JADE HILLS FARMING PTY LTD: THE PROPOSED CONSTRUCTION OF THE NEW JADE HILLS DAM

ON PORTION 26 OF FARM STINKFONTEIN 383, CERES, WESTERN CAPE

DRAFT SCOPING REPORT AND PLAN OF STUDY



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EnviroAfrica
Environmental Management and Impact Assessment
Omgewingsbestuur en Impakbeoordeling

JADE HILLS FARMING PTY LTD

PROPOSED CONSTRUCTION OF THE NEW JADE HILLS DAM

On Portion 26 of Farm Stinkfontein 383, Ceres, Western Cape

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INDEPENDENCE & CONDITIONS

EnviroAfrica is an independent consulting firm that has no interest in the proposed activity other than fair remuneration for services rendered. Remuneration for services is not linked to approval by decision-making authorities and EnviroAfrica has no interest in secondary or downstream development as a result of this project. There are no circumstances that compromise the objectivity of this Scoping Report. The findings, results, observations and recommendations given here are based on the author's best scientific and professional knowledge and available information. EnviroAfrica reserves the right to modify aspects of this report, including the recommendations, if new information becomes available which may have a significant impact on the findings of this report.

RELEVANT QUALIFICATIONS & EXPERIENCE OF THE EAP

This Scoping Report has been prepared by Bianca Gilfillan of EnviroAfrica cc, an Environmental Assessment Practitioner (EAP) with experience in the compilation and management of environmental authorisation processes in terms of the National Environmental Management Act (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2014 (as amended).

Qualifications and Experience

Bianca Gilfillan is an environmental scientist with professional experience in environmental management and impact assessment processes across South Africa. Her work includes the preparation and submission of Basic Assessment Reports (BARs), Scoping and Environmental Impact Assessment Reports (S&EIRs), Environmental Management Programmes (EMPrs), and associated specialist coordination and regulatory compliance processes.

Her experience includes:

- Managing and compiling environmental authorisation applications in terms of the National Environmental Management Act (Act No. 107 of 1998);
- Conducting and overseeing Public Participation Processes in accordance with the EIA Regulations, 2014 (as amended);
- Coordinating specialist studies, including botanical, freshwater, heritage, visual, and geotechnical assessments;
- Liaising with competent authorities and stakeholders, including national, provincial, and local authorities;
- Ensuring compliance with applicable environmental legislation and guidelines.

Bianca Gilfillan has been involved in a range of projects across multiple sectors, including water infrastructure (dams and pipelines), renewable energy developments, residential developments, and conservation-related projects.

Please refer to Appendix L for the CV of the EAP.

EXECUTIVE SUMMARY

Jade Hills Farming (Pty) Ltd is proposing the development of a farm storage dam and associated water conveyance infrastructure on Portion 26 of Farm Stinkfontein No. 383, near Ceres, within the Witzenberg Local Municipality, Cape Winelands District Municipality, Western Cape Province (hereafter referred to as Jade Hills Farm).

The proposed development involves the construction of a new zoned earthfill farm storage dam (hereafter referred to as the Jade Hills Dam). In accordance with the Phase 2 Preliminary Design prepared by Sarel Bester Engineers, the proposed dam will have an approximate storage capacity of 110 000 m³, a maximum wall height of approximately 12.5 m, a crest length of approximately 259 m, and a water surface/flooded area of approximately 2.3 ha. The total dam footprint will be approximately 6.6 ha, which includes the dam wall and spillway area.

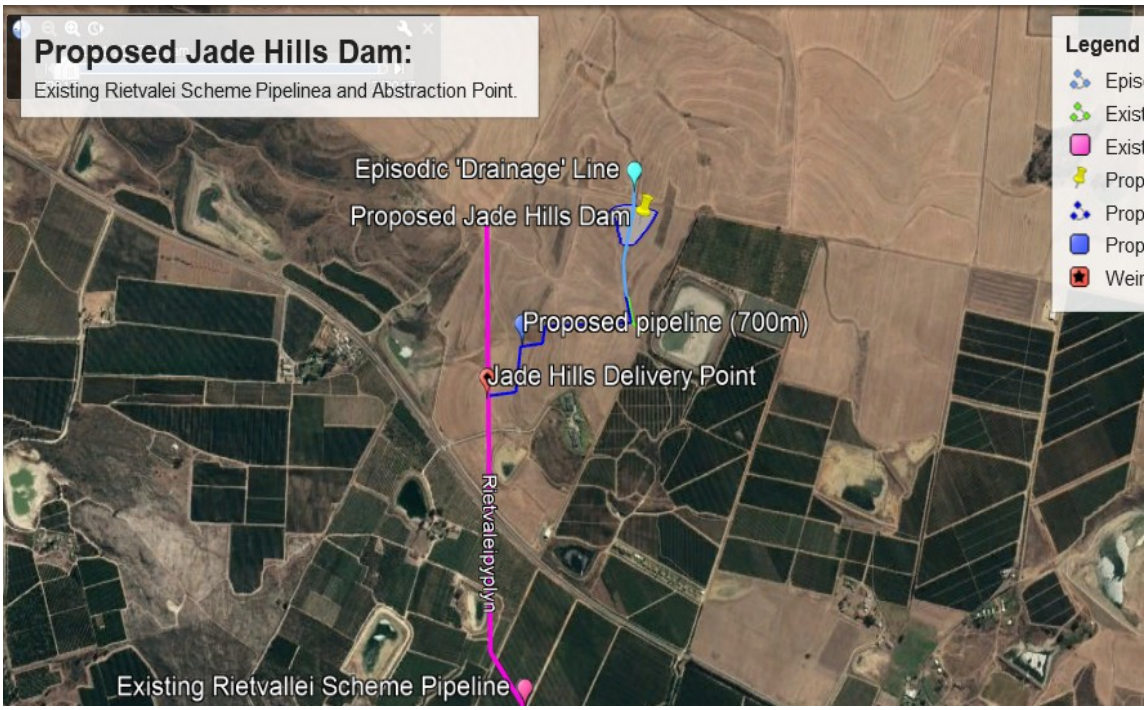
The primary purpose of the proposed dam is to store surplus winter water derived from the existing lawful water use allocation associated with the Rietvalley Irrigation Scheme, for use during the dry summer months in support of existing agricultural activities on the property. The current environmental application does not include any proposed expansion of agricultural cultivation.

The proposed abstraction and storage are authorised in terms of Water Use Licence No. 02/H10B/AB/13972, which authorises the abstraction of a maximum of 110 000 m³ per annum from the Titus River via the Rietvalley Scheme and the storage of 110 000 m³ in the proposed Jade Hills Dam. The licence was subsequently amended to confirm the storage location as Portion 26 of Farm Stinkfontein No. 383.

The proposed dam will be supplied via an approximately 700 m long, 150 mm diameter pipeline from the existing Jade Hills Delivery Point. The final pipeline and associated pumping requirements to be confirmed as part of the detailed engineering design. Associated operational infrastructure will include a small pumphouse of approximately 40 m².

The proposed dam is located predominantly within previously cultivated/transformed agricultural land historically associated with Ceres Shale Renosterveld, a Critically Endangered ecosystem. An episodic drainage feature occurs within the proposed development area. These environmental sensitivities, together with the potential impacts of the proposed dam and associated infrastructure, are considered as part of the environmental assessment process and relevant specialist investigations.

Site coordinates (approximate central point of the proposed dam wall): 33°22′31.67″ S; 19°22′13.15″



The applicant, Jade Hills Farming (Pty) Ltd, who will undertake the proposed development should it be authorised, has appointed EnviroAfrica CC as the independent Environmental Assessment Practitioner (EAP) to undertake the required Environmental Impact Assessment (EIA) process and Public Participation Process in terms of the National Environmental Management Act (Act No. 107 of 1998) (NEMA) and the Environmental Impact Assessment Regulations, 2014 (as amended).

A Scoping and Environmental Impact Reporting (S&EIR) process is being undertaken for the proposed development. This Draft Scoping Report provides a description of the proposed development and receiving environment, identifies the key environmental issues and potential impacts, considers reasonable and feasible alternatives, documents the comments received from commenting authorities and Interested and Affected Parties (I&APs), and identifies the matters requiring further assessment during the Environmental Impact Assessment phase.

The environmental sensitivities of the site have been considered through the Site Sensitivity Verification Report (SSVR) and the specialist investigations undertaken for the proposed development. The principal specialist inputs relevant to the proposed development include:

- Terrestrial Biodiversity/Botanical Assessment;
- Freshwater Resource Verification and Risk Assessment; and
- Heritage input.

The terrestrial biodiversity/botanical and freshwater specialist assessments have been undertaken and their findings will inform the assessment of impacts during the EIA phase. The freshwater assessment will also be considered in determining whether any additional water-use authorisation requirements arise in terms of sections 21(c) and/or 21(i) of the National Water Act (Act No. 36 of 1998). Any additional specialist investigations required by the Competent Authority or relevant commenting authorities will be undertaken where applicable.

The EIA phase will include the detailed assessment of the potential environmental impacts associated with the proposed development and reasonable and feasible alternatives, including consideration of the No-Go Alternative and the alternative storage options raised during the public participation process. Relevant mitigation, management and rehabilitation measures will be incorporated into the Environmental Impact Report (EIR) and Environmental Management Programme (EMPr).

The Draft Scoping Report is being made available to registered I&APs and relevant commenting authorities for review and comment. All comments received will be considered and incorporated into the Comments and Responses Report, where applicable, prior to submission of the Final Scoping Report to the Competent Authority.

Based on the environmental issues identified, specialist investigations undertaken and comments received during the pre-application process, it is considered appropriate that the application proceed through the Scoping and Environmental Impact Reporting process, during which the identified impacts and alternatives will be assessed in detail before a final decision is made by the Competent Authority.

Should the Competent Authority authorise the application to proceed to the EIA phase, identified impacts will be assessed in detail, specialist studies will be finalised, and findings will be incorporated into an Environmental Impact Report (EIR) for public review and authority consideration.

Based on the issues identified to date and the nature of the proposed development, it is considered appropriate that the application proceed through the Scoping and EIA process, where all relevant environmental impacts and mitigation measures can be fully assessed before a final decision is made.

DOCUMENT CONTROL

Version	Name	Role / Responsibility	Date
AA	Bianca Gilfillan	EAP	June 2026
BB	Bianca Gilfillan	EAP	October 2026
CC			
DD			
EE			
Final			

CONTENTS

1. INTRODUCTION 10
1.1 BACKGROUND 10
1.2 DESCRIPTION OF THE PROPOSED ACTIVITY 11
1.3 WATER USE LICENCE 15
2. NEED AND DESIRABILITY 16
2.1 NEED 16
2.2 DESIRABILITY 17
2.2.1 LOCATION AND ACCESSIBILITY 17
2.2.2 COMPATIBILITY WITH THE SURROUNDING AREA 18
2.3 THE CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA 19
2.4 NATIONAL ENVIRONMENTAL MANAGEMENT ACT (ACT 107 OF 1998) 19
2.5 NATIONAL HERITAGE RESOURCES ACT 23
2.6 EIA GUIDELINE AND INFORMATION DOCUMENT SERIES 23
2.7 NATIONAL WATER ACT 24
2.8 NATIONAL ENVIRONMENTAL MANAGEMENT: BIODIVERSITY ACT 25
3. ALTERNATIVES 26
3.1 SITE ALTERNATIVES FOR THE PROPOSED DAM 26
3.2 ACTIVITY ALTERNATIVES 27
3.3 NO-GO ALTERNATIVE 27
3.4 CONCLUSION ON ALTERNATIVES 27
4. SITE DESCRIPTION 29
4.1 LOCATION 29
4.2 CLIMATE 29
4.3 BIODIVERSITY 31
4.3.1 VEGETATION 31
4.3.2 CRITICAL BIODIVERSITY AREAS AND ECOLOGICAL SUPPORT AREAS 32
4.4 FRESHWATER 34
4.5 HERITAGE / ARCHAEOLOGICAL 35
4.5.1 HERITAGE & ARCHAEOLOGICAL FINDINGS 35
4.6 SOCIO-ECONOMIC CONTEXT 36
5. ENVIRONMENTAL ISSUES AND POTENTIAL IMPACTS 38
5.1 BIODIVERSITY IMPACT 38
5.2 FRESHWATER IMPACT 38
5.3 HERITAGE / ARCHAEOLOGICAL IMPACT 39
5.4 LANDSCAPE / VISUAL IMPACT 39
5.5 AGRICULTURAL IMPACT 39
5.6 SOCIO-ECONOMIC IMPACT 39
5.7 CONCLUSION 40
6. DETAILS OF THE PUBLIC PARTICIPATION PROCESS 41
7. PLAN OF STUDY FOR THE EIA 51
7.1 TASKS TO BE UNDERTAKEN 51
7.2 CRITERIA FOR SPECIALIST ASSESSMENT OF IMPACT 52
7.3 ASPECTS / IMPACTS TO BE ASSESSED DURING THE EIA PHASE 54
7.4 ALTERNATIVES TO BE ASSESSED DURING THE EIA PHASE 55
8. CONCLUSION 57
9. Summary of Key Findings from the Scoping Phase 59
10. WAY FORWARD 61

APPENDICES

APPENDIX A:	LOCALITY MAP
APPENDIX B1:	DESIGN DRAWINGS
APPENDIX B2:	WATER USE LICENCE
APPENDIX B3:	WATER USE LICENCE - AMENDMENT
APPENDIX C:	SITE OVERVIEW PHOTOS
APPENDIX D1:	VEGETATION MAP
APPENDIX D2:	BIODIVERSITY OVERLAY
APPENDIX D3:	WATER RESOURCES MAP
APPENDIX E:	DFFE SCREENING TOOL
APPENDIX F:	PUBLIC PARTICIPATION PROCESS
APPENDIX F1:	INTERESTED AND AFFECTED PARTIES LIST- POPI
APPENDIX F2:	NOTIFICATION NEMA APPLICATION
APPENDIX F3	COMMENTS AND RESPONSE REPORT
APPENDIX F4:	PROOF OF NEMA APPLICATION SENT
APPENDIX F5:	ADVERT
APPENDIX F6:	COMMENTS RECEIVED
APPENDIX F7:	PROOF OF POSTERS
APPENDIX L1:	EAP DETAILS
APPENDIX L2:	EAP EAPASA REGISTRATION

ACRONYMS

BGIS	Biodiversity Geographic Information System
CBA	Critical Biodiversity Area
DEA	Department of Environmental Affairs
DEA&DP	Department of Environmental Affairs and Development Planning
DWA	Department of Water Affairs
EAP	Environmental Assessment Practitioner
ECA	Environment Conservation Act (Act No. 73 of 1989)
EIA	Environmental Impact Assessment
EIR	Environmental Impact Report
EMP	Environmental Management Programme
HIA	Heritage Impact Assessment
HWC	Heritage Western Cape
I&APs	Interested and Affected Parties
NEMA	National Environmental Management Act (Act No. 107 of 1998)
NEMBA	National Environmental Management: Biodiversity Act (Act No. 10 of 2004)
NHRA	National Heritage Resources Act (Act No. 25 of 1999)
NID	Notice of Intent to Develop
NWA	National Water Act
ESA	Ecological Support Area
SAHRA	South African Heritage Resources Agency
SANBI	South African National Biodiversity Institute
WULA	Water Use Licence Application

1. INTRODUCTION

1.1 BACKGROUND

Agriculture remains an important economic activity within the Cape Winelands region and contributes to local economic activity, employment and the long-term viability of rural areas.

Mr Jean Faul is the registered landowner and representative of Jade Hills Farming (Pty) Ltd and is the Applicant for this Environmental Impact Assessment (EIA) process. The application relates to the proposed construction of a new farm storage dam and associated water conveyance infrastructure on Portion 26 of Farm Stinkfontein No. 383, located approximately 5 km east of Ceres in the Western Cape (hereafter referred to as Jade Hills Farm).

The property was acquired by the current owner in 2013. Historically, the property formed part of a larger farming unit under previous ownership. An existing lawful water use allocation associated with the Rietvalley Irrigation Scheme is associated with the property and equates to the irrigation of approximately 8.6 ha.

The Rietvalley Irrigation Scheme originates from the mid-1960s and was formally registered in 1969. The scheme provides for the abstraction and distribution of surplus winter water from the Titus River to agricultural properties within the area. The scheme has subsequently been upgraded from contour earth channels to a piped distribution system and comprises a number of abstraction and delivery points serving agricultural properties within the scheme.

Jade Hills Farm is supplied via the existing Loxtonia/Jade Hills Delivery Point, which forms part of the Rietvalley Scheme infrastructure. Further information regarding the authorised abstraction and storage of water is contained in the Water Use Licence documentation included in **Appendix B2** and **Appendix B3**.

Historically, the available winter water allocation could not be fully utilised on Jade Hills Farm due to the absence of sufficient on-site storage infrastructure. The proposed Jade Hills Dam is therefore intended to enable surplus winter water available to the property through the Rietvalley Irrigation Scheme to be stored for subsequent use during the dry summer months.

The proposed development entails the construction of a new zoned earthfill farm storage dam in accordance with the Phase 2 Preliminary Design prepared by Sarel Bester Engineers. The proposed dam will have an approximate storage capacity of 110 000 m³, a maximum wall height of approximately 12.5 m, a crest length of approximately 259 m, a water surface/flooded area of approximately 2.3 ha, and a total dam footprint of approximately 6.6 ha, including the dam wall and spillway area.

Water will be conveyed from the existing Jade Hills Delivery Point to the proposed dam via an approximately 700 m long, 150 mm diameter pipeline, together with associated infrastructure, including a small pumphouse. The final pipeline and associated pumping requirements will be confirmed as part of the detailed engineering design.

The proposed dam will provide storage for water to support existing agricultural activities on the property, including established fruit orchards located on previously cultivated agricultural land. No expansion of agricultural cultivation forms part of the current environmental application. The proposed development is intended to improve the utilisation of the authorised winter water allocation and provide increased irrigation reliability during the dry summer months.

A Water Use Licence (Licence No. 02/H10B/AB/13972) was issued by the Department of Water and Sanitation on 8 March 2024, authorising the abstraction of a maximum of 110 000 m³ per annum from the Titus River via the Rietvalley Scheme in terms of section 21(a) of the National Water Act (Act No. 36 of 1998), and the storage of 110 000 m³ in terms of section 21(b). The licence was subsequently amended on 26 March 2024 to confirm the storage location as Portion 26 of Farm Stinkfontein No. 383. The proposed development will be implemented in accordance with the applicable conditions of the WUL, as amended.

The Applicant, Jade Hills Farming (Pty) Ltd, will undertake the proposed development should Environmental Authorisation be granted. EnviroAfrica CC has been appointed as the independent Environmental Assessment Practitioner (EAP) responsible for undertaking the Scoping and Environmental Impact Reporting process and associated Public Participation Process in terms of the National Environmental Management Act (Act No. 107 of 1998) (NEMA) and the Environmental Impact Assessment Regulations, 2014 (as amended). Sarel Bester Engineers is responsible for the engineering design of the proposed dam and previously provided the technical engineering input supporting the Water Use Licence application.

A previous environmental authorisation process was undertaken for an earlier design of the proposed Jade Hills Dam. That process considered the Phase 1 design, which comprised a smaller dam with a storage capacity of approximately 67 000 m³. The previous process was not completed and the application subsequently lapsed. The current application constitutes a new environmental authorisation process and assesses the current Phase 2 design, with a storage capacity of approximately 110 000 m³. This Draft Scoping Report therefore forms part of the new Scoping and Environmental Impact Reporting process initiated in 2026 and incorporates the updated project description, specialist information and comments received during the pre-application process.

1.2 DESCRIPTION OF THE PROPOSED ACTIVITY

It is proposed that a new farm storage dam and associated water conveyance infrastructure be constructed on Portion 26 of Farm Stinkfontein No. 383, near Ceres in the Western Cape. The purpose of the proposed dam is to store surplus winter water for subsequent use during the dry summer months in support of existing agricultural activities on the property.

Existing Water Use and Abstraction

An existing lawful water use allocation associated with the Rietvalley Irrigation Scheme is available to the property. Water is abstracted from the Titus River via the existing Rietvalley Irrigation Scheme infrastructure during the authorised winter abstraction period.

The Department of Water and Sanitation (DWS) issued Water Use Licence No. 02/H10B/AB/13972 on 8 March 2024. The WUL authorises the following water uses in terms of section 21 of the National Water Act (Act No. 36 of 1998) (NWA):

- Section 21(a): Taking water from a water resource – abstraction of a maximum of 110 000 m³ per annum from the Titus River via the Rietvalley Irrigation Scheme; and
- Section 21(b): Storing water – storage of a maximum of 110 000 m³ in the proposed Jade Hills Dam.

The WUL was subsequently amended on 26 March 2024 to confirm the location of the authorised storage as Portion 26 of Farm Stinkfontein No. 383, Ceres.

Abstraction will be undertaken in accordance with the conditions of the WUL, including the applicable winter abstraction period and the requirement that abstraction may only occur when the flow in the Titus River at Point 9 meets the prescribed surplus-flow requirements and exceeds 216 m³/hour. The WUL further provides that groundwater may not be stored in the proposed Jade Hills Dam.

The freshwater specialist assessment will inform whether the construction of the proposed dam and associated infrastructure results in any additional water uses requiring authorisation in terms of sections 21(c) and/or 21(i) of the NWA. Any additional water-use authorisation requirements identified will be addressed in consultation with the Breede-Olifants Catchment Management Agency (BOCMA), where applicable.

Please refer to Figure 2 and Appendix A (Locality Maps) for the location of the existing Rietvalley Irrigation Scheme infrastructure and Jade Hills Delivery Point. The issued WUL and subsequent amendment are included in **Appendices B2 and B3**, respectively.

Water Conveyance Infrastructure

It is proposed that an approximately 700 m long, 150 mm diameter pipeline be constructed from the existing Jade Hills Delivery Point to the proposed Jade Hills Dam.

The final pipeline and associated pumping requirements will be confirmed during the detailed engineering design, taking into consideration the available abstraction period and the operational requirements of the Titus River Water Users Association. Additional pumping and/or conveyance infrastructure will be incorporated into the final design where required.

Proposed Construction of the Dam

The proposed development entails the construction of a single new zoned earthfill farm storage dam for the storage of surplus winter water for subsequent use during the dry summer months in support of existing agricultural activities on the property.

The current proposal is based on the Phase 2 Preliminary Design prepared by Sarel Bester Engineers. Phase 1 of the preliminary design is no longer under consideration. The Phase 2 design was used for purposes of the Water Use Licence Application and constitutes the current design to be assessed as part of this environmental authorisation process.

The approximate Phase 2 design specifications are as follows:

Description	**Proposed Development – Phase 2**
Dam type	Zoned earthfill dam
Maximum wall height	±12.5 m
Crest length	±259 m
Crest width	±4 m
Storage capacity	±110 000 m³
Water surface/flooded area	±2.3 ha
Total dam footprint	±6.6 ha
Full Supply Level	±548.50 masl
Estimated earthworks	±41 200 m³
Embankment volume	±35 000 m³

The 2.3 ha water surface/flooded area represents the area that will be covered by water at Full Supply Level, whereas the approximately 6.6 ha total dam footprint includes the dam wall and spillway area.
The preliminary engineering design provides for an open side-channel spillway with a concrete sill at the right abutment. The spillway will be designed to safely convey floodwater past the dam

embankment and return flows to the downstream drainage feature. Appropriate erosion protection measures will be incorporated into the detailed engineering design at the spillway, outlet works and other areas susceptible to concentrated flows.

Construction material required for the dam embankment is expected to be sourced primarily from material excavated within the proposed dam basin. Preliminary investigations indicate that suitable material is likely to be available within the dam basin; however, formal soil testing will be undertaken during the final engineering design to confirm the suitability of the available materials. No external borrow pit is currently proposed as part of the development.

A pumphouse of approximately 40 m² is proposed in association with the dam and water conveyance infrastructure, as indicated on the relevant layout and engineering drawings.

Agricultural and Environmental Context

The proposed dam will be located predominantly within previously cultivated/transformed agricultural land. The site historically supported Ceres Shale Renosterveld, which is classified as a Critically Endangered ecosystem. A terrestrial biodiversity/botanical assessment has been undertaken to assess the ecological characteristics and sensitivities of the proposed development area.

An episodic drainage feature occurs within the proposed development area. A Freshwater Resource Verification and Risk Assessment has been undertaken to verify the freshwater features associated with the site and assess the potential impacts of the proposed development. The freshwater assessment and associated recommendations will inform the detailed impact assessment, mitigation measures and any additional water-use authorisation requirements during the EIA phase.

The proposed dam is intended to support existing agricultural activities on the property, including established orchard areas located within previously transformed agricultural land. No expansion of agricultural cultivation forms part of the current environmental application.

The proposed dam location has been identified taking into consideration the site's basin-like topography, elevation relative to the irrigation areas and integration with the existing and proposed water-supply infrastructure. The environmental assessment will also consider reasonable and feasible alternatives, including potential off-stream storage alternatives, the potential enlargement or use of existing storage facilities, and the No-Go Alternative.

Access and Services

Access to the proposed dam site will be obtained via existing farm roads. Existing disturbed areas and established farm road alignments will be utilised for the associated infrastructure where reasonably practicable in order to minimise additional disturbance.

Electricity supply, where required for pumping or associated infrastructure, will be obtained from the existing farm electricity supply, subject to the final engineering requirements.

Please refer to Appendix A for the locality maps and layout plans and Appendix B for the relevant engineering design and Water Use Licence documentation.

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Figure 1: Locality map of the proposed Jade Hills Dam site in proximity to surrounding towns

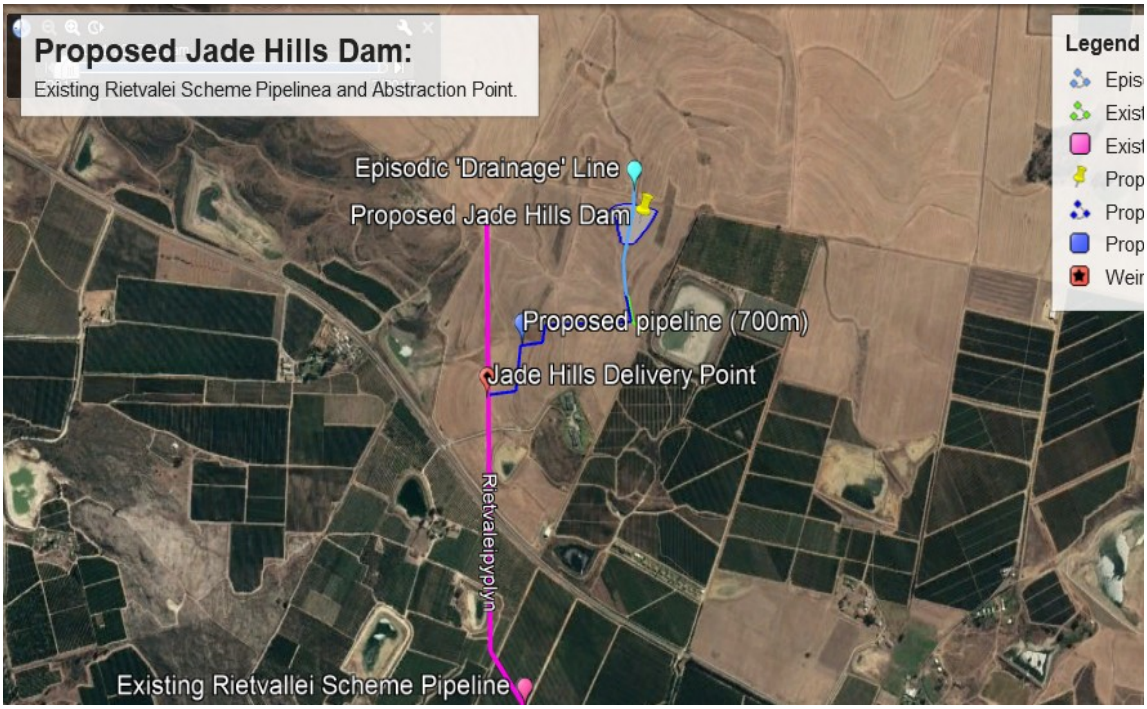


Figure 2: Google map indicating the existing Rietvalley pipeline abstraction point, the existing Jade Hills Delivery Point and the proposed pipeline alignment to the dam.

1.3 WATER USE LICENCE

A Water Use Licence (Licence No. 02/H10B/AB/13972) was issued by the Department of Water and Sanitation (DWS) on 8 March 2024 in respect of the abstraction and storage of water associated with the proposed Jade Hills Dam. The licence was subsequently amended on 26 March 2024 to confirm the location of the authorised storage as Portion 26 of Farm Stinkfontein No. 383, Ceres.

The Water Use Licence authorises the following water uses in terms of section 21 of the National Water Act (Act No. 36 of 1998) (NWA):

1. Section 21(a): Taking water from a water resource – the abstraction of a maximum of 110 000 m³ per annum from the Titus River via the existing Rietvalley Irrigation Scheme; and
2. Section 21(b): Storing water – the storage of a maximum of 110 000 m³ in the proposed Jade Hills Dam.

The authorised water will be conveyed from the existing Rietvalley Irrigation Scheme infrastructure to the proposed dam for storage and subsequent use in support of existing agricultural activities on the property.

Abstraction must be undertaken in accordance with the applicable conditions of the WUL. The licence provides, amongst others, that abstraction may only take place during the applicable winter abstraction period and when the flow in the Titus River at Point 9 meets the prescribed surplus-flow requirements and exceeds 216 m³/hour. The WUL further stipulates that groundwater may not be stored in the proposed Jade Hills Dam.

The proposed dam is located within an episodic drainage feature identified by the freshwater specialist. The issued WUL does not authorise water uses in terms of sections 21(c) or 21(i) of the NWA. The freshwater specialist assessment will therefore inform whether construction of the proposed dam and associated infrastructure results in additional water uses in terms of:

- Section 21(c): Impeding or diverting the flow of water in a watercourse; and/or
- Section 21(i): Altering the bed, banks, course or characteristics of a watercourse.

Should any additional water-use authorisation be required in terms of sections 21(c) and/or 21(i), this will be addressed with the Breede-Olifants Catchment Management Agency (BOCMA) prior to commencement of the relevant activities.

The proposed development and operation of the dam will be undertaken in accordance with the conditions of the issued Water Use Licence, as amended, together with any additional water-use authorisation requirements that may be applicable.

The issued Water Use Licence is included in **Appendix B2**, with the subsequent amendment included in **Appendix B3**.

2. NEED AND DESIRABILITY

In terms of the National Environmental Management Act (Act No. 107 of 1998) (NEMA) and the Environmental Impact Assessment Regulations, 2014 (as amended), the Scoping and Environmental Impact Reporting process must consider the need and desirability of the proposed development. This requires consideration of the strategic context within which the development is proposed, the need for the activity, the suitability of the proposed location, the sustainable use of natural resources, and the potential environmental, social and economic implications of the development.

Need and desirability considers both “need” (the timing and necessity of the proposed development) and “desirability” (the suitability of the proposed development and its location). The assessment must therefore consider whether the development responds to an identified need, whether the proposed site is appropriate from an environmental and land-use perspective, and whether the development can be undertaken in a manner consistent with the principles of sustainable development contained in NEMA.

For the proposed Jade Hills Dam, the need and desirability assessment considers, amongst others, the requirement for on-farm storage of authorised surplus winter water, improved irrigation reliability during the dry summer months, the continued viability of existing agricultural activities, the suitability of the proposed dam location and associated infrastructure, environmental sensitivities of the site, and the reasonable and feasible alternatives available to achieve the purpose of the development.

2.1 NEED

The proposed development is required to provide on-farm storage for surplus winter water authorised for abstraction from the Titus River via the Rietvalley Irrigation Scheme. The issued Water Use Licence authorises the abstraction of up to 110 000 m³ per annum and the storage of 110 000 m³ in the proposed Jade Hills Dam.

Historically, the available winter water allocation could not be fully utilised on Jade Hills Farm due to the absence of sufficient on-site storage infrastructure. The proposed dam will enable authorised surplus winter water to be stored for subsequent use during the dry summer months, when irrigation requirements for the existing agricultural activities on the property are greater.

There is therefore a need for suitable on-farm water storage to improve water security and irrigation reliability and to enable more effective utilisation of the authorised winter water allocation. The proposed dam will provide greater flexibility between the period during which surplus winter water is available for abstraction and the period during which irrigation water is required on the farm.

The proposed development is intended to support and sustain existing agricultural activities on the property. No expansion of agricultural cultivation forms part of the current environmental application. The provision of additional on-farm storage will assist in improving the operational resilience and long-term viability of the existing farming activities, particularly given the seasonal nature of water availability and variability in rainfall.

The continued viability of agricultural activities on Jade Hills Farm contributes to local agricultural production and employment and forms part of the broader agricultural economy of the Ceres area and Cape Winelands District.

The proposed Jade Hills Dam therefore responds to an identified need for reliable on-farm storage of authorised surplus winter water in order to support existing agricultural operations. The need for the

dam must, however, be considered together with the potential environmental impacts of the proposed development and the reasonable and feasible alternatives identified through the Scoping and EIA process.

2.2 DESIRABILITY

The desirability of the proposed Jade Hills Dam relates to the suitability of the proposed development and its location, taking into consideration the existing agricultural land use, engineering and operational requirements, environmental sensitivities, available infrastructure and reasonable and feasible alternatives.

2.2.1 LOCATION AND ACCESSIBILITY

Portion 26 of Farm Stinkfontein No. 383 is an existing agricultural property situated approximately 5 km east of Ceres. The proposed dam site is located predominantly within previously cultivated/transformed agricultural land and has been identified as the preferred location based on its topographical characteristics, elevation relative to the irrigation areas and integration with the existing water-supply infrastructure.

The basin-like topography of the proposed site is favourable for the establishment of a farm storage dam and allows the authorised winter water to be stored in proximity to the existing agricultural operations. The elevation of the proposed dam relative to the irrigation areas also provides opportunities for gravity-fed water distribution where technically feasible, thereby reducing reliance on pumping and the associated long-term energy and operational requirements.

The proposed dam will be connected to the existing Jade Hills Delivery Point via an approximately 700 m long, 150 mm diameter pipeline. Its relationship to the existing Rietvalley Irrigation Scheme infrastructure therefore provides a practical means of conveying authorised surplus winter water to the proposed storage facility. Final pumping and conveyance requirements will be confirmed during detailed engineering design.

Access to the proposed dam site is available via existing farm roads, thereby limiting the need for additional access infrastructure and associated disturbance.

Although the preferred location offers practical engineering and operational advantages, the proposed dam is situated within an episodic drainage feature and is therefore considered an in-stream dam for purposes of the environmental assessment. The suitability of the preferred location must consequently also be considered in relation to the freshwater and terrestrial biodiversity sensitivities identified by the specialist assessments.

The environmental assessment will therefore consider the preferred location against reasonable and feasible alternatives, including potential off-stream storage alternatives, the potential enlargement or use of existing storage facilities, and the No-Go Alternative. The final determination of the desirability of the preferred location will take into account both its engineering and operational advantages and the environmental impacts identified through the EIA process.

Locality and layout maps are included in **Appendix A**, relevant engineering drawings and supporting documentation in Appendix B, and site photographs in **Appendix C**.

2.2.2 COMPATIBILITY WITH THE SURROUNDING AREA

The surrounding area is characterised predominantly by agricultural land uses, including orchards, cultivated lands, irrigation infrastructure, farm dams and associated rural agricultural activities. The broader Ceres Valley is strongly agricultural in character.

The proposed Jade Hills Dam is directly associated with the existing agricultural use of the property and is intended to provide storage of authorised surplus winter water for subsequent use in support of existing farming activities. The proposed development is therefore generally compatible with the existing agricultural character and land-use context of the surrounding area.

The proposed dam and associated water conveyance infrastructure will be located predominantly within an existing transformed agricultural landscape. The development will not introduce a fundamentally different land use into the area but will constitute agricultural support infrastructure associated with the existing farming operation.

The proposed development will nevertheless result in a permanent physical alteration of the immediate site through the construction of the dam wall, inundation area, spillway and associated infrastructure. The potential environmental and landscape implications of this change will therefore be considered as part of the EIA process and addressed through appropriate design, mitigation and rehabilitation measures.

Overall, the proposed development is considered compatible with the predominantly agricultural land-use character of the surrounding area, subject to the findings of the environmental assessment and implementation of the required mitigation measures.

LEGAL REQUIREMENTS

The environmental assessment for the proposed Jade Hills Dam is being undertaken in terms of the National Environmental Management Act (Act No. 107 of 1998) (NEMA), read together with the Environmental Impact Assessment Regulations, 2014 (as amended). The proposed development includes listed activities that may not commence without prior Environmental Authorisation from the competent authority.

The proposed development is therefore subject to a Scoping and Environmental Impact Reporting (S&EIR) process, during which the potential environmental impacts associated with the proposed dam and related infrastructure, reasonable and feasible alternatives, mitigation measures and relevant specialist findings will be considered.

In addition to NEMA and the EIA Regulations, other national and provincial environmental and resource-management legislation is applicable or potentially applicable to the proposed development. This includes legislation relating to water resources, biodiversity, agricultural resources, heritage resources and dam safety, where relevant.

The principal legislation and regulatory requirements relevant to the proposed development are briefly outlined below.

2.3 THE CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA

The Constitution of the Republic of South Africa, 1996 is the supreme law of the Republic and provides the overarching legal framework for environmental governance and sustainable development.

Section 24 of the Constitution 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 that:
    - prevent pollution and ecological degradation;
    - promote conservation; and
    - secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

The proposed environmental assessment process gives effect to these constitutional principles by considering the potential environmental impacts associated with the proposed Jade Hills Dam, the sustainable use of natural resources, reasonable and feasible alternatives, and appropriate mitigation measures.

The Scoping and EIA process will therefore seek to ensure that the proposed development is considered within the context of environmental protection, sustainable water and land-resource use, and the continued economic and social benefits associated with agricultural activities, prior to a decision being taken by the competent authority.

2.4 NATIONAL ENVIRONMENTAL MANAGEMENT ACT (ACT 107 OF 1998)

The National Environmental Management Act (Act No. 107 of 1998) (NEMA), as amended, provides the overarching legislative framework for environmental management in South Africa. NEMA establishes environmental management principles and provides for the identification, assessment and authorisation of activities that may significantly affect the environment.

In the Western Cape Province, the Western Cape Department of Environmental Affairs and Development Planning (DEA&DP) is the competent authority for the environmental authorisation of the proposed Jade Hills Dam.

The Environmental Impact Assessment Regulations, 2014 (as amended), promulgated in terms of NEMA, prescribe the procedures to be followed when applying for Environmental Authorisation.

The EIA Regulations are read together with the applicable Listing Notices, namely:

- Listing Notice 1 – Government Notice No. R.327 of 7 April 2017, as amended;
- Listing Notice 2 – Government Notice No. R.325 of 7 April 2017, as amended; and
- Listing Notice 3 – Government Notice No. R.324 of 7 April 2017, as amended.

Activities identified in Listing Notices 1 and 3 are generally subject to a Basic Assessment process, whereas activities identified in Listing Notice 2 require a Scoping and Environmental Impact Reporting (S&EIR) process.

Based on the current Phase 2 project description, including the proposed 110 000 m³ farm storage dam, associated dam infrastructure and water conveyance infrastructure, listed activities in terms of the EIA Regulations are applicable to the proposed development. As the proposal includes an activity

requiring assessment in terms of Listing Notice 2, the application is being undertaken through a Scoping and Environmental Impact Reporting process.

The listed activities considered applicable to the proposed Jade Hills Dam are identified and described in Table 2 below.

Table 2: Summary of 2014 EIA regulations triggered

No.	Listed Activity	Applicability to the proposed development
Government Notice R327 – Listing Notice 1		
12	The development of infrastructure or structures with a physical footprint of **100 m² or more**, where such development occurs within a watercourse or, where no development setback exists, within **32 m of a watercourse**, measured from the edge of the watercourse, subject to the exclusions contained in the activity.	The proposed Jade Hills Dam and associated infrastructure will exceed 100 m² and the proposed dam is located within an episodic drainage feature/watercourse. The activity is therefore considered applicable.
19	The infilling or depositing of any material of more than **10 m³** into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than **10 m³** from a watercourse, subject to the exclusions contained in the activity.	Construction of the proposed dam will require excavation, earthworks and movement/deposition of substantially more than 10 m³ of material within the identified episodic drainage feature/watercourse. The activity is therefore considered applicable.
27	The clearance of an area of **1 ha or more, but less than 20 ha, of indigenous vegetation**, except where such clearance is required for a linear activity or maintenance purposes undertaken in accordance with a maintenance management plan.	The proposed development is located predominantly within previously cultivated/transformed agricultural land. The terrestrial biodiversity/botanical assessment indicates that the development footprint does not support representative Ceres Shale Renosterveld. Based on the specialist findings currently available, clearance of 1 ha or more of indigenous vegetation is not anticipated and this activity is therefore not currently considered applicable.
Government Notice R325 – Listing Notice 2		
16	The development of a dam where the highest part of the dam wall, as measured from the outside toe of the wall to the highest part of the wall, is **5 m or higher**, or where the high-water mark of the dam covers an area of **10 ha or more**.	The current Phase 2 design provides for a maximum dam wall height of approximately 12.5 m. The proposed development therefore triggers Activity 16 and consequently requires a Scoping and Environmental Impact Reporting process.
Government Notice R324 – Listing Notice 3		
12	The clearance of an area of **300 m² or more of indigenous vegetation** within the geographical areas specified for the relevant province.	The development footprint is located predominantly within previously cultivated/transformed agricultural land. The terrestrial biodiversity/botanical assessment indicates that representative Ceres Shale Renosterveld is not expected to be lost and no plant Species of Conservation Concern were recorded. The applicability of this activity must be based on the verified extent of indigenous vegetation within the development footprint and the applicable Western Cape geographical trigger.

14	The development of infrastructure or structures with a physical footprint of **10 m² or more**, where such development occurs within a watercourse or, where no development setback exists, within **32 m of a watercourse**, within the geographical areas specified for the Western Cape, subject to the exclusions contained in the activity.	The proposed dam and associated infrastructure substantially exceed 10 m² and occur within/associated with an identified episodic drainage feature. Applicability is subject to the site falling within one of the Western Cape geographical areas specified under Activity 14.

An Application Form will be submitted to the Western Cape Department of Environmental Affairs and Development Planning (WCDEA&DP) together with the relevant supporting documentation. The Draft Scoping Report will be subjected to a public participation process, during which registered Interested and Affected Parties (I&APs), relevant organs of state and commenting authorities will be afforded an opportunity to review and comment on the proposed development and the environmental issues identified.

Following completion of the public participation process, all comments received will be considered and incorporated into the Comments and Responses Report, where applicable. The Final Scoping Report and Plan of Study for EIA will thereafter be submitted to WCDEA&DP for consideration and decision on whether the Scoping Report and Plan of Study for EIA may be accepted and the application may proceed to the EIA phase.

2.5 NATIONAL HERITAGE RESOURCES ACT

The protection and management of heritage resources in South Africa are governed by the National Heritage Resources Act (Act No. 25 of 1999) (NHRA). In the Western Cape Province, the relevant provincial heritage resources authority responsible for administering the applicable provisions of the NHRA is Heritage Western Cape (HWC).

Section 38 of the NHRA requires certain categories of development to be notified to the responsible heritage resources authority. In terms of section 38(1)(c)(i), this includes development involving a change in the character of a site exceeding 5 000 m² in extent. Given the approximately 6.6 ha total footprint of the proposed Jade Hills Dam, the proposed development is subject to the applicable requirements of section 38 of the NHRA.

A previous heritage process was undertaken in relation to the earlier environmental application. Heritage Western Cape previously confirmed that there was no reason to believe that the proposed development would impact on heritage resources. As the previous heritage comment was issued more than five years ago, WCDEA&DP has requested that a revised comment be obtained from Heritage Western Cape to confirm whether any further heritage studies will be required for the current development proposal.

Heritage Western Cape will therefore be provided with the current Scoping documentation and requested to provide revised comment on the proposed development and to confirm whether any further heritage studies are required.

Any additional heritage studies or information required by HWC following its review of the current proposal will be undertaken and incorporated into the EIA process, where applicable. The recommendations and requirements of HWC will be taken into consideration in the Environmental Impact Report (EIR) and Environmental Management Programme (EMPr).

2.6 EIA GUIDELINE AND INFORMATION DOCUMENT SERIES

The Western Cape Department of Environmental Affairs and Development Planning (DEA&DP) has published a series of Environmental Impact Assessment (EIA) Guideline and Information Documents to assist applicants, Environmental Assessment Practitioners (EAPs), Interested and Affected Parties, and decisionmakers in the implementation of the EIA process.

The following guideline and information documents have informed the current application process, where applicable:

- *Guideline on Transitional Arrangements;*
- *Guideline on Alternatives;*
- *Guideline on Public Participation;*
- *Guideline on Exemption Applications;*
- *Guideline on Appeals;*
- *Guideline on Need and Desirability;*
- *Information Document on the Interpretation of the Listed Activities; and*
- *Information Document on Generic Terms of Reference for Environmental Assessment Practitioners and Project Schedules.*

These guidance documents have been considered together with the National Environmental Management Act (Act No. 107 of 1998), the Environmental Impact Assessment Regulations, 2014 (as amended), and any subsequent applicable departmental circulars or procedural requirements.

2.7 NATIONAL WATER ACT

The National Water Act (Act No. 36 of 1998) (NWA) provides the legislative framework for the protection, use, development, conservation, management and control of South Africa's water resources. The Act seeks to ensure that water resources are managed sustainably and equitably while providing for the beneficial use of water in the public interest.

In addition to the requirements of NEMA, the proposed Jade Hills Dam is subject to the provisions of the NWA. Water resource management within the relevant catchment is administered by the Breede-Olifants Catchment Management Agency (BOCMA), in conjunction with the Department of Water and Sanitation (DWS), within their respective mandates.

A Water Use Licence (Licence No. 02/H10B/AB/13972) was issued on 8 March 2024 for the abstraction and storage of water associated with the proposed Jade Hills Dam. The licence authorises the following water uses in terms of section 21 of the NWA:

- Section 21(a): Taking water from a water resource – abstraction of a maximum of 110 000 m³ per annum from the Titus River via the existing Rietvalley Irrigation Scheme; and
- Section 21(b): Storing water – storage of a maximum of 110 000 m³ in the proposed Jade Hills Dam.

The WUL was subsequently amended on 26 March 2024 to correct the location of the authorised storage to Portion 26 of Farm Stinkfontein No. 383, Ceres.

The authorised water will be abstracted from the Titus River via the existing Rietvalley Irrigation Scheme infrastructure and conveyed to the proposed Jade Hills Dam for storage and subsequent use in support of existing agricultural activities on the property. Abstraction and storage will be undertaken in accordance with the applicable conditions of the WUL.

Amongst the relevant licence conditions, abstraction may only occur during the applicable winter abstraction period and when the flow in the Titus River at Point 9 complies with the prescribed surplus-flow requirements and exceeds 216 m³/hour. The WUL further provides that groundwater may not be stored in the proposed Jade Hills Dam.

The proposed dam is located within an episodic drainage feature/watercourse, as identified by the freshwater specialist. The issued WUL authorises water uses in terms of sections 21(a) and 21(b) only and does not authorise water uses in terms of sections 21(c) and 21(i). The freshwater assessment will therefore inform whether construction of the proposed dam and associated infrastructure results in additional water uses in terms of:

- Section 21(c): Impeding or diverting the flow of water in a watercourse; and/or
- Section 21(i): Altering the bed, banks, course or characteristics of a watercourse.

Should additional water-use authorisation in terms of sections 21(c) and/or 21(i) be required, this will be addressed with BOCMA prior to commencement of the relevant activities.

The issued Water Use Licence is included in Appendix B2, while the subsequent amendment is included in **Appendix B3**.

Dam Safety

Chapter 12 of the NWA provides for the safety of dams, including the regulation of dams with a safety risk. Given the proposed Phase 2 dam design, including a maximum wall height of approximately 12.5 m and storage capacity of approximately 110 000 m³, the applicable dam safety requirements will be addressed with the Dam Safety Office of DWS.

The design, construction, operation and maintenance of the proposed dam will be undertaken in accordance with the applicable dam safety requirements and regulations. Any registration, classification, approval or other requirements of the Dam Safety Office applicable to the proposed dam will be obtained or complied with prior to the relevant stage of development.

2.8 NATIONAL ENVIRONMENTAL MANAGEMENT: BIODIVERSITY ACT

The National Environmental Management: Biodiversity Act (Act No. 10 of 2004) (NEMBA), as amended, provides for the management and conservation of South Africa's biodiversity, the protection of species and ecosystems that warrant protection, and the sustainable use of indigenous biological resources.

NEMBA provides for the identification and protection of threatened ecosystems and species and regulates activities that may affect listed threatened or protected species. The Act is therefore relevant to the proposed development insofar as the potential impacts on terrestrial biodiversity, indigenous vegetation and species of conservation concern must be considered as part of the environmental assessment process.

The vegetation type historically associated with the proposed development area is Ceres Shale Renosterveld, which is classified as a Critically Endangered ecosystem. However, the terrestrial biodiversity/botanical specialist assessment confirmed that the proposed development footprint is located predominantly within previously cultivated and transformed agricultural land and that representative Ceres Shale Renosterveld is not expected to be lost as a result of the proposed development.

The specialist assessment further confirmed a Low verified sensitivity for terrestrial biodiversity, plant species and animal species, and no plant Species of Conservation Concern (SCC) were recorded within the proposed development footprint. Remaining areas of degraded natural vegetation associated with and adjacent to the proposed development should nevertheless be protected from unnecessary disturbance and appropriately managed during construction and operation.

NEMBA also provides the legislative framework for the management of listed invasive alien species. Alien invasive vegetation occurring within areas affected by the proposed development must therefore be managed in accordance with the applicable requirements of NEMBA and the relevant management measures incorporated into the Environmental Management Programme (EMPr).

The findings and recommendations of the terrestrial biodiversity/botanical assessment will be incorporated into the Environmental Impact Report (EIR) and EMPr to ensure that unnecessary disturbance of remaining indigenous vegetation is avoided and that appropriate biodiversity protection, rehabilitation and alien invasive species management measures are implemented.

3. ALTERNATIVES

Alternatives have been identified during the Scoping phase and will be further investigated and assessed during the EIA phase. The alternatives assessment considers reasonable and feasible means of meeting the purpose and need of the proposed development while seeking to avoid or minimise environmental impacts.

3.1 SITE ALTERNATIVES FOR THE PROPOSED DAM

Portion 26 of Farm Stinkfontein No. 383 (Jade Hills Farm) is an existing agricultural property situated within the Ceres Valley. The identification of a suitable location for the proposed storage dam is influenced by a combination of engineering, operational, agricultural and environmental considerations, including topography, storage requirements, proximity to the existing Rietvalley Irrigation Scheme infrastructure, conveyance requirements, existing agricultural land uses and environmental sensitivities.

The proposed dam location has historically been identified as the preferred site due to its basin-like topography, elevation relative to the irrigation areas and integration with the existing and proposed water-supply infrastructure. The site is located predominantly within previously cultivated/transformed agricultural land and can be connected to the existing Jade Hills Delivery Point by an approximately 700 m long pipeline.

The preferred site does, however, occur within an episodic drainage feature/watercourse. The freshwater specialist assessment has therefore identified the freshwater characteristics and potential impacts associated with development at this location. CapeNature has also specifically requested that the environmental assessment consider whether reasonable and feasible off-stream storage alternatives are available.

Accordingly, the preferred site will not be considered in isolation. During the EIA phase, the alternatives assessment will further investigate and compare:

- the preferred dam location within the episodic drainage feature;
- reasonable and feasible off-stream storage alternatives on the property;
- the potential enlargement or use of existing storage facilities, where technically and practically feasible; and
- the No-Go Alternative.

Potential alternatives will be considered with reference to factors including available storage capacity, topography, engineering feasibility, water conveyance requirements, earthworks, effects on existing productive agricultural land, freshwater impacts, terrestrial biodiversity impacts, operational requirements and overall environmental implications.

Where an alternative is found not to be reasonable or feasible, the reasons for excluding that alternative from further detailed assessment will be clearly documented in the Environmental Impact Report (EIR).

The preferred site therefore remains the current proposed location for assessment, but its environmental acceptability and comparative suitability will only be determined following consideration of the identified alternatives and specialist findings during the EIA phase.

3.2 ACTIVITY ALTERNATIVES

The purpose of the proposed development is to provide on-farm storage for authorised surplus winter water abstracted from the Titus River via the existing Rietvalley Irrigation Scheme, for subsequent use during the dry summer months in support of existing agricultural activities.

The principal activity proposed to achieve this objective is the construction of a farm storage dam. Alternative means of providing water storage will nevertheless be considered as part of the alternatives assessment, including the potential enlargement or use of existing storage facilities and reasonable and feasible off-stream storage options.

Continued reliance on the existing water-supply system without adequate on-farm storage would not provide the required seasonal storage between the winter abstraction period and summer irrigation demand. The feasibility of the identified alternatives will therefore be considered with reference to their ability to provide the required storage capacity, engineering and operational requirements, environmental impacts, water conveyance requirements and effects on existing agricultural activities.

The proposed farm storage dam remains the preferred activity alternative at this stage. The comparative feasibility and environmental implications of the identified alternatives will be further assessed during the EIA phase.

3.3 NO-GO ALTERNATIVE

The No-Go Alternative entails that the proposed Jade Hills Dam and associated water conveyance infrastructure are not constructed and the existing situation on the property remains unchanged.

Under the No-Go Alternative, the direct environmental impacts associated with construction and operation of the proposed development would be avoided. These include the physical alteration of the proposed dam footprint and episodic drainage feature, earthworks and associated disturbance, as well as other potential freshwater, terrestrial biodiversity and construction-related impacts identified through the environmental assessment process.

However, the absence of additional on-farm storage would mean that the authorised surplus winter water available through the Rietvalley Irrigation Scheme could not be stored in the proposed Jade Hills Dam for subsequent use during the dry summer months. The intended improvement in seasonal water storage and irrigation reliability for the existing agricultural activities would therefore not be realised.

The No-Go Alternative would retain the existing environmental conditions at the proposed development site but would not achieve the identified purpose and need for the project, namely the provision of on-farm storage for authorised surplus winter water.

The No-Go Alternative will be retained and assessed in the EIR against the preferred development proposal and other reasonable and feasible alternatives. This assessment will consider both the environmental impacts avoided by not proceeding with the development and the agricultural and operational implications of retaining the status quo.

3.4 CONCLUSION ON ALTERNATIVES

Based on the information available at this stage of the Scoping process, the proposed dam site on Portion 26 of Farm Stinkfontein No. 383 remains the preferred alternative for further assessment.

The preferred location has been identified based on its basin-like topography, elevation relative to the existing irrigation areas, location predominantly within previously cultivated/transformed agricultural land, and its integration with the existing Rietvalley Irrigation Scheme infrastructure. The site can be connected to the existing Jade Hills Delivery Point by an approximately 700 m pipeline and provides opportunities for gravity-fed water transfer where technically feasible.

The preferred site does, however, occur within an episodic drainage feature/watercourse, and the environmental implications associated with development at this location require further consideration. The freshwater specialist findings, together with comments received from CapeNature and other commenting authorities, will therefore inform the comparative assessment of alternatives during the EIA phase.

In particular, the EIA phase will further investigate and compare the preferred proposal with reasonable and feasible off-stream storage alternatives, the potential enlargement or use of existing storage facilities, and the No-Go Alternative. These alternatives will be assessed with consideration of their engineering feasibility, achievable storage capacity, water conveyance requirements, earthworks, impacts on productive agricultural land, freshwater and terrestrial biodiversity impacts, operational requirements and other relevant environmental considerations.

Where potential alternatives are found to be technically, environmentally or practically unreasonable or infeasible, the basis for their exclusion from further assessment will be clearly documented and motivated in the Environmental Impact Report (EIR).

The No-Go Alternative will also be retained for comparative assessment. This alternative would avoid the direct environmental impacts associated with construction and operation of the proposed dam but would not provide the proposed on-farm storage of authorised surplus winter water for subsequent summer irrigation.

Accordingly, the proposed dam at the selected site remains the preferred development alternative at the Scoping stage, but no final conclusion regarding its comparative environmental acceptability is made at this stage. The preferred alternative will be confirmed following the detailed assessment of reasonable and feasible alternatives, specialist findings and comments received during the environmental assessment and Public Participation Process.

4. SITE DESCRIPTION

4.1 LOCATION

The proposed Jade Hills Farm Storage Dam and associated water conveyance infrastructure will be located on Portion 26 of Farm Stinkfontein No. 383, approximately 5 km east of Ceres, within the Witzenberg Local Municipality, Cape Winelands District Municipality, Western Cape Province.

The approximate central coordinates of the proposed dam site are:
33°22′31.67″ S; 19°22′13.15″ E

The property is situated within an established agricultural area of the Ceres Valley. Access to the property is obtained via the existing public road network from Ceres, while access to the proposed dam site will be provided via existing farm roads on the property. No new external access road is proposed as part of the development.

The location of the property, proposed dam and associated infrastructure is shown on the locality and layout plans contained in **Appendix A**.

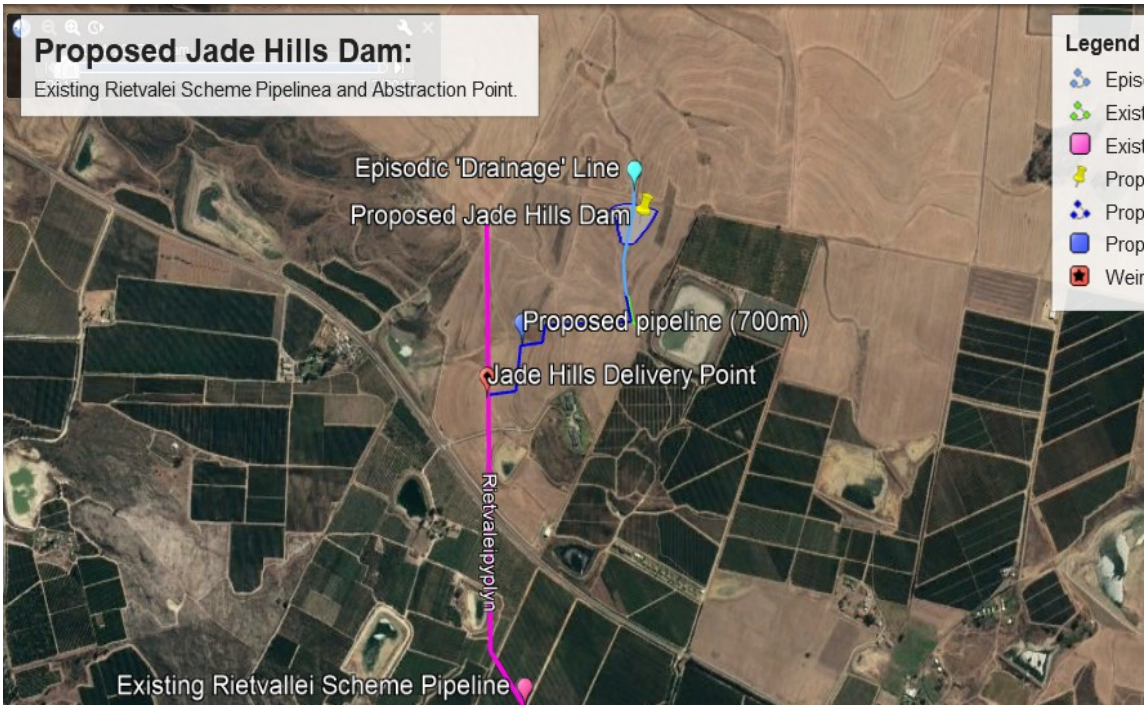


Figure 3: Google map indicating the existing Rietvallei pipeline abstraction point, to the existing Jade Hills delivery point and the proposed pipeline from where water will gravitate to the dam.

4.2 CLIMATE

The Ceres area experiences a Mediterranean-type climate, characterised by warm, dry summers and cool, wet winters. Rainfall occurs predominantly during the winter months, while the summer months are generally dry and associated with higher temperatures and increased agricultural irrigation requirements.

Based on simulated historical climate data for the broader Ceres area obtained from Meteoblue, average annual rainfall is approximately 599 mm, with rainfall concentrated mainly during the winter period. February is typically among the driest months, with approximately 9 mm of rainfall, while June is generally the wettest month, receiving approximately 117 mm.

Average daytime maximum temperatures range from approximately 15°C during winter to 28°C during summer. Winter night-time temperatures can be low, particularly during July, while considerably warmer conditions occur during the summer months.

The seasonal distribution of rainfall is particularly relevant to the proposed development. Surplus water available for abstraction from the Titus River via the Rietvalley Irrigation Scheme occurs during the winter period, whereas irrigation requirements for the existing agricultural activities are greater during the dry summer months. The proposed Jade Hills Dam is therefore intended to provide seasonal storage of authorised surplus winter water for subsequent summer irrigation.

The Meteoblue climate information is based on simulated historical climate and weather data and is considered representative of the broader Ceres area. Local topography and microclimatic conditions may result in site-specific variations.

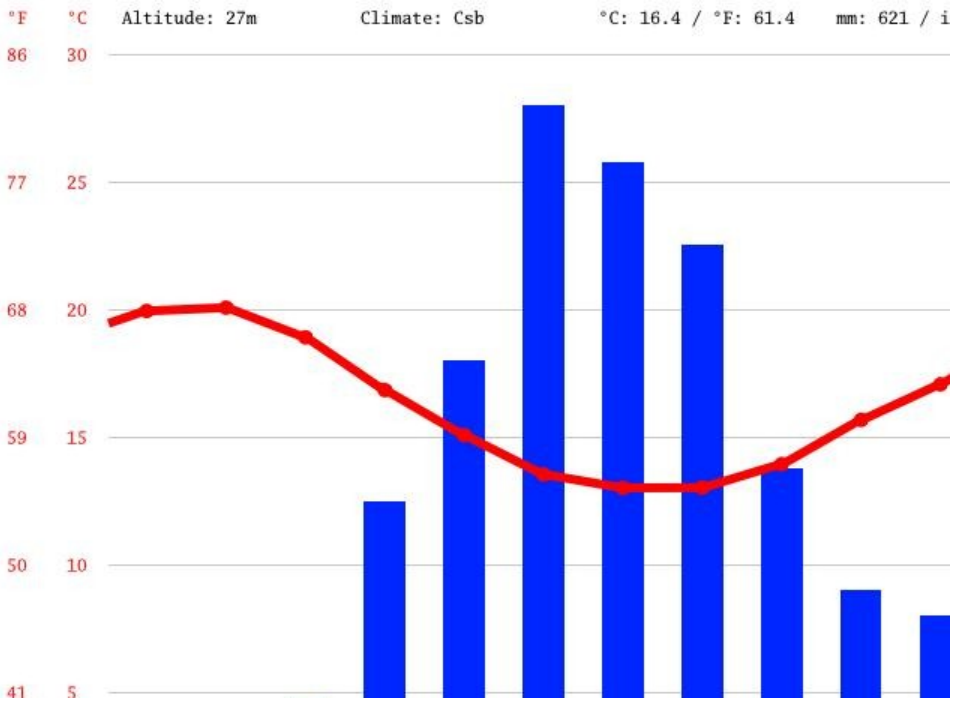


Figure 4: Simulated historical climate data for Ceres, Western Cape, obtained from Meteoblue. The graph illustrates average monthly precipitation, mean daily maximum temperatures, and mean daily minimum temperatures for the broader Jade Hills project area. Data are based on long-term weather model simulations and are intended to provide a regional climatic overview.

4.3 BIODIVERSITY

A Terrestrial Biodiversity and Botanical Assessment has been undertaken for the proposed Jade Hills Dam to assess the terrestrial ecological characteristics and sensitivities of the proposed development area and the potential impacts associated with the development.

The vegetation type historically associated with the site is Ceres Shale Renosterveld, which is classified as a Critically Endangered ecosystem. However, the specialist assessment found that the proposed development footprint is located predominantly within previously cultivated and transformed agricultural land.

The specialist verified the terrestrial biodiversity sensitivity of the proposed development area as Low. The plant species and animal species sensitivities were also verified as Low. No plant Species of Conservation Concern (SCC) were recorded within the proposed development footprint, and the specialist concluded that representative Ceres Shale Renosterveld is not expected to be lost as a result of the proposed development.

Remaining areas of degraded natural vegetation occurring within or adjacent to the broader development area should nevertheless be protected from unnecessary disturbance. Construction activities should, as far as practicable, remain within the approved development footprint and existing disturbed areas.

The findings and recommendations of the Terrestrial Biodiversity and Botanical Assessment will inform the detailed impact assessment during the EIA phase and appropriate avoidance, mitigation, rehabilitation and management measures will be incorporated into the Environmental Impact Report (EIR) and Environmental Management Programme (EMPr).

4.3.1 VEGETATION

The proposed dam will be located predominantly within land that has historically been utilised for agricultural cultivation. Historical agricultural activities have resulted in substantial transformation of the vegetation within the proposed development footprint.

The vegetation type historically associated with the site is Ceres Shale Renosterveld, which is classified as a Critically Endangered ecosystem. Notwithstanding the historical vegetation classification, the Terrestrial Biodiversity and Botanical Assessment confirmed that the proposed development footprint is predominantly situated within previously cultivated and transformed agricultural land and that representative Ceres Shale Renosterveld is not expected to be lost as a result of the proposed development.

The DFFE Screening Tool identifies the broader area as having Very High terrestrial biodiversity sensitivity. However, following site verification and specialist assessment, the terrestrial biodiversity sensitivity of the proposed development area was verified as Low. The specialist similarly verified the plant species and animal species sensitivities as Low.

No plant Species of Conservation Concern (SCC) were recorded within the proposed development footprint. Remaining areas of degraded natural vegetation occurring within or adjacent to the development area nevertheless retain ecological value and should be protected from unnecessary disturbance.

Development activities should therefore be confined to the approved development footprint and previously disturbed areas as far as practicable. Unnecessary disturbance of remaining natural or semi-natural vegetation outside the approved footprint should be avoided, and disturbed areas should be appropriately rehabilitated following construction.

The findings and recommendations of the Terrestrial Biodiversity and Botanical Assessment will inform the detailed impact assessment and mitigation measures contained in the Environmental Impact Report (EIR) and Environmental Management Programme (EMPr).

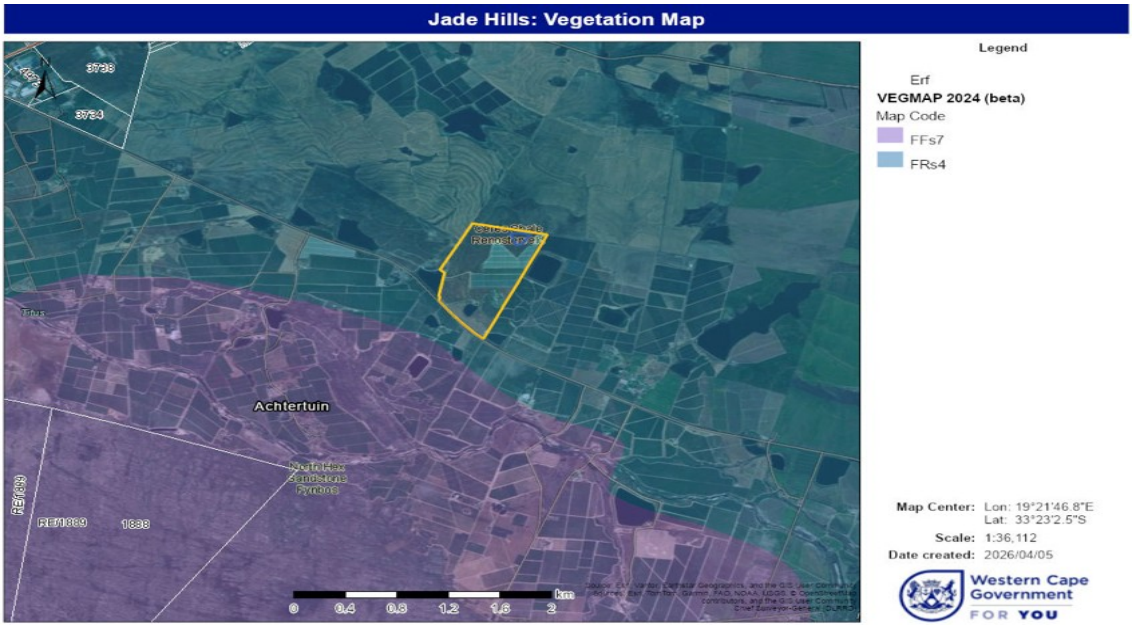


Figure 3: Vegetation Map, Cape Farm Mapper

4.3.2 CRITICAL BIODIVERSITY AREAS AND ECOLOGICAL SUPPORT AREAS

According to the Biodiversity Overlay Mapping available from CapeFarmMapper, the proposed development area is associated predominantly with an Ecological Support Area 2 (ESA2), while a small area in the vicinity of the proposed dam is mapped as a Critical Biodiversity Area (CBA). The ESA2 is associated with the drainage features within the transformed agricultural landscape.

Critical Biodiversity Areas (CBAs) are areas identified as important for meeting biodiversity pattern and ecological process targets, while Ecological Support Areas (ESAs) support the ecological functioning and long-term persistence of CBAs, protected areas and broader ecological processes.

The Terrestrial Biodiversity and Botanical Assessment has subsequently provided site-specific verification of the biodiversity mapping. The specialist confirmed that the areas that will be directly affected by the proposed development comprise transformed agricultural land or severely degraded veld and that the development will not impact any remaining representative Ceres Shale Renosterveld. The specialist consequently verified the terrestrial biodiversity sensitivity of the proposed development footprint as Low.

The specialist further identified a small rocky ridge to the east of the proposed dam, comprising degraded natural veld, as the only area of potential botanical significance in the immediate vicinity. This area corresponds with an area mapped as a CBA. Although degraded, it has not historically been ploughed and may still support indigenous bulb species. Importantly, the specialist confirmed that this area will not be impacted by the proposed development and recommended that it be protected.

The specialist concluded that the proposed dam and pipeline will affect areas of low botanical significance and are not expected to result in significant impacts on Critical Biodiversity Areas, remaining representative natural vegetation, ecological connectivity or species of conservation concern.

Notwithstanding the transformed nature and Low verified sensitivity of the development footprint, disturbance must be confined to the approved development area and unnecessary disturbance of remaining natural or semi-natural vegetation must be avoided. Appropriate mitigation measures will include erosion and sediment control, management of stormwater, control of alien invasive vegetation and rehabilitation of temporarily disturbed areas.

The findings and recommendations of the Terrestrial Biodiversity and Botanical Assessment will be incorporated into the Environmental Impact Report (EIR) and Environmental Management Programme (EMPr).

Please refer to Figure 6 and **Appendix D2** for the biodiversity overlay mapping and to the Terrestrial Biodiversity and Botanical Assessment for the site-specific verification.

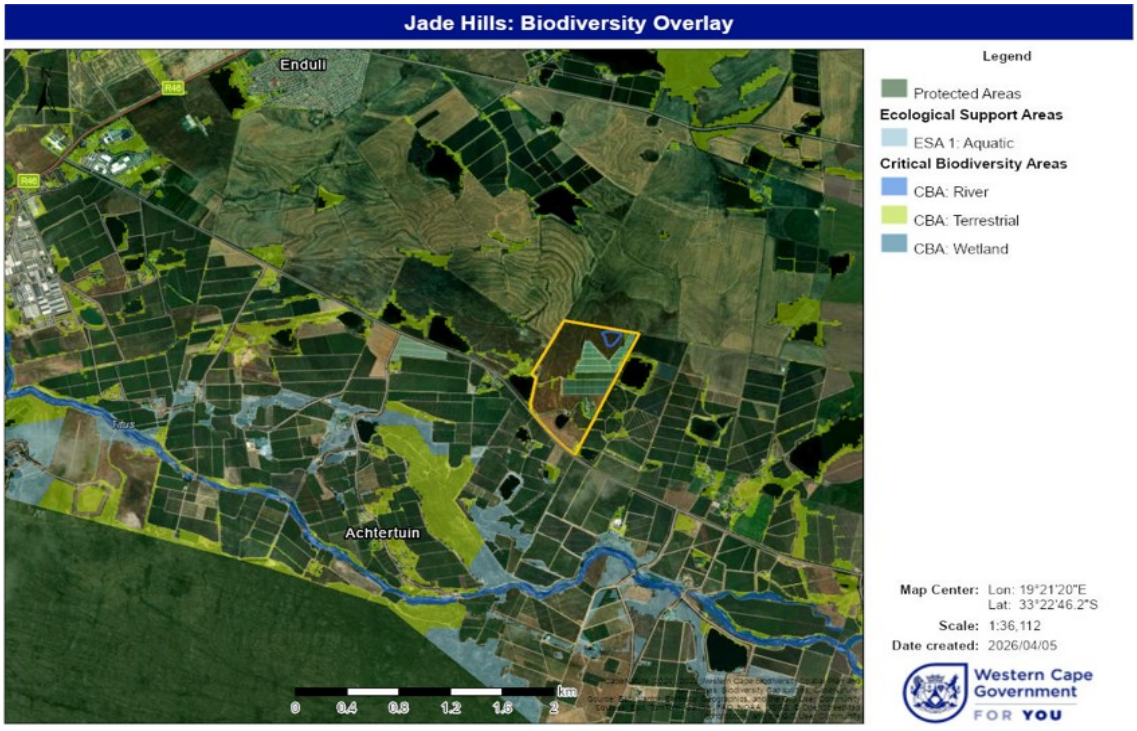


Figure 4: Biodiversity Overlay Map, Cape Farm Mapper

4.4 FRESHWATER

A Freshwater Resource Verification and Risk Assessment has been undertaken for the proposed development, and the findings will be incorporated into the Environmental Impact Report (EIR).

The purpose of the Freshwater Assessment is to identify and evaluate freshwater resources that may be affected by the proposed development, including watercourses and wetlands, and to assess the potential impacts on hydrological processes, aquatic ecology, water quality and ecosystem functioning. The assessment also determines the ecological condition, sensitivity and significance of the affected freshwater features and recommends appropriate avoidance, mitigation and management measures.

According to the Freshwater Resources Map available from CapeFarmMapper (refer to Figure 7 and Appendix D3), the proposed dam footprint intersects a non-perennial drainage line.

The Freshwater Resource Verification and Risk Assessment confirmed that the proposed dam footprint occurs within an episodic drainage line. The drainage feature contains surface water only for limited periods following significant rainfall events and occurs within a landscape that has been substantially transformed by historical and ongoing agricultural activities.

The specialist assessment confirmed that no true wetlands or riparian habitat occur within the proposed dam footprint. Other episodic drainage lines were identified within the broader investigation area and were found to be ecologically degraded.

National Freshwater Ecosystem Priority Area (NFEPA) mapped wetland features occur within the broader surrounding area; however, these do not occur within the proposed dam footprint.

The freshwater specialist verified the affected episodic drainage lines as having Low Aquatic Biodiversity Sensitivity and concluded that the proposed development would pose an overall Low risk significance to these features, provided that the recommended mitigation measures are implemented.

Potential mitigation measures include:

- Limiting disturbance to the approved development footprint;
- Implementing appropriate erosion and sediment control measures during construction;
- Providing appropriate erosion protection at the spillway and outlet structures;
- Preventing contamination from fuels, oils, cement and other construction materials;
- Managing stormwater and concentrated flows to minimise erosion and downstream impacts; and
- Rehabilitating temporarily disturbed areas not required for permanent infrastructure.

The findings and recommendations of the Freshwater Assessment will inform the Environmental Impact Report (EIR) and Environmental Management Programme (EMPr), including appropriate mitigation, rehabilitation and monitoring requirements.

Please refer to Figure 7 below and **Appendix D3** for freshwater resource mapping.

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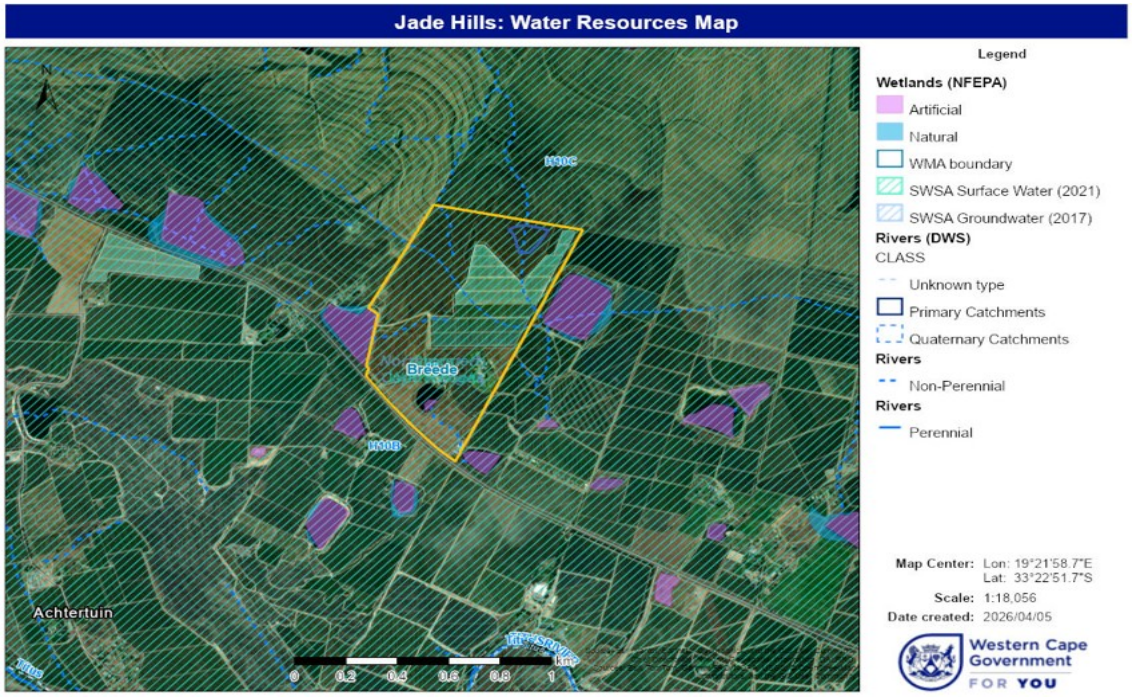


Figure 5: Water Resources Map, Cape Farm Mapper

4.5 HERITAGE / ARCHAEOLOGICAL

A heritage screening process has been undertaken for the proposed Jade Hills Dam development. Heritage Western Cape (HWC) previously confirmed, in relation to the previous lapsed application, that there was no reason to believe that the proposed development would impact on heritage resources. As this comment was issued more than five years ago, WCDEA&DP has requested that a revised comment be obtained from HWC to confirm whether any further heritage studies will be required for the current development proposal.

The purpose of the heritage screening process is to identify and assess any potential heritage, archaeological and palaeontological resources that may occur within the proposed development area and to determine whether further heritage assessment or specialist investigations are required.

Any requirements or recommendations issued by Heritage Western Cape will be incorporated into the Environmental Impact Assessment Report (EIR) and Environmental Management Programme (EMPr), where applicable.

4.5.1 HERITAGE & ARCHAEOLOGICAL FINDINGS

The proposed dam footprint is located within an existing transformed agricultural area that has historically been utilised for cultivation. Based on the disturbed nature of the site, the likelihood of significant intact archaeological resources occurring within the development footprint is considered low.

No known significant heritage resources have been identified within the proposed development footprint to date. Heritage Western Cape will be requested to provide revised comment on the

proposed development and to confirm whether any further heritage studies are required. Any requirements identified by Heritage Western Cape will be addressed during the EIA phase.

Should any heritage resources, artefacts, graves, human remains, archaeological material or fossil material be uncovered during construction, all work within the affected area must cease immediately and Heritage Western Cape must be notified.

4.6 SOCIO-ECONOMIC CONTEXT

4.6.1.1 Cape Winelands District Municipality

The proposed Jade Hills Dam is located within the Cape Winelands District Municipality, an important agricultural region within the Western Cape. The district economy is strongly influenced by agriculture and associated agri-processing and rural industries, with fruit production forming an important component of agricultural activity.

Municipal planning objectives generally support the sustainable development of the agricultural sector, efficient use and management of water resources, rural employment and investment in infrastructure that contributes to the long-term resilience of agricultural activities.

The proposed Jade Hills Dam is consistent with these objectives by providing additional on-farm water storage capacity for authorised surplus winter water, thereby improving water security and supporting existing agricultural production. No expansion of agricultural cultivation forms part of the current environmental application.

The construction phase may provide temporary employment opportunities, while improved water security is expected to contribute to the continued viability of the existing farming operation and associated agricultural employment.



Figure 6: Cape Winelands District Municipality[1]

4.6.1.2 Witzenberg Local Municipality

The proposed development falls within the Witzenberg Local Municipality, which includes Ceres and the surrounding agricultural areas. Witzenberg has a strong agriculture-based economy, with deciduous fruit production, packing, cold storage, transport and associated agri-industries forming an important component of local economic activity.

Agriculture remains an important source of employment within the municipality and contributes to rural livelihoods and local economic activity. Water availability and climate resilience are important factors influencing the long-term sustainability of agricultural activities within the municipal area.

The proposed Jade Hills Dam will support existing agricultural operations on the property by providing additional on-farm storage capacity for authorised surplus winter water, thereby improving water security and irrigation reliability. No expansion of agricultural cultivation forms part of the current environmental application.

The proposed development is therefore considered consistent with the broader socio-economic objectives of the Witzenberg Local Municipality relating to the sustainable agricultural sector, rural economic development, infrastructure investment and the continued viability of agricultural employment.

[1] https://municipalities.co.za/

5. ENVIRONMENTAL ISSUES AND POTENTIAL IMPACTS

Environmental issues and potential impacts associated with the proposed Jade Hills Dam have been identified through desktop review, site observations, specialist investigations, comments received from relevant authorities and Interested and Affected Parties (I&APs), and the Scoping assessment undertaken to date. These issues will be assessed in further detail during the Environmental Impact Assessment (EIA) phase, where applicable.

The following key environmental issues and potential impacts have been identified:

5.1 BIODIVERSITY IMPACT

The proposed dam footprint is located within historically cultivated agricultural land that has been substantially transformed through long-term farming activities. The Terrestrial Biodiversity and Botanical Assessment confirmed that the development footprint predominantly comprises transformed agricultural land and that no representative Ceres Shale Renosterveld is expected to be lost.

Potential impacts may include limited loss of disturbed vegetation, disturbance to fauna utilising the agricultural landscape, and construction-related impacts on adjacent areas if not properly managed.

Based on the transformed nature of the site, biodiversity impacts are expected to be localised and capable of mitigation through appropriate environmental controls. The specialist verified the terrestrial biodiversity, plant species and animal species sensitivities as Low. The remaining degraded natural vegetation, including the small rocky ridge to the east of the proposed dam, must be protected from development-related disturbance. The specialist findings and recommended mitigation measures will be incorporated into the EIR and EMPr.

5.2 FRESHWATER IMPACT

The proposed development will intersect a non-perennial drainage feature / episodic drainage line. Construction and operation of the dam may alter local runoff patterns, stormwater movement, sediment transport, and downstream flow characteristics.

Potential impacts may include:

- temporary construction disturbance within the drainage line;
- erosion and sedimentation;
- changes to local hydrological processes;
- pollution risks during construction; and
- alteration of water movement downstream.

The Freshwater Resource Verification and Risk Assessment concluded that the proposed development would pose an overall Low risk significance to the affected episodic drainage lines, provided that the recommended mitigation measures are implemented.

These issues will be considered further during the EIA phase, and the freshwater specialist findings and recommended mitigation measures will be incorporated into the EIR and EMPr. Any additional water use authorisation requirements associated with sections 21(c) and 21(i) of the National Water Act will be confirmed with BOCMA.

5.3 HERITAGE / ARCHAEOLOGICAL IMPACT

The proposed footprint occurs within transformed agricultural land historically utilised for cultivation. Available heritage screening information indicates a low likelihood of significant archaeological resources occurring within the disturbed footprint area.

No known significant heritage resources have been identified within the proposed development footprint to date. A revised comment will be obtained from Heritage Western Cape to confirm whether any further heritage studies will be required for the current development proposal. Any requirements identified by HWC will be addressed during the EIA phase.

Should any heritage resources, graves, artefacts, archaeological material or fossil material be uncovered during construction, work must cease immediately in the affected area and Heritage Western Cape must be notified.

5.4 LANDSCAPE / VISUAL IMPACT

The proposed development is situated within a rural agricultural landscape characterised by orchards, cultivated fields, farm roads, irrigation infrastructure and farm dams.

As a result, the proposed storage dam is considered compatible with the existing agricultural character of the area. Potential visual impacts are expected to be predominantly localised and will be considered further during the EIA phase.

5.5 AGRICULTURAL IMPACT

The proposed dam footprint will occupy a portion of existing agricultural land; however, the primary purpose of the project is to improve water storage and support existing farming operations on the property. No expansion of agricultural cultivation forms part of the current environmental application.

The development is therefore expected to provide an overall agricultural benefit through improved irrigation reliability, water security, and long-term farm sustainability.

5.6 SOCIO-ECONOMIC IMPACT

The proposed development is expected to generate temporary employment during construction and provide indirect long-term socio-economic benefits through support of existing agricultural operations.

Improved water security will assist in maintaining farm productivity, sustaining employment opportunities, and contributing to the local agricultural economy within the Witzenberg municipal area.

5.7 CONCLUSION

Based on the information currently available, the identified impacts are associated with the construction and operation of the proposed agricultural storage dam and are considered capable of being managed through appropriate design measures, compliance with applicable environmental and water use authorisations, and mitigation contained in the Environmental Management Programme (EMPr).

The significance of impacts will be further assessed and, where applicable, refined during the EIA phase through specialist input and further public participation.

6. DETAILS OF THE PUBLIC PARTICIPATION PROCESS

Interested and Affected Parties (I&APs) are identified throughout the ongoing Public Participation Process. Landowners adjacent to the proposed site, relevant organs of state, organisations, ward councillors and the Local and District Municipalities have been included in the I&AP database. A complete list of the I&APs and authorities identified and/or registered to date is included in the relevant Public Participation Appendix.

A Public Participation Process (PPP) is being conducted for the proposed development in accordance with the requirements of Regulation 41 of the NEMA EIA Regulations, 2014 (as amended). Public participation undertaken to date includes the initial public participation process conducted from 25 February 2026 to 2 April 2026 and the public review of the Pre-Application Scoping Report from 31 July 2026 to 4 September 2026. The Draft Scoping Report will also be made available for the prescribed public review and comment period.

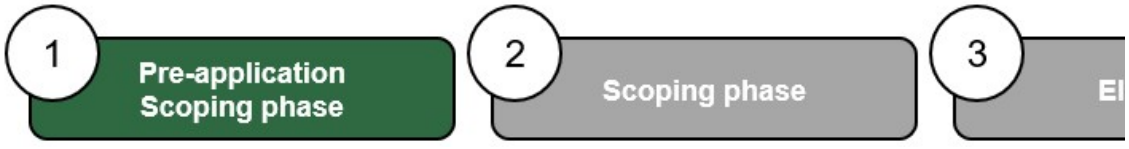
Comments received from I&APs and relevant authorities during the Scoping process, together with the responses thereto, are recorded in the Comments and Responses Report (CRR). Relevant issues raised during the Scoping phase will inform the assessment undertaken during the EIA phase.

The requirements of Regulation 41 contained in Chapter 6 of the NEMA EIA Regulations, 2014 (as amended), will be addressed to demonstrate that potential and registered I&APs and relevant authorities have been provided with an opportunity to participate in the environmental authorisation process.

I&APs will be provided with opportunities to review and comment on the relevant reports made available during the environmental authorisation process. Where necessary, meetings or other forms of engagement may also be undertaken with key stakeholders and authorities.

During the EIA phase, the Draft Environmental Impact Report (EIR) and associated documentation will be made available for public review and comment. Comments received will be considered and incorporated into the Comments and Responses Report, and the EIR will be revised where appropriate. The Final EIR will thereafter be submitted to WCDEA&DP for consideration and decision-making.

Correspondence with I&APs will be via post, email, telephone, notices, newspaper advertisements and/or other appropriate methods of notification, as applicable and in accordance with the EIA Regulations.



This Draft Scoping Report falls within the formal Scoping phase as depicted above and forms part of the Scoping and Environmental Impact Reporting process. The Draft Scoping Report will be made available to registered Interested and Affected Parties (I&APs), relevant authorities and organs of state for review and comment.

The purpose of this Draft Scoping Report is to describe the proposed project, provide an overview of the environmental characteristics of the site, document the public participation process undertaken to

date, present and consider reasonable and feasible alternatives, identify the key environmental issues and potential impacts requiring further assessment, and provide the Plan of Study for the EIA phase. Following the public participation process, comments received will be incorporated into the Comments and Responses Report and the Final Scoping Report will be submitted to WCDEA&DP for consideration and acceptance.

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Table 1: Public participation process Regulations as per NEMA EIA Regulations, 2014 (as amended 2021)

Sub	Regulations of Chapter 6 of NEMA EIA Regulations, 2014 (as amended 2021)	Applicability to the development
Regulation 39 - Activity on land owned by a person other than the proponent		
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.	The Applicant is the landowner / person in control of the property. This requirement is therefore satisfied.
2.	Subregulation (1) does not apply in respect of— a) linear activities; and	Noted. Not applicable to this proposed development.
	b) strategic integrated projects as contemplated in the Infrastructure Development Act, 2014.	Noted. Not applicable to this proposed development.
Regulation 40 - Purpose of public participation		
1.	The public participation process to which the— a) basic assessment report and EMPr, and the closure plan in the case of a closure activity, submitted in terms of regulation 19; and b) scoping report submitted in terms of regulation 21, the environmental impact assessment report, EMPr, and the closure plan in the case of a closure activity, submitted in terms of regulation 23; was subjected to must give all potential or registered interested and affected parties, including the competent authority, a period of at least 30 days to submit comments on each of the basic assessment report, EMPr, scoping report and environmental impact assessment report, and the closure plan in the case of a closure activity, as well as the report contemplated in regulation 32, if such reports or plans are submitted at different times.	As part of the pre-application Scoping phase, a 30-day commenting period was undertaken. All potential or registered Interested and Affected Parties, including the Competent Authority and Commenting Authorities, will be invited and allowed to submit comments regarding the proposed development. The Draft Scoping Report will be subjected to a public participation process of at least 30 days, during which registered Interested and Affected Parties (I&APs), the Competent Authority, commenting authorities and relevant organs of state will be provided with an opportunity to review and comment on the report.
2.	The public participation process contemplated in this regulation must provide access to all information that reasonably has or may have the potential to influence any decision with regard to an application, unless access to that information is protected by law, and must include consultation with — a) the competent authority; b) every State department that administers a law relating to a matter affecting the environment relevant to an application for an environmental authorisation;	As part of the pre-application Scoping phase, a notification letter was sent to — a) The Department of Environmental Affairs and Development Planning (WCDEADP) is identified as the Competent Authority. b & c) The following state departments that administer a

Sub	Regulations of Chapter 6 of NEMA EIA Regulations, 2014 (as amended 2021)	Applicability to the development
	c) all organs of state which have jurisdiction in respect of the activity to which the application relates; and	law relating to a matter affecting the environment relevant to an application and organs of state that have jurisdiction in respect of the activity to which the application relates: − Department of Agriculture − Department of Water and Sanitation − Department of Water and Sanitation: Water Resource Management – Breede-Olifants Catchment Management Agency (BOCMA) − Department of Environmental Affairs and Development Planning − Department of Rural Development and Land Reform Spatial Planning − Department of Transport and Public Works − Heritage Western Cape − Cape Nature: Land Use & Conservation Planning − Local Municipality − District Municipality
	d) all potential, or, where relevant, registered interested and affected parties.	d) All potential, or, where relevant, registered interested and affected parties. The notification letters were sent to inform the parties described above about the proposed activity/development and to invite their input. The Competent Authority, relevant commenting authorities, organs of state and potential and registered I&APs have been identified and consulted as part of the public participation process. Public participation undertaken to date includes the initial public participation process and the public review of the Pre-Application Scoping Report. These parties will continue to be afforded an opportunity to participate during the formal Scoping and EIA phases.

Sub	Regulations of Chapter 6 of NEMA EIA Regulations, 2014 (as amended 2021)	Applicability to the development
3.	Potential or registered interested and affected parties, including the competent authority, may be provided with an opportunity to comment on reports and plans contemplated in subregulation (1) prior to submission of an application but must be provided with an opportunity to comment on such reports once an application has been submitted to the competent authority.	Potential and registered I&APs, the Competent Authority and relevant commenting authorities were provided with opportunities to comment during the pre-application process. Registered I&APs and relevant authorities will be notified of the availability of the Draft Scoping Report and provided with at least 30 days to submit comments.
Regulation 41 – Public participation process		
1.	This regulation only applies in instances where adherence to the provisions of this regulation is specifically required.	Noted.
2.	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	During the pre-application Scoping phase, an English A2-sized notice board was fixed on the boundary / fence of the site where the activity to which the proposed application relates is to be undertaken. Additionally, multiple English A3-sized notice boards were placed at various locations around the site. Proof of placement of the notices is included in the Public Participation Appendix.
	ii. any alternative site	There is no alternative site.
	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 and to any alternative site where the activity is to be undertaken	As part of the pre-application Scoping phase, notification letters were sent to occupiers and persons in control of the site via email and/or mail drops conducted during the site visit.

Sub	Regulations of Chapter 6 of NEMA EIA Regulations, 2014 (as amended 2021)	Applicability to the development
	ii. owners, persons in control of, and occupiers of land adjacent to the site where the activity is or is to be undertaken and to any alternative site where the activity is to be undertaken	As part of the pre-application Scoping phase, notification letters were sent to identified occupiers of land adjacent to the site via email and/or mail drops.
	iii. the municipal councillor of the ward in which the site and alternative site is situated and any organisation of ratepayers that represent the community in the area	As part of the pre-application Scoping phase, a notification letter was sent to the relevant municipal ward councillor at the Witzenberg Local Municipality. No ratepayer organisation was identified for the community in the area.
	iv. the municipality which has jurisdiction in the area	As part of the PPP phase, a notification letter was sent to a representative of the Witzenberg Local Municipality and the Cape Winelands District Municipality.
	v. any organ of state having jurisdiction in respect of any aspect of the activity; and	As part of the PPP phase, notification letters were sent to the following organs of state having jurisdiction in respect of any aspect of the activity: - Department of Agriculture - Department of Water and Sanitation - Department of Water and Sanitation: Water Resource Management – Breede-Olifants Catchment Management Agency (BOCMA) - Department of Environmental Affairs and Development Planning - Department of Rural Development and Land Reform Spatial Planning - Department of Transport and Public Works - Heritage Western Cape - Cape Nature: Land Use & Conservation Planning - Local Municipality - District Municipality
	vi. any other party as required by the competent authority	Noted. Should the competent authority require any other party to receive written notice, then this will be duly carried out.

Sub	Regulations of Chapter 6 of NEMA EIA Regulations, 2014 (as amended 2021)	Applicability to the development
	c) placing an advertisement in— i. one local newspaper; or	An English advertisement was placed in the *Witzenberg Herald*.
	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;	Noted. Not applicable to this proposed development.
	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	Noted. Not applicable to this proposed development.
	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;	Noted. In instances where a person desires to participate in the process but is unable to do so due to illiteracy, disability, or any other disadvantage, and makes such a desire known to the EAP, then reasonable alternative methods will be used, as agreed upon by the competent authority.
	ii. disability; or	
	iii. any other disadvantage	
3.	A notice, notice board or advertisement referred to in subregulation (2) must— a) give details of the application or proposed application which is subjected to public participation; and	The written notices — specifically, notification letters, notice boards, and advertisements — that form part of the pre-application Scoping phase's 30-day commenting period contains details of the proposed application, which is subject to public participation. Please refer to Appendix 4 for proof of the written notices.
	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.	

Sub	Regulations of Chapter 6 of NEMA EIA Regulations, 2014 (as amended 2021)	Applicability to the development
4.	A notice board referred to in subregulation (2) must— a) be of a size of at least 60cm by 42cm; and	The notice boards measure 60cm by 42cm in size and display the required information in a legible format.
	b) display the required information in lettering and in a format as may be determined by the competent authority.	
5.	Where public participation is conducted in terms of this regulation for an application or proposed application, subregulation (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 subregulation (2) (a), (b), (c) and (d); and	Noted.
	b) written notice is given to registered interested and affected parties regarding where the— i. revised documents as contemplated in regulation 19 (1) (b);	Noted.
	ii. revised documents as contemplated in regulation 23 (1) (b); or	Noted.
	iii. environmental impact assessment report and documents 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.	Noted.
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	Noted.
	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.	Noted.

Sub	Regulations of Chapter 6 of NEMA EIA Regulations, 2014 (as amended 2021)	Applicability to the development
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.	Noted.
Regulation 42 - Register of interested and affected parties		
1.	A proponent or applicant must ensure the opening and maintenance of a register of interested and affected parties and submit such a register to the competent authority, which register must contain the names, contact details and addresses of— a) all persons who, as a consequence of the public participation process conducted in respect of that application, have submitted written comments or attended meetings with the proponent, applicant or EAP;	A register of interested and affected parties was opened and is maintained.
	b) all persons who have requested the proponent or applicant, in writing, for their names to be placed on the register; and	
	c) all organs of state which have jurisdiction in respect of the activity to which the application relates.	
Regulation 43 - Registered interested and affected parties entitled to comment on reports and plans		
1.	A registered interested and affected party is entitled to comment, in writing, on all reports or plans submitted to such party during the public participation process contemplated in these Regulations and to bring to the attention of the proponent or applicant any issues which that party believes may be of significance to the consideration of the application, provided that the interested and affected party discloses any direct business, financial, personal or other interest which that party may have in the approval or refusal of the application.	This subregulation will be communicated to registered interested and affected parties during the public participation process.

Sub	Regulations of Chapter 6 of NEMA EIA Regulations, 2014 (as amended 2021)	Applicability to the development
2.	In order to give effect to section 24O of the Act, any State department that administers a law relating to a matter affecting the environment must be requested, subject to regulation 7 (2), to comment within 30 days.	State departments that administer laws relating to environmental matters relevant to the application, as well as organs of state with jurisdiction over the activity, was notified of the proposed application and invited to comment within 30 days. Should comments not be received within the prescribed timeframes, it would be assumed that no comments are forthcoming.
Regulation 44 - Comments of interested and affected parties to be recorded in reports and plans		
1.	The applicant must ensure that the comments of interested and affected parties are recorded in reports and plans and that such written comments, including responses to such comments and records of meetings, are attached to the reports and plans that are submitted to the competent authority in terms of these Regulations.	Comments of interested and affected parties are recorded together with the responses in a Comment and Response report (CRR) and where applicable, incorporated into reports and plans.
2.	Where a person desires but is unable to access written comments as contemplated in the subregulation due to— a) a lack of skills to read or write; b) disability; or c) any other disadvantage; reasonable alternative methods of recording comments must be provided for.	Noted. Where a person desires to but is unable to access written comments due to illiteracy, disability, or any other disadvantage, and makes such a desire known to the EAP, then reasonable alternative methods of recording comments will be provided.

7. PLAN OF STUDY FOR THE EIA

7.1 TASKS TO BE UNDERTAKEN

Due to the nature of the proposed development, there are a number of activities that will still need to be undertaken during the next phase of the project. The proposed process is described as follows and will follow acceptance of the Final Scoping Report and Plan of Study for EIA by the Western Cape Department of Environmental Affairs and Development Planning (WCDEA&DP).

The NEMA application form will be submitted to WCDEA&DP. The Draft Scoping Report will be made available to registered Interested and Affected Parties (I&APs), relevant authorities and organs of state for a minimum 30-day review and comment period. Comments received during the Public Participation Process (PPP) will be incorporated into the Comments and Responses Report (CRR), and the Draft Scoping Report will be revised where appropriate. The Final Scoping Report, including the Plan of Study for EIA, will thereafter be submitted to WCDEA&DP for consideration and acceptance.

Following acceptance of the Final Scoping Report and Plan of Study for EIA, the Environmental Impact Assessment phase will proceed. The following is a list of tasks to be performed as part of the EIA Process. Should the process be modified significantly, WCDEA&DP will be informed accordingly.

Table 2: EIA process – Timeline

EIA Process	
Task	**Timeframes**
Notify members of the public through existing Interested and Affected Parties (I&AP) databases, site notices and a newspaper advertisement about the intention to submit a National Environmental Management Act (NEMA) application for the proposed development as part of the initial Public Participation Process (PPP).	31 July 2026 – 4 September 2026
Distribute the Pre-Application Scoping Report to registered Interested and Affected Parties and Commenting Authorities for their comments.	31 July 2026 – 4 September 2026
Submit NEMA application and Draft Scoping Report (DSR) and Plan of Study for EIA to WCDEA&DP and distribute the Draft Scoping Report to registered I&APs and Commenting Authorities for comment.	October 2026
Submit the Final Scoping Report (FSR) and Plan of Study for EIA to WCDEA&DP for consideration and acceptance.	November 2026
Receive WCDEA&DP's decision on the Final Scoping Report and Plan of Study for EIA.	December 2026 / January 2027
Undertake/finalise specialist investigations and any additional specialist input or confirmation required and compile the Draft Environmental Impact Report (EIR) based on the specialist information.	January 2027 – February 2027
Distribute the Draft EIR to registered I&APs and Commenting Authorities for the prescribed public review and comment period.	February 2027 – March 2027
Consider and respond to comments received on the Draft EIR and revise the	March 2027

EIR, where appropriate.	
Preparation of the Final EIR and submission to WCDEA&DP for consideration and decision-making.	March 2027 / April 2027

**Timeframes provided are estimates and are subject to change. They serve as a tentative indication and may be adjusted as the process progresses.*

7.2 CRITERIA FOR SPECIALIST ASSESSMENT OF IMPACT

As a result of the environmental issues and potential impacts identified in Section 6, the need for the following specialist studies has been identified:

- Terrestrial Biodiversity and Botanical Assessment
- Freshwater Resource Verification and Risk Assessment
- Heritage / Archaeological and Palaeontological input, as determined by Heritage Western Cape

The Terrestrial Biodiversity and Botanical Assessment and Freshwater Resource Verification and Risk Assessment have been undertaken. The findings of these studies have informed the Scoping process and will be incorporated into the EIA phase. The freshwater assessment will be reviewed against the final Phase 2 engineering specifications and updated or confirmed, where required. Any additional heritage assessment requirements identified by Heritage Western Cape will also be addressed during the EIA phase.

The impacts of the proposed activity on the various components of the receiving environment will be evaluated in terms of duration (time scale), extent (spatial scale), magnitude and significance as outlined in Table 5. These impacts could either be positive or negative. This includes an assessment of the alternatives, including the option of not proceeding with the proposed development (see Section 4).

The magnitude of an impact is a judgment value that rests with the individual assessor, while the determination of significance rests on a combination of the criteria for duration, extent and magnitude. Significance, thus, is also a judgment value made by the individual assessor.

In addition to determining the individual impacts against the various criteria, the element of mitigation, where relevant, will also be brought into the assessment. In such instances, the impact will be assessed with a statement on the mitigation measure that could/should be applied. An indication of the certainty of a mitigation measure considered, achieving the end result to the extent indicated, is given on a scale of 1–5 (1 being totally uncertain and 5 being absolutely certain), taking into consideration uncertainties, assumptions and gaps in knowledge. Cognisance will also be taken of the applicable minimum requirements for specialist assessments prescribed by the Environmental Themes and Specialist Assessment Protocols, where applicable.

Table 3: Criteria used for evaluating impacts

Criteria	Category
Nature of impact	This is an evaluation of the effect that the construction, operation and maintenance of a proposed dam would have on the affected environment. This description should include what is to be affected and how.
Duration (Predict whether the lifetime of the Impact will be temporary (less than 1 year) short term (0 to 5 years); medium term (5 to 15 years); long	**Temporary:** < 1 year (not including construction) **Short-term:** 1 – 5 years **Medium term:** 5 – 15 years **Long-term:** >15 years (Impact will stop after the operational or running life of the activity, either due to natural course or by human interference)

Criteria	Category
term (more than 15 years, with the Impact ceasing after full implementation of all development components with mitigations); or permanent.	**Permanent:** Impact will be where mitigation or moderation by natural course or by human interference will not occur in a particular means or in a particular time period that the impact can be considered temporary
Extent (Describe whether the impact occurs on a scale limited to the site area; limited to broader area; or on a wider scale)	**Site Specific:** Expanding only as far as the activity itself *(onsite)* **Small:** restricted to the site's immediate environment within 1 km of the site *(limited)* **Medium:** Within 5 km of the site *(local)* **Large:** Beyond 5 km of the site *(regional)*
Intensity (Describe whether the magnitude (scale/size) of the Impact is high; medium; low; or negligible. The specialist study must attempt to quantify the magnitude of impacts, with the rationale used explained)	**Very low:** Affects the environment in such a way that natural and/or social functions/processes are not affected **Low:** Natural and/or social functions/processes are slightly altered **Medium:** Natural and/or social functions/processes are notably altered in a modified way **High:** Natural and/or social functions/processes are severely altered and may temporarily or permanently cease
Probability of occurrence Describe the probability of the Impact actually occurring as definite (Impact will occur regardless of mitigations	**Improbable:** Not at all likely **Probable:** Distinctive possibility **Highly probable:** Most likely to happen **Definite:** Impact will occur regardless of any prevention measures
Status of the Impact Describe whether the Impact is positive, negative (or neutral).	**Positive:** The activity will have a social/ economical/ environmental benefit **Neutral:** The activity will have no affect **Negative:** The activity will be socially/ economically/ environmentally harmful
Degree of Confidence in predictions State the degree of confidence in predictions based on availability of information and specialist knowledge	**Unsure/Low:** Little confidence regarding information available (<40%) **Probable/Med:** Moderate confidence regarding information available (40-80%) **Definite/High:** Great confidence regarding information available (>80%)
Significance (The impact on each component is determined by a combination of the above criteria and defined as follows) The significance of impacts shall be assessed with and without mitigations. The significance of identified impacts on components of the affected biophysical or socio-economic environment (and, where relevant, with respect to potential legal requirement/s) shall be described as follows:	**No change:** A potential concern which was found to have no impact when evaluated **Very low:** Impacts will be site specific and temporary with no mitigation necessary. **Low:** The impacts will have a minor influence on the proposed development and/or environment. These impacts require some thought to adjustment of the project design where achievable, or alternative mitigation measures **Moderate:** Impacts will be experienced in the local and surrounding areas for the life span of the development and may result in long term changes. The impact can be lessened or improved by an amendment in the project design or implementation of effective mitigation measures. **High:** Impacts have a high magnitude and will be experienced regionally for at least the life span of the development or will be irreversible. The impacts could have the no-go proposition on portions of the development in spite of any mitigation measures that could be implemented.

Table 4: The stated assessment and information will be determined for each individual issue or related groups of issues and presented in a descriptive format in the following table example or a close replica thereof

Impact Statement:		
Mitigation:		
Ratings	Duration	
	Extent	
	Intensity	
	Probability of impact	
	Status of Impact (Positive/negative)	
	Degree of confidence	
Significances	Significance **without** Mitigation	
	Significance ***WITH*** Mitigation	
Indication of the certainty of a mitigation measure considered, achieving the end result to the extent indicated, is given on a scale of 1-5 (1 being totally uncertain and 5 being absolutely certain), taking into consideration uncertainties, assumptions and gaps in knowledge:		
Legal Requirements (Identify and list the specific legislation and permit requirements which are relevant to this development):		

7.3 ASPECTS / IMPACTS TO BE ASSESSED DURING THE EIA PHASE

In accordance with Appendix 2(1)(h) of the NEMA Environmental Impact Assessment Regulations, 2014 (as amended), the following key environmental aspects and potential impacts have been identified for further consideration during the Environmental Impact Assessment (EIA) phase. These aspects have been identified through the Scoping process and informed by the available baseline information, specialist input and the Public Participation Process.

The following aspects and potential impacts will be assessed during the EIA phase:

- Terrestrial biodiversity, including potential impacts on vegetation communities, habitat condition, ecological functioning and species of conservation concern;
- Freshwater resources, including potential impacts on the non-perennial episodic drainage line, hydrological processes, water quality, sediment transport, stormwater management and downstream flow characteristics;
- Agricultural land use, including the permanent loss of a small area of cultivated land and the implications for existing farming operations;
- Heritage resources, including archaeological and palaeontological considerations, subject to the requirements of Heritage Western Cape;
- Visual character, including changes to the existing rural agricultural landscape;
- Socio-economic considerations, including temporary construction employment, support for existing agricultural activities and improved long-term water security;
- Cumulative impacts, particularly in relation to water abstraction, water storage within the broader catchment, potential cumulative effects on the Titus River, downstream water users and water quality; and

- Compliance with the issued Water Use Licence (WUL) and any other applicable statutory authorisations, including operational requirements, monitoring obligations and licence conditions, as well as any additional water use authorisation requirements that may be applicable in terms of sections 21(c) and 21(i) of the National Water Act.

The identified impacts will be assessed in terms of their nature, extent, duration, intensity, probability and significance before and after mitigation. Appropriate avoidance, mitigation and management measures will be identified where necessary, and any residual impacts will be evaluated.

The EIA phase will also include a comparative assessment of the identified alternatives, including the preferred dam site, potential off-stream storage alternatives, the potential use or enlargement of existing storage facilities, and the No-Go Alternative.

7.4 ALTERNATIVES TO BE ASSESSED DURING THE EIA PHASE

In accordance with Appendix 2(1)(h) of the NEMA Environmental Impact Assessment Regulations, 2014 (as amended), the alternatives identified during the Scoping phase will be comparatively assessed during the Environmental Impact Assessment (EIA) phase.

The following alternatives will be considered and comparatively evaluated:

Preferred Development Alternative

The preferred development alternative comprises the construction of the proposed Jade Hills Farm Storage Dam at the selected location on Portion 26 of Farm Stinkfontein No. 383. The current Phase 2 preliminary design provides for a storage capacity of approximately 110,000 m³, a maximum dam wall height of approximately 12.5 m, a crest length of approximately 259 m, a flooded water surface area of approximately 2.3 ha and an overall engineering footprint of approximately 6.6 ha, including the dam wall and spillway.

The preferred location was identified based on the available topography, engineering and operational considerations, its proximity to the existing water supply infrastructure and the predominantly transformed agricultural nature of the site.

Design Alternatives

The Preliminary Design Report considered two design phases for the proposed Jade Hills Dam. Phase 1 provided for a storage capacity of approximately 67,600 m³, a maximum wall height of approximately 11.1 m, a crest length of approximately 237 m and a water surface area of approximately 1.7 ha. Phase 2 provides for a storage capacity of approximately 110,000 m³, a maximum wall height of approximately 12.5 m, a crest length of approximately 259 m and a water surface area of approximately 2.3 ha.

The project engineer has confirmed that Phase 1 is no longer under consideration and that Phase 2 represents the current preliminary design for the proposed development. Phase 2 was used for the Water Use Licence application and is the design carried forward for assessment during the EIA process. Phase 1 will therefore be retained for comparative purposes as a design alternative but will not be carried forward for detailed assessment.

Off-Stream Storage Alternative

In response to comments received from CapeNature, the feasibility of locating the proposed storage dam outside the identified episodic drainage line will be considered during the EIA phase. The off-

stream alternative will be comparatively evaluated against the preferred alternative, taking into account engineering feasibility, water conveyance and storage requirements, agricultural land use and potential environmental impacts.

Use or Enlargement of Existing Storage Facilities

In response to comments received from CapeNature, the potential use or enlargement of existing storage facilities will also be considered as an alternative to the proposed dam. The practicality and feasibility of this option will be evaluated in terms of its ability to provide the required storage capacity, together with the associated engineering, operational and environmental implications.

No-Go Alternative

The No-Go Alternative entails that the proposed farm storage dam is not constructed and that the existing situation remains unchanged, with no additional on-site water storage infrastructure being developed.

The alternatives will be comparatively assessed during the EIA phase in terms of their environmental, social, economic and technical implications. Where an alternative is found not to be reasonable or feasible, the reasons for its exclusion from further detailed assessment will be clearly motivated in the EIR.

8. CONCLUSION

Jade Hills Farming (Pty) Ltd proposes the development of the Jade Hills Farm Storage Dam on Portion 26 of Farm Stinkfontein No. 383, near Ceres, within the Witzenberg Local Municipality, Western Cape.

The proposed Jade Hills Dam will comprise a new earthfill farm storage dam with an estimated storage capacity of approximately 110 000 m³, a maximum wall height of approximately 12.5 m, and a crest length of approximately 259 m. The dam will have a flooded water surface area of approximately 2.3 ha at full supply level, within an overall engineering footprint of approximately 6.6 ha, including the dam wall and spillway.

The structure will include associated outlet works, spillway infrastructure and a small pump house to facilitate the controlled storage and use of water in accordance with the applicable Water Use Licence (WUL).

The dam will store surplus winter water abstracted from the Titus River via the existing Rietvalley Scheme in accordance with the issued WUL. Water will be conveyed to the dam via an approximately 700 m pipeline from the existing Jade Hills Delivery Point.

Stored water will support existing agricultural activities on the property, including established orchard areas situated on previously cultivated and transformed land. No new agricultural expansion forms part of the current application.

The Scoping Phase has identified the key environmental themes requiring further assessment and consideration during the Environmental Impact Assessment (EIA) phase. These include terrestrial biodiversity, freshwater resources, heritage resources, visual character, agricultural land use and cumulative water resource considerations. The terrestrial biodiversity/botanical and freshwater specialist investigations have been undertaken and have informed the Scoping process. The freshwater assessment will be reviewed against the final Phase 2 engineering specifications and updated or confirmed where required, while any further heritage requirements identified by Heritage Western Cape will be addressed during the EIA phase.

The EIA phase will consider and comparatively evaluate the identified reasonable and feasible alternatives, including potential off-stream storage, the potential use or enlargement of existing storage facilities, and the No-Go Alternative. The previous Phase 1 design will be retained for comparative purposes, while the current Phase 2 design will be carried forward for detailed assessment. Where an alternative is determined not to be reasonable or feasible, the reasons for its exclusion from further detailed assessment will be motivated in the EIR.

The Public Participation Process undertaken as part of the Scoping Phase has provided and will continue to provide Interested and Affected Parties and commenting authorities with an opportunity to identify issues of concern and contribute to the assessment process. All comments received during the Scoping Phase will be considered and, where relevant, addressed in the Environmental Impact Assessment Report (EIR).

Based on the information available at this stage, the proposed development appears to be technically feasible and capable of being accommodated within an existing transformed agricultural landscape, subject to the further assessment of the identified environmental impacts and alternatives, the outcome of the EIA phase, and compliance with applicable environmental and water use authorisation requirements.

It is therefore recommended that the Final Scoping Report and Plan of Study for EIA be submitted to WCDEA&DP for consideration and acceptance and, subject to such acceptance, that the application proceed to the EIA phase in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2014 (as amended).

9. SUMMARY OF KEY FINDINGS FROM THE SCOPING PHASE

Positive Findings / Anticipated Benefits

- Water Security – The proposed dam will improve on-site water storage capacity and irrigation reliability during the dry summer period.
- Agricultural Sustainability – The project will support the continued viability of existing farming operations.
- Efficient Use of Authorised Water – The development will facilitate the beneficial use of surplus winter water authorised for abstraction and storage in terms of the issued Water Use Licence.
- Climate Resilience – Additional storage capacity will improve resilience to drought conditions and rainfall variability.
- Employment Support – Existing agricultural employment opportunities are expected to be sustained through improved water security and farm productivity.
- Temporary Construction Employment – Limited short-term employment opportunities may be created during the construction phase.
- Land Use Compatibility – The proposed dam is compatible with the surrounding agricultural landscape and existing rural land uses.
- Operational Efficiency – The selected location facilitates gravity-fed water distribution where practicable, thereby reducing long-term pumping requirements.
- Regulatory Alignment – A Water Use Licence has been issued authorising the abstraction of up to 110 000 m³/a from the Titus River via the Rietvalley Scheme and the storage of 110 000 m³ in the proposed Jade Hills Dam. The development will be required to comply with the applicable licence conditions and any additional water use authorisation requirements identified during the EIA process.

Potential Environmental Issues Requiring Further Assessment

- Freshwater Resources – Construction within an episodic drainage line may affect local hydrology, water movement, sediment transport, water quality and aquatic ecological functioning. The freshwater specialist has identified the overall risk as Low with the implementation of appropriate mitigation measures.
- Loss of Agricultural Land – A portion of existing transformed/cultivated agricultural land will be permanently occupied by the proposed dam and associated infrastructure.
- Terrestrial Biodiversity – The Terrestrial Biodiversity and Botanical Assessment confirmed that the directly affected area is predominantly transformed agricultural land and that no representative Ceres Shale Renosterveld is expected to be lost. Terrestrial biodiversity, plant and animal sensitivity have been verified as Low. Remaining degraded natural vegetation in the vicinity of the development should nevertheless be protected.
- Heritage Resources – Potential archaeological and palaeontological impacts will be addressed in accordance with the requirements of Heritage Western Cape.
- Visual Character – The proposed dam may introduce a permanent change to the existing agricultural landscape.
- Construction-related Impacts – Temporary impacts associated with dust, noise, traffic, erosion, sedimentation, pollution and construction activities will require appropriate management through the EMPr.
- Cumulative Water Resource Considerations – The cumulative implications of additional water storage within the broader catchment, including potential effects on the Titus River, water quality and downstream users, will be considered during the EIA phase.
- Alternatives – The EIA phase will consider potential off-stream storage, the potential use or enlargement of existing storage facilities, and the No-Go Alternative. The previous Phase 1

design will be retained for comparative purposes, while the current Phase 2 design will be carried forward for detailed assessment.

10. WAY FORWARD

All identified issues will be assessed in greater detail during the EIA phase, supported by specialist input and confirmation where required and further public participation. The EIA will assess impact significance, mitigation feasibility, alternatives, cumulative effects, and compliance with applicable legal requirements. The identified alternatives will be comparatively assessed, and the freshwater assessment will be reviewed against the final Phase 2 engineering specifications and updated or confirmed where required. Any additional requirements identified by Heritage Western Cape and BOCMA will also be addressed during the EIA phase.

The findings will provide the Competent Authority with sufficient information to make an informed and legally defensible decision regarding the proposed Jade Hills Dam development.

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