AQUATIC 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

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Report Name	**AQUATIC 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	Aquatic Biodiversity Theme
Project Reference	Agrimark Lutzville
Report Version	Draft 1 / 17 November 2025
Environmental Assessment Practitioner	sillitò
Report Writer	Andrew Husted (Pr. Sci. Nat. 400213/11) 
Declaration	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.

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1 Introduction

1.1 Background

The Biodiversity Company was appointed to undertake an aquatic 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 specific to the Aquatic Biodiversity Theme was undertaken on 10 April 2025 by Hanekom (2025). The timing of the site visit, late summer to early autumn, is regarded as appropriate for accurately assessing non-perennial systems, as channel form, watercourse indicators, and stormwater flow patterns remain clearly detectable despite seasonal variations.

The survey focused on verifying the presence, condition, and relevance of the non-perennial river located approximately 70 m west of the proposed development. Desktop analysis and field verification were used to identify aquatic biodiversity features, assess the state of the drainage line, and evaluate potential risks associated with the proposed activities. The non-perennial river was confirmed to be in a poor ecological condition, heavily influenced by upstream disturbances, altered runoff patterns, and historical modifications to its upper catchment.

The combined desktop and field assessment verified that the aquatic system on and adjacent to the PAOI exhibits Low Aquatic Biodiversity Theme sensitivity, and that the proposed development, being located outside the watercourse and within a transformed footprint, poses no significant risk to aquatic ecological processes or features.

This assessment was conducted according to the protocol for the specialist assessment and minimum report content requirements for environmental impacts on aquatic biodiversity for activities requiring environmental authorisation. This protocol replaces the requirements of Appendix 6 of the Environmental Impact Assessment Regulations[1]. 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 aquatic biodiversity theme for the area as partially ‘Very High’ 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).

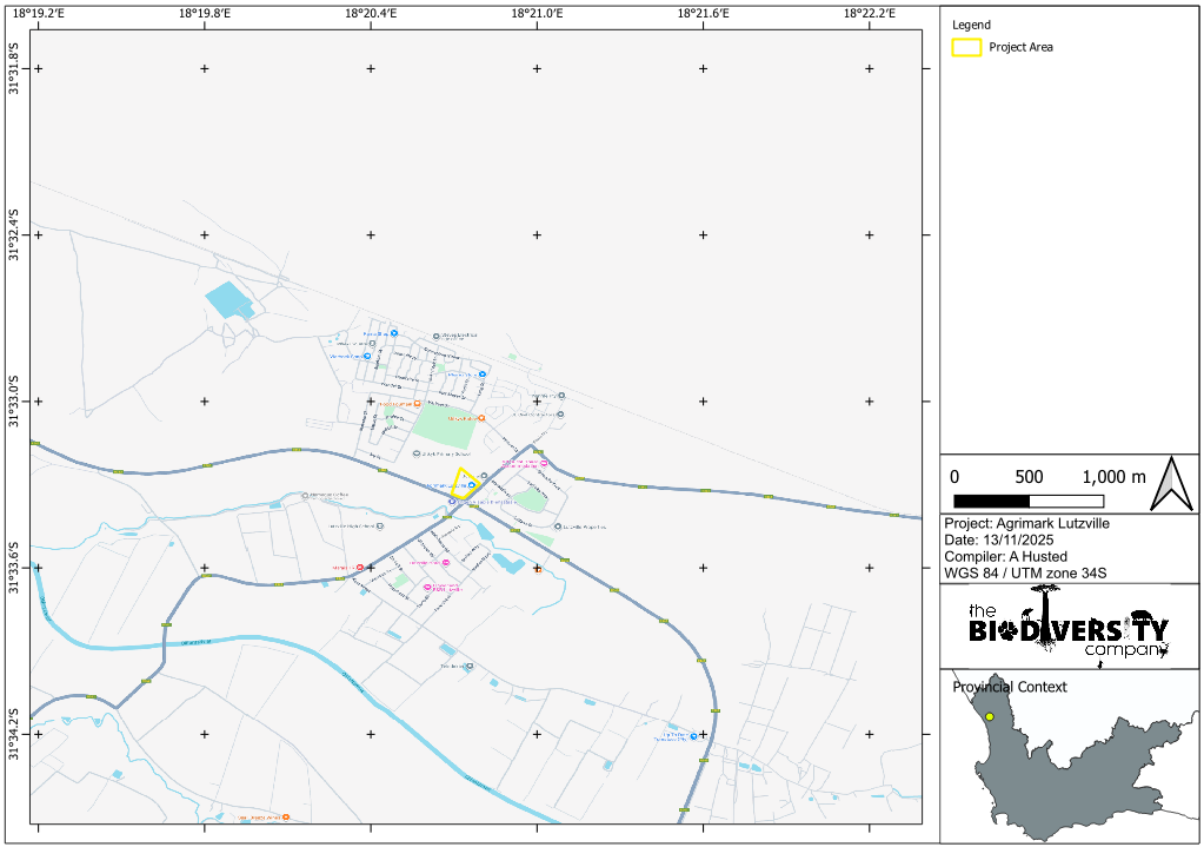


Figure 1-1 Map depicting the regional context of the Project Area of Influence (PAOI)

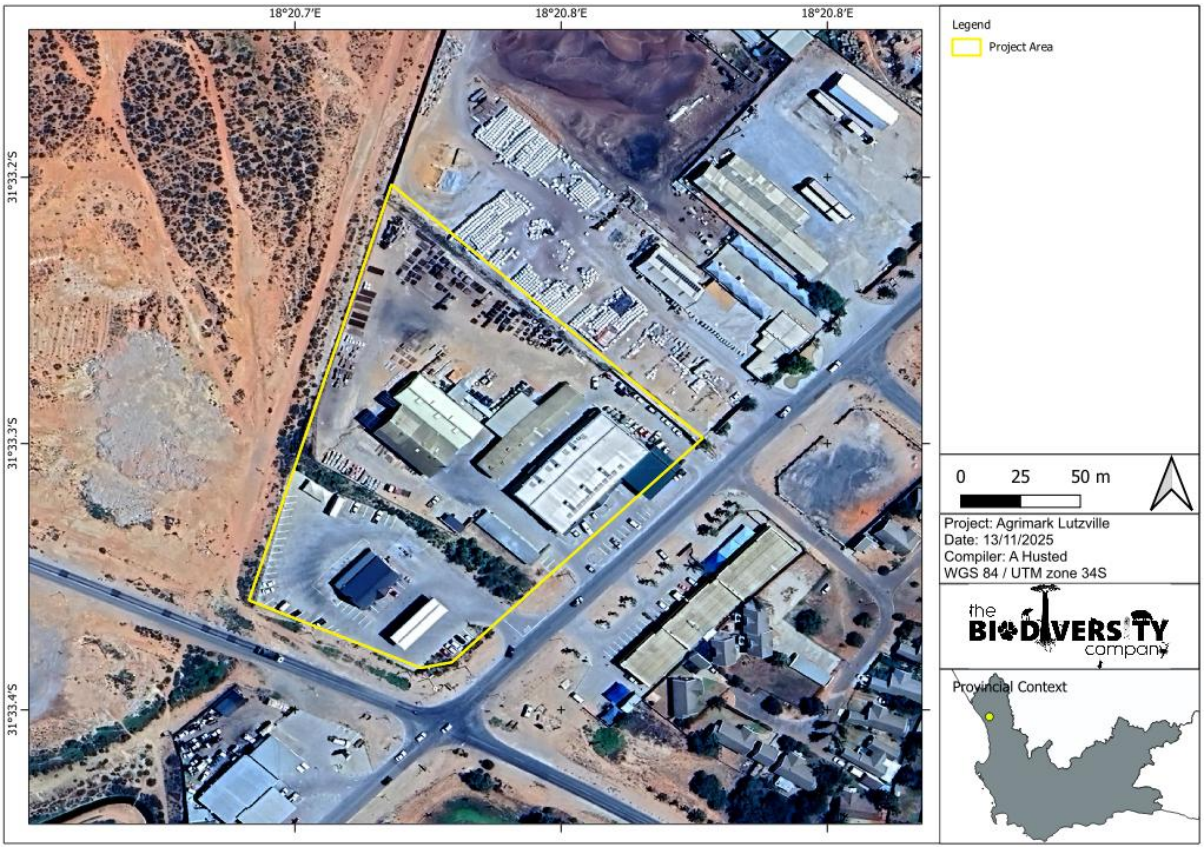


Figure 1-2 Map depicting the local context of the Project Area of Influence (PAOI)

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 aquatic biodiversity features within the PAOI;
- Desktop assessment to identify possible water resources that may occur within the PAOI;
- Determine the Site Ecological Importance (SEI), also commonly referred to as 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 Aquatic Biodiversity Theme Sensitivity rating for the PAOI, 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 Aquatic Biodiversity" published under Government Notice 320 in terms of the National Environmental Management Act (NEMA, 1998) on 20 March 2020 and amended on 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 NEMA"), Section 3 provides the following direction:

- For any activity where the national environmental screening tool identifies a site as being of "Very High" Aquatic Biodiversity Theme sensitivity, an Aquatic Biodiversity Specialist Assessment is required.
- However, where site sensitivity verification demonstrates that the actual on-site sensitivity differs from the screening tool's designation and is confirmed to be of "Low" Aquatic Biodiversity sensitivity, the protocol allows for the submission of an Aquatic Biodiversity Compliance Statement instead of a full specialist assessment.

The site sensitivity verification undertaken for this project confirmed that the PAOI reflects a "Low" Aquatic Biodiversity sensitivity. Consequently, this document fulfils the requirements of an Aquatic Biodiversity Compliance Statement as defined in Sections 2 and 3 of the Protocol. The required minimum content for a Compliance Statement is 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
Contact details of the specialist, SACNASP registration number, field of expertise, and curriculum vitae	Pg 2 / 7.3
Signed statement of independence by the specialist	7.2
Statement on the duration, date, and season of the site inspection, and the relevance of the season to the assessment outcome	2
Baseline profile description of biodiversity and ecosystems of the site	2.1
Methodology used to verify the sensitivities of aquatic biodiversity features on the site, including equipment and modelling used where relevant	7.1
For linear activities: confirmation from the aquatic biodiversity specialist that, with proposed mitigation, the land can be returned to its current state within two years of completing construction	N/A
Proposed impact management outcomes or monitoring requirements for inclusion in the EMPr (where required)	4.4
Description of assumptions, uncertainties, or gaps in knowledge or data	1.4
Any conditions to which the aquatic biodiversity compliance statement is subjected	5.2

2 Fieldwork

2.1 Field Assessment

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

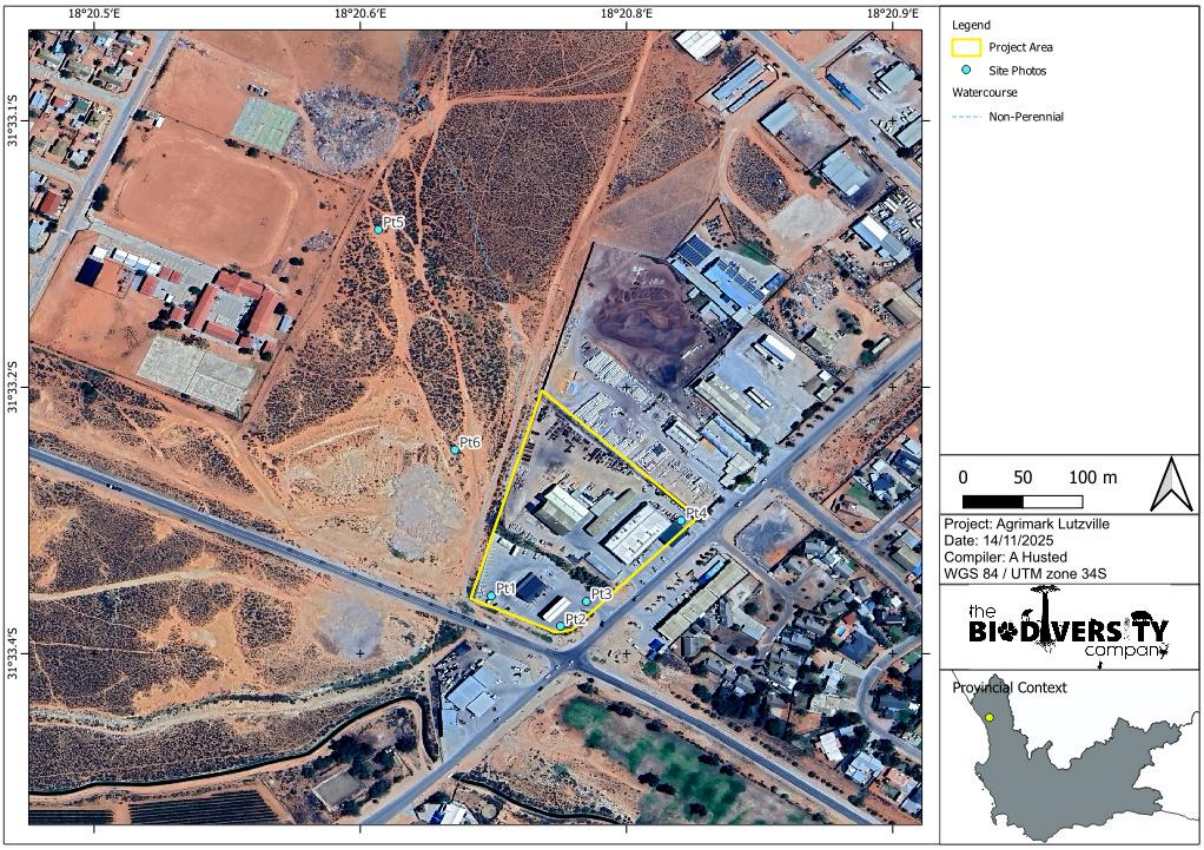


Figure 2-1 Map depicting the photograph points within the PAOI

3 Results & Discussion

3.1 Desktop Baseline

3.1.1 Literature Review

The Aquatic Biodiversity Compliance Statement prepared by Hanekom (2025) confirms that the aquatic features associated with the proposed development are of Low Aquatic Biodiversity Theme sensitivity. A desktop review and field survey were undertaken on 10 April 2025, focusing on the non-perennial river located approximately 70 m west of the development footprint. This seasonal drainage line was found to be in a poor ecological state, largely due to historical land transformation, upstream stormwater alterations, and the infilling of its original upper catchment.

The assessment verified that the watercourse shows limited ecological function, with no indicators of high-value aquatic habitat, natural wetland processes, or intact hydrological connectivity. Flow within the system is episodic and primarily influenced by stormwater routed through culverts and artificial infrastructure. No aquatic biodiversity features of conservation concern were identified, and no sensitive freshwater-dependent species or habitats were recorded or expected.

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	Relevant	Partially overlaps ESA1: Aquatic habitats (Figure 3-1).
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 (NFEPA) (2011)	Irrelevant	The PAOI does not overlap a NFEPA

3.1.3 Ecological Support Area

An Ecological Support Area 1 (ESA 1) is a spatial category identified in the Western Cape Biodiversity Spatial Plan (WCBSP) as an area that is still functional and plays a critical supporting role in maintaining the ecological integrity of nearby Critical Biodiversity Areas (CBAs), wetlands, rivers, and natural ecosystems.

When an ESA 1 is classified as Aquatic, it specifically refers to freshwater-linked ecological support systems, such as river corridors, non-perennial drainage lines, riparian zones, wetlands, or hydrological catchments, that are required to remain functional to sustain aquatic ecosystem processes. The PAOI partially overlaps a designated ESA 1 system (Figure 3-1).

Key significance of an ESA 1 : Aquatic

- Functionally intact: ESA 1 areas are still in a natural, near-natural, or moderately degraded state and maintain important ecological processes.

- Supports aquatic biodiversity: These areas help sustain freshwater habitats and hydrological functioning, even if the site itself may not be a high-value aquatic biodiversity feature.
- Maintains ecosystem services: ESA 1 : Aquatic areas contribute to stormwater attenuation, flow regulation, sediment transport, natural filtration, and water quality maintenance.
- Buffers sensitive areas: They provide protection to rivers, wetlands, estuaries, and associated CBAs by reducing edge effects and preventing further degradation.
- Land-use sensitivity: Development within ESA 1 areas should avoid further disturbance, maintain ecological functioning, and follow strict environmental guidelines to ensure no loss of support to surrounding ecosystems.

In short, an ESA 1: Aquatic is significant because it is a functional freshwater support area that must be safeguarded to maintain broader landscape ecological processes, even if the area itself is not a core biodiversity feature.

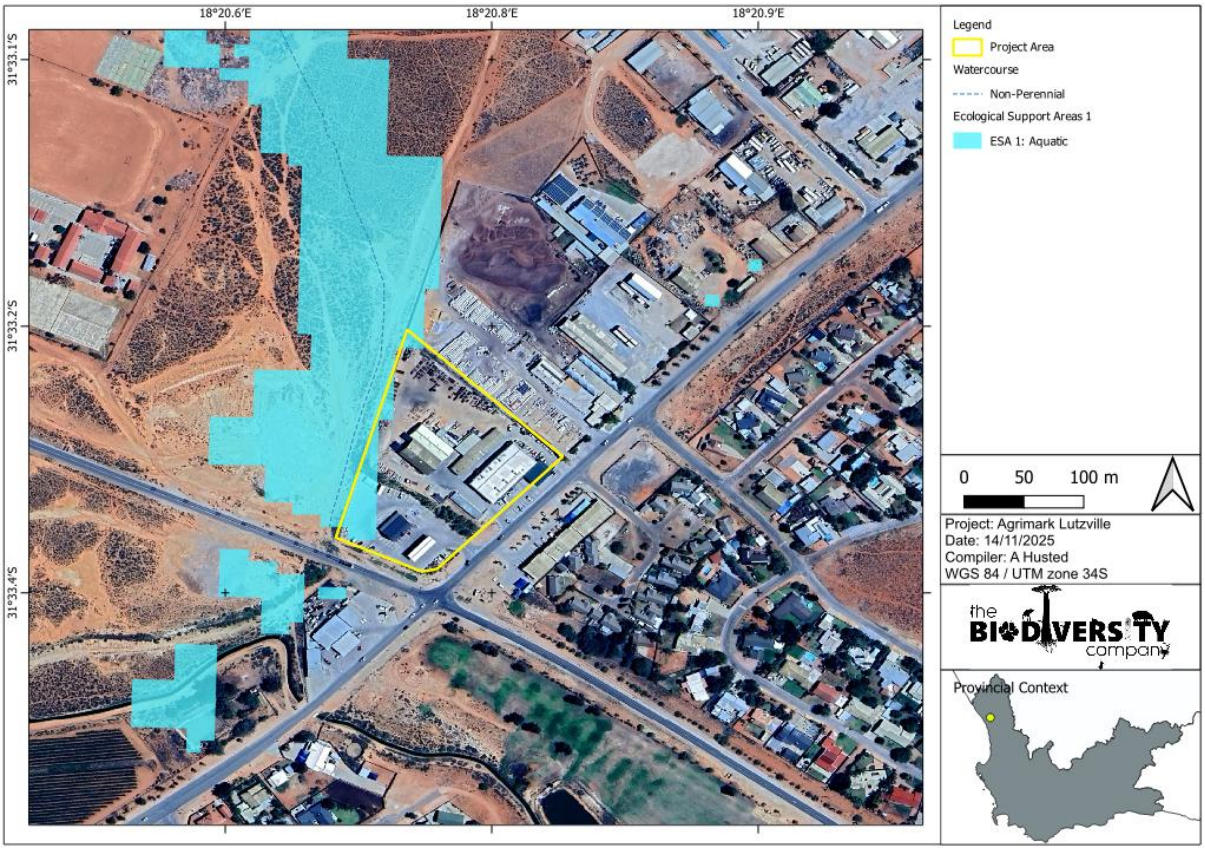


Figure 3-1 The designated ESA 1 area in relation to the PAOI

3.1.4 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):

- Aquatic Biodiversity Theme sensitivity is partially 'Very High' for the PAOI (Figure 3-2), do the presence of an ESA 1 system.

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity
Very High	ESA 1: Aquatic

Figure 3-2 Map depicting the relative aquatic biodiversity theme sensitivity for the PAOI

3.2 Field Survey

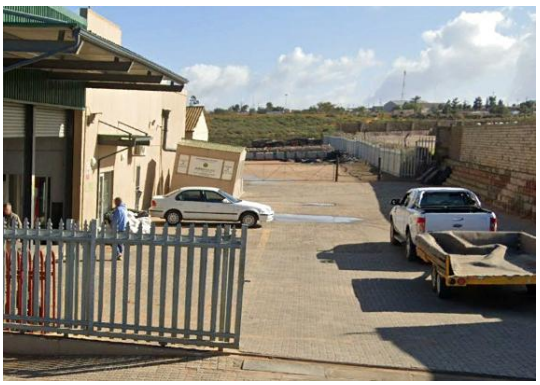
3.2.1 Field points

The following sections discuss the delineated habitat types. Habitats observed at certain site points[2] 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°33'10.16"S 18°20'38.87"E	**Watercourse:** An altered non-perennial drainage line that only flows during rainfall events. The feature is in a poor ecological condition, with disrupted hydrology, an infilled upper catchment, and stormwater-driven flows diverted through culverts. Natural vegetation and channel integrity are largely absent, and the system provides minimal aquatic ecological function.	Low	
Site GPS Reference: Pt5 Date: 13/11/2025 GPS Coordinates: 31°33'20.21"S 18°20'44.50"E	**Modified:** An altered non-perennial drainage line that only flows during rainfall events. The feature is in a poor ecological condition, with disrupted hydrology, an infilled upper catchment, and stormwater-driven flows diverted through culverts. Natural vegetation and channel integrity are largely absent, and the system provides minimal aquatic ecological function.	Low	

[2] Photographs sourced from Google Earth Streetview and Hanekpm (2025)

Site GPS Reference: Pt6 Date: 13/11/2025 GPS Coordinates: 31°33'16.11"S 18°20'40.94"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

The delineated non-perennial watercourse is located approximately 70 m west of the PAOI, as confirmed in the Aquatic Biodiversity Compliance Statement. Because the proposed development footprint falls outside the 32-metre regulated NEMA trigger distance for activities occurring within or near a watercourse, the project does not constitute a listed activity related to watercourse disturbance. No components of the development extend into the riparian zone, channel, or watercourse buffer, and therefore no watercourse-related authorisation is triggered under the Environmental Impact Assessment Regulations.

Two (2) main habitat types were identified across the PAOI and surrounding area, namely:

- Modified; and
- A watercourse

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

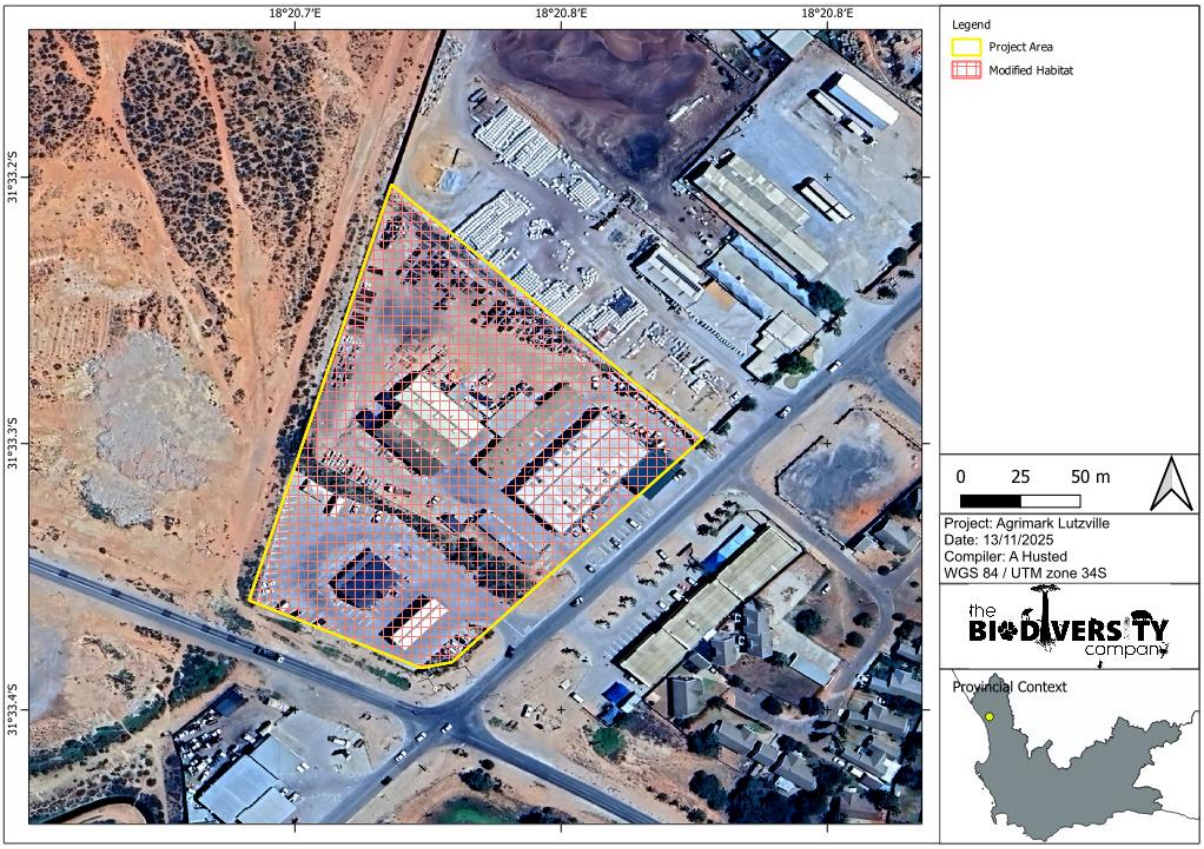


Figure 3-3 Habitat identified within the PAOI

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.
Watercourse	The watercourse exhibits minimal natural structure or functioning due to extensive historical and ongoing disturbance, including the infilling of its upper catchment, diverted stormwater flows, and surrounding urban infrastructure. The channel exists in a persistently degraded state, with limited hydrological integrity and no capacity to recover to a natural condition under current land-use pressures. The ecological services provided by this watercourse are significantly reduced, functioning primarily as a stormwater conveyance feature rather than a natural aquatic system. Natural riparian vegetation is largely absent, habitat complexity is low, and the system offers little to no value for aquatic biodiversity. Due to its degraded condition and altered hydrology, the watercourse does not support freshwater species of conservation concern, and none are expected to occur.

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
Aquatic Biodiversity Theme	Low	Modified	Low	Confirmed – These areas have been modified and have little to no natural vegetation left.
	Very High		Low	Disputed – These areas have been modified and have little to no natural vegetation left.
	Very High	Watercourse	Low	Disputed – Field verification confirms that the mapped feature is a highly degraded ephemeral drainage line with stormwater-driven flows, an infilled upper catchment, and no functional riparian or aquatic habitat. Based on its poor ecological state and limited biodiversity value, the watercourse correctly reflects a Low aquatic sensitivity.

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 water resources within the ecosystem within and around the PAOI; and
- Prevent the direct and indirect loss and disturbance of water resources.

4.1 General mitigation

Table 4-1 General mitigation measures for the project

Mitigation: Action/control
• Confine all development and construction activities strictly within the PAOI to prevent any disturbance or encroachment toward the watercourse. • Maintain the PAOI boundary as a no-go buffer, ensuring no clearing, earthworks, stockpiling, or equipment movement occurs toward the drainage line. • Implement effective on-site stormwater management, ensuring runoff is controlled, contained, and directed away from the watercourse. • Prevent erosion and sediment movement by stabilising exposed surfaces and rehabilitating disturbed areas as soon as practically possible. • Ensure all fuel, generator, and hydrocarbon storage areas are fully bunded and located well within the PAOI to avoid any contamination risk.

- Implement strict spill-prevention protocols, including drip trays under idle machinery, designated refuelling areas, and immediate response to leaks.
- Maintain complete spill kits on-site and ensure personnel are trained to contain and clean spills before they can migrate toward the watercourse.
- Regularly inspect and maintain all equipment and vehicles to prevent oil, diesel, or hydraulic fluid leaks.
- Prohibit any servicing of vehicles or machinery outside designated, contained areas within the PAOI.
- Ensure no stormwater, wastewater, or contaminated runoff from construction activities is allowed to drain toward the watercourse.

4.2 Cumulative Impacts

The quantitative impact of the proposed project in isolation on aquatic biodiversity is anticipated to be "low" due to the expected adherence to mitigation. The cumulative impact of the watercourse > 70 m from the PAOI is anticipated to be "low".

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 aquatic 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
Loss or degradation of watercourse	Impact in isolation	Negative	Low	Yes	Yes	The implementation of mitigation measures ensures that all activities remain contained within the PAOI, preventing any encroachment, stormwater runoff, or pollution reaching the nearby watercourse. By controlling stormwater, managing spills and hydrocarbons, and maintaining strict no-go boundaries, the project effectively avoids all risks to the structure, functioning, and ecological condition of the drainage line.
	Cumulative impact	Negative	Low			

5 Conclusion

The PAOI exists in a modified state, having been subjected to long-term anthropogenic disturbance associated with surrounding development. In its current condition, the habitat is unlikely to recover naturally and will continue to exist in a degraded state without intervention.

The site sensitivity verification undertaken as part of this Aquatic Biodiversity Compliance Statement confirms that the PAOI reflects a 'Low' Aquatic Biodiversity Theme Sensitivity, contrary to the higher sensitivity assigned by the screening tool. The nearby degraded ephemeral watercourse, located approximately 70 m west of the PAOI, is in poor ecological condition and is not directly or indirectly affected by the proposed development.

Given the modified nature of the PAOI and the separation from the watercourse, the proposed development poses no risk to aquatic ecological processes, and the findings of this assessment fully support the classification of the site as Low Aquatic Biodiversity Sensitivity.

5.1 Impact Statement

Given the distance (70 m) between the PAOI and the degraded ephemeral watercourse, as well as the modified and non-functional state of the drainage line, it is unlikely that any functional aquatic habitat will be lost or affected by the proposed activities. The development remains fully contained within a

transformed footprint, ensuring no direct or indirect impacts on the structure, hydrology, or ecological functioning of the watercourse.

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

Hanekom, N.W. 2025. Aquatic Biodiversity 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.

Le Maitre, D.C., O'Farrell, P. & Reyers, B. 2018. Strategic Water Source Areas (SWSAs). National Biodiversity Assessment 2018. South African National Biodiversity Institute.

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 (NFEPA). WRC Report No. K5/1801.

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.

Van Deventer, H., Smith-Adao, L., Collins, N.B., Grenfell, M., Grundling, A. et al. 2018. South African Inventory of Inland Aquatic Ecosystems (SAIIAE). South African National Biodiversity Institute.

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:

- 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).

- 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

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: Mondi 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