



**TERRESTRIAL BIODIVERSITY COMPLIANCE
STATEMENT FOR THE PROPOSED INSTALLATION
OF ADDITIONAL FUEL STORAGE TANKS AND
ASSOCIATED INFRASTRUCTURE ON PLOT 601 (A
PART OF PLOT 553), OLIFANTSRIVER
SETTLEMENT, LUTZVILLE**

**Lutzville, Matzikama Local Municipality, West
Coast District Municipality, Western Cape
Province, South Africa**

17 November 2025

Prepared by:

The Biodiversity Company

Cell: +27 81 319 1225

Fax: +27 86 527 1965

info@thebiodiversitycompany.com

www.thebiodiversitycompany.com

Report Name	TERRESTRIAL BIODIVERSITY COMPLIANCE STATEMENT FOR THE PROPOSED INSTALLATION OF ADDITIONAL FUEL STORAGE TANKS AND ASSOCIATED INFRASTRUCTURE ON PLOT 601 (A PART OF PLOT 553), OLIFANTSRIVER SETTLEMENT, LUTZVILLE	
Specialist Theme	Terrestrial Biodiversity Theme	
Project Reference	Agrimark Lutzville	
Report Version	Draft 1 / 17 November 2025	
Environmental Assessment Practitioner		
Report Writer	Andrew Husted (Pr. Sci. Nat. 400213/11)	
Report Reviewer	Martinus Erasmus (Pr. Sci. Nat. 118630)	
Declaration	<p>The Biodiversity Company and its associates operate as independent consultants under the auspice of the South African Council for Natural Scientific Professions. We declare that we have no affiliation with or vested financial interests in the proponent, other than for work performed under the Environmental Impact Assessment Regulations, 2017. We have no conflicting interests in the undertaking of this activity and have no interests in secondary developments resulting from the authorisation of this project. We have no vested interest in the project, other than to provide a professional service within the constraints of the project (timing, time and budget) based on the principals of science.</p>	

Table of Contents

1	Introduction.....	5
1.1	Background	5
1.2	Project Description	7
1.3	Scope of Work.....	7
1.4	Assumptions and Limitations	7
1.5	Legislative Framework	8
2	Fieldwork	9
2.1	Field Assessment.....	9
3	Results & Discussion	10
3.1	Desktop Baseline	10
3.1.1	Literature Review	10
3.1.2	Ecologically Important Landscape Features	10
3.1.3	Desktop Ecological Sensitivity	10
3.2	Field Survey	12
3.2.1	Field points	12
3.2.2	Habitat Assessment	13
3.3	Site Sensitivity Verification	14
3.3.1	Screening Tool Comparison.....	14
4	Impact Management and Mitigation Plan.....	14
4.1	General mitigation	15
4.2	Cumulative Impacts.....	15
5	Conclusion.....	16
5.1	Impact Statement	16
5.2	Specialist Opinion	16
6	References	17
7	Appendix Items.....	19
7.1	Appendix A – Methods	19
7.1.1	Desktop Dataset Assessment	19
7.2	Appendix C – Specialist Declaration of Independence	22
7.3	Appendix D – Specialist CVs	24

List of Tables

Table 1-1 Compliance Statement information requirements as per the relevant protocol, including the location of the information within this report. 8

Table 3-1 Summary of relevance of the proposed project to ecologically important landscape features 10

Table 3-2 Sensitivity summary of the habitat types delineated within the PAOI..... 12

Table 3-3 Table providing descriptions of the habitat types delineated for the PAOI..... 14

Table 3-4 Summary of the screening tool vs specialist assigned sensitivities. 14

Table 4-1 General mitigation measures for the project..... 15

Table 4-2 Cumulative Impacts associated with the proposed project..... 15

List of Figures

Figure 1-1 Map depicting the regional context of the Project Area of Influence (PAOI) 6

Figure 1-2 Map depicting the local context of the Project Area of Influence (PAOI)..... 6

Figure 2-1 Map depicting the photograph points within the PAOI..... 9

Figure 3-1 Map depicting the relative terrestrial biodiversity theme sensitivity for the PAOI 11

Figure 3-2 Habitat identified within the PAOI 13

1 Introduction

1.1 Background

The Biodiversity Company was appointed to undertake a terrestrial biodiversity assessment for the proposed Installation of additional fuel storage tanks and associated infrastructure on Plot 601 (A Part of Plot 553), Olifantsrivier Settlement, Lutzville.

The proposed development area is referred to as the Project Area of Influence (PAOI) from hereon. A map illustrating the regional locality of the PAOI is depicted in Figure 1-1, and a site locality illustrated in Figure 1-2.

A field survey for both plant and animal species compliance verification was undertaken on 10 April 2025 by Hanekom (2025). This timing falls within the optimal late-summer to early-autumn survey window, ensuring that species detectability, particularly for plant species, was adequate despite the transformed condition of the site. A field survey for the general area was undertaken to determine the presence of flora, fauna and vegetation of the PAOI, as well as likelihood of Species of Conservation Concern (SCC) occurring within the PAOI. Both the desktop assessment and field surveys involved the detection, identification, and description of any locally relevant sensitive receptors. The potential risks that the proposed development would have on the sensitive features was also investigated.

This assessment was conducted according to the protocol for the specialist assessment and minimum report content requirements for environmental impacts on terrestrial biodiversity for activities requiring environmental authorisation. This protocol replaces the requirements of Appendix 6 of the Environmental Impact Assessment Regulations¹. The approach has taken cognisance of the published Government Notice 320 in terms of National Environmental Management Act (NEMA) dated 20 March 2020.

The assessment and minimum reporting requirements of this protocol are associated with a level of environmental sensitivity identified by the national web based environmental screening tool (screening tool). The National Web based Environmental Screening Tool has characterised the terrestrial biodiversity theme for the area as 'Low' sensitivity (National Environmental Screening Tool, 2024).

The purpose of conducting the specialist study is to provide relevant input into the Environmental Authorisation application process, with a focus on the proposed activities and the impacts associated with the project. This report, after taking into consideration the findings and recommendations provided by the specialist stipulated herein, should inform, and guide the Registered Environmental Assessment Practitioner (EAP) and regulatory authorities, enabling informed decision making as to the ecological viability of the proposed project.

¹ The Environmental Impact Assessment Regulations, 2014, as promulgated in terms of Section 24(5) of the National Environmental Management Act, 1998 (Act No. 107 of 1998).

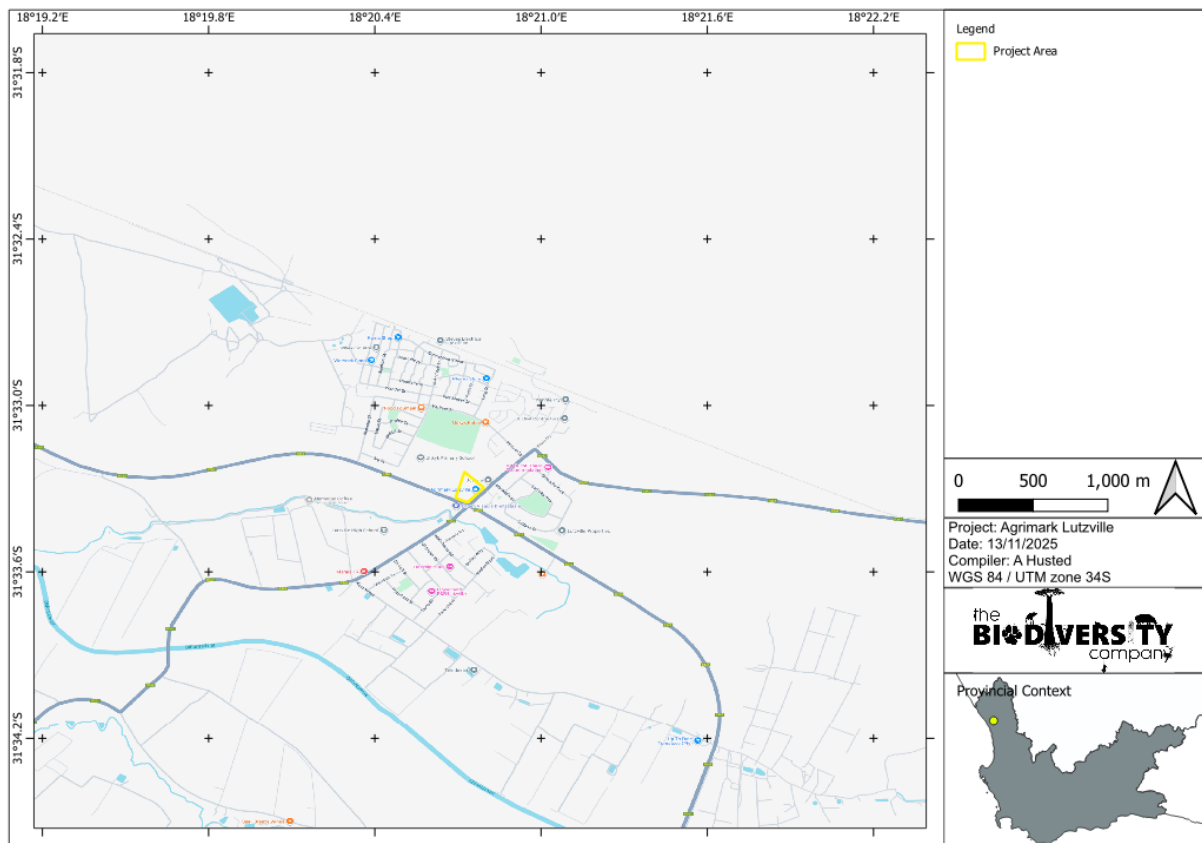


Figure 1-1 Map depicting the regional context of the Project Area of Influence (PAOI)

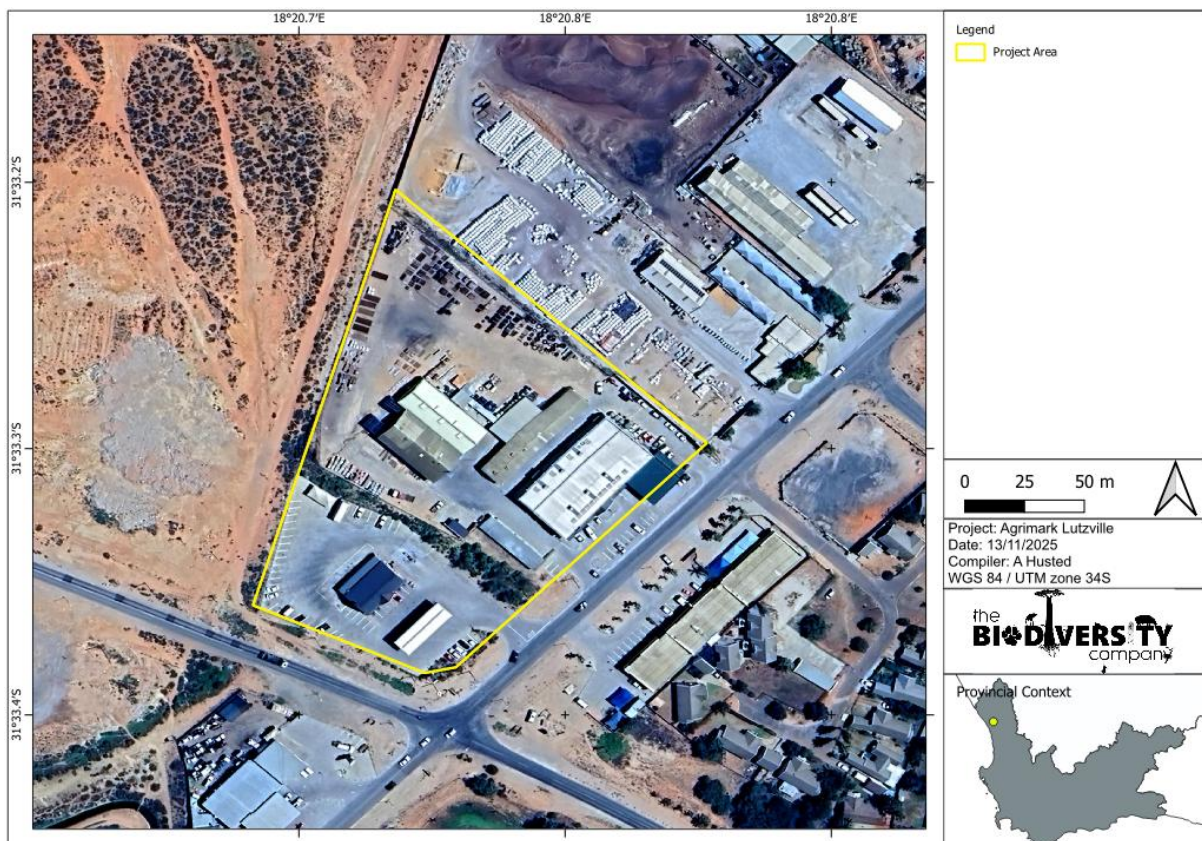


Figure 1-2 Map depicting the local context of the Project Area of Influence (PAOI)

1.2 Project Description

The proposed development entails the installation of additional fuel storage infrastructure on Plot 601 (a portion of Plot 553), Olifantsrivier Settlement, Lutzville. The project involves expanding the existing diesel storage capacity through the construction and installation of three (3) above-ground diesel fuel storage tanks, each with a capacity of 83 m³, providing a combined total storage capacity of 249 m³. The development footprint is approximately 380.81 m², and includes:

- A new bund floor with associated access stairs;
- A new petrol dispensing area;
- A spill slab; and
- Additional bunded containment areas.

1.3 Scope of Work

The aim of the biodiversity assessment was to provide information to guide the risk of the proposed development on the current state of the associated ecosystems within the PAOI. This was achieved through the following:

- Desktop assessment to identify the ecologically important terrestrial biodiversity features within the PAOI;
- Determine the sensitivity of the PAOI;
- Identify the manner that the proposed development impacts the features and evaluate the level of risk of these potential impacts; and
- The prescription of mitigation measures for identified risks associated with the proposed development.

1.4 Assumptions and Limitations

The fieldwork for both the plant and animal species compliance assessments was undertaken by N.W. Hanekom, not by the author of this report. While this represents a minor limitation in terms of direct observer involvement, it does not materially affect the reliability or confidence of the findings. The methodologies applied, survey date (10 April 2025), and site conditions are clearly documented in the compliance statements, and the ecological context, being entirely transformed with no remaining natural habitat, is unambiguous.

The results independently confirm the Low Terrestrial Biodiversity Theme Sensitivity rating, as reflected in both the plant and animal compliance statements, and therefore this limitation has no bearing on the outcome or conclusions of the assessment.

The following assumptions and limitations are also applicable for this assessment:

- It is assumed that all information received from the client is accurate;
- All datasets accessed and utilised for this assessment are considered to be representative of the most recent and suitable data for the intended purposes;
- The assessment area (PAOI) was based on the footprint areas as provided by the client, and any alterations to the area and/or missing Geographic Information System (GIS) information pertaining to the assessment area would have affected the area surveyed and hence the results of this assessment;

- The project description was based on information provided by the client, and any alterations to the area and/or missing data pertaining to the development would have affected the area surveyed and hence the results of this assessment;
- Whilst every effort was made to cover as much of the PAOI as possible, representative sampling was completed. Consequently, it is possible that some fauna and flora species present within the PAOI may have not been recorded during the field survey; and
- The GPS used in the assessment has an accuracy of 5 m and consequently any spatial features may be offset by up to 5 m.

1.5 Legislative Framework

In line with the protocol for the specialist assessment and minimum report content requirements for environmental impacts on terrestrial biodiversity, as per Government Notice 320 published in terms of NEMA, dated 20 March 2020 and 30 October 2020: “Procedures for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation” – section 3, subsection 1:

- An applicant intending to undertake an activity identified in the scope of the protocol, on a site identified on the screening tool as being of 'Very High' sensitivity for terrestrial biodiversity, must submit a Terrestrial Biodiversity Specialist Assessment; however
 - Where the information gathered from the site sensitivity verification differs from the designation of 'Very High' terrestrial biodiversity sensitivity on the screening tool and it is found to be of a 'Low' sensitivity, then a Terrestrial Biodiversity Compliance Statement must be submitted;

The information obtained from a site sensitivity verification, confirmed that the proposed PAOI is of a 'Low' sensitivity. Therefore, this report constitutes a Compliance Statement². As per sections 2 and 3 of the protocol discussed above, a Compliance Statement must contain the information as presented in Table 1-1 below.

Table 1-1 Compliance Statement information requirements as per the relevant protocol, including the location of the information within this report.

Information to be Included (as per GN 320, 20 March 2020)	Report Section
Methodology used to undertake the site assessment and survey, and prepare the compliance statement, including relevant equipment and modelling used	7.1
Description of the assumptions and any uncertainties or gaps in knowledge or data	1.4
A baseline profile description of biodiversity and ecosystems of the site	3.2
Site sensitivity verification: Desktop Analysis using satellite imagery and available information	3.1.1
A statement on the duration, date, and season of the site inspection	2
Site sensitivity verification: Onsite inspection, including a description of current land use and vegetation found on-site	3.3
Site sensitivity verification: Photographs/evidence of environmental sensitivity	3.2
Screening tool confirmation/dispute: The assessment must verify the “Low” sensitivity of the site, in terms of plant, animal, and terrestrial biodiversity themes	3.3.1
Proposed impact management outcomes or monitoring requirements for inclusion in the EMPr	4
Indicate whether the proposed development will have any impact on the terrestrial environment, animals and/or plants	5

² A signed copy of the compliance statement must be appended to the Basic Assessment Report or Environmental Impact Assessment Report.

A signed statement of independence by the specialist	7.2
Specialist details, including a CV	7.3

2 Fieldwork

2.1 Field Assessment

A field survey for both plant and animal species compliance verification was undertaken on 10 April 2025. This timing falls within the optimal late-summer to early-autumn survey window, ensuring that species detectability, particularly for plant species, was adequate despite the transformed condition of the site (Figure 2-1).

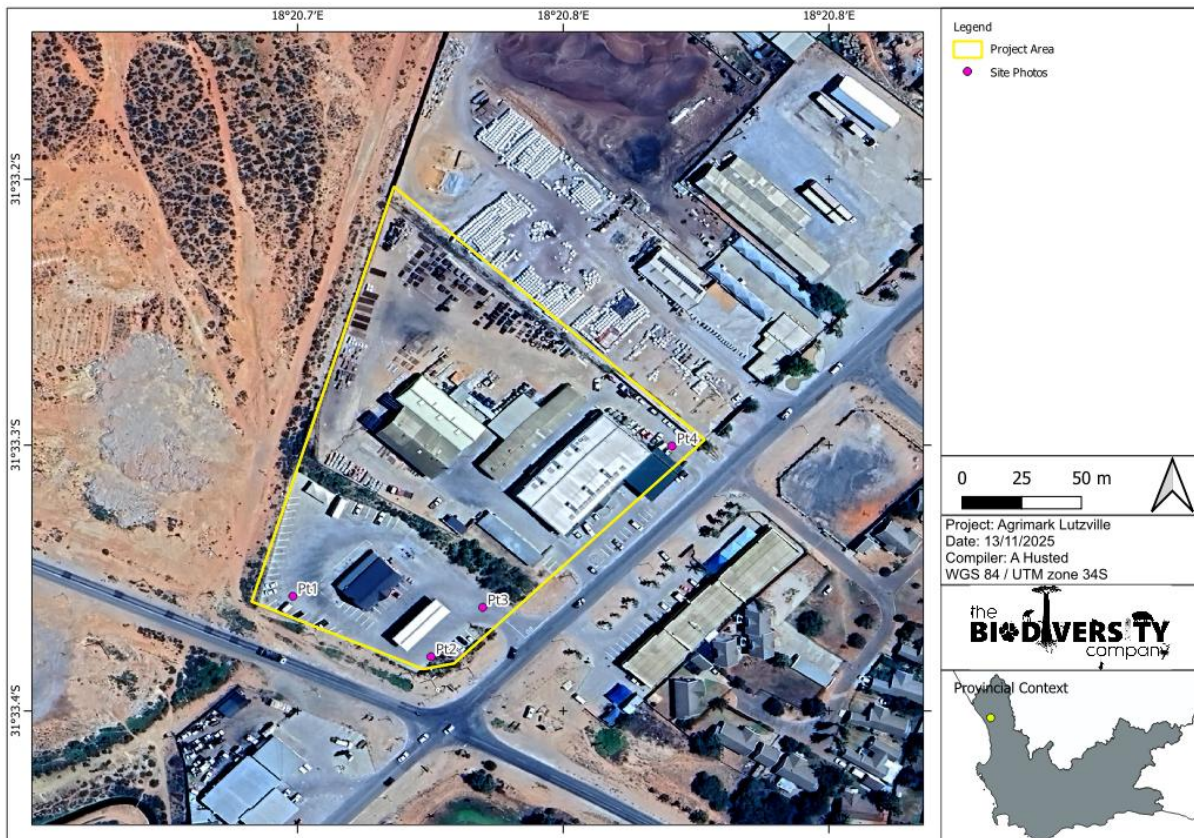


Figure 2-1 Map depicting the photograph points within the PAOI

3 Results & Discussion

3.1 Desktop Baseline

3.1.1 Literature Review

The Animal Species Compliance Statement (Hanekom, 2025) confirms that the survey conducted on 10 April 2025 found the development site to be highly transformed, with no natural habitat capable of supporting animal Species of Conservation Concern (SCC). No fauna SCC were observed, and the species listed in the national screening tool were deemed absent and unlikely to occur due to the disturbed and modified condition of the site. The report concludes that the area is of Low animal species sensitivity and that the proposed development will not impact any fauna-related biodiversity features.

The Plant Species Compliance Statement (Hanekom, 2025) similarly reports that the site assessed on 10 April 2025 is completely transformed, with no indigenous vegetation and no plant SCC present or expected. Although the national screening tool mapped the area as “Medium” sensitivity, field verification demonstrated this to be incorrect, as no botanical features of conservation value remain. The site is therefore validated as having Low plant species sensitivity, and the proposed development presents no botanical biodiversity risk.

3.1.2 Ecologically Important Landscape Features

Table 3-1 below has been produced because of the spatial data collected and analysed (as provided by various sources such as the national and provincial environmental authorities and SANBI). It presents a summative breakdown of the ecological boundaries considered and the associated relevance that each has to the region or PAOI. Where a feature is regarded as relevant it is considered an ecologically important landscape feature and discussed further as part of the sub-sections that follow.

Table 3-1 *Summary of relevance of the proposed project to ecologically important landscape features*

Desktop Information Considered	Relevance	Reasoning
Provincial Conservation Plan	Irrelevant	Partially overlaps Other Natural Area (ONA's).
Ecosystem Threat Status (Red list of Ecosystems (RLE), 2021)	Irrelevant	PAOI overlaps a Least Concern (LC) ecosystem
Ecosystem Protection Level (NBA, 2018)	Irrelevant	PAOI in a Poorly Protected area
National Protected Areas Expansion Strategy (NPAES) (2018)	Irrelevant	The PAOI does not overlap a NPAES area
South African Protected and Conservation Areas Databases (2025) (SAPAD & SACAD)	Irrelevant	The PAOI does not overlap a SAPAD or SACAD areas
Key Biodiversity Areas (KBA, 2024)	Irrelevant	The PAOI does not overlap a KBA
Strategic Water Source Areas (SWSA) (2021)	Irrelevant	The PAOI does not overlap a SWSA
South African Inventory of Inland Aquatic Ecosystems (SAIIAE) (2018)	Irrelevant	The PAOI does not overlap a SAIIAE
National Freshwater Priority Areas (NFPEPA) (2011)	Irrelevant	The PAOI does not overlap a NFPEPA

3.1.3 Desktop Ecological Sensitivity

The following is deduced from the National Web-based Environmental Screening Tool Regulation 16(1)(v) of the Environmental Impact Assessment Regulations 2014, as amended):

- Terrestrial Biodiversity Theme sensitivity is ‘Low’ for the PAOI (Figure 3-1).

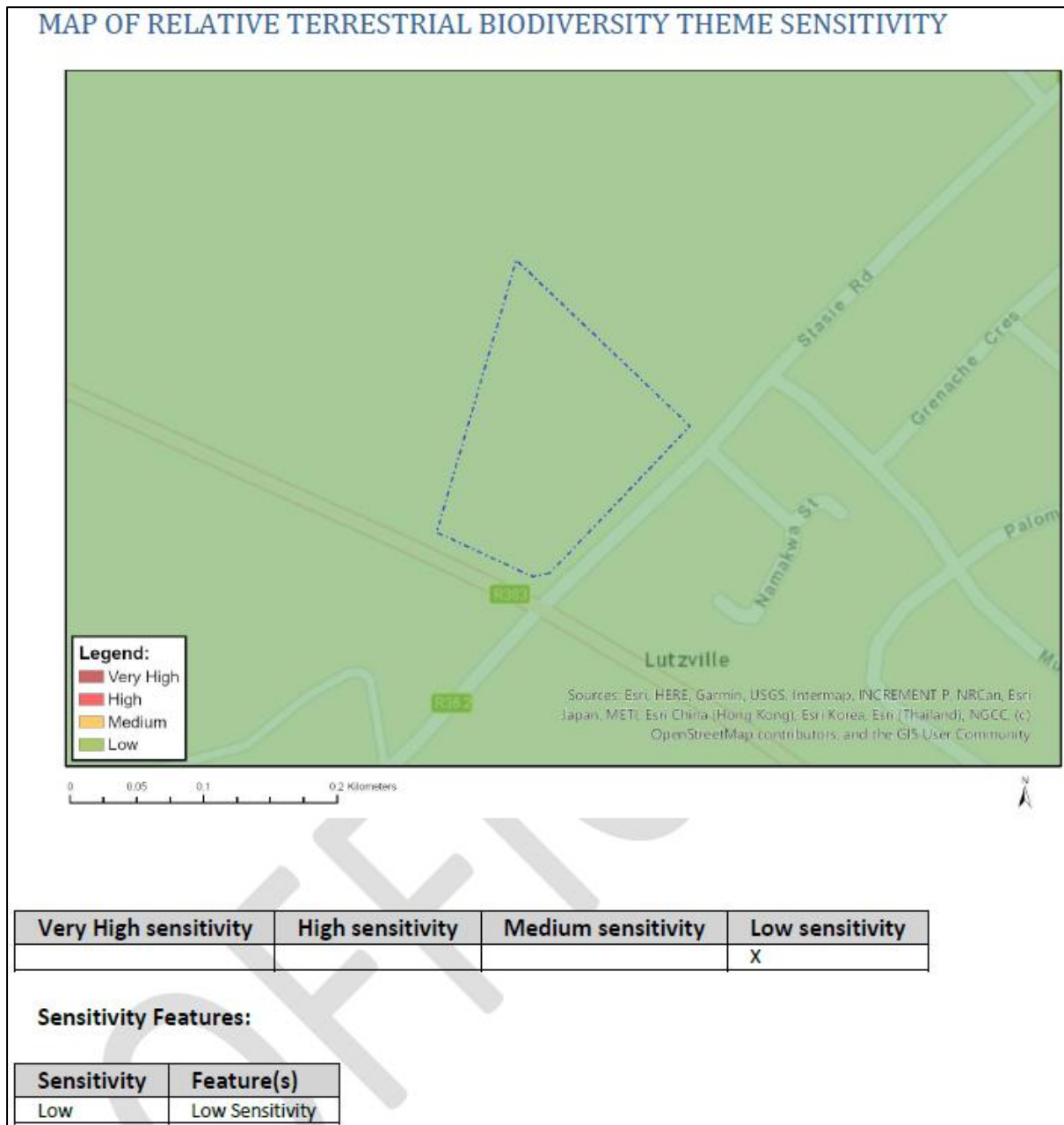


Figure 3-1 Map depicting the relative terrestrial biodiversity theme sensitivity for the PAOI

3.2 Field Survey

3.2.1 Field points

The following sections discuss the delineated habitat type. Habitats observed at certain site points³ are described in Table 3-2.

Table 3-2 Sensitivity summary of the habitat types delineated within the PAOI.

Survey Point	Habitat	SEI	Photograph
Site GPS Reference: Pt1 Date: 13/11/2025 GPS Coordinates: 31°33'20.06"S 18°20'41.93"E	Modified: The modified habitat refers to areas that have undergone substantial alteration due to direct development activities and the cumulative influence of surrounding transformed land. These areas are characterised by disrupted ecological processes, reduced natural structure, and pronounced edge effects resulting from adjacent disturbed or built-up environments.	Low	
Site GPS Reference: Pt2 Date: 13/11/2025 GPS Coordinates: 31°33'20.87"S 18°20'43.80"E	Modified: The modified habitat refers to areas that have undergone substantial alteration due to direct development activities and the cumulative influence of surrounding transformed land. These areas are characterised by disrupted ecological processes, reduced natural structure, and pronounced edge effects resulting from adjacent disturbed or built-up environments.	Low	
Site GPS Reference: Pt3 Date: 13/11/2025 GPS Coordinates: 31°33'20.21"S 18°20'44.50"E	Modified: The modified habitat refers to areas that have undergone substantial alteration due to direct development activities and the cumulative influence of surrounding transformed land. These areas are characterised by disrupted ecological processes, reduced natural structure, and pronounced edge effects resulting from adjacent disturbed or built-up environments.	Low	

³ Photographs sourced from Google Earth Streetview

Site GPS Reference: Pt4
Date: 13/11/2025
GPS Coordinates: 31°33'18.02"S 18°20'47.07"E

Modified: The modified habitat refers to areas that have undergone substantial alteration due to direct development activities and the cumulative influence of surrounding transformed land. These areas are characterised by disrupted ecological processes, reduced natural structure, and pronounced edge effects resulting from adjacent disturbed or built-up environments.

Low



3.2.2 Habitat Assessment

One (1) main habitat type was identified across the PAOI, namely:

- Modified.

The habitat unit for the PAOI can be seen delineated in Figure 3-2 and a description of the habitat units can be found in Table 3-3.

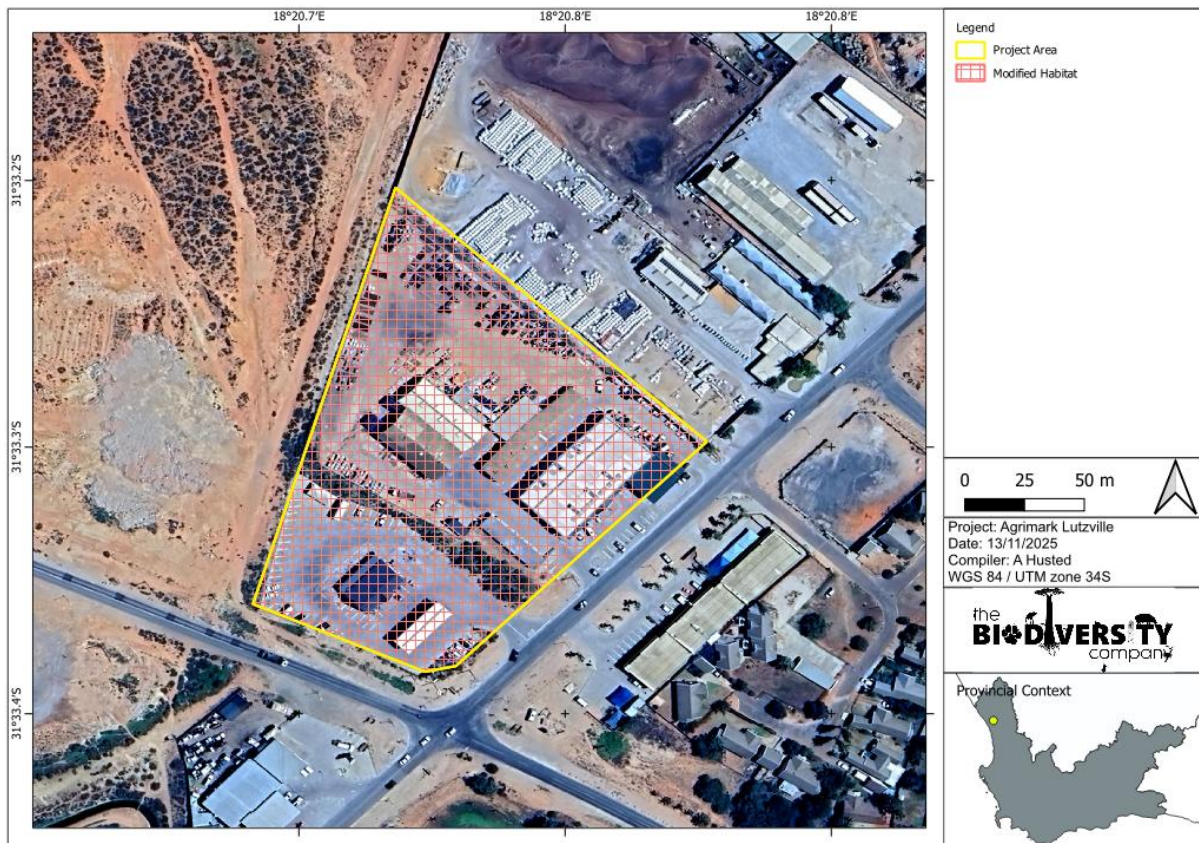


Figure 3-2 *Habitat identified within the PAOI*

Table 3-3 *Table providing descriptions of the habitat types delineated for the PAOI*

Habitat	Description and Condition
Modified	The modified areas exhibit minimal to no remaining natural vegetation due to extensive land transformation from existing infrastructure (substation), agriculture and roads. These habitats exist in a perpetually disturbed state and are unable to recover to a more natural condition due to ongoing disturbances and impacts. This habitat is not a viable ONA or representative of the LC ecosystem.
	The ecological services provided by this habitat are significantly limited, primarily due to the extensive cover of impermeable surfaces and manicured lawns. Despite these limitations, certain sections of the area may function as movement corridors for locally common fauna species.
	No fauna or flora SCC were observed, and none are expected.

3.3 Site Sensitivity Verification

3.3.1 Screening Tool Comparison

The allocated sensitivity for the relevant theme is either disputed or confirmed in Table 3-4 below. A summative explanation for each result is provided as relevant. The specialist-assigned sensitivity ratings are based largely on the SEI process followed in the previous section, and consideration is given to any observed or likely presence of SCC or protected species.

Table 3-4 *Summary of the screening tool vs specialist assigned sensitivities.*

Screening Tool Theme	Screening Tool	Habitat	Specialist	Tool Validated or Disputed by Specialist - Reasoning
Terrestrial Biodiversity Theme	Low	Modified	Low	Confirmed – These areas have been modified and have little to no natural vegetation left.

4 Impact Management and Mitigation Plan

The aim of the management outcomes is to present mitigation actions in such a way that they can be incorporated into the Environmental Management Programme (EMPr), and possible biodiversity management programme, for the project, which should in turn allow for a more successful implementation and auditing of the mitigations and monitoring guidelines. Table 4-1 presents general mitigation measures.

These mitigation tables must be read in conjunction with the Generic Environmental Management Programme (EMPR) for the development and expansion of substation infrastructure for the transmission and distribution of electricity as per No. 42323 GOVERNMENT GAZETTE, 22 MARCH 2019.

The focus of mitigation measures is to reduce the significance of the likely impacts associated with the development, and thereby:

- Prevent the further loss and fragmentation of indigenous vegetation communities within the ecosystem within and around the PAOI;
- Reduce the negative fragmentation effects of the development and facilitate the safe movement of fauna species;
- Prevent the direct and indirect loss and disturbance of flora and fauna species and communities; and
- Adequately follow the guidelines for interpreting the SEI ratings assigned to the PAOI.

4.1 General mitigation

Table 4-1 General mitigation measures for the project

Mitigation: Action/control	
•	Demarcate work areas during the construction phase to avoid affecting outside areas. Use physical barriers e.g., safety tape, not painted lines, and use signage.
•	No new roads or servitudes should be constructed where existing infrastructure can be used.
•	Do not clear areas of indigenous vegetation outside of the direct project footprint.
•	Minimise vegetation clearing to the minimum required.
•	Compile and implement a rehabilitation plan from the onset of the project, make use of indigenous vegetation.
•	Rehabilitate areas as soon as they are no longer impacted by construction. <ul style="list-style-type: none"> ○ The rehabilitated areas must be revegetated with indigenous vegetation.
•	Environmental Officer (EO) to provide supervision and oversight of vegetation clearing activities.
•	Dust-reducing mitigation measures must be put in place and must be strictly adhered to, for all roads and bare (unvegetated) areas. <ul style="list-style-type: none"> ○ Reduce the dust generated by operational vehicles and earth moving machinery, through wetting the soil surface and putting up signs to enforce speed limits to enforce reduced speeds. ○ No non-environmentally friendly suppressants may be used as this could result in pollution of water sources.
•	Cement must be mixed in a designated area on a liner away from water sources and buffers and that successful rehabilitation of the construction areas can take place.
•	Leaking equipment and vehicles must be repaired immediately or be removed from project area to facilitate repair.
•	A hydrocarbon spill management plan must be put in place to ensure that should there be any chemical spill out or over that it does not run into the surrounding areas. The Contractor shall be in possession of an emergency spill kit that must always be complete and available on site. <ul style="list-style-type: none"> ○ Drip trays or any form of oil absorbent material must be placed underneath vehicles/machinery and equipment when not in use. ○ No servicing of equipment on site unless necessary. ○ All contaminated soil / yard stone shall be treated in situ or removed and be placed in containers. ○ Appropriately contain any generator diesel storage tanks, machinery spills (e.g., accidental spills of hydrocarbons oils, diesel etc.) in such a way as to prevent them from leaking and entering the environment. ○ Construction activities and vehicles could cause spillages of lubricants, fuels and waste material negatively affecting the functioning of the ecosystem. All vehicles and equipment must be maintained, and all re-fuelling and servicing of equipment is to take place in demarcated areas outside of the PAOI.

4.2 Cumulative Impacts

The quantitative impact of the proposed project in isolation on terrestrial biodiversity is anticipated to be “low” due to the expected adherence to mitigation. The cumulative impact of the proposed project on habitats, plants and animals is anticipated to be “low”. The project area has undergone historic and current disturbance, like the disturbances that the local area has undergone.

After implementation of the mitigation measures as stipulated above the integrity and functionality of the natural habitat is not expected to deteriorate further as a result of the proposed development and no irreplaceable loss of terrestrial biodiversity is anticipated.

Table 4-2 Cumulative Impacts associated with the proposed project

Nature of the Impact	Status	Impact Rating	Can impact be mitigated?	Is the impact acceptable?	Proposed Mitigation Measures
Vegetation clearance as part of the construction phase activities.	Impact in isolation	Negative Low	Yes	Yes	Areas of indigenous vegetation, even secondary communities outside of the direct project footprint, should under no circumstances be fragmented or disturbed further. It is recommended that areas to be developed be specifically

demarcated so that during the construction phase, only the demarcated areas be impacted upon.

An Alien Invasive Plant (AIP) Management Plan must be compiled and implemented. This should regularly be updated to reflect the annual changes in AIP composition.

Cumulative
impact Negative Low

5 Conclusion

The PAOI exists in a modified state, having been subjected to various anthropogenic impacts from development of the area. This habitat is unlikely to recover and will continue to exist in this state without rehabilitation, if not degrade further.

The completion of this terrestrial biodiversity assessment led to a validation of the 'Low' Terrestrial Biodiversity Theme Sensitivity as set out in the National Environmental Screening Tool. This habitat is not a viable ONA or representative of the LC ecosystem.

The findings of both the Animal Species Compliance Statement and the Plant Species Compliance Statement unequivocally support the conclusion that the proposed development area is of Low Terrestrial Biodiversity Theme Sensitivity.

5.1 Impact Statement

The location, state and size of the ecosystem suggests that it is unlikely that any functional habitat will be lost because of the impacts arising from the proposed activities.

5.2 Specialist Opinion

It is the opinion of the specialist that the proposed development is favourable for authorisation by the Competent Authority.

6 References

Bates, M.F., Branch, W.R., Bauer, A.M., Burger, M., Marais, J., Alexander, G.J. & de Villiers, M.S. (eds.). 2014. *Atlas and Red List of Reptiles of South Africa, Lesotho and Swaziland*. Suricata 1. South African National Biodiversity Institute, Pretoria.

Department of Forestry, Fisheries and the Environment (DFFE). 2022. *National Protected Areas Expansion Strategy*. Available at: <http://egis.environment.gov.za>.

Department of Forestry, Fisheries and the Environment (DFFE). 2024. *South African Conservation Areas Database (SACAD) and South African Protected Areas Database (SAPAD)*. Available at: <http://egis.environment.gov.za>.

Du Preez, L.H. & Carruthers, V. 2009. *A Complete Guide to the Frogs of Southern Africa*. Struik Nature, Cape Town.

Fish, L., Mashau, A.C., Moeaha, M.J. & Nembudani, M.T. 2015. *Identification Guide to Southern African Grasses: An Identification Manual with Keys, Descriptions, and Distributions*. South African National Biodiversity Institute, Pretoria.

Hanekom, N.W. 2025. *Animal Species Compliance Statement: Proposed Installation of Additional Fuel Storage Tanks and Associated Infrastructure on Plot 601 (A Part of Plot 553), Olifantsrivier Settlement, Lutzville*. Enviro-EAP (Pty) Ltd. April 2025.

Hanekom, N.W. 2025. *Plant Species Compliance Statement: Proposed Installation of Additional Fuel Storage Tanks and Associated Infrastructure on Plot 601 (A Part of Plot 553), Olifantsrivier Settlement, Lutzville*. Enviro-EAP (Pty) Ltd. April 2025.

Mucina, L. & Rutherford, M.C. (eds.). 2006. *The Vegetation of South Africa, Lesotho and Swaziland*. Strelitzia 19. South African National Biodiversity Institute, Pretoria.

Mucina, L., Rutherford, M.C. & Powrie, L.W. (eds.). 2007. *Vegetation Map of South Africa, Lesotho and Swaziland*. 2nd edition, 1:1 000 000 scale. South African National Biodiversity Institute, Pretoria.

Mucina, L., Scott-Shaw, C.R., Rutherford, M.C., Camp, K.G.T., Matthews, W.S., Powrie, L.W. & Hoare, D.B. 2006. Indian Ocean Coastal Belt. In: Mucina, L. & Rutherford, M.C. (eds.) *The Vegetation of South Africa, Lesotho and Swaziland*. Strelitzia 19. South African National Biodiversity Institute, Pretoria.

National Biodiversity Assessment (NBA) Spatial Data. 2018. South African National Biodiversity Institute. Available at: <http://bgis.sanbi.org>.

Nel, J.L., Murray, K.M., Maherry, A.M., Petersen, C.P., Roux, D.J., Driver, A., Hill, L. et al. 2011. *Technical Report for the National Freshwater Ecosystem Priority Areas Project*. WRC Report No. K5/1801.

NEMBA. 2014. National Environmental Management: Biodiversity Act. Government Gazette No. 37320. Government Printer, Pretoria. www.gpwonline.co.za.

Raimondo, D., von Staden, L., Foden, W., Victor, J.E., Helme, N.A., Turner, R.C., Kamundi, D.A. & Manyama, P.A. (eds.). 2009. *Red List of South African Plants*. Strelitzia 25. South African National Biodiversity Institute, Pretoria.

SANBI. 2022. *Red List of South African Plants (Version 2020)*. Available at: <https://redlist.sanbi.org>.

SANBI–BGIS. 2017. *Technical Guidelines for CBA Maps: Guidelines for Developing a Map of Critical Biodiversity Areas & Ecological Support Areas Using Systematic Biodiversity Planning*. South African National Biodiversity Institute.

Skowno, A.L., Raimondo, D.C., Poole, C.J., Fizzotti, B. & Slingsby, J.A. (eds.). 2019. *South African National Biodiversity Assessment 2018: Technical Report, Volume 1 – Terrestrial Realm*. South African National Biodiversity Institute, Pretoria.

Skowno, A.L. & Monyeki, M.S. 2021. South Africa's Red List of Terrestrial Ecosystems (RLEs). *Land*, 10:1048.

Van Deventer, H., Smith-Adao, L., Collins, N.B., Grenfell, M., Grundling, A. et al. 2019. *National Biodiversity Assessment 2018: Technical Report, Volume 2b – Inland Aquatic (Freshwater) Realm*. CSIR/SANBI. <http://hdl.handle.net/20.500.12143/6230>.

Skinner, J.D. & Chimimba, C.T. 2005. *The Mammals of the Southern African Subregion*. Cambridge University Press, Cape Town.

7 Appendix Items

7.1 Appendix A – Methods

7.1.1 Desktop Dataset Assessment

7.1.1.1 Ecologically Important Landscape Features

Existing ecologically relevant data layers were incorporated into a GIS to establish how the proposed development might interact with any ecologically important entities. Emphasis was placed around the following spatial datasets:

- National Biodiversity Assessment 2018 (Skowno et al, 2019) - The purpose of the National Biodiversity Assessment (NBA) is to assess the state of South Africa’s biodiversity based on best available science, with a view to understanding trends over time and informing policy and decision-making across a range of sectors. The NBA deals with all three components of biodiversity: genes, species and ecosystems; and assesses biodiversity and ecosystems across terrestrial, freshwater, estuarine and marine environments. The two headline indicators assessed in the NBA are:
 - Ecosystem Threat Status – indicator of an ecosystem’s wellbeing, based on the level of change in structure, function or composition. Ecosystem types are categorised as Critically Endangered (CR), Endangered (EN), Vulnerable (VU), Near Threatened (NT) or Least Concern (LC), based on the proportion of the original extent of each ecosystem type that remains in good ecological condition. Red List of Ecosystems (RLE) 2021 – The list was first published in 2011 and has since been substantially revised by authors Dr Andrew Skowno and Mrs Maphale Monyeki (SANBI, 2022). This list is based on assessments that followed the International Union for Conservation of Nature (IUCN) Red List of Ecosystems Framework (version 1.1) and covers all 456 terrestrial ecosystem types described in South Africa by Mucina and Rutherford (2006). A total of 120 of the 456 terrestrial ecosystem types assessed are categorised as threatened and together make up approximately 10% of the remaining natural habitat in the country. Of these 120 ecosystem types, 55 are Critically Endangered (CR), 51 Endangered (EN) and 14 are Vulnerable (VU). The remainder are categorised as Least Concern (LC) (SANBI, 2022; Skowno & Monyeki, 2021).
 - Ecosystem Protection Level – indicator of the extent to which ecosystems are adequately protected or under-protected. Ecosystem types are categorised as Well Protected (WP), Moderately Protected (MP), Poorly Protected (PP), or Not Protected (NP), based on the proportion of the biodiversity target for each ecosystem type that is included within one or more protected areas. Not Protected, Poorly Protected or Moderately Protected ecosystem types are collectively referred to as under-protected ecosystems.
- Protected areas:
 - South Africa Protected Areas Database (SAPAD) and South Africa Conservation Areas Database (SACAD) (DFFE, 2024a) – The South African Protected Areas Database (SAPAD) and South Africa Conservation Areas Database (SACAD) contains spatial data for the conservation of South Africa. It includes spatial and attribute information for both formally protected areas and areas that have less formal protection. The database is updated on a continuous basis and forms the basis for the Register of Protected Areas which is a legislative requirement under the National Environmental Management: Protected Areas Act, Act 57 of 2003.

- National Protected Areas Expansion Strategy (NPAES) (DFFE, 2022b) – The National Protected Area Expansion Strategy (NPAES) provides spatial information on areas that are suitable for terrestrial ecosystem protection. These focus areas are large, intact and unfragmented and are therefore, of high importance for biodiversity, climate resilience and freshwater protection.
- The Western Cape CBA classified areas within the province on the basis of its contribution to reach the conservation targets within the province. The C-Plan uses the following terms to categorise the various land used types according to their biodiversity and environmental importance:
 - Critical Biodiversity Area (CBA);
 - Ecological Support Area (ESA);
 - Other Natural Area (ONA); and
 - Protected Area (PA).

Critical Biodiversity Areas (CBAs) are terrestrial and aquatic areas of the landscape that need to be maintained in a natural or near-natural state to ensure the continued existence and functioning of species and ecosystems and the delivery of ecosystem services. CBAs are areas of high biodiversity value and need to be kept in a natural state, with no further loss of habitat or species. Thus, if these areas are not maintained in a natural or near natural state then biodiversity targets cannot be met. Maintaining an area in a natural state can include a variety of biodiversity compatible land uses and resource uses (SANBI-BGIS, 2017).

Ecological Support Areas (ESAs) are not essential for meeting biodiversity targets but play an important role in supporting the ecological functioning of Critical Biodiversity Areas and/or in delivering ecosystem services. Critical Biodiversity Areas and Ecological Support Areas may be terrestrial or aquatic (SANBI-BGIS, 2017).

Other Natural Areas (ONAs) consist of all those areas in good or fair ecological condition that fall outside the protected area network and have not been identified as CBAs or ESAs. A biodiversity sector plan or bioregional plan must not specify the desired state/management objectives for ONAs or provide land-use guidelines for ONAs (SANBI-BGIS, 2017).

- Key Biodiversity Areas (KBAs) (SANBI, 2024) – KBAs are identified using the Global Standard for the Identification of KBAs, developed by the International Union for the Conservation of Nature (IUCN). The standard involves applying five criteria to gauge an area's importance for biodiversity. These criteria consider the presence of threatened species or ecosystems, species with limited global distributions, pristine wilderness, significant biological processes, or irreplaceable biodiversity. Each criterion has specific quantitative thresholds to determine if they are met. As of 2023, over 16,000 KBAs have been identified globally, covering more than 20 million square kilometres. South Africa completed its first comprehensive national assessment in 2023, evaluating over 9,900 species or ecosystem types and identifying 260+ individual KBAs; and
- Freshwater Ecology:
 - Strategic Water Source Areas (SWSAs) (Le Maitre et al, 2018) – SWSAs are defined as areas of land that supply a quantity of mean annual surface water runoff in relation to their size and therefore, contribute considerably to the overall water supply of the country. These are key ecological infrastructure assets and the effective protection of

surface water SWSAs areas is vital for national security because a lack of water security will compromise national security and human wellbeing.

- South African Inventory of Inland Aquatic Ecosystems (SAIIAE) (Van Deventer et al, 2018) – A South African Inventory of Inland Aquatic Ecosystems (SAIIAE) was established during the National Biodiversity Assessment of 2018. It is a collection of data layers that represent the extent of river and inland wetland ecosystem types as well as pressures on these systems.
- National Freshwater Ecosystem Priority Area (NFEPA) (Nel et al., 2011) – The NFEPA database provides strategic spatial priorities for conserving the country’s freshwater ecosystems and associated biodiversity as well as supporting sustainable use of water resources.

7.2 Appendix C – Specialist Declaration of Independence

I, Andrew Husted, declare that:

- I act as the independent specialist in this application;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing any decision to be taken with respect to the application by the competent authority; and the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- All the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of Regulation 71 and is punishable in terms of Section 24F of the Act.



Andrew Husted

Ecologist

The Biodiversity Company

November 2025

I, Martinus Erasmus, declare that:

- I act as the independent specialist in this application;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing any decision to be taken with respect to the application by the competent authority; and the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- All the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of Regulation 71 and is punishable in terms of Section 24F of the Act.



Martinus Erasmus

Terrestrial Ecologist

The Biodiversity Company

November 2025

7.3 Appendix D – Specialist CVs

Andrew Husted

M.Sc Aquatic Health (*Pr Sci Nat*)

Cell: +27 81 319 1225

Email: andrew@thebiodiversitycompany.com

Identity Number: 7904195054081

Date of birth: 19 April 1979



Profile Summary

Working experience throughout South Africa, West and Central Africa and also Armenia & Serbia.

Specialist experience in exploration, mining, engineering, hydropower, private sector and renewable energy.

Experience with project management for national and international multi-disciplinary projects.

Specialist guidance, support and facilitation for the compliance with legislative processes, for in-country requirements, and international lenders.

Specialist expertise include Instream Flow and Ecological Water Requirements, Freshwater Ecology, Terrestrial Ecology and also Ecosystem Services.

Areas of Interest

Sustainability and Conservation.

Instream Flow and Ecological Water Requirements.

Publication of scientific journals and articles.

Key Experience

- World Bank, Equator Principles and the International Finance Corporation requirements
- Environmental, Social and Health Impact Assessments (ESHIA)
- Environmental Management Programmes (EMP)
- Ecological Water Requirement determination experience
- Wetland delineations and ecological assessments
- Rehabilitation Plans and Monitoring
- Fish population structure assessments
- The use of macroinvertebrates to determine water quality.
- Aquatic Ecological Assessments
- Aquaculture

Country Experience

Angola, Botswana, Cameroon
Democratic Republic of Congo
Ghana, Ivory Coast, Lesotho
Liberia, Mali, Mauritius, Mozambique
Nigeria, Republic of Armenia,
Senegal, Serbia, Sierra Leone, South Africa
Tanzania

Nationality

South African

Languages

English – Proficient

Afrikaans – Conversational

German - Basic

Qualifications

- MSc (University of Johannesburg) – Aquatic Health.
- BSc Honours (Rand Afrikaans University) – Aquatic Health
- BSc Natural Science
- Pr Sci Nat (400213/11)
- Certificate of Competence: Mondri Wetland Assessments
- Certificate of Competence: Wetland WET-Management
- SASS 5 (Expired) – Department of Water Affairs and Forestry for the River Health Programme
- EcoStatus application for rivers and streams

Martinus Erasmus

B-Tech Nature Conservation (*Pr Sci Nat*)

Cell: +27 82 448 1667

Email: martinus@thebiodiversitycompany.com

Identity Number: 9209035136082

Date of birth: 03 September 1992



Profile Summary

Working experience throughout Southern Africa as well as West Africa.

Specialist experience in exploration, mining, engineering, hydropower, private sector, and renewable energy.

Specialist guidance, support, and facilitation for compliance with legislative processes, in-country requirements, and international lenders.

Specialist expertise includes Botany and Terrestrial Ecology.

Country Experience

Botswana

Eswatini

Guinea

Lesotho

Liberia

Mauritius

Mozambique

Nigeria

South Africa

Zambia

Zimbabwe

Key Experience

- Familiar with World Bank and the International Finance Corporation requirements
- Environmental, Social, and Health Impact Assessments (ESHIA)
- Environmental Management Programmes (EMP)
- Rehabilitation Plans and Monitoring
- Botany, especially in the Limpopo, Mpumalanga, Gauteng, and North-West provinces in South Africa.
- Terrestrial Ecological Assessments
- Veld management and Veld condition

Areas of Interest

Mining, Oil & Gas, Renewable Energy & Bulk Services Infrastructure Development, Sustainability, and Conservation

Nationality

South African

Languages

English – Proficient

Afrikaans – Proficient I

Qualifications

- B-Tech in Nature Conservation, Tshwane University of Technology, Pretoria, South Africa.
- National Diploma in Nature Conservation, Tshwane University of Technology, Pretoria, South Africa.
- Pr Sci Nat (118630)