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BCR Projects' Moordkopje & Zwartfontein Prospecting Right Application: Limpopo Province

Terrestrial Fauna Compliance Statement

August 2022

Specialist Qualification & Declaration

Barbara Kasl (CV summary and SACNASP Registration attached as Appendix A):

- Holds a PhD in Animal, Plant and Environmental Sciences from the University of the Witwatersrand;
- Is a registered SACNASP Professional Ecological and Environmental Scientist (Pr.Sci.Nat. Registration No.: 400257/09), with expertise in faunal ecology; and
- Has been actively involved in the environmental consultancy field for over 14 years.

I, Barbara Kasl, confirm that:

- I act as independent consultant and specialist in the field of ecology and environmental sciences;
- I have no vested interest in the project other than remuneration for work completed in terms of the Scope of Work;
- I have presented the information in this report in line with the requirements of the Animal Species and Terrestrial Biodiversity Protocols as required under the National Environmental Management Act (107/1998) (NEMA) as far as these are relevant to the specific subject and Scope of Work;
- I have taken NEMA Principals into account as far as these are relevant to the Scope of Work; and
- Information presented is, to the best of my knowledge, accurate and correct within the restraints of stipulated limitations.

15-08-2022

Acronyms

ADU	Animal Demographic Unit
AI(S)	Alien Invasive (Species)
BGIS	Biodiversity Geographic Information System
CBA	Critical Biodiversity Areas
ESA	Ecological Support Area
IBA	Important Bird Area
IUCN	International Union for Conservation of Nature
NEMA	National Environment Management Act, 1998 (Act No. 107 of 1998)
NFEPA	National Freshwater Ecosystem Priority Area
NPAES	National Protected Area Expansion Strategy
PA	Protected Area
PES	Present Ecological State
QDGS	Quarter Degree Grid Square
RIVCON	River Condition
RL	Red-listed
SABAP	South African Bird Atlas Project
SANBI	South African National Biodiversity Institute
SCC	Species of Conservation Concern (specifically listed in the SANBI's 2020 Species Guideline)
SEI	Site Ecological Importance
SWSA	Strategic Water Source Area
TOP(S)	Threatened or Protected (Species)
UNESCO	United Nations Educational, Scientific and Cultural Organization
VMUS	Virtual Museum

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1. Introduction

BCR Projects (Pty) Ltd is applying for the right to prospect Platinum Group Metals on the Farm Zwartfontein 814 LR and Moordkopje 813 LR, in the magisterial district of Mogalakwena (Waterberg District), Limpopo (Plan 1). The proposed non-invasive prospecting activities will include the following main techniques:

- Data search, field mapping and desktop studies;
- Logging and sampling historical cores; and
- Scoping and pre-feasibility studies.

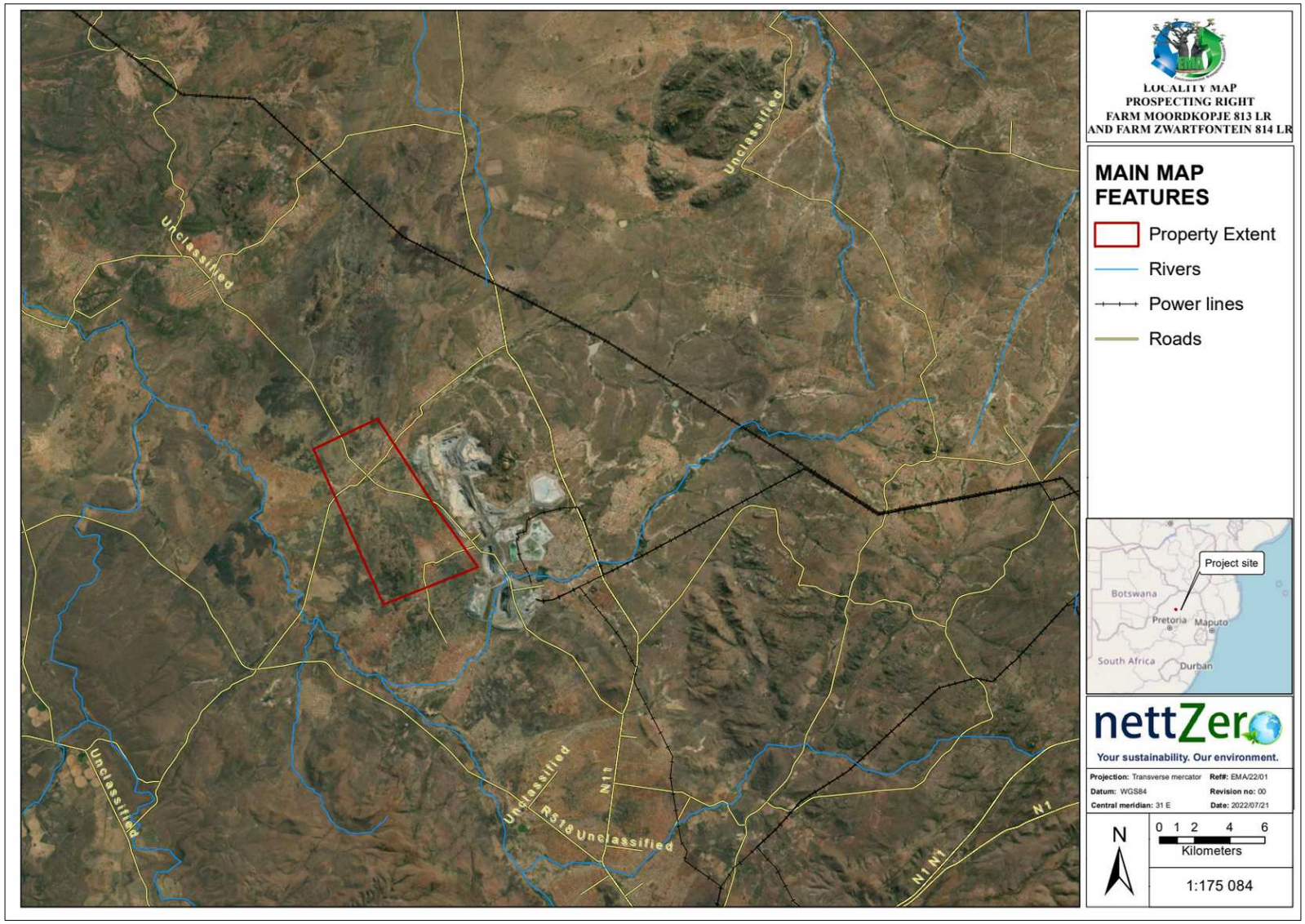
Due to the large amount of previous diamond core drilling conducted in the area, new drilling locations will only be considered after completion of all the sourced historic exploration results. Therefore, at this stage, no activity is proposed for the area as enough existing historical geological data is available for the prospecting right application.

Activity will be limited to persons visiting the site to complete administrative tasks associated with the prospecting rights application process only (placing notices, having meetings with the communities, etc.).

The BCR Projects' Prospecting Rights area is more than 4000ha, with an estimated third under rural township development in and around Mapela. According to the Environmental Screening Tool Report, the following is relevant in terms of the site:

- The site is ranked as medium sensitivity (no prior records but habitat may be present) for five species of conservation concern (SCCs) (Appendix B).
- Most of the site is ranked as low sensitivity for aquatic and terrestrial biodiversity. Very limited high ranked areas are associated with two riverine areas in the north and south of the property (aquatic biodiversity) and a CBA1 (terrestrial biodiversity) in the south of the property (Appendix B).

Due to the fact that no activity will take place, habitat and SCCs will not be exposed to any impact. Any fauna species on site will remain on site and receptor resilience (SANBI, 2020) is very high for all species. Therefore the overall status on site in terms of fauna habitats, ecological service provision to fauna and fauna biodiversity will not be altered or impacted due to the proposed project.



Plan 1: Prospecting Right locality plan

1.1 Legislative Context

The National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), NEMA Environmental Impact Assessment (EIA) Regulations (GNR982, 2017) and the requirements of the EIA Screening Tool Protocols for the Assessment and Reporting of Environmental Themes for animal species (GN1150 of 2020) and relevant aspects of biodiversity (GN320 of 2020) are the main legislation governing the necessity and approach of the animal species and fauna biodiversity assessment. In addition to NEMA and the Environmental Themes Protocols discussed above, the following are relevant:

- The National Environmental Management Biodiversity Act, 2004. (Act 10 of 2004) (NEM:BA).
- The National Environmental Management: Protected Areas Act (Act 57 0f 2003) (NEM:PAA).

The Limpopo Environmental Management Act (No. 7 0f 2003) lists provincially protected species. Although this report does not delve into the legislation, and the development does not intend activities involving the handling of any fauna species, this legislation must be complied with should circumstances arise that require the handling of any fauna on site.

1.2 Scope of Work & Methodology

The current protocols do not distinguish between zero, low or high impact developments only site sensitivity. According to site sensitivity alone, a full Terrestrial Animal Species Specialist Report would be required. However, as no activity is proposed and therefore no impact; one cannot assess impacts or assess the site ecological importance, which is dependent on activity taking place and associated impacts to inform the level of mitigation.

Therefore, due to the lack of impact and the fact that the site's existing status will persist, a compliance statement has been compiled in terms of terrestrial fauna as per the requirements of the EIA Screening Tool Protocols for the Assessment and Reporting of Environmental Themes (GN1150 & GN320 of 2020), published under the National Environment Management Act, 1998 (Act No. 107 of 1998) (NEMA). No fauna-specific site assessment was undertaken, but other ecological specialist did complete site visits and were contacted to photograph specific areas in addition to the general area.

In addition to the requirements of a compliance statement, a discussion of the trigger SCCs is provided, as well as any additional likely threatened or protected (TOP) species. A high level threatened and protected (TOP) species assessment was undertaken, which incorporates the potential SCCs. The TOP species in this report includes threatened (Vulnerable, Endangered, Critically Endangered) Red-listed and IUCN (IUCNredlist.org) species (Near Threatened species are not included, but status is indicated where species is listed as threatened under another listing). Distribution and general information as presented in this report were sourced for:

- Mammals [sourced from Child, *et al*. (2016) as presented in the mammal Red-list on SANBI.org.za, and the Endangered Wildlife Trust Red-listed mammal fact sheets on ewt.org.za/reddata; supplemented by Stuart and Stuart (2013), Stuart and Stuart (2015), Murray (2011), Monadjem *et al*. (2010a) and Monadjem *et al*. (2010b)].

- Birds [Taylor *et al. (*2015); supplemented by Chittenden *et al. (*2016), Sinclair *et al*. (2011) and the Roberts Multimedia Android Application].
- Reptiles [Bates, *et al*. (2014). Although an Atlas Project and not strictly a Red-listed species book, provides recent taxonomic names and more recent listings to the prior outdated Red-Data Book of 1988. Reptile information was supplemented by Tolley and Burger (2012)]
- Frogs [sourced from Minter, *et al.* (2004) as presented in the frog Red-lists on FrogMap.adu.org.za and supplemented by du Preez and Carruthers (2009)].
- Invertebrates [also supplemented by Picker *et al. (*2012), Woodhall (2005) and SANBI Biodiversity Advisor Animal Checklists for ants, millipedes, Orthoptera and scarabs]:
    - Butterflies [Mecenero *et al*. (2013) as obtained from the South African Butterfly Conservation Association lists].
    - Dragonflies (Samways & Simaika, 2016).
    - Spiders (Dippenaar-Schoeman *et al.*, 2010).
    - Scorpions (Leeming, 2019).

The likelihood of species occurring on site was generally assessed as follows:

- Likely: Distribution of the species occurs over the site; the site and immediate surrounds provide broad habitat units of the specific species. There is nothing to prevent the species from residing on site for a length of time (season or year).
- Possible: Distribution of the species occurs over the sites but the broader habitat requirements are absent or sparse on site, but are present in the greater surrounds. Species are not likely to reside on site, but may forage over or traverse the site. Species population is at low density over site.
- Unlikely: Distribution is on the edge of or just outside the site and broad habitat requirements are absent or sparse on the site and surrounds. Species population is at low density and erratic over site. No recent records occur in the area.

2. Assumptions and Gaps in Knowledge

This report represents a desktop study and is deemed more than adequate for a terrestrial fauna assessment as no invading or impacting activities are proposed in terms of this specific prospecting project.

It must be stressed that the survey area is a much smaller area within the larger QDGS and Pentad areas utilised for desktop species, and species presented in these databases may not have been recorded at the specific site.

Larger herbivores have not been fully discussed within this report as these species are actively fenced in and managed within selected areas. Rhinos and elephants are completely excluded due to sensitivity of information. As these species are largely restricted to reserves and farms this is not seen as a significant omission. Furthermore there are national species management plans in place for these species.

A few species are data deficient species, such as the Maquassie Musk Shrew relevant to this study site. Information on species is limited and extrapolation is often required. A cautionary approach has been taken with such species.

There are inherent errors in mapping programmes which must be considered with all mapping information presented.

Citizen Science projects were used for bird (SABAP2 and iNaturalist) and animal (ADU and iNaturalist) baseline data and, although there is a degree of vetting of data, the pitfalls of Citizen Science projects must be kept in mind.

Due to the low resolution of some distribution maps and the mobility of animals, distribution data utilised to present animal lists are not 100% accurate. Proper distribution data for the TOP invertebrates is scant and it is difficult to conclusively state if every species does or does not occur in the area.

3. Results

No fauna-specific site assessment was undertaken, but other ecological specialist did complete site visits. These specialists were requested to include photos of any fauna-specific interest areas identified during the desktop assessment as presented in Table 1 and a photographic assessment has been completed in terms of fauna habitat. The trigger SCCs have no specific peak of activity during the year and seasonality of surveys is not highly relevant to the specific SCCs; animal activity is usually higher in spring / summer season but visibility is usually better in the drier seasons and there are different benefits to sampling at different times of the year for such species.

The site lies largely within QDGS 2328DD, extending into QDGS 2428BB in the south. All desktop data obtained from the citizen science sites have been sourced for these QDGSs or relevant Pentads.

3.1 Summary of Biodiversity Features & Impact Statements

Table 1 summarises the desktop ecological features of the site and provides impact statements where relevant.

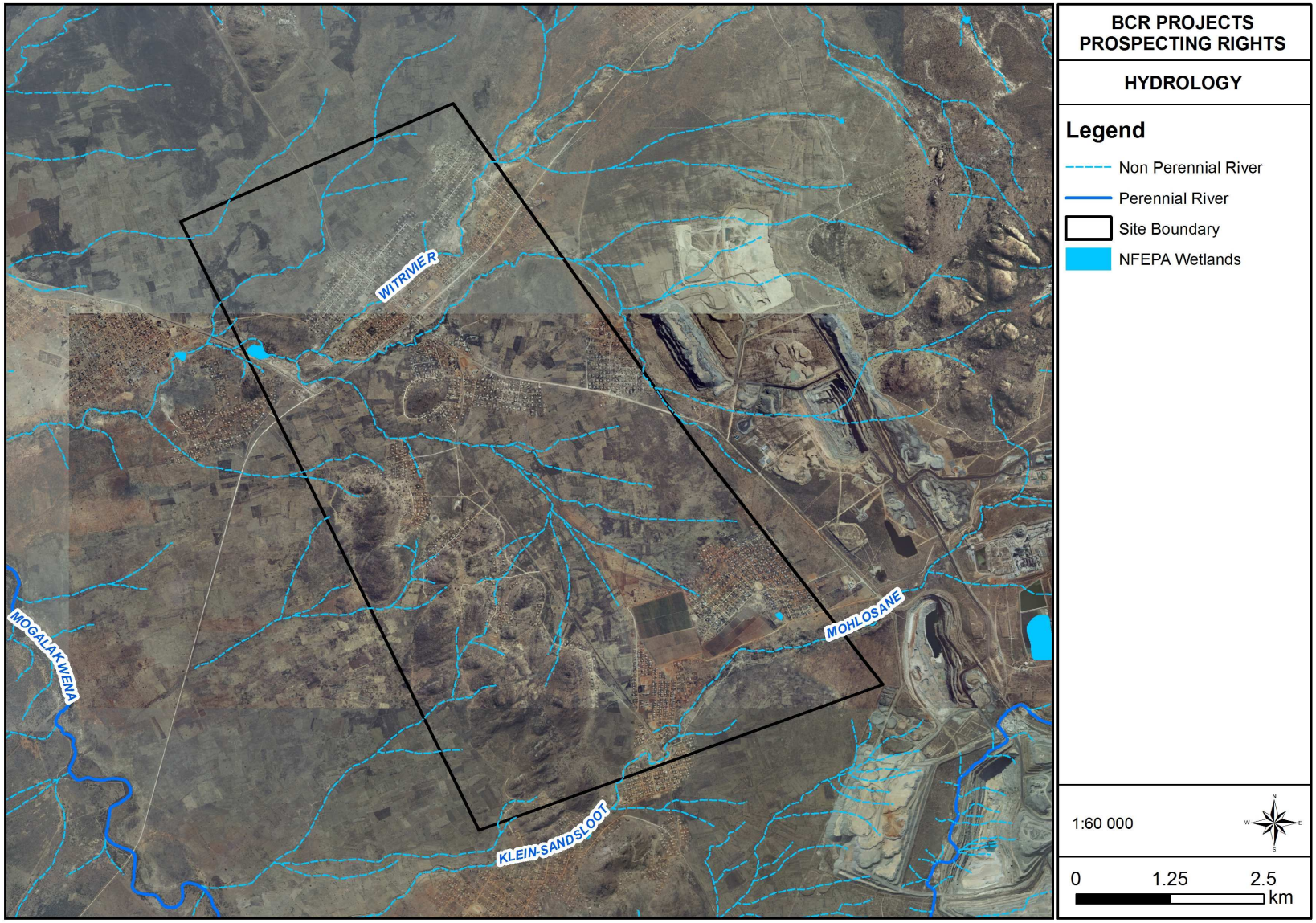
Table 1: Desktop ecologically significant features (distances are "as the crow flies" approximations)

Ecological feature / area	Description of feature relevant to the site
International Conservation	No World Heritage Sites or RAMSAR Wetlands occur within 50km of site. The Nylsvley RAMSAR Wetlands are the nearest; almost 60km south of site in the upper catchment. **Impact Statement: No direct or indirect impacts expected to sites of international conservation.**
Important Bird Areas (IBAs) (Plan 2) (Marnewick *et al*., 2015)	The Waterberg IBA lies 8km south-west of site. Main threats to the IBA include uncontrolled fires, poisoning of vultures, and collisions of vultures with radio and television towers and power lines. **Impact Statement: No direct or indirect impacts expected to the IBA. The prospecting right application process and associated administrative activities will not contribute to threats faced by IBAs. The project area is not considered as prime habitat to IBA trigger species; only smaller prey species expected, mainly due to the existing level of rural**

Ecological feature / area	Description of feature relevant to the site
	development and associated anthropogenic impact. The site is therefore unlikely to serve as a significant satellite habitat to dispersing species, but may provide forage area; the site is unlikely to serve towards the conservation of IBA trigger species.
Protected Areas (PA) and National Protected Areas Expansion Strategy (NPAES) (Plan 2)	The formally protected Witvinger Nature Reserve is 8.5km east of site, but disconnected from site in terms of direct ecological connectivity (mines and villages occur between the two areas) and in terms of surface water flow (in the same quaternary catchment but opposite side of the Groot Sandsloot River which flows between the two areas). No other formally or informally protected areas occur within 10km of site. NPAES are scattered around site, but only one is within 10km of site; NPAES targeting the protection of Limpopo Central Bushveld occur approximately 8.5km south of site (up-slope in the foothills of Waterberg and across the Mogalakwena River). **Impact Statement: No direct or indirect impacts expected to PAs, NPAES and PA buffer zones. The site is also unlikely to be a significant satellite habitat for species dispersing from PAs.**
National Freshwater Ecology Priority Areas (NFEPA) (Plan 3)	The site is within an Upstream NFEPA Catchment. The bulk of the site drains into the non-perennial tributary within the north of the prospecting area. This tributary flows west to confluence with the largely modified (PES C) Mogalakwena River, approximately 3.5km west of site. The south western area is separated from the rest of the prospecting area by a series of koppies, and drains west via non-perennial tributaries into the Mogalakwena River, approximately 3km west of site. Two NFEPA wetlands within the entire prospecting area and all nearby NFEPA wetlands are all Rank 6 wetlands; no Rank 1 or 2 wetlands (important habitat for TOP water birds, cranes and / or frogs) occur on or near site. **Impact Statement: The prospecting right application process and associated administrative activities will not contribute to any significant direct or indirect impacts to the status of local aquatic and wetland habitats that may be utilised by terrestrial fauna.**
Biome and Ecosystem	The area falls within the Savanna Biome and the Makhado Sweet Bushveld vegetation type, which is not a TOP ecosystem (NEM:BA, GN1002, 2011). Much of the area is under township development and was cleared historically for crop agriculture with bushveld habitat largely limited to the koppies along the south-west, an isolated section in the south-eastern part of the prospecting area, along sections of tributaries and where it has reclaimed old agricultural lands (most are utilised for grazing and overgrazing has kept areas largely clear of bushveld). **Impact Statement: The prospecting right application process and associated administrative activities will not contribute to any significant direct or indirect impacts to terrestrial fauna habitat.**
Strategic Water Source Areas (SWSA)	The Nyl and Dorps River Valley strategic groundwater resource is the nearest (12km south of site) but lies in the upstream catchment. No other SWSAs occur within the catchment area of the site or within 10km of the downstream catchment. **Impact Statement: No impacts expected to SWSAs as far as these may be relevant to terrestrial fauna. Impacts to groundwater are outside the scope of this study.**
Limpopo Conservation Plan (Plan 4)	Other than a small Ecological Support Area 2 (ESA2) corresponding to the northern Rank 6 NFEPA Wetland, the area is designated almost equally as 'No Natural Habitat Remaining' or 'Other Natural Areas' (parts of the latter has also succumb to town development and would form part of the former). No other ESAs or Critical Biodiversity Areas (CBAs) are associated with the prospecting area. A CBA2 is associated with the receiving water body, the Mogalakwena River, west of site. **Impact Statement: The prospecting right application process and associated administrative activities will not contribute to any significant direct or indirect impacts to the CBAs, ESAs or Other Natural Areas; Limpopo conservation areas will remain**

Ecological feature / area	Description of feature relevant to the site
	unaffected.
Koppies and Ridges	The most significant representation of natural bushveld habitat occurs along the koppies, which form a small north-south terrestrial corridor in the area. The township areas have encroached on these and fragmented these, but connectivity is retained to the Mogalakwena River west of site by way of old agricultural areas cleared of bushveld. **Impact Statement: The prospecting right application process and associated administrative activities will not further contribute to any significant direct or indirect impacts to terrestrial fauna habitat and remaining ecological connectivity.**

Plan 2: Project area in relation to IBAs, PAs and NPAES (SANBI, BGIS Datasets) overlaid onto Google Earth image (July 2021)



Plan 3: Project area in relation to NFEPA features (perennial rivers and wetlands) (EcoGIS, 2022)

Plan 4: Project area and Limpopo conservation plan (SANBI, BGIS Datasets) overlaid onto Google Earth, indicating six (6) Focus Areas and terrestrial (T), aquatic (A) and shared (S) assessment sites

The area has been divided into six focus areas based largely on the "Other Natural Areas" as per the Limpopo Conservation Plan (Plan 4) and discussed in terms of their potential importance to terrestrial fauna with focus on the SCCs. The remaining areas designated as "No Natural Habitat Remaining" are discussed as a single general area. Site visits and relevant photographs at specific assessment sites (Table 2) were provided by the following ecologists:

- The aquatic ecologist (Paul da Cruz of Scientific Aquatic Services) completed a site visit over the 4 and 5 August 2022 and provided overall site photographs, including photographs of the riverine areas and the only ESA area within the proposed prospecting rights area.
- The floral ecologist (Antoinette Eyssell of Dimela Eco-Consulting) completed a site visit on the 10 August 2022, who provided overall site photographs, photographs of the koppies and photographs of the ESA area.

Table 2: Site habitat characterisation

<table>
<tr><td colspan="2">Area 1: Other Natural Areas incorporating the Riverine Corridors in the north and also the townships interspersed between the rivers designated as "No Natural Habitat Remaining". Northernmost river ranked as very high sensitivity in terms of aquatic biodiversity and extends into Area 2. Area 1 is 597ha in extent with 9 survey points (approximate ratio: 1 point per 66ha).</td></tr>
<tr><td> 
Photograph 1: Stream ranked as very high sensitivity for aquatic biodiversity</td><td> 
Photograph 2: Disturbed terrestrial areas around the stream in Photograph 1 mostly denuded of bushveld</td></tr>
<tr><td> 
Photograph 3: Southern stream in Area 1</td><td> 
Photograph 4: Disturbed, but wider terrestrial areas around the stream indicated in Photograph 3</td></tr>
</table>

Photograph 5: Eastern extent of the southern river and evidence of stock animal activity in the river

Photograph 6: Eastern extent cleared of bushveld, suspected to be for farming and also grazing

Area 2: Other Natural Areas incorporating the riverine area where it exits the prospecting area and on-site ESA; includes a section of the river ranked as very high sensitivity which originates in Area 1. Area 2 is 157ha in extent with 4 survey points (approximate ratio: 1 point per 39ha).

Photograph 7: Main receiving river with eroded vertical banks showing minor use by fauna; remnant bushveld (top left) at the local cemetery.

Photograph 8: Terrestrial areas cleared of bushveld with sparse grassy cover adjacent to the river depicted in Photograph 7.

Photograph 9: On-site ESA is utilised as the local sports ground, specifically as a soccer pitch

Photograph 10: Wetland area dominated by Cyprus, outside of the prospecting area and downstream of Photograph 7.

Photograph 11: Less disturbed terrestrial areas in the north of Area 2, still showing historical disturbance; background koppie in the north-west of the site.

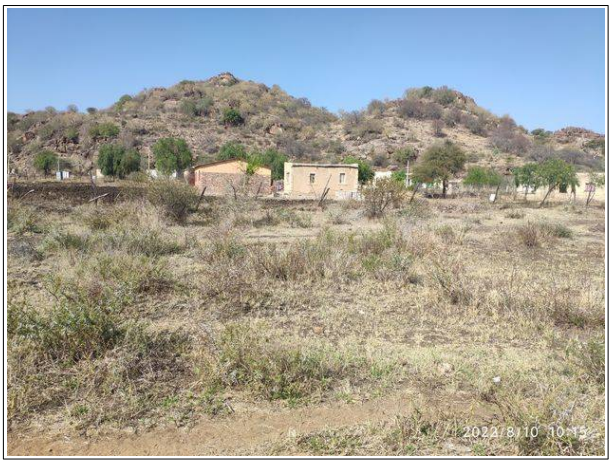
Photograph 12: Terrestrial areas off-site, west of Area 2; aloes provide nectar source over winter.

Area 3: Other Natural Areas incorporating the central Riverine Corridor. No designated ESAs or CBAs. Area 3 is 121ha in extent with 2 survey points (approximate ratio: 1 point per 60ha).

Photograph 13: Bushveld habitat along the tributary and cleared open grassy areas

Photograph 14: Cleared and disturbed areas and a koppie along the tributary within Area 3

Area 4: Other Natural Areas incorporating the koppies in the south-west. No designated ESAs or CBAs. Area 4 is 916ha in extent with 12 survey points (approximate ratio: 1 point per 76ha).



Photograph 15: North-western parts of Area 4 indicating the rocky koppies

Photograph 16: Central parts of Area 4 indicating the rocky koppies

Photograph 17: Bushveld areas and drainage line west of the koppies

Photograph 18: Rocky bushveld areas west of the koppies

Area 5: Other Natural Areas incorporating river ranked as very high sensitivity in terms of aquatic biodiversity. Southern extent ranked high for terrestrial biodiversity (trigger is CBA1). No ESAs or CBAs are designated for the area; but area overlaps bushveld that is minimally disturbed, but isolated with minor connectivity along a narrow tributary and old agricultural areas cleared of bushveld, south of the prospecting area. Area 5 is 264ha in extent with 6 survey points (approximate ratio: 1 point per 44ha)

Photograph 19: Stream (very high sensitivity for aquatic biodiversity) with narrow bushveld corridor along the stream

Photograph 20: Patch of dense vegetation banks along the stream

Photograph 21: Bushveld with aloes in the southern

Photograph 22: Areas cleared of bushveld closer to

terrestrial extent of Area 5	the existing village in Area 5
Area 6: Other Natural Areas incorporating open spaces in the east of site. No designated ESAs or CBAs. Area 6 is 216ha in extent with 2 survey points (approximate ratio: 1 point per 108ha).	
 Photograph 23: Disturbed bushveld in the southern extent of Area 6, with areas denuded of bushveld	 Photograph 24: Township development expanding into "Other Natural Areas" in the north of Area 6
"No Natural Habitat Remaining" area. Area is approximately 1700ha in extent with 11 survey points (approximate ratio: 1 point per 154ha)	
 Photograph 25: Historically cleared bushveld area (north of Area 2), indicate signs of overgrazing	 Photograph 26: Disturbed bushveld area between Area 1 and Area 4
 Photograph 27: Origins of the tributary east and adjacent to Area 3, historically cleared of bushveld	 Photograph 28: East and adjacent to Area 3; historically cleared area used for stock grazing

The photographic assessment as provided in Table 2 is largely in support of the desktop findings described in Table 1. There are areas designated as Other Natural Areas that have been historically cleared of bushveld or have succumbed to township development, and the site does not support natural habitat to the extent indicated in the Limpopo biodiversity conservation plan. It must be stated that terrestrial fauna will still utilise the man-modified habitats of the old agricultural areas and the man-made habitats within the townships and along roads, but species will progressively be more generalist and tolerant species. Add to this the day-to-day anthropogenic activity in the area, the likelihood of sensitive fauna is further decreased and fauna perceived to be a threat to stock or people even less likely to persist on site.

The remnant natural bushveld provides habitat to terrestrial fauna and does still form interconnected ecological corridors, although the bushveld is largely disturbed and sometimes entirely cleared over large parts of the area and along the ecological corridors on site.

The lack of adequate permanent aquatic and wetland habitats, which are likely to only be available seasonally and intermittently (rainfall dependent), means that aquatic and wetland species are regarded as possible species on site, likely to wonder through or visit the site but not remain in the area or to congregate on site. The neighbouring off-site wetlands and perennial rivers are more likely to support aquatic and wetland species.

There are rocky hills in the south-west of the prospecting area and rocky habitat species are retained as likely species for the site, although there is scattered rural development along the koppies which will prevent sensitive / shy species from using the area.

Altitude on site varies between 1005-1230mamsl (Google Earth measurements), peaking at the koppies in the south west. Species with preferences outside these ranges are considered as unlikely to occur on site.

3.2 Summary of TOP Fauna & Impact Statements

Previously recorded species (ADU / SABAP / iNaturalist) are indicated in Appendix C. In terms of the ADU lists the following is relevant:

- Unidentified and excluded ADU species have not been included in Appendix C.
- Hybrids or special breeds are excluded from Appendix C.
- *Canis mesomelas* (Black-backed Jackal) has been included in Appendix C to represent the ADU *Canis* sp.
- *Trachylepis damarana* (Damara Variable Skin) is assumed to be within the *T. varia* complex (Variable Skink complex), which is still under taxonomic review, but has been listed as a separate species in Appendix C.
- Species names are indicated as per sources referenced and listed in Section 1.2.

The Waterberg IBA trigger species, which have been discussed if relevant, include (Marnewick *et al*., 2015):

- Globally threatened species: Cape Vulture, Secretarybird, Martial Eagle, Blue Crane, Denham's Bustard and Southern Ground-Hornbill.

- Regionally threatened species: White-backed Night Heron, Lanner Falcon, White-bellied Korhaan, African Grass Owl, Tawny Eagle, African Finfoot and Half-collared Kingfisher.
- Biome-restricted species: Kurrichane Thrush, White-bellied Sunbird, Barred Wren-Warbler, Burchell's Starling, White-throated Robin-Chat, Buff-streaked Chat, Kalahari Scrub Robin and Gurney's Sugarbird.

Table 3 lists the trigger SCCs (Environmental Screening Tool Report), TOP and endemic species historically recorded in the area as obtained from various citizen science sites (ADU data for the QDGS and SABAP2 data for the Pentad). iNaturalist was also consulted and species included where relevant. In addition, the TOP species identified as highly likely (distribution overlaps the site, habitat for the species is available on site and site provides other species requirements such as nesting sites, water, micro-habitats) to occur in the area are also included in Table 3.

The following is relevant regarding the species in Table 3:

- **Mammals**:
  - Mammal SCCs are not considered as likely species on site due to a combination of poor correlation to known distribution ranges and lack of historical records, coupled with extensive anthropogenic activity in the project area. There is also inadequate habitat for wetland species. The following species is data deficient and as per limitations a cautionary approach is taken with this species:
    - Maquassie Musk Shrew (*Crocidura maquassiensis*) (RL Vulnerable) (Taylor *et al*., 2016).
      - Main threats are loss or degradation of moist, productive areas such as wetlands and rank grasslands within suitable habitat due to abstraction of surface water and draining of wetlands through industrial and residential expansion and overgrazing of moist grasslands.
      - The project area is within the larger distribution range of the species but no recent records occur for the species in the area or within the QDGS. No historical records occur for the species near the project area.
      - There is little conclusive information about the species, but the species is linked to moist habitats with dense matted vegetation, associated with wetlands. In terms of habitat, the species is not likely to occur on site. The species is retained as a possible species in the project area.
  - Only two of the previously recorded TOP carnivores are considered as likely species (Leopard and Brown Hyena), when considering their wide habitat tolerances. However, both species are likely to be chased from site as perceived danger to stock and the community and both are threatened due, in part, to direct human interaction.
    - Leopard (*Panthera pardus*) (GN151 Vulnerable; RL Vulnerable; IUCN Vulnerable). Main threats include direct and indirect persecution, capture for cultural regalia and trophy hunting. Other significant and localised threats include the injudicious use of radio-collars for research and recreational purpose; sub-adults exhibit rapid growth and collars can asphyxiate individuals collared to young. Species is also susceptible to road collisions (Swanepoel *et al*., 2016).
    - Brown Hyaena (*Parahyaena brunnea*) (GN151 Protected). They are often shot, poisoned, trapped, snared and hunted with dogs in an attempt to reduce livestock predation events (Yarnell *et al*., 2016).
  - Three TOP species with distribution over the area and that cannot be excluded from the area due to available habitat on site or wide habitat tolerances have been identified for

the area. The species are under direct threat from humans, reducing their likelihood to persist in the area and include:

- Honey Badger (*Mellivora capensis*) (GN151 Protected). Main threats to the species arises from conflict and persecution by bee farmers (Begg *et al*., 2016).
- Southern Mountain Reedbuck (*Redunca fulvorufula*) (RL Endangered; IUCN Endangered). Main threats include expansion of human settlements and associated increase in poaching, disturbance by cattle herders and their livestock, and increased predation levels from higher abundances of meso-predators (Taylor *et al*., 2016).
- Southern African Hedgehog (*Atelerix frontalis*) (GN151 Protected). Main threats include habitat loss, degradation and fragmentation from urban sprawl and agriculture. Also threatened by illegal harvesting from the wild for food, or for sale as pets and traditional medicine (Light *et al*., 2016).

- The site is not part of an area of endemism for mammals.
- **<u>Impact Statement:</u> The prospecting right application process and associated administrative activities will not contribute to any significant direct or indirect impacts to indigenous mammals in the area.**

- **<u>Birds</u>**:
  - No avian SCCs were listed for the area.
  - One TOP bird, Verreaux's Eagle (*Aquila verreauxii*), was previously recorded in the area. The site is not considered to fully meet the birds roosting requirements, but the predominant prey, the Rock Hyrax, is confirmed based on latrine marks along rocky boulders in the koppies. Furthermore, the raptor is prone to persecution by stock farmers. The birds is retained as a possible species that may forage in the area.
  - One additional TOP species with distribution over the area and that cannot be excluded from site includes the:
    - Lesser Kestrel (*Falco naumanni*) (GN151 Vulnerable). Mainly faces threats in Europe and Asia, but also threatened by control of insects through pesticides, felling of tall trees and collisions with vehicles (Taylor *et al*., 2015).
  - The limited on-site aquatic and wetland features limits the presence of congregatory water birds. Limited species may utilise the seasonal and ephemeral on-site rivers and dams intermittently during the rainy season.
  - Previously recorded and likely endemic birds (South African Cliff Swallow and Cape White-eye) are fairly common with large distribution ranges in South Africa and the site is not part of an area of endemism for birds.
  - **<u>Impact Statement</u>: The prospecting right application process and associated administrative activities will not contribute to any significant direct or indirect impacts to indigenous birds in the area.**
- **<u>Reptiles</u>**:
  - Nile Crocodile (*Crocodylus niloticus*) (GN151 Protected; RL Vulnerable) is listed as an SCC for the area. It is associated with fairly inundated habitats (swamps, rivers, estuaries) and habitat is considered absent on site, and the species is considered unlikely on site (Bates *et al*., 2014).
  - One TOP reptile was recorded for the QDGS:
    - South African Python (*Python Natalensis*) (GN151 Protected) is retained as a likely species in the area as the site is within the species distribution range and meets the habitat requirements for the species. However, the proximity to human dwellings drastically reduces its likelihood to persist in the area. Species is threatened by

habitat transformation (Bates *et al*., 2014), but also likely threatened by persecution and the pet / muti trade.

- No other TOP reptiles with distribution across site are considered as likely to occur on site.
- The site is within two main areas of reptile endemism, including the Waterberg west of site and the Witvinger Nature Reserve and the Percy Fyfe Nature Reserve east of site. Some of the Waterberg endemic reptiles have distribution ranges extending into the prospecting area and cannot be excluded from site (Table 3: Restricted Endemics). The reptiles are considered as restricted endemic species, but they are widespread and common within the Waterberg area.
- **Impact Statement: The prospecting right application process and associated administrative activities will not contribute to any significant direct or indirect impacts to indigenous reptiles in the area.**

- **Frogs**:
  - No frog SCCs are listed for the area.
  - No TOP frogs were recorded for the QDGS.
  - The two species of Bullfrogs (the Giant Bullfrog and the African Bullfrog) cannot be excluded from site. The bullfrogs may also be associated with the seasonal dams / pans off-site and swarming juveniles may find their way to site if bullfrogs are present and breeding in the surrounds.
  - The site is not part of an area of endemism for frogs.
  - **Impact Statement: The prospecting right application process and associated administrative activities will not contribute to any significant direct or indirect impacts to indigenous frogs in the area.**
- **Invertebrates**:
  - No invertebrate SCCs were listed for the project area.
  - No TOP scorpions, butterflies or dragonflies have been recorded for the QDGS / general area.
  - The TOP Baboon Spider (*Ceratogyrus darlingi*) cannot be excluded from site, but as a burrowing species may be deterred from areas of human activity (homesteads and agricultural lands). The species is more likely to occur in the less disturbed areas of the bushveld around the koppies and greater surrounds, where it should persist.
  - No provincially protected invertebrates have been recorded for the QDGS / general area.
  - **Impact Statement: The prospecting right application process and associated administrative activities will not contribute to any significant direct or indirect impacts to TOP invertebrates in the area.**

Alien invasive (AI) species (AIS) recorded in the Pentad were limited to three Category 3 species (Rock Dove, the Common Myna and the House Sparrow). The species are common species in the peri-urban setting and occur throughout South Africa (Picker & Griffiths, 2011).

Table 3: Historically recorded and highly likely vertebrates of conservation concern (vertebrate SCCs indicated in bold)

Family	Common Name	Species	Endemism	GN151	Red-List	IUCN	Likelihood
MAMMALS							
Carnivora	Wild Dog, African	*Lycaon Pictus*		EN	EN	EN	SCC – Unlikely
Rodentia	Rat, Robert's Marsh	*Dasymys robertsii*			VU		SCC – Possible
Eulipotyphla	Shrew, Maquassie Musk	*Crocidura maquassiensis*			VU		SCC – Possible
Sensitive Species 5	Sensitive Species 5	*Sensitive Species 5*		SCC - Appendix D			
Carnivora	Serval	*Leptailurus serval*		PR	NT		ADU – Possible
Carnivora	Leopard	*Panthera pardus*		VU	VU	VU	ADU – Likely
Carnivora	Hyaena, Brown	*Parahyaena brunnea*		PR	NT	NT	ADU – Likely
Carnivora	Honey Badger (Ratel)	*Mellivora capensis*		PR			Likely
Cetartiodactyla	Reedbuck, Southern Mountain	*Redunca fulvorufula*			EN	EN	Likely
Eulipotyphla	Hedgehog, Southern African	*Atelerix frontalis*		PR	NT		Likely
BIRDS							
Accipitridae	Eagle, Verreaux's	*Aquila verreauxii*			VU		SABAP – Possible
Zosteropidae	White-eye, Cape	*Zosterops virens*	Endemic				Likely
Falconidae	Kestrel, Lesser	*Falco naumanni*		VU			Likely
Hirundinidae	Swallow, South African Cliff	*Hirundo spilodera*	Breeding Endemic				Likely
REPTILES							
Agamidae	Agama, Eastern Ground	*Agama aculeata distanti*	Endemic				ADU – Likely
Pythonidae	Python, Southern African	*Python natalensis*		PR			ADU – Likely
Cordylidae	Lizard, Dwarf Flat	*Platysaurus guttatus*	RE West LP				Likely
Cordylidae	Lizard, Waterberg Flat	*Platysaurus minor*	RE West LP				Likely
Cordylidae	Lizard, Waterberg Girdled	*Smaug breyeri*	RE West LP				Likely
Gekkonidae	Gecko, Transvaal Thick-toed	*Pachydactylus affinis*	Endemic				Likely
Lamprophiidae	Snake, Striped Harlequin	*Homoroselaps dorsalis*	Endemic		NT		Likely
Lamprophiidae	Snake, Olive Ground	*Lycodonomorphus inornatus*	Endemic				Likely
FROGS							
Bufonidae	Toad, Raucous	*Amietophrynus rangeri*	Endemic				Likely
Pyxicephalidae	Bullfrog, Giant	*Pyxicephalus adspersus*		PR	NT		Likely
Pyxicephalidae	Bullfrog, African	*Pyxicephalus edulis*		PR			Likely
Pyxicephalidae	Stream Frog, Clicking	*Strongylopus grayii*	Endemic				Likely

CR: Critically Endangered; EN: Endangered; VU: Vulnerable; PR: Protected; NT: Near Threatened

4. Conclusion and Recommendations

Environmental Screening Report Sensitivity Ranks: Table 4 provides a summary statement on the sensitivity ranks based on the in-depth photographic assessment of site. In general, the area ranked as very high sensitivity for terrestrial biodiversity (Appendix B) is considered to retain its very high sensitivity rank (even though not designated as a CBA or ESA) as long as the ecological corridor leading from this area, south of the prospecting area (and off-site), does not deteriorate any further, which would completely isolate the area. All rivers / streams are also considered as highly sensitive as they provide corridors, unique habitats within the terrestrial setting and water provision. All remaining natural bushveld along the koppies and the riverine areas are considered as medium sensitivity in terms of general habitat provision to existing faunal populations on site (retaining these areas should allow the on-site natural and indigenous fauna to persist in the area).

Table 4: Summary of Site Verification Outcome for terrestrial animal species (Desktop)

Screening Tool Report Sensitivity Rank	Verified Sensitivity (Desktop level only)	Plan of study	Section Motivating Verification
Animal Species			
Medium rank for four mammal SCCs and one aquatic reptile SCC	The two larger mammal SCCs (African Wild Dog and Sensitive Species 5) and the reptilian SCC (Nile Crocodile) are not considered likely species on site due to human presence and activity on site. Two smaller mammal SCCs are considered as possible species on site, associated with wetland habitats; the main rivers and tributaries on site (Plan 3), wetlands and designated buffers are considered highly sensitive (pending the aquatic biodiversity report).	Full Animal Species Specialist Report will be required if any additional prospecting activity proceeds.	Section 4: Conclusion and Recommendations
Aquatic Biodiversity – As far as it pertains to terrestrial animal species			
Very high rank areas limited to two riverine areas.	The main rivers and tributaries on site (Plan 3), wetlands and designated buffers are considered highly sensitive (pending the aquatic biodiversity report).	Habitat and ecological corridor must be evaluated if any additional prospecting activity proceeds.	Section 4: Conclusion and Recommendations
Terrestrial Biodiversity – As far as it pertains to terrestrial animal species			
Very high rank area (CBA1 trigger) limited to south-western extent of site.	No CBAs occur on site, but where the area overlaps natural bushveld areas, the very high rank is retained.	Habitat and ecological corridor must be evaluated if any additional prospecting activity proceeds.	Section 4: Conclusion and Recommendations

Impact Statement Summary: The current proposed prospecting right application process and associated administrative activities will not contribute to any significant direct or indirect impacts to indigenous animals in the area or their habitats or the existing ecological status of the site.

Recommendations / conditions: The following is recommended should any additional activity proceed on site:

- Should the prospecting application process require any activities on site, over and above the current proposed administrative activities, then a full fauna species assessment, including a specialist herpetology assessment, must be undertaken.
- No activities are to take place in the riverine areas or wetlands without the necessary environmental and water use authorisations.
- The recommendations of the flora specialists must be included in the environmental management plan and implemented on site.

Specialist's Reasoned Opinion: In terms of the terrestrial fauna, if the above conditions are met there should be no reason not to authorise the activity.

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Appendix A: CV, Qualification, SACNASP registration

Curriculum Vitae: BARBARA KASL

- 2010 – current: SACNASP Professional Environmental and Ecological Scientist
- 1999, 2001 & 2008 – current: Entomological Society of South Africa
- E-mail: bk.zoology@gmail.com;

Tertiary Education

University of the Witwatersrand

- 2002-2004: PhD (Animal, Plant and Environmental Sciences)
- 1999-2001: MSc (upgraded to PhD)
- 1998: B.Sc. Hon. (Zoology and Botany)
- 1995-1998: BSc (Zoology and Botany)

Professional Experience – ±15 years

02/2017 – Current: Self-employed as fauna specialist & environmental consultant

- Fauna impact assessments and management plans.
- Fauna assessment / input into a variety of environmental projects (SOE, EMPr, EMFs)
- Environmental consulting.

01/2008 – 02/2017: CABANGA CONCEPTS:

- Environmental Scientist / Principal Consultant & shareholder in Cabanga Concepts.
- Overall project manager and principal report reviewer.
- Experience with World Bank Standards, IFC Equator Principals.
- Compilation of various environmental applications and documents, including various audit reports.
- Stay current with environmental legislation and standards and norms.
- Review and comment on draft environmental legislation related to environmental sector.

09/2004 – 11/2007: DIGBY WELLS & ASSOCIATES (DIGBY WELLS ENVIRONMENTAL)

- Unit Manager for the Ecology Unit including management of a flora and wetland specialist.
- Acting Department Head and management of the Biophysical Department which included the Ecology Unit and Atmospheric Environment Unit.
- Responsible in completion of fauna assessments and managing ecological projects.
- Various South African and African environmental application and management projects.

Other Professional activities (details can be provided on request)

Mentorship programmes & tutelage

- Field-based tutelage to you professional zoologists.
- High level mentor in the MISA Mentorship Programme for SACNASP candidates.

Participation in legislative processes

- Review and comment on the alien invasive species legislation.

- Review and comment on the environmental themes legislation, specifically the terrestrial biodiversity and animal species protocols and associated guidelines.

Courses / Workshops / Conferences

- February 2022: SANBI Animal Species Guidelines Webinar: Invertebrate Focus Group
- December 2021: South African Science Forum. Attended.
- May 2020: IAIA Species Environmental Assessment Guideline: Webinar for the introduction of the SANBI species assessment guidelines for the animal and plant species protocols. 21 May 2020
- December 2018: South African Science Forum. Attended.
- December 2017: South African Science Forum. Attended.
- April 2017:Alien invasive species identification and management.
- June 2014: Waste Management Law Workshop.
- October 2010: NEM: Air Quality Act Workshop.
- August 2009: NEMA and NEMWA Workshop.
- November 2007: Environmental Impact Assessment Training.
- February/March 2007: Project Management.
- September 2006: Introduction to Managing Environmental Water Quality.
- September 2005: Non-credited course in River health and SASS5.
- May 2005: Snake Identification and Snakebite Treatment Course.
- July 2001: Entomological Society of Southern Africa (2-5 July 2001) Attended & presented talk.
- July 1999: Entomological Society of Southern Africa Conference (12-15 July 1999) Attended & presented poster
- July 1998: Zoological Society of Southern Africa Conference (6-10 July 1998) Attended & presented poster.

SACNASP

South African Council for Natural Scientific Professions

herewith certifies that

Barbara Kasl

Registration Number: 400257/09

is a registered scientist

in terms of section 20(3) of the Natural Scientific Professions Act, 2003
(Act 27 of 2003)
in the following fields(s) of practice (Schedule 1 of the Act)

Ecological Science (Professional Natural Scientist)
Environmental Science (Professional Natural Scientist)

Effective **11 November 2009** Expires **31 March 2023**

Botha
Chairperson

Chief Executive Officer

To verify this certificate scan this code

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

At a congregation of the University

held on 25 November 2004

Barbara Kasl

was admitted to the Degree of

Doctor of Philosophy

AFRIKAANSE POLISIEDIENS
KLIËNTE DIENS SENTRUM
2010 -03- 22
SOUTH AFRICAN POLICE SERVICE

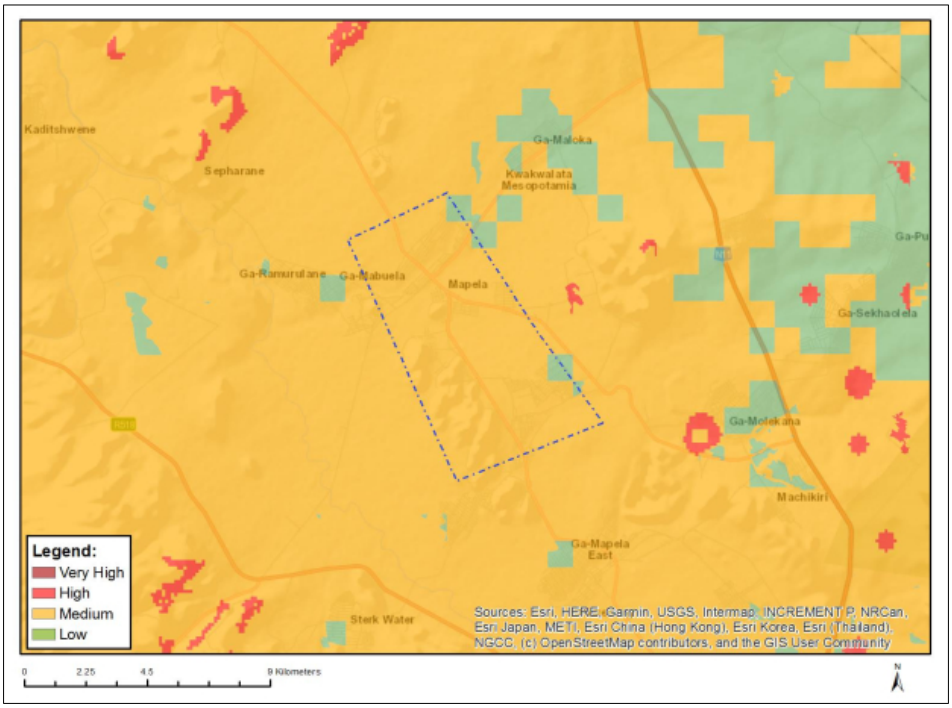
Dean, Faculty of Science

Vice-Chancellor and Principal

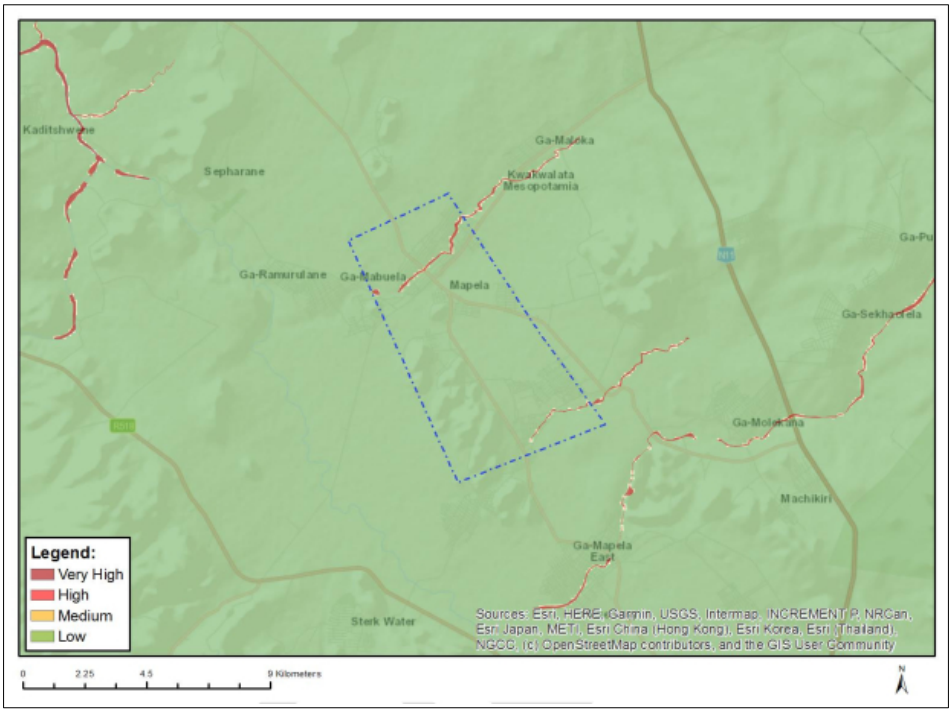
Registrar

Appendix B: Environmental Impact Assessment Screening Tool Report Sensitivity Maps

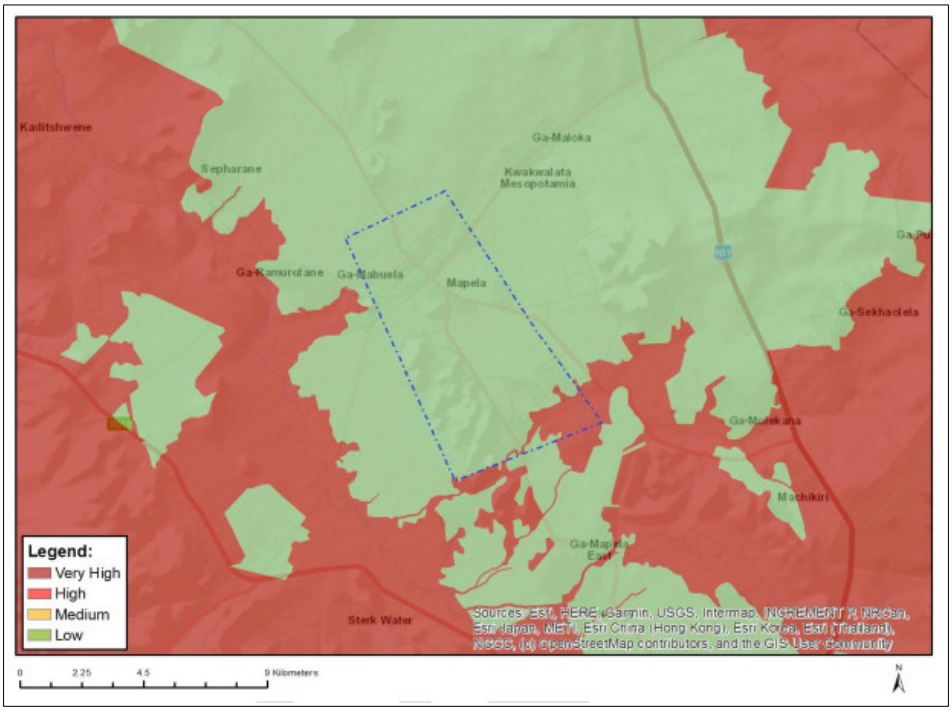
Animal Species Sensitivity Ranks



Aquatic Biodiversity Sensitivity Ranks



Terrestrial Biodiversity Sensitivity Ranks



Appendix C: Desktop fauna records (mainly from ADU, SABAP2 and iNaturalist)

Family	Common name	Scientific name
Mammals		
Carnivora	Jackal, Black-backed	*Canis mesomelas*
Carnivora	Caracal	*Caracal caracal*
Carnivora	Serval	*Leptailurus serval*
Carnivora	Leopard	*Panthera pardus*
Carnivora	Hyaena, Brown	*Parahyaena brunnea*
Rodentia	Porcupine, Cape	*Hystrix africaeaustralis*
Reptiles		
Agamidae	Agama, southern Tree	*Acanthocercus atricollis atricollis*
Agamidae	Agama, Western Common	*Agama aculeata*
Agamidae	Agama, Eastern Ground	*Agama aculeata distanti*
Colubridae	Snake, Spotted Bush	*Philothamnus semivariegatus*
Elapidae	Cobra, Snouted	*Naja annulifera*
Gekkonidae	Gecko, Turner's	*Chondrodactylus turneri*
Gerrhosauridae	Lizard, Giant Plated	*Matobosaurus validus*
Pythonidae	Python, Southern African	*Python natalensis*
Scincidae	Skink, Sundevall's Writhing	*Mochlus sundevallii sundevallii*
Scincidae	Skink, Damara Variable	*Trachylepis damarana*
Scincidae	Skink, Rainbow	*Trachylepis margaritifer*
Scincidae	Skink, Speckled Rock	*Trachylepis punctatissima*
Scincidae	Skink, Variable	*Trachylepis varia*
Frogs		
Bufonidae	Toad, Eastern Olive	*Amietophrynus garmani*
Bufonidae	Toad, Guttural	*Amietophrynus gutturalis*
Bufonidae	Toad, Red	*Schismaderma carens*
Ptychadenidae	Grass Frog, Plain	*Ptychadena anchietae*
Pyxicephalidae	River Frog, Delalande's	*Amieta (delalandii) quecketti*
Pyxicephalidae	River Frog, Poynton's	*Amietia poyntoni*
Rhacophoridae	Foam Nest Frog, Southern	*Chiromantis xerampelina*
Birds		
Accipitridae	Eagle, Verreaux's	*Aquila verreauxii*
Accipitridae	Buzzard, Common (Steppe)	*Buteo buteo (vulpinus)*
Accipitridae	Eagle, Brown Snake	*Circaetus cinereus*
Accipitridae	Eagle, Black-chested Snake	*Circaetus pectoralis*
Acrocephalidae	Warbler, Marsh	*Acrocephalus palustris*
Alaudidae	Lark, Red-capped	*Calandrella cinerea*
Alaudidae	Lark, Sabota	*Calendulauda sabota*
Alaudidae	Lark, Rufous-naped	*Mirafra africana*
Alcedinidae	Kingfisher, Brown-hooded	*Halcyon albiventris*
Alcedinidae	Kingfisher, Woodland	*Halcyon senegalensis*
Apodidae	Swift, Little	*Apus affinis*
Apodidae	Swift, White-rumped	*Apus caffer*
Apodidae	Swift, African Palm	*Cypsiurus parvus*

Family	Common name	Scientific name
Apodidae	Swift, Alpine	*Tachymarptis melba*
Ardeidae	Egret, Cattle	*Bubulcus ibis*
Bucerotidae	Hornbill, Southern Yellow-billed	*Tockus leucomelas*
Charadriidae	Plover, Three-banded	*Charadrius tricollaris*
Charadriidae	Lapwing, Crowned	*Vanellus coronatus*
Cisticolidae	Camaroptera, Grey-backed	*Camaroptera brevicaudata*
Cisticolidae	Cisticola, Desert	*Cisticola aridulus*
Cisticolidae	Cisticola, Rattling	*Cisticola chiniana*
Cisticolidae	Neddicky	*Cisticola fulvicapilla*
Cisticolidae	Eremomela, Yellow-bellied	*Eremomela icteropygialis*
Cisticolidae	Eremomela, Burnt-necked	*Eremomela usticollis*
Cisticolidae	Prinia, Black-chested	*Prinia flavicans*
Cisticolidae	Prinia, Tawny-flanked	*Prinia subflava*
Coliidae	Mousebird, Speckled	*Colius striatus*
Coliidae	Mousebird, Red-faced	*Urocolius indicus*
Columbidae	Pigeon, Speckled	*Columba guinea*
Columbidae	Dove, Rock	*Columba livia*
Columbidae	Dove, Namaqua	*Oena capensis*
Columbidae	Dove, Laughing	*Spilopelia senegalensis*
Columbidae	Dove, Cape Turtle	*Streptopelia capicola*
Columbidae	Dove, Red-eyed	*Streptopelia semitorquata*
Columbidae	Dove, Emerald-spotted Wood	*Turtur chalcospilos*
Coraciidae	Roller, European	*Coracias garrulus*
Corvidae	Crow, Pied	*Corvus albus*
Cuculidae	Cuckoo, Diderick	*Chrysococcyx caprius*
Cuculidae	Cuckoo, Klaas's	*Chrysococcyx klaas*
Cuculidae	Cuckoo, Black	*Cuculus clamosus*
Dicruridae	Drongo, Fork-tailed	*Dicrurus adsimilis*
Estrildidae	Finch, Cut-throat	*Amadina fasciata*
Estrildidae	Waxbill, Orange-breasted	*Amandava subflava*
Estrildidae	Waxbill, Common	*Estrilda astrild*
Estrildidae	Waxbill Black-faced	*Estrilda erythronotos*
Estrildidae	Waxbill, Violet-eared	*Granatina granatina*
Estrildidae	Firefinch, Jameson's	*Lagonosticta rhodopareia*
Estrildidae	Firefinch, African	*Lagonosticta rubricata*
Estrildidae	Firefinch, Red-billed	*Lagonosticta senegala*
Estrildidae	Pytilia, Green-winged	*Pytilia melba*
Estrildidae	Mannikin, Bronze	*Spermestes cucullatus*
Estrildidae	Waxbill, Blue	*Uraeginthus angolensis*
Falconidae	Kestrel, Greater	*Falco rupicoloides*
Falconidae	Kestrel, Rock	*Falco rupicolus*
Fringillidae	Canary, Black-throated	*Crithagra atrogularis*
Fringillidae	Seedeater, Streaky-headed	*Crithagra gularis*
Fringillidae	Canary, Yellow-fronted	*Crithagra mozambica*
Hirundinidae	Martin, Common House	*Delichon urbicum*
Hirundinidae	Swallow, Lesser Striped	*Hirundo abyssinica*
Hirundinidae	Swallow, Greater Striped	*Hirundo cucullata*

Family	Common name	Scientific name
Hirundinidae	Martin, Rock	*Hirundo fuligula*
Hirundinidae	Swallow, Barn	*Hirundo rustica*
Hirundinidae	Swallow, Red-breasted	*Hirundo semirufa*
Laniidae	Fiscal, Common (Southern)	*Lanius collaris*
Laniidae	Shrike, Red-backed	*Lanius collurio*
Laniidae	Shrike, Magpie (Northern Long-tailed)	*Urolestes melanoleucus*
Leiothrichidae	Babbler, Arrow-marked	*Turdoides jardineii*
Lybiidae	Tinkerbird, Yellow-fronted	*Pogoniulus chrysoconus*
Lybiidae	Barbet, Crested	*Trachyphonus vaillantii*
Lybiidae	Barbet, Acacia Pied	*Tricholaema leucomelas*
Macrosphenidae	Crombec, Long-billed	*Sylvietta rufescens*
Malaconotidae	Puffback, Black-backed	*Dryoscopus cubla*
Malaconotidae	Shrike, Crimson-breasted	*Laniarius atrococcineus*
Malaconotidae	Boubou, Southern	*Laniarius ferrugineus*
Malaconotidae	Brubru	*Nilaus afer*
Malaconotidae	Tchagra, Brown-crowned	*Tchagra australis*
Meropidae	Bee-eater, European	*Merops apiaster*
Meropidae	Bee-eater, Little	*Merops pusillus*
Monarchidae	Flycatcher, African Paradise	*Terpsiphone viridis*
Motacillidae	Pipit, African	*Anthus cinnamomeus*
Motacillidae	Wagtail, Cape	*Motacilla capensis*
Muscicapidae	Flycatcher, Marico	*Bradornis mariquensis*
Muscicapidae	Chat, Familiar	*Cercomela familiaris*
Muscicapidae	Scrub-robin, White-browed	*Cercotrichas leucophrys*
Muscicapidae	Scrub-robin, Kalahari	*Cercotrichas paena*
Muscicapidae	Robin-chat, White-throated	*Cossypha humeralis*
Muscicapidae	Wheatear, Capped	*Oenanthe pileata*
Musophagidae	Go-away-bird, Grey	*Corythaixoides concolor*
Nectariniidae	Sunbird, Amethyst	*Chalcomitra amethystina*
Nectariniidae	Sunbird, Marico	*Cinnyris mariquensis*
Nectariniidae	Sunbird, White-bellied	*Cinnyris talatala*
Oriolidae	Oriole, Black-headed	*Oriolus larvatus*
Paridae	Tit, Southern Black	*Parus niger*
Passeridae	Sparrow, Southern Grey-headed	*Passer diffusus*
Passeridae	Sparrow, House	*Passer domesticus*
Passeridae	Sparrow, Cape	*Passer melanurus*
Passeridae	Sparrow, Great	*Passer motitensis*
Phasianidae	Francolin, Crested	*Dendroperdix sephaena*
Phasianidae	Spurfowl, Natal	*Pternistis natalensis*
Phasianidae	Spurfowl, Swainson's	*Pternistis swainsonii*
Phoeniculidae	Scimitarbill, Common	*Rhinopomastus cyanomelas*
Phylloscopidae	Warbler, Willow	*Phylloscopus trochilus*
Picidae	Woodpecker, Golden-tailed	*Campethera abingoni*
Picidae	Woodpecker, Bearded	*Dendropicos namaquus*
Platysteiridae	Batis, Chinspot	*Batis molitor*
Ploceidae	Weaver, Red-billed Buffalo	*Bubalornis niger*
Ploceidae	Widowbird, White-winged	*Euplectes albonotatus*

Family	Common name	Scientific name
Ploceidae	Bishop, Southern Red	*Euplectes orix*
Ploceidae	Sparrow-weaver, White-browed	*Plocepasser mahali*
Ploceidae	Weaver, Village	*Ploceus cucullatus*
Ploceidae	Masked-weaver, Southern	*Ploceus velatus*
Ploceidae	Quelea, Red-billed	*Quelea quelea*
Ploceidae	Finch, Scaly-feathered	*Sporopipes squamifrons*
Pycnonotidae	Greenbul, Yellow-bellied	*Chlorocichla flaviventris*
Pycnonotidae	Bulbul, Dark-capped	*Pycnonotus tricolor*
Scopidae	Hamerkop	*Scopus umbretta*
Sturnidae	Myna, Common	*Acridotheres tristis*
Sturnidae	Starling, Violet-backed	*Cinnyricinclus leucogaster*
Sturnidae	Starling, Cape Glossy	*Lamprotornis nitens*
Sturnidae	Starling, Red-winged	*Onychognathus morio*
Sylviidae	Tit-babbler, Chestnut-vented	*Sylvia subcaeruleum*
Threskiornithidae	Ibis, Hadeda	*Bostrychia hagedash*
Turdidae	Thrush, Karoo	*Turdus smithi*
Upupidae	Hoopoe, African	*Upupa africana*
Vangidae	Helmet-shrike, White-crested	*Prionops plumatus*
Viduidae	Indigobird, Village	*Vidua chalybeata*
Viduidae	Whydah, Pin-tailed	*Vidua macroura*
Zosteropidae	White-eye, Cape	*Zosterops virens*

Appendix D: Sensitive Species CONFIDENTIAL APPENDIX NOT FOR RELEASE TO THE PUBLIC