



DRAFT ENVIRONMENTAL IMPACT REPORT & ENVIRONMENTAL MANAGEMENT PLAN

For

OUDRIFT DAM & ASSOCIATED INFRASTRUCTURE

On

**Remainder Portion 3 Farm 143, Remainder
Portion 13 Farm 143 and Remainder 147
BANFF, Mossel Bay Municipal District**

In terms of the

**National Environmental Management Act (Act No.
107 of 1998, as amended) & 2014 Environmental
Impact Regulations**

Prepared for Applicant: Klipheuwel Farm

Date: 19 June 2026

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Report Reference: MOS894/03

Department Reference: 16/3/3/2/D6/25/0000/26

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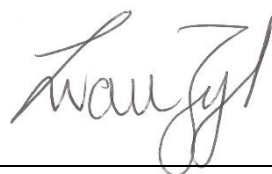


DOCUMENT TRACKING

DOCUMENT HISTORY

REVISION	DATE	AUTHOR
Final Scoping Report	02 July 2024	Renier Kapp (Kappec Environmental)
Draft Environmental Impact Report	19 June 2026	Louise-Mari van Zyl (Cape EAPrac)
Draft Environmental Management Programme	19 June 2026	Louise-Mari van Zyl (Cape EAPrac)
Final Environmental Impact Report	Pending	
Final Environmental Management Programme	Pending	

APPROVAL FOR RELEASE

NAME	TITLE	SIGNATURE
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DISTRIBUTION

DISTRIBUTION LIST
Department of Forestry, Fisheries and the Environment.
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Potential Registered Interested & Affected Parties (re-submission advertising / notifications)

SUBMISSION AND CORRESPONDENCE WITH COMPETENT AUTHORITY

SUBMISSION / CORRESPONDENCE	DATE
Final Scoping Report acknowledged by DEADP	31 July 2024
DEADP informs Applicant that application has lapsed	10 December 2024
Pre-Application meeting held with DEADP	15 April 2025
Notice of Intent & Fee Reference Number submitted	26 November 2026
DEADP responds to Notice of Intent and issue Fee Reference Number	13 June 2026
Application form submitted	13 June 2026
Application form acknowledged	15 June 2026

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PURPOSE OF THIS REPORT:
Stakeholder Review and Comment

APPLICANT:
Klipheuwel Trust

CAPE EAPRAC REFERENCE NO:
MOS894/03

DEPARTMENT REFERENCE:
16/3/3/2/D6/25/0000/26

SUBMISSION DATE:
19 June 2026

DRAFT ENVIRONMENTAL IMPACT REPORT

in terms of the

National Environmental Management Act, 1998 (Act No. 107 of 1998 as amended) &
Environmental Impact Regulations 2014 (as amended)

Oudrift Dam & Associated Infrastructure

Remainder Portion 3 Farm 143, Remainder Portion 13 Farm 143 & Remainder 147 BANFF.

Submitted for:

Stakeholder Review & Comment

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REPORT DETAILS

Title:	Draft Environmental Impact Report – Oudrift Dam & Associated infrastructure
Purpose of this report:	This Draft Environmental Impact Report forms part of a series of reports and information sources that are being provided during the Scoping and Environmental Impact Reporting Process for the proposed Oudrift Dam with associated infrastructure. This report is produced as part of a re-submission application in terms of Regulation 21 of the Environmental Regulations that stipulates ‘...where a scoping report is still valid and the environmental context has not changed, the submission of a scoping report need not be complied with (a) in cases where a scoping report was accepted as part of a previous application and the application lapsed, (b) on condition that Regulation 16 is complied with (submission protocols) and that such application is accompanied by proof that registered I&APs, who participated in the public participation process conducted as part of the previous application, have been notified of the intent to (re)submit the application prior to submission of the application, (c) if the application is submitted by the same applicant for the same development and (d) if an environmental assessment report, which must have been subjected to public participation for a least 30-days and which reflects the incorporated comments received, is submitted within a period of two (2) years from the date of the acceptance of the scoping report. Registered I&APs from the previous application were notified of the intent to resubmit on <u>3 June 2026</u> as is required by Regulation 21. Furthermore, key stakeholders including mandated Authorities will be given an opportunity to comment on the following reports as part of this environmental process: - Draft Environmental Impact Report (inclusive of the adopted Final Scoping Report); - All Specialist Studies, - Technical Dam Design report; and - Draft Environmental Management Programme. In accordance with the regulations, the objectives of an environmental process are to, through a consultative process: • identify the relevant policies and legislation relevant to the activity; • motivate the need and desirability of the proposed activity, including the need and desirability of the activity in the context of the preferred location; • identify and confirm the preferred activity and technology alternative through an impact and risk assessment and ranking process; • identify and confirm the preferred site, through a detailed site selection process, which includes an impact and risk assessment process inclusive of cumulative impacts and a ranking process of all the identified alternatives focusing on the geographical, physical, biological, social, economic, and cultural aspects of the environment; • identify the key issues to be addressed in the assessment phase; • agree on the level of assessment to be undertaken, including the methodology to be applied, the expertise required as well as the extent of further consultation to be undertaken to determine the impacts and risks the activity will impose on the preferred site through the life of the activity, including the nature, significance, consequence, extent, duration and probability of the impacts to inform the location of the development footprint within the preferred site; and • identify suitable measures to avoid, manage or mitigate identified impacts and to determine the extent of the residual risks that need to be managed and monitored. The Draft EIR is available for a period of 30-days extending from 19 June – 20 July 2026. All comments received during this comment period will be incorporated into the Final Environmental Impact Report that will be submitted to the DEADP for consideration and Decision making.
Prepared for:	Klipheuwel Trust

Published by:	Cape Environmental Assessment Practitioners (Pty) Ltd. (Cape EAPrac)
Authors:	Louise-Mari van Zyl (appointed EAP)
Cape EAPrac Ref:	MOS894/03
DFFE Case officer & Ref. No:	Shireen Pullen – 16/3/3/2/D6/25/0001/24
Date:	19 June 2026
To be cited as:	<i>Cape EAPrac</i> , 2026. Draft Environmental Impact Report for Oudrift Dam and associated infrastructure.

CHECKLIST

The following technical checklist is included as a quick reference roadmap for the proposed project.

Project Name		Bethel Solar PV and Associated Infrastructure
Applicant Details	Applicant Name:	Klipheuwel Trust (The Board of Trustees)
	Company Registration Number:	(IT2641/2001)
	BBBEE Status:	NA
	Project Name:	Oudrift Dam and Associated infrastructure.
Site Details		
Size of the properties	Description of the affected properties	RE 3 / 143 = 28ha (hosts a partial dam footprint) RE 13 / 143=21ha (hosts a partial dam footprint, spillway, spillway channel, pumphouse and partial feeder/discharge pipeline infrastructure) RE 147=470ha (hosts the partial feeder/discharge pipeline infrastructure)
Central coordinate	Dam	34°2'56.12"S and 22°8'15.04"E (central)
Size of the study area	Size in ha of initial study area.	+/-9.3ha total disturbance footprint inclusive of the dam, associated infrastructure and work areas (to be rehabilitated post construction)
Development Footprint	Development is deemed to include all transformation areas	+/-9.3ha total disturbance footprint inclusive of the dam footprint at +/- 5.6ha within the 6.96ha structure/infrastructure footprint inclusive of associated infrastructure and work areas (of which +/-2.3ha out of the total 9.3ha is to be rehabilitated post construction)

I. ACTIVITY SUMMARY

The Applicant, **Klipheuwel Trust**, is proposing the construction of an earth storage dam with associated infrastructure, on **Remainder 3 & 13 of Farm 143, as well as Remainder Farm 147**, Mossel Bay Municipal District.

The farm operates as a **dairy/livestock farm** and **surety of (water) supply** is critical to their farming operation. The proposed dam is intended as a long-term, pro-active measure (next 30-years) to address climate change in the dairy/farming industry that relies heavily on drinking water for livestock and irrigation of fields/crops for livestock feeding.

The grazing fields (mostly for dairy cows) are irrigated and during periods of drought or low rainfall, when water supply is low, the Applicant must introduce feeding schemes to supplement the grazing capacity at additional cost. The cost of feed is substantial and considering that a drought can last for extended periods of time (most likely increasing based on climate change predictions), the Applicant wishes to store water in the proposed dam that can be used during periods of drought and low rainfall, which reduces the additional operational cost of supplementing grazing with feed.

Importantly water stored in the proposed dam may only be abstracted during periods of high flow volumes so as not to affect flow levels in the Moordkuil River that ultimately feeds into the Klein Brak River Estuary because further reducing baseflow and flow levels to the Estuary may impact negatively on the river/estuarine system.

The following key aspects are noted:

- The proposed 300 000m³ Oudrift dam site is located +/-520 m from the northern shore of the existing Klipheuwel Dam that supplies (some) water to the Mossel Bay Municipality;
- Eskom servitude with overhead powerlines run directly along the northern full supply level of the proposed dam;
- The location of the proposed Oudrift Dam is at 34°2'56.12"S and 22°8'15.04"E (central for dam) located approximately 4km North of Kleinbrak River township in the Mossel Bay Municipal district;
- The dam will be filled via a new 250mmØ feeder pipeline to be installed over a distance of approximately 600m over transformed farm land – this same line will be used as a discharge line when stored water from the dam is inserted back into the existing farm irrigation network;
- The dam design includes a spillway, spillway channel, pump station and separate outlet pipe to allow reserve flow from the dam's catchment area to pass through the dam at all times;
- To ensure that any overflow from the neighbouring Klipheuwel Dam is not (also) stored in the Oudrift Dam, a new V-notch measuring system will be installed in the overflow of the Klipheuwel Dam before entering the Oudrift Dam to ensure an equivalent release of any such water volumes;
- In addition to the topographical site location selected for the proposed dam (low lying area with narrow valley line for construction of dam wall), the engineers confirm that proposed site is geologically suited to an earth fill embankment dam with a central clay core. Based on geotechnical test pit analysis they conclude that rock permeabilities in the dam basin are generally very low, and the majority of the rock mass can be considered to be nearly impervious.

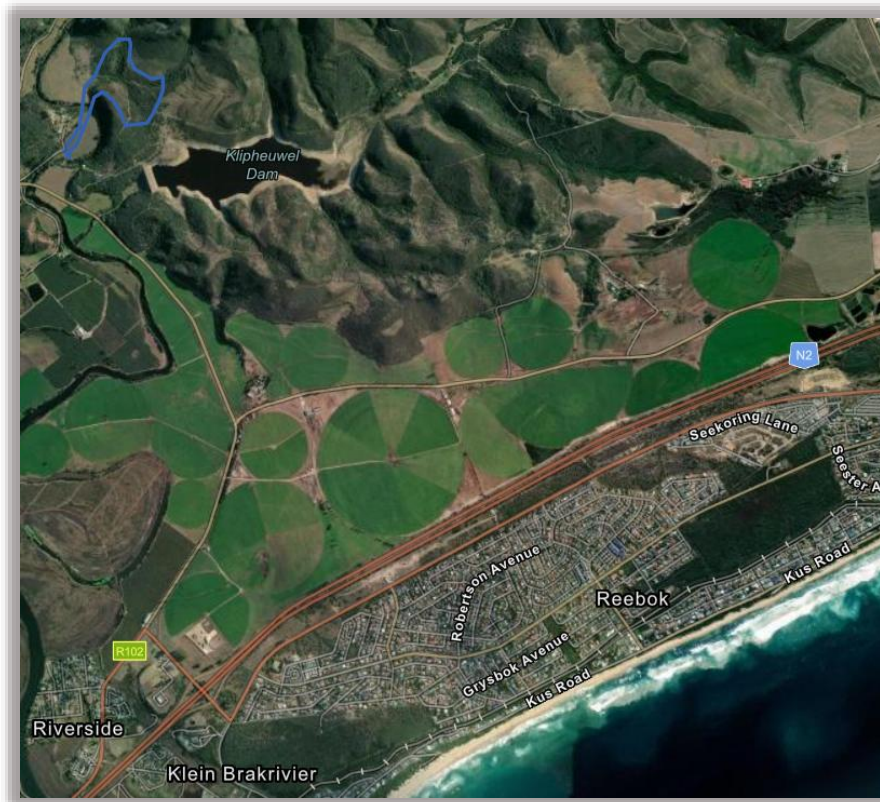


Figure 1: Blue polygon is indicative of the dam's location in proximity to the Klipheuwel Dam, Klein Brak River and Rheebok coastal towns.



Figure 2: Typical example of an earth fill embankment irrigation dam similar to the proposed dam for Oudrift Dam (Source: Hagenbrink Consulting Engineers).

CONTENTS OF AN ENVIRONMENTAL IMPACT REPORT

Appendix 3 of Regulation 982 of the 2014 EIA Regulations contains the required contents of an Environmental Impact Report. The checklist below serves as a summary of how these requirements were incorporated into this Impact Report.

Requirement	Details
(1) An environmental impact assessment report must contain the information that is necessary for the competent authority to consider and come to a decision on the application, and must include –	
(a) details of - The EAP who prepared the report; and The expertise of the EAP, including, a curriculum vitae.	This Draft Environmental Impact Report was compiled by Louise-Mari van Zyl of Cape Environmental Assessment Practitioners (Pty) Ltd (Cape EAPrac). Details of the EAP are included at the beginning of this report. A CV of the author as well as a company profile of the EAP company, Cape EAPrac, is attached in Appendix G3.
(b) the location of the activity, including – The 21 digit Surveyor General code of each cadastral land parcel; Where available, the physical address and farm name; Where the required information in items (i) and (ii) is not available, the coordinates of the boundary of the property or properties.	The study site is located approximately 4km North of Klein Brak River in the Garden Route, Mossel Bay Municipal District on Rooiheuwel Farm. RE/147 C05100000000014700000 RE Prt 13/143 C05100000000014300013 RE Prt 3/143 C05100000000014300003
(c) a plan which locates the proposed activity or activities applied for as well as the associated structures and infrastructure at an appropriate scale.	Refer to site location plans and engineering design plans.
(d) a description of the scope of the proposed activity, including - All listed and specified activities triggered and being applied for; and A description of the associated structures and infrastructure related to the development.	Sections 2 and 3.2 EIR.
(e) A description of the policy and legislative context within which the development is located and an explanation of how the proposed development complies with and responds to the legislation and policy content.	Section 3 of this EIR.
(f) A motivation for the need and desirability for the proposed development, including the need and desirability of the activity in the context of the preferred location.	Section 2.3 of this EIR.
(g) A motivation for the preferred development footprint within the approved site.	Section 2.4 and 2.5 of this EIR.
(h) A full description of the process followed to reach the proposed development footprint within the approved site, including - - Details of the development footprint alternatives considered; - Details of the public participation process undertaken in terms of regulation 41 of the Regulations, including copies of the supporting documents and inputs;	Sections 2.4, 2.5, and sections 9 of this EIR.

Requirement	Details
• A summary of the issues raised by interested and affected parties, and an indication of the manner in which the issues were incorporated, or the reasons for not including them; • The environmental attributes associated with the development footprint alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects; • The impacts and risks identified, including the nature, significance, consequence, extent, duration and probability of the impacts, including the degree to which these impacts - can be reversed; may cause irreplaceable loss of resources; (and can be avoided, managed or mitigated. • The methodology used in determining and ranking the nature, significance, consequences, extent, duration and probability of potential environmental impacts and risks; • Positive and negative impacts that the proposed activity and alternatives will have on the environment and on the community that may be affected focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects; • The possible mitigation measures that could be applied and level of residual risk; • If no alternative development locations for the activity were investigated, the motivation for not considering such: and • A concluding statement indicating the preferred alternative development location within the approved site.	
(i) A full description of the process undertaken to identify, assess and rank the impacts the activity and associated structures and infrastructure will impose on the preferred location through the life of the activity, including - A description of all environmental issues and risks that were identified during the environmental impact assessment process; and An assessment of the significance of each issue and risk and an indication of the extent to which the issue and risk could be avoided or addressed by the adoption of mitigation measures.	Please refer to the Plan of Study For EIA that Formed part of the approved Final Scoping Report. Also refer to section 7 of this EIR.
(j) An assessment of each identified potentially significant impact and risk, including - • Cumulative impacts; • The nature, significance and consequences of the impact and risk; • The extent and duration of the impact and risk; • The probability of the impact and risk occurring; • The degree to which the impact and risk can be reversed; • The degree to which the impact and risk may cause irreplaceable loss of resources; and • The degree to which the impact and risk can be mitigated.	Section 7 of this EIR

Requirement	Details
(k) Where applicable, a summary of the findings and recommendations of any specialist report complying with Appendix 6 to these Regulations and an indication as to how these findings and recommendations have been included in the final assessment report.	Section 8 of the EIR
(l) An environmental impact statement which contains – • A summary of the key findings of the environmental impact assessment; • A map at an appropriate scale which superimposes the proposed activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers; and • A summary of the positive and negative impacts and risks of the proposed activity and identified alternatives.	Sections 7.10 and 7.11 of this EIR. The Site Layout Plan attached in appendix D, includes the high sensitivity features identified by the participating specialists.
(m) Based on the assessment, and where applicable, recommendations from specialist reports, the recording of proposed impact management objectives, and the impact management outcomes for the development for inclusion in the EMPr as well as for inclusion as conditions of authorisation.	Appendix H and section 8 of this EIR.
(n) The final proposed alternatives which respond to the impact management measures, avoidance and mitigation measures identified through the assessment.	Section 8 of the EIR read in conjunction with sections 2.4 and 2.5.
(o) Any aspects which were conditional to the findings of the assessment either by the EAP or specialist which are to be included as conditions of authorisation.	Section 8 includes a table of all mitigation measures and identifies which mitigation is included in the EMPr and which should be included as conditions of authorisation.
(p) A description of assumptions, uncertainties and gaps in knowledge which relate to the assessment and mitigation measures proposed.	Section 1.3 of this EIR.
(q) A reasoned opinion as to whether the proposed activity should or should not be authorised, and if the opinion is that it should be authorised, any conditions that should be made in respect of that authorisation.	Section 1.1 and 7.11 of this Final EIR.
(r) Where the proposed activity does not include operational aspects, the period for which the environmental authorisation is required and the date on which the activity will be concluded and the post construction monitoring requirements finalised.	Section 5.
(s) An undertaking under oath or affirmation by the EAP in relation to: • The correctness of the information provided in the reports; • The inclusion of comments and inputs from stakeholders and I&APs; • The inclusion of inputs and recommendations from the specialist reports where relevant; and • Any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected parties.	Annexure G3.
(t) Where applicable, details of any financial provisions for the rehabilitation, closure and ongoing post decommissioning management of negative environmental impacts;	Not applicable.

Requirement	Details
(u) An indication of any deviation from the approved scoping report, including the plan of study, including – Any deviation from the methodology used in determining the significance of potential environmental impacts and risks; and A motivation for the deviation.	No deviation from the plan of study for EIA has occurred although the scoping Preferred Alternative has been mitigated to align with the WULA specifications for a lower storage volume.
(v) Any specific information that may be required by the competent authority.	Refer to table below.
(w) Any other matters required in terms of section 24(4)(a) and (b) of the Act.	None.

ORDER OF REPORT

Report Summary

Draft Environmental Impact Report – Main Report

Appendix A	:	Location, Topographical Plans
Appendix B	:	Environmental Sensitivity Plans
Appendix E	:	Supplementary Reports (Specialist Reports and Technical Reports)
Appendix E1	:	Botanical Impact Assessment
Appendix E2	:	Aquatic & Biodiversity Impact Assessment
Appendix E3	:	Heritage Impact Assessment (archaeology/palaeontology incl)
Appendix E4	:	Agricultural Compliance Statements (Terra Africa, 2025)
Appendix F	:	Public Participation Process
Appendix F1	:	I&AP Register (to be supplied for Final EIR)
Appendix F2	:	Comments and Response Report (to be completed for FEIR)
Appendix F3	:	Draft EIR Notifications (to be included in final EIR)
Appendix G	:	Other Information
Appendix G1	:	Correspondence with Competent Authority
Appendix G2	:	Landowner Consent
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INTRODUCTION

1. PROJECT OVERVIEW

Cape EAPrac has been appointed by Klipheuwel Trust, hereafter referred to as the Applicant, as the independent Environmental Assessment Practitioner (EAP), to facilitate the re-submission of its Environmental Impact Reporting process required in terms of the National Environmental Management Act (NEMA, Act 107 of 1998) for the proposed development of an irrigation storage dam (called Oudrift Dam) with associated infrastructure on Remainder Portion 3/143, Remainder Portion 13/143 and Remainder 147 BANEFF in the Mossel Bay Municipal District.

The dam is proposed as part of the Applicant's long-term (30 year) strategy to improve water surety of supply for existing dairy/livestock farming operations considering expected climate change conditions.

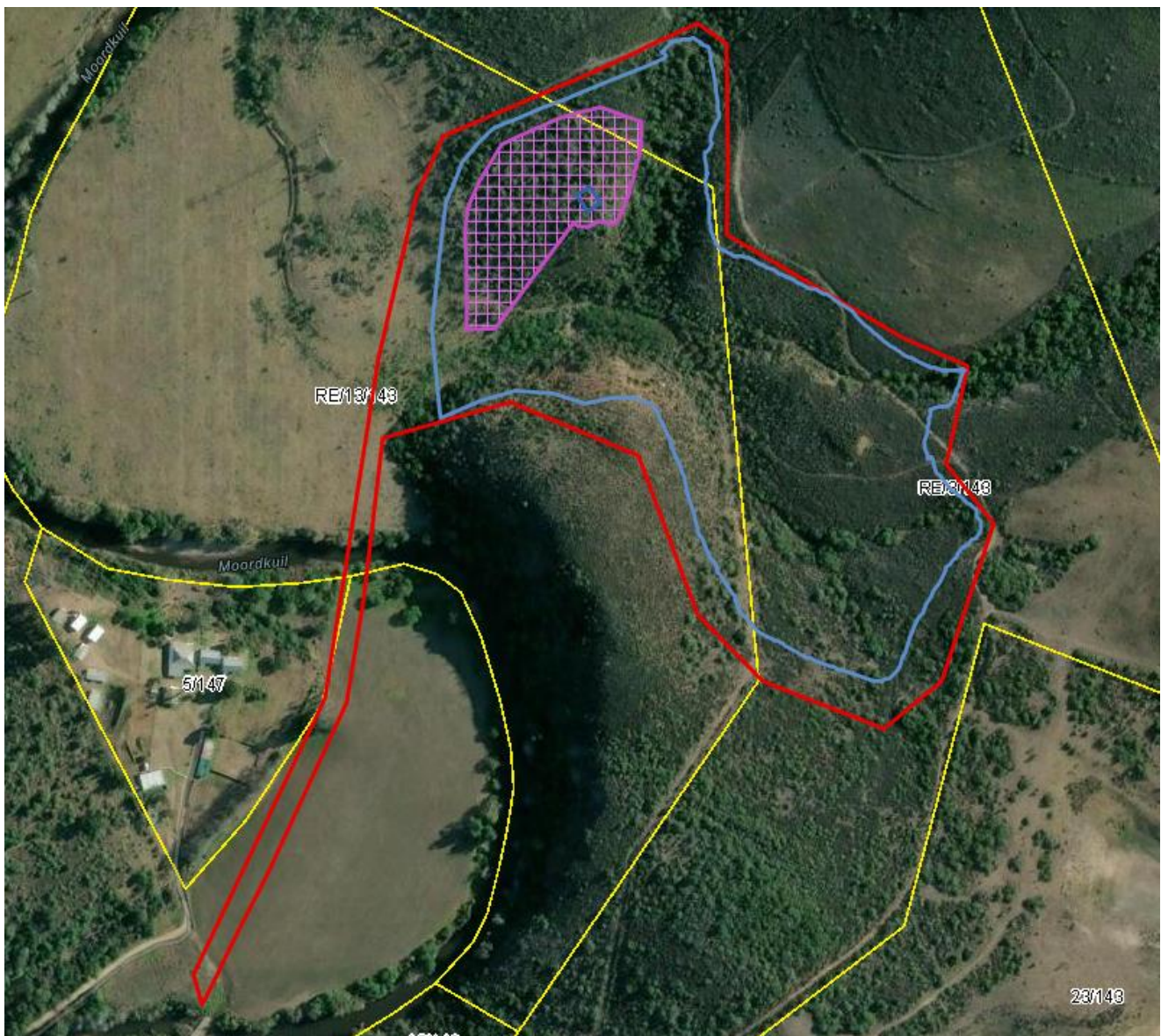


Figure 3: Schematic footprint of the total disturbance area (9.3ha in RED) for the proposed Oudrift Dam and associated infrastructure, with physical dam footprint (GLUE) overlaid onto Google Earth imagery. The hashed purple area is the northern koppie that houses the historical structure/house that will be

retained as natural/protected. The V-notch overflow for Klipheuwel Dam falls just outside the depicted area on this map.

1.1 DESIGN CONSIDERATIONS FOR THE OUDRIFT DAM:

The dam is proposed to have a **300 000 cubic metres storage volume** with the following design specifications as per the HagenBrink Consulting Engineering design (February 2026).

Cross-section details	Value
Crest width	15 m
Non-overspill level	25.5 m.a.s.l.
Crest length	112.2 m
Wall height	19.6 m

Aspect	Levels
Full Supply level (m)	23.0
Non-overspill Crest (m)	25.5

The project includes infrastructure associated with an irrigation storage dam namely:

- Feeder/discharge pipeline that will feed water via the existing irrigation system of the farm, directly to the dam when there is high-flow volumes in the river;
- The same pipeline will discharge stored water from the dam back into the existing irrigation system of the farm during times of drought;
- Pump house;
- Outlet pipe structure;
- Overflow
- Overflow channel

The site location has (amongst others) been informed by the topography with two koppies (north and south of the proposed dam wall) that creates an ideal position in the landscape for an earthfilled dam wall, depression or low lying area for the dam basin and close proximity to the existing farm irrigation abstraction point from the Moordkuil River from where new infrastructure (pipeline) can be installed.

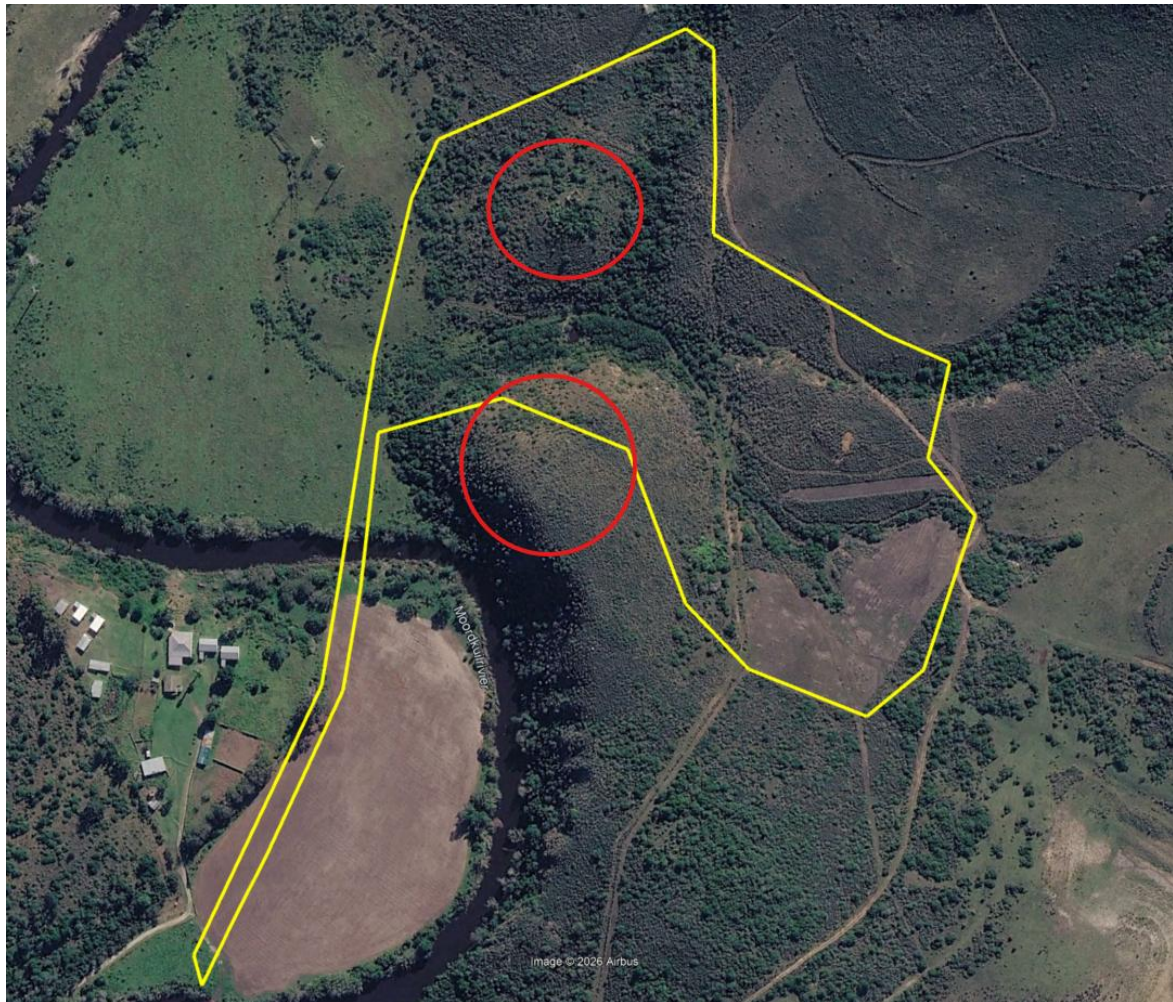


Figure 4: North and South koppies in the landscape (RED circles) creating an ideal feature to position a dam wall with the total dam disturbance footprint indicated in YELLOW.

Based on HagenBrink's design, it is anticipated that the dam will most likely be a so-called 'Medium' dam with significant hazard rating in terms of the Guidelines for Safety in Relation to Floods as assigned by the Department of Water Affairs and Sanitation (DWS) and therefore would be classified as a **Category II dam** to dam safety.

The dam is positioned in a very **small catchment** of approximately **0.54km²**. Because the nearby Klipheuwel Dam (one of several municipal water supply dams) does not have a formal spillway, flood discharge from the Klipheuwel Dam is through a natural saddle upstream of the right flank of the dam. Any flow through this saddle will discharge into the basin of the Oudrift Dam. Therefore, the Oudrift Dam **spillway and freeboard** must (be able to) accommodate (over)flows from Klipheuwel Dam to address dam safety requirements which in turn informed HagenBrink's design.

The spillway must discharge excess inflow to the Oudrift Dam, in a controlled manner without endangering the dam itself, downstream inhabitants or the general public using downstream infrastructure and roads (N2 & R102). Based on design requirements a **conventional open channel spillway with concrete sill** has been selected. The spillway will consist of a 30m long reinforced concrete sill constructed on natural rock. The spillway channel will be 750mm deep and 500mm thick.

Once water from the dam flows over the spillway, it will enter a **trapezoidal spillway channel** which ultimately discharges any overflow down the hill next to the dam wall, into the natural stream downstream of the dam wall.

At the discharge point of the channel, there will be a **stilling basin** with an expected size of 10m x 25m (width x length) that will be constructed with reinforced concrete, with a gabion mattress installed at the downstream end of the stilling basing to prevent scouring and/or unwanted erosion.

The **outlet pipe** for the dam will be a single 250mmØ pipe encased in reinforced concrete. This outlet pipe must be installed underneath the dam wall (embankment) to control flow out of the dam and allow for discharge of water from the catchment/Klipheuwel Dam overflow.

Although there is no record of the neighbouring Klipheuwel Dam overflowing since its construction in 1980, the possibility of such cannot be excluded and therefore a so-called V-notch (gauching station) must be constructed between the two dams to measure any overflow from Klipheuwel Dam so that such a volume of water (overflowing from Klipheuwel Dam) can be released through the Oudrift Dam outlet pipe. It is recommended that the structure be partially constructed with topsoil (instead of concrete only) from the dam basin and vegetated with indigenous vegetation to reduce potential impact associated with this structure.



Figure 5: Consideration has been given by the Engineers for the expected fetch in a north-western wind direction which influences wave height and run-off of waves inside of the dam to help inform dam safety design.

1.2 CONSTRUCTION METHODOLOGY

The material needed to construct the dam wall (embankment) will be sourced from within the dam basin, or from commercial sources i.e. registered quarries. If approved, the Applicant/Contractor will have to provide proof of lawfulness of any commercial suppliers should material from the dam basin be augmented with additional commercially sourced material.

If sourced from the dam basin it will be done within the proposed 'full supply level' (FSL) of the dam to ensure that transformation in the receiving environment does not go beyond what would ultimately be the long-term dam footprint.

Excavation of impervious material for the clay core (of the dam wall), as well as semi-pervious material for the shell material (filling around the dam wall core), will be excavated mechanically and stockpiled within the full-supply level for use. Three (3) potential borrow areas were identified for embankment materials (28 000m³ of impervious material and 49 000 m³ of transition material) within the proposed dam basin. Although considered as an option, the additional 300m³ of fragmented quartzitic sandstone boulders for rip-rap for the embankment slope protection may not be removed from the Moordkuil River channel to avoid unnecessary siltation within the river that may impact on the downstream aquatic environment and estuary.

The appointed Environmental Control Officer (ECO) will monitor compliance during construction to ensure adherence to any authorisations and the Environmental Management Plan (EMP).

The Applicant/Contractor must survey and demarcate the ELU (for the purposes of ensuring that excavations do not exceed beyond), as well as the total disturbance area that extends beyond the ELU, to provide clear visible markers/points beyond which disturbances may not occur.

The total physical construction impact area of the dam with associated infrastructure is calculated at 6.96ha (of which +/-5.6ha is the ultimate dam footprint at full supply level) although a reasonable 9.3ha is provided for as the maximum 'disturbance footprint' with the balance +/-2.3ha outside the construction impact area, to be rehabilitated post-construction.

The feeder pipeline will be excavated with machinery across the transformed kikuyu fields up to the Moordkuils River bank from where the pipeline will be laid onto the riverbed and weighted down with concrete anchor blocks to minimise disturbance of the riverbed. Once out of the riverbed, the pipeline will once again be installed in an excavated trench to the dam wall

II. RECOMMENDATION OF THIS DRAFT ENVIRONMENTAL IMPACT REPORT

The proposed dam will be filled from verified existing lawful use (ELU) for irrigation, out of the Moordkuil River. The Moordkuil River is a tributary of the Klein Brak River and Estuary and as such care is taken to ensure that catchment water / overflow from the Klipheuwel will be discharged via a dedicated outlet pipe and that abstraction to fill the dam may only be undertaken during periods of high flow (August – November) and when the downstream DWS gauging station measures above 0.4m³/s. It is imperative that the Applicant maintain construction and abstraction records for verification and to ensure compliance with these critical condition.

The proposed dam is located within a wider area considered of Low Aquatic Biodiversity Combined Sensitivity. Only the wetland habitat associated with the Moordkuil River and its larger tributaries are mapped as being of very high Aquatic Biodiversity Combined Sensitivity due to the Aquatic CBAs,

NFEPA Rivers and Wetlands mapping. The site is not located in a National Surface Water Strategic Water Source Area.

- The findings of the aquatic site verification assessment are largely in agreement with the Screening Tool Aquatic Biodiversity Sensitivity mapping for the site confirming that the affected non-perennial tributaries, although largely in a natural condition, is of moderate – low ecological importance and sensitivity whilst the Moordkuil River is in a moderate – largely modified state but with high ecological importance and sensitivity;
- Consideration has been given to the fact that the Breede-Olifants River Catchment Management Agency (BOCMA) via Department of Water Affairs & Sanitation (DWS) has confirmed that water to be abstracted and stored in the proposed dam, is an existing lawful use (ELU) for irrigation;
- It is acknowledged that BOCMA/DWS as the competent authority for water resource uses and the impact on water resources, considered the Water Use License Application (WULA)¹ and based on the information and motivations contained in the application, approved the water rights to construct the dam and to store water to the volume of 300 000m³, to be measured and metered, with abstraction from the Moordkuil River only during periods of high-flow (August – November) and only when the measured flow in the river at the Department of Water Affairs (DWS) gauging weri K1H005 is above 0.4m/s to ensure an abstraction practice in line with the RQOs set for the Klein Brak Estuary;
- Consideration has been given to the finding of the aquatic biodiversity assessment concluding that there is no reason why the proposed dam could not be approved with the recommended mitigation measures;
- The botanist has confirmed that no biodiversity offset is required given the limited loss of mostly degraded/secondary vegetation albeit that some of the vegetation is classified as critical endangered ecosystem with a threat status;
- Invasive alien clearing is mandatory for RE Portion 3 Farm 143 (owned by the Applicant) and for a distance of +/-570m downstream of the feeder/discharge pipeline crossing of the Moordkuil River (on RE Prt 13/Farm 143 and RE Banff 147 to ensure that abstraction does not contribute to further water flow reduction to the Estuary;
- Ito heritage/palontology/archaeology the site is not deemed sensitive although protocols for recording any significant features during construction is recommended. Furthermore the remnant structure (old house) on the Northern koppie will be retained with a +/-1.4ha natural buffer which is also deemed botanically sensitive;
- Although several animal species were noted by the faunal specialist, all are deemed to be relatively common in the area with similar remnant habitat surrounding the proposed dam site to which species will relocate.

None of the participating specialists identified any fatal flaws or impact ratings higher than Medium-Low (with mitigation). The potential benefit of active and continued alien clearing on RE Prt 3/Farm 143 as well as the specified section of Moordkuil River will address some of the concern about indirectly impacting on the Klein Brak River Estuary system, whilst surety of supply for ongoing agricultural

¹ The WULA is valid for five (5) years (with option to extend for a further two years) to allow commencement and full exercising of the rights of the activity and 25 years for operation with a condition for bi-annual external audits one year from date of commencement.

operations, food security and job security, is noted as potential benefits associated with the preferred alternative.

The finding of the project team and independent specialists support the preferred alternative that is also aligned with the Water Use License (WULA) issued for the dam.

III. NEED AND DESIRABILITY

Need and desirability for this project have been considered in detail in this environmental process. The overall need and desirability in terms of developing renewable energy generation in South Africa, Limpopo Province and globally is considered in section 1, while the project specific need and desirability is considered in section 2.8 of this report.

IV. ENVIRONMENTAL LEGISLATIVE REQUIREMENTS

The current assessment is being undertaken in terms of the **National Environmental Management Act** (NEMA, Act 107 of 1998)². This Act makes provision for the identification and assessment of activities that are potentially detrimental to the environment, and which require authorisation from the competent authority based on the findings of an Environmental Assessment.

The proposed development entails a number of listed activities, which require a Scoping & Environmental Impact Reporting process to be followed. Such a process must be conducted by an independent registered EAP³. Cape EAPrac has been appointed to undertake this process.

The listed activities associated with the proposed development, as stipulation under 2014 Regulations **327, 325 and 324** are as follows:

GN No. R983: **Listing Notice 1**

- Activity 12, 17, 19, 19A and 27

GN No. R984 **Listing Notice 2**

- Activity No: 16

GN No. R985 **Listing Notice 3**

- Activity No: 12

NOTE: Basic Assessment as well as S&EIR Activities are being triggered by the proposed development, the Environmental Application Process follows a Scoping and Environmental Impact Reporting Process.

² The Minister of Water and Environmental Affairs promulgated new regulations in terms of Chapter 5 of the National Environmental Management Act (NEMA, Act 107 of 1998), viz, the Environmental Impact Assessment (EIA) Regulations 2014 (as amended). These regulations came into effect on 08 December 2014 and replace the EIA regulations promulgated in 2006 and 2010.

³ The EAP in this regard is registered with EAPASA under registration number 2019/301.

Before any of the above-mentioned listed activities can be undertaken, authorisation must be obtained from the competent authority, in this case the DEADP. Should the Department approve the proposed activity, the Environmental Authorisation does not exclude the need for obtaining relevant approvals from other Authorities who have a legal mandate in respect of the activity.

V. PUBLIC PARTICIPATION & STAKEHOLDER ENGAGEMENT

During the preceding Scoping & Impact Assessment process which was facilitated by Kappec Consultants, public participation was undertaken by initial notification and calling for Interested & Affected Parties (I&APs) to register and participate during the process (4 December 2020 – 1 February 2021). This included the availability of a pre-application Scoping Report, several site notices, newspaper advert and writing notifications in accordance with the Regulations.

This initial registration period was followed by the availability of the Draft Scoping Report (DSR) for a period of 30-days (28 May 2024 – 1 July 2024).

According to records by Kappec Consulting, a Stakeholder Register was opened to reflect all I&APs that registered or submitted comment up to this point and inputs received during these commenting/registration periods helped identify key issues/concerns that were document in the Final Scoping Report inclusive of the Plan of Study for Environmental Impact Report that detailed the specialist studies necessary to inform the Impact Assessment Report (submitted to the DEADP on 2 July 2024).

DEADP subsequently accepted the Final Scoping Report and Plan of Study for Impact Assessment (PoS for EIR) on 31 July 2024.

As part of this re-submission process, all (original) registered I&APs were notified of the re-submission application process on 3 July 2026 informing of the intent to proceed with the impact assessment phase of the application process.

In addition to these notifications, the availability of the Draft Impact Assessment Report (DEIR) is advertised in the *Mossel Bay Advertiser* (19 June 2026), site notice put up at the main gate providing access to the Farm and mandated Authorities/Organs of State, as well as the Local Councillor, neighbours informed of their right to register for the remainder of the application process.

All (new) registrations will be added to the original Stakeholder Register that will be updated accordingly.

VI. ALTERNATIVES

The Applicant originally considered a number of alternatives including enlargement of the Church Dam on Farm Banff No 147, or providing for additional storage to be created at the existing Begraafplaas Dam or enlargement of various smaller dams on the properties owned by the Applicant. Oudrift Dam was found to be the most economically feasible and was thus considered as the focussed Alternative during the precedent scoping & environmental impact assessment (EIA) process.

The Final Scoping Report (FSR) was adopted by the Competent Authority, with the following as the focussed alternative:

- 7.29ha on a total development footprint of 10.5ha
- Full supply level storage volume of 472 109m³
- Dam wall height of 19m with maximum dam depth of 18m

- Dam wall length of +/-121m

This preferred alternative has been modification to align with the determination and conditions of the Water Use License Application (WULA) that was issued for the proposed Oudrift Dam & associated infrastructure:

The modified and Preferred Alternative for the purpose of this assessment entails the following:

- Dam footprint = 5.6ha (6.96 is inclusive of the +/-1.4ha around the old house on the northern koppie and services infrastructure)
- Total impact area = 9.3ha
- Wall height = 19.7m
- Crest length = 108.5m
- Depth = 14m
- Full supply level storage capacity = 300 000m³

No-Go Alternative is the option of not implementing the proposed activity.

It is submitted that status quo conditions will remain for the site since there will be no habitat loss. However there will also be no incentive (or condition of approval that can be enforced) for the Applicant to conduct active invasive alien clearing on the property and along a section of the Moordkuil River.

It is submitted that without additional surety of (water) supply for long-term farming operations, the impact of climate change will negatively impact on farming production, which influences income generation and affects job security.

Furthermore the current abstraction practice, which is not stipulated as fixed, draws down from the Moordkuil River during periods of high flow and low flow which is contrary to the objectives of the Draft Klein Brak River Estuarine Management Plan that promotes activities that do not contribute to a reduction in baseflow to the estuary. In the absence of additional surety of supply through storage, the Applicant will continue with this practice to support existing farming activities into the future.

VII. SPECIALIST INPUT

The following specialists have provided input into this environmental impact assessment process and report as per the accepted Scoping Report and Plan of Study for EIR:

1. Botanical Impact Assessment – Mark Berry (MB Botanical Surveys)
2. Aquatic Biodiversity Impact Assessment – Toni Belcher/Dana Grobler (Blue Science)
3. Integrated Heritage Impact Assessment – David Halkett (ACO)
4. Agricultural Compliance Statement – Dr Rowena Harrison (Land Matters Consulting)
5. Paleontological Impact Assessment – Dr John Almond (Natura Viva)
6. Terrestrial Animal Species Compliance Statement – Prof. Jan Venter (Nelson Mandela University, George Campus)
7. Civil Aviation Compliance Statement – Tobie du Toit (Tappas Consulting)

VII. CONCLUSIONS & RECOMMENDATIONS

The scoping phase of the environmental impact assessment process was undertaken by Kappec Environmental Services and concluded with the Final Scoping Report (FSR) and Plan of Study (PoS) for Environmental Impact Report (EIR) being accepted by the Provincial Department of Environmental Affairs & Development Planning (DEA&DP).

At the time of the process, the Finale Environmental Impact Assessment Report (FEIR) was not submitted within the regulated timeframes and the (then) application came to a halt. Regulation 21(2) allows the Applicant to proceed with the impact assessment (EIA) once more on condition that the FEIR is submitted to the DEADP within a two-year period from when the FSR was accepted.

This Draft Environmental Impact Report (DEIR) is made available for public review and comment as part of the re-application made by the Applicant. Stakeholders are provided a 30-day commenting period, extending from **19 June – 20 July 2026**, to review this document and provide input and comment for consideration.

Once the commenting period ends, the appointed EAP must consider and review all the submissions received during this period and incorporate and reflect such as part of the FEIR for submission to the DEADP for review and decision-making.

Cape EAPrac is of the opinion that the information contained in this Draft Environmental Impact Report and the documentation attached hereto, also considering the outcome of the scoping phase, is sufficient to allow stakeholders as well as the competent authority to apply their minds to the potential negative and/or positive impacts associated with the development, in respect of the activities applied for.

The findings of the different specialists, along with the outcome of the Water Use License Application (WULA) process, have informed the updated preferred design by Hagenbrink Consulting Engineers for the preferred and recommended alternative.

The outcome of assessment evaluation to date has not identified any fatal flaws associated with the development proposal, however strict mitigation measures that range from abstraction regime practice adjustments and permissible periods for abstraction of water to fill the dam, are mandatory. In the event that such measures are not adhered to, indirect impacts will be negative and substantial to especially the Klein Brak River Estuary system.

It is Cape EAPrac's reasoned opinion that the proposed activity, in its recommended design and subject to the implication of various mitigation measures made by specialists and key stakeholders, can be considered for authorisation. Input from stakeholders and registered I&APs will however be considered prior to making final recommendations in the Finale Environmental Impact Assessment Report (FEIR).

All submissions must be made to the following address:

Cape EAPrac attention Louise-Mari van Zyl (registered EAP 2019/1444)

PO Box 2070, George, 6530

Email: louise@cape-eaprac.co.za

For queries or verbal comments or requests/enquiries about the proposal/process, please contact
044-8740365.

DRAFT ENVIRONMENTAL IMPACT REPORT

1 INTRODUCTION

Cape EAPrac has been appointed by Klipheuwel Trust, hereafter referred to as the Applicant, as the independent Environmental Assessment Practitioner (EAP), to facilitate the assessment phase of the regulated Scoping and Environmental Impact Reporting process required in terms of the National Environmental Management Act (NEMA, Act 107 of 1998) for the proposed development of the Oudrift Dam with associated infrastructure as described in this report.



Figure 6: Approximate location of the proposed Oudrift Dam.

The dam straddles two properties namely **Remainder Portion 3** (owned by the Applicant) and **Remainder Portion 13** of the **Farm 143** Klein Brak (Mossel Bay Municipal District). Associated infrastructure, in particular a new feeder/discharge pipeline is proposed across the neighbouring Remainder **Farm BANFF 147**.

- RE Pt 13 Farm 143 and RE Farm BANFF 147 are owned by the Robertson Familie Plaas Trust who has granted consent and over who's property servitudes are being registered to facilitate implementation of the activities applied for.

The topography of the site can be described as a small, naturally vegetated valley forming a basin which slopes from the north, east and south towards the west. The study site is located in a coastal fynbos-renosterveld-thicket environment. According to the botanical specialist the 2018 SA Vegetation Map has **incorrectly mapped the main vegetation type as Garden Route Granite Fynbos** since it more accurately resembles **Mossel Bay Shale Renosterveld**⁴ (listed as 'critically endangered' in the revised 2022 Threatened Ecosystems). The northern

⁴ +/- 38% of Mossel Bay Shale Renosterveld is still left with 0.2% formally protected.

most corner of the full supply level (FSL) of the dam in mapped South Outeniqua Sandstone Fynbos (well protected) and the feeder/discharge pipeline in mapped **Groot Brak Dune Strandveld** where it crosses the Moordkuil River (Aquatic Critical Biodiversity Area). As a result, the vegetation has been incorporated as part of the mapped as a Critical Biodiversity Area (CBA) which has been adopted for the Western Cape Province.

The site is covered by significant tracts of renosterveld (albeit degraded), fynbos (mostly regrowth i.e. secondary) and thicket, but also fallow land and previously alien (black wattle and gum) infested areas. Two small steep koppies are present on the western section of the proposed dam footprint of the site which will be utilized for the construction of the dam wall.

The dam footprint is located in a natural valley that shows evidence of three (3x) non-perennial watercourses that meanders west toward the Moordkuil River. These non-perennial drainage lines confluence at the location where the dam wall will be proposed. The catchment is relatively small (0.53ha) meaning that storage of water in the dam is not dependent on runoff from this catchment but rather from filling it with water abstracted from the Moordkuil River under the ELU for irrigation for the farm.

An existing deep drainage channel leads along the west of the southern koppie where the dam wall is proposed and this channel flows into the Moordkuil River. This channel will be retained as part of the dam overflow.

An Eskom servitude and distribution line forms the border of the northern full supply level edge of the proposed dam footprint indicated on below image.

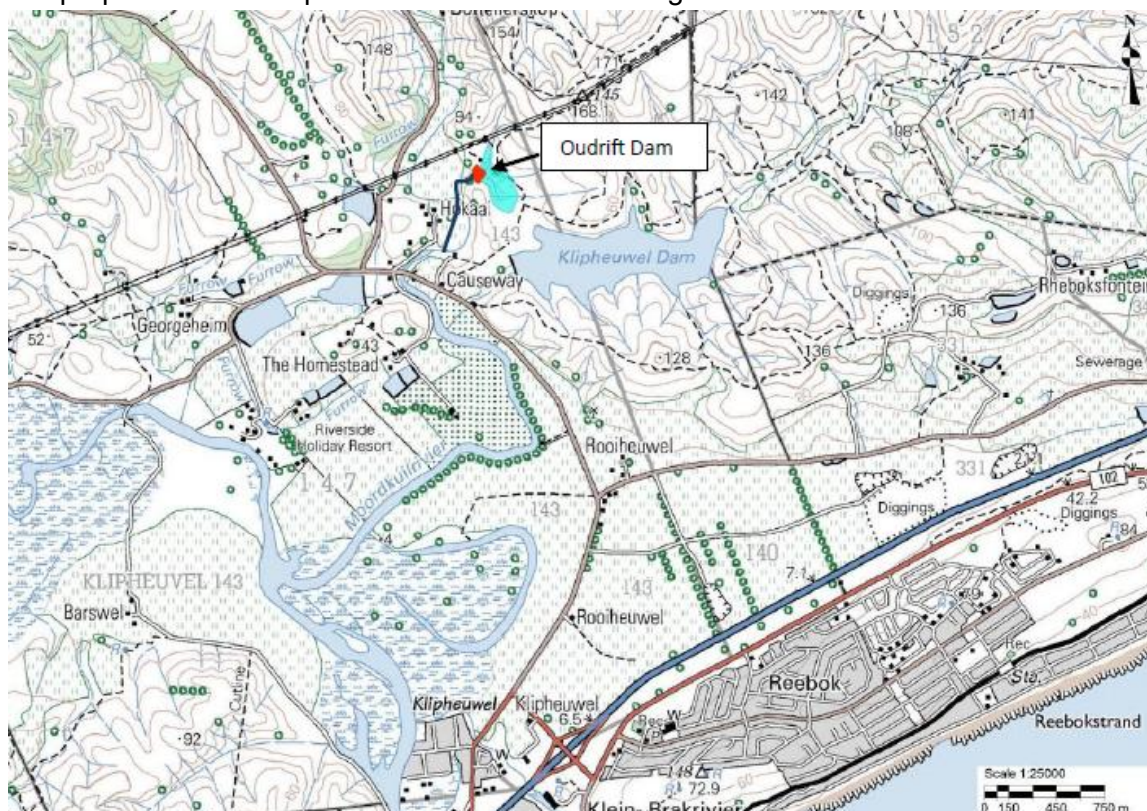


Figure 7: Indicative location of the proposed Oudrift Dam overlaid onto topographical map of the greater area.

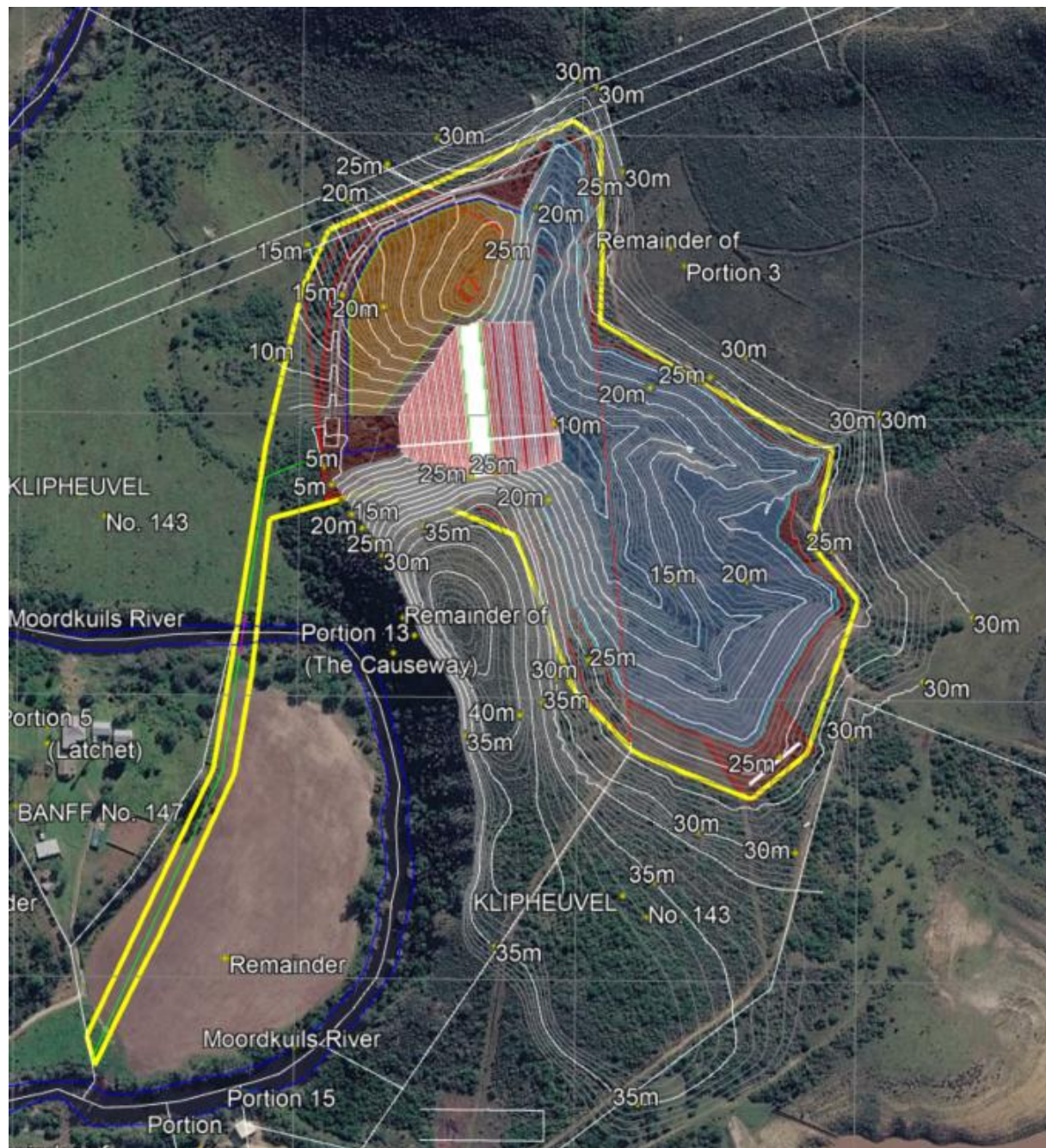
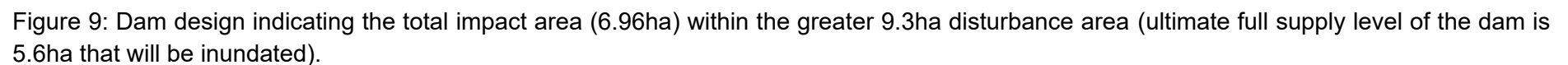


Figure 8: Hagenbrink design (Nov 2025) with total dam disturbance area of 9.3ha (yellow) overlay onto Google Earth image.



The purpose of the **Draft Environmental Impact Report** (Draft EIR) is to describe the environment to be affected, the proposed project, to present the site constraints identified by the various specialist during their site assessments and identify and assess impacts of this development on the receiving environment. This information is presented to all registered and potential Interested and Affected Parties (I&AP's), organs of state, state departments and the competent authority for review and comment.

All comments received on the Draft EIR will be incorporated into the Final EIR that will be submitted to the DEADP for consideration and decision making. All registered I&AP's will be notified of the outcome of the decision-making process.

1.3 RECOMMENDATION OF THE DRAFT ENVIRONMENTAL IMPACT REPORT

Neither the outcome of preceding scoping phase, nor this Impact Assessment phase, has identified any fatal flaws associated with the development of the proposed dam with associated infrastructure.

Not all identified impacts highlighted during the scoping phase and by participating specialists have been avoided, however the majority has been mitigated to acceptable levels and no high post mitigation impacts or risks are envisioned.

It is Cape EAPrac's reasoned opinion that the preferred Alternative can be considered for approval by the competent Authority on condition that all the recommended mitigation measures are implemented, all other legislative approvals be obtained and complied with, and that the final Environmental Management & Maintenance Plan (EMMP) be adhered to.

1.4 ASSUMPTIONS & LIMITATIONS

This section provides a brief overview of the *specific assumptions and limitations* identified by the key specialist themes, as well as the EAP, having an impact on this environmental application process:

- It is assumed that the information on which this report is based (specialist studies and project information, as well as existing information) is **correct, factual and truthful**.
- It is assumed that all the relevant **mitigation and management measures** and agreements specified in this report will be implemented in order to ensure minimal negative impacts and maximum environmental benefits.
- It is assumed that consideration will be given to the **discrepancies in the digital mapping**, caused by differing software programs, and that it is understood that the ultimate/final detailed design will adhere to the parameters of final approvals if granted.
- The Department of Water and Sanitation / Catchment Management Agency **will ensure compliance with the Water Use License (WULA)** necessary for allowing the use of water resources, as well as the storage of water in the dam.
- It is assumed that Stakeholders and Interested and Affected Parties notified of the availability of this will submit all relevant **comments within the designated 30-days** review and comment period, so that these can be included in the Final Environmental Impact Report to be timeously submitted to the competent authority, the DEADP for consideration and decision making.

1.4.1 Assumptions and Limitations of Botanical Specialist

- Fieldwork was carried out in autumn and late spring, considered to be suitable times for most flowering species in the Southern Cape. However, flowering plants that only flower at other times of the year (e.g. winter to early spring) may have been missed. Mossel Bay also experienced a very dry spring season in 2025, which may have affected certain spring flowering species (notably from the Iridaceae & Orchidaceae families).
- The overall confidence in the completeness and accuracy of the botanical findings is considered to be good.

Notwithstanding, the specialist confirms that despite the above limitation and the fact that the vegetation is partly degraded or transformed, the specialist is of the opinion that the survey and findings are adequate to aid decision making.

1.4.2 Assumptions and Limitations of Aquatic/Biodiversity specialist

- Analysis of the freshwater ecosystems was undertaken at a rapid level and did not involve detailed habitat and biota assessments although consideration was given to the botanical assessment and input;
- The river health assessment assessments were carried out using South African Department of Water and Sanitation (DWS) developed methodologies. River Health assessments were carried out to provide information on the ecological condition and ecological importance and sensitivity of the river systems impacted.
- The guideline document, “A Practical Field Procedure for the Identification and Delineation of Wetlands and Riparian Areas” document, as published by DWAF (2005) was followed for the delineation of the wetland areas.

Notwithstanding, the specialist confirms that the level of aquatic assessment and environmental water requirement determination undertaken was considered to be adequate for this study.

2. PROPOSED ACTIVITY

The Applicant wishes to develop a storage dam with a capacity (at full supply level) of 300 000m³ on approximately 5.6ha dam footprint contained within 6.96ha that includes the northern koppie and associated infrastructure, within the total disturbance area of 9.3ha, in the preferred location on select properties.

Hagenbrink Consulting Engineers considered the previous design by Gorra Water that provided for a larger footprint (7.29ha at full supply level) and a storage capacity of 472 109m³ as was presented in the Final Scoping Report.

The general location for the dam remained the same, however the Water Use License Application (WULA) approved only storage for 300 000m³ necessitating a re-look at the previous design.

As part of the Hagenbrink design, the following components also form part of the proposal:

- Feeder/discharge pipeline that must provide a connection between the farm's existing irrigation network and the dam. This single pipeline is designed to receive water (to fill the dam) and to discharge water from the dam when needed, back into the irrigation network;

- A V-notch structure with preferably vegetated earth berm, must be built between the existing Klipheuwel Dam and the full supply level (FSL) of the proposed Oudrift Dam to ensure that should Klipheuwel Dam ever overflow, such flow volume can be measured for release from the Oudrift Dam to ensure that the dam only stores water within its ELU;
- The mandatory outlet pipe that must be used to discharge above overflow and catchment runoff volumes.
- Overflow and overflow channel with associated erosion protection measures.

It is submitted that Hagenbrink considered provision of a new road along the southern koppie, above the FSL to allow vehicular access across the dam wall. Due to the sensitivity of this koppie this road was omitted from the preferred design alternative.

Furthermore, the FSL partially covers (once full) a short section of the existing farm track that provides vehicular access to an old field. It was considered by Hagenbrink to re-route this section of track, however the route to deviate would cross one of the heavily eroded non-perennial tributaries leading into the dam footprint and to construct a structure over such an eroded channel only for a farm track, was deemed not-feasible by the Applicant. This track will therefore continue to only be accessible when the dam is not at full supply level.

Existing farm tracks leading to the location of the proposed dam, will be used for construction purposes. No new roads are needed to implement the activity.

2.1 PROJECT NEED AND DESIRABILITY

In keeping with the requirements of an integrated Environmental Impact process, the DEA&DP *Guidelines on Need and Desirability (2010 & 2011)*⁵ were referenced to provide the following estimation of the activity in relation to the broader societal needs. The concept of need and desirability can be explained in terms of its two components, where *need* refers to *time*, and *desirability* refers to *place*. Questions pertaining to these components are answered in the Sections below.

This section however considers the need and desirability of this specific project at this point in time.

2.1.1 Feasibility consideration

Climate change poses a significant threat to water resources and agricultural sustainability. Rising temperatures, shifting rainfall patterns and in increasing frequency of extreme events such as droughts and floods are intensifying water stress and disturbing agricultural systems. Hydrological models consistently project declines in runoff, soil moisture and streamflow, while crop simulation models predict reduction in the yields of crops (Source: Olabanji & Chitakira 2026⁶).

⁵ The Western Cape Guidelines were considered in this regard, as no guidelines are available for the Limpopo Province.

⁶ Olabanji & Chitakira 2026. *A Review of Climate Change Impacts on Water Resources, Crop Production and Adaptation Strategies in South Africa*. Department of Environmental Science, University of South Africa.

Climate change is expected to intensify agricultural water demand, with irrigation requirements projected to increase by 6.5% - 32% by 2090. At the same time hydrological regimes are becoming increasingly variable with both surface and groundwater resources being affected.

Likewise the agricultural sector in South Africa is highly vulnerable to climate change largely due to its strong dependence on rainfall whereas irrigation systems in South Africa relies heavily on surface water sources (which are replenished with rainfall). Consequently periods of reduced rainfall leads to diminished river flows and dam storage levels, ultimately constraining availability of water for irrigation and reducing the reliability of these systems.

According to the WWF (2018⁷) irrigated agriculture uses large proportion of the country's available water resources. In the Western Cape it is estimated that +/-43% of available water is used for agricultural irrigation. In the country as a whole, it is closer to 61% (DWS 2025). However WWF also confirms that the importance of the agricultural sector in South Africa, for the economy and food security, is undisputed with the Western Cape province alone sustaining a R530 billion agricultural economy that employs +/-180 000 direct workers, while agro-processing adds another 126 000 jobs to the economy amounting to 15% of the provincial labour force.

Mossel Bay- Herbertsdale	Rivers, low storage capacity	Mostly winter rainfall, but occasional rain in summer, cool with onshore wind in summer	Low range warming	Wheat, barley, canola, berries Dairy, ostrich, pigs, cattle, sheep	Transition area, productivity could improve with more irrigation capacity
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The impacts of climate change on dairy farming will depend indirectly on the way pastures respond to warming and shifting rainfall patterns, and the availability of water for irrigated pastures. Irrigation requirements for pastures are set to increase under conditions of increased temperature. This poses a threat to dairy farming in the area which relies on irrigation. Direct effects on dairy cattle are also expected. These include increasing heat and nutrition stress, changes in the distribution of pests and diseases, and changes in water availability. Dairy cattle are more sensitive than other cattle breeds to heat and nutrition stress, which reduces milk production and fertility.

Improving surety of supply for the Applicant's operations by developing a dam for storage is a focus strategy, however water efficiency must be implemented hand-in-hand with invasive alien clearing being critical, alongside the need to monitor water use.

Notably the Department of Water Affairs & Sanitation (DWS) published '*Water security is Climate security*' in January 2025⁸. This report highlights the importance of water resource planning and one of the components thereof is the provision of storage facilities i.e. dams to ensure reliable supply of water, especially during periods of drought. In this strategy DWS also

⁷ <https://www.wwf.org.za/?25441/Agricultural-water-file-Farming-for-a-drier-future>.

⁸ Department of Water and Sanitation, South Africa. 2024. *Climate Change Status Quo Analysis for Water Resources and the Development of a Climate Change Response Strategy for the Water and Sanitation Sector in South Africa: First Draft Climate Change Response Strategy for Water and Sanitation Sector*. WP11353. DWS Report No: P RSA 000/00/23221/20

highlights the need for landowners to remove and maintain invasive alien free properties/farms, especially along riparian areas.

The published data, by different reliable sources, acknowledge climate change and how it will impact on aquatic systems, especially considering the significant dependence of the agricultural sector on the same system. Storage of water will improve surety of supply for the Applicant's operations, however it must be implemented with the understanding that storage alone is not (environmentally) sustainable. Efficient and continued invasive alien clearing must accompany the notion of supporting the agricultural practices of the farm by (also) securing additional storage capacity.

The SmartAgri project by Western Cape Government: Agriculture specifically published their *Status Quo Review of Climate Change and the Agricultural Sector in the Western Cape Province as a Brief for Dairy and other Regional Commodities for the Southern Cape*⁹.

This report echoes the importance of climate change and the impact on specifically dairy farming in the Southern Cape as needing to pro-actively manage their water resources more effectively and to continue in the clearing of alien invasive plants, especially in the catchment areas of the mountains and foothills and along river courses where additional storage is proposed.

2.1.2 Site Suitability

The biophysical environment that will be impacted is natural and deemed sensitive despite levels of degradation and from this perspective the transformation/loss of habitat and vegetation is not ideal for the location of the proposed dam.

- Specialist input however confirms that although natural vegetation and habitat will be lost to the amount of +/-5.6ha post-rehabilitation, the renosterbos and fynbos that will be lost, albeit having critically endangered classification, is noted as being secondary and degraded.
- The aquatic specialist indicated that potential benefit to the receiving environment once invasive alien vegetation has been removed as recommended for a minimum distance of 10 m upstream and 50 m downstream from the Moordkuil River crossing (of the feeder/discharge pipeline) and abstraction point, will benefit the receiving environment.

It is a recommendation of the EAP however that the full distance measured from the Moordkuil River crossing to the point where the feeder/discharge connection starts on RE Farm 147 BANFF near the existing low-level vehicle crossing, which is a distance of +/-570m must be cleared of invasive alien vegetation species, on both sides of the river (minimum 10m each side), as well as the remainder of the Remainder Portion 3 of Farm 143 (which totals 28ha) will be water exchange of up to 15%-30% in the catchment zones. The Applicant must ensure access to this area for initial clearing, as well as follow-up with the landowner over who's land the servitude (for the dam and infrastructure) is being registered.

⁹ <https://www.greenagri.org.za/assets/documents-/SmartAgri/Briefs-/3-Brief-for-Dairy-and-other-Regional-Commodities-Southern-Cape.pdf>

The design engineers, having considered the geology of the terrain has confirmed that the site is ideal for development of a dam both ito the soil type / material that can be used in construction of the dam wall and the fact that the northern and southern koppies in the location creates a natural narrow and elevated area where a dam wall can be constructed.

2.1.3 Social and Economic Beneficiation

A requirement ito the Water Use License (WULA) issued for the proposed dam in terms of the National Water Act (NWA) is for the Applicant to establish an empowerment trust¹⁰ to benefit black employees as defined in the B-BBEEE Codes of Good Practice as beneficiaries of the Trust. In the event that the Applicant obtains all of the necessary rights to develop the dam, said Trust will be established and maintained according to the WULA condition 2.28.

2.1.4 Need

In accordance with the guidelines on need and desirability, a project should be able to answer a series of questions to demonstrate need. These are highlighted in the table below:

Table 1: Project Need Analysis

Need	Discussion	
Is the land use considered within the timeframe intended by the existing approved Spatial Development Framework (SDF)? (I.e., is the proposed development in line with the projects and programmes identified as priorities within the credible IDP?	Yes	The Mossel Bay SDF does acknowledge the importance of agriculture in the economy and the IDP specifically supports the sustained operations of farming in the municipal district as an employment and income generator.
Should the development occur here at this point in time?	Yes	The outcome of the impact assessment confirms that although impacts are noted, the mitigations as part of the preferred alternative design are sufficient to reduce potential negative impacts to acceptable levels whilst optimising potential positive impacts.
Does the community / area need the activity, and the associated land use concerned?	Yes	Rooiheuvel Farm employ a number of local farm workers and managers. The dairy industry in the Southern Cape is one of the most prominent in the country. Improving surety of water supply addresses the sustainability of the farming operation which is linked to food security, job security, income generation and lifestyle quality.
Are the necessary services with adequate capacity currently available?	Yes	DWS conducted Verification and Validation (V&V) in the immediate area and confirmed the existing lawful use (ELU) of irrigation for the Applicant. The dam will be filled from within the scope of this ELU and may only be abstracted during high-flow periods. The Applicant has obtained a WULA authorising the storage dam.

¹⁰ Rooiheuvel Farms Empowerment Trust - Trust Deed signed on 7 May 2021.

Need	Discussion	
Is this development provided for in the infrastructure planning of the municipality?	No	The Mossel Bay Municipality obtains water from the neighbouring Klipheuwel Dam which is located in close proximity to the proposed Oudrift Dam. The Oudrift Dam does not impact on any inflow/catchment of the Klipdrift Dam.
Is this project part of a national programme to address an issue of national concern or importance?	Partially	The DWS Water/Climate Strategy (January 2025) acknowledge the fact that water resources must be managed with care and additional storage capacity must be accompanied by initial as well as follow-up invasive alien clearing.

2.1.5 Desirability (place)

In accordance with the guidelines on need and desirability, a project should be able to answer a series of questions to demonstrate desirability. These are highlighted in the table below:

Table 2: Project Desirability Analysis

Desirability	Discussion	
Is the development the best practicable environmental option for this land / site?	Yes	The Applicant owns RE Portion 3/Farm 143 Klipheuwel with the bulk of the dam footprint being on this property. Servitude agreements are in place with the owners of RE Portion 13/Farm 143 and Farm BANFF 147. The location is a low-lying area on RE/Portion 3 with topographical qualities (north and south koppies) suitable for an earth-filled wall.
Would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?	No	Achieving a balanced approach whereby water surety is improved in support of agricultural is aligned with the SDF and IDP.
Would the approval of this application compromise the integrity of the existing approved environmental management priorities for the area?	Yes	Although the specialists confirm that the loss of 5.6ha of natural vegetation is acceptable due to it being secondary and/or degraded, taking into account the socio-economic benefit to Trust beneficiaries and long-term water exchange with continued and active alien vegetation clearing, the loss of vegetation/terrestrial habitat is still not aligned with the outcomes of a threatened ecosystem. Noting that a dam (as an aquatic feature) also creates additional aquatic habitat.
Do location factors favour this land use at this place?	Yes	Topographically the site is ideal. Geology is ideal. Specialists confirm that the associated loss in habitat/vegetation is acceptable at the location considering the degraded/secondary status thereof.
How will the activity or the land use associated with the activity applied for, impact on sensitive natural and cultural areas?	Yes	The affected ecosystem is threatened albeit degraded/secondary. The identified cultural feature (old house on the Northern koppie) is protected with an area of approximately 1.4ha remaining natural habitat surrounding it to protect the cultural landscape.
How will the development impact on people's health and wellbeing?	Yes	The socio-economic benefit associated with beneficiaries that can obtain future value should the dam be approved, along with the long-term security associated with the dairy/livestock farming operations with water surety of supply holds benefit for especially the Applicant and employees.
Will the proposed activity or the land use associated with the activity applied for, result	Unlikely	The loss of +/-5.6ha threatened ecosystem habitat/vegetation is not supported when such habitat is pristine. This area is degraded and secondary and measured against the benefit of surety of supply /

Desirability	Discussion	
in unacceptable opportunity costs?		beneficiation to trustees/beneficiaries of the empowerment Trust, the opportunity cost is acceptable.
Will the proposed land use result in unacceptable cumulative impacts?	Unlikely	Opinion has been expressed by farmers that building new instream dams will allow for infrequent floods to be captured rather than losing the water downstream. However, the erratic nature of rainfall and related sporadic runoff is unlikely to allow such instream dams to routinely fill, further adding to the unit cost of water from new dams. New instream dams relying solely on runoff to fill the dams, will therefore not necessarily increase assurance of supply. The proposed Oudrift Dam however is not reliant on runoff from the catchment. It is relying on ELU irrigation water from the Moordkuil River under conditions of only abstracting during high-flow periods to supplement irrigation during periods of drought. The loss of +/-5.6ha threatened ecosystem habitat/vegetation is not supported when such habitat is pristine. This area is degraded and secondary and measured against the benefit of surety of supply / beneficiation to trustees/beneficiaries of the empowerment Trust, the opportunity cost is acceptable.

2.2 CONSIDERATION OF ALTERNATIVES

In compliance with the regulations, as a minimum, the No-Go Alternative will be considered and assessed.

2.2.1 Dam Design

The following layout alternatives have been considered thus far in this environmental process.

2.2.1.1 Alternative 1 – Scoping (eliminated)

The proposal as per the Scoping Report to take into the impact assessment phase was for the following:

- Dam footprint = 7.29ha
- Total impact area = 10.5ha
- Wall height = 19m
- Crest length = 121m
- Depth = 18m
- Full supply level storage capacity = 472 109m³

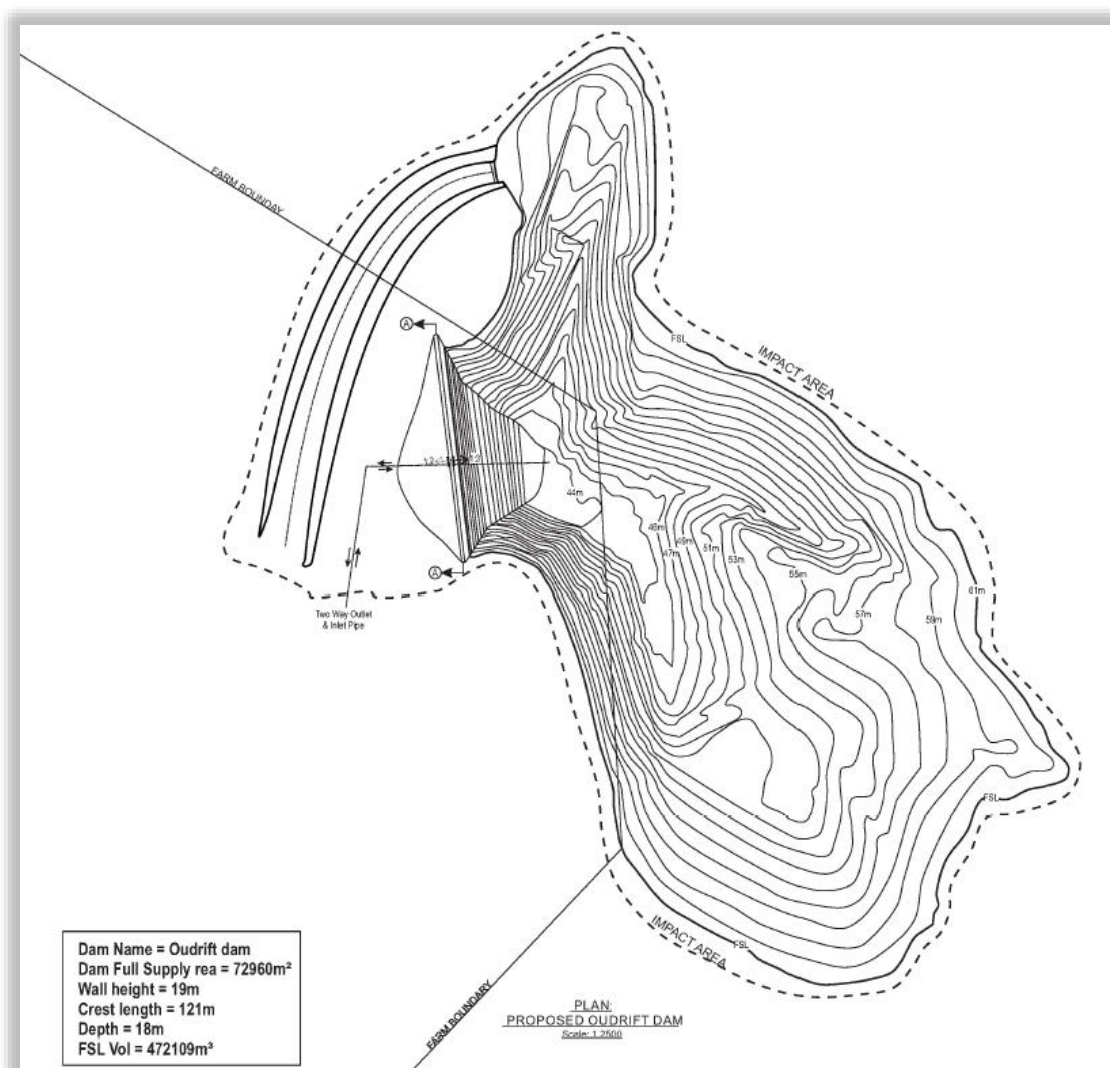


Figure 10: Scoping Alternative 1

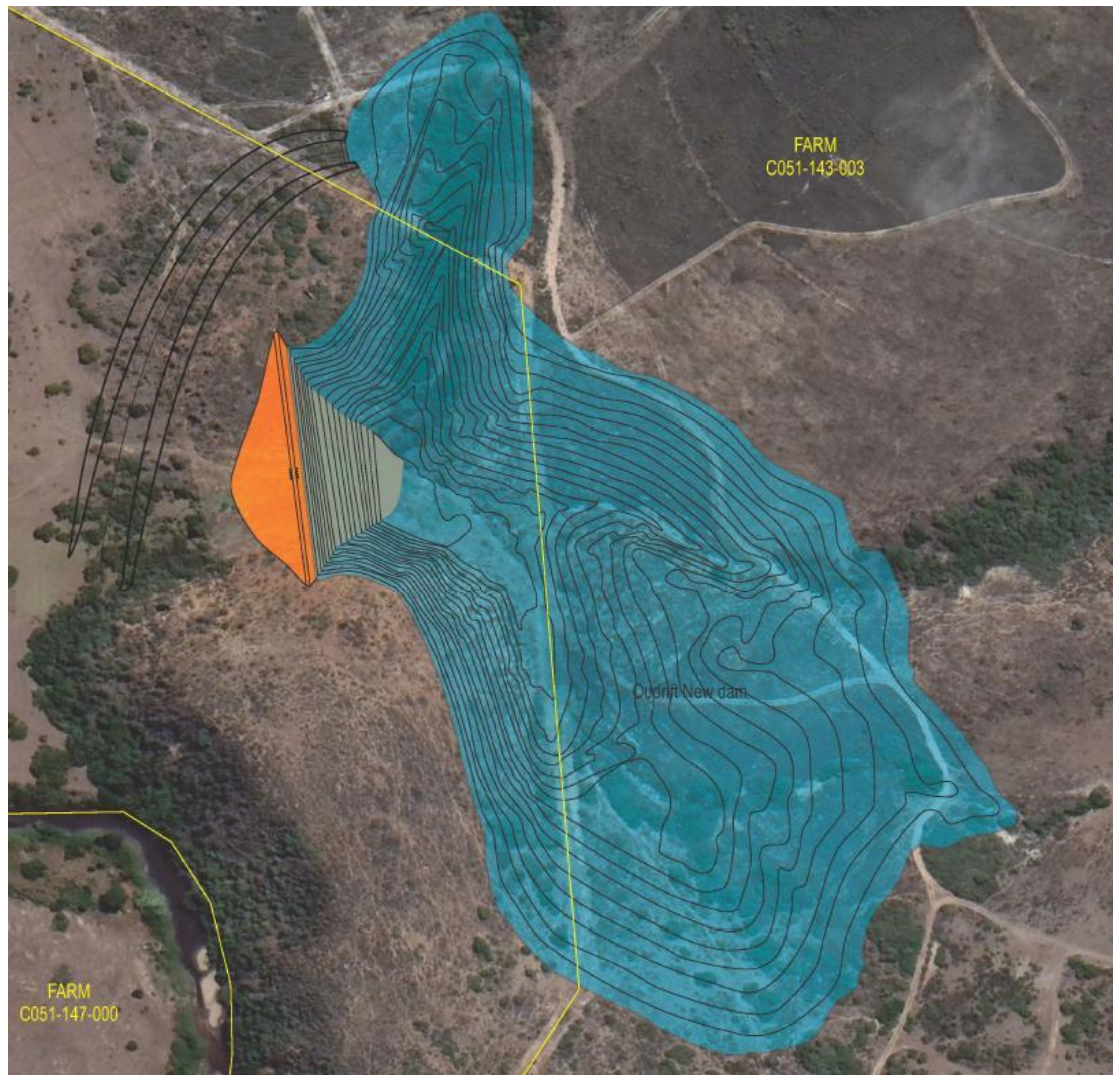


Figure 11: Scoping Alternative 1 overlaid onto aerial indicating full supply level and overflow channel.

The subsequent WULA issued by BOCMA / DWS restricts the storage volume and as such this Alternative 1 is no longer feasible, or reasonable. This Alternative 1 has therefore been eliminated.

2.2.1.2 Alternative 2 – Preferred alternative aligned with WULA

The preferred dam design alternative for the purpose of this impact assessment is:

- Dam footprint = 5.6ha (6.96 is inclusive of the +/-1.4ha around the old house on the northern koppie)
- Total impact area = 9.3ha
- Wall height = 19.7m
- Crest length = 108.5m
- Depth = 14m
- Full supply level storage capacity = 300 000m³

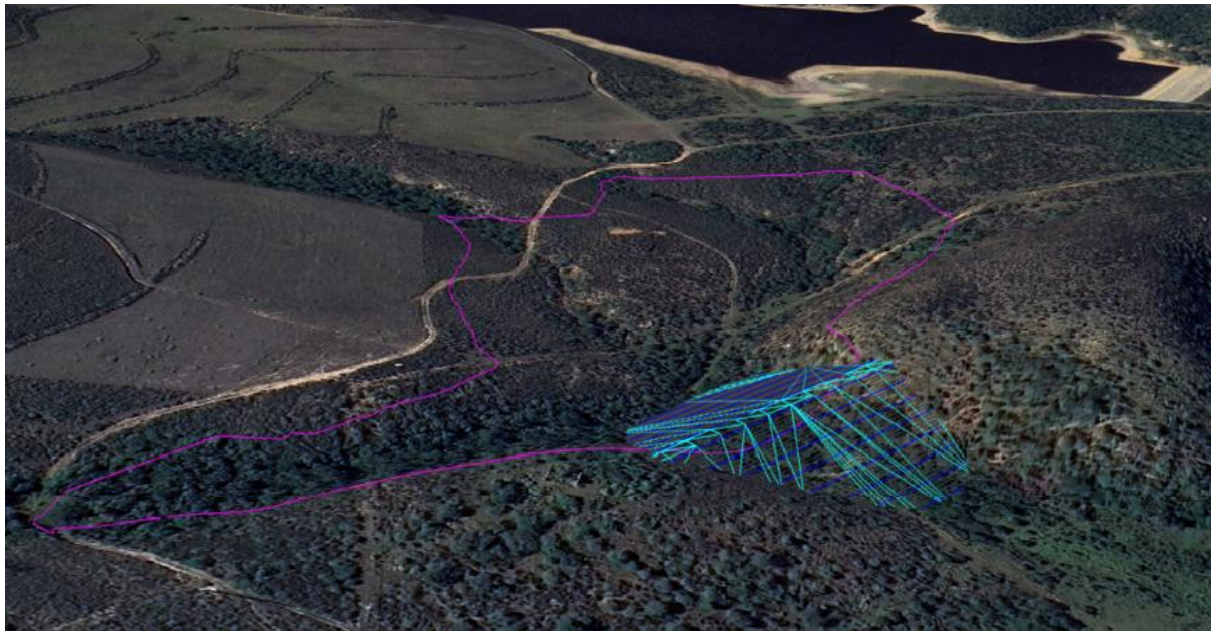


Figure 12: 3-Dimensional indication of the preferred alternative dam design (Source: Hagenbrink).

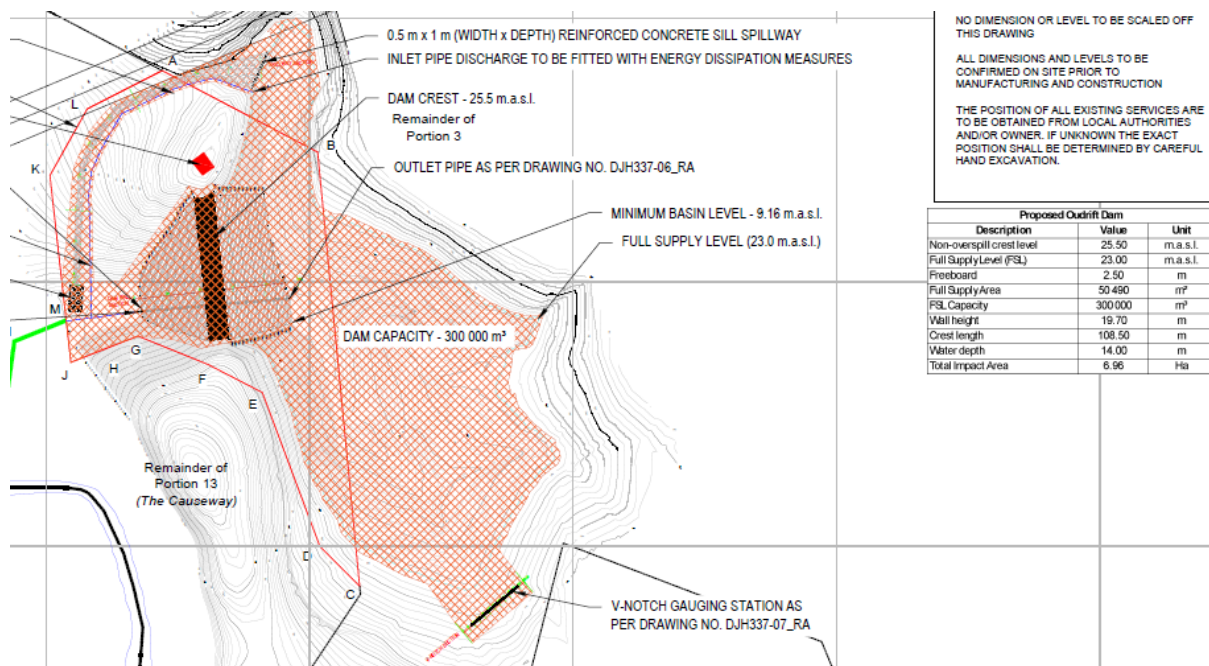


Figure 13: Engineering design concept for preferred Alternative 2.

2.2.2 Associated Services

The Scoping Report listed the following for infrastructure alternatives:

- Two separate pipelines, one as the feeder line to fill the dam and a separate line to discharge water from the dam back into the irrigation network. In light of the alternative of designing a pipeline that can serve both purposes, this alternative has been eliminated in favour of a single multi-purpose pipeline for which a servitude will be registered.



Figure 14: Two different pipes as feeder line and discharge/gravity line.

The **preferred associated infrastructure alternative** that has been considered with his EIR is a single feeder/discharge line on the same alignment as the 'gravity' line in Alternative 1 of the associated infrastructure.

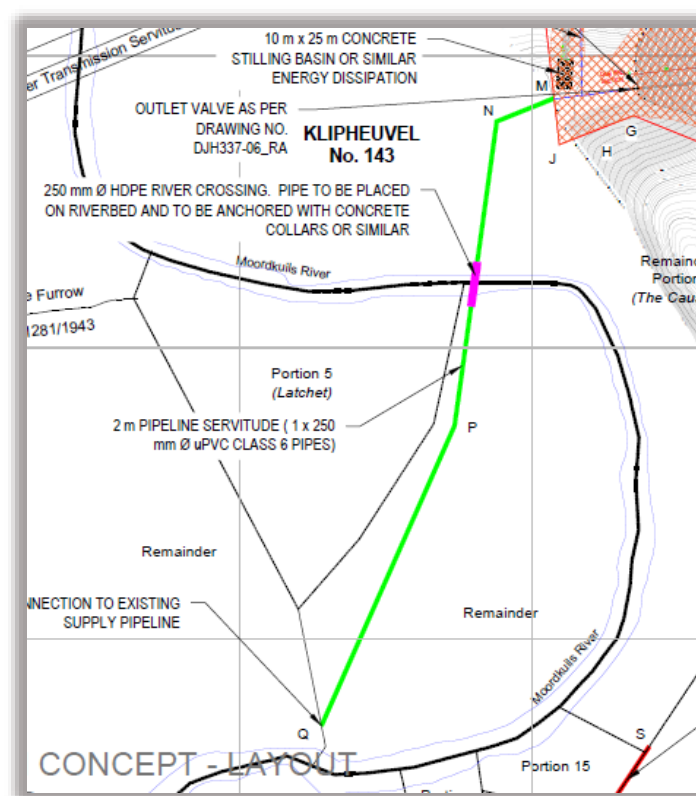


Figure 15: Preferred multi-purpose feeder/discharge pipeline.

2.2.3 The no-go alternative

The no-go Alternative (or status quo) proposes that the proposed Oudrift Dam is not developed.

The no-go alternative increases the risk of future water shortage for the ongoing farming operations should waterflow in the Moordkuil River become intermittent.

Currently the Applicant withdraw water without restriction its timing/flow volumes implying that water is abstracted at low flow periods to continuously meet the current demand for livestock/irrigation. Low flow abstraction from the Moordkuil River reduces water flow in the system that feeds the Klein Brak Estuary. As a result the Estuary can be negatively impacted as a result of less freshwater inflow volumes.

Without water surety of supply under the No-Go alternative, that will enable the Applicant to continue production (drinking water for livestock / irrigation for crops/fields to supply food for the cows) during periods of drought, farming operations will suffer firstly because of the additional expense of having to purchase feed, likely that there may be a drop in milk production (dairy cows are the most sensitive of cows to changing conditions), which has the indirect impact of reduced income and ultimately impacting on job security and livelihoods of the Applicant, Managers and/or Employees.

The no-go alternative is used as a baseline from which to determine the level and significance of potential impacts associated with the preferred alternative.

3. LEGISLATIVE AND POLICY FRAMEWORK

The legislation that is relevant to this study is briefly outlined below. These environmental requirements are not intended to be definitive or exhaustive but serve to highlight key environmental legislation and responsibilities only.

3.1 NATIONAL LEGISLATION

This section deals with nationally promulgated or nationally applicable legislation associated with the proposed activity.

3.1.1 The Constitution of the Republic of South Africa

The Constitution of the Republic of South Africa (Act 108 of 1996) states that, everyone has a right to a non-threatening environment and that reasonable measures are applied to protect the environment. This includes preventing pollution and promoting conservation and environmentally sustainable development, while promoting justifiable social and economic development.

The Constitution and Bill of Rights provides that everyone has the right:

- to an environment that is not harmful to their health or well-being; and
- to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures:
 - prevent pollution and ecological degradation;
 - promote conservation; and
 - secure, ecologically sustainable development and the use of natural resources while promoting justifiable economic and social development.

The National Environmental Management Act, NEMA (discussed below) is the enabling legislation to ensure this primary right is achieved.

3.1.2 National Environmental Management Act (NEMA)

The current assessment is being undertaken in terms of the **National Environmental Management Act** (NEMA, Act 107 of 1998)¹¹. This Act makes provision for the identification and assessment of activities that are potentially detrimental to the environment, and which require authorisation from the competent authority (in this case, the national Department of Forestry, Fisheries and the Environment) based on the findings of an Environmental Assessment.

The proposed development entails a number of listed activities, which require a Scoping & Environmental Impact Reporting process to be followed. Such a process must be conducted by an independent registered EAP¹². Cape EAPrac has been appointed to facilitate the assessment phase of the re-application process. The figure below depicts a summary of the Scoping and Environmental Impact Reporting Process.

¹¹ The Minister of Water and Environmental Affairs promulgated new regulations in terms of Chapter 5 of the National Environmental Management Act (NEMA, Act 107 of 1998), viz, the Environmental Impact Assessment (EIA) Regulations 2014 (as amended). These regulations came into effect on 08 December 2014 and replace the EIA regulations promulgated in 2006 and 2010.

¹² The EAP in this regard is registered with EAPASA under registration number 2019/301

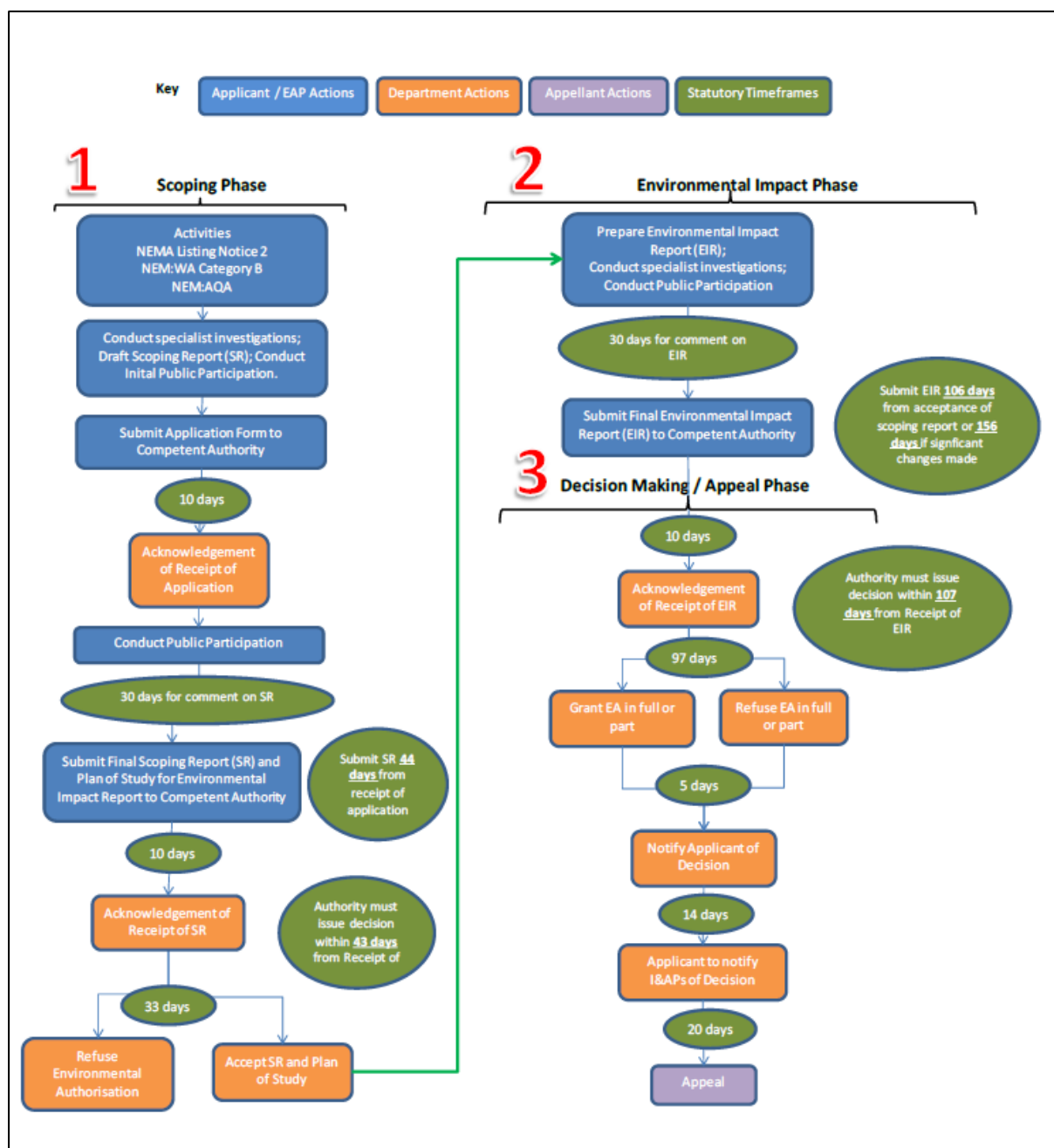


Figure 16: Summary of Scoping and Environmental Impact Reporting Process in terms of the 2014 EIA Regulations (as amended).

Before any 'listed activities' may be undertaken, authorisation must be obtained from the competent authority, in this case the DEADP. Should the Department approve the proposed activity, the Environmental Authorisation does not exclude the need for obtaining relevant approvals from other Authorities who have a legal mandate in respect of the activity.

3.1.3 National Environmental Management: Biodiversity (Act 10 of 2004)

The National Environmental Management: Biodiversity Act (Act 10 of 2004) (NEMBA) provides for listing threatened or protected ecosystems, in one of four categories: critically endangered (CR), endangered (EN), vulnerable (VU) or protected. The Draft National List of Threatened

Ecosystems (Notice 1477 of 2009, Government Gazette No 32689, 6 November 2009) has been gazetted for public comment.

The list of threatened terrestrial ecosystems supersedes the information regarding terrestrial ecosystem status in the NSBA 2004. In terms of the EIA regulations, an environmental assessment and authorisation is required for the transformation or removal of indigenous vegetation in a critically endangered or endangered ecosystem if more than 300 square metres will be removed or where the activity will take place within an adopted Critical Biodiversity Area (CBA).

NEMBA also deals with endangered, threatened and otherwise controlled species. The Act provides for listing of species as threatened or protected, under one of the following categories:

- **Critically Endangered:** any indigenous species facing an extremely high risk of extinction in the wild in the immediate future.
- **Endangered:** any indigenous species facing a high risk of extinction in the wild in the near future, although it is not a critically endangered species.
- **Vulnerable:** any indigenous species facing an extremely high risk of extinction in the wild in the medium-term future; although it is not a critically endangered species or an endangered species.
- **Protected species:** any species which is of such high conservation value or national importance that it requires national protection. Species listed in this category include, among others, species listed in terms of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

Certain activities, known as Restricted Activities, are regulated by a set of permit regulations published under the Act. These activities may not proceed without environmental authorization.

According to the botanical specialist the site proposed for the dam lies on the boundary between **South Outeniqua Sandstone Fynbos** and **Mossel Bay Shale Renosterveld**. The latter is the most threatened vegetation type found here and is currently listed as **Critically Endangered**. South Outeniqua Sandstone Fynbos, on the other hand, is still well represented and protected. The site also encroaches on the biodiversity network (CBA corridor).

At least four known threatened species (*Erica unicolor* ssp. *mutica*, *Trichodiadema burgeri*, *Hermannia lavandulifolia* & *Polygala pubiflora*) and two protected tree species (*Sideroxylon inerme* & *Pittosporum viridiflorum*) will be affected by the project. Given the degraded state of a large part of the site, the impact on terrestrial biodiversity and plant species is of medium-low significance.

3.1.4 Conservation of Agricultural Resources Act – CARA (Act 43 of 1983):

The Conservation of Agricultural Resources Act (CARA) provides for the regulation of control over the utilisation of the natural agricultural resources in order to promote the conservation of soil, water and vegetation and provides for combating weeds and invader plant species. CARA defines different categories of alien plants:

- Category 1 - prohibited and must be controlled;
- Category 2 – must be grown within a demarcated area under permit; and
- Category 3 - ornamental plants that may no longer be planted, but existing plants may remain provided that all reasonable steps are taken to prevent the spreading thereof, except within the flood lines of water courses and wetlands.

The Department of Agriculture, Land Reform and Rural Development is guided by Act 43 of 1983.

In order to comply with their mandate in terms of this legislation, the applicant is required to take note of the following:

Article 7. (3)b of Regulation 9238: Conservation of Agriculture Resources, 1983 (Act 43 of 1983) deals with the Utilisation and protection of vleis, marshes, water sponges and water courses

- 7.(1) “no land user shall utilize the vegetation in a vlei, marsh or water sponge or within the flood area of a water course or within 10 meters horizontally outside such flood area in a manner that causes or may cause the deterioration of or damage to the natural agriculture resources.”
- (3)(b) “cultivate any land on his farm unit within the flood area of a water course or within 10 meters horizontally outside the flood area of a water course”.

The activity will partially take place within the estuarine functional zone that is linked to the Moordkuil River, as well as the dam footprint on an area where three (3) non-perennial tributaries confluence.

The Agricultural Act does reference the protection and support of agricultural activities which the Applicant intends to do by securing water storage capacity in light of climatic change expected to affect farming operations over the long-term.

- The Provincial Department of Agriculture is a registered I&AP and will be requested to provide comment on this DEIR.

3.1.5 National Water Act, No 36 of 1998

Section 21c & i of the National Water Act (NWA) requires the Applicant to apply for authorisation from the Department of Water and Sanitation for an activity in, or in proximity to any watercourse/where the bed/banks of a watercourse will be affected and/or for abstraction and storage of water.

Following a water use license application submitted to the BOCMA a WULA was issued to the Applicant permitting the continued use of ELU irrigation water for storage in the proposed dam, inclusive of the storage facility itself (dam) and associated infrastructure (pipeline crossing the Moordkuil River).

- The Department of Water and Sanitation as well as the Catchment Management Agency are registered as a key stakeholder and will be asked to provide input into this environmental process.

3.1.6 National Forests Act (No. 84 of 1998):

The National Forests Act (NFA) provides for the protection of forests as well as specific tree species, quoting directly from the Act: *“no person may cut, disturb, damage or destroy any protected tree or possess, collect, remove, transport, export, purchase, sell, donate or in any other manner acquire or dispose of any protected tree or any forest product derived from a protected tree, except under a licence or exemption granted by the Minister to an applicant and subject to such period and conditions as may be stipulated”.*

The botanical specialist has confirmed the presence of two (2) protected trees in the dam footprint (*Sideroxylon inerme* and *Pittosporum viridiflorum*) for which Forestry Permits will be required prior to any earthworks or vegetation clearing commencing where these trees occur.

- The Department of Forestry is a registered I&AP and will be requested to provide comment on this DEIR.

3.1.7 National Heritage Resources Act, 25 of 1998

The protection and management of South Africa's heritage resources are controlled by the National Heritage Resources Act (Act No. 25 of 1999). Heritage Western Cape (HWC) is the enforcing authority in the Province and is registered as a Stakeholder for this environmental process.

In terms of Section 38 of the National Heritage Resources Act, HWC will comment on the integrated Heritage Impact Assessment (HIA) where certain categories of development are proposed. Section 38(8) also makes provision for the assessment of heritage impacts as part of an EIA process.

The National Heritage Resources Act requires relevant authorities to be notified regarding this proposed development, as the following activities are relevant:

- the construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length (pipeline);
- any development or other activity which will change the character of a site exceeding 5 000 m² in extent (dam); and
- the re-zoning of a site exceeding 10 000m² in extent (not applicable).

Furthermore, in terms of Section 34(1), no person may alter or demolish any structure or part of a structure, which is older than 60 years without a permit issued by the SAHRA, or the responsible resources authority (in this case, SAHRA).

- In terms of Section 36 (3), no person may destroy, damage, alter, exhume or remove from its original position, or otherwise disturb, any grave or burial ground older than 60 years, which is situated outside a formal cemetery administered by a local authority, without a permit issued by the SAHRA, or a provincial heritage authority (in this case, SAHRA).
- In terms of Section 35 (4), no person may destroy, damage, excavate, alter or remove from its original position, or collect, any archaeological material or object, without a permit issued by the SAHRA, or the responsible resources authority (In this Case, SAHRA).

The dam footprint avoids the existing old house structure found on the Northern koppie with an area of approximately 1.4ha surrounding the structure that will remain natural and act as a buffer around the feature in the landscape.

Heritage Western Cape (HWC) is a registered I&AP and will be asked to provide comment on this DEIR.

3.1 PROVINCIAL & REGIONAL LEGISLATION

Western Cape PSDF (2014)

The Western Cape Provincial Spatial Development Framework (WCPSPDF) was approved in 2014 by the Western Cape Parliament and serves as a strategic spatial planning tool that “communicates the provinces spatial planning agenda”.

The WCBSP is a map that shows priority areas for protecting and conservation. The plan was updated in 2023, replacing the 2017 version. While the two (2) versions look similar overall, some important changes were made.

The proposed activity aligns with:

Policy R1 - Protect Biodiversity and Ecosystem Services.

- The project footprint consists predominantly of transformed habitat.
- The project footprint will not affect any natural watercourses.
- The proposal will not result in impacts on Fauna Species of Conservation Concern (SCC).
- The proposal will not impact heritage, archaeological or palaeontological resources.
- The proposal will not impact on agricultural resources.

Policy E3 – Revitalise and strengthen urban space-economies as the engine of growth.

The proposed activity strengthens the Municipality’s ability to provide services to its residents as part of its service delivery mandate.

Eden Spatial Development Framework (2017)

The Eden District Spatial Development Framework was approved in 2017 and aims to establish a strong strategic direction and vision, towards increasing levels of detail in the spatial recommendations that are directive rather than prescriptive and providing guidance to local municipalities in the district regarding future spatial planning, strategic decision making and regional integration.

The proposed activity complies with the District’s Strategic Objective (SO4): Environmental management and public safety and their associated strategies (supported by Policy 1.1.):

- Protect and conserve important terrestrial, aquatic (rivers, wetlands, and estuaries) and marine habitats as identified through Critical Biodiversity Area (CBA) mapping exercise or similar conservation planning process.

It is proposed to implement Pipe Jacking & Pipe Cracking in certain areas where conventional open trenching will cause unnecessary disturbance.

3.2 MUNICIPAL LEGISLATION

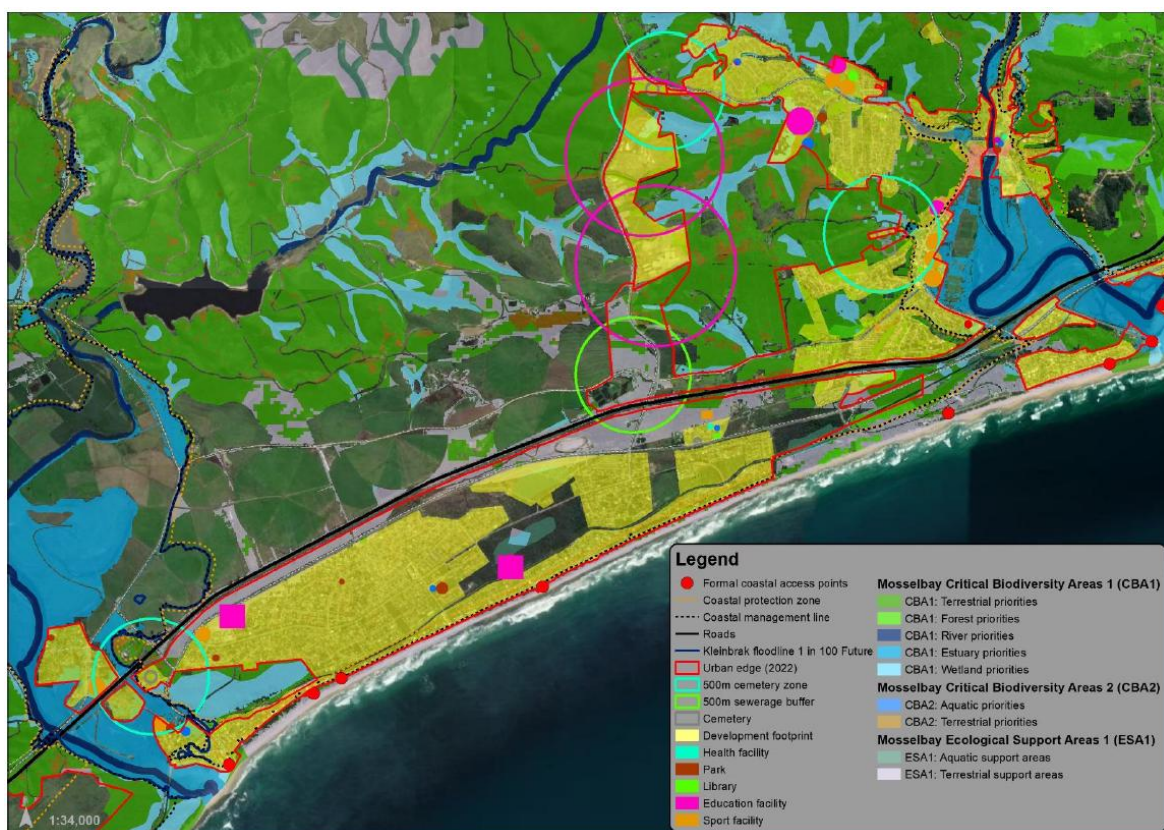
This section deals with regionally and municipally promulgated or regionally or municipally applicable legislation associated with the proposed activity.

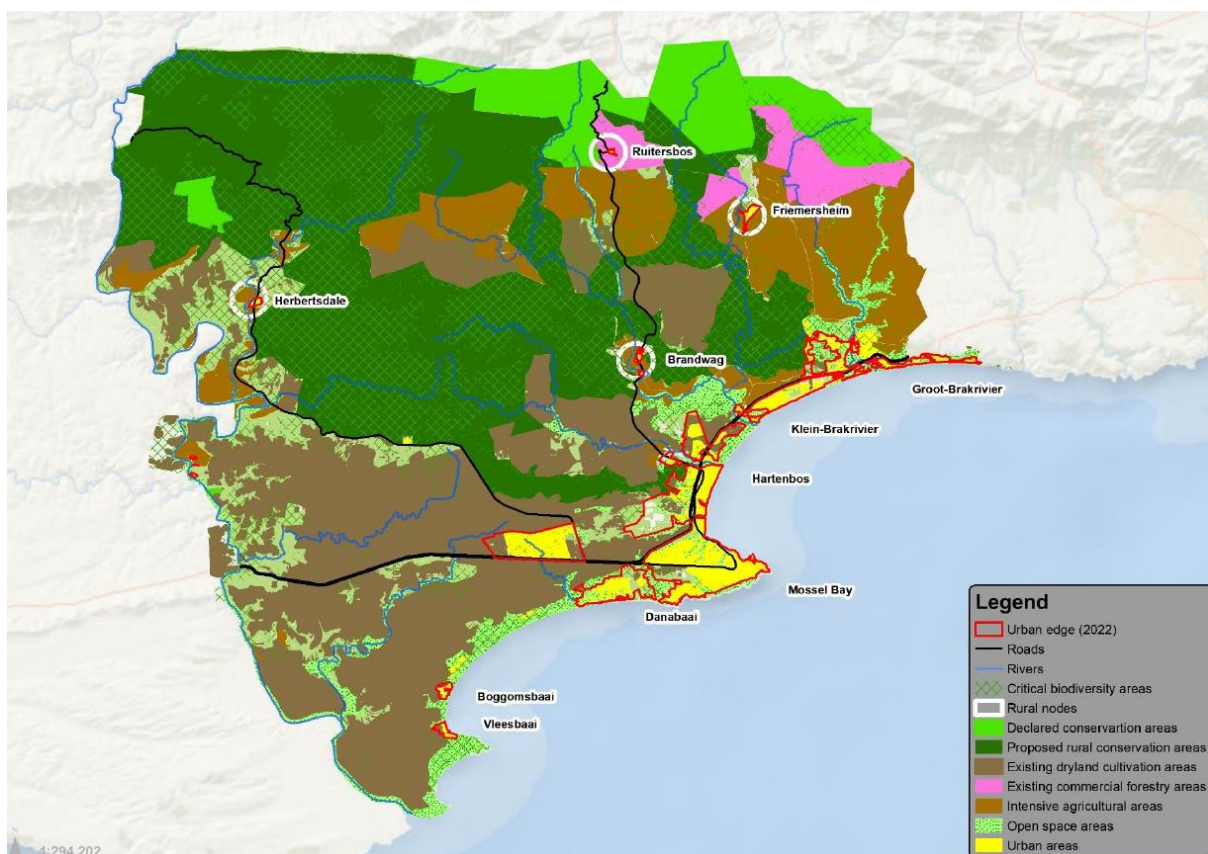
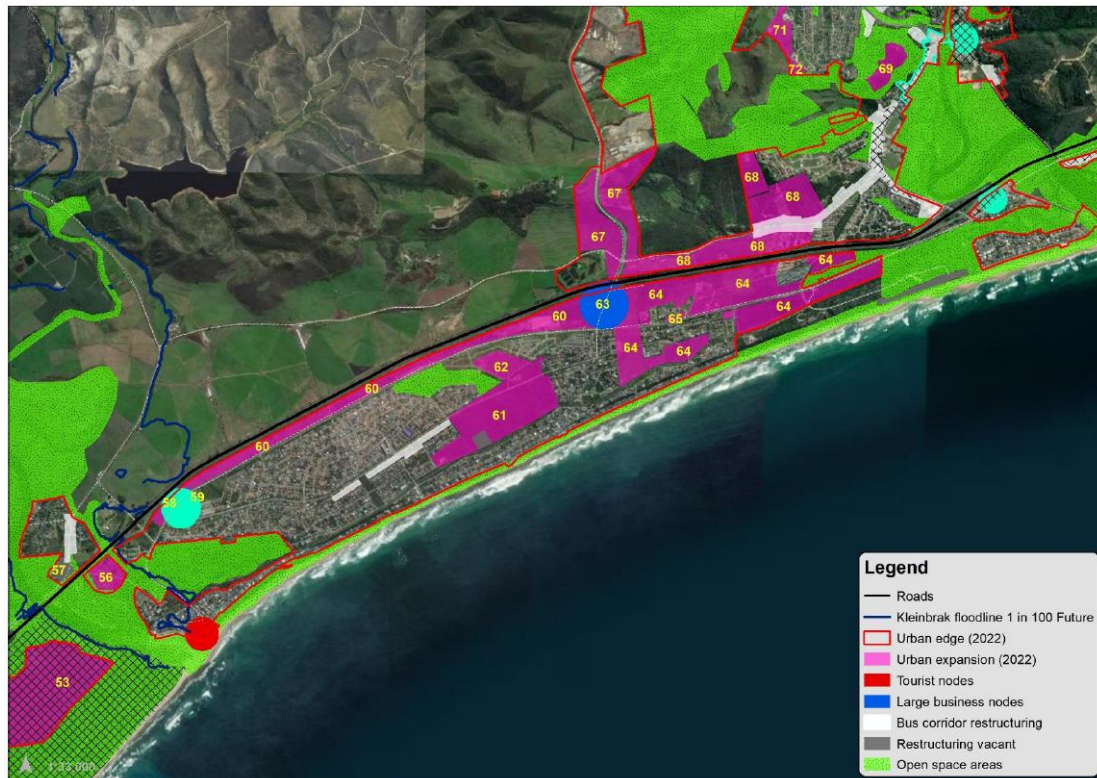
3.2.1 Mossel Bay Local Municipality Integrated Development Plan (2024-2025)

Section B of the Mossel Bay SDF / EMF was issued in May 2022 and is read together with Section A which comprises the Status Quo of the municipal area, referred to as MB SQ 2021

in the document. Section A and B will serve as base documents for Section C which will contain the detail information needed to conform to the relevant environmental legislation for EMF's. Section C will be developed after adoption of Section A and B and aims to establish a defined "Urban Area" which is used to determine listed activities in development applications. The SDF / EMF 2022 must also be read against the background of the 2018 SDF which contains further information that informed the proposals and conclusions of the SDF / EMF 2022.

The site falls inside the Mossel Bay Biodiversity Network, with almost the entire site and surrounding area mapped as a critical biodiversity area (CBA) (see Figure 7). Reasons for this include the importance of the area as a climate adaption corridor, the presence of threatened vegetation types and water resource protection. It was previously noted that most of the intact vegetation in the Mossel Bay interior is found on the steeper hill slopes.





The site is indicated as per the Rural spatial pattern as Intensive agriculture. The light brown areas indicated in Figure above indicate the existing intensive agricultural areas. These areas are very important for food security.

Timeous amendment to agricultural practices to mitigate climate change must be implemented. The use of the water resource must be managed to ensure it does not enlarge the impact of water security for the urban nodes and the negative impact on the river systems and critical biodiversity areas. Low water use agriculture on smaller footprints is encouraged.

3.3 GUIDELINES, POLICIES AND AUTHORITATIVE REPORTS

This section includes relevant Guidelines, Policies and Authoritative reports applicable to the proposed activity.

3.3.1 Klein Brak River Estuary Draft Estuarine Management Plan (2021)

The National Estuarine Management Protocol (the Protocol), promulgated in May 2013 under the National Environmental Management: Integrated Coastal Management Act (Act No. 24 of 2008, as amended by Act No. 36 of 2014), sets out the minimum requirements for individual estuarine management plans.

The Klein Brak Estuary is situated within the southern coastal belt and is approximately 12 km north of Mossel Bay. Two major tributaries, the Brandwag River and the **Moordkuil River** join approximately 3 km from the coast to form a flood-tidal delta. Land use within the catchment is comprised of dry land crop production, irrigated crop farming, forestry and livestock grazing with limited township development (Brandwag, Ruitersbos, Friemersheim and Klein Brak township).

The Klein River Estuary is a large (1153 ha) estuarine lake system that closes annually from the sea. The Klein Brak River estuary rates as the 93rd most important estuary in South Africa from a conservation perspective. Nevertheless, the estuary was identified as a high priority estuary for rehabilitation (Turpie and Clark, 2007). The types of rehabilitation identified included pollution mitigation, alien clearing, mouth management and saltmarsh rehabilitation.

The proposed Oudrift Dam is located within the proposed **1000m development buffer zone** for the estuary which is directed at **adhering to legal requirements**, as well as **protecting the integrity** of the estuarine environment, **controlling future development** and **mitigating the negative impacts of current development**.

Water is currently abstracted from the lower reaches of the **Moordkuil River** and transferred to the existing **Klipheuwel Dam** to supply Mossel Bay of drinking water. It is suggested in the Draft Plan that the extraction occurring at the Moordkuil DWS point is the major factor in flow reduction.

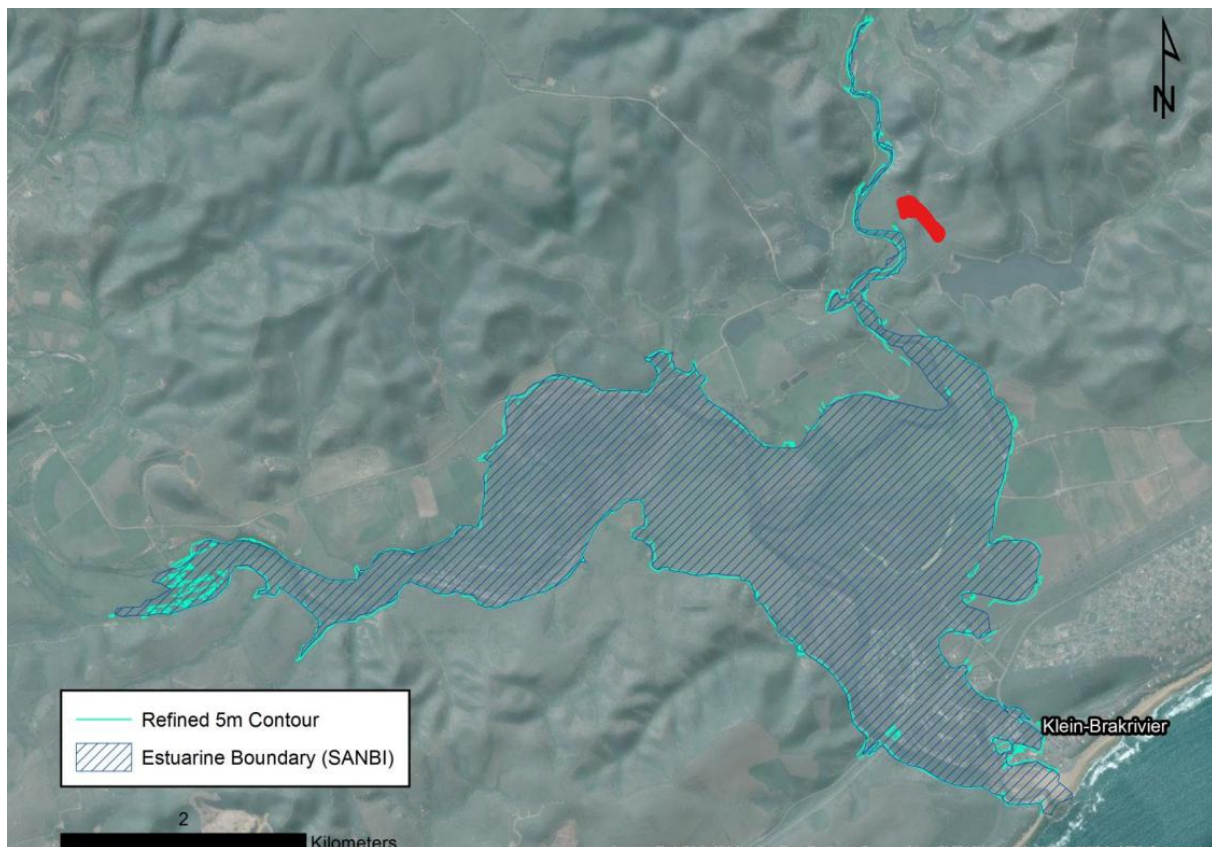


Figure 17: Location of the proposed Oudrift Dam in relation to the estuarine boundary (Source: Draft Klein Brak Estuarine Management Plan, 2021).

The Present Ecological State of the Klein River Estuary is a “C Ecological Category” which is the classification for ‘moderately modified state’. The ongoing degradation of the system’s health is largely attributed to:

- Loss of estuarine and riparian habitat (i.e. destruction of saltmarshes, loss of buffers);
- Modification of streambeds, i.e. closure of estuary by culverts in upper reaches;
- **Increase in the nutrient and sediment load from the floodplain and catchment;**
- Overexploitation of fish and bait in the system;
- **Some reduction in the freshwater inflow (especially baseflows) to the system** (attributed to abstraction and high levels of invasive alien vegetation in the catchment area causing flow reduction);
- Increase in the nutrient load from various sources including storm water and the water treatment works located within the catchment; and
- Failure by the relevant authorities to deal decisively with historic issues related to the management of the Water Treatment Works.

Flowing from identification of these risks, one of the management outcomes identified in the Draft Plan is to improve flow patterns and improve ecosystem functioning in the estuarine system. Another outcome was identified as the control the spread of invasive alien vegetation.

Management Objective 2: Improve flow patterns to improve ecosystem functioning of the Klein Brak River estuarine system			
Identify and assess the impacts of obstructions on the Klein Brak River estuary (the removal of some obstructions noted)	NWA NEMA DMAA	- All obstructions identified - Impact assessment undertaken - Legal status established - Remedial plan developed to remove structures (legal and illegal) - Funding secured for priority areas - Implementation of remedial plan - Improved functioning of the estuary	RMA, DEA&DP Provincial Disaster Management Centre DWS: WfW DAFF Mossel Bay Transnet SANRAL
Develop and implement remedial plan			

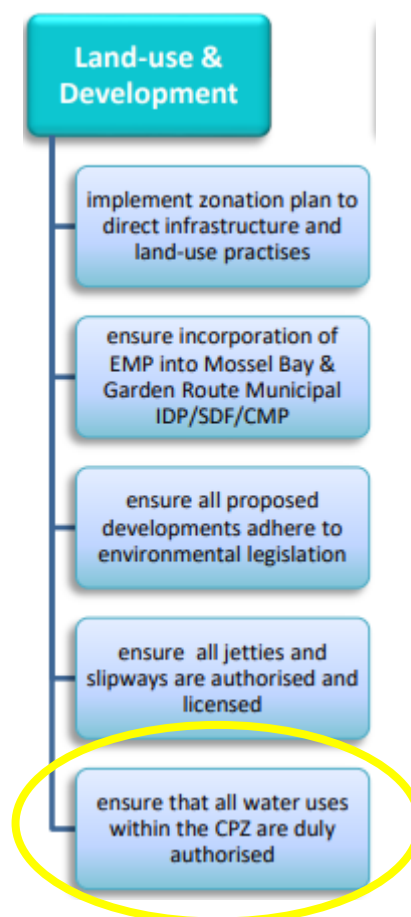
Management Objective 5: Control the spread and densification of both aquatic and terrestrial invasive alien plant species			
Identify, prioritise and control invasive alien plant infestation	CARA NEMA	- Fine scale GIS map generated - Priority infestations identified - Long term budget estimated - Funding sourced - Staff employed - Volume/ weight/ ha of areas cleared	DEA: WfW DEA: Working for the Coast Mossel Bay LM DEA&DP
Initiate and maintain eradication programme (cleaning in upper catchment acknowledged)	NEM:BA NWA		Landowners RMA

According to the Draft Plan as an estuary of ‘average importance’, the Klein Brak should at least be managed in a Category C (maintain PES with Category C as minimum). It is acknowledged in the Plan that it is highly unlikely that the flow reduction, nutrient loading from agriculture and habitat loss in the system can be alleviated in its entirety. It is therefore recommended that the Best Attainable State is a moderately modified system (i.e. Category C).

Taking into consideration the land-use development management objectives and key objectives, it is noted that water uses within the catchment must be lawful in order to cross-link with conservation of biodiversity in the estuarine area. One of the operational objectives of the Draft Plan is to enforce existing water use licensing and ensure lawful water uses within the coastal protection zone of the estuary.

In addition to the regulatory requirement to obtain prior Environmental Authorisation (EA) for the proposed activities, it is noted that the Department of Water Affairs (DWS) has authorised and issued a Water Use License for construction of the dam/infrastructure inclusive of storage of water supplied through existing lawful use (ELU) irrigation abstraction from the Moordkuil River. It is noted from the Draft Plan that the Department of Water Affairs (DWS) and the Catchment Management Agency (BOCMA) is a responsible authority involved with the estuarine management plan because of the National Water Act mandate.

In addition to the noted WULA and aquatic specialist recommendations/condition, is a recommendation of this impact assessment that the Applicant must remove invasive alien vegetation along the Moordkuil River for a specified distance, as well as on his property of nearly 28ha that fall within the catchment area of the Estuary.



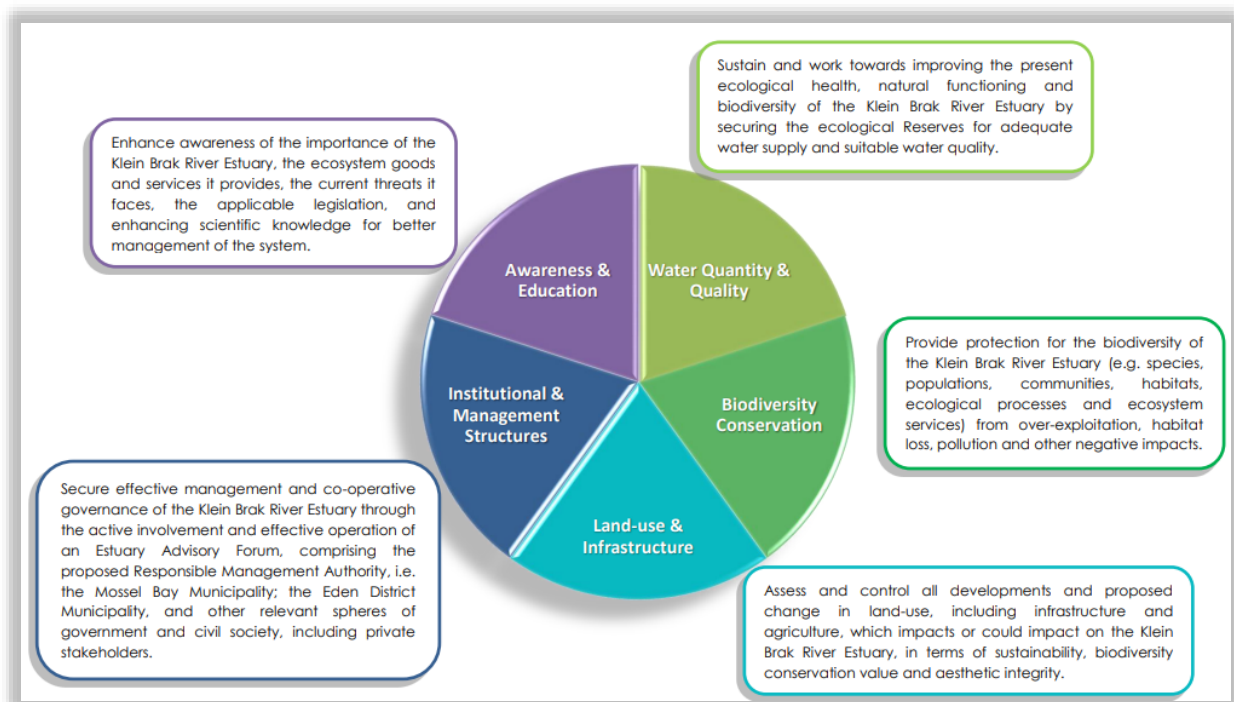


Figure 18: Key objectives for the Klein Brak River Estuarine Management Plan (Source: DEADP Western Cape Government 2021).

3.3.2 National Development Plan 2030 (2012)

The National Development Plan 2030 is a plan prepared by the National Planning Commission in consultation with the South African public which is aimed at eliminating poverty and reducing inequality by 2030. The National Development Plan aims to achieve this by drawing on the energies of its people, growing and inclusive economy, building capabilities, enhancing the capacity of the state and promoting leaderships and partnerships throughout society. While the achievement of the objectives of the National Development Plan requires progress on a broad front, three priorities stand out, namely:

- Raising employment through faster economic growth.
- Improving the quality of education, skills development and innovation.
- Building the capability of the state to play a developmental, transformative role.

The National Development Plan aims to provide a supportive environment for growth and development, while promoting a more labour-absorbing economy. The proposed project will provide additional surety and sustainability of the existing farming operations for the long-term ensuring less risk to food production, employment and income generation.

3.3.3 Sustainability Imperative

The norm implicit to our environmental law is the notion of sustainable development ("SD"). SD and sustainable use and exploitation of natural resources are at the core of the protection of the environment. SD is generally accepted to mean development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.

The evolving elements of the concept of SD *inter alia* include the right to develop; the pursuit of equity in the use and allocation of natural resources (the principle of intra-generational equity) and the need to preserve natural resources for the benefit of present and future generations. Economic development, social development and the protection of the environment are considered the pillars of SD (the triple bottom line).

“Man-land relationships require a holistic perspective, an ability to appreciate the many aspects that make up the real problems. Sustainable planning has to confront the physical, social, environmental and economic challenges and conflicting aspirations of local communities. The imperative of sustainable planning translates into notions of striking a balance between the many competing interests in the ecological, economic and social fields in a planned manner. The ‘triple bottom line’ objectives of sustainable planning and development should be understood in terms of economic efficiency (employment and economic growth), social equity (human needs) and ecological integrity (ecological capital).”

As was pointed out by the Constitutional Court, SD does not require the cessation of socio-economic development but seeks to regulate the manner in which it takes place. The idea that developmental and environmental protection must be reconciled is central to the concept of SD - it implies the accommodation, reconciliation and (in some instances) integration between economic development, social development and environmental protection. It is regarded as providing a “conceptual bridge” between the right to social and economic development, and the need to protect the environment.

Our Constitutional Court has pointed out that the requirement that environmental authorities must place people and their needs at the forefront of their concern so that environmental management can serve their developmental, cultural and social interests, can be achieved if a development is sustainable. *“The very idea of sustainability implies continuity. It reflects the concern for social and developmental equity between generations, a concern that must logically be extended to equity within each generation. This concern is reflected in the principles of inter-generational and intra-generational equity which are embodied in both section 24 of the Constitution and the principles of environmental management contained in NEMA.”*

In terms of NEMA sustainable development requires the integration of the relevant factors, the purpose of which is *to ensure that development serves present and future generations.*¹³

It is believed that pro-active planning by the Applicant to increase surety of (water) supply and reduce the risk of long-term climate change impacts on the ongoing farming operations without resulting in unacceptable environmental / social or economic costs and impacts that cannot be readily mitigated and managed, is aligned with the SD principles.

3.3.4 National Freshwater Ecosystem Priority Area Status

The National Freshwater Ecosystem Priority Areas (NFEPA) database forms part of a comprehensive approach to the sustainable and equitable development of South Africa's scarce water resources. This database guides how many rivers, wetlands and estuaries, and which ones, should remain in a natural or near-natural condition to support the water resource protection goals of the National Water Act (Act 36 of 1998). This directly applies to the National

¹³ Refer to definition of “sustainable development” in section 1 of NEMA.

Water Act, which feeds into Catchment Management Strategies, water resource classification, reserve determination, and the setting and monitoring of resource quality objectives (Nel *et al.*, 2011). The NFEPA's are intended to be conservation support tools and envisioned to guide the effective implementation of measures to achieve the National Environment Management Biodiversity Act's biodiversity goals (NEM:BA) (Act 10 of 2004), informing both the listing of threatened freshwater ecosystems and the process of bioregional planning provided for by this Act (Nel *et al.*, 2011).

The Moordkuil River is identified as an aquatic CBA which highlights its importance as a tributary to the Klein Brak Estuary. Central to this application is the fact that water to fill the proposed dam will be existing lawful use (ELU) irrigation water that will be pumped to the dam and stored in the dam during high-flow periods only. The water stored is ultimately intended as a source that can be used as supply for livestock and irrigation during periods of drought when the Moordkuil River may have reduced flow or intermittent flow.

The abstraction time is specified as only during low flow periods (August – November) and only when the measured flow in the river at the DWS gauging station (weir K1H005) is above 0.4m/s.

- Both BOCMA and DWS, as well as DEADP Coastal Management are registered I&APs and will be requested to consider the findings of the specialist reports and this DEIR for comment and input.

3.3.5 DFFE Screening Tool and Protocols

The National Web based Environmental Screening Tool is a geographically based web-enabled application which allows a proponent intending to submit an application for environmental authorisation in terms of the Environmental Impact Assessment (EIA) Regulations 2014, as amended to screen their proposed site for any environmental sensitivity.

The Screening Tool also provides site specific EIA process and review information for a specific area.

Further to this, the Screening Tool identifies related exclusions and/ or specific requirements including specialist studies applicable to the proposed site and/or development, based on the national sector classification and the environmental sensitivity of the site.

Finally, the Screening Tool allows for the generating of a Screening Report referred to in Regulation 16(1)(v) of the Environmental Impact Assessment Regulations 2014, as amended whereby a Screening Report is required to accompany any application for Environmental.

Prior to commencing with a specialist assessment, the current use of the land and the environmental sensitivity of the site under consideration identified by the national web based environmental screening tool (screening tool), where determined, must be confirmed by undertaking a site sensitivity verification.

A screening tool report was generated for the proposed activity and included with the Notice of Intent (NoI). Importantly a separate site sensitivity verification (SSV) was not undertaken for this re-application considering that the DEADP accepted the Final Scoping Report with PoS for EIR that specified the following specialist studies, as well as the level of said studies necessary to

1. Botanical Impact Assessment
2. Aquatic Biodiversity Impact Assessment

3. Integrated Heritage Impact Assessment (inclusive of palaeontological assessment)
4. Agricultural Compliance Statement
5. Terrestrial Fauna Compliance Statement
6. Civil Aviation Compliance Statement

These studies are the basis for having considered the key issues that were identified during the scoping phase and now addressed/assessed as part of this Draft Environmental Impact Report (DEIR).

3.4 GUIDELINES & PROTOCOLS

Guideline on Need and Desirability (March 2013)

Need & Desirability refers to the temporal and spatial need of an area for a specific development. This Guideline was used to define the requirements and implications of Need & Desirability.

Guideline on Alternatives (March 2013)

The preferred alternative presented in the FSR has been further adjusted and mitigated to align with the outcome and specifications of the WULA for a reduced storage volume. Furthermore the FSR presented an alternative for two separate feeder and discharge pipelines which can be negated with a single multi-purpose pipeline.

Guideline for Environmental Management Plans (June 2005)

The Draft Environmental Management & Maintenance Programme (EMMP_r) has been included with this Draft EIR to provide practical and implementable actions to ensure that the development maintains sustainability and minimise impacts through all its phases. The document is finalised as per the Guidelines and requirements of NEMA and covers both the construction as well as future maintenance work.

Guideline on generic terms of Reference for EAPs and Project Schedules (March 2013)

Followed guidance on:

- Generic Requirements for EAPS (what an EAP must manage).
- General Requirements for persons compiling a specialist report.
- Scope of Work (project description, primary responsibility, anticipated inputs etc.).

Guideline for determining the scope of specialist involvement in the EIA process, June 2005

This Guidelines was used to determine the timing, scope and quality of specialist inputs in the EIA process nothing that the FSR and PoS for EIR has already been adopted.

Circular EADP 0028/2014: One Environmental Management System

This Circular provided guidance in terms of best practice (timeframes, public participation, notifications to I&APs, availability of report for comment, comments & responses etc.). The WULA process preceded the involvement of Cape EAP_rac and has concluded. The heritage application process is being facilitated in parallel with HWC as a commenting authority.

4. SITE DESCRIPTION AND ATTRIBUTES

The following sections provide a description of the natural environment, built environment and social and economic context of the property where the activity is proposed.

Regional Topography and Climate

The area slopes steeply from mountains to the coast, with short steep watercourses, fed by mountain runoff and groundwater. The average rainfall is about 450mm of rain per year, with rainfall occurring throughout the year. The lowest rainfall (26mm) occurs in June and the highest (52mm) in March with August – November being high rainfall months. The average midday temperatures range from 18.8°C in July to 27.6°C in February. The region is the coldest during July when the mercury drops to 7°C on average during the night.

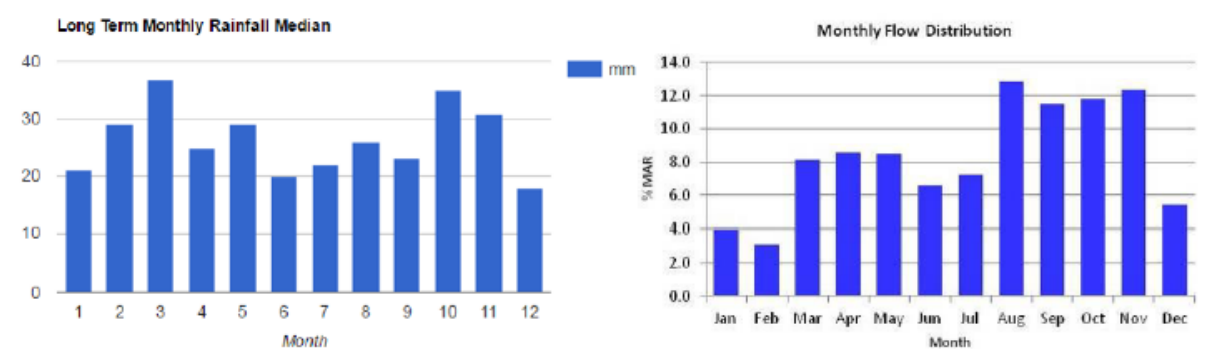


Table 3: Mean rainfall data for the area (Source: Agricultural Report, 2024).

	Annual	January	February	March	April	May	June	July	August	September	October	November	December
Mean Rainfall (mm)	562	45	39	52	52	44	38	38	49	40	56	64	45

Geology and Soil Characteristics

Underlying geology includes sedimentary rocks of the Cape Super Group, with extensive quartzitic sandstone outcrops and alluvial valley deposits. Soils are clay-rich, strongly structured, and non-reddish, with vertic, melanic, and plinthic types present.



Figure 19: National soil classes surrounding the Moordkuil River (CapeFarmMapper, 2026).

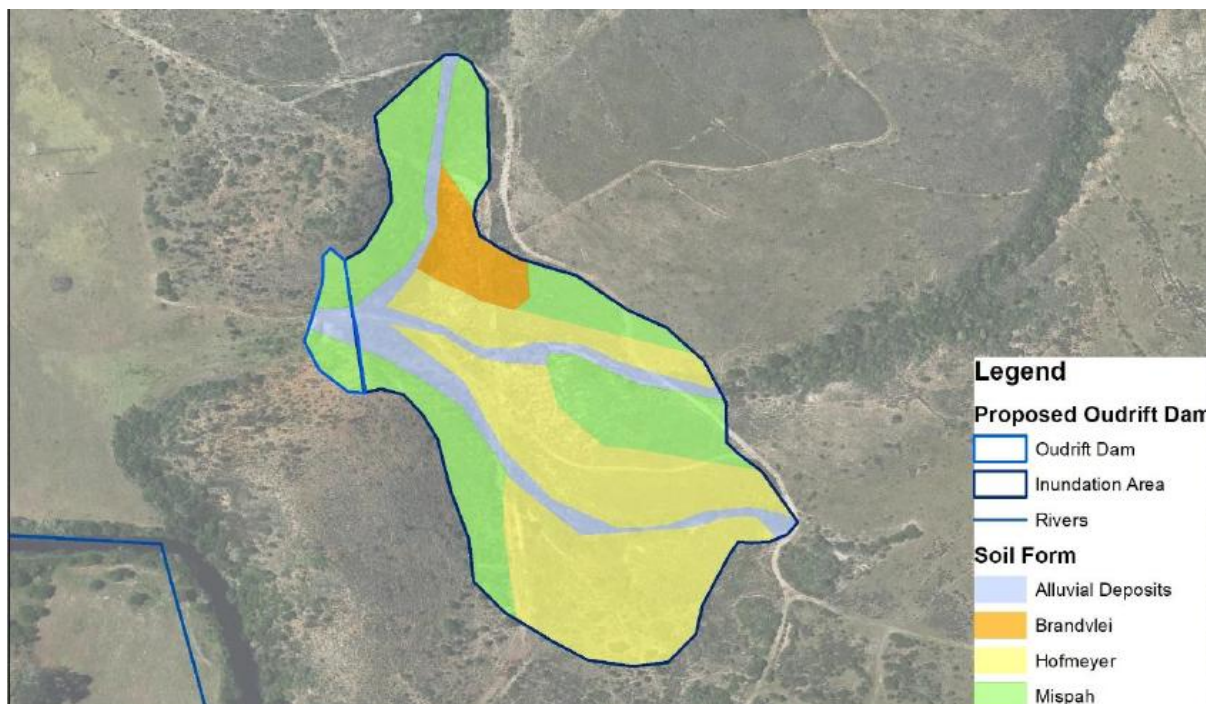


Figure 20: Soil formations based on soil augering done by the agricultural soil specialist (Source: Agricultural Report, 2024).

Vegetation and Biodiversity

Vegetation is transitional between Critically Endangered Mossel Bay Shale Renosterveld and Least Concern South Outeniqua Sandstone Fynbos, with some areas of Endangered Groot

Brak Dune Strandveld. Riparian zones contain indigenous species like *Vachellia karroo* and *Virgilia oroboides*, but are heavily invaded by alien plants such as *Acacia mearnsii* and *Eucalyptus*.

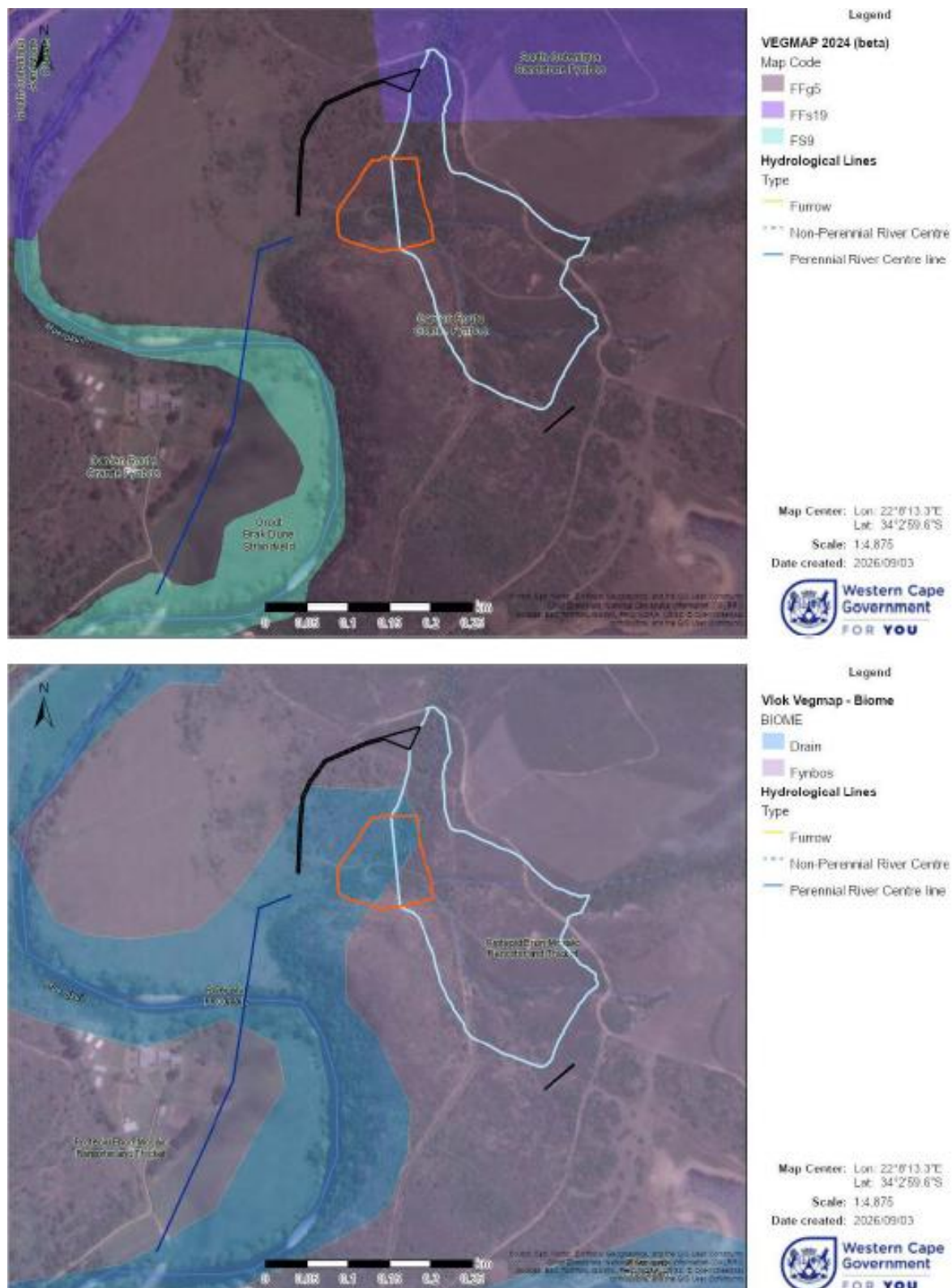


Figure 21: Vegetation type that would/could have occurred in the region under unmodified conditions based on SANBI 2018 VegMap (Source: CapeFarmMapper, 2026).

Aquatic Features and Land Use

The site is on a small tributary of the Moordkuil River, characterized by steep, narrow channels with mostly natural riparian vegetation. The river is perennial downstream but non-perennial at the site, with existing modifications from agriculture and infrastructure. Land use includes natural, forested, and agricultural areas, with nearby protected reserves and dams.

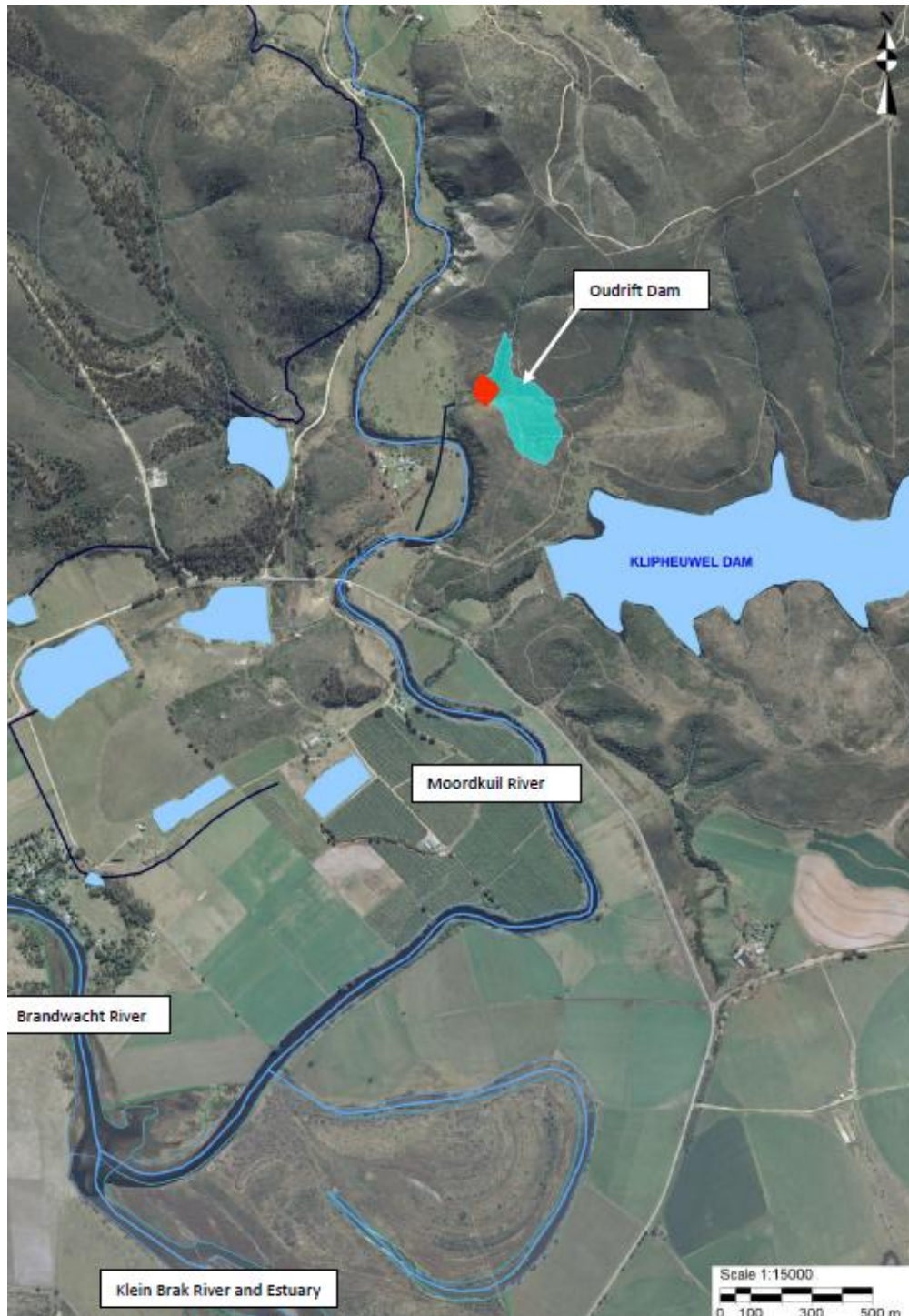
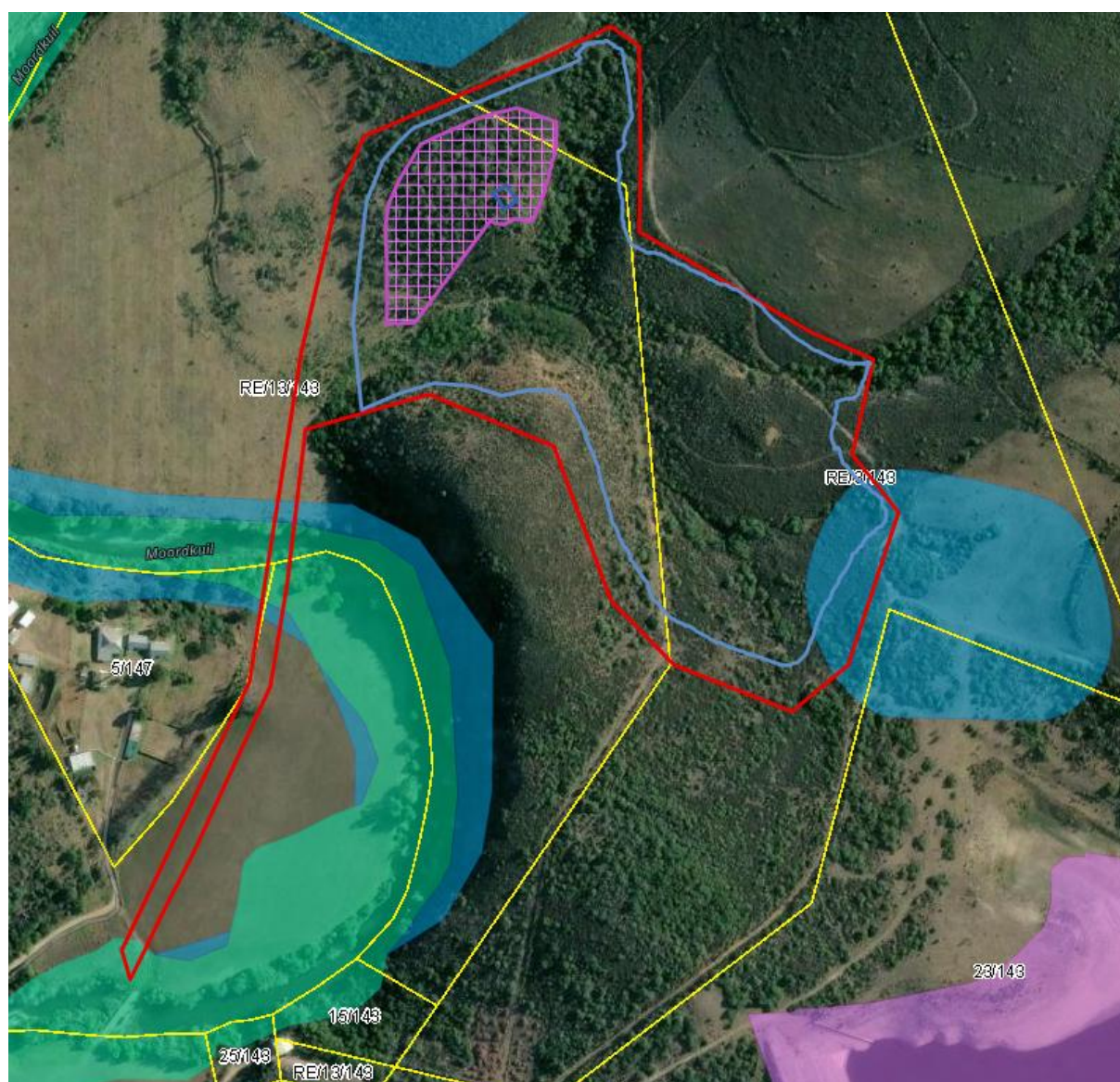


Figure 22: Orthophotograph of the lower Klein Brak river system and location of the proposed Oudrift Dam and existing Klipheuwel Dam (Source: Blue Science, 2026).



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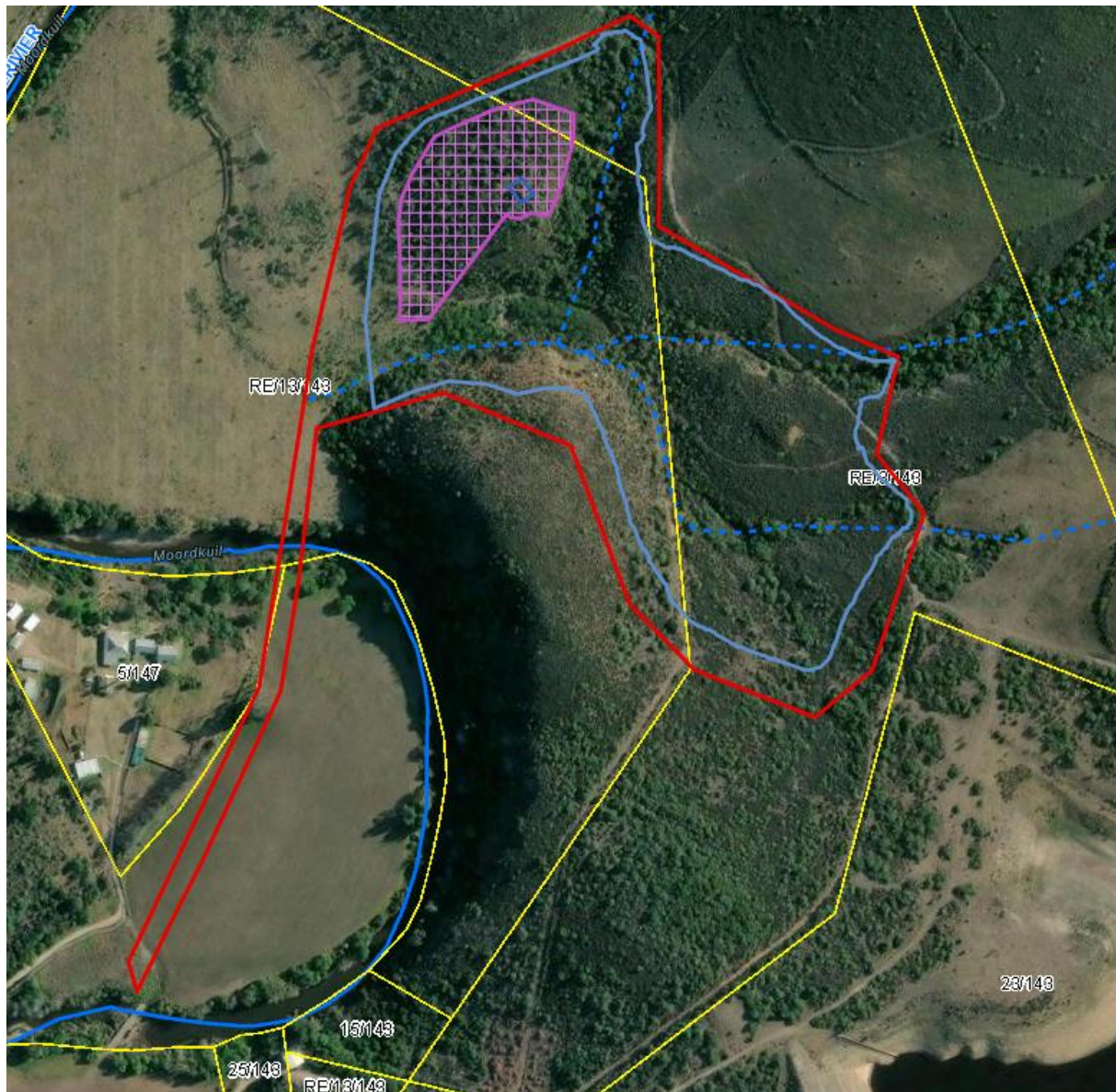


Figure 24: Mapped permanent and non-perennial watercourses (Source: CapeFarmMapper, 2026).

Biodiversity Conservation Value

The Moordkuil River is mapped as a Phase 2 NFEPA river and wetland, with high ecological importance and sensitivity. The site lies within Critical Biodiversity Areas, emphasizing the need for conservation and minimal habitat disturbance.



Figure 25: Western Cape Biodiversity Spatial Plan mapping for the area (Source: CapeFarmMapper, 2026).

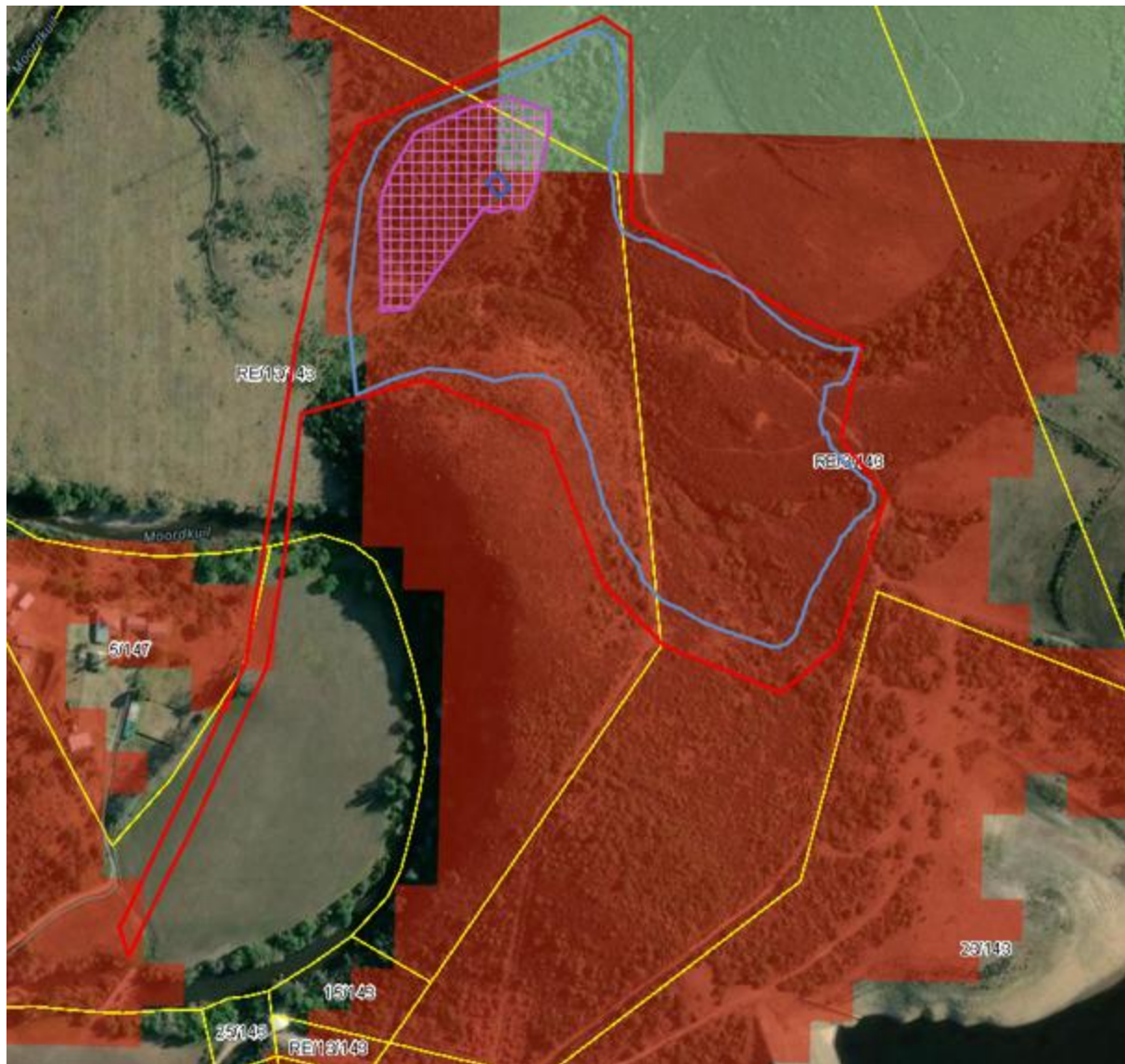


Figure 26: Dam footprint and disturbance area overlaid onto the mapped threatened ecosystems map (Source: CapeFarmMapper, 2026).

River Classification and Site Characteristics

The river is classified as a Lowland River within the Southern Coastal Belt Ecoregion, with a semi-confined, alluvial channel, and largely natural vegetation. The minor tributary is a foothill stream, largely confined, with gravel/sand substrate, and mostly natural.

According to the aquatic specialist, the area indicated to comprise a NFEPA wetland in the southern extent of the proposed dam basin (between the proposed location for the dam and the Klipheuwel Dam) did not contain any wetland characteristic.

Watercourse	Moordkuil	Minor tributary
Geomorphological Zone	Lowland River	Foothill stream
Lateral mobility	Semi-confined	Largely confined by topography
Channel dimension	Approx. 30m wide	<2m wide
Channel pattern	Single thread: low sinuosity	Single thread: low sinuosity
Channel type	Alluvial with cobbles/gravel	Gravel/sand
Channel modification	Moderately modified by surrounding agricultural land-use	Largely natural
Hydrological type	Perennial (present-day as a result of WWTW and storm water discharges to the river)	Non-perennial
Ecoregion	Southern Coastal Belt Ecoregion	Southern Coastal Belt Ecoregion
DWA catchment	K10F	K10F
Vegetation type	Groot Brak Dune Strandveld	Brandwag Fynbos-Renoster-Thicket
Rainfall region	Rainfall throughout the year but mostly in Winter	Rainfall throughout the year but mostly in Winter

The Moordkuil River at the site of the existing abstraction point from the river and the proposed feeder/discharge pipeline consists of a single channel with a narrow band of riparian vegetation, which comprises a mix of alien and indigenous vegetation.



Figure 27: Existing abstraction point for the farm's irrigation supply (Source: BlueScience, 2026).

Habitat Integrity and Impact Levels

Habitat integrity assessments show the Moordkuil River in a C category (moderately modified) with an instream habitat score of 73 and riparian zone score of 61, indicating some modifications but largely natural conditions. The tributary scores higher, indicating better condition, with habitat classes B and C/D respectively. Major impacts include water abstraction, vegetation removal, and flow modification, but overall, the river system retains significant ecological value.

Table 4: Habitat integrity assessment by BlueScience, 2026.

Criteria	Moordkuil	Minor tributary	Criteria	Moordkuil	Minor tributary
Water Abstraction	8	0	Vegetation Removal	11	6
Flow Modification	6	5	Exotic Vegetation	10	6
Bed Modification	8	4	Bank Erosion	7	7
Channel Modification	7	4	Channel Modification	8	5
Water Quality	7	5	Water Abstraction	7	0
Inundation	9	0	Inundation	8	0
Exotic Macrophytes	6	3	Flow Modification	6	5
Exotic Fauna	4	3	Water Quality	8	5
Rubbish Dumping	4	2			
Instream Habitat Integrity Score	73	88	Riparian Zone Habitat Integrity Score	61	83
Integrity Class	C	B	Integrity Class	C/D	B

Table 5: DWS integrity categories (Source: BlueScience, 2026).

Category	Description	Score (% of Total)
A	Unmodified, natural.	90-100
B	Largely natural with few modifications. A small change in natural habitats and biota may have taken place but the ecosystem functions are essentially unchanged.	80-90
C	Moderately modified. A loss and change of natural habitat and biota have occurred but the basic ecosystem functions are still predominantly unchanged.	60-79
D	Largely modified. Large loss of natural habitat, biota and basic ecosystem function occurred.	40-59
E	The loss of natural habitat, biota and basic ecosystem functions is extensive.	20-39
F	Modifications have reached a critical level with an almost complete loss of natural habitat and biota. Basic ecosystem functions may have been destroyed and changes are irreversible.	0

Ecological Importance and Sensitivity of Watercourses

The Moordkuil River and its tributary are ecologically significant, with varying degrees of importance and sensitivity based on biotic and habitat determinants.

- Moordkuil River is classified as high importance and sensitivity due to populations of indigenous species such as *Galaxias zebratus*, *Sandelia capensis*, and *Pseudobarbus afer*.
- The smaller tributary is of moderate to low ecological importance and sensitivity, with a largely natural condition in its upper reaches.
- Biotic determinants like rare/endangered species, unique biota, and habitat diversity scored 3, 3, and 2.5 respectively for Moordkuil, indicating high importance.
- The minor tributary scored 1, 1.5, and 1, indicating moderate to low importance.
- The ecological importance categories are high for Moordkuil (score >2-4) and moderate/low for the tributary (score ≤2).
- The river supports macroinvertebrate communities and critical biodiversity areas, emphasizing its conservation value.

Ecological Category and Water Management Recommendations

The water bodies are classified based on their ecological condition, with management strategies aimed at maintaining or improving their status.

- The Moordkuil River upstream of the site is classified as D (Largely modified), while the Klein Brak Estuary downstream is C (Moderately modified).
- The tributary should be managed to at least a moderately modified ecological condition.
- The Klein Brak Estuary requires 77% of mean annual runoff (MAR) for environmental flow requirements (EWR).
- The catchment area for K10F is 239 km² with a MAR of 21.78 million m³; Oudrift Dam catchment is 0.5 km² with a MAR of 0.008 million m³.
- The small catchment and low runoff mean no EWR is required for Oudrift Dam.
- The dam should include a bypass pipe or channel to allow runoff to bypass, ensuring minimal flow disruption.
- The water abstraction practice should prioritize high flow periods (August-November) when river flow exceeds 0.4 m³/s, to align with estuarine RQOs

According to the draft water resource classes and resource quality objectives recommended for the Breede Gouritz Water Management Area (Government Gazette No 42053 of 2018), the recommended or target ecological category for the Moordkuil River in Quaternary Catchment K10E, upstream of the site, is D (Largely modified). The Klein Brak Estuary downstream of the site, in Quaternary Catchment K10F is C (Moderately modified). It is recommended that the tributary should be at least managed in a moderately modified ecological condition.

According to BlueScience the resource quality objectives have only been set for the Klein Brak Estuary which requires 77% of the mean annual runoff for environmental flow requirements (EWR). The monthly flow distribution of the EWR in the RQOs for the estuary is as follows (expressed as a percentage of the natural Mean Monthly Runoff (MMR) and Mean Annual Runoff (MAR) ranging between 70.2% (February lowest level) and 79.5% (August highest level).

Resource quality objectives have only been set for the Klein Brak Estuary which requires 77% of the mean annual runoff for environmental flow requirements (EWR). The monthly flow distribution of the EWR in the RQOs for the estuary (expressed as a percentage of the natural Mean Monthly Runoff (MMR) and Mean Annual Runoff (MAR) indicates that there is a particular need to increase lower flows to the estuary in the size class of up to 0.4m³/s.

According to flow data obtained from DWS for the Moordkuil River below the municipal off-take point, extending over the period from 2019-2024, the data confirms that there are regular occurrences of high-flow events occurring in the river, but the low/base flow in the river is often below the indicated normal range.

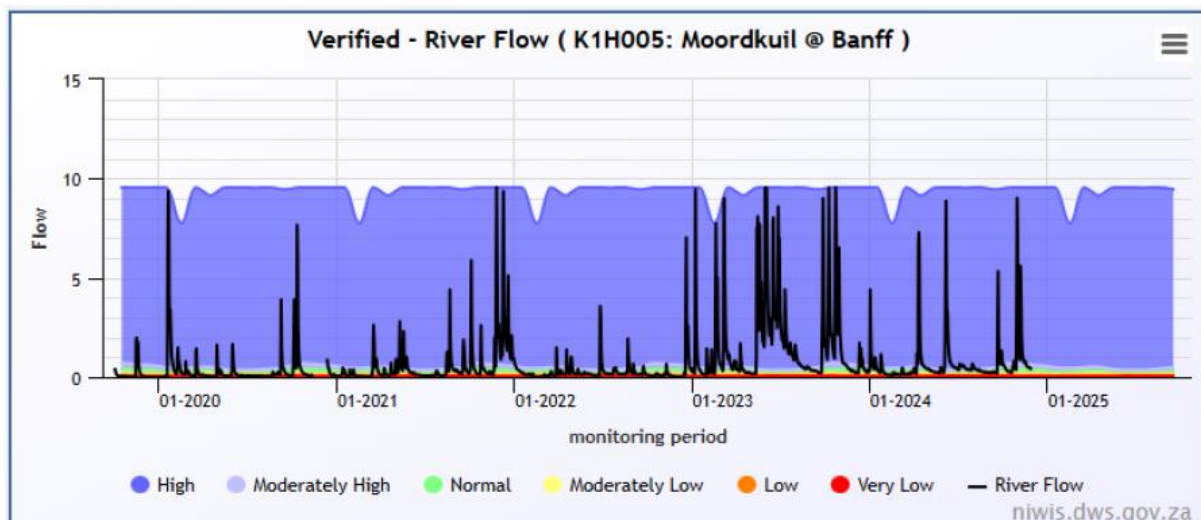


Figure 28: Measured and verified river flow in the lower Moordkuil River at Banff for the period October 2019-November 2024.

BlueScience having considered the data and ELU for filling the proposed dam, stipulates that the water allocation to fill the dam may only be taken from the Moordkuil River when the measured flow in the river at the DWS gauging weir (K1H005) is above 0.4m³/second. This abstraction practice will be in line with the RQOs set for the Klein Brak River Estuary.

The dam design includes a bypass outlet pipe to allow runoff from the catchment and/or overflow from the neighbouring Klipheuwel Dam, to be released past the dam to maintain the lower reaches of the watercourse within the Moordkuil River valley floor.

4.1.1 Specialist Assessments

It is important to note that specialist involvement is needed when the environment could be **significantly affected** by the proposed activity, where that environment is **valued by, or important to society** and/or where there is **insufficient information** to determine whether impacts would be significant.

The scope of specialists' contribution (if required) depends on the **nature of the project**, the environmental context [of the site] and the amount of available information and does not always entail detailed studies or assessment of impacts (*Source: Guideline for the review of specialist input in EIA processes, 2005*).

Based on the SSVr in conjunction with the Specialist SSVr's presented in the Scoping Phase of this Environmental Process, the following specialist assessments have been undertaken as part of the Impact Phase of the environmental process:

1. Aquatic Biodiversity Impact Assessment.
2. Botanical Impact Assessment.
3. Animal Compliance Statement
4. Faunal Compliance Statement
5. Heritage Impact Assessment (including Cultural Heritage, Archaeology and Palaeontology)
6. Agricultural Compliance Statement.

5. ASSESSMENT OF IMPACTS

The Plan of Study for the environmental Impact Assessment (PosEIA) was approved by the DEADP along with the Final Scoping Report. In compliance with the approved PosEIA, the several aspects have been assessed in this EIR.

The impacts will firstly be discussed per specialist discipline and then summarised in the impact summary and statement in the following sections.

5.1 ASSESSMENT METHODOLOGY

All possible impacts need to be assessed – the **direct, in-direct as well as cumulative impacts**. The following general assessment methodology has been applied:

- **Nature of the impact:** impacts associated with the proposed PV have been described in terms of whether they are negative or positive and to what extent.
- **Duration of impacts:** Impacts were assessed in terms of their anticipated duration:
 - Short term (e.g., during the construction phase – 0 – 2 years)
 - Medium term (e.g., during part or all of the operational phase – 2 - 20 years)
 - Long term (e.g., > 20 years)
 - Permanent (e.g., where the impact is for all intents and purposes irreversible)
 - Discontinuous or intermittent (e.g., where the impact may only occur during specific climatic conditions or during a particular season of the year)
- **Intensity or magnitude:** The size of the impact (if positive) or its severity (if negative):
 - Low, where the receiving environment (biophysical, social, economic, cultural etc) is negligibly affected or where the impact is so low that the remedial action is not required;
 - Medium, where the receiving environment (biophysical, social, economic, cultural etc) is altered, but not severely affected, and the impact can be remedied successfully; and
 - High, where the receiving environment (biophysical, social, economic, cultural etc) would be substantially (i.e., to a very large degree) affected. If a negative impact, could lead to irreplaceable loss of a resource and/or unacceptable consequences for human wellbeing.
- **Probability:** Should describe the likelihood of the impact actually occurring indicated as:
 - Improbable, where the possibility of the impact is very low either because of design or historic experience;
 - Probable, where there is a distinct possibility that the impact will occur;
 - Highly probable, where it is most likely that the impact will occur; or
 - Definite, where the impact will occur regardless of any prevention measures.

- **Significance:** The significance of impacts can be determined through a synthesis of the assessment criteria. Significance can be described as:
 - Low, where it would have negligible effect on the receiving environment (biophysical, social, economic, cultural etc), and on the decision;
 - Medium, where it would have a moderate effect on the receiving environment (biophysical, social, economic, cultural etc), and should influence the decision;
 - High, where it would have, or there would be a high risk of, a large effect on the receiving environment (biophysical, social, economic, cultural etc). These impacts should have a major influence on the decision;
 - Very high, where it would have, or there would be a high risk of, an irreversible negative impact on the receiving environment (biophysical, social, economic, cultural etc) and irreplaceable loss of natural capital/resources or a major positive effect on human well-being. Impacts of very high significance should be a central factor in decision-making.
 - Provision should be made for with and without mitigation scenarios.
- **Reversibility:**
 - Reversible, the impact can be managed to a low to high degree and is not permanent; or
 - Irreversible, the impact can only be managed to a limited degree and is permanent.
- **Confidence:** The level of confidence in predicting the impact can be described as:
 - Low, where there is little confidence in the prediction, due to inherent uncertainty about the likely response of the receiving ecosystem, or inadequate information;
 - Medium, where there is a moderate level of confidence in the prediction, or
 - High, where the impact can be predicted with a high level of confidence
- **Consequence:** What will happen if the impact occurs
 - Insignificant, where the potential consequence of an identified impact will not cause detrimental impact to the receiving environment;
 - Significant, where the potential consequence of an identified impact will cause detrimental impact to the receiving environment.
 - Provision must be made for with and without mitigation scenarios.

The impacts have been assessed in terms of the following aspects:

- **Status of the impact**

The specialist should determine whether the impacts are negative, positive or neutral (“cost – benefit” analysis). The impacts are to be assessed in terms of their effect on the project and

the environment. For example, an impact that is positive for the proposed development may be negative for the environment. It is important that this distinction is made in the analysis.

- **Cumulative impact**

Consideration must be given to the extent of any accumulative impact that may occur due to the proposed development. Such impacts must be evaluated with an assessment of similar developments planned and already in the environment. Such impacts will be either positive or negative, and will be graded as being of negligible, low, medium or high impact.

Care must be taken to ensure that where cumulative impacts can occur that these impacts are considered and categorised as **additive** (incremental or accumulative); **interactive**, **sequential** or **synergistic**.

Based on a synthesis of the information contained in the above-described procedure, the specialists assessed the potential impacts in terms of the following significance criteria:

- **No significance:** The impacts do not influence the proposed development and/or environment in any way.
- **Low significance:** The impacts will have a minor influence on the proposed development and/or environment. These impacts require some attention to modification of the project design where possible, or alternative mitigation.
- **Moderate significance:** The impacts will have a moderate influence on the proposed development and/or environment. The impact can be ameliorated by a modification in the project design or implementation of effective mitigation measures.
- **High significance:** The impacts will have a major influence on the proposed development and/or environment.

Where relevant, all specialists have assessed the mitigated preferred layout(Layout Alternative 3) and the No-Go Alternative using the abovementioned general methodology as a basis. Please note that each specialist utilises rating and weighting criteria specific to their discipline in order to determine the significance of specific impacts.

For ease of reference, the significance and status of impacts reflected in all the assessment tables in the following sections are also visually reflected using the following colour scheme¹⁴.

All positive impacts (regardless of their significance)	
Very low or low negative impacts	
Medium negative impacts	
Medium – High negative impacts	
High and Very High negative impacts	

5.2 BOTANICAL & BIODIVERSITY IMPACTS

Botanical surveys of the site were undertaken on 21 and 22 March 2020, and 27 November 2025 by the independent botanist. A qualitative assessment of the type and condition of affected vegetation on site, disturbances and presence of alien species, SCC and protected tree species was carried out.

The study fulfils the requirements of the terrestrial biodiversity and plant species protocols.

¹⁴ Where specialist ratings fall across 2 of the groups, the worst case is reflected in the quick reference.

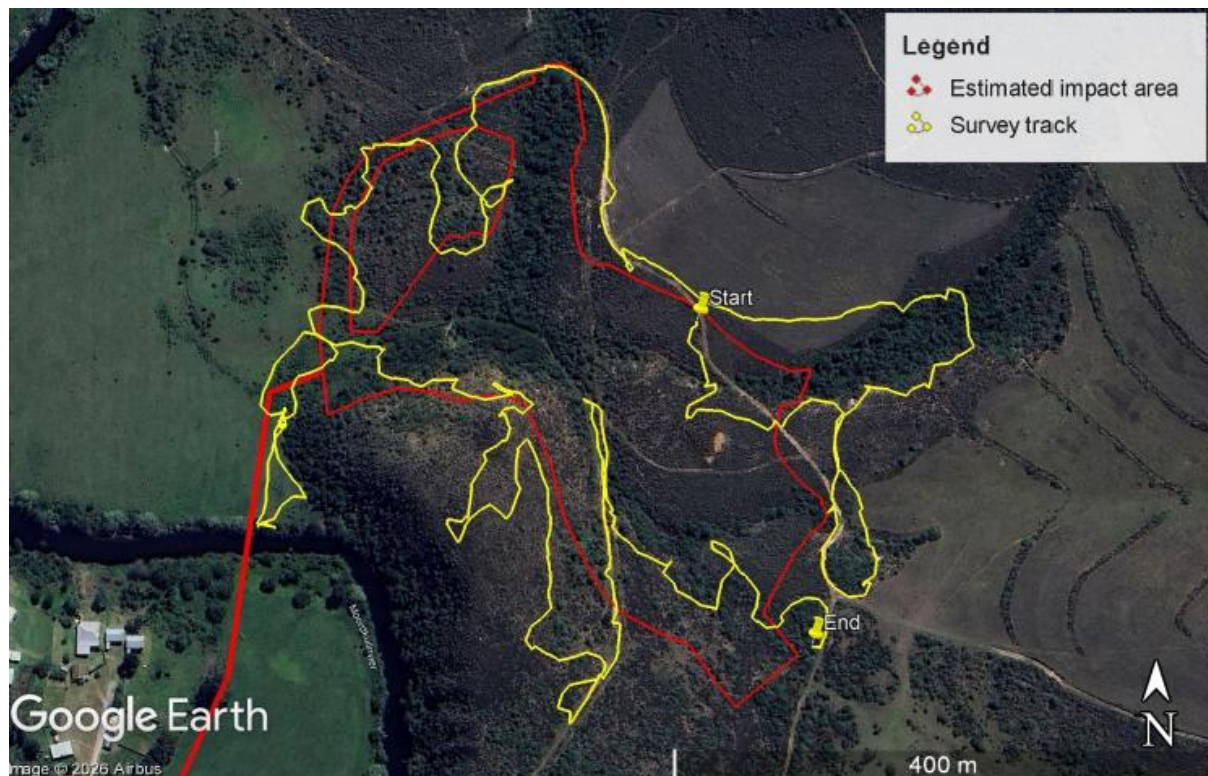


Figure 29: Satellite photo indicating the survey tracks by the Botanist overlaid onto the total development area of the proposed Oudrift Dam & associated infrastructure (Source: M. Berry, 2026).

According to the botanical specialist, the area earmarked for the dam has been disturbed by past farming activities. Pastures and regrowth (secondary fynbos) were recorded on the site, notably on the southwest-facing slope on northern side. Historical Google Earth photographs also show significant alien infestation in the lower parts of the site. Most of the latter was subsequently cleared by the farmer. Despite the above past disturbances, significant tracts of renosterveld (albeit degraded) and fynbos (mostly regrowth) remain. The regrowth areas also show different stages of succession with the return of fynbos and renosterveld species in the location of the dam basin (footprint).

The proposed two-way pipeline runs mainly through farmland (pastures), with a short section crossing the Moordkuil River. The embankment of the latter is covered by *Searsia rehmanniana* var. *glabrata*, *Grewia occidentalis*, *Leonotis leonurus*, *Rubus pinnatus*, *Pteridium aquilinum*, *Arundo donax* (highly invasive reed, Giant Reed) and *Cyperus textilis*. The passage through the river is of little botanical interest.



Figure 30: Southern koppie covered with renosterveld on the south-western side of the dam (Source: M.Berry, 2026).



Figure 31: Central location of the dam (basin) with fynbos regrowth evident (Source: M. Berry, 2026).



Figure 32: Thicket in the fire-protected kloof in the far northern portion of the dam footprint (Source: M.Berry, 2026).



Figure 33: Brushcut pastures on the north-eastern side of the dam site (Source: M. Berry, 2026).



Figure 34: Degraded location between the northern and southern koppies and the position of the proposed dam wall (Source: M. Berry, 2026).

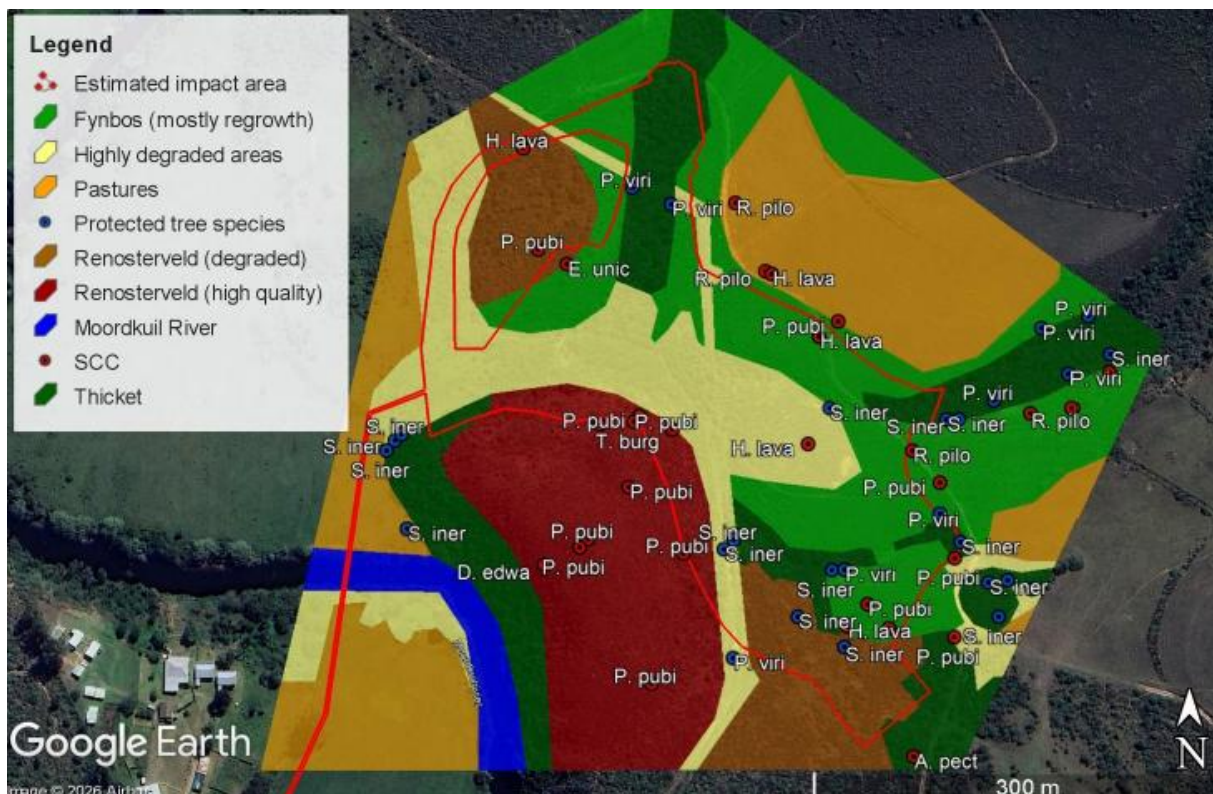


Figure 35: Botanical attributes of the location of the proposed activity (Source: M. Berry, 2026).

The following indigenous tree and shrub species were recorded by the Botanist on and around the proposed dam site, namely *Erica peltata*, *E. unicolor* ssp. *mutica*, *Dicerothamnus rhinocerotis*, *Metalasia acuta*, *Tarchonanthus littoralis*, *Athanasia trifurcata*, *A. pectinata*, *Oedera squarrosa*, *O. imbricata*, *O. pungens*, *O. genistifolia*, *Senecio rosmarinifolius*, *Helichrysum teretifolium*, *H. odoratissimum*, *Eriocephalus africanus*, *Nidorella ivifolia*, *Chrysocoma ciliata*, *Berkheya carlinoides*, *B. heterophylla*, *Osteospermum moniliferum*, *Pseudognaphalium undulatum*, *Vachellia karroo*, *Schotia afra*, *Aspalathus acuminata*, *A. asparagoides*, *Indigofera nigromontana*, *I. heterophylla*, *Rhynchosia caribaea*, *Searsia lucida*, *S. pallens*, *S. pterota*, *S. rehmanniana* var. *glabrata*, *Pterocelastrus tricuspidatus*, *Gymnosporia buxifolia*, *G. capitata*, *Mystroxydon aethiopicum*, *Lauridia tetragona*, *Buddleja saligna*, *Scolopia zeyheri*, *Pittosporum viridiflorum*, *Sideroxylon inerme*, *Azima tetracantha*, *Acrodon bellidiflorus*, *Ruschia tenella*, *Delosperma neethlingiae*, *D. litorale*, *Drosanthemum parvifolium*, *D. edwardsiae*, *Carpobrotus deliciosus*, *Trichodiadema burgeri*, *Anacampseros telephiastrum*, *Euphorbia mauritanica*, *Aloe ferox*, *Cotyledon orbiculata*, *Adromischus maculatus*, *Crassula mollis*, *C. perforata*, *C. ericoides*, *C. cultrata*, *C. capitella* ssp. *thyrsiflora*, *C. subulata*, *C. muscosa*, *C. biplanata*, *Grewia occidentalis*, *Abutilon sonneratianum*, *Anisodonteia scabrosa*, *Hermannia lavandulifolia*, *H. holosericea*, *H. flammea*, *H. salviifolia*, *Hibiscus aethiopicus*, *Colpoos compressum*, *Polygala myrtifolia*, *P. pubiflora*, *Dodonaea viscosa*, *Olea europaea*, *Euclea undulata*, *E. crispa*, *Diospyros dichrophylla*, *Leonotis ocymifolia*, *Lobostemon echinoides*, *Pelargonium candicans*, *P. capitatum*, *Phyllica purpurea*, *Myrsine africana*, *Anthospermum aethiopicum*, *Gnidia squarrosa*, *Asparagus suaveolens*, *A. striatus*, *A. aethiopicus*, *A. mariae*, *Carissa bispinosa*, *Cussonia thyrsiflora*, *Agathosma ovata*, *Anginon swellendamense*, *Lycium tenue*, *Solanum linnaeanum*, *Rhoicissus digitata*, *Lobelia tomentosa*, *Monopsis unidentata*, *Exomis microphylla*, *Scabiosa columbaria*, *Selago cf nigrescens*, *Ruellia pilosa* and *Barleria pungens*.

The majority of the succulents were recorded on the koppie in the western part of the site. Hemicryptophytes and geophytes recorded include *Melinis nerviglumis*, *Eragrostis gummiiflua*, *E. curvula*, *Digitaria cf eriantha*, *Cyperus textilis*, *Lanaria lanata*, *Commelina africana*, *Cheilanthes contracta*, *Hypoxis* sp., *Eriospermum pubescens*, *Oxalis ciliaris*, *Agapanthus praecox*, *Boophone disticha*, *Bonatea speciosa*, *Moraea polyanthos*, *Babiana cf fourcadei* and *Bobartia robusta*. Additional fynbos species recorded on the fynbos slope above the site, include *Achyranthemum paniculatum*, *Aspalathus hirta*, *Leucadendron salignum* and *restios*.

Invasive aliens were recorded throughout the site especially in the lower, more disturbed parts, include *Acacia mearnsii* (black wattle, category 2), *A. cyclops* (rooikrans, 1b), *Eucalyptus* sp (gums), *Hakea sericea* (silky hakea, 1b), *Datura stramonium* (olieboom, 1b), *Ricinus communis* (caster-oil plant, 2), *Cestrum laevigatum* (inkberry, 1b), *Coleus barbatus* (woolly plectranthus, 1b), *Opuntia ficus-indica* (sweet prickly pear, 1b), *O. monacantha* (drooping prickly pear, 1b) and *Atriplex semibaccata* (Australian salt bush).

The younger old lands are covered by grasses and weeds. Nearly all are Category 1b and 2 invaders. In terms of the National Environmental Management: Biodiversity Act (NEMBA) (Act 10 of 2004) Alien and Invasive Species List (2016), category 1b invasive species require compulsory control as part of an invasive species control programme. Also, the harbouring of category 2 species, such as black wattle and caster-oil plant, is prohibited without a permit. Black wattle, which is indicative of past disturbances, is considered a serious threat to the environment and is very difficult to control. Woody aliens also present a fire risk.

Species of Conservation Concern (SCC) & protected tree species

Seven (7) SCC were recorded on and around the site, namely *Erica unicolor* ssp. *mutica* (EN), *Athanasia pectinata* (VU), *Drosanthemum edwardsiae* (DDD), *Trichodiadema burgeri* (VU), *Hermannia lavandulifolia* (VU), *Polygala pubiflora* (VU) and *Ruellia pilosa* (VU). *Polygala pubiflora* occurs sporadically throughout the site, while *Erica unicolor* ssp. *mutica*, *Hermannia lavandulifolia* and *Ruellia pilosa* are mainly found in the fynbos areas. *Athanasia pectinata*, *Drosanthemum edwardsiae* and *Trichodiadema burgeri* are restricted to the renosterveld and thicket areas. Apart from *Athanasia pectinata* and *Drosanthemum edwardsiae*, all of them are still frequently encountered in suitable habitats in the Mossel Bay area. All the other recorded species are widespread and mostly common.

The site occurs in the Type habitat for *Tulista kingiana* (Endangered), *Haworthia pygmaea*, *H. parksiana* (Critically Endangered) and *H. retusa*. The site has, however, previously been surveyed by botanists associated with CREW and no *Tulista* or *Haworthia* species were found (Mr John Robertson pers. comm). Other SCC recorded in similar habitats in the area (some close to the site), include *Brunsvigia josephinae*, *Gladiolus vaginatus*, *Freesia fergusoniae*, *Holothrix pilosa* and *Watsonia aletroides*.

Two protected tree species (in terms of the National Forests Act 84 of 1998) were recorded (mainly inside the thicket areas), namely *Sideroxylon inerme* (milkwood) and *Pittosporum viridiflorum* (kasuur). These tree species are common in the thicket and forest areas of the Garden Route, but their removal requires a permit from the Department of Forestry.

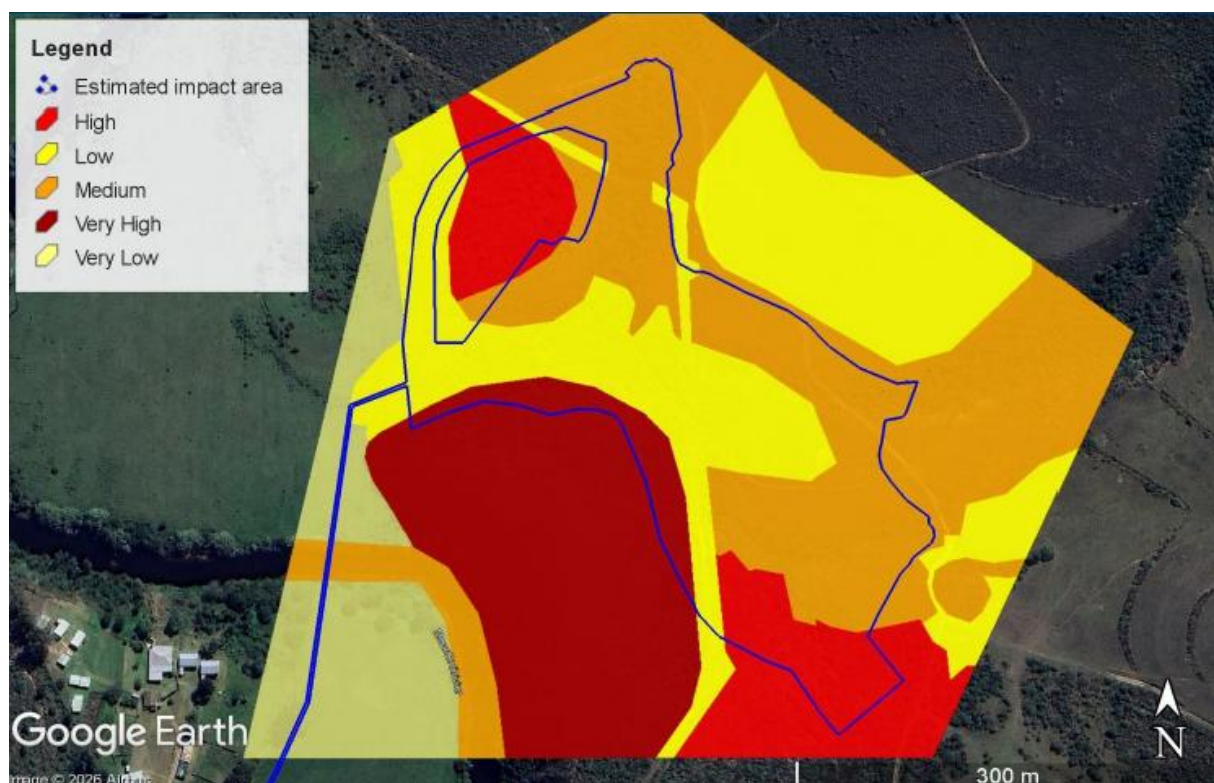


Figure 36: Site ecological importance (SEI) map for the area where the dam and associated infrastructure is proposed (Source: M.Berry, 2026).

Table 6: SEI analysis and description of different classifications (Source: M.Berry, 2026).

	CI	FI	BI	RR	SEI
High quality renosterveld & embedded thicket	Very High	High	Very High	Medium	Very High
Degraded renosterveld & embedded thicket	Very High	Medium	High	Medium	High
Fynbos & embedded thicket	High	Medium	Medium	Medium	Medium
Moordkuil River	High	High	High	High	Medium
Highly degraded areas & brush-cut pastures north & east of dam site	Low	Medium	Low	Medium	Low
Pastures	Low	Low	Low	High	Very Low

The independent botanist confirms that the preferred Alternative will result in the following losses in terrestrial biodiversity:

- Good quality renosterveld = 0.47 ha
- Degraded renosterveld = 0.76 ha
- Fynbos (mostly regrowth) = 2.31 ha
- Thicket = 1.08 ha

Due to South Outeniqua Sandstone Fynbos still being well represented in the larger area and that regrowth will mostly be affected, the impact on fynbos, which is most affected of the different habitats, is of a low to moderate concern. The impact on Mossel Bay Shale Renosterveld, on the other hand, is of a greater concern. Although not in a pristine state and degraded by past farming activities, the renosterveld it still conservation worthy.

Compared with the scoping preferred alternative (since eliminated), it would have resulted in an additional 0.5ha of good quality and degraded renosterveld, extra 1ha fynbos and 0.3ha in thicket.

The Applicant considered inclusion of a new access road along the southern koppie to cross the dam wall, however considering that this koppie has very high SEI, this component has been excluded from the application altogether.

The botanist notes that the proposed V-notch gauging structure, which is part of the preferred alternative and a condition of the WULA, can be a berm or built wall. It is debatable which will result in the greatest impact, but the berm can potentially be planted with plant material sourced from the site. The resulting impact (of loss of vegetation) can then be reversed on condition that soil for berm can be sourced from the dam basin (topsoil) and successfully established with indigenous species.

The specialist observed both historical and ongoing invasive alien clearing on RE/Prt 3 Farm 143 and notes that the ability to control invasive alien species (which is an expensive exercise) and will be required as a condition of approval, can only be funded by agricultural activities and these require water storage for periods of drought.

The site is located inside a CBA corridor network that runs along the foothills of the Mossel Bay interior and connects with Outeniquas (Doringrivier Wilderness Area & Ruitersbos Nature Reserve) to the north. Apart from providing a backbone to the local biodiversity network, the

corridor(s) serves as an important passage along which fauna can migrate between the mountain and the foothills and along the foothills itself. With the proposed dam located close to the southern edge of the corridor one can expect a moderate impact on its functionality albeit that a dam does create habitat for and supports other corridor functions. The only practical mitigation measures is to rehabilitate the areas disturbed during the construction phase, and to encourage the establish of indigenous vegetation in previously disturbed areas (e.g. fallow land), and to continue with active invasive alien clearing on the property.

Potential Impacts on Terrestrial Biodiversity

The construction and operation of the proposed dam will cause localized loss of various vegetation types, with impacts varying by layout and infrastructure choices.

- The preferred 2026 layout will result in the loss of 0.47 ha of good quality renosterveld, 0.76 ha of degraded renosterveld, 2.31 ha of fynbos, and 1.08 ha of thicket.
- The dam footprint increased in the 2020 layout, adding 0.5 ha in renosterveld, 1.0 ha in fynbos, and 0.3 ha in thicket compared to the 2024/2026 layouts, however it is noted that this alternative has been eliminated.
- Earthworks involve dam wall construction, spillway, pipeline, and gauging structure, requiring careful disturbance management.
- The impact on the biodiversity network within a CBA corridor is moderate, with mitigation needed through rehabilitation and invasive species control.
- The impact significance before mitigation is medium-high during construction and medium-low during operation, reducing to low after mitigation.
- The site is within a biodiversity corridor connecting protected areas, with potential moderate impact on its functionality.

Impact on Plant Species and Protected Trees

The project threatens several threatened and protected plant species, but most are well represented elsewhere, with impacts being manageable through mitigation.

- Seven SCC species are present, including *Erica unicolor* ssp. *mutica* (EN), *Athanasia pectinata* (VU), *Drosanthemum edwardsiae* (DDD), *Trichodiadema burgeri* (VU), *Hermannia lavandulifolia* (VU), *Polygala pubiflora* (VU), and *Ruellia pilosa* (VU).
- Four species will be directly impacted; *D. edwardsiae* is habitat-specific and less at risk.
- The project impacts at least four SCC, seven milkwoods, and four kasuur's during construction.
- Two protected trees, *Sideroxylon inerme* and *Pittosporum viridiflorum*, are mainly in thicket patches and are frequently encountered in the area.
- Impact significance on flora and protected species is medium-high before mitigation, reducing to low after mitigation.
- Mitigation includes rescue and replanting of bulbs and succulents, using indigenous species, and obtaining permits for relocation.
- The preferred layout (2026) results in the lowest impact on SCC and protected trees compared to other options.

Cumulative and No-Go Impact Assessment

The overall cumulative impact on biodiversity is small due to the degraded state of much of the site and the large remaining areas of threatened vegetation.

- The Mossel Bay Shale Renosterveld covers 32,927 ha, and South Outeniqua Sandstone Fynbos covers 105,272 ha, both largely intact.
- If the dam is not built, the current degraded state will persist, with alien infestation ongoing, but no further habitat loss.
- Continued alien clearing and no additional rehabilitation funding will be required if the project is not implemented.
- The no-go alternative maintains the status quo, with no additional impacts but also no incentives for habitat restoration.

Phase	Construction Phase	Operational Phase
Nature of impact(s)	<u>2026 layout (preferred):</u> - Clearing of 0.47 ha of good quality renosterveld. - Clearing of 0.76 ha of degraded renosterveld. - Clearing of 2.31 ha of fynbos. - Clearing of 1.08 ha of thicket. <u>2026 layout with new farm road:</u> - An additional loss of 0.10 ha in good quality renosterveld and 600 m² in fynbos. <u>2020 layout:</u> - Clearing of 0.7 ha of good quality renosterveld. - Clearing of 1.0 ha of degraded renosterveld. - Clearing of 3.2 ha of fynbos. - Clearing of 1.3 ha of thicket. <u>In addition to the above:</u> - Impact on the functionality of biodiversity network. - Increased opportunity for alien infestation.	- Increased alien infestation. - Erosion due to poor rehabilitation efforts and increased runoff.
Extent of impact	Proposed dam site & immediate surroundings	Proposed dam site & immediate surroundings
Duration	Permanent	Long term
Intensity	Medium	Low
Probability of occurrence	High	Medium
Degree of reversibility	Low-medium	High
Irreplaceability of resource	Medium	Medium-low
Mitigatory potential	Medium	High
Significance before mitigation	Medium-high	Medium-low
Significance after mitigation	Medium-low	Low

Recommended Mitigation Measures for Construction

To minimize impacts during construction, specific mitigation strategies are advised.

- Demarcate construction areas (9.3ha total development area); declare surrounding vegetation as 'no-go' zones outside the total development area noting that the 1.4ha around the historic house structure must form part of the No-Go area.
- Limit disturbance to already degraded or disturbed areas; avoid unnecessary impact on natural vegetation.
- Conduct Search & Rescue of succulents and bulbs for replanting, using soil and seed material from the site, with permits prior to any vegetation clearing and/or construction.

- Construct the V-notch gauging structure as a partial soil berm sourced from dam topsoil, planting indigenous species on it.
- Rehabilitate all disturbed areas outside the dam physical footprint, including spillway, pipeline, and stabilizing dam walls with native plants.
- Monitor rehabilitation success and alien infestation for at least 24 months post-construction.
- Protect rehabilitated renosterveld from further farming and grazing by erecting fences / demarcating the areas to keep livestock out.
- Do not disturb the northern koppie where the historical house is indicated as having high sensitivity.

Operational Phase Mitigation Strategies

Long-term management focuses on erosion control and invasive species management.

- Regularly monitor dam wall and surrounding areas for erosion; implement stabilization measures like mulching and seeding.
- Continue alien clearing, especially targeting black wattle, rooikrans, and silky hakea, as part of legal control programs for RE Prt 3/Farm 143 which is owned by the Applicant.
- Maintain invasive species control to prevent further ecological degradation and support habitat resilience.

The impact on plant species, including SCC and protected tree species, is also expected to be of medium-high significance, prior to mitigation. This is due to the presence of at least seven SCC on and around the dam site, namely *Erica unicolor* ssp. *mutica* (EN), *Athanasia pectinata* (VU), *Drosanthemum edwardsiae* (DDD), *Trichodiadema burgeri* (VU), *Hermannia lavandulifolia* (VU), *Polygala pubiflora* (VU) and *Ruellia pilosa* (VU). Four of these species will be directly impacted by the project.

Fortunately, all the affected species are also well represented in the veld outside the dam footprint and in suitable habitats elsewhere in the Mossel Bay area. *D. edwardsiae* should be safe from construction activities as it is habitat specific and was only recorded on the upper western slope of the koppie west of the dam site. The preferred alternative design layout presents the lowest impact on SCC and protected tree species as a development option.

Phase	Construction Phase	Operational Phase
Nature of impact(s)	Loss of indigenous flora, SCC & protected tree species. <u>2026 layout (preferred):</u> - At least four SCC, seven milkwoods and four kasuur's directly impacted. <u>2026 layout with new farm road:</u> - A greater impact on the <i>Trichodiadema burgeri</i> subpopulation, which is restricted to the koppie west of the dam site. <u>2020 layout:</u> - At least five SCC, 11 milkwoods and six kasuur's directly impacted. Loss of a greater number of SCC and encroachment on a single record of <i>Athanasia pectinata</i> southeast of the dam site.	Alien infestation & resulting displacement of indigenous flora.
Extent of impact	Proposed dam site & immediate surroundings	Proposed dam site & immediate surroundings
Duration	Permanent	Long term
Intensity	Medium	Low
Probability of occurrence	High	Medium
Degree of reversibility	Low-medium	High
Irreplaceability of resource	Medium	Medium-low
Mitigatory potential	Medium	High
Significance before mitigation	Medium-high	Medium-low
Significance after mitigation	Medium-low	Low

Cumulative impact & No-Go alternative:

The cumulative impact of the project on terrestrial biodiversity is expected to be small given the degraded state of a large part of the site and the relatively large areas of Mossel Bay Shale Renosterveld (32927 ha) and South Outeniqua Sandstone Fynbos (105272 ha) still left.

In the case of the dam not being built ('no-go' alternative), the current situation will remain unchanged. The highly degraded areas are also unlikely to recover with continued farming (grazing) activities and alien infestation. However, the farmer is obliged to continue with alien control. There will be no financial incentive for the rehabilitation of degraded areas on and around the dam site.

5.2.1 Concluding Statement – Terrestrial Plant species & Biodiversity Impacts

The site proposed for the dam lies on the boundary between South Outeniqua Sandstone Fynbos and Mossel Bay Shale Renosterveld. The latter is the most threatened vegetation type

found here and is currently listed as Critically Endangered. South Outeniqua Sandstone Fynbos, on the other hand, is still well represented and protected. The site also encroaches on the biodiversity network (CBA corridor).

At least four known threatened species (*Erica unicolor* ssp. *mutica*, *Trichodiadema burgeri*, *Hermannia lavandulifolia* & *Polygala pubiflora*) and two protected tree species (*Sideroxylon inerme* & *Pittosporum viridiflorum*) will be affected by the project.

Given the degraded state of a large part of the site, the impact on terrestrial biodiversity and plant species is of **medium-low significance with mitigation**.

Agricultural activities and alien infestation have contributed to the degradation of the site. However, it still accommodates significant renosterveld and fynbos elements with good rehabilitation potential.

With mitigation, the impact can be lowered to an acceptable level without the need for a biodiversity offset. Furthermore, the preferred alternative, when compared to the scoping and older designs, presents the smallest footprint and lowest impact as a development option.

The botanist concludes that the preferred alternative (without the new farm road option across the dam wall) be approved, subject to the proposed mitigation measures.

5.3 AQUATIC BIODIVERSITY IMPACTS

Impacts of Oudrift Dam Construction and Operation

The dam's construction and operation pose potential impacts on aquatic habitats, water quality, and flow regimes. Below points summarise these potential impacts with more detailed information in the attached specialist aquatic biodiversity report.

- The main impact is the loss/disturbance of aquatic habitat within the dam footprint, affecting approximately 750 m of the tributary/catchment.
- Short-term impacts include water quality issues during construction, mitigated by good housekeeping and timing (drier months).
- Long-term impacts involve flow impedance and habitat modification, but are of low significance with mitigation.
- Construction impacts include limited disturbance to riparian zones, with potential alien vegetation invasion.
- Mitigation includes removing invasive plants, revegetation with indigenous species, and rehabilitation of disturbed areas.
- The pipeline crossing will cause limited, short-term disturbance, with ongoing management needed.
- The dam's operation has the potential to modify flow and water quality downstream, but impacts are low if water is abstracted during high flow periods (of the Moordkuil River) only.
- A bypass channel / outlet structure is recommended to maintain natural runoff and flow regimes so that overflow from Klipheuwel Dam and the minor catchment in which the dam is proposed is not stored in the Oudrift Dam.

- The overall impact is **medium to low negative**, with **residual impacts reduced to low negative after mitigation**.

Freshwater Impact Assessment and Mitigation Strategies

The main potential impact on the proposed Oudrift Dam is associated with the physical impact of the dam within its basin. The footprint of the Oudrift Dam will inundate the riverine habitat of a minor unnamed tributary / small catchment of the Moordkuil River. The instream habitat, due to the seasonal to episodic flow in the tributaries, has very limited instream aquatic vegetation but does include thicket indigenous trees and shrubs that are associated with the watercourses.

The downstream reach of the watercourse, below the proposed dam (approx. 200m before it joins the Moordkuil River), which would also potentially be impacted by the construction and operation of the dam as well as the proposed pipeline that will need to cross the river in this downstream reach, has also been significantly encroached on and transformed by the surrounding cultivation areas.

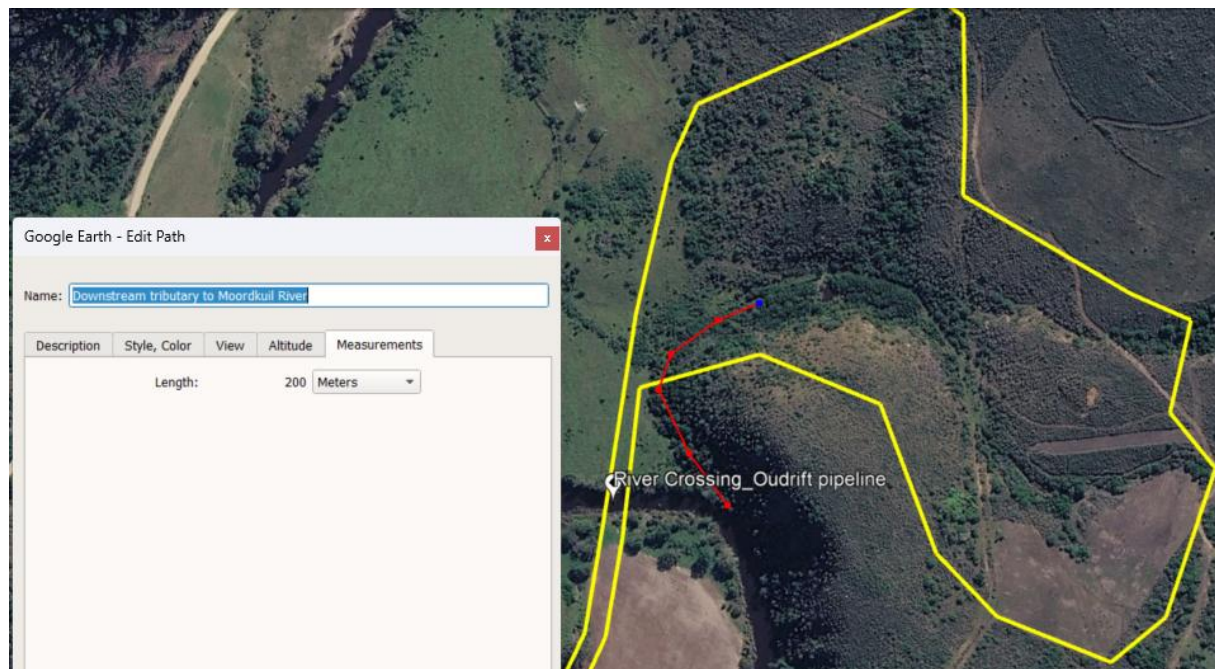


Figure 37: Tributary from small catchment in which dam footprint is proposed till it reaches the Moordkuil River.

The present ecological condition of the tributary is considered to be largely natural in its upper reaches but degrades to being significantly modified in its lower reaches. This tributary has an ecological importance and sensitivity of **moderate to low**.

Approximately 750 m of cumulative watercourse length (3x minor non-perennial tributaries within the dam footprint plus the 200m tributary downstream of the dam) would be inundated, or modified by the proposed dam.

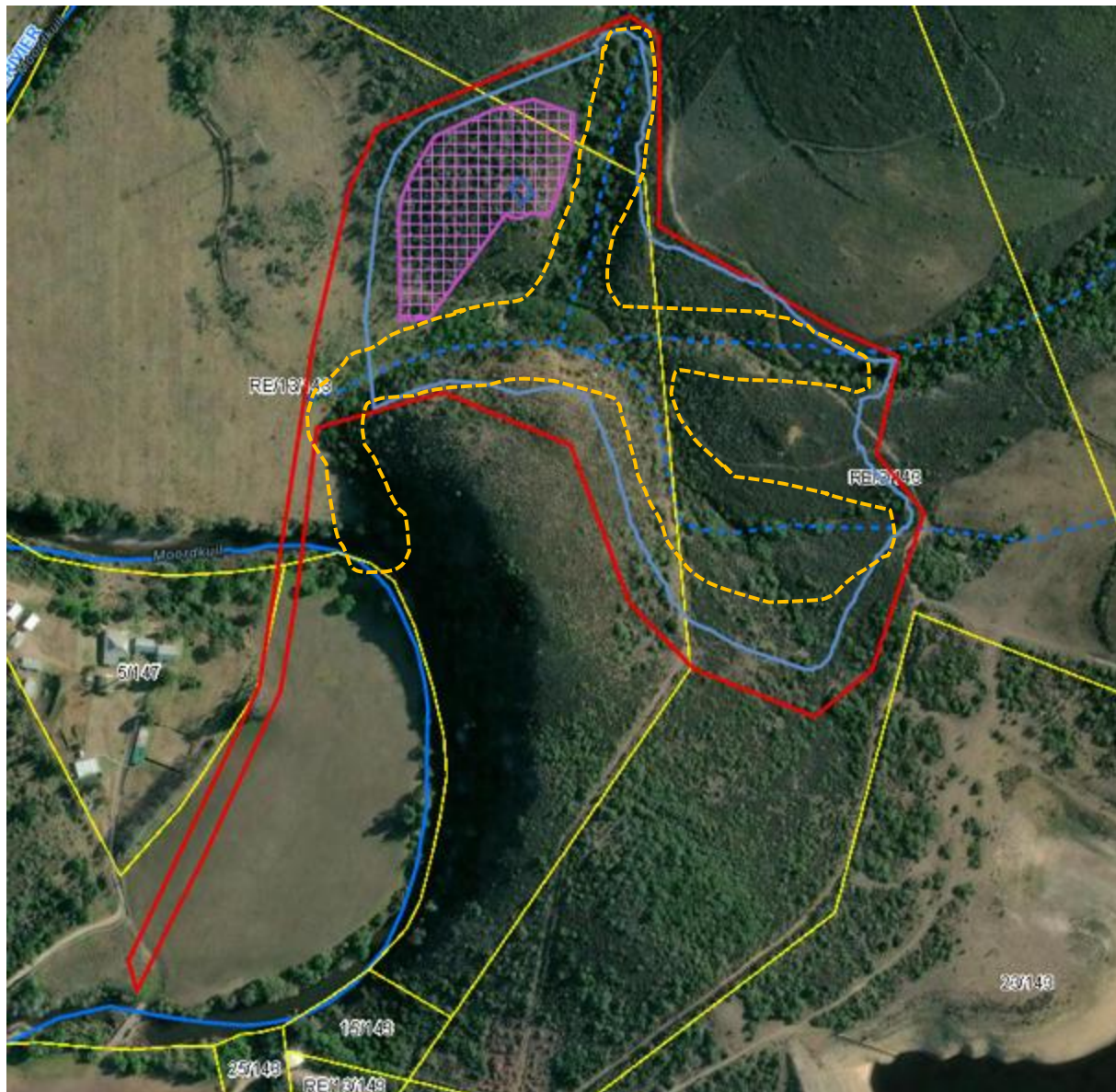


Figure 38: +/-750m cumulative tributary affected by the proposed Oudrift Dam (ORANGE polygon indicated on the image).

Longer-term flow impacts in the lower tributary are likely to occur as a result of the impedance of flow at the dam. Given the **very low runoff generated by the catchment** of the dam, these impacts are likely to be of a **low significance**.

The dam has a potential **positive flow impact** on the lower Moordkuil River and estuary if the water abstracted to fill the dam **primarily takes place largely during the higher flow period** and in so doing **reduces the current need to abstract when the flow in the river falls below 0.4m³/s**.

With regards to the proposed pipeline, the only aquatic ecosystem impact would be associated with the pipeline crossing through the Moordkuil River and its associated riparian zone. It is proposed that the pipe be **weighted down with concrete collars** or similar onto the riverbed at the crossing, but will be trenched or excavated in the riparian areas.

This single pipeline is a 250 mm dia. PVC pipe, within a 2m wide servitude. This would be likely to result on only **a limited and short term disturbance of the riparian zones** that are already in a moderately to largely modified ecological condition. Longer term impacts would relate to any **maintenance work should the pipeline need to be replaced** for example if damaged during a high flow/flood event. The disturbance of the riparian zone would also facilitate further invasion of the riparian zone with alien vegetation unless effectively managed.

Although considered at the time of the assessment, the possible re-routed farm track through the smaller tributary upstream of the dam footprint, that will be inundated by the full supply level of the dam, would result in limited disturbance of the watercourse and associated vegetation. The tributary is still in a largely natural ecological condition and has much sparser associated vegetation with little invasive alien plants that would be more susceptible to erosion at the new road crossing. The Applicant has however decided not to implement this re-routing considering that the crossing will require significant infilling to get to the other side because of erosion at the location outside the FSL and the track will remain accessible when the dam is not at FSL.

Significance of impacts without mitigation: **Medium to low negative** impact for the construction and operation phases.

Recommended mitigation: The loss of aquatic habitat within the tributary as a result of the construction of the dam should be mitigated by improving the ecological condition of the Moordkuil River at the **pipeline crossing** and **water abstraction point** for a distance of 5m to 10 m upstream and 50 m downstream of these points. By removing invasive alien plants along the watercourse corridor and revegetating with indigenous vegetation where needed will improve ecological benefits. **The EAP recommends that this mitigation be expanded to include the section of river between the pipeline river crossing and the existing low-level vehicle crossing to a total distance of +/-570m.** Such invasive alien clearing is in addition to the recommendation that the Applicant implement effective invasive alien vegetation clearing on RE/Prt 3 Farm 143 in support of improving the overall ecological condition of vegetation/habitat and downstream flow volumes to the system.

Table 7: Co-ordinate summary of the area of Moordkuil River to be cleared of invasive alien vegetation by the Applicant.

River crossing (feeder/discharge pipeline)	Latitude: <input s"="" type="text" value="34° 3'0.47"/> Longitude: <input e"="" type="text" value="22° 8'7.07"/>
Existing abstraction point from Moordkuil River	Latitude: <input s"="" type="text" value="34° 3'11.41"/> Longitude: <input e"="" type="text" value="22° 8'6.70"/>
Existing low-level vehicle crossing in Moordkuil River	Latitude: <input s"="" type="text" value="34° 3'11.76"/> Longitude: <input e"="" type="text" value="22° 8'2.67"/>

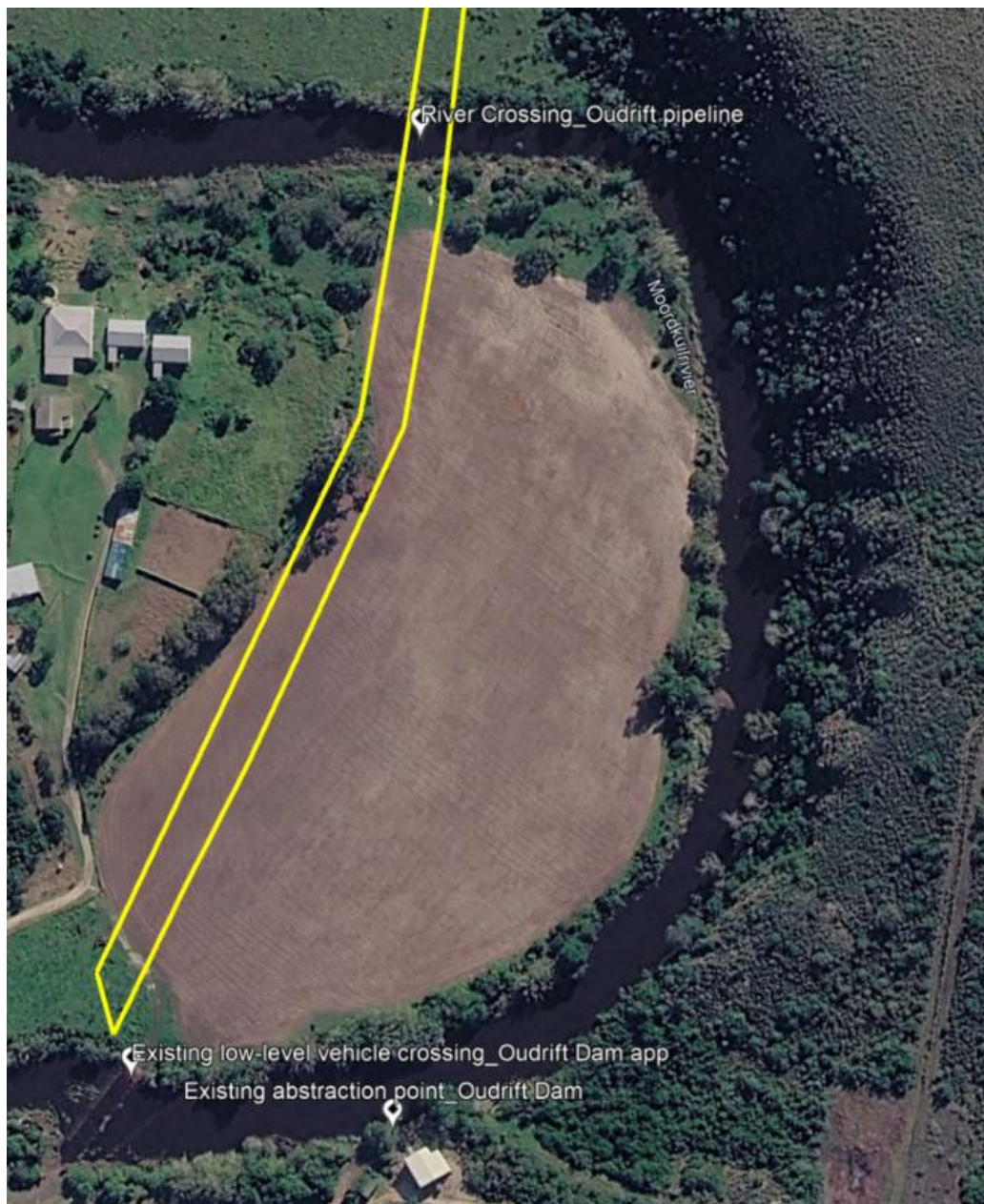


Figure 39: Section of Moordkuil River between the pipeline crossing (+10m upstream) and the existing low-level vehicle crossing below the existing abstraction point in the Moordkuil River, to be cleared/kept alien free by the Applicant.

The pipeline crossing of the Moordkuil River must be rehabilitated after construction:

- through reshaping of the bank of the river surface to resemble the surrounding landscape and
- revegetating the affected river bank with suitable local indigenous vegetation.
- these areas in particular must be monitored and mitigated over the longer term for invasion with alien plants and for erosion.

To mitigate the potential water quality impacts, the construction of the dam must preferably take place in the drier months of the year (December to March and June/July).

Short-term water quality impacts may occur during the construction of the dam which is of low significance and can easily be mitigated by ensuring that siltation in work areas is limited.

Risk Assessment Summary

A comprehensive risk assessment undertaken by BlueScience in 2026, indicates moderate to low risk for the proposed activities, contingent on mitigation.

- The risk rating considers potential impacts on aquatic ecology, water quality, and flow regimes.
- Proper implementation of mitigation measures can reduce risks to acceptable levels.
- An integrated water use licence has been obtained, supporting responsible water management.
- Continuous monitoring and management are essential to maintain ecological integrity and compliance.

Table 8: Risk assessment matrix for the water use activities undertaken by BlueScience (2026).

Phase	Activity	Impact	Potentially affected watercourses	Risk Rating
CONSTRUCTION	Construction of Oudrift Dam	Habitat, flow and water quality modification and disturbance during construction	Moordkuil Minor Tributary	M
		Water quality and flow impacts as a result of construction activities	Moordkuil River	L
	Construction of associated infrastructure	Habitat, flow and water quality modification and disturbance during	Moordkuil River	L
		Habitat, flow and water quality modification and disturbance during construction	Moordkuil Minor Tributary	L
OPERATIONAL	Maintenance of water supply scheme and associated infrastructure	Habitat disturbance and water quality impacts during maintenance	Moordkuil River	L
		Habitat disturbance and water quality impacts during maintenance	Moordkuil Minor Tributary	L
	Operation of water supply scheme	Habitat modification, flow and water quality impacts due to operation of scheme	Moordkuil River	L
		Habitat modification, flow and water quality impacts due to operation of scheme	Moordkuil Minor Tributary	M

Impacts associated with the CONSTRUCTION PHASE:

Impact table for proposed Oudrift Dam:

Construction Phase	
Potential impact and risk	Aquatic ecology
Nature	Loss/disturbance of aquatic habitat and water quality impacts at the proposed dam site
Extent and duration	Low Extent and High duration
Intensity/Severity	Medium to low
Consequence	Medium to low
Probability	Medium to high
Confidence	High
Irreplaceability	Medium to low
Reversibility	Low
Indirect impacts	Flow and water quality modification
Cumulative impacts before mitigation	Medium to low negative
Significance of impact before mitigation	Medium to low negative
Degree impact can be avoided	Low
Degree impact can be managed	Medium to high
Degree impact can be mitigated	Medium to high
Mitigation	- The loss of aquatic habitat within the tributary as a result of the construction of the dam should be mitigated by improving the ecological condition of the Moordkuil River at the abstraction point by removing invasive alien plants within the watercourse corridor and revegetating with indigenous vegetation. - Both the pipeline crossing of the Moordkuil River and the realigned road through the tributary should be rehabilitated after construction through reshaping of the surface to resemble the surrounding landscape and revegetating with suitable local indigenous vegetation. - The structure associated with the realigned access road that is placed in the tributary should not impede the flow in the watercourse nor concentrate or change the direction or the base level in the stream. - To mitigate the potential water quality impacts, the construction of the dam should preferably take place in the drier months of the year (December to July). Good housekeeping measures should be in place within the construction site to ensure that any potential water quality contaminants are contained and managed on site.
Residual impacts	Modification of aquatic habitat
Cumulative impacts after mitigation	Low negative
Significance of impact after mitigation	Low negative

Impacts associated with the OPERATIONAL PHASE:

Operation Phase	
Potential impact and risk	Aquatic ecology
Nature	Modification of aquatic habitat as well as flow impacts
Extent and duration	Low Extent and high duration
Intensity/Severity	Medium
Consequence	Medium to Low
Probability	Medium
Confidence	High
Irreplaceability	Medium to low
Reversibility	Medium to low
Indirect impacts	Growth of alien invasive plants in riparian zones and wetlands and erosion of channel

CUMULATIVE IMPACTS associated with the Activity:

Cumulative impacts before mitigation	Medium to Low negative due to existing poor ecological condition of watercourse and wetland
Significance of impact before mitigation	Medium Low negative
Degree impact can be avoided	Medium to low
Degree impact can be managed	Medium
Degree impact can be mitigated	Medium
Mitigation	• Control of invasive alien vegetation and erosion within watercourses • Maintenance works in aquatic habitats and buffer areas in accordance with approved MMP/EMP • In terms of the potential flow-related impacts associated with the dam, it is recommended that a bypass channel or pipeline be included in the design of the dam that will allow any runoff from the catchment to bypass the dam. • Water abstracted from the Moordkuil River to fill the Oudrift Dam should preferably primarily take place largely during the higher flow period (August to November) and when the measured flow in the river at the DWS gauging weir K1H005 is above 0.4m³/s. • The water use on the property, including the monthly volumes of water stored and utilized from the dam should be metered and recorded. • Considering the number of dams and infrastructure within the properties, it is recommended that a Maintenance Management Plan be approved for the property that allows for longer term maintenance activities within the various watercourses.
Residual impacts	Modified aquatic habitat
Cumulative impacts after mitigation	Low negative e
Significance of impact after mitigation	Low negative

5.4 AGRICULTURAL IMPACTS

The agricultural specialist refuted the screening tool agricultural theme sensitivity and adjusted it from high to low. As a result of the classification of the site to a **low sensitivity** for agricultural production the specialist considers that the proposed dam may be considered for approval.

The reasons being that no negative impact on agricultural production will occur as a result of this project both within the site as well as within any neighbouring properties. The specialist is of the opinion that the dam will aid in agricultural production of the area as it will be used for irrigation purposes in support of ongoing farming operations.

Mitigation measures as outlined below is aimed at limiting the impacts during the construction and operational phase of the dam.

- Erosion control measures must be implemented in areas sensitive to erosion. These measures include but are not limited to - sand bags, hessian sheets, silt fences, retention or replacement of vegetation and geotextiles such as soil cells which must be used in the protection of slopes.
- Do not allow surface water or stormwater to be concentrated, or to flow down cut or fill slopes without erosion protection measures being in place.
- Dust monitoring must be undertaken during the construction phase as excessive dust will have a negative effect on vegetation growth.
- All waste generated during the construction of the dam is to be disposed of in a responsible manner and must ensure no litter or other contaminants (particularly any chemicals stored on site) are deposited in the soils.

- No release of any substance i.e. cements, oil, or any other substance that could be toxic into the soil profiles.
- Spillages of fuels, oils and other potentially harmful chemicals must be contained and cleaned up immediately. Contaminants must be properly drained and disposed of using proper solid/hazardous waste facilities (never to be disposed of within the natural environment). Any contaminated soil must be removed, and the affected area rehabilitated immediately.
- Monitor all sites disturbed by construction activities for colonisation by exotics or invasive plants and control these as they emerge. This requirement is in fulfilment of the terms of the National Environmental Management: Biodiversity Act (Act 10 of 2004).

5.5 FAUNAL IMPACTS

The animal species site sensitivity verification reports that the study area should be classified as Low sensitivity, as the majority of the SCC indicated in the Screening Tool, do not occur at the study area, and the species that could occur there will not be affected significantly by the construction of the farm dam.

Vegetation adjacent to the proposed farm dam (which will not be flooded by the dam) is almost identical to the vegetation that will be flooded by the dam: animal species present in the flooded area will be able to relocate to nearby suitable vegetation, and will therefore not be impacted significantly by this project.

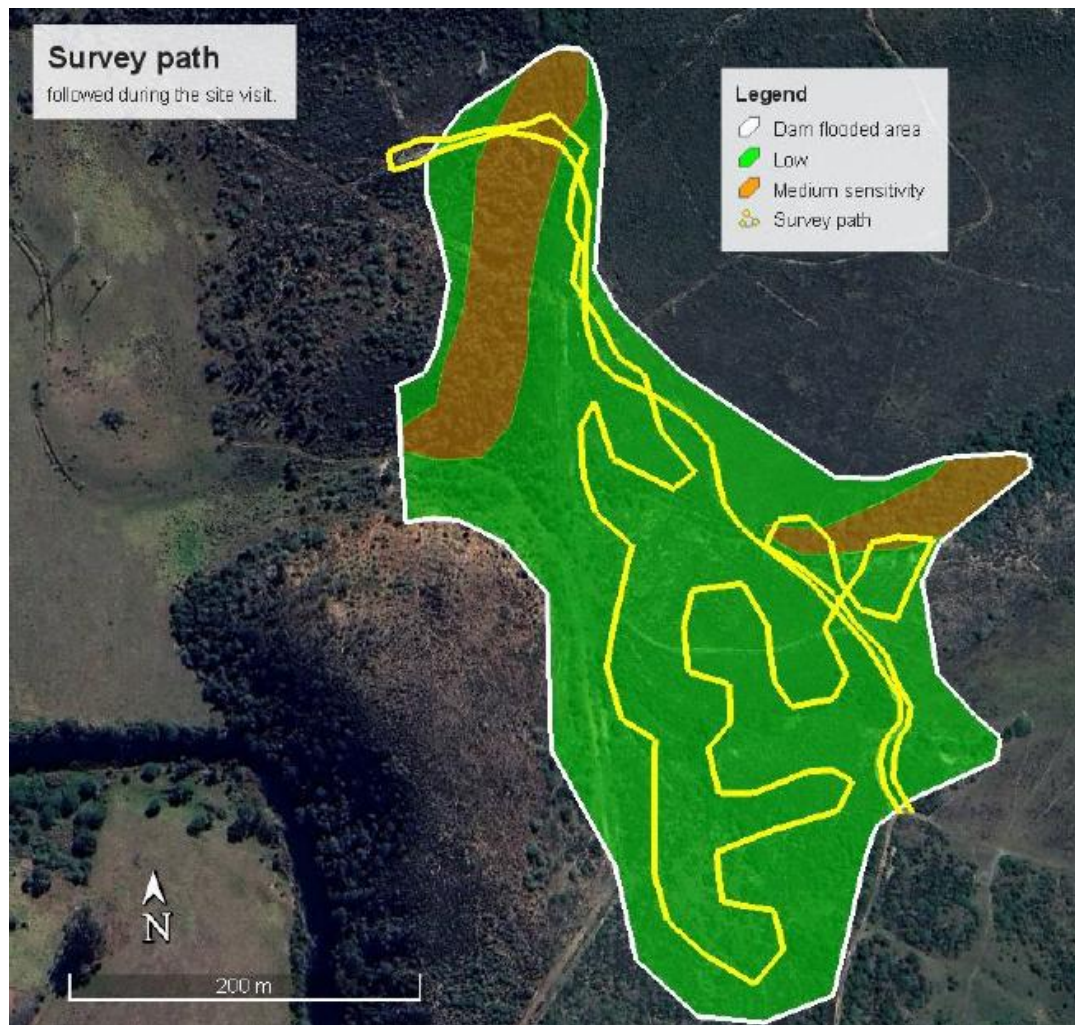


Figure 40: Survey track of the faunal specialist of the dam disturbance area (Source: J Venter & W Matthee, 2024).

The following likelihoods of the SCC listed in the Screening Tool occurring at the study area are provided:

- A very low likelihood of *H. caspia*, *A. montanus*, Sensitive Species 5, Sensitive Species 8, *T. dicksoni*, *A. thyra orientis*, *P. onocrotalus*, *S. coronatus*, and *C. ranivorus*;
- A low likelihood of *B. sylvaticus*, *N. denhami*, *Afrotis afra*, and *C. maurus*; and
- A high likelihood of *P. bellicosus* occurring at the site.

***Hydroprogne caspia* (Caspian tern)** is a vulnerable species that occurs at (a) estuaries and sheltered coastal bays, or (b) large, permanent inland water bodies (Tree, 2005; Ortmann et al., 2015). The South African population is estimated at less than 1 000 mature individuals, with a generally decreasing population trend. The main threats include climatic variables, egg collection and predation by natural predators (e.g. Kelp gulls, *Larus dominicanus*) and domestic dogs.

The study area currently has no permanent water body present with the closest being the neighbouring Klipheuwel Dam, and it is therefore highly unlikely that this species occurs at the study area.

There are 30 records of this species within a 3 km radius of the study area, with one record being an eBird observation from the Brandwag River (about 2.3 km from the study area), and the remaining 29 observations being observations from the Southern African Bird Atlas Project

2 (SABAP2) database. These SABAP2 records do not have GPS co-ordinates recorded, and are most likely from the two large rivers and associated estuaries to the south of the study area.

The only large permanent water body present in the area around the study area, is the Klipheuveld Dam, located about 0.78 km from the study area. However, it is highly unlikely that the proposed Klipheuveld Farm Dam will impact this species, as it does not occur in the area that will be flooded and there are no records of this species from the immediate vicinity of the study area.

***Bradypterus sylvaticus* (Knysna warbler)** is a vulnerable bird species occurring in dense thickets, including riparian vegetation and coastal thickets dominated by White milkwood, *Sideroxylon inerme* (Smith, 2005; Taylor, 2015a).

This species is threatened mainly by habitat destruction, specifically the clearing of coastal clearings where it occurs. Although it mainly occurs in indigenous thickets, it may also occur in suitable thickets of exotics, such as exotic *Rubus* (bramble) and lantana (*Lantana camara*).

The majority of the study area does not have suitable habitat present, with the potential exception of the two sections of thicket vegetation in the northern most valleys.

There are 33 records of this species on the GBIF database for the area around the property, with one thereof being an eBird observation with GPS co-ordinates (recorded along the Moordkuil River to the west of the farm), and the remaining 32 records being SABAP2 records without accurate GPS co-ordinates). The majority of these SABAP2 records are likely from thickets at Botlierskop Private Game Reserve, where extensive thickets are present. The thickets within the study area are possibly too small to support this species. It is also possible that suitable thicket vegetation may establish along the dam, which could support this species in future.

***Polemaetus bellicosus* (Martial eagle)** is a large, endangered raptor that prefers open vegetation, and breeds in tall trees (Simmons, 2005a; Taylor, 2015b). This species is threatened mainly due to direct persecution by small livestock farmers, poisoning, and reduction of prey abundance due to habitat transformation.

There are 16 records of this species in the area around the study area (all SABAP2 records without accurate GPS co-ordinates). It is very likely that these records are also from Botlierskop Private Game Reserve, though the landowner has confirmed that they have seen this species on the property twice before (one juvenile that was injured when it flew into a powerline, and one of unrecorded age).

The open vegetation present in the area is likely suitable habitat for this species, but the surrounding vegetation (that will not be flooded by the proposed dam) will also be able to support this species, especially considering the amount of clearing of AIPs and restoration that has occurred in that section of the farm.

***Circus ranivorus* (African marsh-harrier)** occurs along large water bodies and in neighbouring open vegetation (Simmons, 2005b). This species is classified as Endangered in South Africa (Taylor, 2015c), with habitat loss and degradation being the most significant threat to the continued survival of this species.

There are 17 records of this species on the BGIS database for the area around the study area, all from the SABAP2 database (and therefore without accurate GPS co-ordinates). These records are most likely from sightings at Botlierskop Private Game Reserve, or along the Moordkuil or Brandwag Rivers, as the habitat at the study area is not suitable for this species. *C. ranivorus* requires extensive reedbeds for breeding and feeding, which is absent from the

study area. It is possible that reedbeds may establish alongside the dam in future, which could then act as suitable habitat for this species. At present, however, there is a very low likelihood that this species occurs at the study site.

***Circus maurus* (Black harrier)** is an endangered raptor (Taylor, 2015d), endemic to southern Africa. It occurs in indigenous fynbos and neighbouring cropfields (Simmons et al., 2005), and is threatened mainly by habitat destruction and fragmentation. The conservation of intact suitable habitat is therefore essential for the continued existence of this species. The majority of the property is suitable for this species, as it consists of open vegetation shrubland that is suitable foraging habitat for this species. There are only four records of this species on the GBIF database, with three SABAP2 records (without accurate GPS co-ordinates), and one georeferenced eBird observation (recorded in the farmlands to the south of the existing Klipheuvel Dam). Due to the open shrubland vegetation present on the property, there is a medium likelihood that this species occurs within the development footprint, but the rarity of records indicates that they are not commonly recorded in the general area.

***Neotis denhami* (Denham's bustard)** occurs in natural vegetation (fynbos and grasslands), pastures and agricultural fields (Allan, 2005a). It is classified as Vulnerable in South Africa (Taylor, 2015e), mainly due to powerline collisions, habitat conversion to intensive monoculture fields, and overgrazing of grassland habitats. There are nine records on the GBIF database of this species for the area around the study area, with one georeferenced record (recorded at Botlierskop Private Game Reserve), and eight SABAP2 records without accurate GPS co-ordinates. With this species preferring open shrubland (similar to *C. maurus*), there is a medium likelihood that this species occurs at the study area. However, with few sightings in the area, they are likely not abundant in the area.

***Pelecanus onocrotalus* (Great white pelican)** is classified as vulnerable (Bowker, 2015), with a breeding population of 2 500 breeding pairs in South Africa. Approximately 500 pairs occur within the Western Cape, but there are few records of this species from the study area. A total of five records exist of this species in the area around the study area. One of these records (from July 2011) was from the Great Brak River estuary, while the remaining four records were all from one individual that was recorded at a farm dam approximately 9 km northwest of this proposed dam for the period 24 – 30 September 2017.

This species is limited to large water bodies with sufficient prey, including shallow lakes, flood plains, estuaries, lagoons and coastal bays (Crawford, 2005). There is no standing water within the study area, and without suitable habitat this species is highly unlikely to occur within the study area. If it is impacted by the proposed farm dam, the impact would likely be positive, as it could provide a resting place for this highly nomadic species.

***Stephanoaetus coronatus* (Crowned eagle)** is a large eagle that inhabits forested or densely-wooded areas (Simmons, 2005c). It is classified as Vulnerable in South Africa, with an estimated population size of less than 1 000 mature individuals (Taylor, 2015f). The main threat consists of persecution by humans (notably stock farmers), especially when they predate on livestock or domestic animals. In the Western Cape, they are predominantly found in indigenous southern Afrotemperate forests, but they may also occur in commercial plantations (mainly *Pinus* and *Eucalyptus* plantations).

There are no records of this species from the area around the study area, as there is an absence of large extents of suitable habitat in the area. The closest records of this species is from the area near Friemersheim, approximately 11.5 km from the study area. Due to the absence of suitable habitat and records from the area, it is very unlikely that this species occurs at the study area, or will be impacted by the proposed dam construction.

***Afrotis afra* (Southern black korhaan)** is a vulnerable bird species that occurs in open fynbos and arid shrublands (Allan, 2005b; Hofmeyr & Taylor, 2015). There are no records of this species near the study area, and this species is notably absent from the section of the Garden Route between Mossel Bay and George.

Though the habitat of short shrubland may initially appear suitable for this species, it is highly unlikely that it occurs at the study site, as it is very vocal (especially during the breeding season), and would have been recorded if it did occur in the area. The proposed dam is therefore unlikely to have an impact on this species.

***Aloeides thyra orientis* (Brenton copper)** occurs in the area around Knysna and Rhenendal, with an isolated likely record of this species (August 2022) from the mountains north of Friemersheim (approximately 11 km from the study site).

An isolated population of this species also occurs around Still Bay to the west (approximately 80 km from the study site). It is classified as Endangered (Edge, 2018), and occurs in sandy fynbos on flat terrain close to the coast. Due to the isolated nature of the populations of this species, and the absence of the preferred habitat, it is highly unlikely to occur at the study site, and the proposed dam will not impact this species.

***Tsitana dicksoni* (Dickson's sylph)** is a rare butterfly that occurs along three mountain ranges, namely the Hawequas, Langeberg East and Outeniqua Mountains (Dobson & Dobson, 2018).

There are 37 records of this species on the GBIF database, but all records are from the Hawequas Mountains population. This species occurs in grassy mountain fynbos in higher-lying areas.

The lack of records of this species from the area around the study area, along with the study area being located at lower altitudes and the lack of suitable habitat at the study area indicates that this species is highly unlikely to occur at the study area, and is unlikely to be impacted by the proposed dam.

Sensitive Species 5 (which cannot be disclosed) only occurs in large, open areas where sufficient food resources are available. Although there are historic records of this species from the Western Cape (notably from Beaufort West in the 1860s), they have been extirpated from their entire range within the province (Skinner & Chimamba, 2005; Van der Merwe et al., 2016).

Individuals of this species, where they occur in the Western Cape, are limited to fenced conservation areas (such as the Botlierskop Private Game Reserve), though there are no records of this species from the area around the study area. This species is therefore highly unlikely to occur in the study area, or be affected by the proposed dam.

Sensitive Species 8 (which cannot be disclosed) occurs in indigenous forests and thicket vegetation, and usually move away from areas with high levels of disturbance (Venter et al., 2016). There is one record of this species from indigenous White milkwood (*Sideroxylon inerme*) thickets around Great Brak River, but no records of this species around the study area.

The study area has very little thicket vegetation present, which is too fragmented to support this species. This species is therefore highly unlikely to occur at the study area, or be impacted by the proposed dam.

***Aneuryphymus montanus* (Yellow-winged agile grasshopper)** is a vulnerable grasshopper species known from only six localities (Hochkirck et al., 2018). There are no records of this species in the area on the GBIF database, with the closest record being from the Swartberg

Pass, which is approximately 90 km from this site. *A. montanus* also prefers arid, sclerophyllous fynbos on rocky substrates.

The fynbos vegetation at the study site has an absence of proteoids and other sclerophyllous vegetation. Due to the lack of records from the area and the lack of suitable habitat on the property, there is a very low likelihood of this species at the study site, and the species is unlikely to be impacted by the proposed development.

During the site visit, the faunal specialist noted a total of 31 animal species that were recorded. These observations consisted of one arachnid, 13 bird, one gastropod, 14 insect (one Coleoptera, two Diptera, two Hymenoptera, eight Lepidoptera, and one Odonata), and two mammal species. Apart from the Martial eagle that was recorded, other interesting animals recorded included Aardvark (*Orycteropus afer*), Black sparrowhawk (*Accipiter melanoleucus*), and Jackal buzzard (*Buteo rufofuscus*). The majority of the species recorded are generalists, and will be present across the landscape in suitable habitats. Apart from the Martial eagle, no other species of conservation concern were recorded during the site visit.

The species recorded (including the Martial eagle) are all widely-distributed, would make use of the vegetation outside the development footprint, and would not be impacted in the long-term by the proposed dam.

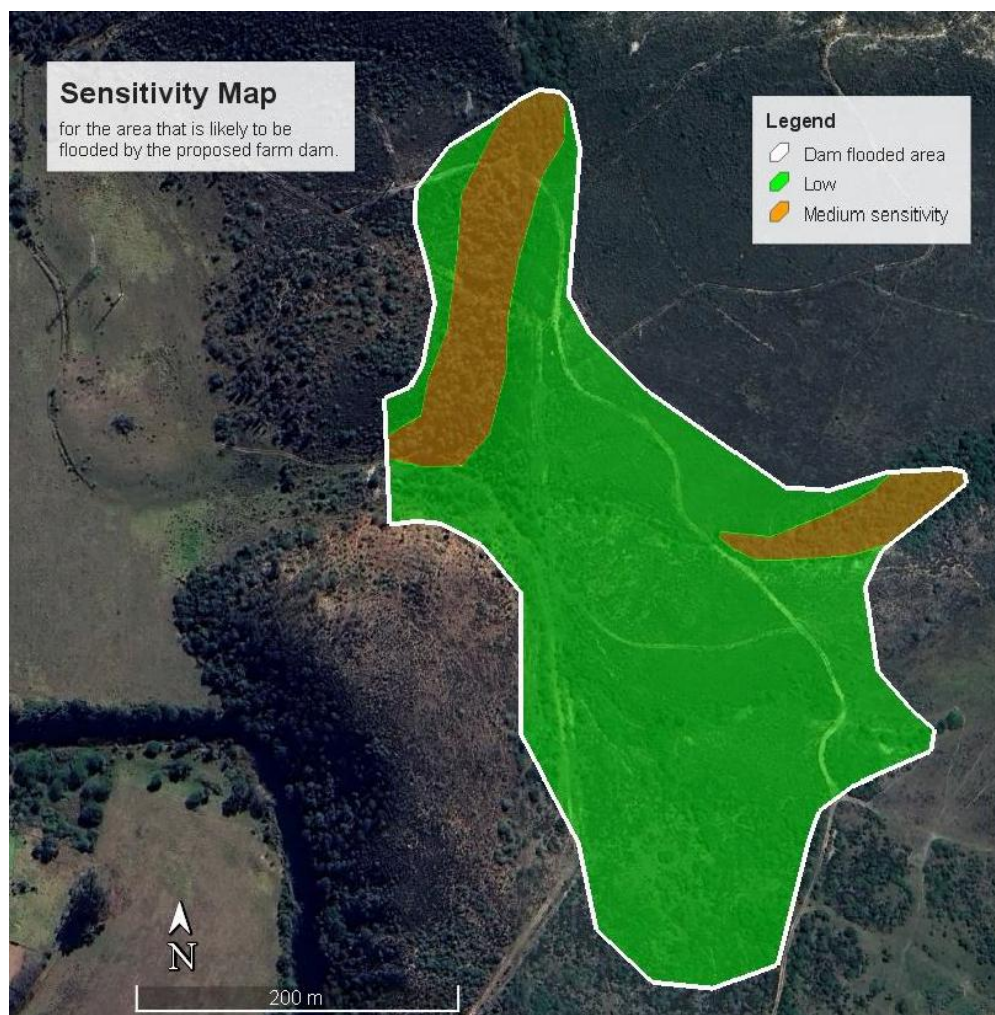


Figure 41: Faunal site sensitivity map produced by the specialist (Source: J Venter & W Matthee, 2024).

According to the faunal specialist the impacts of the dam construction on fynbos species are largely mitigated by the presence of pristine fynbos vegetation on the remainder of the property. Additionally, the impacts on thicket species can be mitigated by allowing some thicket vegetation to establish along the dam, enabling the thicket to continue acting as ecological corridors (particularly if the newly-established thicket vegetation connects the two thicket fragments already present on the property).

5.6 HERITAGE IMPACTS

Pre-colonial heritage

The sites of the dam, dam basin and FSL, spillway and pipelines were searched on foot by the specialist who noted very few isolated Early Stone age artefacts were identified and these lie on old, cultivated land where they had been exposed through mechanical activities such as ploughing.



Figure 42: Photographs of stone age tools found by the specialist (Source: HIA, 2024).

Historic built environment

Built environment at the site is limited to a single structure located on the hill to the north of the proposed dam wall. The building is indicated on the 1962 and 1982 topographic maps.



Figure 43: Remnants of an old building (Source: HIA, 2024).

No artefacts were found to suggest that there was any habitation here prior to the 20th century with only modern glass, metal and ceramics observed. Corrugated iron sheets that once formed the roof, lie scattered about the site. It is typical of a simple farm workers cottage and is of moderate interest, but not of great significance.

Cultural landscape

Contour maps of the dam site and of the broader area are relevant to the discussion of the cultural landscapes as it can be seen that the landforms have shaped the location of use areas therein.

Although there has been little change over time except for the expected structures, powerlines, roads etc, the most significant landscape change appears in the form of the Klipheuwel Dam, built by 1982, one of the main Municipal Dams supplying Mossel Bay and surrounds.

This existing dam lies less than a kilometre to the south of the proposed dam on Klipheuwel. Due to the hilly topography of the area, the Klipheuwel Dam is virtually invisible from roads in the area, and the dam's wall is glimpsed only fleetingly when driving past knowing where to look for the dam wall. Vegetation on the wall strongly masks its presence.

The proposed Oudrift Dam will also be shielded by similar topography to reduce significant negative visual impacts in the cultural landscape.

Winter and Oberholzer (2014) have broadly assessed the region, and have not identified any significant cultural landscapes in the area of the dam. The nearest formal cultural landscape is the Klein Brak River Estuary ~3km to the south, described as a "water landscape" (Winter and Oberholzer 2014:41). They describe this as a river estuary used for boating with numerous holiday homes. It has high scenic and recreational value (Landscape III). The proposed dam will not affect this value.

No significant historical structures are found in the immediate project area and the nearest Grade III structures are Plaatjeskraal (Platjeskraal) (~4.2 km to the north east) and Bergsig (~10 km to the north west) (Fransen 2004:478, Winter and Oberholzer 2014:41). Brandwag (~8 km to the south west on the R328) is indicated by Winter and Oberholzer (ibid) to be Grade II.

None of these features will be impacted in any way by the proposed activity. No roads in the viewshed of the dam project are indicated to be scenic routes (ibid).

SITE SENSITIVITY

There is no identified formal cultural landscape identified by Winter and Oberholzer (2014) in the project area or vicinity. The few Stone Age archaeological resources that were found were none in primary context and are considered to be of **very low significance**.

The single ruinous structure found on the hill to the north of the proposed dam wall is likely to have been built early in the 20th century, but is not considered to have anything other than local significance.

The dam is of relatively small scale and will be largely invisible from the local roads due to intervening topography. None of the local roads are classed as scenic routes (ibid). The activities are consistent with the prevailing land use and are likely to be absorbed and blend into the agricultural setting, thus maintaining the existing cultural landscape. The moderately altered sense of place can be considered to be of low significance.

FINDINGS AND RECOMMENDATIONS

In general, the proposed developments will not have high impact on heritage resources inclusive of archaeology/palaeontology/cultural landscape.

Anticipated impacts on local palaeontological heritage due to the new farm dam and associated pipeline developments are assessed as of **Low** palaeontological significance.

There is no preference on palaeontological grounds for any of the pipeline corridors under consideration and no objection to authorization of the proposed development.

Given the generally poor bedrock exposure and small project footprint, further specialist palaeontological studies and monitoring are not recommended here, pending the potential discovery of new fossil remains (e.g. petrified wood, vertebrate bones and teeth) during the construction phase – notably during excavation of the dam basin.

Recommended mitigation measures:

- The Environmental Control Officer (ECO) responsible for the dam and pipeline development must be aware of the possibility of important fossils (e.g. shells, petrified wood, plant remains, trace fossils, mammalian bones and teeth) being present or unearthed on site and should regularly monitor all substantial excavations into superficial sediments as well as fresh (i.e. unweathered) sedimentary bedrock for fossil remains;
- In the case of any significant fossil finds made during construction, these should be safeguarded - preferably in situ - and reported by the ECO as soon as possible to the relevant heritage management authority (Heritage Western Cape. Protea Assurance Building, Green Market Square, Cape Town 8000. Private Bag X9067, Cape Town 8001. Tel: 086-142 142. Fax: 021-483 9842) so that appropriate mitigation (i.e. recording, sampling or collection) by a palaeontological specialist can be considered and implemented, at the developer's expense; and
- These recommendations are summarized as a tabulated Chance Fossil Finds Procedure in Appendix D2 and must be incorporated into the Environmental Management Plan (EMP) for the farm dam project.
- If required, the palaeontologist concerned with recording and mitigation work will need a valid palaeontological collection permit from Heritage Western Cape. All work would have to conform to international best practice for palaeontological fieldwork and the study (e.g. data recording fossil collection and curation, final report) should adhere to the minimum standards for palaeontological heritage studies developed by SAHRA (2013) and Heritage Western Cape (2016).

5.7 IMPACT SUMMARY STATEMENT

Acknowledging the two focus disciplines its key impact(s) associated with the proposed activity, namely botanical and aquatic biodiversity, the respective specialists confirms that **impacts will not be avoided** (unless the No-Go Alternative is maintained), although the impacts, when effectively mitigated, are deemed acceptable and of **low-moderate significance**.

The aquatic specialist confirms that the No-Go Alternative i.e. not implementing the activities, would not result in the immediate impacts associated with the construction and operation of the Oudrift Dam described in this EIR, however by implication the landowner is unlikely to adjust the current abstraction practice to abstraction water from the Moordkuil River, during low flow periods when the water is (still) needed for irrigation during periods of drought / less rainfall. Similarly, which is also echoed by the Botanist and Agricultural specialists, although mandated by law (both CARA and NEMBA) the No-Go alternative presents little incentive to initiate large scale alien invasive clearing that holds both botanical, as well as aquatic biodiversity benefits.

The **tributary (catchment)** of the Moordkuil River in which the Oudrift Dam (footprint) is proposed, is in a largely natural condition and of **moderate to low ecological importance and sensitivity**.

The perennial Moordkuil River section downstream from the dam footprint, from which water (to fill the dam) is to be abstracted (an existing water use allocation), is in a **moderately to largely modified state** as a result of surrounding land-use activities.

The **Moordkuil River** feeds the Klein Brak River Estuary system and therefore it has conservation value and is considered of **high ecological importance and sensitivity**. The river at the site is *mapped* as a critical aquatic biodiversity area (CBA) and an NFEPA wetland.

From an aquatic perspective:

- The largest impact of the dam itself, is identified as the loss of aquatic habitat within the proposed dam footprint (5.6ha) (**moderate – low ecological importance/sensitivity**);
- Additional impacts would result from a change to the flow and quality within the watercourse downstream of the dam site because of impedance of flow, however for the +/- 200m of watercourse downstream from the dam, it is noted as an already degraded habitat/watercourse.
- The aquatic specialist confirmed that a **low negative impact** is expected for the construction and operation phases if adequately mitigated.

The loss of aquatic habitat within the tributary as a result of the construction of the dam will be mitigated by **improving the ecological condition of the Moordkuil River** at the pipeline crossing and water abstraction point for a distance of at least 10 m upstream and 50 m downstream of these points. Considering the objectives of the Draft Klein Brak River Estuarine Management Plan stating invasive alien clearing along rivers and in the catchment area as a priority to ensure that the status of the Estuary is not further compromised, this specialist recommendation is supplemented to cover the remainder of the Moordkuil River downstream of the pipeline crossing up to the existing vehicle crossing approximately 570m downstream of the crossing.

Rehabilitation by removing invasive alien plants within the watercourse corridor and revegetating with indigenous vegetation contribute towards ensuring that the proposed activity does not impact negatively on the Estuary and downstream Modder River watercourse.

Ongoing control of invasive alien vegetation along this section, as well as on Remainder Portion 3 Farm 143 (owned by the Application) will be required within the areas disturbed by the construction activities, inclusive of initial clearing and regular follow-up.

With regards to the proposed pipeline, the only aquatic ecosystem impact would be associated with the pipeline crossing through the Moordkuil River and its associated riparian zone. This would be a temporary and short term disturbance of the riparian zones. Limited longer term impacts would relate to any maintenance work in this section should the pipeline be damaged as a result of flooding. The temporary disturbance of the riparian zone would also facilitate further invasion of the riparian zone with alien vegetation which further elevates the condition of invasive alien vegetation control in this section of the Moordkuil River.

To mitigate the potential water quality impacts, the construction of the dam must preferably take place in the drier months of the year (December to July). Good housekeeping measures must be in place within the construction site to ensure that any potential water quality contaminants are contained and managed on-site during construction to avoid downstream siltation and indirect impacts on the Moordkuil River and Klein Brak River Estuary.

The dam has the potential positive flow impact on the lower Moordkuil River and Estuary if the water abstracted to fill the dam primarily takes place largely during the higher flow period and in so doing reduces the current need to abstract when the flow in the river falls below 0.4m³/s.

It is thus recommended that water abstracted from the Moordkuil River to fill the Oudrift Dam be taken largely during the higher flow period (August to November) and when the measured flow in the river at the DWS gauging weir K1H005 is above 0.4m³/s. This abstraction practice would be in line with the RQOs set for the Estuary.

Given the small catchment and low runoff from the catchment of the existing Klipfontein Dam, there is no recommended EWR requirement for the dam. It is rather recommended that an outlet pipeline be included in the design of the dam that will allow any runoff from the catchment/Klipheuwel Dam to bypass the dam. The design for the preferred alternative includes the provision for an outlet pipe.

The water use on the property, including the monthly volumes of water stored and utilised from the dam must be metered and recorded in order to (a) track volumes and (b) correlate that such abstraction/taking of water is during the high-flow months only.

- The Aquatic specialist confirms that the risk rating of the proposed activities is considered to be moderate to low, provided the mitigation measures are implemented and that the activities applied for may therefore be considered for approval.

The botanical specialist considered plant species and biodiversity and confirms that the preferred Alternative will result in the following losses in terrestrial biodiversity:

- Good quality renosterveld = 0.47 ha
- Degraded renosterveld = 0.76 ha
- Fynbos (mostly regrowth) = 2.31 ha
- Thicket = 1.08 ha

Considering the fact that the affected areas of these habitats are relatively small and for some notably degraded/secondary, the anticipated loss of vegetation is deemed acceptable. This level of acceptance is subject to rehabilitation of affected areas outside of the ultimate FSL of the dam as well as initial and continued alien vegetation clearing on RE Prt 3/Farm 143 that contains large tracts of the same vegetation.

The heritage/archaeology/palaeontology evaluations did not identify any areas of significance although the preferred design will avoid the remnant old house structure on the northern koppie.

The faunal specialist observed numerous faunal species during site inspection, however all observed species are relatively common in the area and due to the fact that the remainder of RE Prt 3/Farm 143 contains similar vegetation these species will not be displaced from their habitat. Positive impact is the provision of a permanent water source in the environment that will benefit/attract faunal species.

6. PUBLIC PARTICIPATION PROCESS

Section 41 in Chapter 6 of regulation 982 details the public participation process that has to take place as part of an environmental process. The table below provides a quick reference to show how this environmental process has or intends to comply with these legislated requirements relating to public participation.

Please refer to **Appendix F**, where all evidence of public participation is included.

Table 9: Public participation requirements in terms of S41 of R982

Regulated Requirement	Description
(1) If the proponent is not the owner or person in control of the land on which the activity is to be undertaken, the proponent must, before applying for an environmental authorisation in respect of such activity, obtain the written consent of the landowner or person in control of the land to undertake such activity on that land. (2) Sub regulation (1) does not apply in respect of- (a) linear activities;	Applicant is the landowner of RE/Prt 3/Farm 143 on which the largest part of the FSL of the dam falls. RE/Prt 13 Farm 143 and RE Farm Banff 147 is owned by the Robertson Familie Trust who have given their written consent both the environmental investigation process, as well as the necessary servitude(s) to be register for the dam and associated infrastructure on these properties.
The person conducting a public participation process must take into account any relevant guidelines applicable to public participation as contemplated in section 24J of the Act and must give notice to all potential interested and affected parties of an application or proposed application which is subjected to public participation by -	
(a) fixing a notice board at a place conspicuous to and accessible by the public at the boundary, on the fence or along the corridor of - (i) the site where the activity to which the application or proposed application relates is or is to be undertaken; and (ii) any alternative site;	A site notice was placed at the main farm gate closest to the proposed Oudrift Dam site accessible/visible from Moordkuil Sint Street direction Sorgfontein and Botlierskop. Evidence of the site notice is included with this report. Photographic evidence and the location of these notices is attached in Annexure F3.
(b) giving written notice, in any of the manners provided for in section 47D of the Act, to -	
(i) the occupiers of the site and, if the proponent or applicant is not the owner or person in control of the site on which the activity is to be undertaken, the owner or person in control of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;	There are no occupiers on RE/Prt 3/Farm 143. The owners of RE/Prt 13/Farm 143 and Banff 147 is notified and requested to notify tenants of other occupiers that may reside elsewhere on the property.
(ii) owners, persons in control of, and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;	Owners of adjacent properties have been notified of this environmental process. Such owners have been requested to inform the occupiers of the land of this environmental process.
(iii) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;	Councillor Anton Dellelijn for Ward 5 (Klein Brak River) has been notified.
(iv) the municipality which has jurisdiction in the area;	The Mossel Bay Municipality has been notified (Environmental and Planning Directorate, Civil Engineers Water Supply Directorate).
(v) any organ of state having jurisdiction in respect of any aspect of the activity; and	All mandated Authorities have been notified
(vi) any other party as required by the competent authority;	None

Regulated Requirement	Description
(c) placing an advertisement in - (i) one local newspaper; or (ii) any official Gazette that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;	An advert calling for registration of I&APs and notifying of the availability of the Draft EIR placed in the Mossel Bay Advertiser (19 June 2026). There is currently no official Gazette that has been published specifically for the purpose of providing public notice of applications
(d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or district municipality in which it is or will be undertaken: Provided that this paragraph need not be complied with if an advertisement has been placed in an official Gazette referred to in paragraph (c)(ii);and	Adverts were not placed in provincial or national newspapers, as the potential impacts will not extend beyond the borders of the municipal area.
(e) using reasonable alternative methods, as agreed to by the competent authority, in those instances where a person is desirous of but unable to participate in the process due to - (i) illiteracy; (ii) disability; or (iii) any other disadvantage.	Notifications have included provision for alternative engagement in the event of illiteracy, disability or any other disadvantage. In such instances, Cape EAPrac will engage with such individuals in such a manner as agreed on with the competent authority.
(3) A notice, notice board or advertisement referred to in sub regulation (2) must - (a) give details of the application or proposed application which is subjected to public participation; and (b) state - (i) whether basic assessment or S&EIR procedures are being applied to the application; (ii) the nature and location of the activity to which the application relates; (iii) where further information on the application or proposed application can be obtained; and (iv) the manner in which and the person to whom representations in respect of the application or proposed application may be made.	Notice board placed at main entrance to the farm where the Oudrift Dam is proposed.
(4) A notice board referred to in sub regulation (2) must - (a) be of a size at least 60cm by 42cm; and (b) display the required information in lettering and in a format as may be determined by the competent authority.	Complied with.
(5) Where public participation is conducted in terms of this regulation for an application or proposed	For purposes of all final reports are produced to include proof of, in the environmental process.

Regulated Requirement	Description
application, sub regulation (2)(a), (b), (c) and (d) need not be complied with again during the additional public participation process contemplated in regulations 19(1)(b) or 23(1)(b) or the public participation process contemplated in regulation 21(2)(d), on condition that - (a) such process has been preceded by a public participation process which included compliance with sub regulation (2)(a), (b), (c) and (d); and (b) written notice is given to registered interested and affected parties regarding where the - (i) revised basic assessment report or, EMPr or closure plan, as contemplated in regulation 19(1)(b); (ii) revised environmental impact report or EMPr as contemplated in regulation 23(1)(b); or (iii) environmental impact report and EMPr as contemplated in regulation 21(2)(d); may be obtained, the manner in which and the person to whom representations on these reports or plans may be made and the date on which such representations are due.	
(6) When complying with this regulation, the person conducting the public participation process must ensure that - (a) information containing all relevant facts in respect of the application or proposed application is made available to potential interested and affected parties; and (b) participation by potential or registered interested and affected parties is facilitated in such a manner that all potential or registered interested and affected parties are provided with a reasonable opportunity to comment on the application or proposed application. (7) Where an environmental authorisation is required in terms of these Regulations and an authorisation, permit or licence is required in terms of a specific environmental management Act, the public participation process contemplated in this Chapter may be combined with any public participation processes prescribed in terms of a specific environmental management Act, on condition that all relevant authorities agree to such combination of processes.	All reports that are submitted to the competent authority will be subject to a public participation process. These include: - Draft Environmental Impact Report - Draft EMPr - All specialist reports that form part of this environmental process. For purposes of compliance with the requirement that 'all relevant information' must be available, the approved Final Scoping Report is also included as an appendix to the Draft EIR.

6.1 REGISTRATION OF KEY STAKEHOLDERS

A number of key stakeholders were automatically registered and were given an opportunity to comment on the Draft EIR. These include the registered I&APs from the process facilitated by Kappec Environmental Services previous. Notifications to these original registered I&APs were sent via email on 3 June 2026.06.20

Copies and proof of notifications will be included with the Final EIR as the complete Stakeholder Register. A list of key stakeholders/Authorities registered for this process included in the table below.

Table 10: Key Stakeholders automatically registered as part of the Environmental Process

- Klein Brak Estuary Advisory Forum (EAF)
- Mossel Bay Municipality (Carel Venter, Eric Louw, Dick Naidoo and Rudi Mini)
- BOCMA (Mr Carlo Abrahams)
- CapeNature (Megan Simons)
- Garden Route District Municipality (Ms Nina Viljoen)
- Heritage Western Cape (Stephanie Brandt)
- Department of Agriculture (Cor vd Walt & Brandon Layman)
- Department of Forestry (Melanie Koen)
- DEA&DP: Biodiversity & Coastal Management (leptieshaam Bekko)
- SACAA (environment@caa.co.za)
- Eskom (WesternCape@eskom.co.za)

6.2 AVAILABILITY OF DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR):

The Draft EIR report is made available to all original Interested & Affected Parties (I&APs), mandated Authorities and Key Stakeholders automatically registered and potential Interested and Affected Parties for a 30 day-comment period extending from **19 June 2026 – 20 July 2026**.

- Newspaper advert placed in the *Mossel Bay Advertiser* on Friday, 19 June 2026;
- Site notice at the main entrance gate closest to the location of the proposed dam and associated infrastructure
- Notifications sent to registered I&APs from the scoping phase (3 June 2026)
- Notifications sent to key stakeholders and mandated authorities

Electronic copy of the report available at the following platforms:

- Cape EAPrac Website: www.cape-eaprac.co.za.
- Can provide electronic copy of the report via WeTransfer / Dropbox.

All notifications (including the site notice and advert) have made provisions for potential I&APs to contact Cape EAPrac, should they not have access to the digital platforms provided. In such instances, Cape EAPrac will arrange other suitable mechanisms for them to be able to access the relevant information.

A copy of the notifications regarding the availability of the Draft EIR, along with adverts/site notice evidence will be attached with the Final EIR as record of the public participation along with all submissions received.

MOSSEL BAY ADVERTISER

En Suid-Kaap Son Nuus / Including Suid-Kaap Sun News - GESTIG 1870 est. Tel 044 690 7156

Friday, 19 June 2026



www.mosselbayadvertiser.com

R5.00



Cape Environmental Assessment Practitioners

PUBLIC PARTICIPATION PROCESS

RE-SUBMISSION FOR ENVIRONMENTAL IMPACT ASSESSMENT PROCESS for PROPOSED 'OUDRIFT DAM'

Notice is hereby given of a Public Participation Process in terms of the National Environmental Management Act (NEMA, Act No 107 of 1998 as amended)

An Environmental Impact Assessment (EIA) process is being followed for assessment of the proposed 'Oudrift Dam' with associated infrastructure. The Department of Environmental Affairs and Development Planning (DEA&DP, George) is the Competent Authority for decision-making. A previous application was facilitated by Kappec Consultants in 2024. This re-submission follows Regulation 21(2) of the Environmental Regulations which allows the EIA process to continue with the impact assessment phase.

DEA&DP Ref: 16/3/3/2/D6/25/0000/26 | **Environmental Consultant:** Cape EAPrac | **Proponent:** Klipheuwel Trust | **Exemptions/Deviations:** None applied for

Proposal: Development of a 300 000m³ earth storage dam on Remainder Portion 3 & Remainder Portion 13 of Farm Klipheuwel, as well as Remainder Farm 147 BANFF with associated feeder/discharge pipe (250mmØ over 600m distance crossing the Moordkulls River – via anchor blocks), outlet pipe, pump house, overflow, overflow channel, v-notch structure to measure any overflow from the neighbouring Klipheuwel Dam and possibly re-routing of an existing farm track above the full supply level mark, including associated erosion control measures. Water abstraction falls within the existing lawful use (ELU) registered for the farm.

Location: Dam site is located +/-520 m from the northern shore of the existing Klipheuwel Dam. The location of the proposed Oudrift Dam is at 34°2'56.12"S and 22°8'15.04"E (central point for dam) located approximately 4km North of Kleinbrak River township in the Mossel Bay Municipal district.

Information Available: The Draft Environmental Impact Report (DEIR), inclusive of the adopted Final Scoping Report and Water Use License (WULA) which has been issued for the dam, is available electronically and can be downloaded from www.cape-eaprac.co.za (under Active Projects the project is listed as 'Oudrift Dam Draft EIR'. This office can also send copies of the report via electronic platforms such as WeTransfer or directly via email on request. For any other circulation options please contact us directly.

Listed activities: NEMA Listing 1 (Activities 12, 17, 19, 19A, 27 – removal of indigenous vegetation, development within watercourses / in proximity to estuarine functional zone), Listing 2 (Activity 16 – dam with a wall height higher than 5m), Listing Notice 3 (Activity 12 – removal of indigenous vegetation).

To be **registered** as an Interested and Affected Party (I&AP) this application, stakeholders are requested to register and respond to this notice by submitting their complete contact details and/or preliminary comments on the Draft Impact Report, to Cape EAPrac in writing on, or before **20 July 2026**. [Correspondence throughout the remainder of the environmental process will be distributed to **registered** I&APs only].

Registrations & comments:

Cape EAPrac

Attention: Louise-Mari van Zyl (appointed EAP EAPASA Reg: 2019/1444))

Email: louise@cape-eaprac.co.za

PO Box 2070, George, 6530; 044 874 0365

Take Note: In the POPIA legislation when registering as an I&AP a person consents to the lawful processing of personal information for the intended purposes, as described by the Protection of Personal Information Act, 2013 (Act no. 4 of 2013). By registering/submitting comment a person agrees that his/her/their contact details will, where required by a public body, be reflected in regulated reports that must be compiled and submitted to the general public, registered stakeholders, organs of state as well as the competent authority for consideration and decision-making.



6.3 REMAINDER OF THE ENVIRONMENTAL ASSESSMENT PROCESS

The following steps remain to be completed as part of the remainder of the environmental process:

- All comments received in response to this DEIR will be responded to, addressed and the proposal for the activity adapted where necessary and the Final EIR will be submitted to the DEADP for consideration and decision-making;
- The DEADP decision (Environmental Authorisation) on the FEIR will be communicated with all registered I&APs.

7. CONCLUSION AND RECOMMENDATIONS

This impact assessment is currently being undertaken to present the preferred proposals to the public and potential Interested & Affected Parties help identify environmental issues and concerns raised as a result of the proposed development.

This allows Interested & Affected Parties (I&APs), authorities, the project team, as well as specialists to provide input and raise issues and concerns, based on impact assessment studies undertaken.

The application has been analysed from a multi-disciplinary specialist team perspective inclusive of input from a Dam Engineer, Botanical, Aquatic-Biodiversity, Agricultural, Heritage/Archaeology/Palaeontology and Faunal specialists.

This DEIR report summarises the process to date, reports on the findings of relevant baseline studies/impact assessment studies, the outcome of the initial public participation process

(scoping report attached as Appendix) and outlines the requirements for the remainder of the environmental process.

Cape EAPrac is of the opinion that the information contained in this Draft Environmental Impact Report and the documentation attached hereto, including the specialist and technical reports provided, is sufficient to allow stakeholders, as well as the competent authority to apply their minds to the potential negative and/or positive impacts associated with the development, in respect of the activities applied for.

Following the completion of the impact assessment phase, the preferred alternatives will be finalised, taking into account the site sensitivities and all comments received to conclude and make a final recommendation about the activities applied for.

The Final Environmental Impact Report (FEIR) will be informed by all submissions received. Registered Interested & Affected Parties who respond to notifications and/or submit comment on this DEIR, will be notified of the submission of the FEIR to the Competent Authority and provided with access to the report to ensure that their comments/submissions have been correctly captured and reflected in the documentation which the DEADP must consider for decision-making.

8. ABBREVIATIONS

AIA	Archaeological Impact Assessment
BGIS LUDS	Biodiversity Geographic Information System Land Use Decision Support
CBA	Critical Biodiversity Area
DSR	Draft Scoping Report
EAP	Environmental Impact Practitioner
EIA	Environmental Impact Assessment
EIR	Environmental Impact Report
EMPr	Environmental Management Programme
ESA	Ecological Support Area
HIA	Heritage Impact Assessment
I&APs	Interested and Affected Parties
IDP	Integrated Development Plan
LUPO	Land Use Planning Ordinance
NEMA	National Environmental Management Act
NEMBA	National Environmental Management: Biodiversity Act
NHRA	National Heritage Resources Act
NSBA	National Spatial Biodiversity Assessment
NWA	National Water Act
PSDF	Provincial Spatial Development Framework
SACAA / CAA	South African Civil Aviation Authority
SAHRA	South African National Heritage Resources Agency
SANBI	South Africa National Biodiversity Institute
SDF	Spatial Development Framework
TOPS	Threatened and Protected Species

9. REFERENCES

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