potter, L. 2005. Agathosma puberula (Steud.) Fourc. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
10	*Aizoon*	*glinoides*		Aizoaceae	Protected	Least Concern	Ubiqiutous weedy species in the Eastern and Western Cape.	100	**YES**	Foden, W. & Potter, L. 2005. Aizoon glinoides L.f. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
11	*Alchemilla*	*capensis*		Rosaceae		Least Concern	Widely distributed: Eastern Cape, KwaZulu-Natal, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Alchemilla capensis Thunb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
12	*Alepidea*	*capensis*	*capensis*	Apiaceae		Data Deficient - Taxonomically	Eastern and Western Cape Endemic - wide distrribution		**NO**	Goldblatt, P. & Manning, J. 2000. Cape Plants - A conspectus of the Cape Flora of South Africa. Strelitzia 9. National Botanical Institute, Pretoria. Raimondo, D. 2008. Alepidea capensis (P.J.Bergius) R.A.Dyer var. tenella (Schltr. & H.Wolff) Weim. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
13	*Alepidea*	*macowani*		Apiaceae		Vulnerable A2ad; B1ab(v)	Linked to moist grasslands in the Eastern Cape	LOW	**NO**	Williams, V.L. & Dold, A.P. 2008. Alepidea macowani Dummer. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
14	*Allophylus*	*decipiens*		Sapindaceae		Least Concern	Usually linked to mesic thickets and forests	LOW	**NO**	Victor, J.E. & van Wyk, A.E. 2005. Allophylus decipiens (Sond.) Radlk. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
15	*Aloe*	*africana*		Asphodelaceae	Protected	Least Concern	Narrow range in the Eastern Cape from the Gamtoos River to Port Alfred, but below 300m amsl.	**NIL**	**NO**	Mtshali, H. & von Staden, L. 2018. Aloe africana Mill. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
16	*Aloe*	*speciosa*		Asphodelaceae	Protected	Least Concern	Occurs in the drier rocky areas of fynbos and thicket	MEDIUM	**NO**	Mtshali, H. 2018. Aloe speciosa Baker. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25

No	Genus	species	Subsp / Variation	Family	Provincial Conservation Status	Current National Status SANBI	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
17	*Aloe*	*striata*	*striata*	Asphodelaceae	Protected	Least Concern	Eastern and Western Cape Endemic - wide distrribution	100	**YES**	Mtshali, H. & von Staden, L. 2018. Aloe striata Haw. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
18	*Amellus*	*strigosus*	*pseudoscabridus*	Asteraceae		Least Concern	Eastern Cape endemic		**NO**	Foden, W. & Potter, L. 2005. Amellus strigosus (Thunb.) Less. subsp. pseudoscabridus Rommel. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
19	*Ammocharis*	*coranica*		Amaryllidaceae	Protected	Least Concern	Extremely wide distribution	100	**YES**	Snijman, D.A. & Victor, J.E. 2004. Ammocharis coranica (Ker Gawl.) Herb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
20	*Anacampseros*	*arachnoides*		Anacampserotaceae	Protected	Least Concern	Little Karoo to Kingwilliamstown. Favours rocky areas	100	**YES**	von Staden, L. 2015. Anacampseros arachnoides (Haw.) Sims. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
21	*Anthospermum*	*aethiopicum*		Rubiaceae		Least Concern	Widely distributed : Eastern Cape, Mpumalanga, North West, Western Cape- also outside SA		**NO**	Foden, W. & Potter, L. 2005. Anthospermum aethiopicum L. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
22	*Aptosimum*	*procumbens*		Scrophulariaceae		Least Concern	Eastern Cape, Free State, Northern Cape, North West, Western Cape	100	**YES**	Foden, W. & Potter, L. 2005. Aptosimum procumbens (Lehm.) Steud. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
23	*Arctotis*	*arctotoides*		Asteraceae		Least Concern	National Distribution	100	**YES**	Foden, W. & Potter, L. 2005. Arctotis arctotoides (L.f.) O.Hoffm. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
24	*Arctotis*	*microcephala*		Asteraceae		Least Concern	Eastern Cape, Free State, Gauteng, Northern Cape, North West, Western Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Arctotis microcephala (DC.) Beauverd. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
25	*Argyrolobium*	*pauciflorum*		Fabaceae		Least Concern	Eastern Cape, Free State and Mpumalanga	HIGH	**NO**	Foden, W. & Potter, L. 2005. Argyrolobium pauciflorum Eckl. & Zeyh. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
26	*Aristea*	*confusa*		Iridaceae	Protected	Least Concern	Name chaned to Aristea bakeri. Coastal and fold-mountain plain species in the	MEDIUM	**NO**	Foden, W. & Potter, L. 2005. Aristea bakeri Klatt. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26

No	Genus	species	Subsp / Variation	Family	Provincial Conservation Status	Current National Status SANBI	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
							Western and Eastern Cape			
27	*Asclepias*	*gibba*		Asclepiaceae	Protected	Least Concern	Distribution is mostlu in the northern provinces so this would be at the extreme end of the species range.	**MEDIUM**	**NO**	Foden, W. & Potter, L. 2005. Asclepias gibba (E.Mey.) Schltr. var. gibba. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
28	*Aspalathus*	*chortophila*		Fabaceae		Least Concern	Mountain fynbos, grassy fynbos and grassland.	MEDIUM	**NO**	Foden, W. & Potter, L. 2009. Aspalathus chortophila Eckl. & Zeyh. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
29	*Aspalathus*	*cinerascens*		Fabaceae		Least Concern	Widespread in mountainous areas of the Eastern Cape	HIGH	**NO**	von Staden, L. & Dayaram, A. 2011. Aspalathus cinerascens E.Mey. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
30	*Aspalathus*	*frankenioides*		Fabaceae		Least Concern	Rocky or sandy mountain and hill slopes in fynbos and thicket - especially degraded sites	HIGH	**NO**	Foden, W. & Potter, L. 2009. Aspalathus frankenioides DC. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
31	*Aspalathus*	*subtingens*		Fabaceae		Least Concern	Widespread in the old Cape provinces	HIGH	**NO**	Foden, W. & Potter, L. 2009. Aspalathus subtingens Eckl. & Zeyh. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
32	*Asparagus*	*aethiopicus*		Fabaceae		Least Concern	Ubiquitous in dry and coastal habitats: Albany Thicket, Fynbos, Grassland, Indian Ocean Coastal Belt, Nama Karoo, Savanna, Succulent Karoo	HIGH	**NO**	von Staden, L. 2012. Asparagus aethiopicus L. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
33	*Asparagus*	*capensis*		Asparagaceae		Least Concern	Eastern Cape, Northern Cape, Western Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Asparagus capensis L. var. capensis. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
34	*Asparagus*	*laricinus*		Asparagaceae		Least Concern	Common species but study site is the very southern end of its range	MEDIUM	**NO**	Burrows, S.M. & von Staden, L. 2018. Asparagus laricinus Burch. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
35	*Asparagus*	*burchellii*		Asparagaceae		Least Concern	Endemic to the old Cape Provinces		**NO**	Foden, W. & Potter, L. 2005. Asparagus burchellii Baker. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/2

No	Genus	species	Subsp / Variation	Family	Provincial Conservation Status	Current National Status SANBI	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
36	*Asparagus*	*concinnus*		Asparagaceae		Least Concern	A range restricted species (NW parts of the Eastern Cape)	MEDIUM	**NO**	Burrows, S.M. & von Staden, L. 2018. Asparagus concinnus (Baker) Kies. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
37	*Asparagus*	*cooperi*		Asparagaceae		Least Concern	All provinces	HIGH	**NO**	Foden, W. & Potter, L. 2005. Asparagus cooperi Baker. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
38	*Asparagus*	*densiflorus*		Asparagaceae		Least Concern	Wide distribution in the following provinces: distribution Eastern Cape, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga	HIGH	**NO**	Foden, W. & Potter, L. 2005. Asparagus densiflorus (Kunth) Jessop. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
39	*Asparagus*	*denudatus*		Asparagaceae		Least Concern	Wide distribution: Eastern Cape, Free State, KwaZulu-Natal, Limpopo, Northern Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Asparagus denudatus (Kunth) Baker. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
40	*Asparagus*	*mucronatus*		Asparagaceae		Least Concern	Limited to the old Cape provinces	HIGH	**NO**	Foden, W. & Potter, L. 2005. Asparagus mucronatus Jessop. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
41	*Asparagus*	*striatus*		Asparagaceae		Least Concern	Wide distribution: Eastern Cape, Free State, Northern Cape, Western Cape	100	**YES**	Foden, W. & Potter, L. 2005. Asparagus striatus (L.f.) Thunb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
42	*Asparagus*	*suaveolens*		Asparagaceae		least Concern	All provinces	100	**YES**	Foden, W. & Potter, L. 2005. Asparagus suaveolens Burch. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
43	*Asplenium*	*platyneuron*		Aspleniaceae		Least Concern	Wide distribution		**NO**	Foden, W. & Potter, L. 2005. Asplenium platyneuron (L.) Britten, Sterns & Poggenb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/2
44	*Asplenium*	*varians*	*fimbriatum*	Aspleniaceae		Least Concern	Eastern Cape, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga		**NO**	Foden, W. & Potter, L. 2005. Asplenium varians Wall. ex Hook. & Grev. subsp. fimbriatum (Kunze) Schelpe. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
45	*Aster*	*bakeranus*		Asteraceae		Not Determined	Name has changed to *Afroaster hispida*. Widely distributed:	HIGH	**NO**	Foden, W. & Potter, L. 2005. Afroaster hispida (Thunb.) J.C.Manning & Goldblatt. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26

No	Genus	species	Subsp / Variation	Family	Provincial Conservation Status	Current National Status SANBI	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
							Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Mpumalanga, Western Cape			
46	*Athanasia*	*dentata*		Asteraceae		Least Concern	Eastern and Western Cape endemic		**NO**	Foden, W. & Potter, L. 2005. Athanasia dentata (L.) L. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
47	*Azima*	*tetracantha*		Salvadoraceae		Least Concern	Ubiquitous, especially in thicket	100	**YES**	Foden, W. & Potter, L. 2005. Azima tetracantha Lam. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
48	*Barleria*	*pungens*		Acanthaceae		Least Concern	Widely distributed in Eastern and Western Cape	100	**YES**	Helme, N.A. & Raimondo, D. 2006. Barleria pungens L.f. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/2
49	*Bergeranthus*	*verpertinus*		Aizoaceae	Protected	Least Concern	Eastern Cape Endemic	HIGH	**NO**	Burgoyne, P.M. 2006. Bergeranthus vespertinus (A.Berger) Schwantes. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
50	*Berkheya*	*disclor*		Asteraceae		Least Concern	Distributed widely: Eastern Cape, Free State, KwaZulu-Natal, North West	HIGH	**NO**	Foden, W. & Potter, L. 2005. Berkheya discolor (DC.) O.Hoffm. & Muschl. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
51	*Berkheya*	*carlinifolia*	*carlinifolia*	Asteraceae		Least Concern	Endemic to the Eastern and Western Cape	HIGH	**NO**	Kamundi, D.A. 2005. Berkheya carlinifolia (DC.) Roessler subsp. carlinifolia. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
52	*Berkheya*	*decurrens*		Asteraceae		Least Concern	Eastern Cape endemic	100	**YES**	Foden, W. & Potter, L. 2005. Berkheya decurrens (Thunb.) Willd. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
53	*Berkheya*	*heterophylla*		Asteraceae		Least Concern	KZN and Eastern Cape		**NO**	Foden, W. & Potter, L. 2005. Berkheya heterophylla (Thunb.) O.Hoffm. var. heterophylla. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
54	*Berkheya*	*onopordifolia*	*glabra*	Asteraceae		Least Concern	Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Mpumalanga, North West		**NO**	Foden, W. & Potter, L. 2005. Berkheya onopordifolia (DC.) O.Hoffm. ex Burtt Davy var. glabra Bohnen ex Roessler. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
55	*Berkheya*	*onopordifolia*	*onopordifolia*	Asteraceae		Least Concern	Widely distributed Eastern Cape, Free State,		**NO**	Foden, W. & Potter, L. 2005. Berkheya onopordifolia (DC.) O.Hoffm. ex Burtt Davy var. onopordifolia. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26

No	Genus	species	Subsp / Variation	Family	Provincial Conservation Status	Current National Status SANBI	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
							Gauteng, KwaZulu-Natal, Mpumalanga, North West			
56	*Blechnum*	*australe*	*australe*	Blechnaceae		Least Concern	Fern spp found in all 9 provinces - study site maybe too dry	LOW	**NO**	von Staden, L. 2017. Blepharis capensis (L.f.) Pers. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
57	*Blepharis*	*capensis*	*capensis*	Acanthaceae		Least Concern	Eastern Cape, Free State, Northern Cape, Western Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Blechnum capense Burm.f. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
58	*Blepharis*	*integrifolia*	*clarkei*	Acanthaceae		Least Concern	Eastern Cape, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga		**NO**	Kamundi, D.A. 2006. Blepharis integrifolia (L.f.) E.Mey. ex Schinz var. clarkei (Schinz) Oberm. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
59	*Blepharis*	*integrifolia*	*integrifolia*	Acanthaceae		Least Concern	All nine provinces		**NO**	Kamundi, D.A. 2006. Blepharis integrifolia (L.f.) E.Mey. ex Schinz var. integrifolia. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
60	*Blepharis*	*mitrata*		Acanthaceae		Least Concern	Old Cape provinces		**NO**	Raimondo, D., von Staden, L., Foden, W., Victor, J.E., Helme, N.A., Turner, R.C., Kamundi, D.A. and Manyama, P.A. 2009. Red List of South African Plants. Strelitzia 25. South African National Biodiversity Institute, Pretoria
61	*Bobartia*	*orientalis*	*orientalis*	Iridaceae	Protected	Least Concern	Widely distributed, mostly fynbos and grassy fynbos, increases drastically with over-grazing	LOW	**NO**	Foden, W. & Potter, L. 2005. Bobartia orientalis J.B.Gillett subsp. orientalis. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
62	*Bonatea*	*cassidea*		Orchidaceae	Protected	Least Concern	Widespread along the east coast of SA - study site may be too dry and at the end of its range (south west)	MEDIUM	**YES**	von Staden, L. 2017. Bonatea cassidea Sond. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
63	*Boophane*	*distichia*		Amaryllidaceae	Protected	Least Concern	Found across these vegetation types:Albany Thicket, Fynbos, Grassland, Indian Ocean Coastal Belt, Nama Karoo,	100	**YES**	Williams, V.L., Raimondo, D., Brueton, V.J., Crouch, N.R., Cunningham, A.B., Scott-Shaw, C.R., Lötter, M. & Ngwenya, A.M. 2016. Boophone disticha (L.f.) Herb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25

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							Savanna, Succulent Karoo			
64	*Boscia*	*oleoides*		Brassicaceae		Least Concern	Wide distribution in the Eastern Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Boscia oleoides (Burch. ex DC.) Toelken. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
65	*Brachylaena*	*elliptica*		Asteraceae		Least Concern	Wide distribution from Uitenhage to Zululand		**NO**	von Staden, L. 2018. Brachylaena elliptica (Thunb.) DC. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
66	*Brachylaena*	*ilicifolia*		Asteraceae		Least Concern	Favours dry thickets and savannas	HIGH	**NO**	von Staden, L. 2018. Brachylaena ilicifolia (Lam.) E.Phillips & Schweick. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
67	*Buddleja*	*saligna*		Scrophulariaceae		Least Concern	Occurs in all 9 provinces	HIGH	**NO**	Foden, W. & Potter, L. 2005. Buddleja saligna Willd. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
68	*Bulbine*	*abyssinica*		Asphodelaceae		Least Concern	Occurs in all 9 provinces	HIGH	**NO**	Foden, W. & Potter, L. 2005. Bulbine abyssinica A.Rich. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
69	*Bulbine*	*frutescens*		Asphodelaceae		Least Concern	Occurs in all 9 provinces	100	**YES**	Foden, W. & Potter, L. 2005. Bulbine frutescens (L.) Willd. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
70	*Bulbine*	*narcissifolia*		Asphodelaceae		Least Concern	Wide distribution but limited to the Eastern Cape, Free State and Gauteng	100	**YES**	Foden, W. & Potter, L. 2005. Bulbine narcissifolia Salm-Dyck. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
71	*Bulbostylis*	*humilis*		Cyperaceae		Least Concern	Occurs in all 9 provinces	HIGH	**NO**	Foden, W. & Potter, L. 2005. Bulbostylis humilis (Kunth) C.B.Clarke. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
72	*Burchellia*	*bubalina*		Rubiaceae		Least Concern	Wide distribution: Eastern Cape, Free State, KwaZulu-Natal, Limpopo, Mpumalanga, Western Cap	HIGH	**NO**	Foden, W. & Potter, L. 2005. Burchellia bubalina (L.f.) Sims. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
73	*Cadaba*	*aphylla*		Brassicaceae		Least Concern	Wide distribution: Eastern Cape, Free State, Limpopo, Northern Cape, North West, Western Cape	100	**YES**	Foden, W. & Potter, L. 2005. Cadaba aphylla (Thunb.) Wild. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26

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74	*Calpurnia*	*aurea*	*aurea*	Fabaceae		Least Concern	Wide distribution but prefers more mesic thickets, woodlands or forests. Study site is too dry	**NIL**	**NO**	Foden, W. & Potter, L. 2005. Calpurnia aurea (Aiton) Benth. subsp. aurea. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26. Pooley, E. 1997. The Complete Guide to the Trees of Natal, Zululand and Transkei. Natal Flora Publications Trust. Durban.
75	*Canthium*	*ciliatum*		Canthaceae		Least Concern	Wide distribtion: Eastern Cape, Free State, KwaZulu-Natal, Limpopo, Mpumalanga, Northern Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Canthium ciliatum (Klotzsch) Kuntze. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
76	*Capparis*	*sepiaria*	*citrifolia*	Brassicaceae		Least Concern	Widely distributed in Eastern Cape, KwaZulu Natal and Western Cape	100	**YES**	Foden, W. & Potter, L. 2005. Capparis sepiaria L. var. citrifolia (Lam.) Toelken. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
77	*Carex*	*glomerabilis*		Cyperaceae		Least Concern	Eastern Cape, KwaZulu-Natal, Limpopo, Mpumalanga	HIGH	**NO**	Foden, W. & Potter, L. 2005. Carex glomerabilis Krecz. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
78	*Carex*	*mossii*		Cyperaceae		Least Concern	Eastern Cape, KwaZulu-Natal, Limpopo, Mpumalanga	HIGH	**NO**	Foden, W. & Potter, L. 2005. Carex mossii Nelmes. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
79	*Catha*	*edulis*		Celastraceae		Protected Tree: National Forests Act	Found in dry woodland and on rocky outcrops.	HIGH	**NO**	Geldenhuys, C.J. & Victor, J.E. 2004. Catha edulis (Vahl) Forssk. ex Endl. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25. Pooley 1997. The Complete Guide to Trees of Natal, Zululand and Transkei. Nata
80	*Ceropegia*	*zeyheri*		Apocynaceae	Protected	Least Concern	Eastern Cape and Western Cape Endemic		**NO**	Manyama, P.A. & Kamundi, D.A. 2006. Ceropegia zeyheri Schltr. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
81	*Chasmatophyllum*	*musculinum*		Aizoaceae	Protected	Least Concern	Widespread and not endemic to SA: Eastern Cape, Free State, Gauteng, Mpumalanga, Northern Cape, North West, Western Cape	100	**YES**	Burgoyne, P.M. 2006. Chasmatophyllum musculinum (Haw.) Dinter & Schwantes. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23

No	Genus	species	Subsp / Variation	Family	Provincial Conservation Status	Current National Status SANBI	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
82	*Cheilanthes*	*bergiana*		Pteridaceae		Least Concern	Widely distributed: Eastern Cape, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Cheilanthes bergiana Schltdl. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
83	*Cheilanthes*	*eckloniana*		Pteridaceae		Least Concern	All provinces		**NO**	Foden, W. & Potter, L. 2005. Cheilanthes eckloniana (Kunze) Mett. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
84	*Cheilanthes*	*quadripinnata*		Pteridaceae		Least Concern	All provinces		**NO**	Foden, W. & Potter, L. 2005. Cheilanthes quadripinnata (Forssk.) Kuhn. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
85	*Chlorophytum*	*crispum*		Agavaceae		Least Concern	Widely distributed in Eastern and Western Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Chlorophytum crispum (Thunb.) Baker. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
86	*Chrysocoma*	*ciliata*		Asteraceae		Least Concern	All provinces	100	**YES**	Foden, W. & Potter, L. 2005. Chrysocoma ciliata L. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
87	*Cineraria*	*saxifraga*		Asteraeae		Least Concern	Eastern Cape endemic		**NO**	Cron, G.V. & Victor, J.E. 2005. Cineraria saxifraga DC. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/2
88	*Clematis*	*brachiata*		Ranunculaceae		Least Concern	All provinces	HIGH	**NO**	Foden, W. & Potter, L. 2005. Clematis brachiata Thunb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
89	*Cliffortia*	*paucistaminea*		Rosaceae		Least Concern	Not endemic to SA and widely distributed: Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Cliffortia paucistaminea Weim. var. paucistaminea. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
90	*Clutia*	*pulchella*	*pulchella*	Euphorbiaceae		Least Concern	All but 1 province: Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, Western Cape		**NO**	Archer, R.H. & Victor, J.E. 2005. Clutia pulchella L. var. pulchella. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26

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91	*Clutia*	*heterophylla*		Euphorbiaceae		Least Concern	Eastern Cape Endemic		**NO**	Archer, R.H. & Victor, J.E. 2005. Clutia heterophylla Thunb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
92	*Colchicum*	*longipes*		Colchicaceae		Least Concern	Eastern Cape Endemic		**NO**	Foden, W. & Potter, L. 2005. Colchicum longipes (Baker) J.C.Manning & Vinn. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
93	*Commelina*	*africana*	*africana*	Commelinaceae		Least Concern	All provinces bar Western and Eastern cape	100	**YES**	Foden, W. & Potter, L. 2005. Commelina africana L. var. africana. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
94	*Convolvulus*	*farinosus*		Convolvulaceae		Least Concern	Not endemic to SA and widely distributed: Eastern Cape, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, North West, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Convolvulus farinosus L. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
95	*Cotyledon*	*orbiculata*	*orbiculata*	Crassulaceae		Least Concern	Endemic to the old Cape Provinces	HIGH	**NO**	Foden, W. & Potter, L. 2005. Cotyledon orbiculata L. var. orbiculata. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
96	*Crassula*	*latibracteata*		Crassulaceae		Least Concern	Eatern Cape endemic: Riebeeck East to the Fish River: Suurberg Quartzite Fynbos, Saltaire Karroid Thicket, Grahamstown Grassland Thicket, Fish Valley Thicket, Crossroads Grassland Thicket	HIGH	**NO**	von Staden, L. 2018. Crassula latibracteata Toelken. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
97	*Crassula*	*perfoliata*	*perfoliata*	Crassulaceae	Protected	Least Concern	Eastern Cape endemic prefering dry karroid scrub on lower stony slopes. Port Elizabeth to Graaff Reinet.	HIGH	**NO**	Smith, G.F., Crouch, N.R., & Figueiredo, E. 2017. Field Guide to the Succulents in Southern Africa. Struik Nature, Cape Town Foden, W. & Potter, L. 2005. Crassula perfoliata L. var. perfoliata. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26

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98	*Crassula*	*rupestris*	*rupestris*	Crassulaceae		Least Concern	Widely distributed in Eastern and Western Cape, specifically rocky areas on slopes in Albany Thicket, Fynbos, Nama Karoo, and Succulent Karoo.	HIGH	**NO**	Foden, W. & Potter, L. 2009. Crassula rupestris Thunb. subsp. rupestris. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
99	Crassula	arborescens	*arborescens*	Crassulaceae		Least Concern	No subspecies listed in Hoare 2010.	**NIL**	NO	Foden, W. & Potter, L. 2009. Crassula arborescens (Mill.) Willd. subsp. arborescens. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
100	*Crassula*	*arborescens*	*undulatifolia*	Crassulaceae		Critically Rare	No subspecies listed in Hoare 2010. Limited to a narrow range: mountains between Worcester and Prince Albert in the Western Cape	**NIL**	**NO**	van Jaarsveld, E.J., Victor, J.E. & Helme, N.A. 2006. Crassula arborescens (Mill.) Willd. subsp. undulatifolia Toelken. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
101	*Crassula*	*capitella*	*capitella*	Crassulaceae		Least Concern	Widely distributed Free State, Western Cape Eastern Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Crassula capitella Thunb. subsp. capitella. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
102	*Crassula*	*capitella*	*thyrsiflora*	Crassulaceae		Least Concern	Widely distributed Free State, Western Cape Eastern Cape, N Cape and KZN	HIGH	**NO**	Foden, W. & Potter, L. 2005. Crassula capitella Thunb. subsp. thyrsiflora (Thunb.) Toelken. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
103	*Crassula*	*cultrata*		Crassulaceae		Least Concern	Eastern Cape and KZN : specifically Albany Thicket, Fynbos, Grassland, Indian Ocean Coastal Belt, Nama Karoo, Succulent Karoo	HIGH	**NO**	
104	*Crassula*	*dependens*		Crassulaceae		Least Concern	Widely distributed: Eastern Cape, Free State, KwaZulu-Natal,	HIGH	**NO**	Foden, W. & Potter, L. 2005. Crassula dependens Bolus. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23

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							Mpumalanga, Northern Cape, Western Cape			
105	*Crassula*	*mesembryanthoides*	*hispida*	Crassulaceae		Least Concern	Eastern Cape endemic with a wide distribiution	HIGH	**YES**	Foden, W. & Potter, L. 2005. Crassula mesembryanthoides (Haw.) D.Dietr. subsp. hispida (Haw.) Toelken. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
106	*Crassula*	*mesembryanthoides*	*mesembryanthoides*	Crassulaceae		Least Concern	Eastern Cape endemic with a wide distribiution	100	**YES**	Foden, W. & Potter, L. 2005. Crassula mesembryanthoides (Haw.) D.Dietr. subsp. mesembryanthoides. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
107	*Crassula*	*mollis*		Crassulaceae		Least Concern	Limited to these vegetation types in the Eastern and Western Cape: Albany Thicket, Fynbos, Succulent Karo	HIGH	**NO**	Foden, W. & Potter, L. 2009. Crassula mollis Thunb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
108	*Crassula*	*muscosa*		Crassulaceae		Least Concern	Wide distribution: Cape Provinces, Free State and southerm Namibia	HIGH	**NO**	Eastern Cape, Free State, Northern Cape, Western Cape
109	*Crassula*	*ovata*		Crassulaceae		Least Concern	Wide distribution Eastern Cape and KZN : Albany Thicket, Fynbos, Grassland, Indian Ocean Coastal Belt, Savanna	HIGH	**NO**	Foden, W. & Potter, L. 2009. Crassula ovata (Mill.) Druce. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
110	*Crassula*	*tetragona*		Crassulaceae		Least Concern	Widely distributed in old Cape Provinces	HIGH	**NO**	Foden, W. & Potter, L. 2005. Crassula tetragona L. subsp. tetragona. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
111	*Crinum*	*macowanii*		Amaryllidaceae	Protected		Not endemic to South Africa, widely distributed and occurs in a number of biomes.	MEDIUM	**NO**	Williams, V.L., Raimondo, D., Crouch, N.R., Cunningham, A.B., Scott-Shaw, C.R., Lötter, M., Ngwenya, A.M. & Brueton, V.J. 2016. Crinum macowanii Baker. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/19
112	*Crinum*	*campanulatum*		Amaryllidaceae	Protected	Near Threatened B1ab(iii	Species linked to freshwater systems, e.g. seasonal vleis in various types of thickets.	HIGH	**NO**	Dold, A.P., Snijman, D.A. & Victor, J.E. 2005. Crinum campanulatum Herb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26

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113	*Cucumis*	*zeyheri*		Cucurbitaceae		Least Concern	Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, Northern Cape, North West	HIGH	**NO**	Foden, W. & Potter, L. 2005. Cucumis zeyheri Sond. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/27
114	*Cuscuta*	*africana*		Convolvulaceae		Least Concern	Eastern and Western Cape endemic	HIGH	**NO**	Foden, W. & Potter, L. 2005. Cuscuta africana Willd. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
115	*Cuspidia*	*cernua*	*cernua*	Asteraceae		Least Concern	Eastern Cape endemic		**NO**	Foden, W. & Potter, L. 2005. Cuspidia cernua (L.f.) B.L.Burtt subsp. cernua. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
116	*Cussonia*	*paniculata*	*paniculata*	Ariliaceae		Least Concern	Eastern Cape, KwaZulu-Natal, Northern Cape, Western Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Cussonia paniculata Eckl. & Zeyh. subsp. paniculata. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
117	*Cussonia*	*spicata*		Ariliaceae		Least Concern	Eastern Cape, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, North West, Western Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Cussonia spicata Thunb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
118	*Cyanotis*	*speciosa*		Commelinaceae		Least Concern	Eastern Cape, Free State, KwaZulu-Natal, Limpopo, Mpumalanga, Northern Cape, North West, Western Cape	100	**YES**	Eastern Cape, Free State, KwaZulu-Natal, Limpopo, Mpumalanga, Northern Cape, North West, Western Cape
119	*Cyperus*	*owanii*		Çyperaceae		Least Concern	Eastern Cape, KwaZulu-Natal, Limpopo, Mpumalanga	HIGH	**NO**	Foden, W. & Potter, L. 2005. Cyperus owanii Boeck. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
120	*Cyperus*	*pulcher*		Cyperaceae		Least Concern	Eastern Cape and KZN	HIGH	**NO**	Foden, W. & Potter, L. 2005. Cyperus pulcher Thunb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
121	*Cyperus*	*usitatus*		Cyperaceae		Least Concern	All nine provinces	HIGH	**NO**	Foden, W. & Potter, L. 2005. Cyperus usitatus Burch. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02

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122	*Cyphia*	*sylvatica*		Lobeliaceae		Least Concern	Eastern Cape, KwaZulu-Natal, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Cyphia sylvatica Eckl. var. sylvatica. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
123	*Cyphostemma*	*cirrhosum*	*cirrhosum*	Vitaceae		Least Concern	Hoare not listing the subspecies. KZN and Eastern Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Cyphostemma cirrhosum (Thunb.) Desc. ex Wild & R.B.Drumm. subsp. cirrhosum. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
124	*Cyphostemma*	*quinatum*		Vitaceae		Least Concern	Eastern Cape endemic	HIGH	**NO**	Foden, W. & Potter, L. 2005. Cyphostemma quinatum (Dryand.) Desc. ex Wild & R.B.Drumm. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
125	*Cyrtanthus*	*huttonii*		Amaryllidaceae	Protected	Least Concern	Eastern Cape and Mpumalanga.		**NO**	Snijman, D.A. & Victor, J.E. 2004. Cyrtanthus huttonii Baker. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
126	*Cyrtanthus*	*obrienii*		Amaryllidaceae	Protected	Least Concern	Recorded in KZN (Du Plessis) and further north by Snijman & Victor: Eastern Cape, Free State, KwaZulu-Natal, Mpumalanga	LOW	**NO**	du Plessis, N., Duncan, G. & Bodley, E. 1989. Bulbous Plants of Southern Africa. Tafelberg, Cape Town . Snijman, D.A. & Victor, J.E. 2004. Cyrtanthus obrienii Baker. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
127	*Cyrtanthus*	*smithiae*		Amaryllidaceae	Protected		Eastern Cape endemic		**NO**	Snijman, D.A. & Victor, J.E. 2004. Cyrtanthus smithiae Watt ex Harv. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/2
128	*Cystopteris*	*fragilis*		Cystopteridaceae		Least Concern	Eastern Cape, Free State, KwaZulu-Natal, Limpopo, Mpumalanga, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Cystopteris fragilis (L.) Bernh. subsp. fragilis. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
129	*Delosperma*	*affine*		Aizoaceae	Protected	Least Concern	Largely Western and Eastern Cape (GBIF)	**HIGH**	NO	https://www.gbif.org/species/3707590. Burgoyne, P.M. 2006. Delosperma affine Lavis. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
130	*Dianthus*	*micropetalus*		Caryophyllaceae		Least Concern	Eastern Cape, Free State, Gauteng, Northern Cape, North West, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Dianthus micropetalus Ser. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
131	*Dianthus*	*namaensis*	*dinteri*	Caryophyllaceae		Least Concern	Endemic to the old Cape Provinces		**NO**	Foden, W. & Potter, L. 2005. Dianthus namaensis Schinz var. dinteri (Schinz) S.S.Hooper. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23

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132	*Diascia*	*cuneata*		Scrophulariaceae	Protected	Least Concern	Eastern Cape and Free State	100	**YES**	Foden, W. & Potter, L. 2005. Diascia cuneata E.Mey. ex Benth. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
133	*Dietes*	*iridioides*		Iridaceae	Protected	Least Concern	From the Riviersondernd Mountains to Ethiopia (Manning et al 2002) but Foden and Potter 2005 - Eastern Cape, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, North West, Western Cape	HIGH	**NO**	Manning, J., Goldblatt, P. & Snijman, D. 2002. The Colour Encyclopedia of Cape Bulbs. Timber Press, Cambridge, UK. Foden, W. & Potter, L. 2005. Dietes iridioides (L.) Sweet ex Klatt. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
134	*Dioscorea*	*elephantipes*		Dioscoreaceae	Protected	Least Concern	Endemic to the old Cape Provinces - specifically favouring East facing slopes, quartzic and shale: Albany Thicket, Desert, Fynbos, Grassland, Succulent Karoo	HIGH	**NO**	Victor, J.E. & Dold, A.P. 2016. Dioscorea elephantipes (L'Hér.) Engl. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
135	*Diospyros*	*lycioides*	*lycioides*	Ebenaceae		Least Concern	Eastern Cape, Free State, Gauteng, Limpopo, Mpumalanga, Northern Cape, North West, Western Cape	100	**YES**	Foden, W. & Potter, L. 2005. Diospyros lycioides Desf. subsp. lycioides. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
136	*Diospyros*	*dichrophylla*		Ebenaceae		Least Concern	Eastern Cape, KwaZulu-Natal, Limpopo, Western Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Diospyros dichrophylla (Gand.) De Winter. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
137	*Diospyros*	*scabrida*	*scabrida*	Ebenaceae		Least Concern	Hoare not listing the subspecies. KZN and Eastern Cape		**NO**	Foden, W. & Potter, L. 2005. Diospyros scabrida (Harv. ex Hiern) De Winter var. scabrida. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02

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138	*Disa*	*crassicornis*		Orchidaceae	Protected	Least Concern	Southern limits of the distribution (Foden & Potter 2005, Johnson & Byteie 2015). Usually in damp areas of grasslands.	LOW	**NO**	Johnson, S. & Bytebier, B. 2015. Orchids of South Africa. Struik, Cape Town. Foden, W. & Potter, L. 2005. Disa crassicornis Lindl. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
139	*Disa*	*sagittalis*		Orchidaceae	Protected	Least Concern	Eastern and Western Cape endemic - wide distrribution but limited to stony, rocky soils, along streams and often in semi-shade	HIGH	**NO**	Johnson, S. & Bytebier, B. 2015. Orchids of South Africa. Struik, Cape Town. Foden, W. & Potter, L. 2005. Disa sagittalis (L.f.) Sw. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
140	*Disa*	*versicolor*		Orchidaceae	Protected	Least Concern	Likely to be at the southern end of the distribution for the study site: Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga. Dry and wet grasslands.	LOW	**NO**	Johnson, S. & Bytebier, B. 2015. Orchids of South Africa. Struik, Cape Town. Foden, W. & Potter, L. 2005. Disa versicolor Rchb.f. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
141	*Disparago*	*ericoides*		Asteraceae		Least Concern	Limited to the fynbos vegetation from Malmesbury to Plettenberg Bay: Rocky or sandy areas on flats and lower slopes.	**NIL**	**NO**	Foden, W. & Potter, L. 2011. Disparago ericoides (P.J.Bergius) Gaertn. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
142	*Dolichos*	*hastaeformis*		Fabaceae		Least Concern	Eastern and Western Cape endemic	HIGH	**NO**	Foden, W. & Potter, L. 2005. Dolichos hastaeformis E.Mey. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
143	*Doryopteris*	*concolor*		Pteridaceae		Least Concern	Eastern Cape, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, North West, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Doryopteris concolor (Langsd. & Fisch.) Kuhn. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03

No	Genus	species	Subsp / Variation	Family	Provincial Conservation Status	Current National Status SANBI	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
144	*Drimia*	*altissima*		Hycanthaceae		Least Concern	Not concur with listing this as a SSC.	100	**YES**	Williams, V.L., Raimondo, D., Crouch, N.R., Brueton, V.J., Cunningham, A.B., Scott-Shaw, C.R., Lötter, M. & Ngwenya, A.M. 2016. Drimia altissima (L.f.) Ker Gawl. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
145	*Drosanthemum*	*opacum*		Aizoaceae	Protected	Least Concern	Western Cape endemic - 500km to the west of the study site	**NIL**	**NO**	Raimondo, D., Manyama, P.A. & Kamundi, D.A. 2008. Drosanthemum opacum L.Bolus. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
146	*Drosanthemum*	*hispidum*		Aizoaceae	Protected	Least Concern	Widely distributed: Eastern Cape, Free State, Northern Cape, Western Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Drosanthemum hispidum (L.) Schwantes. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
147	*Elytropappus*	*rhinocerotis*		Asteraceae		Least Concern	Endemic to the old Cape Provinces		**NO**	Kamundi, D.A. & Victor, J.E. 2006. Elytropappus rhinocerotis (L.f.) Less. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
148	*Encephalartos*	*cycadifolius*		Zamiaceae	Protected	Least Concern	Narrow range in the Eastern Cape on the Bedford District: Semi-dry grassland areas in shallow shale soils on the northern and eastern slopes of the mountains	HIGH	**NO**	Donaldson, J.S. 2009. Encephalartos cycadifolius (Jacq.) Lehm. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
149	*Encephalartos*	*lehmannii*		Zamiaceae	Protected	Near Threatened A2d	Dry areas, Eastern Cape endemic - Arid, low succulent shrubland on rocky ridges and slopes. Albany Thicket, Nama Karoo and Succulent Karoo	HIGH	**NO**	Donaldson, J.S. 2009. Encephalartos lehmannii Lehm. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
150	*Erica*	*gracilis*		Ericaceae	Protected	Least Concern	Western Cape endemic	**NIL**	**NO**	Foden, W. & Potter, L. 2005. Erica gracilis J.C.Wendl. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
151	*Erica*	*caespitosa*		Ericaceae	Protected	Least Concern	Eastern Cape and KZN		**NO**	Raimondo, D., von Staden, L., Foden, W., Victor, J.E., Helme, N.A., Turner, R.C., Kamundi, D.A. and Manyama, P.A. 2009. Red List of South African Plants. Strelitzia 25. South African National Biodiversity Institute, Pretoria.

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152	*Erica*	*cerinthoides*		Ericaceae	Protected	Not Determined	Widely distributed: Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, Western Cape - mostly fynbos and grasslands	MEDIUM	**NO**	van der Colff, D. 2015. Erica cerinthoides L. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
153	*Erica*	*rupicola*		Ericaceae	Protected	Data Deficient - Insufficient Information	Western Cape endemic: sandstone fynbos in the Riviersonderend Mountains	**NIL**	**NO**	Turner, R.C. 2008. Erica rupicola Klotzsch. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
154	*Eriocephalus*	*africanus*	*paniculatus*	Asteraceae		Least Concern	Hoare didn't mention subspecies. *E. africanus africanus* is a W Cape endemic. *E. eriocephalus paniculatus* is an old Cape Provinces endemic.		**NO**	Foden, W. & Potter, L. 2005. Eriocephalus africanus L. var. paniculatus (Cass.) M.A.N.Müll.,P.P.J.Herman & Kolberg. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
155	*Eriosema*	*salignum*		Fabaceae		Least Concern	Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, North West - but study site may be too far south for natural range.		**NO**	Foden, W. & Potter, L. 2005. Eriosema salignum E.Mey. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
156	*Euclea*	*racemosa*	*bernadii*	Ebenaceae		Least Concern	Southern Afrotemperate Forest, Southern Cape Dune Fynbos, Goukamma Dune Thicket Description It occurs in coastal	**NIL**	**NO**	von Staden, L. 2017. Euclea racemosa Murray subsp. bernardii F.White. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03

No	Genus	species	Subsp / Variation	Family	Provincial Conservation Status	Current National Status SANBI	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
							dune thicket and dry riverine forest			
157	*Euclea*	*racemosa*	*macrophylla*	Ebenaceae		Least Concern	Eastern Cape, KwaZulu-Natal, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Euclea racemosa Murray subsp. macrophylla (E.Mey. ex A.DC.) F.White. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
158	*Euclea*	*racemosa*	*racemosa*	Ebenaceae		Least Concern	E. racemosa racemosa = N Cape and Western Cape endemic	**NIL**	**NO**	Foden, W. & Potter, L. 2005. Euclea racemosa Murray subsp. racemosa. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
159	*Euclea*	*racemosa*		Ebenaceae		Not Evaluated	Hoare not listing the subspecies.		**NO**	Not listed on SANBI Red Data List
160	*Euclea*	*crispa*		Ebenaceae		Least Concern	RRRG and TBC 2020 recored *Euclea undulata*. Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, North West, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Euclea crispa (Thunb.) Gürke subsp. crispa. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
161	*Euclea*	*schimperi*	*schimperi*	Ebenaceae		Least Concern	SANBI not listing subspecies. Eastern Cape, KwaZulu-Natal, Limpopo, Mpumalanga		**NO**	von Staden, L. 2014. Euclea schimperi (A.DC.) Dandy. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
162	*Euphorbia*	*globosa*	*globosa*	Euphorbiaceae	Protected	Endangered B1ab(ii,iii,v)	EOO 1200 km², less than five remaining locations. Continuing decline due to coastal development (Uitenhage to Port Elizabeth). Albany Alluvial Vegetation, Sundays Valley Thicket, Motherwell	**NIL**	**NO**	Moller, A. & Becker, R., 2019. Field Guide to the Succulent Euphorbias of Southern Africa, Briza Publications, Pretoria.. Victor, J.E. & Dold, A.P. 2019. Euphorbia globosa (Haw.) Sims. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03

No	Genus	species	Subsp / Variation	Family	Provincial Conservation Status	Current National Status SANBI	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
							Karroid Thicket. Only 20km from the coast (Moller & Becker 2019).			
163	*Euphorbia*	*brachiata*		Euphorbiaceae		Least Concern	Species changed to *E. rhombifolia*. Old Cape provinces and small presence in Free State	HIGH	**NO**	Archer, R.H., Vlok, J.H., Victor, J.E. & Raimondo, D. 2017. Euphorbia rhombifolia Boiss. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
164	*Euphorbia*	*caterviflora*		Euphorbiaceae		Least Concern	Species changed to *E. rhombifolia*. Old Cape provinces and small presence in Free State	HIGH	**NO**	Archer, R.H., Vlok, J.H., Victor, J.E. & Raimondo, D. 2017. Euphorbia rhombifolia Boiss. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
165	*Euphorbia*	*coerulescens*		Euphorbiaceae		Least Concern	Species frequently spelled in two forms. Listed as *E. caerulescens*. Eastern and Western Cape endemic - linked to Albany Thicket, Nama Karoo and Succulent Karoo	LOW	**NO**	Archer, R.H., Victor, J.E., Dold, A.P. & von Staden, L. 2014. Euphorbia caerulescens Haw. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
166	*Euphorbia*	*epicyparissias*	*epicyparissias*	Euphorbiaceae		Least Concern	Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, Western Cape		**NO**	Archer, R.H. & Victor, J.E. 2005. Euphorbia epicyparissias E.Mey. ex Boiss. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
167	*Euphorbia*	*inconstantia*		Euphorbiaceae		Least Concern	Eastern Cape endemic	HIGH	**NO**	
168	*Euphorbia*	*ornithopus*		Euphorbiaceae		Least Concern	Species name changed to *E. tridentata*. Grahamstown and Cradock areas	100	**YES**	Not listed in SANBI Red Data List. Moller, A. & Becker, R., 2019. Field Guide to the Succulent Euphorbias of Southern Africa, Briza Publications, Pretoria.
169	*Euphorbia*	*pentagona*		Euphorbiaceae		Least Concern	Eastern Cape endemic.		**NO**	Archer, R.H. & Victor, J.E. 2005. Euphorbia pentagona Haw. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03

No	Genus	species	Subsp / Variation	Family	Provincial Conservation Status	Current National Status SANBI	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
170	*Euphorbia*	*rhombifolia*		Euphorbiaceae		Least Concern	Old Cape provinces and small presence in Free State	100	**YES**	Archer, R.H., Vlok, J.H., Victor, J.E. & Raimondo, D. 2017. Euphorbia rhombifolia Boiss. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
171	*Euphorbia*	*stellata*		Euphorbiaceae		Least Concern	Eastern Cape endemic	100	**YES**	Archer, R.H. & Victor, J.E. 2005. Euphorbia stellata Willd. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
172	*Euryops*	*subcarnosus*	*vulgaris*	Asteraceae		Least Concern	Eastern Cape, Free State, Northern Cape, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Euryops subcarnosus DC. subsp. vulgaris B.Nord. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
173	*Euryops*	*algoensis*		Asteraceae		Least Concern	Eastern Cape endemic		**NO**	Foden, W. & Potter, L. 2005. Euryops subcarnosus DC. subsp. vulgaris B.Nord. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
174	*Euryops*	*anthemoides*	*anthemoides*	Asteraceae		Least Concern	Western and Eastern Cape endemic		**NO**	Foden, W. & Potter, L. 2005. Euryops anthemoides B.Nord. subsp. anthemoides. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
175	*Euryops*	*brachypodus*		Asteraceae		Least Concern	Eastern Cape endemic		**NO**	Foden, W. & Potter, L. 2005. Euryops brachypodus (DC.) B.Nord. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/0
176	*Falkia*	*repens*		Convolvulaceae		Least Concern	Eastern Cape endemic		**NO**	Foden, W. & Potter, L. 2005. Falkia repens Thunb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
177	*Faucaria*	*felina*	*felina*	Aizoaceae	Protected	Least Concern			**NO**	Victor, J.E. & Dold, A.P. 2007. Faucaria felina (L.) Schwantes. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
178	*Faucaria*	*tuberculosa*		Aizoaceae	Protected	Least Concern		100	**YES**	Burgoyne, P.M. 2006. Faucaria tuberculosa (Rolfe) Schwantes. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23. Regarded as Vulnerable by T. Dold but Least Concern by SANBI.
179	*Felicia*	*muricata*	*muricata*	Asteraceae		Least Concern	All nine provinces and widely dispersed	100	**YES**	Foden, W. & Potter, L. 2005. Felicia muricata (Thunb.) Nees subsp. muricata. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
180	*Felicia*	*muricata*		Asteraceae		Least Concern		100	**YES**	Not listed on SANBI Red Data List
181	*Felicia*	*filifolia*		Asteraceae		Least Concern	Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Mpumalanga, Northern Cape, North West, Western Cape	100	**YES**	Foden, W. & Potter, L. 2005. Felicia filifolia (Vent.) Burtt Davy subsp. filifolia. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03

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182	*Felicia*	*hyssopifolia*	*polypjhylla*	Asteraceae		Least Concern	Hoare didn't list subsp. *F. hyssopifolia hyssopifolia* and F. hyssopifolia are both W Cape endemics - F. hyssopifolia polyphylla is a Eastern and W Cape endemic		**NO**	Foden, W. & Potter, L. 2005. Felicia hyssopifolia (P.J.Bergius) Nees subsp. polyphylla (Harv.) Grau. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
183	*Ficinia*	*acuminata*		Cyperaceae		Least Concern	Eastern Cape and Western Cape endemic		**NO**	Foden, W. & Potter, L. 2005. Ficinia acuminata (Nees) Nees. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
184	*Ficinia*	*gracilis*		Cyperaceae		Least Concern	Eastern Cape, Free State, KwaZulu-Natal, Limpopo, Mpumalanga		**NO**	Foden, W. & Potter, L. 2005. Ficinia gracilis Schrad. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
185	*Ficinia*	*nigrescens*		Cyperaceae		Least Concern	Old Cape endemic		**NO**	Foden, W. & Potter, L. 2005. Ficinia nigrescens (Schrad.) J.Raynal. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
186	*Ficinia*	*stolonifera*		Cyperaceae		Least Concern	Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Ficinia stolonifera Boeck. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
187	*Flueggea*	*verrucosa*		Phyllanthaceae		Least Concern	Eastern Cape and KZN		**NO**	Archer, R.H. & Victor, J.E. 2005. Flueggea verrucosa (Thunb.) G.L.Webster. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
188	*Garuleum*	*tanacetifolium*		Asteraceae		Least Concern	Eastern Cape endemic: Forest margins, and shrubby mountain slopes. Only found N of Bedford, N of Somerset East and the Sneeuberg Mountains.	**NIL**	**NO**	Swelankomo, N. & von Staden, L. 2013. Garuleum tanacetifolium (MacOwan) Norl. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23

No	Genus	species	Subsp / Variation	Family	Provincial Conservation Status	Current National Status SANBI	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
189	*Gasteria*	*disticha*	*disticha*	Asphodelaceae		Not Determined	Wide distribution in Western Cape	**NIL**	**NO**	Smith, G.F., Crouch, N.R., & Figueiredo, E. 2017. Field Guide to the Succulents in Southern Africa. Struik Nature, Cape Town
190	*Gasteria*	*disticha*	*langebergensis*	Asphodelaceae		Endangered B1ab(ii,iii,v)+2ab(ii,iii,v)	Very narrow range in the W Cape	**NIL**	**NO**	van Jaarsveld, E.J., Raimondo, D. & von Staden, L. 2015. Gasteria disticha (L.) Haw. var. langebergensis Van Jaarsv. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
191	*Gasteria*	*disticha*		Asphodelaceae		Not Determined	Subspecies not listed by Hoare. Likely that numerous subspecies have been listed since Van Jaarsveld (1994) who didn't recognise subssp and defined the natural distribution to the Western Cape (Robertson, Swartberg, Beaufort West areas).	**NIL**	**NO**	van Jaarsveld, E. & Ward-Hilhorst. 1994. Gasterias of South Africa, Fernwood Press, Johannesburg.
192	*Gasteria*	*bicolor*	*bicolor*	Asphodelaceae		Least Concern	Eastern Cape endemic	100	**YES**	van Jaarsveld, E. & Ward-Hilhorst. 1994. Gasterias of South Africa, Fernwood Press, Johannesburg. Foden, W. & Potter, L. 2005. Gasteria bicolor Haw. var. bicolor. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
193	*Gazania*	*krebsiana*	*krebsiana*	Asteraceae		Least Concern	Hoare didn't list subsp. Eastern Cape, Free State, KwaZulu-Natal, Northern Cape, Western Cape	100	**YES**	Foden, W. & Potter, L. 2005. Gazania krebsiana Less. subsp. krebsiana. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
194	*Gazania*	*linearis*	*linearis*	Asteraceae		Least Concern	Hoare didn't list subsp. Eastern Cape endemic. Eastern Cape, KwaZulu-Natal, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Gazania linearis (Thunb.) Druce var. linearis. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
195	*Gazania*	*linearis*	*ovalis*	Asteraceae		Least Concern	Hoare didn't list subsp. Eastern Cape endemic		**NO**	Kamundi, D.A. & Victor, J.E. 2005. Gazania linearis (Thunb.) Druce var. ovalis (Harv.) Roessler. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03

No	Genus	species	Subsp / Variation	Family	Provincial Conservation Status	Current National Status SANBI	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
196	*Gazania*	*rigens*	*uniflora*	Asteraceae		Least Concern	Eastern Cape, KwaZulu-Natal, Western Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Gazania rigens (L.) Gaertn. var. uniflora (L.f.) Roessler. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
197	*Geranium*	*grandistipulatum*		Gerianaceae		Least Concern			**NO**	
198	*Gerbera*	*piloselloides*		Asteraceae		Least Concern	Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, North West, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Gerbera piloselloides (L.) Cass. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
199	*Gladiolus*	*ochroleucus*		Iridaceae	Protected	Least Concern	A common sp. Suurberg west of Grahamstown and the southern foothills of the Amathole Mountains near Kings William's Town in the Eastern Cape eastwards towards Byrne in southern Kwazulu-Natal. The species has no particular soil preference, but can most often be found in coastal sandstone-derived soils on light clay. Flowering period - Dec - May. Widespread in the Eastern Cape :Grahamstown and King Williams town moving NE towards KZN (Saunders & Saunders 2021).	HIGH	**NO**	Saunders, R. & Saunders, R. 2021. Saunders Field Guide to the Gladioli of South Africa. Struik Nature, Cape Town Goldblatt, P. & Manning, J. 1988. Gladiolus in Southern Africa. Fernwood Press, Johannesburg. von Staden, L. 2020. Gladiolus ochroleucus Baker. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02.

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200	*Gnaphalium*	*confine*		Asteraceae		Least Concern	Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Mpumalanga, Northern Cape, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Gnaphalium confine Harv. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
201	*Gnaphalium*	*vestitum*		Asteraceae		Least Concern	Eastern Cape endemic		**NO**	Raimondo, D. & Turner, R.C. 2007. Gnaphalium vestitum Thunb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
202	*Gnidia*	*cuneata*		Thymelaeaceae		Least Concern		100	**YES**	Not listed on SANBI Red Data List
203	*Gomphostigma*	*virgatum*		Scrophulariaceae		Least Concern	All nine provinces		**NO**	Foden, W. & Potter, L. 2005. Gomphostigma virgatum (L.f.) Baill. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
204	*Gonialoe*	*variegata*		Asphodelaceae	Protected	Least Concern	Wide distribution in the arid areas of the Eastern Western and Northern Cape	MEDIUM	**NO**	Mtshali, H. & von Staden, L. 2018. Gonialoe variegata (L.) Boatwr. & J.C.Manning. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25. . Van Wyb, B-E., Smith, G. Guide to the Aloes of South Africa. 2008. Briza, Pretoria.
205	*Grewia*	*robusta*		Malvaceae		Least Concern	Restricted to the semi-arid areas in the Karoo and Eastern Cape: Albany Thicket, Grassland, Nama Karoo, Succulent Karoo	100	**NO**	Raimondo, D. 2019. Grewia robusta Burch. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
206	*Habenaria*	*epipactidea*		Orchidaceae	Protected	Least Concern	Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, North West. The southern range distribution limit may be north of study site - Foden & Potter (2005). Johnson & Bytebier (2015) - the distribution looks to include the study site	HIGH	**NO**	Johnson, S. & Bytebier, B. 2015. Orchids of South Africa. Struik, Cape Town. Foden, W. & Potter, L. 2005. Habenaria epipactidea Rchb.f. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23

No	Genus	species	Subsp / Variation	Family	Provincial Conservation Status	Current National Status SANBI	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
207	*Habenaria*	*lithophila*		Orchidaceae	Protected	Least Concern	Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Mpumalanga, Western Cape (Foden & Potter 2005). Johnson & Bytebier (2015) seem to include the distribution in the study site location	HIGH	**NO**	Foden, W. & Potter, L. 2005. Habenaria lithophila Schltr. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
208	*Haemanthus*	*albiflos*		Amaryllidaceae	Protected	Least Concern	Widely distributed:	100	**YES**	Snijman, D.A. & Victor, J.E. 2004. Haemanthus albiflos Jacq. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/24
209	*Haemanthus*	*montanus*		Amaryllidaceae	Protected	Least Concern	Large range: KZN, former Transkei, Free State and Gauteng	**NIL**	**NO**	Du Plessis, & Duncan, G. 1989. Bulbous Plants of Southern Africa. Tafelberg, Cape Town. Snijman, D.A. & Victor, J.E. 2004. Haemanthus montanus Baker. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
210	*Haplocarpha*	*lyrata*		Asteraceae		Least Concern	Eastern Cape, Free State, Gauteng, Mpumalanga, Western Cape	100	**YES**	Foden, W. & Potter, L. 2005. Haplocarpha lyrata Harv. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
211	*Haworthia*	*altilinea*		Asphodelaceae	Protected	Not Determined	Species changed to *mucronata* subsp. *mucronata*	**NO**		SANBI. 2020. Haworthia mucronata Haw. var. mucronata. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
212	*Haworthia*	*deltoidea*	*deltoidea*	Asphodelaceae	Protected	Least Concern	Genus changed to Astroloba and species changed to congesta. Prince Albert to Victoria West and east to Cradock and Grahamstown.	HIGH	**NO**	Raimondo, D. 2016. Astroloba congesta (Salm-Dyck) Uitewaal. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
213	*Haworthia*	*limifolia*	*ubomboensis*	Asphodelaceae	Protected	Vulnerable A2d	Genus changed to *Haworthiopis*. Wide distribution but limited to KZN, Swaziland and Mozambique	**NIL**	**NO**	Bayer, B. 1999. Haworthia revisited - A revision of the genus. Umdauss Press, Pretoria. https://en.wikipedia.org/wiki/Haworthiopsis_limifolia. Williams, V.L., Raimondo, D., Crouch, N.R., Cunningham, A.B., Scott-Shaw, C.R., Lötter, M. & Ngwenya, A.M. 2014. Haworthiopsis limifolia (Marloth) G.D.Rowley. National Assessment: Red List

No	Genus	species	Subsp / Variation	Family	Provincial Conservation Status	Current National Status SANBI	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
										of South African Plants version 2020.1. Accessed on 2022/04/29
214	*Haworthia*	*nigra*	*nigra*	Asphodelaceae	Protected	Not Determined	Genus changed to *Haworthiopis*. Widely distributed in the Eastern Cape	HIGH	**NO**	Bayer, B. 1999. Haworthia revisited - A revision of the genus. Umdauss Press, Pretoria. SANBI. 2020. Haworthiopsis nigra (Haw.) G.D.Rowley var. nigra. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
215	*Haworthia*	*reinwardtii*	*reinwardtii*	Asphodelaceae	Protected	Not Determined	Wide distribution in the Eastern Cape	HIGH	**NO**	Bayer, B. 1999. Haworthia revisited - A revision of the genus. Umdauss Press, Pretoria. SANBI. 2020. Haworthia reinwardtii (Salm-Dyck) Haw. var. reinwardtii forma reinwardtii. National Assessment: Red List of South African Plants version 2020.1. accessed on 2022/04/29
216	*Helichrysum*	*anomalum*		Asteraceae		Least Concern	Eastern Cape and Western Cape endemic	HIGH	**NO**	Foden, W. & Potter, L. 2005. Helichrysum anomalum Less. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
217	*Helichrysum*	*herbaceum*		Asteraceae		Least Concern	Eastern Cape, Free State, KwaZulu-Natal, Limpopo, Mpumalanga, Western Cape	MEDIUM	**NO**	Foden, W. & Potter, L. 2005. Helichrysum herbaceum (Andrews) Sweet. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
218	*Helichrysum*	*miconiifolium*		Asteraceae		Least Concern	Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, North West		**NO**	Foden, W. & Potter, L. 2005. Helichrysum miconiifolium DC. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
219	*Helichrysum*	*teretifolium*		Asteraceae		Least Concern	Albany Thicket, Fynbos, Grassland, Indian Ocean Coastal Belt	HIGH	**NO**	Foden, W. & Potter, L. 2009. Helichrysum teretifolium (L.) D.Don. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
220	*Helichrysum*	*cymosum*	*cymosum*	Asteraceae		Least Concern	Eastern Cape, KwaZulu-Natal, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Helichrysum cymosum (L.) D.Don subsp. cymosum. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
221	*Helichrysum*	*felinum*		Asteraceae		Least Concern	Eastern Cape, KwaZulu-Natal, Western Cape: Albany Thicket, Fynbos, Grassland, Indian	HIGH	**NO**	Foden, W. & Potter, L. 2009. Helichrysum felinum Less. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03

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							Ocean Coastal Belt			
222	*Helichrysum*	*nudifolium*		Asteraceae		Least Concern	All nine provinces		**NO**	Foden, W. & Potter, L. 2005. Helichrysum nudifolium (L.) Less. var. nudifolium. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
223	*Helichrysum*	*odoratissimum*		Asteraceae		Least Concern	Eastern Cape, Free State, KwaZulu-Natal, Limpopo, Western Cape		**NO**	von Staden, L. 2010. Helichrysum odoratissimum (L.) Sweet. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/0
224	*Helichrysum*	*pilosellum*		Asteraceae		Least Concern	Species changed to *H. nudifolium*.		**NO**	Kamundi, D.A. & Victor, J.E. 2005. Helichrysum nudifolium (L.) Less. var. pilosellum (L.f.) Beentje. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
225	*Helichrysum*	*rosum*	*rosum*	*Asteraceae*		Least Concern	Eastern and Western Cape endemic. Hoare never specified subsp.	100	**YES**	Foden, W. & Potter, L. 2005. Helichrysum rosum (P.J.Bergius) Less. var. rosum. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
226	*Helichrysum*	*rugulosum*		*Asteraceae*		Least Concern	Stony grasslands: Albany Thicket, Fynbos, Grassland, Indian Ocean Coastal Belt, Savanna	100	**YES**	von Staden, L. 2016. Helichrysum rugulosum Less. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
227	*Helichrysum*	*spiralepis*		Asteraceae		Least Concern	Coastal grasslands, montane grasslands and fynbos. Albany Thicket, Fynbos, Grassland, Indian Ocean Coastal Belt, Savanna - but unlikely to reach into the study site.	LOW	**NO**	von Staden, L. 2016. Helichrysum spiralepis Hilliard & B.L.Burtt. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
228	*Hermannia*	*depressa*		Malvaceae		Least Concern	Largely excluded from W Cape and N Cape but widespread in all other provinces. Southern distribution may be too far east of the study site	LOW	**NO**	Foden, W. & Potter, L. 2005. Hermannia depressa N.E.Br. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03

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229	*Hermannia*	*althaeifolia*		Malvaceae		Least Concern	This species is an endemic to the old Cape Provinces: occurs from Namaqualand to the Cape Peninsula, Roggeveld Escarpment, Little Karoo and Langkloof.	**NIL**	**NO**	von Staden, L. 2020. Hermannia althaeifolia L. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
230	*Hermannia*	*althaeoides*		Malvaceae		Least Concern	Eastern Cape, Free State, Northern Cape, Western Cape	100	**YES**	Foden, W. & Potter, L. 2005. Hermannia althaeoides Link. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
231	*Hermannia*	*glabrata*		Malvaceae		Least Concern	Eastern Cape, KwaZulu-Natal, Northern Cape, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Hermannia glabrata L.f. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
232	*Hermannia*	*gracilis*		Malvaceae		Least Concern	Old Cape Provinces endemic		**NO**	Foden, W. & Potter, L. 2005. Hermannia gracilis Eckl. & Zeyh. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
233	*Heteromorpha*	*arborescens*	*abyssinica*	Apiaceae			Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, Northern Cape, North West, Western Cape. May be the study site is too far south for the range.	LOW	**NO**	Victor, J.E. & Winter, P.J.D. 2005. Heteromorpha arborescens (Spreng.) Cham. & Schltdl. var. abyssinica (Hochst. ex A.Rich.) H.Wolff. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
234	*Hibiscus*	*aethiopicus*		Malvaceae		Least Concern	Hoare didn't list subsp. *H. aethiopicus aethiopicus* - wide distribution: Eastern Cape, KwaZulu-Natal, Northern Cape, North West, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Hibiscus aethiopicus L. var. angustifolius (Eckl. & Zeyh.) Exell. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22

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235	*Hibiscus*	*pusillus*		Malvaceae		Least Concern	Occurs in all nine provinces	100	**YES**	Foden, W. & Potter, L. 2005. Hibiscus pusillus Thunb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
236	*Hypericum*	*lalandii*		Hypericaceae		Least Concern	Occurs in all nine provinces	HIGH	**NO**	Foden, W. & Potter, L. 2005. Hypericum lalandii Choisy. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
237	*Hypertelis*	*salsoloides*		Kewaceae		Least Concern	Genus has changed to *Kewa*. Wide distribution: Desert, Nama Karoo, Succulent Karoo, Savanna	LOW	**NO**	von Staden, L. 2015. Kewa salsoloides (Burch.) Christenh. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
238	*Hypoestes*	*forskaolii*		Acanthaceae		Least Concern	All nine provinces	HIGH	**NO**	Kamundi, D.A. 2006. Hypoestes forskaolii (Vahl) R.Br. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
239	*Hypoxis*	*argentea*	*argentea*	Hypoxidaceae		Least Concern	Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, North West, Western Cape. Subsp. not listed by Hoare.		**NO**	Foden, W. & Potter, L. 2005. Hypoxis argentea Harv. ex Baker var. argentea. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
240	*Hypoxis*	*costata*		Hypoxidaceae		Least Concern	Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Mpumalanga		**NO**	Foden, W. & Potter, L. 2005. Hypoxis costata Baker. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
241	*Hypoxis*	*hemerocallidea*		Hypoxidaceae		Least Concern	Albany Thicket, Grassland, Indian Ocean Coastal Belt, Savanna	HIGH	**NO**	Williams, V.L., Raimondo, D., Crouch, N.R., Victor, J.E., Cunningham, A.B., Scott-Shaw, C.R., Lötter, M., Ngwenya, A.M. & Singh, Y. 2019. Hypoxis hemerocallidea Fisch., C.A.Mey. & Avé-Lall. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
242	*Hypoxis*	*multiceps*		Hypoxidaceae		Least Concern	Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga		**NO**	Foden, W. & Potter, L. 2005. Hypoxis multiceps Buchinger ex Baker. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
243	*Hypoxis*	*villosa*		Hypoxidaceae		Least Concern	Eastern Cape, KwaZulu-Natal, Western Cape		**NO**	Manyama, P.A. & Kamundi, D.A. 2006. Hypoxis villosa L.f. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
244	*Indigofera*	*alternans*	*alternans*	Fabaceae		Least Concern	Wide distribution: Eastern Cape,	HIGH	**NO**	Foden, W. & Potter, L. 2005. Indigofera alternans DC. var. alternans. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28

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							Free State, Gauteng, Limpopo, Northern Cape, North West, Western Cape			
245	*Indigofera*	*burchellii*		Fabaceae		Least Concern	Eastern Cape and Northern Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Indigofera burchellii DC. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
246	*Indigofera*	*disticha*		Fabaceae		Least Concern	Eastern cape endemic		**NO**	Foden, W. & Potter, L. 2005. Indigofera disticha Eckl. & Zeyh. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
247	*Indigofera*	*verrucosa*		Fabaceae		Least Concern	Eastern Cape, KwaZulu-Natal, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Indigofera verrucosa Eckl. & Zeyh. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
248	*Ipomoea*	*crispa*		Ipomoeaceae		Least Concern	Eastern Cape Endemic	100	**YES**	Foden, W. & Potter, L. 2005. Ipomoea crispa (Thunb.) Hallier f. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
249	*Ipomoea*	*oenotheroides*		Ipomoeaceae		Least Concern	Wide distribution: Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Northern Cape, North West		**NO**	Foden, W. & Potter, L. 2005. Ipomoea oenotheroides (L.f.) Raf. ex Hallier f. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
250	*Isolepis*	*costata*		Cyperaceae		Least Concern	Found in all 9 provinces	HIGH	**NO**	Foden, W. & Potter, L. 2005. Isolepis costata Hochst. ex A.Rich. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
251	*Isolepis*	*diabolica*		Cyperaceae		Least Concern	Eastern Cape, KwaZulu-Natal, Northern Cape, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Isolepis diabolica (Steud.) Schrad. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
252	*Jamesbrittenia*	*atropurpurea*	*atropurpurea*	Scrophulariaceae		Least Concern	Eastern Cape, Free State, Gauteng, Northern Cape, North West, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Jamesbrittenia atropurpurea (Benth.) Hilliard subsp. atropurpurea. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
253	*Jamesbrittenia*	*filicaulis*		Scrophulariaceae		Least Concern	Eastern Cape, Free State, KwaZulu-Natal		**NO**	Foden, W. & Potter, L. 2005. Jamesbrittenia filicaulis (Benth.) Hilliard. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
254	*Jamesbrittenia*	*foliolosa*		Scrophulariaceae		Least Concern	Eastern Cape and Western Cape Endemic	HIGH	**NO**	Foden, W. & Potter, L. 2005. Jamesbrittenia foliolosa (Benth.) Hilliard. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23

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255	*Jatropha*	*capensis*		Euphorbiaceae		Least Concern	Eastern Cape Endemic		**NO**	Archer, R.H. & Victor, J.E. 2005. Jatropha capensis (L.f.) Sond. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
256	*Juncus*	*effusus*		Juncaceae		Least Concern	Wide distribution: Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, North West, Western Cape		**NO**	Cholo, F. & Foden, W. 2006. Juncus effusus L. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
257	*Juncus*	*oxycarpus*		Juncaceae		Least Concern	All nine provinces		**NO**	Cholo, F. & Foden, W. 2006. Juncus oxycarpus E.Mey. ex Kunth. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
258	*Justicia*	*orchioides*	*glabrata*	Acanthaceae		Least Concern	Eastern Cape, Free State, North West, Western Cape		**NO**	Victor, J.E. 2005. Justicia orchioides L.f. subsp. glabrata Immelman. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
259	*Kniphofia*	*triangularis*	*triangularis*	Asphodelaceae	Protected	Least Concern	Eastern Cape, Free State, KZN	MEDIUM	**NO**	Foden, W. & Potter, L. 2005. Kniphofia triangularis Kunth subsp. triangularis. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
260	*Kniphofia*	*uvaria*		Asphodelaceae	Protected	Least Concern	Old Cape provinces. Limited to areas of high seasonal soil moisture	MEDIUM	**NO**	Foden, W. & Potter, L. 2005. Kniphofia uvaria (L.) Oken. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
261	*Knowltonia*	*cordata*		Ranunculaceae		Least Concern	Genus changed to Anemone: Endemic to Eastern and Western Cape		NO	Foden, W. & Potter, L. 2005. Anemone cordata (H.Rasm.) J.C.Manning & Goldblatt. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
262	*Kyllinga*	*alata*		Cyperaceae		Least Concern	Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, North West, Western Cape	MEDIUM	**NO**	Foden, W. & Potter, L. 2005. Kyllinga alata Nees. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
263	*Lachenalia*	*bowkeri*		Hyacinthaceae	Protected	Least Concern	Eastern Cape Endemic: Albany Thicket, Fynbos,	100	**YES**	Duncan, G.D. & Victor, J.E. 2005. Lachenalia bowkeri Baker. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23

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							Nama Karoo, Succulent Karoo			
264	*Lactuca*	*inermis*		Asteraceae		Least Concern	All nine provinces		**NO**	Foden, W. & Potter, L. 2005. Lactuca inermis Forssk. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
265	*Lampranthus*	*productus*		Aizoaceae	Protected	Least Concern	Western Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Lampranthus productus (Haw.) N.E.Br. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
266	*Lampranthus*	*stayneri*		Aizoaceae	Protected		Eastern Cape and Western Cape Endemic		**NO**	Klak, C., Raimondo, D. & Matlamela, P.F. 2008. Lampranthus stayneri (L.Bolus) N.E.Br. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
267	*Lantana*	*rugosa*		Verbenaceae		Least Concern	Widely distributed in all 9 provinces	HIGH	**NO**	Foden, W. & Potter, L. 2005. Lantana rugosa Thunb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
268	*Lasiospermum*	*pedunculare*		Asteraceae		Least Concern	Northern Cape and Western Cape endemic		**NO**	Foden, W. & Potter, L. 2005. Lasiospermum pedunculare Lag. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
269	*Leonotis*	*ocymifolia*	*ocymifolia*	Lamiaceae		Least Concern	Wide distribution: Eastern Cape, Gauteng, Limpopo, Mpumalanga, Northern Cape, North West, Western Cape and beyond SA	HIGH	**NO**	Foden, W. & Potter, L. 2005. Leonotis ocymifolia (Burm.f.) Iwarsson. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
270	*Lessertia*	*annularis*		Fabaceae		Least Concern	Eastern Cape, Free State, Northern Cape, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Lessertia annularis Burch. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
271	*Leucas*	*capensis*		Lamiaceae		Least Concern	Common species in study area	100	**YES**	Not listed in the SANBI RED LIST
272	*Linum*	*thunbergii*		Linaceae		Least Concern	Wide spread: all provinces bar N Cape		**NO**	Foden, W. & Potter, L. 2005. Linum thunbergii Eckl. & Zeyh. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
273	*Lithospermum*	*papillosum*		Boraginaceae		Least Concern	Eastern Cape, KwaZulu-Natal, Mpumalanga, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Lithospermum papillosum Thunb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
274	*Lobelia*	*flaccida*	*flaccida*	Lobeliaceae		Least Concern	All nine provinces		**NO**	Victor, J.E. 2004. Lobelia flaccida (C.Presl) A.DC. subsp. flaccida. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28

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275	*Lobelia*	*thermalis*		Lobeliaceae		Least Concern	All provinces bar KZN		**NO**	Foden, W. & Potter, L. 2005. Lobelia thermalis Thunb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
276	*Lobelia*	*tomentosa*		Lobeliaceae		Least Concern	Eastern Cape, KwaZulu-Natal, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Lobelia tomentosa L.f. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
277	*Lotononis*	*laxa*		Fabaceae		Least Concern	Wide distribution: Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, Northern Cape, North West	100	**YES**	Foden, W. & Potter, L. 2005. Lotononis laxa Eckl. & Zeyh. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
278	*Lycium*	*prunus-spinosa*		Solanaceae			See *Lycium cinereum*. Not listed in the SANBI RED LIST, species changed to L. cinereum		**NO**	
279	*Lycium*	*cinereum*		Solanaceae		Least Concern	All nine provinces	100	**YES**	Foden, W. & Potter, L. 2005. Lycium cinereum Thunb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
280	*Lycium*	*oxycarpum*		Solanaceae		Least Concern	Eastern Cape, Free State, Northern Cape, Western Cape	100	**YES**	von Staden, L. 2018. Lycium oxycarpum Dunal. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
281	*Lycium*	*schizocalyx*		Solanaceae		Least Concern	Eastern Cape, Free State, Limpopo, Northern Cape, North West, Western Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Lycium schizocalyx C.H.Wright. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
282	*Maerua*	*cafra*		Brassicaceae		Least Concern	Eastern Cape, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, North West		**NO**	Foden, W. & Potter, L. 2005. Maerua cafra (DC.) Pax. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
283	*Malephora*	*crassa*		Aizoaceae	Protected	Least Concern	Northern Cape and Western Cape endemic	LOW	**NO**	Burgoyne, P.M. 2006. Malephora crassa (L.Bolus) H.Jacobsen & Schwantes. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
284	*Mariscus*	*congestus*		Cyperaceae		Least Concern	Genus changed to Cyperus. Wide distribution		**NO**	Foden, W. & Potter, L. 2005. Cyperus congestus Vahl. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28

No	Genus	species	Subsp / Variation	Family	Provincial Conservation Status	Current National Status SANBI	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
285	*Mariscus*	*uitenhagensis*		Cyperaceae		Least Concern	Genus changed to Cyperus. Wide distribution: Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, North West, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Cyperus uitenhagensis (Steud.) C.Archer & Goetgh. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
286	*Maytenus*	*linearis*		Celastraceae		Least Concern	Genus changed to Gymnosporia: Wide distribution - Eastern and Western Cape		**NO**	Archer, R.H. & Victor, J.E. 2005. Gymnosporia linearis (L.f.) Loes. subsp. linearis. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
287	*Maytenus*	*heterophylla*		Celastraceae		Least Concern	Genus changed to Gymnosporia: Wide distribution - Eastern Cape, KwaZulu-Natal, Limpopo, Mpumalanga	HIGH	**NO**	Archer, R.H. & Victor, J.E. 2005. Gymnosporia heterophylla (Eckl. & Zeyh.) Loes. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
288	*Melolobium*	*burchelli*		Fabaceae		Least Concern	Eastern Cape, Free State, KwaZulu-Natal, Mpumalanga, Northern Cape. Species changed to M. microphyllum	100	**YES**	Foden, W. & Potter, L. 2005. Melolobium microphyllum (L.f.) Eckl. & Zeyh. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
289	*Mesembryanthemum*	*aitonis*		Aizoaceae	Protected	Least Concern	Wide distribution in old Cape provinces	HIGH	**NO**	Goldblatt, P. & Manning, J. 2000. Cape Plants - A conspectus of the Cape Flora of South Africa. Strelitzia 9. National Botanical Institute, Pretoria Burgoyne, P.M. 2006. Mesembryanthemum aitonis Jacq. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
290	*Metalasia*	*densa*		Asteraceae		Least Concern	Eastern Cape, Free State, KwaZulu-Natal, Limpopo, Mpumalanga, Northern Cape, Western Cape	MEDIUM	**NO**	Foden, W. & Potter, L. 2005. Metalasia densa (Lam.) P.O.Karis. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
291	*Metalasia*	*muricata*		Asteraceae		Least Concern	Wide range but coastal areas from the Cape	**NIL**	**NO**	Foden, W. & Potter, L. 2005. Metalasia muricata (L.) D.Don. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22

No	Genus	species	Subsp / Variation	Family	Provincial Conservation Status	Current National Status SANBI	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
							Peninsula to the Ngqeleni-Mqanduli district in the Transkei.			
292	*Metalasia*	*trivialis*		Asteraceae		Least Concern	Eastern and Western Cape: Albany Thicket, Fynbos, Grassland	HIGH	**NO**	Foden, W. & Potter, L. 2005. Metalasia trivialis P.O.Karis. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
293	*Mohria*	*caffrorum*	*caffrorum*	Anemiaceae		Least Concern	Widely distributed fern species: old Cape provinces		**NO**	Victor, J.E. 2005. Mohria caffrorum (L.) Desv. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
294	*Monopsis*	*unidentata*	*unidentata*	Lobeliaceae		Least Concern	Eastern Cape and Western Cape endemic		**NO**	Victor, J.E. 2005. Monopsis unidentata (Dryand.) E.Wimm. subsp. unidentata. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
295	*Moquiniella*	*rubra*		Loranthaceae		Least Concern	Widely in the old Cape Provinces and associated with spp like: Vachellia, Carissa, Diospyros, Euclea, Ficus, Grewia, Searsia	100	**YES**	Visser, J. 1981. South African Parasitic Flowering Plants. Juta Press Cape Town. . Foden, W. & Potter, L. 2005. Moquiniella rubra (A.Spreng.) Balle. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
296	*Moraea*	*polystachya*		Iridaceae	Protected	Least Concern	Wide distribution old Cape Provinces, Free State and Namibia. Flowering time is limited to one day per flower and populations flowering time 6-8 weeks per annum.	HIGH	**NO**	Goldblatt, P. & Anderson, F. 1986. The Moraeas of Southern Africa. National Botanical Gardens, Pretoria. Foden, W. & Potter, L. 2005. Moraea polystachya (Thunb.) Ker Gawl. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
297	*Muraltia*	*alopecuroides*		Polygalaceae		Least Concern	Eastern and Western Cape: Albany Thicket, Fynbos, Grassland, Nama Karoo	HIGH	**NO**	Foden, W. & Potter, L. 2005. Muraltia alopecuroides (L.) DC. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
298	Muraltia	mixta		Polygalaceae		Data Deficient - Insufficient Information	Limited to sandstone slopes in the Fynbos and Western Cape endemic - not	**NIL**	NO	Helme, N.A. & Raimondo, D. 2009. Muraltia mixta (L.f.) DC. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03

No	Genus	species	Subsp / Variation	Family	Provincial Conservation Status	Current National Status SANBI	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
							recorded since 1954			
299	***Myrica***	*serrata*		Mricaceae		Least Concern	Widely distributed in all 9 provinces, but very limited in the N Cape. Genus changed to *Morella*.	HIGH	**NO**	Foden, W. & Potter, L. 2005. Morella serrata (Lam.) Killick. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
300	*Myrsine*	*africana*		Myrsinaceae		Least Concern	Wide distribution : Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, North West, Western Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Myrsine africana L. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
301	*Nemesia*	*melissifolia*		Scrophulariaceae		Least Concern	Eastern Cape, KwaZulu-Natal, Northern Cape, Western Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Nemesia melissifolia Benth. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
302	*Nenax*	*microphylla*		Rubiaceae		Least Concern	Eastern Cape, Free State, Northern Cape	100	**YES**	Foden, W. & Potter, L. 2005. Nenax microphylla (Sond.) T.M.Salter. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/0
303	*Nerine*	*huttoniae*		Iridaceae	Protected	Vulnerable B1ab(iii,v).	South Eastern Cape. Summer growing species: February to April. Flowering time coincided with field trip. Species only associated with rich alluvial floodplains in the Fish River Valley	**NIL**	**NO**	Du Plessis et al 1989. Bulbous Plants of Southern Africa. Tafelberg, Cape Town Dold, A.P., McMaster, C. & Raimondo, D. 2016. Nerine huttoniae Schönland. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
304	*Nidorella*	*auriculata*		Asteraceae		Least Concern	Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, North West, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Nidorella auriculata DC. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23

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305	*Ocimum*	*burchellianum*		Lamiaceae		Least Concern	Eastern Cape endemic widely distributed	HIGH	**NO**	Foden, W. & Potter, L. 2005. Ocimum burchellianum Benth. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
306	*Oedera*	*genistifolia*		Asteraceae		Least Concern	Endemic to old Cape Provinces	HIGH	**NO**	Foden, W. & Potter, L. 2005. Oedera genistifolia (L.) Anderb. & K.Bremer. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
307	*Oldenburgia*	*grandis*		Asteraceae		Least Concern	Eastern Cape endemic - associated with quartzitic and sandstone mountains	LOW	**NO**	Rebelo, A.G., Helme, N.A., Holmes, P.M., Forshaw, C.N., Richardson, S.H., Raimondo, D., Euston-Brown, D.I.W., Victor, J.E., Foden, W., Ebrahim, I., Bomhard, B., Oliver, E.G.H., Johns, A., van der Venter, J., van der Walt, R., von Witt, C., Low, A.B., Paterson-Jones, C., Rourke, J.P., Hitchcock, A.N., Potter, L., Vlok, J.H. & Pillay, D. 2005. Oldenburgia grandis (Thunb.) Baill. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
308	*Olea*	*europaea*	*africana*	Oleaceae		Least Concern	Widely distributed in all 9 provinces	100	**YES**	Foden, W. & Potter, L. 2005. Olea europaea L. subsp. africana (Mill.) P.S.Green. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
309	*Oligocarpus*	*calendulaceus*		Asteraceae		Least Concern	Genus changed to *Osteospermum calendulaceum*. Eastern Cape, KwaZulu-Natal, Northern Cape, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Osteospermum calendulaceum L.f. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
310	*Ornithogalum*	*fimbrimarginatum*		Hyacinthaceae		Least Concern	Species changed to *O. dubium*. Albany Thicket, Fynbos, Grassland, Indian Ocean Coastal Belt, Succulent Karoo	HIGH	**NO**	Klopper, R.R., Victor, J.E. & von Staden, L. 2012. Ornithogalum dubium Houtt. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
311	*Ornithogalum*	*juncifolium*		Hyacinthaceae		Least Concern	All provinces bar N Cape	HIGH	**NO**	van der Colff, D. 2015. Ornithogalum juncifolium Jacq. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
312	*Ornithogalum*	*unifolium*		Hyacinthaceae		Least Concern	Genus has changed to *Albuca*. Species has changed to *unifolia*. Northern and Western Cape endemic	**NIL**	**NO**	von Staden, L. 2012. Albuca unifolia (Retz.) J.C.Manning & Goldblatt. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02

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313	*Osteospermum*	*bidens*		Asteraceae		Least Concern	Northern and Western Cape endemic	**NIL**	**NO**	Foden, W. & Potter, L. 2005. Osteospermum bidens Thunb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
314	*Oxalis*	*semiloba*	*semiloba*	Oxilidaceae		Least Concern	Eastern Cape, Free State, Gauteng, Limpopo, Mpumalanga		**NO**	Foden, W. & Potter, L. 2005. Oxalis semiloba Sond. subsp. semiloba. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
315	*Pachypodium*	*succulentum*		Apocynaceae	Protected	Least Concern	Widespread spp in the old Cape provinces	100	**YES**	Raimondo, D., van Jaarsveld, E.J. & Vlok, J.H. 2007. Pachypodium succulentum (Jacq.) Sweet. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
316	*Pappea*	*capensis*		Sapindaceae		Least Concern	Widespread in all provinces	100	**YES**	Victor, J.E. & van Wyk, A.E. 2005. Pappea capensis Eckl. & Zeyh. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
317	*Passerina*	*montana*		Thymelaeaceae		Least Concern	Eastern Cape, Free State, KwaZulu-Natal, Limpopo, Mpumalanga, North West		**NO**	Foden, W. & Potter, L. 2005. Passerina montana Thoday. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
318	*Pegolettia*	*retrofracta*		Asteraceae		Least Concern	Eastern Cape, Free State, Limpopo, Northern Cape, North West, Western Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Pegolettia retrofracta (Thunb.) Kies. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
319	*Pelargonium*	*alchemilloides*		Gerianaceae		Least Concern	Wide distribution: Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, North West, Western Cape	100	**YES**	Foden, W. & Potter, L. 2005. Pelargonium alchemilloides (L.) L'Hér. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
320	*Pelargonium*	*aridum*		Gerianaceae		Least Concern	Eastern Cape, Free State, North West	HIGH	**NO**	Foden, W. & Potter, L. 2005. Pelargonium aridum R.A.Dyer. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
321	*Pelargonium*	*abrotanifolium*		Gerianaceae		Least Concern	Eastern Cape, Free State, Western Cape: Albany Thicket, Fynbos, Grassland, Nama	100	**YES**	Foden, W. & Potter, L. 2009. Pelargonium abrotanifolium (L.f.) Jacq. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22

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							Karoo, Succulent Karoo			
322	*Pelargonium*	*multicaule*	*multicaule*	Gerianaceae		Least Concern	Eastern Cape, Free State, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Pelargonium multicaule Jacq. subsp. multicaule. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
323	*Pelargonium*	*odoratissimum*		Gerianaceae		Least Concern	Eastern Cape, KwaZulu-Natal, Mpumalanga, Western Cape	LOW	**NO**	Foden, W. & Potter, L. 2005. Pelargonium odoratissimum (L.) L'Hér. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
324	*Pelargonium*	*sidoides*		Gerianaceae		Least Concern	Wide distribution: Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Mpumalanga, North West	100	**YES**	de Castro, A., Vlok, J.H., Newton, D., Motjotji, L. & Raimondo, D. 2012. Pelargonium sidoides DC. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
325	*Pellaea*	*calomelanos*	*leucomelas*	Pteridaceae		Least Concern	All 9 provinces	HIGH	**NO**	Foden, W. & Potter, L. 2005. Pellaea calomelanos (Sw.) Link var. calomelanos. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
326	*Pentzia*	*globosa*		Asteraceae		Least Concern	Widely distributed: Eastern Cape, Free State, Gauteng, Northern Cape, North West, Western Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Pentzia globosa Less. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
327	*Pentzia*	*incana*		Asteraceae		Least Concern	Wide distribution in semi-arid areas: Free State and old Cape Provinces	100	**YES**	von Staden, L. 2012. Pentzia incana (Thunb.) Kuntze. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
328	*Phylica*	*gnidioides*		Rhamnaceae		Least Concern	Humansdorp to Grahamstown: dunes and grassy areas: Eastern and Western Cape endemic	LOW	**NO**	Foden, W. & Potter, L. 2005. Phylica gnidioides Eckl. & Zeyh. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/0
329	*Phylica*	*paniculata*		Rhamnaceae		Least Concern	Widespread: Eastern Cape, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga,	HIGH	**NO**	von Staden, L. 2020. Phylica paniculata Willd. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03

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							North West, Western Cape			
330	*Pimpinella*	*caffra*		Apiaceae		Least Concern	Eastern Cape, KwaZulu-Natal, Limpopo, Mpumalanga: but southern end of distribution far from Bedford	LOW	**NO**	Victor, J.E. & Winter, P.J.D. 2005. Pimpinella caffra (Eckl. & Zeyh.) D.Dietr. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
331	*Plectranthus*	*ambiguus*		Lamiaceae		Least Concern	Eastern Cape and KZN: Grahamstown to Bathurst in semi-coastal areas along the east coast to Ngoye forest west of Richards Bay.	LOW	**NO**	von Staden, L. 2018. Plectranthus ambiguus (Bolus) Codd. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/0
332	*Plectranthus*	*grallatus*		Lamiaceae		Least Concern	Southern end of the species range may just be NE of Bedford: Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga	LOW	**NO**	Foden, W. & Potter, L. 2005. Plectranthus grallatus Briq. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/03
333	*Polygala*	*uncinata*		Polygalaceae		Least Concern	Occurs in all nine provinces	MEDIUM	**NO**	Foden, W. & Potter, L. 2005. Polygala uncinata E.Mey. ex Meisn. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
334	*Polygala*	*virgata*	*virgata*	Polygalaceae		Least Concern	Eastern Cape, Free State, Gauteng, Limpopo, Mpumalanga, Northern Cape, Western Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Polygala virgata Thunb. var. virgata. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
335	*Polygala*	*illepida*		Polygalaceae		Least Concern	Eastern Cape endemic	100	**YES**	Foden, W. & Potter, L. 2005. Polygala illepida E.Mey. ex Harv. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
336	*Polygala*	*leptophylla*		Polygalaceae		Least Concern	Eastern Cape, Free State, Gauteng, Limpopo, Mpumalanga,		**NO**	Foden, W. & Potter, L. 2005. Polygala leptophylla Burch. var. leptophylla. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23

No	Genus	species	Subsp / Variation	Family	Provincial Conservation Status	Current National Status SANBI	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
							Northern Cape, North West, Western Cape			
337	*Polygala*	*macowaniana*		Polygalaceae		Least Concern	Eastern Cape, KwaZulu-Natal		**NO**	Foden, W. & Potter, L. 2005. Polygala macowaniana Paiva. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
338	*Polypodium*	*vulgare*		Polypodiaceae		Least Concern	Eastern Cape, Free State, KwaZulu-Natal, Mpumalanga, Western Cape - widespread fern spp.		**NO**	Foden, W. & Potter, L. 2005. Polypodium vulgare L. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
339	*Polystichum*	*pungens*		Dryopteridaceae		Least Concern	Eastern Cape, KwaZulu-Natal, Limpopo, Mpumalanga, Western Cape - widespread fern sp.		**NO**	Foden, W. & Potter, L. 2005. Polystichum pungens (Kaulf.) C.Presl. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
340	*Portulacaria*	*afra*		Didieraceae		Least Concern	Widespread in Albany Thicket, Fynbos, Succulent Karoo, Savanna and Nama Karoo: Eastern Cape, KwaZulu-Natal, Limpopo, Mpumalanga, Western Cape	100	**YES**	von Staden, L. 2015. Portulacaria afra Jacq. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
341	*Psilocaulon*	*granulicaule*		Aizoaceae	Protected	Least Concern	Eastern Cape, Free State, Northern Cape, Western Cape	HIGH	**NO**	Burgoyne, P.M. 2006. Psilocaulon granulicaule (Haw.) Schwantes. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
342	*Ptaeroxylon*	*obliquum*		Rutaceae	Protected	Least Concern	Eastern Cape, KwaZulu-Natal, Limpopo, Mpumalanga, Western Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Ptaeroxylon obliquum (Thunb.) Radlk. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
343	*Pteridium*	*aquilinum*		Dennstaedtiaceae		Least Concern	Widespread fern spp: Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga,		**NO**	Foden, W. & Potter, L. 2005. Pteridium aquilinum (L.) Kuhn subsp. aquilinum. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02

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							North West, Western Cape			
344	*Pterocelastrus*	*tricuspidatus*		Celastraceae		Least Concern	Associated with dune forest, dune scrub and forest margins or mesic thicket. Study site is too dry.	**NIL**	**NO**	Williams, V.L., Raimondo, D., Crouch, N.R., Cunningham, A.B., Scott-Shaw, C.R., Lötter, M. & Ngwenya, A.M. 2020. Pterocelastrus tricuspidatus (Lam.) Walp. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
345	*Pteronia*	*adenocarpa*		Asteraceae		Least Concern	Endemic to the old Cape Provinces	HIGH	**NO**	Foden, W. & Potter, L. 2005. Pteronia adenocarpa Harv. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
346	*Pteronia*	*glomerata*		Asteraceae		Least Concern	Endemic to the old Cape Provinces		**NO**	Foden, W. & Potter, L. 2005. Pteronia glomerata L.f. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
347	*Pteronia*	*incana*		Asteraceae		Least Concern	Endemic to the old Cape Provinces	HIGH	**NO**	Foden, W. & Potter, L. 2005. Pteronia incana (Burm.) DC. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
348	*Pterygodium*	*magnum*		Orchidaceae	Protected	Least Concern	Eastern Cape, Free State, KwaZulu-Natal, Limpopo, - not endemic to SA. Southern distribution limit likely to be further N than study site.	LOW	**NO**	Foden, W. & Potter, L. 2005. Pterygodium magnum Rchb.f. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
349	*Putterlickia*	*pyracantha*		Celastraceae		Least Concern	Eastern and Western Cape endemic	HIGH	**NO**	von Staden, L. 2018. Putterlickia pyracantha (L.) Szyszyl. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
350	*Rafnia*	*elliptica*		Fabaceae		Least Concern	Eastern Cape, KwaZulu-Natal, Western Cape but limited to grassy coastal fynbos in the Eastern Cape or sandstone-derived soils in KZN	**NIL**	**NO**	von Staden, L. 2020. Rafnia elliptica Thunb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
351	*Relhania*	*pungens*		Asteraceae		Least Concern	Eastern and Western Cape endemic		**NO**	Foden, W. & Potter, L. 2005. Relhania pungens L'Hér. subsp. pungens. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
352	*Resnova*	*lachenalioides*		Hyacinthaceae		Least Concern	Genus changed to *Ledebouria*.		NO	Hankey, A.J. & Victor, J.E. 2005. Ledebouria lachenalioides (Baker) J.C.Manning & Goldblatt.

No	Genus	species	Subsp / Variation	Family	Provincial Conservation Status	Current National Status SANBI	RRRG Comment	RRRG LOO	RRRG Found on site	Reference	
										National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02	
353	*Restio*	*sejunctus*		Restionaceae		Least Concern	Eastern Cape, KwaZulu-Natal, Western Cape. Rocky slopes	MEDIUM	**NO**	Haaksma, E.D, & Linder, P. 2000. Restios of the Fynbos. Botanical Society of South Africa. Foden, W. & Potter, L. 2005. Restio sejunctus Mast. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02	
354	*Restio*	*triticeus*		Restionaceae		Least Concern	Eastern and Western Cape endemic - limited to dry fynbos vegetation often on congolmerate geology	LOW	**NO**	Haaksma, E.D, & Linder, P. 2000. Restios of the Fynbos. Botanical Society of South Africa. Foden, W. & Potter, L. 2005. Restio triticeus Rottb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02	
355	*Rhodocoma*	*fruticosa*		Restionaceae		Least Concern	Eastern Cape, KwaZulu-Natal, Western Cape - widespread species Western Cape, Eastern Cape and KZN. Sandstone and lateritic soils.	MEDIUM	**NO**	Haaksma, E.D, & Linder, P. 2000. Restios of the Fynbos. Botanical Society of South Africa. Foden, W. & Potter, L. 2005. Rhodocoma fruticosa (Thunb.) H.P.Linder. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23	
356	*Rhoicissus*	*rhomboidea*		Vitaceae		Least Concern	Eastern Cape, KwaZulu-Natal, Limpopo, but a forest species	**NIL**	**NO**	Pooley, E. 1997. The Complete Guide to the Trees of Natal, Zululand and Transkei. Natal Flora Publications Trust. Durban. Foden, W. & Potter, L. 2005. Rhoicissus rhomboidea (E.Mey. ex Harv.) Planch. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02	
357	*Rhynchosia*	*totta*	*totta*	Fabaceae		Least Concern	Occurs in all nine provinces		**NO**	Foden, W. & Potter, L. 2005. Rhynchosia totta (Thunb.) DC. var. totta. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23	
358	*Rhynchosia*	*calvescens*		Fabaceae		Least Concern	Eastern Cape and KZN		**NO**	Foden, W. & Potter, L. 2005. Rhynchosia calvescens Meikle. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23	
359	*Rhynchosia*	*ciliata*		Fabaceae		Least Concern	Eastern and Western Cape endemic		**NO**	Foden, W. & Potter, L. 2005. Rhynchosia ciliata (Thunb.) Schinz. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23	
360	*Rubus*	*pinnatus*		Rosaceae		Least Concern	Eastern Cape, KwaZulu-Natal, Limpopo, Mpumalanga, Western Cape	HIGH	**NO**	von Staden, L. 2013. Rubus pinnatus Willd. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02	
361	*Rumohra*	*adiantiformis*		Dryopteridaceae		Least Concern	Eastern Cape, KwaZulu-Natal,		**NO**		

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							Limpopo, Mpumalanga, Western Cape			
362	*Ruschia*	*orientalis*		Aizoaceae	Protected	Least Concern.	Eastern Cape endemic		**NO**	Foden, W. & Potter, L. 2005. Ruschia orientalis L.Bolus. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
363	*Ruschia*	*complanata*		Aizoaceae	Protected	Data Deficient - Taxonomically Problematic	Eastern Cape endemic		**NO**	Raimondo, D. & Cholo, F. 2008. Ruschia complanata L.Bolus. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
364	*Ruschia*	*cradockensis*	*cradockensis*	Aizoaceae	Protected	Least Concern	Eastern and Western Cape endemic	100	**YES**	Burgoyne, P.M. 2006. Ruschia cradockensis (Kuntze) H.E.K.Hartmann & Stüber subsp. cradockensis. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
365	*Ruschia*	*uncinata*		Aizoaceae	Protected	Least Concern.	Western Cape endemic	**NIL**	**NO**	Burgoyne, P.M. 2006. Ruschia uncinata (L.) Schwantes. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
366	*Salvia*	*repens*	*repens*	Lamiaceae		Least Concern	Wide distribution Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, North West, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Salvia repens Burch. ex Benth. var. repens. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/28
367	*Salvia*	*stenophylla*		Lamiaceae			Not listed on SANBI RED Data List.		**NO**	
368	*Sansevieria*	*aethiopica*		Ruscaceae		Least Concern.	Wide distribution: Eastern Cape, Free State, Gauteng, Limpopo, Northern Cape, North West	100	**YES**	Foden, W. & Potter, L. 2005. Sansevieria aethiopica Thunb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
369	*Sansevieria*	*hyacinthoides*		Ruscaceae		Least Concern.	Wide distribution: distribution Eastern Cape, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga	100	**YES**	Foden, W. & Potter, L. 2005. Sansevieria hyacinthoides (L.) Druce. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
370	*Satyrium*	*membranaceum*		Orchidaceae	Protected	Least Concern.	Uncommon and restricted to	**NIL**	**NO**	Johnson, S. & Bytebier, B. 2015. Orchids of South Africa. Struik, Cape Town. Foden, W. & Potter, L.

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							stony grass slopes but below 700m above sea-level.			2005. Satyrium membranaceum Sw. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
371	*Satyrium*	*parviflorum*		Orchidaceae	Protected	Least Concern.	Locally uncommon but linked to a wide variety of vegetation types.	MEDIUM	**NO**	Johnson, S. & Bytebier, B. 2015. Orchids of South Africa. Struik, Cape Town. Foden, W. & Potter, L. 2005. Satyrium parviflorum Sw. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
372	*Scabiosa*	*columbaria*		Dipsacaceae		Least Concern	Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, Northern Cape, North West	HIGH	**NO**	Williams, V.L., Raimondo, D., Crouch, N.R., Cunningham, A.B., Scott-Shaw, C.R., Lötter, M. & Ngwenya, A.M. 2008. Scabiosa columbaria L. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
373	*Scabiosa*	*tysonii*		Dipsacaceae		Least Concern	Eastern Cape and Natal endemic - study site at the extreme end of southern range	MEDIUM	**NO**	Foden, W. & Potter, L. 2005. Scabiosa tysonii L.Bolus. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
374	*Schoenoplectus*	*decipiens*		Cyperaceae		Least Concern	Wide distribution in all nine provinces and associated with vleis, seepage areas and margins of pools	HIGH	**NO**	Mtshali, H., Cholo, F. & Foden, W. 2017. Schoenoplectus decipiens (Nees) J.Raynal. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
375	*Schoenoplectus*	*paludicola*		Cyperaceae		Least Concern	Eastern Cape, KwaZulu-Natal, Mpumalanga, Western Cape		**NO**	Foden, W. & Potter, L. 2006. Schoenoplectus paludicola (Kunth) J.Raynal. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
376	*Schoenoxiphium*	*lehmannii*		Cyperaceae		Least Concern	Eastern Cape and KZN - linked to forests	LOW	**NO**	Victor, J.E. 2004. Schoenoxiphium lehmannii (Nees) Steud. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/0
377	*Schoenoxiphium*	*sparteum*		Cyperaceae		Least Concern	Eastern Cape, Free State, KwaZulu-Natal		**NO**	Foden, W. & Potter, L. 2005. Schoenoxiphium sparteum (Wahlenb.) C.B.Clarke. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
378	*Schotia*	*latifolia*		Fabaceae		Least Concern	Widely distributed: Eastern Cape, KwaZulu-Natal, Limpopo, Mpumalanga, Western Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Schotia latifolia Jacq. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02

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379	*Schotia*	*afra*	*afra*	Fabaceae		Least Concern	Eastern Cape and Western Cape endemic: Albany Thicket, and Karoo	100	**YES**	Foden, W. & Potter, L. 2005. Schotia afra (L.) Thunb. var. afra. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
380	*Sclerochiton*	*odoratissimus*		Acanthaceae		Least Concern	Limited to KwaZulu and Eastern Cape		**NO**	Kamundi, D.A. 2006. Sclerochiton odoratissimus Hilliard. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
381	*Scutia*	*myrtina*		Rhamnaceae		Least Concern	Eastern Cape, KwaZulu-Natal, Limpopo, Mpumalanga, Western Cape. An indigenous bush encroacher,	HIGH	**NO**	Foden, W. & Potter, L. 2005. Scutia myrtina (Burm.f.) Kurz. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
382	*Searsia*	*burchellii*		Anacaridaceae		Least Concern	The plant naturally occurs in Northern Cape, Western Cape, Free State, western Lesotho and Namibia. This inland, dry area grassland plant also occurs in rocky area	HIGH	**NO**	https://treesa.org/searsia-burchellii/ von Staden, L. 2018. Searsia burchellii (Sond. ex Engl.) Moffett. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02.
383	*Searsia*	*crenata*		Anacaridaceae		Least Concern	SA endemic: Eastern Cape, KwaZulu-Natal, Western Cape. Species restricted to coastal and inland dune ecosystems	**NIL**	**NO**	von Staden, L. 2018. Searsia crenata (Thunb.) Moffett. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02. Pooley, E. 1997. The Complete Guide to the Trees of Natal, Zululand and Transkei. Natal Flora Publications Trust. Durban.
384	*Searsia*	*dentata*		Anacaridaceae		Least Concern	Occurs naturally in almost the whole of South Africa except the Western and Northern Cape Provinces	100	**YES**	von Staden, L. 2018. Searsia dentata (Thunb.) F.A.Barkley. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
385	*Searsia*	*dregeana*		Anacaridaceae		Least Concern	Eastern Cape and Free State		**NO**	Foden, W. & Potter, L. 2005. Searsia dregeana (Sond.) Moffett. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02

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386	*Searsia*	*glauca*		Anacaridaceae		Least Concern	Eastern Cape and Western Cape Endemic in Albany Thicket, Fynbos, Succulent Karoo	HIGH	**NO**	von Staden, L. 2018. Searsia glauca (Thunb.) Moffett. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
387	*Searsia*	*gueinzii*		Anacaridaceae		Least Concern	Eastern Cape, KwaZulu-Natal, Limpopo, Mpumalanga: very unlikely in study area - too far south for range.	LOW	**NO**	von Staden, L. 2018. Searsia gueinzii (Sond.) F.A.Barkley. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
388	*Searsia*	*incisa*		Anacaridaceae		Least Concern	Northern Cape and Eastern Cape endemic	HIGH	**NO**	Foden, W. & Potter, L. 2005. Searsia incisa (L.f.) F.A.Barkley var. incisa. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
389	*Searsia*	*lancea*		Anacaridaceae		Least Concern	Eastern Cape, Free State, Gauteng, Limpopo, Mpumalanga, Northern Cape, North West, Western Cape	100	**YES**	von Staden, L. 2018. Searsia lancea (L.f.) F.A.Barkley. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
390	*Searsia*	*longispina*		Anacaridaceae		Least Concern	Widespread in the old Cape provinces: Albany Thicket, Nama Karoo, Succulent Karoo	100	**YES**	von Staden, L. 2018. Searsia longispina (Eckl. & Zeyh.) Moffett. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
391	*Searsia*	*lucida*	*elliptica*	Anacaridaceae		Least Concern	Not determined	HIGH	**NO**	SANBI. 2020. Searsia lucida (L.) F.A.Barkley forma elliptica. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
392	*Searsia*	*rhodesiensis*	*rhodesiensis*	Anacaridaceae		Least Concern	Limited to the Limpopo Provinces. Name has changed to *Searsia magalismontana*	**NIL**	**NO**	Foden, W. & Potter, L. 2005. Searsia magalismontana (Sond.) Moffett subsp. trifoliolata (Baker f.) Moffett. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
393	*Searsia*	*chirindensis*		Anacaridaceae		Least Concern	Limited to forest and forest margins, in the following vegetation types:	LOW	**NO**	von Staden, L. 2018. Searsia chirindensis (Baker f.) Moffett. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02

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							Forest, Indian Ocean Coastal Belt and Savanna			
394	*Searsia*	*rehmanniana*	*glabrata*	Anacaridaceae		Least Concern	Widely distributed in drainage lines: Eastern Cape, KwaZulu-Natal, Limpopo, Mpumalanga, Western Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Searsia rehmanniana (Engl.) Moffett var. glabrata (Sond.) Moffett. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
395	*Sebaea*	*sedoides*	*confertiflora*	Gentianaceae		Least Concern	Wide distribution: Eastern Cape, Free State, KwaZulu-Natal, Limpopo, Mpumalanga		**NO**	Foden, W. & Potter, L. 2005. Sebaea sedoides Gilg var. confertiflora (Schinz) Marais. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
396	*Selago*	*corycymbosa*		Scrophulariaceae		Least Concern	Eastern and Western Cape endemic		**NO**	Foden, W. & Potter, L. 2005. Selago corymbosa L. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
397	*Selago*	*densiflora*		Scrophulariaceae		Least Concern	Wide distribution but unkikely in the study area	LOW	**NO**	Foden, W. & Potter, L. 2005. Selago densiflora Rolfe. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
398	*Selago*	*dolocosa*		Scrophulariaceae		Least Concern	No species listed on SANBI RED LIST. S. dolosa is however listed.		**NO**	Foden, W. & Potter, L. 2005. Selago dolosa Hilliard. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
399	*Selago*	*galpinii*		Scrophulariaceae		Least Concern	Wide distribution: Eastern Cape, Free State, KwaZulu-Natal, Mpumalanga		**NO**	Foden, W. & Potter, L. 2005. Selago galpinii Schltr. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
400	*Selago*	*geniculata*		Scrophulariaceae		Least Concern	Wide distribution in the following provinces: Eastern Cape, Free State, Northern Cape, North West, Western Cape	100	**YES**	Foden, W. & Potter, L. 2005. Selago geniculata L.f. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
401	*Selago*	*gracilis*		Scrophulariaceae		Least Concern	Eastern and Western Cape endemic		**NO**	Foden, W. & Potter, L. 2005. Selago gracilis (Rolfe) Hilliard. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
402	*Selago*	*saxatilis*		Scrophulariaceae		Least Concern	Eastern Cape, Free State, Northern Cape	100	**YES**	Foden, W. & Potter, L. 2005. Selago saxatilis E.Mey. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29

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403	*Senecio*	*inaequidens*		Asteraceae		Least Concern	Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, Northern Cape, North West	100	**YES**	Foden, W. & Potter, L. 2005. Senecio inaequidens DC. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
404	*Senecio*	*oxyodontus*		Asteraceae		Least Concern	Eastern Cape, KwaZulu-Natal		**NO**	Foden, W. & Potter, L. 2005. Senecio oxyodontus DC. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
405	*Senecio*	*bracachypodus*		Asteraceae		Least Concern	Eastern Cape, KwaZulu-Natal		**NO**	von Staden, L. 2020. Senecio brachypodus DC. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
406	*Senecio*	*conrathii*		Asteraceae		Least Concern	Predominantly Kwazulu Natal, Mpumalanga and Limpopo	LOW	**NO**	Foden, W. & Potter, L. 2005. Senecio conrathii N.E.Br. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
407	*Senecio*	*erucubescens*		Asteraceae		Least Concern	Widespread: South Africa from Limpopo to the Cape Peninsula and Cederberg, southern Tropical Africa and Congo	HIGH	**NO**	von Staden, L. 2016. Senecio erubescens Aiton. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
408	*Senecio*	*juniperinus*		Asteraceae		Least Concern	Eastern and Western Cape endemic		**NO**	Foden, W. & Potter, L. 2005. Senecio juniperinus L.f. var. juniperinus. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
409	*Senecio*	*linifolius*		Asteraceae		Least Concern	Eastern Cape endemic and widespread: Fynbos, Grassland, Nama Karoo, Savanna		**NO**	von Staden, L. 2011. Senecio linifolius L. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
410	*Senecio*	*radicans*		Asteraceae		Least Concern	Not listed on SANBI RED LIST or Golding 2002 or Hilton-Taylor 1996. Widely distributed in arid parts of South Africa	100	**YES**	Smith et al. 2017. Field Guide to the Succulents in Southern Africa. Smith, G.F., Crouch, N.R., & Figueiredo, E. 2017. Field Guide to the Succulents in Southern Africa. Struik Nature, Cape Town. Golding, J. (ed) 2002. Southern African Plant Red Data Lists. South African Biodiversity Network Report no 14. SABONET, Pretoria.
411	*Senecio*	*retrorsus*		Asteraceae		Least Concern	Eastern Cape and KZN		**NO**	Foden, W. & Potter, L. 2005. Senecio retrorsus DC. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23

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412	*Senecio*	*speciosus*		Asteraceae		Least Concern	Eastern Cape, Free State, KwaZulu-Natal, Limpopo, Mpumalanga, Western Cape	MEDIUM	**NO**	Foden, W. & Potter, L. 2005. Senecio speciosus Willd. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
413	*Silene*	*angustifolcchellii*	*angustifolia*	Caryophyllaceae		Least Concern	Species name chnaged to *S. burcherllii*. Widely distributed: Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, Northern Cape, Western Cape	HIGH	**NO**	von Staden, L. 2014. Silene burchellii Otth subsp. pilosellifolia (Cham. & Schltdl.) J.C.Manning & Goldblatt. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
414	*Sonchus*	*dregeanus*		Asteraceae		Least Concern	All nine provinces		**NO**	Foden, W. & Potter, L. 2005. Sonchus dregeanus DC. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/23
415	*Spiloxene*	*trifurcillata*		Hypoxidaceae		Least Concern	Genus changed to Pauridia. Eastern Cape endemic.		**NO**	Foden, W. & Potter, L. 2005. Pauridia trifurcillata (Nel) Snijman & Kocyan. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
416	*Stachys*	*aethiopica*		Lamiaceae		Least Concern	Wide distribution: Eastern Cape, Free State, KwaZulu-Natal, Limpopo, Mpumalanga, Northern Cape, Western Cap	HIGH	**NO**	Foden, W. & Potter, L. 2005. Stachys aethiopica L. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
417	*Stapelia*	*macowanii*	*conformis*	Asclepiadaceae	Protected	Not Determined	Widely distributed - but and Eastern Cape endemic. Species name has changed to *S. grandiflora*	100	**YES**	Victor, J.E. 2005. Stapelia grandiflora Masson var. conformis (N.E.Br.) Bruyns. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
418	*Stegnogramma*	*pozoi*		Thelypteridaceae		Least Concern	Widely distributed fern species: Eastern Cape, KwaZulu-Natal, Limpopo, Mpumalanga, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Stegnogramma pozoi (Lag.) K.Iwats. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29

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419	*Sutera*	*campanulata*		Scrophulariaceae		Least Concern	Genus changed to *Chaenostoma. Eastern Cape endemic.*		**NO**	Naidoo, K. 2005. Chaenostoma campanulatum Benth. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
420	*Sutera*	*pinnatifida*		Scrophulariaceae		Least Concern	Genus changed to *Jamesbrittenia. Old Cape Provinces endemic.*		**NO**	Raimondo, D., Matlamela, P.F. & Kamundi, D.A. 2008. Jamesbrittenia pinnatifida (L.f.) Hilliard. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
421	*Sutherlandia*	*frutescens*	*frutescens*	Fabaceae		Least Concern	Genus changed to *Lessertia*. Subspecies added.	HIGH	**NO**	Foden, W. & Potter, L. 2005. Lessertia frutescens (L.) Goldblatt & J.C.Manning subsp. frutescens. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
422	*Sutherlandia*	*humilis*		Fabaceae		Least Concern	Genus changed to *Lessertia*. Species lumped with *L. frutescens* subsp. *frutesecens*.		**NO**	Foden, W. & Potter, L. 2005. Lessertia frutescens (L.) Goldblatt & J.C.Manning subsp. frutescens. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/30
423	*Sutherlandia*	*microphylla*		Fabaceae		Least Concern	Genus changed to *Lessertia*. Species name changed to L. *frutescens* subspecies *microphylla*. Widely distributed: Eastern Cape, Free State, Gauteng, Limpopo, Mpumalanga, Northern Cape, North West, Western Cape - but study area at the end of its range.	MEDIUM	**NO**	Foden, W. & Potter, L. 2011. Lessertia frutescens (L.) Goldblatt & J.C.Manning subsp. microphylla (Burch. ex DC.) J.C.Manning & Boatwr. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
424	*Talinum*	*caffrum*		Anacampserotaceae		Least Concern	Widely distributed: Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, Northern Cape, North West	HIGH	**NO**	Williams, V.L., Raimondo, D., Crouch, N.R., Cunningham, A.B., Scott-Shaw, C.R., Lötter, M. & Ngwenya, A.M. 2008. Talinum caffrum (Thunb.) Eckl. & Zeyh. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26

No	Genus	species	Subsp / Variation	Family	Provincial Conservation Status	Current National Status SANBI	RRRG Comment	RRRG LOO	RRRG Found on site	Reference
425	*Tarchonanthus*	*camphoratus*		Asteraceae		Least Concern	African distribution	HIGH	**NO**	von Staden, L. 2018. Tarchonanthus camphoratus L. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
426	*Tephrosia*	*capensis*		Fabaceae		Least Concern	Wide distribution: Eastern Cape, Gauteng, Mpumalanga, Western Cape	100	**YES**	Foden, W. & Potter, L. 2005. Tephrosia capensis (Jacq.) Pers. var. acutifolia E.Mey. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
427	*Tetraria*	*cuspidata*		Cyperaceae		Least Concern	Wide distribution: Eastern Cape, KwaZulu-Natal, Limpopo, Mpumalanga, Western Cape	HIGH	**NO**	van der Colff, D. & von Staden, L. 2020. Tetraria cuspidata (Rottb.) C.B.Clarke. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
428	*Teucrium*	*africanum*		Lamiaceae		Least Concern	Eastern and Western Cape		**NO**	Foden, W. & Potter, L. 2005. Teucrium africanum Thunb. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
429	*Thesium*	*pallidum*		Santalaceae		Least Concern	Eastern Cape, Gauteng, KwaZulu-Natal, Mpumalanga	HIGH	**NO**	Williams, V.L., Raimondo, D., Crouch, N.R., Cunningham, A.B., Scott-Shaw, C.R., Lötter, M. & Ngwenya, A.M. 2008. Thesium pallidum A.DC. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/26
430	*Thunbergia*	*capensis*		Acanthaceae		Least Concern	Eastern and Western Cape. Needs desktop work on niche requirements		**NO**	Kamundi, D.A. 2006. Thunbergia capensis Retz. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
431	*Trachyandra*	*asperata*		Asphodelaceae		Least Concern	Eastern Cape, Free State, KwaZulu-Natal, Mpumalanga and not endemic to SA	100	**YES**	Foden, W. & Potter, L. 2005. Trachyandra asperata Kunth var. asperata. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
432	*Trachyandra*	*saltii*		Asphodelaceae		Least Concern	Wide distribution: Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, Northern Cape, North West		**NO**	Foden, W. & Potter, L. 2005. Trachyandra saltii (Baker) Oberm. var. saltii. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
433	*Trachyandra*	*giffenii*		Asphodelaceae		Least Concern	Eastern Cape endemic	HIGH	**NO**	Foden, W. & Potter, L. 2005. Trachyandra giffenii (F.M.Leight.) Oberm. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22

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434	*Trichodiadema*	*mirabile*		Aizoaceae	Protected	Least Concern	Limited to stony slopes of the Cape fold mountains from the Witteberg to Uitenhage.	**NIL**	**NO**	Goldblatt, P. & Manning, J. 2000. Cape Plants - A conspectus of the Cape Flora of South Africa. Strelitzia 9. National Botanical Institute, Pretoria. Burgoyne, P.M. 2006. Trichodiadema mirabile (N.E.Br.) Schwantes. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
435	*Trifolium*	*burchellianum*		Fabaceae		Least Concern	Widely distributed Eastern Cape, Free State, KwaZulu-Natal, Northern Cape, Western Cape	HIGH	**NO**	von Staden, L. 2017. Trifolium burchellianum Ser. subsp. burchellianum. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
436	*Tritonia*	*gladiolaris*		Iridaceae	Protected	Least Concern	Wide distribution: Eastern Cape, KwaZulu-Natal, Mpumalanga, Western Cape		**NO**	Foden, W. & Potter, L. 2005. Tritonia gladiolaris (Lam.) Goldblatt & J.C.Manning. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
437	*Tritonia*	*strictifolia*		Iridaceae	Protected	Least Concern	Also listed as Tritonia laxifolia. Eastern Cape endemic	MEDIUM	**NO**	Foden, W. & Potter, L. 2005. Tritonia strictifolia (Klatt) Benth. & Hook.f. ex B.D.Jacks. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
438	*Vachellia*	*karroo*		Fabaceae		Least Concern	Ubiquitous and an indigenous bush encroacher	100	**YES**	Foden, W. & Potter, L. 2005. Vachellia karroo (Hayne) Banfi & Gallaso. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/25
439	*Viscum*	*continuum*		Santalaceae		Least Concern	Eastern and Western Cape, widely distributed and associated with Vachellia karoo, *Diospyros* spp and *Searsia* spp.	HIGH	**NO**	Visser, J. 1981. South African Parasitic Flowering Plants. Juta Press Cape Town. Foden, W. & Potter, L. 2005. Viscum continuum E.Mey. ex Sprague. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
440	*Viscum*	*crassulae*		Santalaceae		Least Concern	Mostly Eastern Cape endemic with small population in the Western Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Viscum crassulae Eckl. & Zeyh. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
441	*Viscum*	*rotundifolium*		Santalaceae		Least Concern	Occurs in all nine provinces	100	**YES**	Foden, W. & Potter, L. 2005. Viscum rotundifolium L.f. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
442	*Wahlenbergia*	*albens*		Campalulaceae		Least Concern	Not endemic to SA. Wide distribution: Eastern Cape,		**NO**	Foden, W. & Potter, L. 2005. Wahlenbergia albens (Spreng. ex A.DC.) Lammers. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22

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							Free State, Northern Cape, Western Cape			
443	*Wahlenbergia*	*cuspidata*		Campalulaceae		Least Concern	KZN and Eastern Cape not endemic to SA		**NO**	Welman, W.G. & Victor, J.E. 2006. Wahlenbergia cuspidata Brehmer. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
444	*Wahlenbergia*	*juncea*		Campalulaceae		Least Concern	Wide distribution - Eastern Cape endemic	100	**YES**	von Staden, L. 2017. Wahlenbergia juncea (H.Buek) Lammers. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
445	*Walafrida*	*geniculata*		Scrophulariaceae		Least Concern	Genus changed to Selago. See *S. geniculata*	100	**NO**	Foden, W. & Potter, L. 2005. Selago geniculata L.f. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/29
446	*Xysmalobium*	*parviflorum*		Apocynaceae	Protected		Wide distribution: Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga	MEDIUM	**NO**	Foden, W. & Potter, L. 2005. Xysmalobium parviflorum Harv. ex Scott-Elliot. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/05/02
447	*Zaluzianskya*	*spathacea*		Scrophulariaceae		Least Concern	Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga - but may be at the end of its southern range at the Study Site	MEDIUM	**NO**	von Staden, L. 2020. Zaluzianskya spathacea (Benth.) Walp. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
448	*Zanthoxylum*	*capense*		Rutaceae	Protected	Least Concern	Widespread in southern Africa	HIGH	**NO**	Williams, V.L., Raimondo, D., Crouch, N.R., Cunningham, A.B., Scott-Shaw, C.R., Lötter, M. & Ngwenya, A.M. 2008. Zanthoxylum capense (Thunb.) Harv. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22
449	*Zornia*	*capensis*	*capensis*	Fabaceae		Least Concern	All provinces bar Northen and Western Cape	HIGH	**NO**	Foden, W. & Potter, L. 2005. Zornia capensis Pers. subsp. capensis. National Assessment: Red List of South African Plants version 2020.1. Accessed on 2022/04/22