

Aquatic Biodiversity Compliance Statement for the proposed Kelvin Power Station Combined Cycle Gas Turbine Power Plant Project

City of Ekurhuleni Metropolitan Municipality, West Rand District Municipality, Gauteng Province, South Africa

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1 Introduction

The Biodiversity Company (TBC) was appointed to undertake an aquatic biodiversity assessment for the proposed Kelvin Power Combined Cycle Gas Turbine (CCGT) Project in Kempton Park, Gauteng Province. The proposed development area will be referred to as the PAOI of Influence (PAOI) for reporting purposes. A map presenting the regional context of the PAOI can be found in Figure 1-1 and a map presenting the PAOI details is illustrated in Figure 1-2.

This assessment was conducted in accordance with the amendments to the Environmental Impact Assessment Regulations. 2014 (GNR 326, 7 April 2017) of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA). The approach has taken cognisance of the recently published Government Notices (GN) 320 (20 March 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" (Reporting Criteria). The National Web based Environmental Screening Tool has characterised the aquatic theme sensitivity of the project area as "Low" sensitivity (Figure 1-3).

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 their impacts associated with the project. This report, after taking into consideration the findings and recommendations provided by the specialist 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.

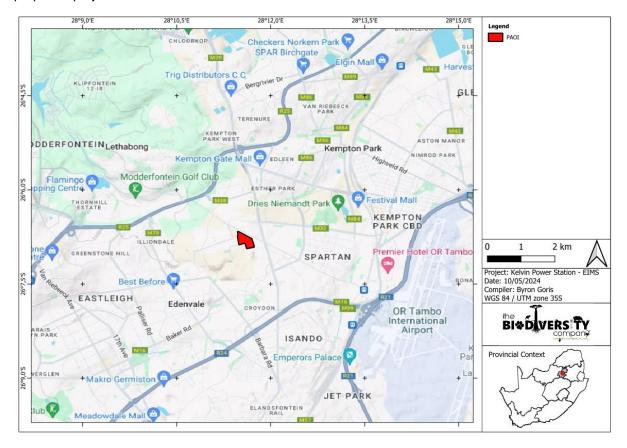


Figure 1-1 Map illustrating the regional context of the PAOI



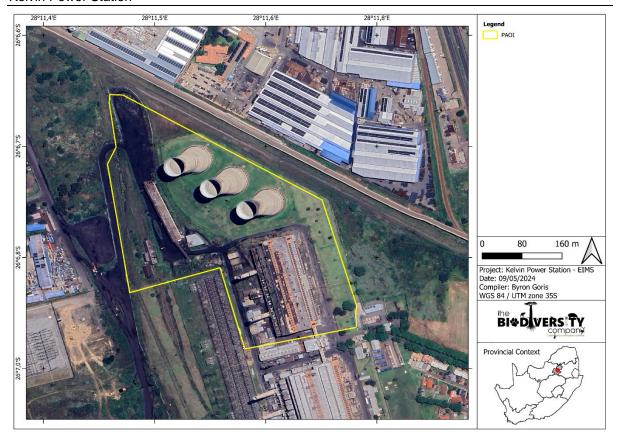


Figure 1-2 Map illustrating the PAOI



MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

	Sensitivity	Feature(s)
ſ	Low	Low sensitivity

Figure 1-3 The aquatic biodiversity theme sensitivity

1.1 Project Description

The following project description is as per information provided by EIMS (2024):

The applicant, Kelvin Power (Pty) Ltd, is proposing the development of a Combined Cycle Gas Turbine (CCGT) Power Plant at the Kelvin Power Station located in Kempton Park, within the City of Ekurhuleni Metropolitan Municipality. Kelvin intends to construct a CCGT with generation capacity of up to 600 MW at the previous Kelvin A-station site area. Kelvin aims to supply the electricity generated to Eskom through a Power Purchase Agreement (PPA).

The CCGT Power Plant will comprise of one gas turbine, a heat recovery boiler, and a steam turbine (with associated High Voltage switchgear and control gear). The gas turbine will receive natural gas from the Sasol gas pipeline network into the gas turbine where the combustion will take place producing mechanical energy that is converted by the generator to electric power and a hot exhaust gas. The hot exhaust gas will be captured by the heat recovery boiler where treated water will be heated producing high pressure steam with high potential energy. The steam will be moved to the steam turbine where



the potential energy contained in the steam will be converted to mechanical energy powering a generator thar will produce electricity. The steam is them discharged into condenser where it is then collected and retuned to the boiler to produce more steam (recycling).

The proposed CCGT Power Plant will comprise of one gas turbine, heat recovery boiler and steam turbine. The main structures comprising the plant include a control room, gas turbine unit, mechanical drift cooling tower, steam turbine building, heat recovery steam generator (HRSG) and HRSG stack, water treatment plant for the cooling tower water, raw water and demineralised water tanks, fuel gas, compressor building, a High Voltage switchyard, auxiliary buildings, and administration buildings. Other infrastructure includes additional water and treatment sewage water reticulation pipelines, as well as electricity transmission lines to the City Power Sebenza substation adjacent to the power station.

Kelvin plans to receive Natural Gas to the CCGT plant via Sasol's gas pipeline network. A short pipeline will be required to connect to the existing gas pipeline network. It is noteworthy that various gas suppliers are currently being engaged to the supply of gas to the CCGT plant via the existing Sasol gas pipeline.

The proposed CCGT is proposed to consist of MW to EHV step-up transformers to tie the generators to the grid. Electricity generated as the Power Station will be evacuated from the plant by means of a new 2754 kV lines (or possible cables) with an approximate length of 250 m from the generating plant to the Sebenza 275/88 kV Substation located adjacent to the proposed CCGT plant. Eskom and City Power have shared ownership of the Sebenza Substation and already has space allocated for the integration of Kelvin Power via two 275 kV bays. The Sebenza Substation is connected to the Eskom grid via 275Kv powerlines to Prospect Substation with a transfer capacity of approximately 625MVA each.

1.2 Specialist Details

Report Name	THE FRESHWATER ECOLOGY COMPLIANCE STATEMENT FOR THE PROPOSED KELVIN POWER STATION COMBINED CYCLE GAS TURBINE POWER PLANT PROJECT
Environmental Assessment Practitioner	EIMS ENVIRONMENTAL IMPACT MANAGEMENT SERVICES
Write / Reviewer	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, Amended. 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.

1.3 Legislative Framework

1.3.1 National Water Act (NWA, 1998)

The DWS is the custodian of South Africa's water resources and therefore assumes public trusteeship of water resources, which includes watercourses, surface water, estuaries, or aquifers. The National Water Act (Act No. 36 of 1998) (NWA) allows for the protection of water resources, which includes:



- The maintenance of the quality of the water resource to the extent that the water resources may be used in an ecologically sustainable way;
- The prevention of the degradation of the water resource; and
- The rehabilitation of the water resource.

A watercourse means;

- A river or spring;
- A natural channel in which water flows regularly or intermittently;
- A wetland, lake or dam into which, or from which, water flows; and
- Any collection of water which the Minister may, by notice in the Gazette, declare to be a watercourse, and a reference to a watercourse includes, where relevant, its bed and banks.

The NWA recognises that the entire ecosystem and not just the water itself, and any given water resource constitutes the resource and as such needs to be conserved. No activity may therefore take place within a watercourse unless it is authorised by the DWS. Any area within a wetland or riparian zone is therefore excluded from development unless authorisation is obtained from the DWS in terms of Section 21 (c) and (i).

1.3.2 National Environmental Management Act (NEMA, 1998)

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: "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" – the following has been assumed:

- An applicant intending to undertake an activity identified in the scope of this protocol on a site identified on the screening tool as being of:
 - o "low sensitivity" for aquatic biodiversity, must submit an Aquatic Biodiversity Compliance Statement.
- Where the information gathered from the site sensitivity verification differs from the screening tool designation of "very high" aquatic biodiversity sensitivity, and it is found to be of a "low" sensitivity, an Aquatic Biodiversity Compliance Statement must be submitted.

An Aquatic Biodiversity Compliance Statement must contain the information as presented in Table 1-1 below.

Table 1-1 Aquatic Biodiversity 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, their SACNASP registration number, their field of expertise and a curriculum vitae	1.2
a signed statement of independence by the specialist	Appendix A
a statement on the duration, date and season of the site inspection and the relevance of the season to the outcome of the assessment	2
a baseline profile description of biodiversity and ecosystems of the site	3.2



the methodology used to verify the sensitivities of the aquatic biodiversity features on the site including the equipment and modelling used where relevant;	2
in the case of a linear activity, confirmation from the aquatic biodiversity specialist that, in their opinion, based on the mitigation and remedial measures proposed, the land can be returned to the current state within two years of completion of the construction phase	N/A
where required, proposed impact management outcomes or any monitoring requirements for inclusion in the EMPr	N/A
a description of the assumptions made as well as any uncertainties or gaps in knowledge or data	2.4
any conditions to which this statement is subjected	5.2

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

2 Methodology

A site visit was conducted between the 7th May 2024, this would constitute an early dry season survey. This was deemed sufficient for the proposed development. Effort was made to traverse the PAOI, within the limits of time, access and security. This site visit is considered sufficient for the project (Figure 2-1).

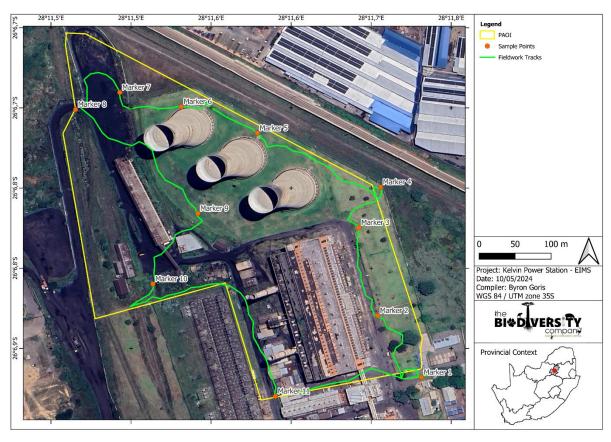


Figure 2-1 Map illustrating the field tracks of the field survey

2.1 Ecological Classification and Description

The National Wetland Classification Systems (NWCS) developed by the South African National Biodiversity Institute (SANBI) will be considered for this study. This system comprises a hierarchical classification process of defining a wetland based on the principles of the hydrogeomorphic (HGM) approach at higher levels, and then also includes structural features at the lower levels of classification (Ollis *et al.*, 2013).



2.2 Wetland Systems

2.2.1 Identification and Mapping

The wetland areas were delineated in accordance with the DWAF (2005) guidelines, a cross section is presented in Figure 2-2. The outer edges of the wetland areas were identified by considering the following four specific indicators:

- The Terrain Unit Indicator helps to identify those parts of the landscape where wetlands are more likely to occur;
- The Soil Form Indicator identifies the soil forms, as defined by the Soil Classification Working Group (1991), which are associated with prolonged and frequent saturation.
 - The soil forms (types of soil) found in the landscape were identified using the South African soil classification system namely; Soil Classification: A Taxonomic System for South Africa (Soil Classification Working Group, 1991);
- The Soil Wetness Indicator identifies the morphological "signatures" developed in the soil profile because of prolonged and frequent saturation; and
- The Vegetation Indicator identifies hydrophilic vegetation associated with frequently saturated soils.

Vegetation is used as the primary wetland indicator. However, in practice the soil wetness indicator tends to be the most important, and the other three indicators are used in a confirmatory role.

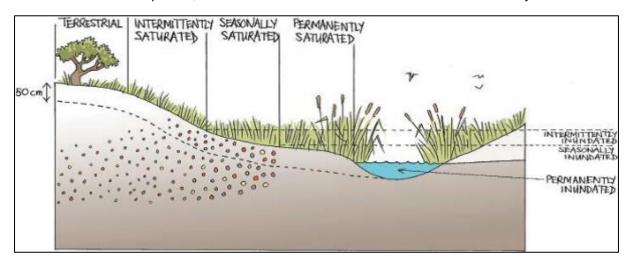


Figure 2-2 Cross section through a wetland, indicating how the soil wetness and vegetation indicators change (Ollis et al. 2013)

2.2.2 Functional Assessment

Wetland Functionality refers to the ability of wetlands to provide healthy conditions for the wide variety of organisms found in wetlands as well as humans. Eco Services serves as the main factor contributing to wetland functionality.

The assessment of the ecosystem services supplied by the identified wetlands was conducted per the guidelines as described in WET-EcoServices (Kotze *et al.* 2008). An assessment was undertaken that examines and rates the following services according to their degree of importance and the degree to which the services are provided (Table 2-1).

Table 2-1 Classes for determining the likely extent to which a benefit is being supplied

Score

Rating of likely extent to which a benefit is being supplied

Kelvin Power Station

< 0.5	Low
0.6 - 1.2	Moderately Low
1.3 - 2.0	Intermediate
2.1 - 3.0	Moderately High
> 3.0	High

2.2.3 Present Ecological Status

The overall approach is to quantify the impacts of human activity or clearly visible impacts on wetland health, and then to convert the impact scores to a Present Ecological Status (PES) score. This takes the form of assessing the spatial extent of impact of individual activities/occurrences and then separately assessing the intensity of impact of each activity in the affected area. The extent and intensity are then combined to determine an overall magnitude of impact. The Present State categories are provided in Table 2-2.

Table 2-2 The Present Ecological Status categories (Macfarlane, et al., 2008)

Impact Category	Description	Impact Score Range	PES
None	Unmodified, natural	0 to 0.9	Α
Small	Largely Natural with few modifications. A slight change in ecosystem processes is discernible and a small loss of natural habitats and biota may have taken place.	1.0 to 1.9	В
Moderate	Moderately Modified. A moderate change in ecosystem processes and loss of natural habitats has taken place, but the natural habitat remains predominantly intact.	2.0 to 3.9	С
Large	Largely Modified. A large change in ecosystem processes and loss of natural habitat and biota has occurred.	4.0 to 5.9	D
Serious	Seriously Modified. The change in ecosystem processes and loss of natural habitat and biota is great, but some remaining natural habitat features are still recognizable.	6.0 to 7.9	Е
Critical	Critical Modification. The modifications have reached a critical level and the ecosystem processes have been modified completely with an almost complete loss of natural habitat and biota.	8.0 to 10	F

2.2.4 Importance and Sensitivity

The importance and sensitivity of water resources is determined to establish resources that provide higher than average ecosystem services, biodiversity support functions or are particularly sensitive to impacts. The mean of the determinants is used to assign the Importance and Sensitivity (IS) category as listed in Table 2-3.

Table 2-3 Description of Importance and Sensitivity categories

IS Category	Range of Mean	Recommended Ecological Management Class
Very High	3.1 to 4.0	Α
High	2.1 to 3.0	В
Moderate	1.1 to 2.0	С
Low Marginal	< 1.0	D

2.3 Buffer Requirements

The "Preliminary Guideline for the Determination of Buffer Zones for Rivers, Wetlands and Estuaries" (Macfarlane *et al.*, 2014) was used to determine the appropriate buffer zone for the proposed activity.

2.4 Assumptions and Limitations

The following limitations should be noted for the assessment:



- The assessment area was based on the spatial file provided by the client and any alterations to the development area may affect the results;
- Effort was made to identify and assess systems within the development area, namely the PAOI delineated for the project; and
- The seasonality of the site survey, namely autumn, is not considered to be a limiting factor for this project.

3 Receiving Environment

3.1 Ecologically Important Landscape Features

Table 3-1 below has been produced as a result of the spatial data collected and analysed as provided by relevant sources. It presents a summative breakdown of the ecological boundaries considered and the associated relevance that each has to the region or PAOI.

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

Desktop Information Considered	Relevance	Reasoning
South African Inventory of Inland Aquatic Ecosystems (SAIIAE)	Irrelevant	The PAOI does not overlap with any wetlands or rivers
National Freshwater Priority Area	Irrelevant	The PAOI does not overlap with any NFEPA wetlands or rivers

3.2 Survey Results

No natural watercourses or wetlands are located within the PAOI. The following sections discuss the results from the field survey that was conducted for the proposed project, which was undertaken on the 7th of May 2024. Each sample point is described in Table 3-2.

Table 3-2 Sensitivity summary of the survey points and habitat types delineated within the PAOI

Survey Point	Description	SEI	Photographs
	Modified		
Sample Point: 1 Date: 07/05/2024 GPS Coordinates: 26° 6'55.30"S 28°11'44.26"E	High levels of anthropogenic disturbance and transformation. Entrance gates, roads, a parking lot, and a Kikuyu (<i>Pennisetum clandestinum</i>)-dominated lawn as well as surrounding infrastructure are present. Very little to no indigenous vegetation remaining. Some mounds of soil from small mammal diggings – likely attributed to common-mole rats (<i>Cryptomys hottentotus</i>).	Low	

No natural freshwater systems were identified.

Modified

Sample
Point: 2
Date:
07/05/2024
GPS
Coordinates:
26° 6'52.53"S
28°11'42.29"E

High levels of anthropogenic disturbance and transformation. Entrance gates, roads, and a Kikuyu (*Pennisetum clandestinum*)-dominated lawn as well as surrounding infrastructure are present. Very little to no indigenous vegetation remaining besides some indigenous tree and grass species. Some mounds of soil from small mammal diggings – likely attributed to common-mole rats (*Cryptomys hottentotus*).





No natural freshwater systems were identified.

Sample
Point: 3
Date:
07/05/2024
GPS
Coordinates:
26° 6'48.58"S
28°11'41.45"E

Modified

High levels of anthropogenic disturbance and transformation. Roads, cooling towers, building material, and a Kikuyu-dominated lawn as well as Low surrounding infrastructure are present. Very little to no indigenous vegetation remaining.

No natural freshwater systems were identified.

Modified

Sample
Point: 4
Date:
07/05/2024
GPS
Coordinates:
26° 6'46.76"S
28°11'42.42"E

High levels of anthropogenic disturbance and transformation. Boundary wall, lamp posts, building material, and a Kikuyu (*Pennisetum clandestinum*)-dominated lawn as well as surrounding infrastructure are present. Very little to no indigenous vegetation remaining besides some grass species.

Low



No natural freshwater systems were identified.

Sample Point: 5 Date: 07/05/2024 GPS Coordinates:

26° 6'44.34"S 28°11'36.88"E

Modified

High levels of anthropogenic disturbance and transformation. Roads, cooling towers, building material, and a Kikuyu (*Pennisetum clandestinum*)-dominated lawn as well as surrounding infrastructure are present. Very little to no indigenous vegetation.

Low



No natural freshwater systems were identified.

Modified

Sample
Point: 6
Date:
07/05/2024
GPS
Coordinates:
26° 6'43.15"S
28°11'33.46"E

High levels of anthropogenic disturbance and transformation. Roads, cooling towers, building material, and a Kikuyu (*Pennisetum clandestinum*)-dominated lawn as well as surrounding infrastructure are present. Very little to no indigenous vegetation remaining.

Low



No natural freshwater systems were identified.

Modified

Sample
Point: 7
Date:
07/05/2024
GPS
Coordinates:
26° 6'42.51"S
28°11'30.70"E

High levels of anthropogenic disturbance and transformation. Roads, coal stockpiles, building material, and AIP-dominated vegetated areas as well as surrounding infrastructure are present. Digging and ground disturbances from construction activities, as well as heavy coal-dust pollution was noted. Very little to no indigenous vegetation.

Lov



No natural freshwater systems were identified.

Kelvin Power Station



Sample Point: 8

Date: 07/05/2024 GPS Coordinates: 26° 6'43.27"S

28°11'28.71"E

Modified

High levels of anthropogenic disturbance and transformation. Roads, coal stockpiles, building material, and AIP-dominated vegetated areas as well as surrounding infrastructure are present. Old trenching and heavy coal-dust pollution was noted. Very little to no indigenous vegetation remaining.

Low



No natural freshwater systems were identified.

Modified

Sample Point: 9 Date: 07/05/2024 GPS Coordinates:

26° 6'47.94"S

28°11'34.21"E

High levels of anthropogenic disturbance and transformation. Roads, cooling towers, old vehicle parking and seemingly unused buildings, together with a Kikuyu (*Pennisetum clandestinum*)-dominated lawn as well as surrounding infrastructure are present. Very little to no indigenous vegetation remaining.

High levels of anthropogenic disturbance and transformation. Old vehicle parking and unused buildings, building material, and AIP-dominated vegetated areas as well as surrounding infrastructure are present. Very little to no indigenous vegetation remaining besides some indigenous trees and grass species.

Low



No natural freshwater systems were identified.

Modified

Sample Point: 10 Date: 07/05/2024 GPS Coordinates: 26° 6'51.11"S 28°11'32.19"E

High levels of anthropogenic disturbance and transformation. Roads, building material, and AIP-dominated vegetated areas as well as surrounding infrastructure are present. Heavy coaldust and general pollution were noted. Very little to no indigenous vegetation remaining.

Low



No natural freshwater systems were identified.

Sample Point: 11 Date: 07/05/2024 GPS Coordinates:

26° 6'56.15"S 28°11'37.70"E

Modified

High levels of anthropogenic disturbance and transformation. Roads, a substation, building material, and surrounding infrastructure are present. Heavy coaldust and general pollution were noted. Very little to no indigenous vegetation remaining.

Low

No natural freshwater systems were identified.

3.3 Aquatic Biodiversity Sensitivity

The National Web based Environmental Screening Tool has characterised the aquatic theme sensitivity of the project area as "Low" sensitivity.

Table 3-3 provides a comparison between the Environmental Screening Tool and the specialist determined Site Ecological Importance (SEI) of the project. The specialist-assigned sensitivity ratings are based largely on the SEI process.

Table 3-3 Summary of the Screening Tool Sensitivity versus the Specialist assigned Site Ecological Importance (SEI) for the Field Survey Area of the Project Area



Screening Tool Theme	Screening Tool	Specialist	Tool Validated or Disputed by Specialist - Reasoning
Aquatic Biodiversity Theme	Low	Low	Confirmed – No natural freshwater systems were identified within the PAOI.

4 Impact Assessment

A formal impact assessment is not required for the compilation of a specialist compliance statement. No natural watercourses or wetlands are located within the PAOI. A cumulative impact assessment has been completed for the proposed project.

The proposed project poses no direct risks to local freshwater systems. An indirect risk would be the discharge of treated effluent water via the existing Kelvin Power Station effluent discharge point into the Modderfontein River channel to the south of the project area. This discharge point is more than 1 km from the PAOI. The current discharge is an authorised water use.

It is recommended that any changes to the current discharge qualities and volumed because of the CCGT plant project must be authorised, and the following applies:

- Qualities must be in line with general wastewater limits set out in the General Authorization regulations; and
- Quantities must be in consideration of the ecological reserve and hydrological regimes.

4.1 Cumulative Impacts

The quantitative impact of the proposed project in isolation on aquatic biodiversity is anticipated to be "Low", due to the absence if systems from the PAOI. The cumulative impact of the proposed project on aquatic biodiversity is anticipated to be "Low" (Table 4-1). No irreplaceable loss of aquatic biodiversity is anticipated for this project.

Table 4-1 Cumulative impacts to aquatic ecosystems associated with the proposed project

Phase	Nature	Extent	Duration		Magnitude	Reversibility	Probability
Impact in isolation	-1		1	1	1	1	1
Cumulative impact	-1		2	2	3	3	1

5 Conclusions

The development area was traversed on foot, with several checks being undertaken to identify any soil wetness indicators, and to determine the local soil forms. No natural watercourses or wetlands are located within the PAOI.

5.1 Aquatic Biodiversity Sensitivity

The National Web based Environmental Screening Tool has characterised the aquatic theme sensitivity of the project area as "Low" sensitivity, as confirmed by this study.

Table 5-1 Summary of the Screening Tool Sensitivity versus the Specialist assigned Site Ecological Importance (SEI) for the Field Survey Area of the Project Area

Screening Tool Theme	Screening Tool	Specialist	Tool Validated or Disputed by Specialist - Reasoning	
Aquatic				
Biodiversity Theme	Low	Low	Confirmed – No natural freshwater systems were identified within the PAOI.	



5.2 Impact Statement

Due to the absence of natural freshwater systems within the PAOI, no impacts are anticipated for this project. The overall cumulative impact for the proposed development is expected to be Low.

It is recommended that any changes to the current discharge qualities and volumed because of the CCGT plant project must be authorised, and the following applies:

- Qualities must be in line with general wastewater limits set out in the General Authorization regulations; and
- Quantities must be in consideration of the ecological reserve and hydrological regimes.

5.3 Specialist Opinion

The conclusion of this assessment on the acceptability of the proposed project and the recommendation for its approval is not subject to any conditions.



6 References

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7 Appendix A Specialist declarations

DECLARATION

- I, Andrew Husted, declare that:
 - I act as the independent specialist in this application;
 - I am aware of the procedures and requirements 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 (NEMA), 1998, as amended, when applying for environmental authorisation which were promulgated in Government Notice No. 320 of 20 March 2020 (i.e. "the Protocols") and in Government Notice No. 1150 of 30 October 2020.
 - 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 and is punishable in terms of the NEMA Act.

Andrew Husted

HAX

Freshwater Ecologist

The Biodiversity Company

September 2024



herewith certifies that Andrew Husted

Registration Number: 400213/11

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)

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

Effective 13 July 2011

Expires 31 March 2025





Chairperson

Lesuns

Chief Executive Officer

