

TERRESTRIAL ANIMAL SPECIES COMPLIANCE STATEMENT

**PROPOSED SAND AND GRAVEL MINING PERMIT ON FARM DOORNFONTEIN
RE/4/814, MALMESBURY WESTERN CAPE**



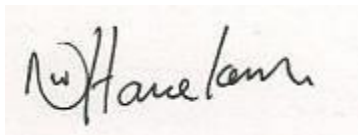
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AUGUST 2026

DECLARATION OF THE SPECIALIST

I **Nicolaas Willem Hanekom**, as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
 - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.



Nicolaas Hanekom

Pri.Sci.Nat (Ecology) 400274/11

Signature of the EAP/ Specialist:

26 August 2026

Date:

Enviro-EAP (Pty) Ltd

Name of company (if applicable):

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1. INTRODUCTION

1.1. *Background & Competency*

Nicolaas Hanekom is a registered Professional Natural Scientist in the ecological science field with the South African Council for Natural Scientific Professions (“SACNASP”), (Ecology field) and a qualified registered Environmental Assessment Practitioner (“EAP”) who holds a Masters Technologiae, Nature Conservation (“Vegetation Ecology and Biodiversity Assessment”) degree from the Cape Peninsula University of Technology (Refer to Appendix A, CV). Nicolaas Hanekom is suitably qualified SACNASP registered specialist. Nicolaas Hanekom (the specialist) is suitably qualified in terms of the protocols as an Ecologist. Ecologist is a recognise registration for Animal Studies. Nicolaas Hanekom did his first fauna specialist report in 2006. Most of the reports reference in the CV refers to biodiversity assessments. These biodiversity assessments include fauna (animals) sections in the reports since fauna is a subsection of biodiversity. Then since 2019 when the protocols Nicolaas Hanekom did first terrestrial animal impact assessments and compliance statements in terms of the protocols, and after 2020, when the protocols were amended he did animal impact assessments.

1.2. *Conditions Relating to this Report*

The findings, results, observations, conclusions and recommendations given in this report are based on the author’s best scientific and professional knowledge as well as available information and knowledge of the area.

This report may not be altered or added to without the prior written consent of the author. This restraint also refers to electronic copies of this report which are supplied as sub portion

of other reports, including main reports. Similarly, any recommendations, statements, or conclusions drawn from or based on this report must specifically refer to this report. If such comments form part of a main report for this investigation, the report must be included in its entirety as an appendix or separate section to the main report.

1.3. Terms of Reference

Step 1: Site Sensitivity Verification Report

Prior to beginning the assessment, the current use of the land and the potential environmental sensitivity of the site as identified by the national web based environmental screening tool must be confirmed by undertaking an Initial Site Sensitivity Verification. The Initial Site Sensitivity Verification must be undertaken by an environmental assessment practitioner or a registered specialist with expertise in the relevant environmental theme being considered. The Initial Site Sensitivity Verification must be undertaken through the use of:

- (a) a desk top analysis, using satellite imagery;
- (b) a preliminary on-site inspection to;
- (c) any other available and relevant information.

The outcome of the Initial Site Sensitivity Verification must be recorded in the form of a report that:

- (a) confirms or disputes the current use of the land and the environmental sensitivity as identified by the screening tool, such as new developments or infrastructure, the change in vegetation cover or status etc.;
- (b) contains a motivation and evidence (e.g. photographs) of either the verified or different use of the land and environmental sensitivity; and
- (c) is submitted together with the relevant assessment report prepared in accordance with the requirements of the Environmental Impact Assessment Regulations.

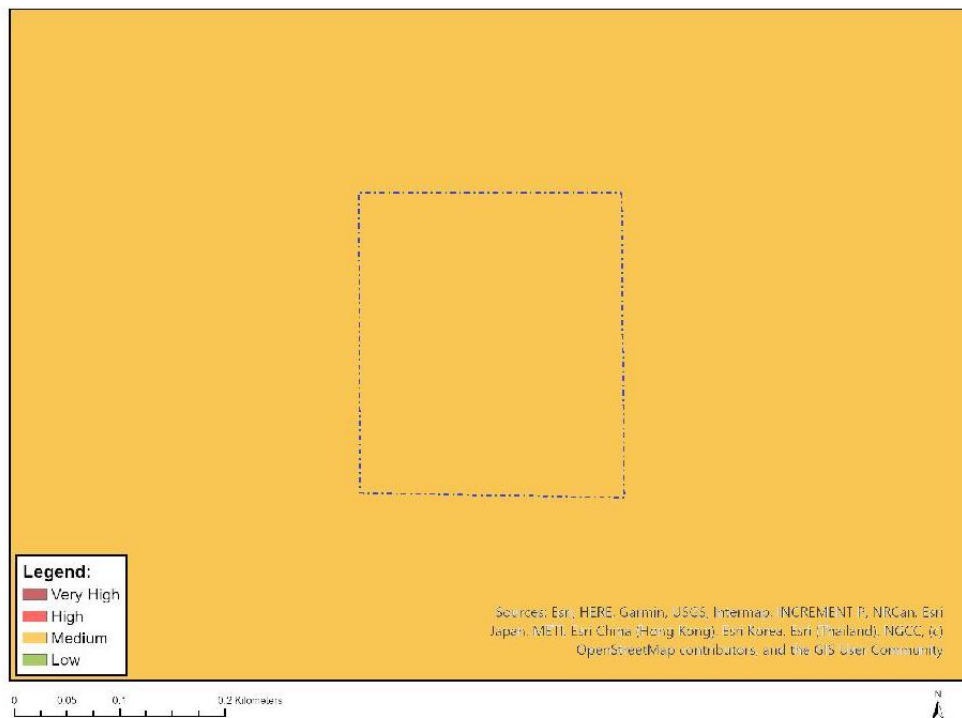
The site sensitivity verification report was completed by the environmental assessment practitioner and was included in the Scoping and Environmental Impact Assessment reports.

The outcome of the site sensitivity verification report concerning animal sensitivity of proposed development site and surrounds can be summarised as below:

The Department of Environmental Affairs screening report from the national web based environmental screening tool reported a "Medium sensitivity for animal species theme". Figure 1 depicts the property on which mining activities area proposed which falls within Medium Animal Species Sensitivity areas (refer to figure 1 below). However the environmental assessment practitioner and ecological specialist does not agree with this finding and have provided the following reason why the proposed development area can be classified as a Low Sensitivity Animal Species area and therefore an Animal Impact Compliance Statement will suffice:

- *Most of the property is annually cultivated and all proposed mining activities are on annually cultivated agricultural land therefore the impacted site it is not expected to be home to animal species of conservation concern. However due to remaining indigenous remnants throughout the property indigenous animal species may be impacted upon by the proposed development therefore an Animal Species Impact Statement is proposed.*

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Mammalia-Eremitalpa granti granti
Medium	Invertebrate-Pachysoma aesculapius
Medium	Invertebrate-Conocephalus peringueyi
Medium	Invertebrate-Aneuryphymus montanus

Figure 1: Animal sensitivity map generated by the national web based environmental screening tool for proposed mining areas on Farm Doornfontein RE/4/814, indicating location and animal sensitivity of the proposed 5ha mining area.

Step 2: Terrestrial Animal Species Compliance Statement

This compliance statement reports on the findings of the terrestrial animal sensitivity verification and site survey that was conducted by Nicolaas Hanekom.

The compliance statement must:

- be applicable to the study area;
- confirm that the study area is of “low” sensitivity for terrestrial animal species; and
- indicate whether or not the proposed development will have any impact on SCC.

The terrestrial animal compliance statement, must contain, as a minimum, the following

information:

- contact details and relevant experience as well as the SACNASP registration number of the specialist preparing the compliance statement including a curriculum vitae; **Refer to cover page, section 1.1. and Appendix A of this report**
- A signed statement of independence by the specialist; **Refer to page 2 of this report**
- A statement on the duration, date and season of the site inspection and the relevance of the season to the outcome of the assessment; **Refer to section 2.**
- a description of the methodology used to undertake the site survey and prepare the compliance statement, including equipment and modelling used where relevant; **Refer to section 3**
- the mean density of observations/ number of samples sites per unit area; **Refer to Section 4**
- where required, proposed impact management actions and outcomes or any monitoring requirements for inclusion in the EMP; **Refer to Section 5**
- a description of the assumptions made as well as any uncertainties or gaps in knowledge or data; and **Refer to Section 6**
- any conditions to which the compliance statement is subjected. **Refer to Sections 5 and 7**

Step 3: Reporting

A signed copy of the compliance statement must be appended to the Basic Assessment Report or Environmental Impact Assessment Report.

2. BASELINE PROFILE DESCRIPTION OF BIODIVERSITY AND ECOSYSTEMS, INCLUDING A STATEMENT ON THE DURATION, DATE AND SEASON OF THE SITE INSPECTION AND THE RELEVANCE OF THE SEASON TO THE OUTCOME OF THE ASSESSMENT

The proposed property, Farm Doornfontein RE/4/814 size 200.82ha is located approximately ± 7 km to the south of Malmesbury, within the municipal jurisdiction of Swartland Municipality. The property can be accessed via Main Road 174 (R302) which connects to the N1. The predominant land use in the surrounding area is agriculture and includes cultivated land used for grain production and vineyards. The property is used as an agricultural unit and is developed with infrastructure such as a farmhouse or labourer cottages. The site of the proposed 5ha sand mine has significantly been impacted upon by agricultural activities. The nearest non-perennial watercourse is located approximately 230m to the west of the proposed mine. A dry-pit sand and gravel mine of 5ha is assessed in this report. The average depth of mine-able sand spread over the mine area (5ha) is ± 30 cm deep and the average depth of gravel, ± 50 cm. The mining operator will first remove the topsoil layer (250mm) from block 1 and stockpile it on the to be mined block 2. The mineable sand and gravel will then be removed from block 1 by a front-end loader and loaded onto tip-trucks. When all mineable sand and gravel is removed from block 1, the stockpiled topsoil on block 2 is removed and immediately placed on block 1, leaving 500mm topsoil above the gravel / clay layer. Removal of topsoil from block 2 commences and is stockpiled on block 3, where after mining on block 3 commence. Concurrent mining and rehabilitation continue until the sand resource on the 6 mining blocks is removed. The mining process reduced the depth of the sand but, following the recommended rehabilitation measures, will leave a minimum of 500 mm of topsoil.

No new roads would have to be constructed to provide access to the proposed mining

areas. The mine area is accessed directly off existing farm roads to remain as is throughout the mining process.

The site was visited by the specialist on 24 August 2026 to confirm current land use, animal sensitivity of the site and potential animal species impacts of proposed mining activities. Seeing that all proposed mining activities are located on completely transformed annually cultivated agricultural land with no sensitive terrestrial or aquatic habitat features i.e. wetlands or indigenous vegetation areas the survey can be conducted any time of the year.

It was observed that the proposed mining activities areas falls within agricultural land currently being used for annual crop cultivation and livestock grazing. No indigenous animal or bird species of conservation concern (SCC) were recorded at the time of the site survey on the proposed mining areas nor its immediate surrounds.

The proposed mining areas are not located on any mapped terrestrial CBA or ESA areas. The access roads are existing farm roads which will remain and used as is during the proposed mining activities and maintained as per current farming practices.

The screen tool report Identified *Eremitalpa granti granti*, *Pachysoma Aesculapius*, *Conocephalus peringueyi* and *Aneuryphymus montanus* as possibly being present on site. None of them are however present due to transformed habitat and their habitat or host plants not present on site or in close proximity to the site.

The animal species habitat is totally destroyed, and the site consist of ploughed and cultivated agricultural fields. The development will have a Negligible Sensitivity SEI on the PAOI. In accordance with the Protocol for the Specialist Assessment and Minimum Report Content Requirements for Environmental Impacts on Terrestrial Animal Species (GN 1150, GG 43855), the determination of the Site Ecological Importance (SEI) for the recorded habitat types is only required where the Terrestrial Animal Species Theme has been assigned a High or Very High sensitivity. As demonstrate, the study area was confirmed to have a negligible terrestrial animal species sensitivity. Consequently, a formal SEI assessment for the different habitat types is not required in terms of the protocol.

One habitat type was identified, namely ploughed and cultivated areas. SCC-specific buffers were considered, but no SCC breeding sites, roosting sites, confirmed populations or other buffer-triggering features were recorded within the development footprint or PAOI. No SCC-specific buffers are required. No SCC breeding sites, roosting sites, confirmed populations or key habitat features were recorded, and that the degraded condition of the site limits its importance for SCC.



Figure 2: Locality of proposed 5ha mining area on Farm Doornfontein RE/4/814, Malmesbury in the Western Cape

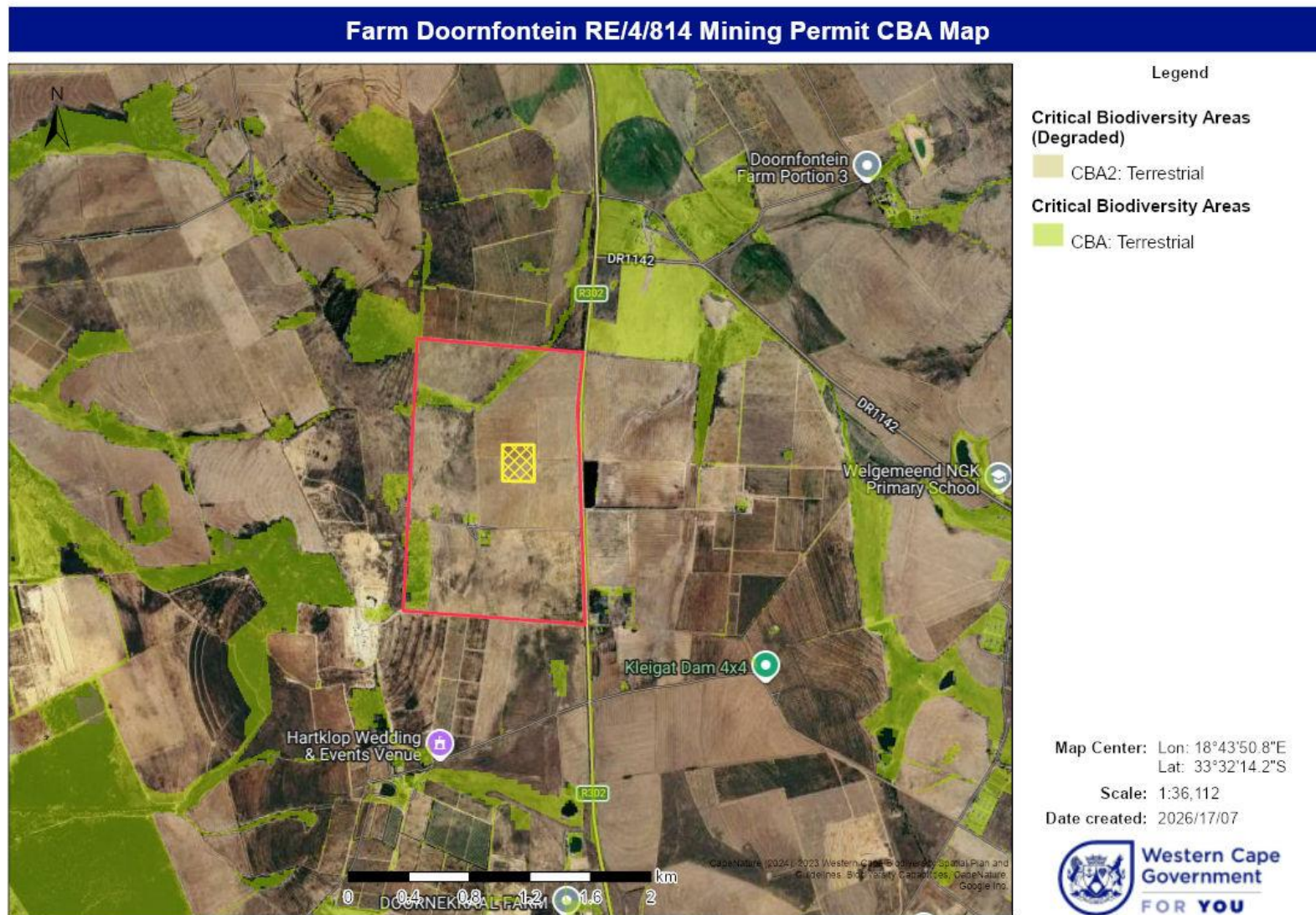


Figure 3: WCBSP 2023 CBA and ESA map in relation to the proposed mining activities areas on Farm Doornfontein RE/4/814 near Malmesbury in the Western Cape



Site Photo 1: Proposed mining areas on transformed cultivated land of Farm Doornfontein RE/4/814



Site Photo 2: Proposed mining areas on transformed cultivated land of Farm Doornfontein RE/4/814.



Site Photo 3: Proposed mining areas on transformed cultivated land of Farm Doornfontein RE/4/814.



Site Photo 4: Proposed mining areas on transformed cultivated land of Farm Doornfontein RE/4/814



Site Photo 5: Proposed mining areas on transformed cultivated land of Farm Doornfontein RE/4/814

3. A DESCRIPTION OF THE METHODOLOGY USED TO UNDERTAKE THE SITE SURVEY AND PREPARE THE COMPLIANCE STATEMENT, INCLUDING EQUIPMENT AND MODELLING USED WHERE RELEVANT

A literature review and desktop analysis were undertaken prior to the field investigation, utilizing various sources including:

- 2025 Mammal Red List - <https://ewt.org/2025-red-mammal-list/>
- 2025 Bird Red List - <https://www.birdlife.org.za/red-data-book/>
- SANBI. 2026. Species Environmental Assessment Guideline. Guidelines for the implementation of the Fauna and Flora Species Protocols for environmental impact assessments in South Africa Version 4.1 South Africa. South African National Biodiversity Institute, Pretoria.

Recent and historical aerial imagery of the site was reviewed in order to identify points for investigation during the field survey. Utilising the above information, a field investigation was undertaken whereby:

- Sites of geomorphological or topographic variance were identified and subjected to an evaluation of species present within transects established across the selected site.
- Species were identified and collated.
- Additional random sample points were selected from other sites surrounding the proposed impacted areas for comparative purposes.

The assessments entailed both a literature review of the region, as well as on site evaluations, during which specific primary data was collected and evaluated. In addition, the identification of key ecological features was undertaken allowing for the interpretation of the prevailing habitat form and associated processes.

All data collected in the field and during the literature review was evaluated and interpreted in order to provide an understanding of the nature of the prevailing environment at a landscape and habitat level. In addition, specific evaluation of data relating to habitat form and structure was undertaken, aiding in the identification of bio-physical anomalies within the prevailing environment. Such variance may be considered to be indicative of differing habitat forms, which under consideration, may be of higher order ecological value in relation of the prevailing environment.

The presence of fauna must be evaluated based on the literature and available databases but in many cases, these databases are not intended for fine-scale use and the reliability and adequacy of these data sources relies heavily on the extent to which the area has been sampled in the past. Many areas have not been well sampled with the result that the species lists derived for the area do not always adequately reflect the actual fauna and flora present at the site. Cryptic/nocturnal animals might not have been sampled and encountered. This is acknowledged as a limitation of the study, however it is substantially reduced through extracting the species lists for a substantially larger area than the site and through the inclusion of information from previous experience in the wider area. The assessment was undertaken using sampling methods appropriate to the protocols, terms of reference and methodologies described above.

For the Avi-Fauna point counts, which involve standing at designated locations to record birds seen or heard, walking along predefined lines, observations when in the area, historical recordings and history of visiting the area over years were used as sampling methods. Sampling was done in August and within the months recommended in the Species Environmental Assessment Guidelines.

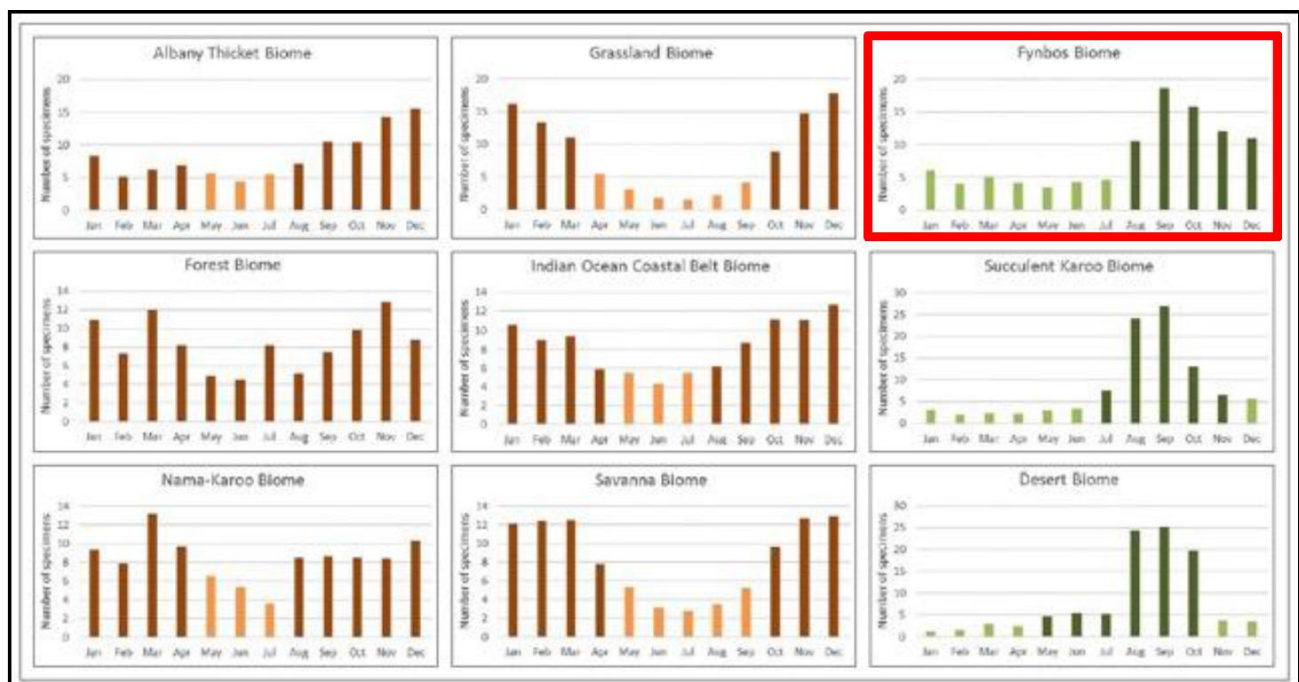


Figure 4: Recommended survey periods for different biomes (Species Environmental Assessment Guidelines). The site is within the fynbos biome.

The study area was surveyed on foot and outside the development area by vehicle, and all animal species, activities or footprints in the greater study area were noted. Various

transects were conducted to cover the area. Particular attention was paid to potential fauna and flora Species of Conservation Concern that could have been present. Various photographs were taken.

For the Species of Conservation Concern (SCC) surveys and sampling the following techniques were used. For Avi-Fauna, surveys were focus on observations while walking, using elevated areas to do surveys over time using binoculars, observations while driving and knowledge of years visiting the area. For mammals surveys was focus on direct observations were made by walking through the project area and recording species seen. In addition, habitats that typically provide refuge for faunal species were targeted to search for specific species.

Reptiles and terrestrial amphibians were targeted in microhabitats by lifting rocks and logs, peeling away bark and scraping through leaf litter. While walking the project area, mammals and Avi-Fauna are often flushed from hiding and were recorded.

Indirect observation is the searching for evidence of faunal presence and includes spoor, skat, roadkill, skulls, quills, dens, burrows, hairs, scrapings, and diggings.

Various photographs were taken. The site visit was carried 24 August 2026, which is an optimal time.

Jackal Buzzard (*Buteo rufofuscus*), Spur-winged goose (*Plectropterus gambensis*) and Cape gerbil (*Gerbilliscus afra*) burrows were recorded during the survey in the bigger area.

No Threatened or Protected Species were recorded on site and unlikely that they will occur on site due to the transformed state of the area.

4. THE MEAN DENSITY OF OBSERVATIONS/ NUMBER OF SAMPLES SITES PER UNIT AREA

No animal species of conservation concern were recorded nor is their preferred habitat present on site. The animal species listed in the environmental screen tool report was not observed or recorded on site and will also not be impacted on. One habitat type was identified, namely ploughed and cultivated areas SCC-specific buffers were considered, but no SCC breeding sites, roosting sites, confirmed populations or other buffer-triggering features were recorded within the development footprint or PAOI. No SCC-specific buffers are required. No SCC breeding sites, roosting sites, confirmed populations or key habitat features were recorded, and that the degraded condition of the site limits its importance for SCC.

Jackal Buzzard (*Buteo rufofuscus*), Spur-winged goose (*Plectropterus gambensis*) and Cape gerbil (*Gerbilliscus afra*) burrows were recorded during the survey in the bigger area.

5. WHERE REQUIRED, PROPOSED IMPACT MANAGEMENT ACTIONS AND OUTCOMES OR ANY MONITORING REQUIREMENTS FOR INCLUSION IN THE EMPR

Mining can have both direct and indirect impacts on animal species of the development sites and surrounds. Direct impacts are those that destroys indigenous animal species habitats.

Indirect impacts are those that may overtime lead to degradation or transformation of indigenous animal species habitats such as erosion.

The proposed mining activities can have the following potential impacts on indigenous animal species of the site and surrounds:

- Habitat destruction or degradation
- Disturbance during breeding season
- Physical death of species

The following impact management measures must be implemented and included in the EMP, and should they be implemented the proposed mining activities should not have any significant negative impacts on any indigenous animal present on the site or surrounds:

- Mining activities must be limited to identified and demarcated annually cultivated agricultural land and only existing roads may be used.
- Remove and conserve topsoil layer and overburden material for rehabilitation after mining activities have ceased
- Invasive vegetation to be removed during mining activities to be disposed of at landfill site in such a manner that seeds must not be able to spread from the disposal site or during transportation.
- No trapping or hunting of any fauna or avifauna species may take place on the property.
- Any tortoises or fauna or avifauna species present on the site when excavations are taking place must be safely moved to adjacent areas not to be impacted by the mining activities.
- No disturbance should be allowed within the remaining indigenous vegetation areas outside of the proposed mining activity areas and existing access roads. This includes no excavations; no storage of topsoil, overburden or bentonite stockpiles, no new or widened roads, and all forms of temporary disturbance. If indigenous vegetation areas are disturbed they must be immediately rehabilitated with indigenous vegetation areas under guidance of suitably qualified rehabilitation specialist.
- No natural vegetation areas edges may be cleared or impacted upon by the proposed mining activities.
- Implement erosion and storm water runoff management measures to prevent (or if prevention is not possible limit) any erosion from occurring on the mining activity areas and surrounds.
- Backfill mined areas as soon as possible after mining completion with onsite excavated material.
- Only use topsoil and excavated material as derived and conserved from the proposed mining site to backfill and rehabilitate impacted areas.
- Monitor rehabilitated areas for signs of erosion for at least a year after rehabilitation and implement erosion rectification and prevention measures as and if required.
- Alien invasive and weed vegetation monitoring and removal must be undertaken for at least a year after mining activities have ceased and the site has been rehabilitated This must be done by the applicant, landowner or their appointed contractor, using CapeNature approved methodology.
- Should any faunal SCC be encountered during construction, these must be recorded (i.e. be photographed, GPS co-ordinates taken) and photographs placed on iNaturalist
- Any faunal species that may die as a result of construction activities must be recorded (i.e. be photographed, GPS co-ordinates taken) and these records placed on

iNaturalist.

- In addition to all mitigations listed above a clause must be included in contracts for ALL personnel working on site stating that: “no wild animals will be hunted, killed, poisoned or captured. No wild animals will be imported into, exported from or transported in or through the province. No wild animals will be sold, bought, donated and no person associated with the development will be in possession of any live wild animal, carcass or anything manufactured from the carcass.” A clause relating to fines, possible dismissal and legal prosecution must be included should any of the above transgressions occur, especially for SCC.
- Fauna chance-find protocol, restrictions on night lighting, pet control during construction, and alien-plant clearing must be included in EMPr

6. A DESCRIPTION OF THE ASSUMPTIONS MADE AND ANY UNCERTAINTIES OR GAPS IN KNOWLEDGE OR DATA

The site visit was conducted 24 August 2026. The overall confidence in the completeness and accuracy of the animal species findings at this point in time is considered to be good. A follow-up survey is not considered essential for decision-making.

The timing of the survey is regarded as optimal in terms of accurately assessing the terrestrial animal species presence of the site. An accurate idea of the priority indigenous habitat areas and sensitive ecological features was gained by inspecting the proposed development sites and surrounds and recording distribution and/or presence of indigenous habitats and animal species (if present), and confidence in the accuracy of the findings is very high. The overall confidence in the completeness and accuracy of the terrestrial animal species findings is considered to be very good.

A follow-up survey is not considered essential for decision-making.

7. ANY CONDITIONS TO WHICH THE COMPLIANCE STATEMENT IS SUBJECTED

The findings, results, observations, conclusions and recommendations given in this report are based on the author's best scientific and professional knowledge as well as available information and knowledge of the area.

This report may not be altered or added to without the prior written consent of the author. This restraint also refers to electronic copies of this report which are supplied as sub portion of other reports, including main reports. Similarly, any recommendations, statements, or conclusions drawn from or based on this report must specifically refer to this report. If such comments form part of a main report for this investigation, the report must be included in its entirety as an appendix or separate section to the main report.

It was concluded that should the proposed mitigation measures as listed under point 5 above be implemented that the overall significance of the impacts on animal sensitivity of the site and surrounds will be of overall low negative significance. All of the mitigation and monitoring measures as listed under point 5 above must be included as part of the Environmental Management Programme conditions to be adhered to before, during and after the proposed mining activities.

The compliance statement contains the main components required for an Animal Species

Compliance Statement and provides a reasonable basis for concluding that the site is of negligent sensitivity for the animal species theme. The report identifies the relevant screening-tool species, evaluates habitat suitability, provides site photographs, documents field observations, and includes mitigation measures for inclusion in the EMP.

8. REFERENCES

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APPENDIX A SPECIALIST CV

CURRICULUM VITAE – NICOLAAS WILLEM HANEKOM

Profession: Environmental Scientist and Environmental Assessment Practitioner

Date of Birth: 01/02/1967

BIOGRAPHICAL SKETCH

Nicolaas Hanekom is a qualified Environmental Assessment Practitioner ("EAP") who holds a Masters Technologiae, Nature Conservation ("Vegetation Ecology and Biodiversity Assessment") degree from the Cape Peninsula University of Technology. Nicolaas is certified in terms of section 20(3)(a) of the Natural Scientific Professions Act, 2003 (Act 27 of 2003), as a Professional Natural Scientist (Ecological Science) Registration Number: 4008274/11. He further qualified in Environmental Management Systems ISO 14001:2004, at the Centre For Environmental Management, North-West University, as well as Environmental Management Systems ISO 14001:2004 Audit: Internal Auditors Course to ISO 19011:2003 level, from the Centre for Environmental Management, North-West University qualifying him to execute audits to ISO/SANS environmental compliance and EMS standards.

He has also completed the suite of Greener Governance courses with certificates in;

- An Overview of Environmental Management at the Local Government Level, Centre for Environmental Management, North-West University;
- Greener Governance for Local Authorities, Centre for Environmental Management, North-West University;
- Tools for Integrated Environmental Management and Governance, Centre for Environmental Management, North-West University.

He further attended and obtained a certificate on Integrated Protected Area Planning at the Centre for Environmental Development, University of Kwa Zulu Natal and a certificate in Project Management (Theory and Practical), through CS Holdings. Nicolaas has lectured in two subjects at the Cape Peninsula University of Technology. He has 26 years of environmental planning experience, working for Free State and Western Cape departments of environmental affairs, where he reviewed and commented on development (EIA) applications, in the West Coast Region.

He has, as practising EAP been responsible for many environmental impact assessments and EIA applications, waste license and atmospheric emission license applications.

He has also been involved in the implementation of several environmental management systems. He has engaged successfully with various clients as set out below.

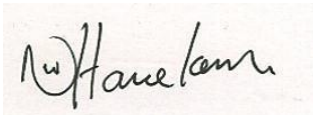
Areas	of	• Ecosystem (terrestrial and aquatic) monitoring and assessments
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specialisation:	• Design of monitoring programmes for ecosystems (terrestrial and aquatic) • Environmental Impact Assessments • River classification and environmental water requirements • Wetlands Delineation • River and Wetlands management • Water Use Authorization Applications • Water quality management • River Health Assessments
Countries of Work Experience:	South Africa (Northern Cape, Western Cape, Free State, Mpumalanga, Gauteng)
Employment Record	• Student at Bontebok National Park (1992) • Assistant Reserve Manager at Gariep Dam Nature Reserve, Free State (1993 - 1998) • Reserve Manager, Conservation Services Manager for Western Cape Nature Conservation Board (1998 - 2006) • External Lecturer at Cape Peninsula University of Technology (2003 - 2005) • Director: Environmental Management at Cape Lowlands Environmental Services (2006 – 2010) • Director, Environmental Management and lead Environmental Impact Assessment Practitioner at Eco Impact (Pty) Ltd (2010 – to August 2019) • Director, Environmental Management and lead Environmental Impact Assessment Practitioner at Enviro-EAP (Pty) Ltd (September 2019 – to date)
Professional membership, accreditations and courses	• South African Council for Natural Scientists Professions Pri.Sci.Nat (Ecological Science) • Riparian vegetation identification and health assessment. Internal Western Cape Nature Conservation short course presented by Dr C Boucher (Stellenbosch University) in 2000. • SASS5 Aquatic Biomonitoring Training Course. 2 to 5 September 2013. Ground Truth Water and Environmental Engineering consultancy in partnership with the Department of Water Affairs. • Workshop on “Section 21(c) and (i) Water Use Training: Understanding Watercourses and Managing Impacts to their Characteristics”. 10 May 2017. Presented by Dr Wietsche Roets of the Department of Water and Sanitation (Sub-Directorate: Instream Water Use).
Summary of experience	1992: South African National Parks. Student at Bontebok National Park with management and monitoring actions related to the Breede River. 1993 -1998: Free State Nature Conservation. Ecological management and monitoring actions related to the Gariep Dam, Orange and Caledon Rivers. 1998 -2006: CapeNature. Ecological management and monitoring actions related to the Berg River Estuary, Verlorenvlei, Lamberts bay's Jackalsvlei, Wadriht Soutpanne, Oliphant's River mouth, Rocherpan Nature Reserve, etc. Review and assessment of EIA applications, inclusive of Freshwater ecology. Did some site visits with Department of Water Affairs and Forestry (Hester Lyons) to confirm the presence of aquatic ecological features during EIA water use registration applications. 2006 to date: Cape Lowland Environmental Services, Eco Impact Legal Consultant and Enviro-EAP. Ecological (Freshwater and aquatic)

	Specialist input, assessment, monitoring and reports.
Publications and assessment reports	Just to name a few. Was involved in many Ecological Assessments, monitoring and inputs in EIA applications. • Elandskloof Farm 475 Citrusdal Biodiversity Baseline Survey. August 2010. This Biodiversity Assessment Covering Terrestrial and Aquatic Aspects to Inform Decisions Regarding The Proposed Elandskloof Weir Flood Damage Project On Farm 475, In The Citrusdal Area. • Cape Solar Energy Electricity Generation Facility. Farm 187/3 & 187/13 Kenhardt. Biodiversity And Ecological Baseline Survey. January 2011. (Included Terrestrial and aquatic ecological assessments and water use authorization applications) • Prieska Photovoltaic Power Generation Project. Prieska Commonage Northern Cape. Biodiversity And Ecological Baseline Survey. July 2011. (Included Terrestrial and aquatic ecological assessments and water use authorization applications) • Witteklip Erf 123 Extension, Vredenburg. Biodiversity Baseline Survey. Updated - October 2012 (Included Terrestrial and aquatic ecological assessments and water use authorization applications) • Baseline Biodiversity Survey And Wetland Delineation for ECCA Holdings: Cape Bentonite Mine on Erf 1412 Near Heidelberg. Prepared for: Shangoni Management Services Pry (Ltd). October 2014. • Freshwater Impact Assessment Laingsburg Flood Damage Repairs & Storm Water Infrastructure. 18 February 2016. • Ecological Assessment for Swartland Municipality - Upgrades To Voortrekker/Bokomo Road And Voortrekker/Rozenburg Road Intersections and Upgrade to the Diep River Bridge, Malmesbury on A Portion Of Erf 327, Malmesbury (Road) Erf 1530, Diep River Bridge Crossing, and Erf 1528, Property South of Diep River where Road Widening and Turning Circle Will Be Constructed. March 2016. (Freshwater Ecology Inputs and Water Use Registration) • Freshwater Impact Assessment. McGregor Bridge, Robertson Bridge and Willem Nels River Maintenance Management Plan. 24 June 2016. (Freshwater Ecology assessment and input as well as Water Use Registration) • Water Use Authorization Application Risk Matrix. Orange Grove Trust Vegetation Clearing and Agricultural Development on Portion 4 of Farm Glen Heatlie No 316, Worcester. 12 June 2017. (Freshwater ecological inputs in EIA process and Water Use Registration). • Water Use Authorization Application Risk Matrix Prepared For: Witzenberg Municipality Sand Mine Farm 1 Prince Alfred Hamlet. 28 March 2017. (Freshwater ecological inputs in EIA process and Water Use Registration). • Proposed Hartmanshoop Agri Vegetation Clearing Project and Irrigation on Erf 686, Laingsburg. 12 August 2017. (Freshwater ecological inputs in Water Use Registration). • County Fair: Hocraft Abattoir And Rendering Facility Waste Water Treatment Works "CF Hocraft WWTW" Mosselbank River Second Quarter 2018 Biomonitoring Report. June 2018. (Done quarterly biomonitoring for the last three years).

CERTIFICATION

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe my qualifications, my experience, and me.

A handwritten signature in black ink on a light-colored background. The signature is written in a cursive style, starting with a large 'N' and ending with a long, sweeping tail.

Nicolaas Hanekom Pri Sci Nat (Ecology).
Registration number 004415



herewith certifies that
Nicolaas Willem Hanekom
Registration Number: 004415
is a registered scientist

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

Ecological Science (Professional Natural Scientist)
Aquatic Science (Candidate Natural Scientist)
Conservation Science (Candidate Natural Scientist)
Zoological Science (Candidate Natural Scientist)

Effective 27 July 2011 Expires 31 March 2026



Chairperson

Chief Executive Officer



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