Request for the relevant Competent Authority to define or adopt a Maintenance Management Plan for a watercourse in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), Environmental Impact Assessment Regulations, 2014 (as amended).

		(For official use only)
File Reference Number:		
Date Received by Department:		
Date Received by Component:		
Form Duly Signed and Dated:		Yes No

PROJECT TITLE

Proposed Maintenance of Farm Dams on Portion 7 of Farm 153 Steenebrug, Piketberg, Western Cape.

cell:082 327 2100 | Tel:(028) 312 1734 | Fax:086 508 3249 | amanda@phsconsulting.co.za | | PO Box 1752 | Hermanus 7200

Appendices:

Appendix		**Attached or Included in this document**
Appendix A	Freshwater Assessment	Attached
Appendix B	Locations of maintenance practices	Included
Appendix C	Proof of WULA process	Included

A. SCOPE AND IMPORTANT INFORMATION

1) This document is to be used to ensure that the request for adopting or defining a Maintenance Management Plan (MMP) in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), Environmental Impact Assessment (EIA) Regulations, 2014 (as amended) is undertaken to the sufficient standard and requirements as defined by the competent authority, the Department of Environmental Affairs and Development Planning of the Western Cape Government (henceforth the Department). It is advised that the determination of applicability regarding the scale of the proposed maintenance/management activity(ies) be undertaken through a pre-application consultation with the Department.

2) The geographical scope of the MMP is limited to watercourses as defined in the EIA Regulations, 2014(as amended). The document does not relate to coastal activities or activities to be undertaken in an estuary.

3) The use of this document for the development of a MMP for a watercourse **will only** be considered when the proposed maintenance activities constitute any one of the following listed activities identified in terms of the NEMA EIA Regulations, 2014 (as amended):

EIA Regulations Listing Notice 1 of 2014 (as amended)

- Activity 19, Listing Notice 1: The infilling or depositing of any material of more than 10 cubic meters into, or the dredging, excavation, removal or moving of soil, sand, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse; but excluding where such infilling, depositing, dredging, excavation, removal or moving-
  (a) will occur behind a development setback;
  (b) is for maintenance purposes undertaken in accordance with a maintenance management plan;
  (c) falls within the ambit of activity 21 in this Notice, in which case that activity applies;
  (N.B. Points (d) and (e) does not apply as these activities fall within the coastal zone)

- Activity 27, Listing Notice 1: The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for-
  i. The undertaking of a linear activity; or
  ii. Maintenance purposes undertaken in accordance with a MMP.

EIA Regulations Listing Notice 2 of 2014 (as amended)

- Activity 15, Listing Notice 2: The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for-
  I. The undertaking of a linear activity; or
  II. Maintenance purposes undertaken in accordance with a MMP.

- Activity 24, Listing Notice 2: The extraction or removal of peat or peat soils, including the disturbance of vegetation or soils in anticipation of the extraction or removal of peat or peat soils, but excluding where such extraction or removal is for the rehabilitation of wetlands in accordance with a MMP.

EIA Regulations Listing Notice 3 of 2014 (as amended)

- Activity 12, Listing Notice 3: The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a MMP.

  i. Western Cape

  i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;
  ii. Within critical biodiversity areas identified in bioregional plans;

iv. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning; or
v. On land designated for protection or conservation purposes in an Environmental Management Framework adopted in the prescribed manner, or a Spatial Development Framework adopted by the MEC or Minister.

(NB. Point iii does not apply as this activity falls within the coastal zone)

4) In deciding the request, the competent authority may define conditions related to auditing compliance with the MMP; monitoring requirements; reporting requirements, review; updating and amending the document and period for which the MMP is defined/adopted.

5) The purpose of the MMP is to maintain both man-made and ecological infrastructure in a manner that either improves the current state of, and/or reduces the negative impacts on a watercourse to ensure that ecosystems services are preserved/improved and to prevent further deterioration of the watercourse.

6) Notwithstanding the MMP possibly being defined or adopted by the Competent Authority, any other applicable statutory requirement must still be complied with (e.g. any obligations under the National Water Act, 1998 (Act 36 of 1998) or the Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983)).

7) The proponent must note that a MMP for a watercourse **must** be undertaken through consultation with the Department of Water and Sanitation and/or the relevant Catchment Management Agency (responsible water authority). This is to ensure compliance in terms of a Permissible Water Use as set out in the National Water Act, 1998 (Act No. 36 of 1998). It is recommended that this process for authorisation in terms of the National Water Act be clarified prior to the drafting and submission of the MMP.

8) The development of this document has been done in such a way so as to meet the requirements of both this Department as the competent authority in terms of the NEMA EIA Regulations, 2014 (as amended), as well as the requirements of the delegated water authority, regarding general authorisation considerations for sections 21(c) and (i) of the National Water Act, 1998 (Act No. 36 of 1998), to ensure alignment between the two authorities when defining or adopting the MMP.

9) In situations where a Water Use Licence Application (WULA) is required by the water authority regarding the proposed activities within a MMP, this will not prevent the proponent from submitting a request for a MMP to be defined or adopted by the Department.

10) Unless protected by law, all information contained in, and attached to this document, shall become public information on receipt by the competent authority.

11) A duly dated and originally signed copy of this document together with one hard copy and one electronic copy of the MMP must be posted to the Department at the postal address given below or delivered to the Registry Office of the Department.

12) A copy of the final defined/adopted MMP and cover letter **must** be submitted to the responsible water authority.

13) **NOTE: Adopting or defining the MMP does not absolve the proponent from complying with any applicable legislation or the general "duty of care" set out in Section 28(1) of the NEMA that states, *"Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment*." (Note: When interpreting this "duty of care" responsibility, cognisance must be taken of the national environmental management principles contained in Section 2 of the NEMA.**

14) **NOTE: This document can be used as a template to assist in the information required and is to be filled out in full. The Department reserves the right to request any additional information during the initial development and submission of the draft MMP.**

15) **NOTE: The Department reserves the right to not adopt the MMP and require that an application be submitted to obtain Environmental Authorisation for the respective activities. Furthermore, consideration for the review should also be aligned to the periodic reviews of the General Authorisation for sections 21 (c) and (i) of the National Water Act, 1998 (Act No. 36 of 1998) to ensure continued alignment and compliance.**

B. MAINTENANCE MANAGEMENT PRINCIPLES

1) The following are overarching principles to be used by landowners and managers when considering the development and implementation of a MMP:

    a. The anticipation and prevention of negative impacts and risks, then minimisation, rehabilitation or 'repair', where a sequence of possible mitigation measures to avoid, minimize, rehabilitate and/or remedy negative impacts is explicitly considered;
    b. Avoid and reduce unnecessary maintenance;
    c. Maintenance and management of a watercourse must be informed by the condition of the physical and ecological processes that drive and maintain aquatic ecosystems within a catchment, relative to the desired state of the affected system;
    d. Management actions must aim to prevent further deterioration to the condition of affected watercourses and, overall, be guided by a general commitment to improving and maintaining ecological infrastructure for the delivery of ecosystem services;
    e. Managers and organs of state must identify, address and, where feasible, eliminate the factors that necessitate intrusive, environmentally-damaging maintenance; and
    f. A process of continuous management improvement be applied, namely Planning; Implementing; Checking (monitoring, auditing, determine corrective action) and Acting (management review).

2) The following table provides a simple overview for the determination of the need for a MMP:

	Question	**If the answer to any of the questions is YES, then a MMP may be applicable.**
2.1	Is there a watercourse on or adjacent to the property?	Yes
2.2	Has there been a history of flood damage or vandalism to the existing infrastructure or watercourse – erosion and/or sedimentation?	Yes. Siltation of in stream dams over time.
2.3	Is there infrastructure or any community at risk of being damaged by flooding?	No
2.4	Is the design of infrastructure considered inadequate in terms of managing the risk of flooding, erosion and/or sedimentation?	No
2.5	Would you consider an improved design to existing infrastructure to reduce maintenance needs?	No
2.6	Are there specific incidences where the watercourse is obstructed or blockages occur that alter the flow of the river during floods?	No
2.7	Is there an existing obstruction in the watercourse that has changed the flow of the river under normal conditions?	Yes. There are two instream dams for which this MMP is.
2.8	Is there a marked increase in the rate of erosion/sedimentation being experienced which threatens operations and assets?	No

2.9	Is there a presence of alien or bush encroachment vegetation within the watercourse and/or the presence of woody debris after flooding?	Alien vegetation within wetland areas.

3) It is important to consider that the type of maintenance required will impact on the level of assessment needed in terms of the impact the activity will have on the system and how best to mitigate the impact. Types of maintenance can broadly be classified in the following categories, with recognition that maintenance activities vary across the rural and urban context:

Maintenance Category	**Types of maintenance activities (examples only)**

Category A:
Sediment removal as a result of deposition or sediment deposition as a result of erosion
	• Clearing sediment or placing sediment at:
	  o Pump hole/trench
	  o Return flow (irrigation)
	  o Off-take weir
	  o Stormwater outfall
	  o Detention/retention ponds
	  o Canalized urban rivers
	  o Bridges, culverts and drifts
	• Prevent formation of islands in the channel of the river
	• Dredging of in-stream dams

Category B: Emergency repairs – urgent action required to manage risk and damage to assets	• Repair to erosion of river bank or servicing infrastructure (e.g. pipelines/roads) • Removal of material built up as a result of flooding/sedimentation and increasing risk to infrastructure • Address damage or replacement of infrastructure (e.g. bridge, pipeline, pump house) • Manage the condition of flood protection berms, and existing structures such as gabions, canalized and stormwater systems • Installing temporary gravel approaches at flood-damaged river crossings
Category C: Managing alien invasive and bush encroachment plant species	• Clearing of alien invasive vegetation out of a watercourse to reduce maintenance requirements as they relate to erosion and sedimentation • Management of indigenous species categorized as bush encroachment, to improve hydrological flow and reduce associated flooding impacts
Category D: Rehabilitation and restoration activities for maintaining ecological infrastructure	• Development and maintenance of ecological buffering systems to improve and/or restore functioning (e.g. wetlands and stormwater detention ponds) • Actively rehabilitating riparian zones through planting of locally indigenous species • Bank grading and movement/removal of berms and barriers to flow

4) The development of appropriate method statements to mitigate the impact of the maintenance needs, should be aligned within the framework of these considerations:

a. Watercourses experience a natural process of sedimentation and erosion, with varying rates depending on the geomorphology and the integrity of the land-uses within the catchment;

b. Manipulation of the watercourse results in increased erosion and/or deposition being experienced further downstream, perpetuating greater need for manipulation and more drastic and costly maintenance interventions;

c. Locally indigenous riparian and wetland vegetation assists in the stabilization of river banks through effective root structures, while contributing to improve in-stream habitat and water quality conditions;

d. Invasive alien and bush encroachment vegetation significantly impacts on the functioning of a watercourse, often leading to increased flood associated damage, with further implications and a reduction in water quality and availability;

e. Persons undertaking maintenance activities have a responsibility to ensure a sense of duty of care is applied as prescribed within NEMA Section 28(1).

5) It is recognized that within urban areas, sedimentation and erosion rates are significantly amplified because of development in urban areas and thus systems associated with watercourses in such areas can no longer be considered as 'natural'. In such a context, the drivers of such a process are often located outside the control of the landowner or responsible authority (i.e. Municipality). Therefore, the response taken to address the needs of a maintenance management plan for a watercourse within the urban environment may be limited in mitigating the requirement for maintenance to be undertaken.

C. REQUEST FOR THE COMPETENT AUTHORITY TO DEFINE OR ADOPT A MAINTENANCE MANAGEMENT PLAN FOR A WATERCOURSE IN TERMS OF THE NEMA, EIA REGULATIONS 2014 (AS AMENDED).

The following information must be submitted as part of the request for the competent authority to define or adopt the MMP:

1. PERSONAL DETAILS

Highlight the Departmental Sub-Region(s) in which the maintenance is to be undertaken. (mark the appropriate box with an 'X'). For Departmental details see Annexure A.

REGION 1 (City of Cape Town Metropolitan and West Coast District)	REGION 2 (Cape Winelands District, Overberg District)	REGION 3 (Eden & Central Karoo Districts)
X		

Name of person/authority who will undertake responsibility for the activity:	TWENTE PARTNERS FARMS PTY LTD		
Signatory (if other):	Andries Du Preez		
Postal address:	PO BOX 323, PIKETBERG		
Telephone:	087 150 9256	Postal code:	7320
Fax:	n/a	Cell:	076 858 4476
Email:	adupreez@twentepartners.com		
Name of person who has prepared the MMP:	Amanda Fritz-Whyte (EAP) & Josie Howard (Candidate EAP)		
Contact Person (if other):	n/a		
Postal address:	PO Box 1752, Hermanus		
Telephone:	028 312 1734	Postal code:	7200
Fax:	(086) 508 3249	Cell:	082 327 2100
E-mail:	amanda@phsconsulting.co.za; josie@phsconsulting.co.za		
Expertise of EAP	Twenty-three years' experience in Environmental Impact Assessments, Public Participation, auditing, water resource management, WULA applications and compilation of EMPrs.		
EAP Registrations/Associations	IAIAsa, Pri.Sci.Nat (118385), WISA fellow; Registered EAP - 2019/367 (EAPASA)		
Name of landowner(s) on whose behalf the plan has been developed:	TWENTE PARTNERS FARMS PTY LTD		

Contact person(s):	Jannie De Klerk		
Postal address:	PO BOX 323, PIKETBERG		
Telephone:	n/a	Postal code:	7320
Fax:	n/a	Cell:	082 777 3873
E-mail:	jannie@grootvleiboerdery.co.za		
Municipality for proposed project:	Bergrivier Local Municipality		
Farm name(s), erf(s) and portion number(s) etc*:	Portion 7 of Farm 153 Steenebrug		
Magisterial District or Town:	Bergrivier Local Municipality		
Name(s) of watercourse(s) in question:	Mapped wetland systems within the farm's cadastral areas (refer Figure 1): - Dam 1 (in-stream) - Dam 2 (in-stream) - Non-perennial river 1 - Non-perennial river 2		

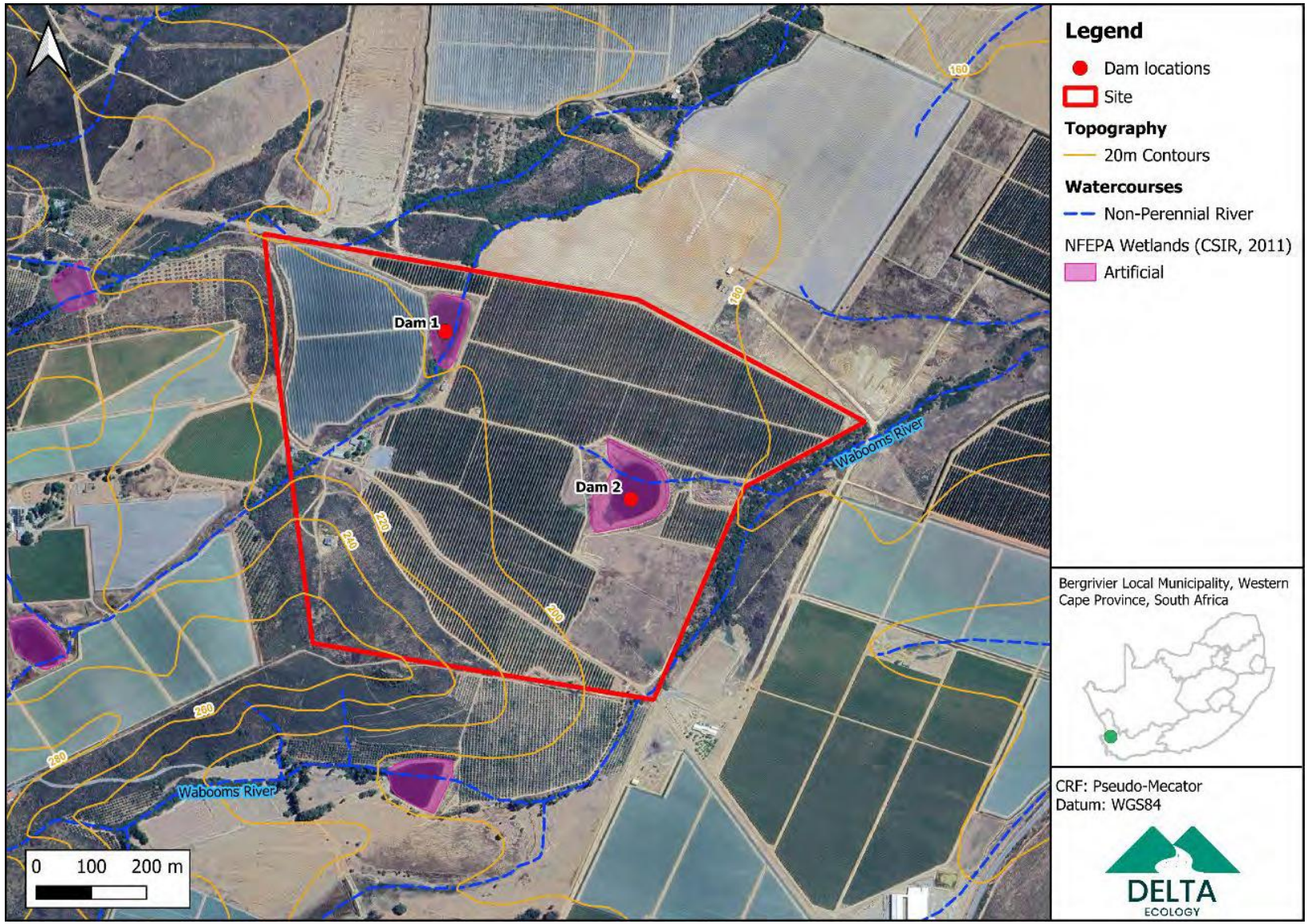


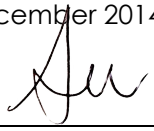
Figure 1: The mapped extent of the watercourses and artificial features associated with the property and location of the 2 in-stream dams (Delta Ecology, 2025).

2. DECLARATION

THE PERSON THAT WILL BE UNDERTAKING THE MAINTENANCE

I Andries du Preez, in my **personal capacity** or **duly authorised** (please circle the applicable option) by Twente Partners Farms (Pty) Ltd (name of legal entity) thereto hereby declare that I/we:

- Request the MMP to be adopted by the Competent Authority;
- Regard the information contained herein to be true and correct for this Maintenance Management Plan;
- Am fully aware of my responsibilities in terms of the National Environmental Management Act of 1998 ("NEMA") (Act No. 107 of 1998) and that, notwithstanding the adoption of this MMP, I/we shall comply with any other statutory requirement applicable, which may include, but not limited to the Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983), the National Water Act, 1998 (Act No. 36 of 1998) and the Environmental Impact Assessment Regulations, 2014 (as amended) ("EIA Regulations"), in terms of NEMA;
- Am fully aware that the proposed maintenance constitutes a listed activity in terms of the NEMA EIA Regulations, 2014 (as amended) and that an environmental assessment for environmental authorisation may be required for any other listed activities not included as part of this MMP;
- Acknowledge that any activity undertaken that does not form part of the defined and adopted MMP, will be subject to the Section 24(F) of NEMA and that appropriate enforcement and compliance requirements will follow;
- Shall undertake only those tasks described in the MMP, failing which environmental authorisation will be required, where applicable;
- Shall provide the competent authorities with access to all information at my disposal that is relevant to this request;
- Shall be responsible for any costs incurred in complying with environmental legislation;
- Hereby indemnify the government of the Republic, the competent authority and all its officers, agents and employees, from any liability arising out of, inter alia, any loss or damage to property or person as a consequence of undertaking this MMP; and
- Am aware that a false declaration is an offence in terms of Regulation 48(1)(a) GN No. R. 982 of 4 December 2014 (as amended).



19 August 2025

Signature of the proponent: Date:

Twente Partners Farms (Pty) Ltd

Name of institution/company:

25 June 2025

To Whom It May Concern

WATER USE LICENCE APPLICATION CONSULTANT POWER OF ATTORNEY LETTER

I the undersigned representing TWENTE PARTNERS FARMS (PROPRIETARY) LIMITED ***(Company Registration nr: 2024/045284/07)***, hereafter referred to as the Water Use Applicant, hereby appoint, ***Amanda Fritz-Whyte (7407170003081)***, of ***PHS Consulting: FYNBOSLAND 323 CC (2005/081216/23)*** to represent TWENTE PARTNERS FARMS (PROPRIETARY) LIMITED***,*** for the proposed *application for a Water Use Authorisation on Farm 7/153 Steenebrug, Piketberg.*

This letter serves as the Power of Attorney for ***Amanda Fritz-Whyte (7407170003081)*** to apply for Water Use Authorisation in terms of Section 21 of the National Water Act for the above-mentioned project:

- to prepare and submit the Water Use Authorisation Application;
- to sign the necessary Application Forms;
- to serve as the contact person between the Responsible Authority and the Water Use Applicant;
- to act on behalf of the Water Use Applicant for any issues related to the Water Use Authorisation Application.

Appointment Start Date: *25 June 2025*
Appointment End Date: *25 June 2026 (*or until the project scope has been completed)

The details of the relevant contact persons are included below:

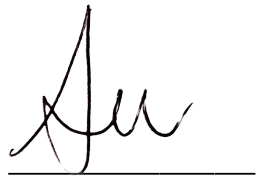
Contact details of the Consultant

Company Name:	PHS Consulting: FYNBOSLAND 323 CC (2005/081216/23)				
Name of Representative:	Amanda Fritz-Whyte (7407170003081)				
Physical address:	63 Albertyn Street, Hermanus				
Postal code:	7200	Cellphone:	082 327 2100	Telephone:	028 312 1734
Email:	amanda@phsconsulting.co.za				

Contact details of the Applicant

Name of Applicant:	TWENTE PARTNERS FARMS (PROPRIETARY) LIMITED				
Signatory:	ANDRIES DU PREEZ				
Primary Contact person:	JUAN ROBIN				
Physical address:	GROOTVLEI FARM, PIKETBERG, WESTERN CAPE				
Postal code:	7320	Cellphone:	0828147089	Telephone:	087 150 9256
Email:	jprobin@twentepartners.com				

25 June 2025 Amanda Fritz-Whyte



Andries du Preez *25 June 2025*
TWENTE PARTNERS FARMS (PROPRIETARY) LIMITED

3. BACKGROUND AND INTRODUCTION

3.1 Contextual Information

This report aims to develop a Maintenance Management Plan for the proposed maintenance of two farm dams on Steenebrug Farm (7/153). The farm is located approximately 12 km North of Piketberg, Western Cape.

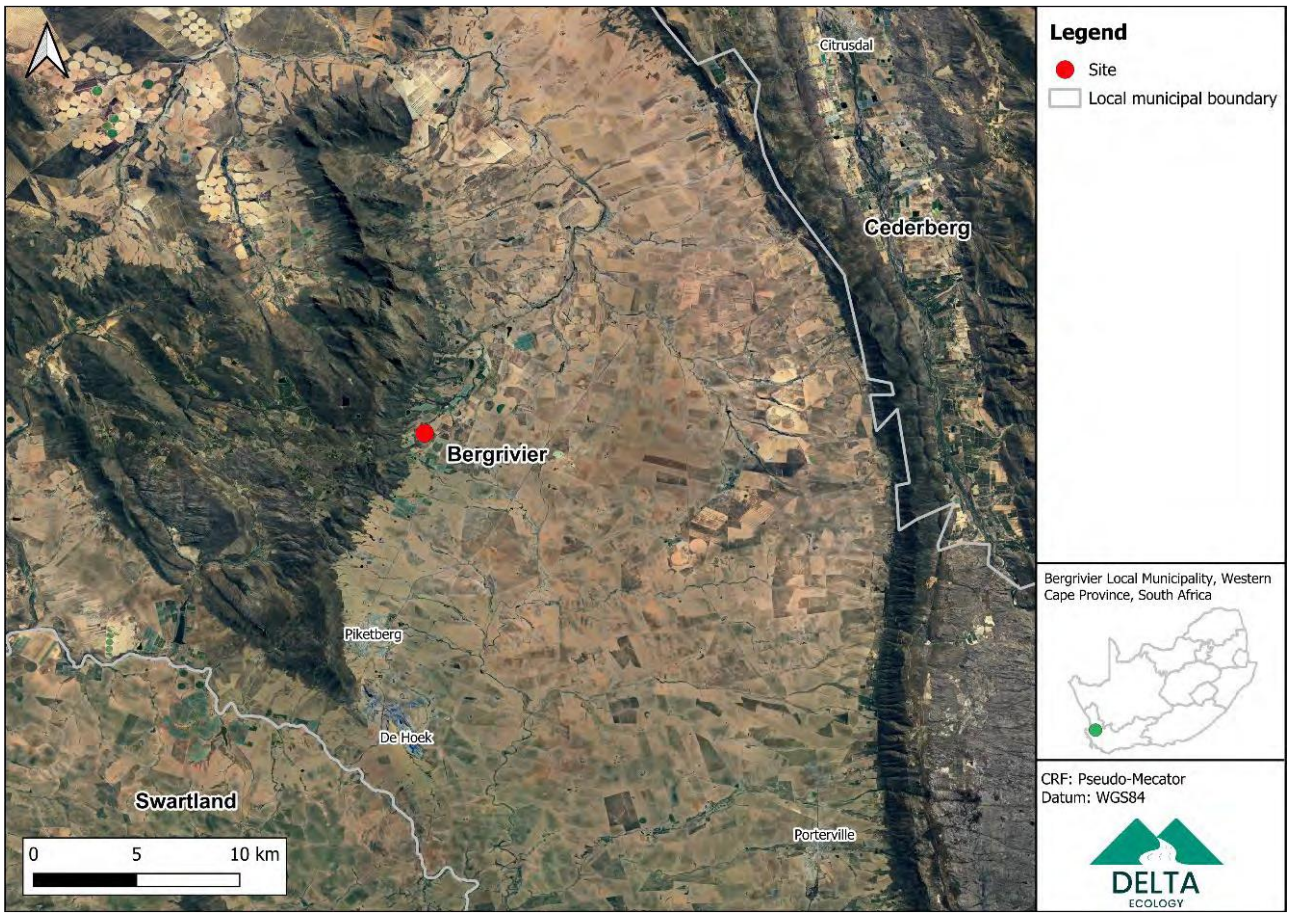


Figure 2: Regional location of Steenebrug Farm (Delta Ecology, 2025).

The site is located within Quaternary Catchment G30B in the Breede-Olifants Water Management Area. The Wabooms river runs along the West and South of the site.

A freshwater ecological site verification was undertaken in 2025 by Delta Ecology and the following watercourses were identified (refer to Figure 1):

- **2 Dams**
- **2 Non-perennial rivers** that are tributaries of the Wabooms River.

3.2 Scope of proposed project

The main goal of the maintenance activities is to restore and preserve the volume of the dams at their registered capacity. Therefore, the most significant activities will involve the removal of the built-up silt and sediment within the dams. Other activities that may occur include general maintenance of the roads within regulated areas, vegetation removal, and dam wall and infrastructure maintenance.

3.3 Purpose of the MMP

The purpose of this MMP is to ensure that any environmental impacts associated with proposed maintenance activities within the regulated areas of watercourses are effectively managed, mitigated, and minimized. Possible maintenance is anticipated, associated risk identified, and these are mitigated / managed to minimise the impact. It also provides clear guidance to the person responsible for the maintenance in future to avoid possible transgressions in terms of NEMA listed activities. In this way maintenance is also minimised and directional when it occurs.

3.4 Listed Activities

This MMP is applicable to the following listed activities in terms of NEMA:

Description of listed activity	Description of maintenance activities
EIA Regulations Listing Notice 1 of 2014 (as amended) **Activity 19, Listing Notice 1**: The infilling or depositing of any material of more than 10 cubic meters into, or the dredging, excavation, removal or moving of soil, sand, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse; but excluding where such infilling, depositing, dredging, excavation, removal or moving- (a) will occur behind a development setback; (b) is for maintenance purposes undertaken in accordance with a maintenance management plan;	Sediment removal within Dam 1 and Dam 2 as needed to restore registered capacity. Emergency repairs to dams in future. Alien vegetation removal from dams and drainage lines. And infrastructure maintenance.

(c) falls within the ambit of activity 21 in this Notice, in which case that activity applies; (N.B. Points (d) and (e) does not apply as these activities fall within the coastal zone)	

The MMP must form part of all contractual documents for maintenance projects in the future. The adoption of the MMP by DEA&DP will require that the applicant/ landowner and all appointed contractors must comply with the requirements therein. Any amendments/ changes/ upgrades to the MMP required will require submission to and approval by DEA&DP.

3.5 MMP process project team

Team member	Expertise	Role
Amanda Fritz-Whyte	EAP – MMP compilation	Compilation of MMP
Josie Howard	Candidate EAP	Compilation of MMP
Delta Ecology	Freshwater Ecologist	Compiled Freshwater Ecological report
Jannie De Klerk	Landowner Representative responsible for implementation of MMP	Input into MMP and implementation of MMP

3.6 Roles and Responsibilities

The responsibility for implementing the MMP lies with the Applicant and the designated implementing agent - farm manager Jannie De Klerk.

4 DEFINITIONS OF TERMS AND ACRONYMS

Definitions:

"**Activity**" means an activity identified in any notice published by the Minister or MEC in terms of section 24D(1)(a) of the Act as a listed activity or specified activity. Activity in this document refers to the activities as listed in Listing Notice 1, 2 and 3 of the Environmental Impact Assessment Regulations, 2014 (as amended).

"**Bush Encroachment**" means stands of plants of the kinds specified in column 1 of Table 4 of the Conservation of Agricultural Resources Act (Act No. 43 of 1983) where individual plants are closer to each other than three times the mean crown diameter.

"**Diverting**" as defined in the General Authorisation, in terms of section 39 of the National Water Act, 1998 (Act no 36 of 1998) for Water Uses as defined in Section 21(c) and 21(i) (GN. 509 of 26 August 2016), means to, in any manner, cause the instream flow of water to be rerouted temporarily or permanently.

"**Ecological Infrastructure**" refers to naturally functioning ecosystems that deliver valuable services to people, such as water and climate regulation, soil formation and disaster risk reduction.

"**Estuary**" has the meaning assigned to it in the National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008)

"**Flood event**" is the event where land is inundated by the overflowing of water from a river channel and where this event causes significant damage to infrastructure or results in watercourse erosion and/or sediment deposition.

"**Flow-altering**" as defined in the General Authorisation, in terms of section 39 of the National Water Act, 1998 (Act no 36 of 1998) for Water Uses as defined in Section 21(c) and 21(i) (GN. 509 of 26 August 2016), means to, in any manner, alter the instream flow route, speed or quantity of water temporarily or permanently.

"**General Authorisation**" in this document refers to the General Authorisation in terms of section 39 of the National Water Act, 1998 (Act no 36 of 1998) for Water Uses as defined in Section 21(c) or Section 21(i) (GN. 509 of 26 August 2016).

"**Impeding**" as defined in the General Authorisation, in terms of section 39 of the National Water Act, 1998 (Act no 36 of 1998) for Water Uses as defined in Section 21(c) and 21(i) (GN. 509 of 26 August 2016), means to, in any manner, hinder or obstruct the instream flow of water temporarily or permanently, but excludes the damming of flow so as to cause storage of water.

"**Indigenous vegetation**" refers to vegetation consisting of indigenous plant species occurring naturally in an area, regardless of the level of alien infestation and where the topsoil has not been lawfully disturbed during the preceding ten years.

"**Maintenance**" means actions performed to keep a structure or system functioning or in service on the same location, capacity and footprint.

"**Maintenance Management Plan**" means a management plan for maintenance purposes defined or adopted by the competent authority.

"**River Management Plans**" as defined in the General Authorisation, in terms of section 39 of the National Water Act, 1998 (Act no 36 of 1998) for Water Uses as defined in Section 21(c) and 21(i) (GN. 509 of 26 August 2016), any river management plan developed for the purposes of river or storm water management in any municipal/metropolitan area or described river section, river reach, entire river or sub quaternary catchment that considers the river in a catchment context.

"**River reach**", a length of river characterised by a particular channel pattern and channel morphology, resulting from a uniform set of local constraints on channel form. A river reach is typically hundreds of meters in length.

"**Stretch**" a section of watercourse, delineated between two or more mapped coordinates, within which proposed maintenance activities are to take place as guided by a MMP.

"**Thalweg**" refers to the line of lowest elevation within a valley or watercourse.

"**Watercourse**" means:

(a) a river or spring;

(b) a natural channel in which water flows regularly or intermittently;

(c) a wetland, lake or dam into which, or from which, water flows; and

any collection of water which the Minister may, by notice in the Gazette, declare to be a watercourse as defined in the National Water Act, 1998 (Act No. 36 of 1998); and a reference to a watercourse includes, where relevant, its bed and banks.

"**Wetland**" means, land which is transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is periodically covered with shallow water, and which land in normal circumstances supports or would support vegetation typically adapted to life in saturated soil.

Acronyms:

DEA&DP	Department of Environmental Affairs & Development Planning
DWS	Department of Water & Sanitation
EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Assessment
GA	General Authorisation, in terms of the National Water Act, 1998 (Act No. 36 of 1998)
GN	Government Notice
MMP	Maintenance Management Plan
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998)
NEMBA	National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)
NFEPA	National Freshwater Ecosystem Priority Areas
NWA	National Water Act, 1998 (Act No. 36 of 1998)
PES	Present Ecological State
PPP	Public Participation Process
REC	Recommended Ecological Category
RI	Rapid Intensification
RQO's	Resource Quality Objectives
WCBSP	Western Cape Biodiversity Spatial Plan
WUA	Water Users Association
WULA	Water Use Licence Application

5 ENGAGEMENT PROCESS

4.1. AUTHORITY ENGAGEMENT

Please indicate (with an 'x') which of the following authorities have been consulted to provide input based on the proposed maintenance activities:

- X Department of Water and Sanitation (represented by BOCMA)
- X Catchment Management Agency (BOCMA)
- X CapeNature
- ☐ SANParks
- X Western Cape Department of Agriculture, Directorate: Land Use Management
- X Local Municipality (Bergriver)
- X Heritage Western Cape
- ☐ Department of Agriculture, Forestry and Fisheries
- X Department of Environmental Affairs & Development Planning
- ☐ Other (please list):
  - X West Coast District Municipality

The above authorities will be consulted for their input and comments received will be captured in a Comments and Responses report to be submitted with the final MMP to DEA&DP. Amendments to the MMP will be included in the final MMP submitted for approval to DEA&DP.

4.2. PUBLIC PARTICIPATION

The following public participation recommendations, regarding the different scale or geographical extent of the request, are as follows. If no, then motivation must be given as to why a particular process was not undertaken.

Single property / maintenance and management activities along a watercourse occurring along a stretch of no more than 1 kilometer (≤1000 meters):

(i) Given written notice to the owner or person in control of that land if the person undertaking the maintenance activity is not the owner or person in control of the land.	***n/a***	***Person undertaking MMP is landowner***
(ii) Given written notice to adjacent landowners (up to 500m upstream and downstream from furthest upstream and downstream maintenance site and opposite side of the banks) of the development of the MMP.	***Yes***	***Notice of PPP to be given to adjacent landowners. All comments to be recorded in Comments and Responses report and responded to***
(iii) Stakeholder meeting held for adjacent landowners, in which MMP is presented. This must include an opportunity for adjacent landowners to provide comment.	***No***	***Notice of PPP to be given to adjacent landowners. All comments to be recorded in Comments***

		and Responses report and responded to.
(iv) Given written notice to any organ of state having jurisdiction in respect of any aspect of the activity(ies) proposed within the development of the MMP.	***Yes***	***Notice of PPP to be given to organs of state. All comments to be recorded in Comments and Responses report and responded to***
(v) Provided written notice and confirmation to the relevant Water Users Association (WUA) or Irrigation Board (IB) of the development of the MMP, if applicable.	***n/a***	***No WUA or IB at this site***

5. DATA COLLECTION AND ASSESSMENT

5.1. Activities during Maintenance Phase

The following activities will be undertaken during the maintenance phase of the proposed development:

- Maintenance and repairs to water pipelines including replacing damaged sections, securing loose fittings, or treating corrosion.
- Excavation or trenching may be required to facilitate necessary maintenance works such as replacement of fence posts or pipeline repairs.
- Vegetation and debris removal from areas where maintenance work is required.
- Erosion control measures associated with the dam, its infrastructure and areas exposed during vegetation removal
- Periodic flushing or scouring of pipelines to maintain capacity and address the build-up of organic materials.
- Silt removal from dams. This work will likely require using an excavator or similar equipment both within and around the dams.
- Gravel road maintenance will involve regular inspections to identify issues and grading and pothole repair to keep the surface even.
- Drainage features, such as ditches and culverts, will be cleared regularly to prevent erosion.
- Pump house and associated pipes, general maintenance and repairs.

PLEASE NOTE: The information provided in this section is largely obtained from the Detailed Freshwater Ecological Assessment by Delta Ecology (June 2025) as provided in Appendix A of this report. The Risk Matrix for the S21(c) and (i) activities is provided in the Freshwater Ecological report and used for the water use registration associated with the maintenance activities. The Terms of Reference for the specialist appointment is also provided for in Appendix A.

5.2. Catchment context:

The proposed development site is located within the Breede-Olifants Water Management Area, quaternary catchment G30B. According to the FEPA database, the sub-quaternary catchment is currently considered important in terms of fish or freshwater ecological conservation. The NGI River line vector dataset for the Western Cape does indicates the Wabooms River, flowing along the eastern boundary of the site (Figure 1). Additionally, two non-perennial rivers, that are tributaries of the Wabooms River, flow through the study area. According to the NFEPA dataset, there are two artificial wetlands (associated with the Farm Dams 1 and 2) within the two non-perennial tributaries of the Wabooms River (Figure 1).

5.3. Regional and National Conservation context

To establish a comprehensive regional and national conservation context, various national and provincial wetland databases were consulted during the desktop assessment of the site. Key resources included the NFEPA 2011 wetlands database (Figures 1 and 3), NGI 2011 database (Figure 4) and the Western Cape Biodiversity Spatial Plan 2023 (Figure 5). The general characteristics of the site are summarized in Table 1 below.

Table 1: Desktop data (from desktop databases only) relating to the general biophysical characteristics of the freshwater ecosystems within the site (Delta Ecology, 2025).

Site attribute	Description	Data source
Eco-region	Southwestern Coastal Belt	Department of Water Affairs Level 1 Ecoregions (Department of Water and Sanitation (DWS), 2011)
Terrestrial Vegetation	Leipoldtville Sand Fynbos (EN – NP) Swartland Shale Renosterveld (LC – WP)	National Vegetation Map of South Africa, 2018 (SANBI, 2018)
Dominant Geology and Soils	Colluvium and alluvium with feldspathic grit, greywacke, quartz schist, conglomerate and limestone beds with lenses of phyllite of the Piketberg Formation and phyllitic shale, schist, greywacke with limestone and sporadic quartzitic sandstone. Soils consist of prismacutanic and/or pedocutanic diagnostic horizons dominant, B horizons mainly not red.	Cape Farm Mapper (ENPAT, 2021)
Soil Erodibility Factor (K)	0.59 (High Erodibility)	SA Atlas of Climatology and Agrohydrology (Schulze, 2009)
Soil Depth & Clay Percentage (%)	>= 450 mm and < 750 mm Clay < 15% - Soils with a marked clay accumulation, strongly structured and a non-reddish colour. In addition, one or more of vertic, melanic and plinthic soils may be present.	Soil types and descriptions for the Western Cape, Department of Agriculture, Forestry and Fisheries (DFFE, 2021)
Mean Annual Precipitation (mm)	461 mm	SA Atlas of Climatology and Agrohydrology (Schulze, 2009)
Rainfall Seasonality	Winter rainfall	
Mean Annual Temperature (°C)	18°C	
Water Management Area	Breede-Olifants	Water Management Areas (DWS, 2023)
Quaternary Catchment	G30B	South African Quaternary Catchments Database (Schulze et al. 2007)
Wetland Vegetation Group (for wetlands within the applicable terrestrial vegetation type)	Northwest Sand Fynbos (CR- ZP) West Coast Shale Renosterveld (CR – ZP)	NFEPA Wetland Vegetation Types (SANBI, 2011)

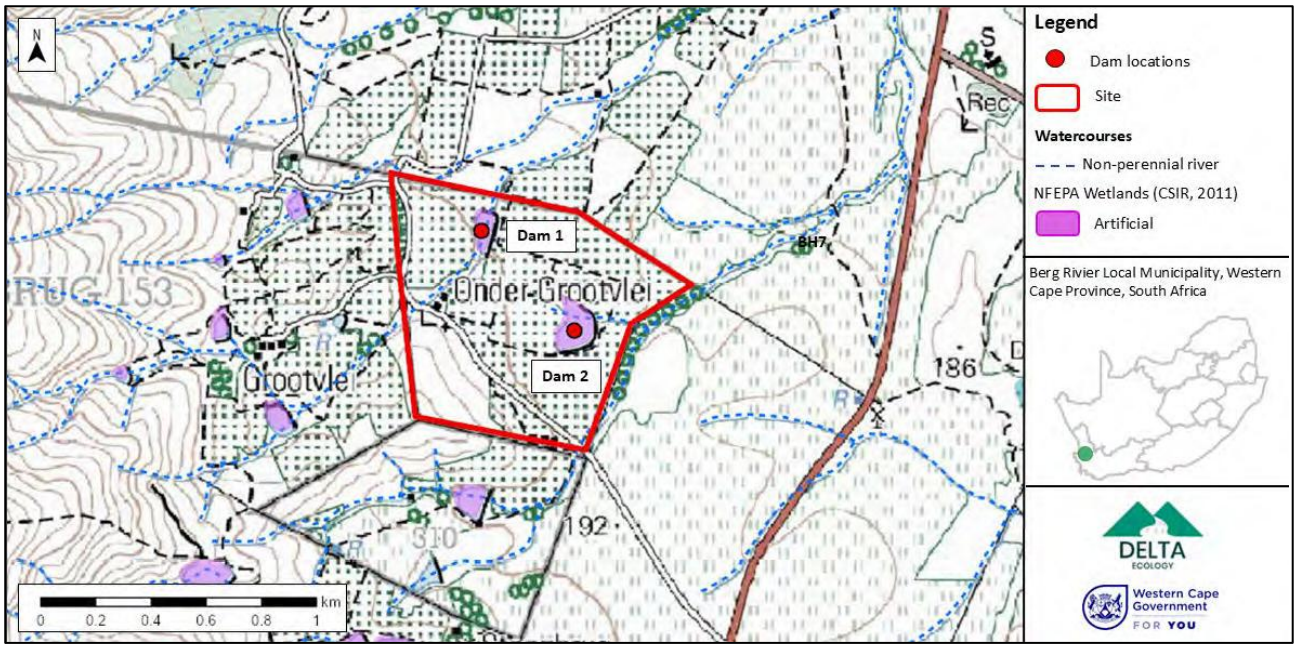


Figure 3: NGI (2011) Map of the study area indicating aquatic features (Delta Ecology, 2025).

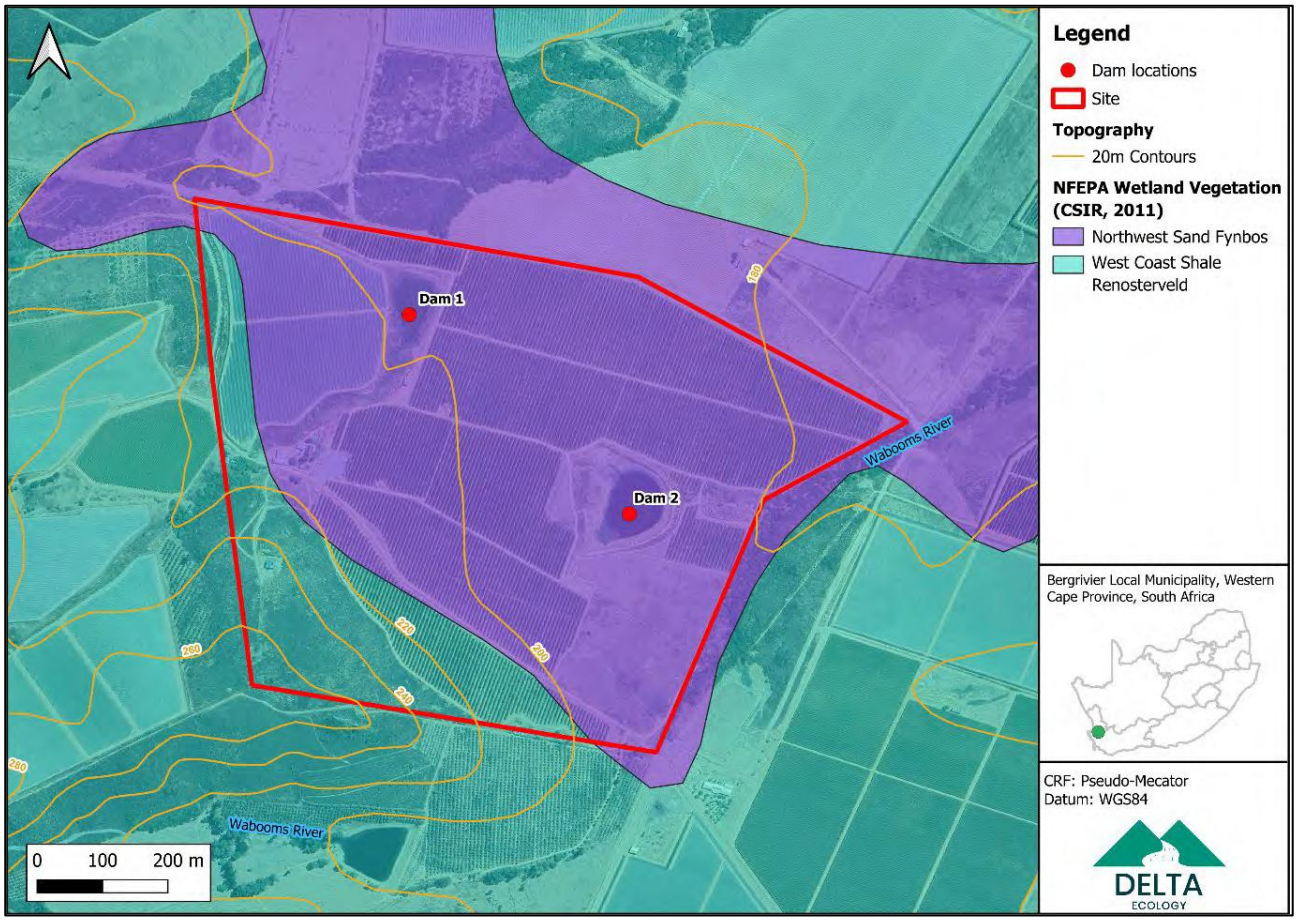


Figure 4: Map of the NFEPA Wetland Vegetation (2011) types associated with the aquatic systems within the site (Delta Ecology, 2025).

5.4. Watercourses associated with the proposed maintenance work

Overview

Upon assessment of the site, two non-perennial rivers (tributaries of the Wabooms River), and wetland areas associated with instream Dams 1 and 2, were identified and delineated. Non-perennial river 1 enters from the western boundary and flows for 555m before exiting along the northern boundary (Figure 5). Non-perennial river 2 originates near the centre of the site and flows for 332m, exiting along the eastern boundary (Figure 6). Both non-perennial rivers have experienced a large degree of disturbances due to the agricultural activities within the site and surrounding catchment area. See Table 1 for a summary of the Freshwater Specialist's assessment of the condition of the 2 dams and non-perennial rivers.

Non-perennial River 1 and Dam 1

The section of the river upstream of Dam 1 has been impacted by the development of adjacent agricultural fields and dirt roads. Historical clearing of vegetation has led to increased erosion and a reduction in indigenous riparian plant species. The riparian vegetation present within this section of the river consists of alien species such as *Arundo donax* (Giant Reed) and *Ricinus communis* (Castor Bean), indigenous species consist of *Phragmites australis* (Common Reed), *Cyperus polystachyos* (Bunchy Flat-Sedge) and *Searsia rehmanniana* (Blunt-leaved Currant-Rhus). Dam 1 wetland area is dominated by *Phragmites australis* (Common Reed) interspersed with *Typha capensis* (Bulrush) (Figure 7). The section of the river downstream of Dam 1 (Figure 6) has been impacted by the development of two dirt roads which cross the river and the development of an orchard within the river. The riparian vegetation present within this section of the river consists of alien species such as *Ricinus communis* (Castor Bean), indigenous species consist of trees *Olea europaea* (Wild Olive) and *Maytenus oleoides* (Rock Candlewood).

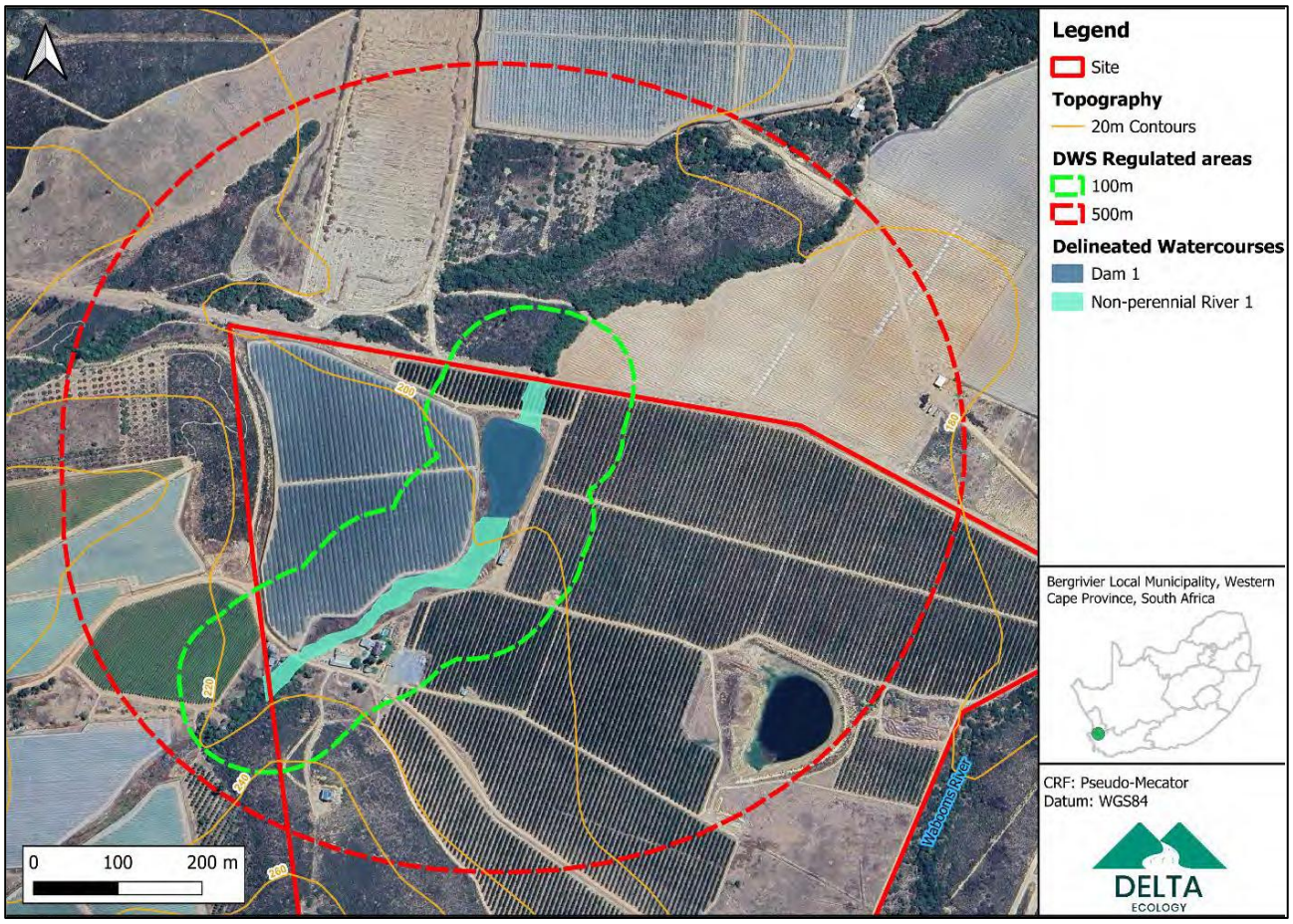


Figure 5: Delineation map for Non-perennial River 1 and Farm Dam 1 Wetland Area (Delta Ecology, 2025).

Figure 6: Watercourse (in blue dotted line) entering Dam 1, yellow arrow indicating position opposite the pump station from where maintenance management will be required from.

Figure 7: Dam 1, taken from the eastern section of the dam wall, looking north-west.

Non-perennial River 2 and Dam 2

Dam 2 wetland area and the section of the river upstream of Dam 2, have been impacted by historical clearing of vegetation leaving only ruderal grass species present (Figure 9). A small section of the Dam 2 wetland area is populated by *Phragmites australis* (Common Reed). The downstream section of the river has been impacted by the development of dirt roads directly crossing the river, the development of orchards (Figure 9 and Figure 10). The riparian vegetation present within this section of the river consists of alien species such as *Arundo donax* (Giant Reed) and *Ricinus communis* (Castor Bean).

Both non-perennial rivers flow into the Wabooms River downstream of the site. The Wabooms River has not been as heavily impacted by agricultural activities, resulting in riparian areas in a less degraded state i.e. with a greater presence of indigenous riparian plant species such as *Olea europaea* (Wild Olive), *Maytenus oleoides* (Rock Candlewood), *Searsia undulata* (Namaqua Kunirhus) and *Searsia rehmanniana* (Blunt-leaved Currant-Rhus). Some alien species are present such as *Ricinus communis* (Castor Bean).

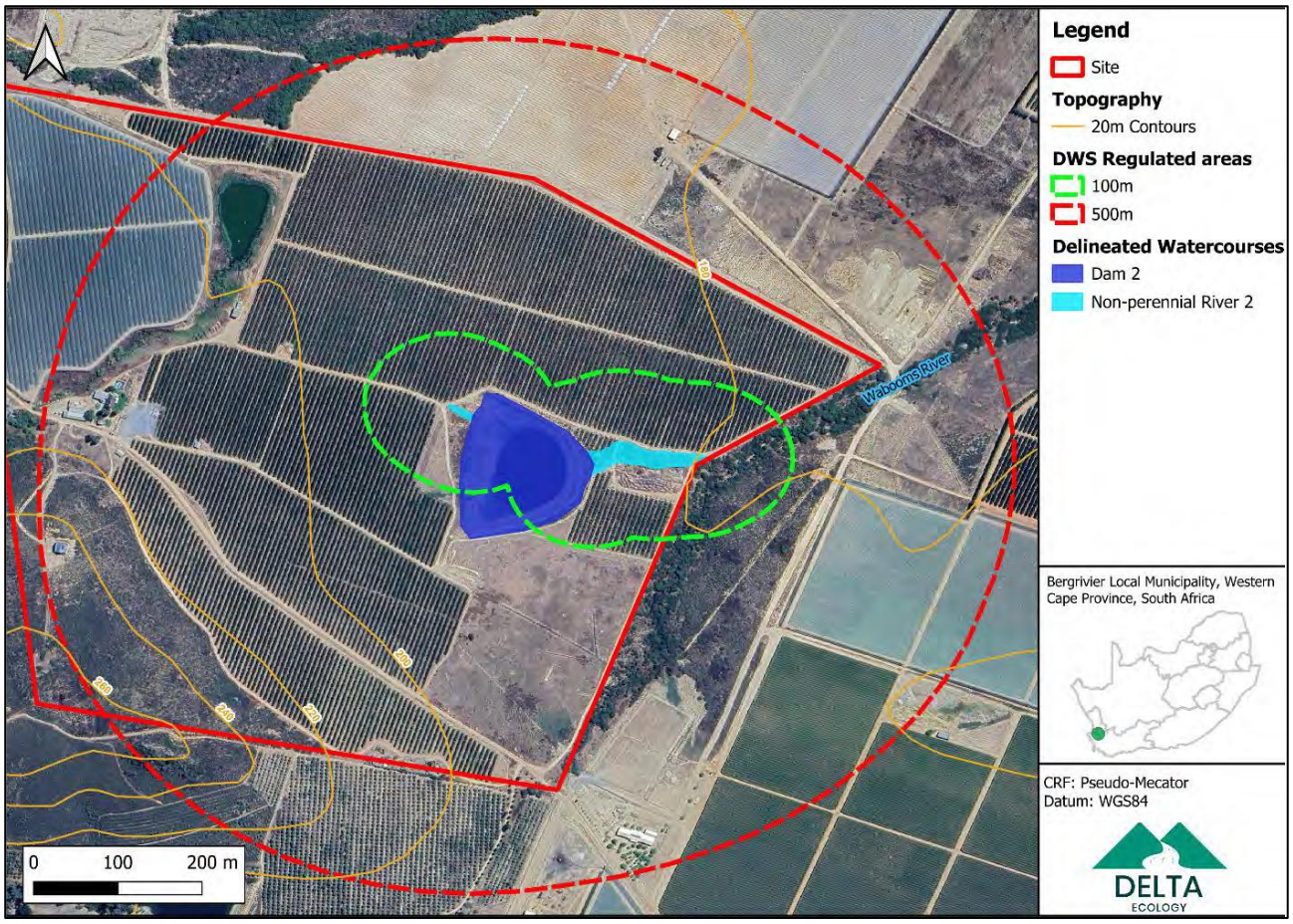


Figure 8: Delineation map for Non-perennial River 2 and Farm Dam 2 Wetland Area (Delta Ecology, 2025).

Figure 9: Upstream of Farm Dam 2, impacted by vegetation clearing, looking North.

Figure 10: Image of Dam 2 taken on the southeastern side of the dam wall, approx. extent of dam indicated in blue dotted line.

Table 2: Summary of the Freshwater Specialist's Water Course Status Quo Assessment (Delta Ecology, 2025)

Water Course Status Quo Assessment		Non-Perennial River 1	Non-Perennial River 2	Dam 1	Dam 2
Instream Habitat Integrity	Score	24	22	-	-
	Category	E	E	-	-
Riparian Habitat Integrity	Score	21	13	-	-
	Category	E	F	-	-
Ecosystem Importance and Integrity		Low	Low	Low	Low
Ecosystem Services	Regulating and Supporting Services	Very Low - Low	Very Low - Low	Very Low - Low	Very Low - Low
	Provisioning Services	Very Low - Moderate	Very Low - Moderate	Very Low – Moderately High	Very Low – Moderately High
	Cultural Services	Very Low	Very Low	Very Low	Very Low

6. RISKS ASSOCIATED WITH NOT IMPLEMENTING THE MMP

The following risks were identified should the MMP not be implemented:

1) Ad hoc clearing to provide access for maintenance work could lead to siltation downstream and water quality impairment downstream.
2) Alien vegetation encroachment into sensitive buffer areas due to non-removal or ineffective methods.
3) Water quality impacts caused continued sedimentation, erosion and alien vegetation growth.
4) Water quality impairment and siltation downstream if maintenance work conducted during wet season, or if silt removed is placed too close to drainage lines.
5) Loss of capacity in Dam 1 and Dam 2 impacting on water storage and irrigation abilities.

7. METHOD STATEMENT

6.1 The method statement must provide a step-by-step plan (which may include a schematic diagram etc.) to inform the responsible person(s) on the process and actions to take in a sequential and logical manner, which aims to reduce the impact of undertaking the activity within a reasonable timeframe and cost.

6.2 A method statement should be compiled for each individual activity given the likely specific circumstances and conditions of a site requiring maintenance. However, in situations whereby uniform conditions and circumstances are evident for multiple sites requiring the same type of activity, a method statement can be given for a specific type of activity to be undertaken at multiple sites given the aforementioned requirements.

6.3 The detail of the method statement will be assessed by the Department and other relevant regulatory authorities to ensure actions that are taken are such that they do not perpetuate increased incidences of erosion/deposition of material.

6.4 Time periods must be given within which the maintenance actions contemplated need to be implemented. An indication must be made whether maintenance actions will be repeated, e.g. clearing of silt/debris from under a bridge annually or after flood events.

6.5 The following serves as a general guide required to minimise the spatial impact of the maintenance activity:

- The boundaries of footprint areas, including contractor laydown areas, are to be clearly defined and it should be ensured that all activities remain within defined footprint areas. Edge effects must be strictly controlled.
- Repairs and maintenance should be undertaken within the dry season, except for emergency maintenance works.
- Where at all possible, existing access routes should be used. In cases where none exist, a route should be created through the most degraded area avoiding sensitive/indigenous vegetation areas.
- It must be ensured that all hazardous storage containers and storage areas comply with the relevant SABS standards to prevent leakage. All hazardous chemicals as well as stockpiles should be stored on bunded surfaces and have facilities constructed to control runoff from these areas.
- Appropriate sanitation facilities must be provided onsite
- An adequate number of waste and "spill" bins must be provided

- When machinery is involved, ensure effective operation with no leaking parts and refuel outside of the riparian area, at a safe distance from the watercourse to manage any accidental spillages and pose no threat of pollution.
- In the event of a vehicle breakdown, maintenance of vehicles must take place with care and the recollection of spillage should be practised near the surface area to prevent ingress of hydrocarbons into topsoil and subsequent habitat loss.
- All spills should they occur, should be immediately cleaned up and treated accordingly.
- At no time should the flow of the watercourse be blocked (temporary diversions may be allowed) nor should the movement of aquatic and riparian biota (noting breeding periods) be prevented during maintenance actions.
- In circumstances which require the removal of any top soil, this must be sufficiently restored through sustainable measures and practices.
- Concerted effort must be made to actively rehabilitate repaired or reshaped banks with indigenous local vegetation.
- The build-up of debris/sediment removed from a maintenance site may:
    - be utilised for the purpose of in-filling or other related maintenance actions related to managing erosion, which form part of an adopted MMP;
    - not be deposited anywhere within the watercourse or anywhere along the banks of a river where such action is not part of the proposed maintenance activity (ies). Material that cannot be used for maintenance purposes must be removed out of the riparian area to a suitable stockpile location or disposal site. Further action and consideration may be required where the possibility of contaminated material may occur, such as in urban watercourses.
- The use of foreign material, such as concrete, rubble, woody debris and/or dry land based soil, is strictly prohibited from being used in maintenance actions, unless for the specific purpose of repairs to existing infrastructure, coupled with appropriate mitigation measures.
- On completion of the maintenance action, the condition of the site in terms of relative topography should be similar to the pre-damaged state (i.e. the shape of the riverbank should be similar or in a state which is improved to manage future damage). This ultimately dictates that the channel, banks and bed cannot be made narrower, higher or deepened respectively. Exceptions are considered for systems involved with the management of stormwater and improvements for water quality within the urban context.

The following method statements have been developed for maintenance activities required within the 32m regulated area of a wetland:

1) Removal of silt and sediment from the farm dams.
2) Inspection and servicing water pipelines within the regulated area
3) Disturbance of instream habitat and potentially increased risk of erosion as a result of periodic vegetation removal (Including alien vegetation).
4) Upkeep and repairs of maintenance and access roads.

MS1: Removal of silt and sediment from the farm dams

Description of activity	Silt and sediment continue to build up within the dams and will need to be periodically removed in order to maintain the highest possible volume of the dams.
Actions	Actions to be taken: 1. Identify preferred method of dredging 2. Remove silt 3. Transport silt to stockpiles located away from freshwater systems, more than 15m from freshwater 4. Silt can be stored on the property and used, for example filling holes or grading roads.
Impacts of actions	The following potential impacts may result from the proposed maintenance activities: • Water Quality Impairment - Use of construction vehicles in close proximity to and directly within the watercourses may result in spillages and water quality impairment. This can degrade water quality, making it unsafe for human consumption and harmful to aquatic life. Pollutants such as oils, heavy metals, and nutrients can have long-term detrimental effects on the health of the watercourses. • Sedimentation – Excavation, dredging and earthworks may stir up accumulated sediments, additionally stockpiling of soil may increase the risk of sedimentation. This sedimentation can degrade water quality, smother aquatic habitats, and reduce the capacity of the river channel, increasing the risk of flooding. Fine sediments can also clog fish gills and reduce light penetration, affecting aquatic plants and animals. • Habitat disturbance - The movement of construction vehicles / equipment and personnel during maintenance activities, as well as the inappropriate storage or dumping of excavated material, and removed vegetation may result in the disturbance of the watercourses. The physical alteration of the river and surrounding areas by infill or removal of material within the watercourse, can lead to the destruction of habitats for various aquatic and terrestrial species. This can reduce biodiversity and disrupt ecological processes. This may

	• Flow alteration – the maintenance activities may disrupt the current hydrological regime, affecting the flow patterns, volume, and timing of water, which in turn can impact aquatic ecosystems and downstream water availability. - increased capacity within the dams may result in less water being released into the downstream non-perennial rivers; compared to the current baseline environment.
Severity of impacts	If all mitigation measures are implemented the severity of the impact will be Low.
Measures to mitigate the severity of the impact	• The non perennial rivers should be designated as No Go areas during the proposed maintenance activities. • Undertake the dam maintenance in the dry season (November to January). • Prohibit the dumping of excavated material or removed vegetation within the onsite watercourses. • Stockpiles (including soil from excavation) and all vehicles must remain at least 15 m from the watercourses. All erodible stockpiles (soil and similar substances) must be covered with an erosion blanket of geotextile or similar material. Locate soil stockpile areas in designated areas of already hardened surface or disturbed areas on site. These areas should preferably be located on level ground in a previously disturbed area of vegetation. • Areas disturbed during the activities, should be revegetated where necessary or ensure passively re-establishment of indigenous riparian vegetation. • Fuel, chemicals, and other hazardous substances should preferably be stored offsite, or as far away as possible from the onsite watercourses (at a minimum 15 m). These substances must be stored in suitable secure weather-proof containers with impermeable and bunded floors to limit pilferage, spillage into the environment, flooding, or storm damage. • Mixing and transferring of chemicals or hazardous substances must take place outside of the No Go areas, and must take place on drip trays, shutter boards or other impermeable surfaces. • Drip trays must be utilised at all fuel dispensing areas (if applicable). • Vehicles and machinery should preferably be cleaned off site. Should cleaning be required on site it must only take place within designated areas outside of the non-perennial drainage lines and should only occur on bunded areas with a water/oil/grease separator.

	• Dispose of used oils, wash water from cement and other pollutants (as applicable) at an appropriate licensed landfill site. • Clean up any spillages immediately with the use of a chemical spill kit and dispose of contaminated material at an appropriately registered facility. • Avoid the use of infill material with pollution / leaching potential. Where possible, in situ earthen materials must be used in order to reduce the risk of leachate from imported materials contaminating the onsite watercourses. • Inspect all storage facilities, vehicles, and machinery daily for the early detection of deterioration or leaks and strictly prohibit the use of any vehicles or machinery from which leakage has been detected. • Provide an adequate number of bins on site and encourage construction personnel to dispose of their waste responsibly. • Vegetation clearance should be restricted to the relevant development components and indigenous vegetation cover should be maintained as far as practically possible. • Erosion control measures that could be implemented include: o Covering steep/unstable/erosion prone areas with geotextiles. o Covering areas prone to erosion with brush packing, straw bales, mulch. o Stabilizing cleared/disturbed areas susceptible to erosion with sandbags. o Constructing silt fences / traps in areas prone to erosion, to retain sediment-laden runoff. Silt fences must be adequately maintained. Furthermore, the site / farm manager must monitor sediment fences / traps after every heavy rainfall event and any sediment that has accumulated must be removed by hand. • If dam water levels must be lowered, it must be done gradually to avoid sudden changes in downstream flow and to prevent flushing sediments. • As far as possible, ensure that the non-perennial rivers continue to maintain flow during the wet season and thereby maintaining flow to the Wabooms River downstream.
Remedial measures	There are no additional remedial mitigation measures other than those listed above if implemented in full.

Method of Access	Existing access roads should be utilised as far as possible.
Period of activity	The period of the maintenance management activity will vary depending on the level of maintenance required. The activity will be ongoing (once in 5-10 years).

MS2: Inspection and servicing of water pipelines

Description of activity	Pipes are used to pump water from the dams into the irrigation systems, there is a pump house next to Dam 1. Maintenance efforts will focus on maintaining the structural integrity of these pipelines and preventing blockages as well as any maintenance and repairs to the pump house. Typical repairs may involve replacing damaged sections, securing loose fittings, or treating corrosion. Vegetation removal and excavation or trenching will be required to facilitate these repairs or replacements. Routine cleaning of water pipelines is also essential to avoid blockages and ensure consistent flow.
Actions	The following general sequence of actions are required: 1. Identify and demarcate area of pipeline to be repaired/ replaced; 2. Clear area of debris or vegetation in order to access pipeline if required; 3. Replace/ repair pipeline and remove old pipeline debris or materials; 4. All water/material discharged from the pipeline should be collected directly into a tank or other waterproof collection device and disposed of appropriately where it will not contaminate any watercourse or soils; 5. Rehabilitate disturbed areas, remediate any erosion areas identified, suitably loosen any compacted soil and remove siltation if required; 6. Reshape areas and/or plant as required.
Impacts of actions	The following potential impacts may result from the proposed maintenance activities: • Maintenance or repairs of the service infrastructure could result in similar impacts as those experienced during service installation: o Disturbances of soil potentially leading to increased AIP proliferation, and in turn to altered freshwater ecosystem habitat. o Earthworks could be potential sources of sediment, which may be transported as runoff into the freshwater ecosystems.

	○ Potential fragmentation of freshwater habitats. ○ Potential loss of indigenous vegetation as a result of maintenance works. ○ Potential disturbance to hydrological functioning and activity of the freshwater ecosystems. ○ Disturbance to and compaction of soil resulting in erosion. • Periodic flushing of pipelines to maintain capacity and address the build-up of sediment and other materials could result in the passage of water, sediment or sewage into any of the watercourses identified within the site/investigation area resulting in water quality impacts. • If a portion of the pipeline(s) ruptures under pressure or while carrying flows, then passage of sediment and/or sewage might enter nearby watercourses resulting in water quality impacts. • Potential eutrophication of water as a result of enriched water draining into the freshwater ecosystems
Severity of impacts	If all mitigation measures are implemented the severity of the impact will be Low.
Measures to mitigate the severity of the impact	• Conduct routine maintenance to minimize the risk of infrastructure failures that that could lead to substantial environmental impacts, avoiding the need for extensive interventions within regulated wetland areas. • An emergency plan must be implemented to ensure a quick response and attendance to the matter in case of a leakage or bursting of a pipeline. • Only existing roadways should be utilized during maintenance and repairs to avoid indiscriminate movement of vehicles within the wetlands. • The non-perennial rivers should be designated as No Go areas during the proposed maintenance • Any AIPs within the maintenance area must ideally be removed prior to the initiation of soil disturbing maintenance activities. This will assist in reducing the long-term AIP management requirements. • Stockpiling of excavated materials may only be temporary (i.e. may only be stockpiled during the period of maintenance at a particular site). Soil must be stockpiled on the upgradient side of the trench to avoid sedimentation of the downgradient areas.

	• Trenches must be backfilled as soon as infrastructure has been installed/repaired in any given section to reduce potential erosion of exposed soil. • Limit routine maintenance activities to the dry summer months as far as possible. • As far as possible, physical movement in the freshwater ecosystems by personnel must be limited. • No stormwater generated during construction may be directly released into the freshwater environment. • Any erosion, sedimentation or other damage to watercourses caused because of the above incidents / activities should be rectified immediately, with rehabilitation activities potentially including removal of sediment, reshaping of banks and replanting where it is deemed necessary • Erosion control measures that could be implemented include: o Covering steep/unstable/erosion prone areas with geotextiles. o Covering areas prone to erosion with brush packing, straw bales, mulch. o Stabilizing cleared/disturbed areas susceptible to erosion with sandbags. o Constructing silt fences / traps in areas prone to erosion, to retain sediment-laden runoff. Silt fences must be adequately maintained. Furthermore, the site / farm manager must monitor sediment fences / traps after every heavy rainfall event and any sediment that has accumulated must be removed by hand.
Remedial measures	There are no additional remedial mitigation measures other than those listed above if implemented in full.
Method of Access	Existing access roads should be utilised as far as possible.
Period of activity	The period of the maintenance management activity will vary depending on the level of maintenance required. The activity will be ongoing.

MS3: Disturbance of instream habitat and potentially increased risk of erosion as a result of periodic alien vegetation removal

Description of activity	Disturbance of instream habitat and potentially increased risk of erosion because of periodic vegetation removal (including alien vegetation) to maintain ecological integrity of the natural areas onsite.
Actions	The following general sequence of actions are required to remove and control the alien vegetation: 1) Identify alien invasive species; 2) Cutting or pulling of target plants; 3) Treatment of plant remainders with appropriate, non-harmful, herbicide or treatment of herbaceous plants that cannot be manually removed; 4) Removal of plant material from the wetland and riparian area; 5) Follow-up work to prevent regrowth and the production of seed remaining in the soil; and 6) Revegetation of areas with indigenous vegetation where necessary.
Impacts of actions	The following potential impacts may result from the proposed maintenance activities: - Disturbance to aquatic habitat and vegetation and potential risk of erosion. - Disturbance to and compaction of soil resulting in erosion. - Potential increase in sedimentation of watercourses located downslope.
Severity of impacts	If all mitigation measures are implemented the severity of the impact will be Low - if revegetation with indigenous species and follow-up control takes place, a low to moderate positive impact could be expected.
Measures to mitigate the severity of the impact	• Identify alien plants to be removed. • Avoid trampling or clearing indigenous vegetation by using established paths where possible. • Clear alien vegetation.

	• When using herbicides, it is essential to apply the correct herbicide, in the right dose, at the right time, using the correct application method. Use only registered herbicides, follow manufacturer's instructions on the label, and wear the appropriate protective clothing during handling. • Remove cleared alien vegetation from the aquatic features and dispose of at a suitable point, off-site. • Implement erosion control measures where required. Examples of erosion control measures may include: o Covering steep/unstable/erosion prone areas with geotextiles. o Covering areas prone to erosion with brush packing, straw bales, mulch. o Stabilizing cleared/disturbed areas susceptible to erosion with sandbags. o Constructing silt fences / traps in areas prone to erosion, to retain sediment-laden runoff. Silt fences must be adequately maintained. Furthermore, the site / farm manager must monitor sediment fences / traps after every heavy rainfall event and any sediment that has accumulated must be removed by hand. • Ongoing monitoring and clearing of regrowth of alien plants within these areas will be required.
Remedial measures	There are no additional remedial mitigation measures other than those listed above if implemented in full.
Method of Access	Existing access roads should be utilised as far as possible.
Period of activity	The period of the maintenance management activity will vary depending on the level of infestation. The activity will be ongoing.

MS4: Upkeep and repairs of maintenance and access roads.

Description of activity	Gravel road maintenance will involve regular inspections to identify issues and grading to keep the surface even. Drainage features, such as ditches and culverts, will be cleared regularly to prevent erosion, while potholes and erosion will be promptly repaired. Vegetation along road edges will be controlled, and any flood-related damage will be repaired after storms to maintain road access and prevent further erosion.
Actions	The following general sequence of actions are required: 1. Identify maintenance activities required. 2. Clear area of debris, sediment or vegetation from the area if required. 3. Carry out necessary maintenance work. 4. Rehabilitate disturbed areas, remediate any erosion and suitably loosen any compacted soil. 5. Reshape areas and/or replant as required.
Impacts of actions	The following potential impacts may result from the proposed maintenance activities: • Proliferation of AIP species within the disturbed areas. • Potential loss of indigenous vegetation as a result of maintenance works. • Disturbance to and compaction of soil resulting in erosion. • Potential conveyance of sediment laden stormwater into the freshwater ecosystems
Severity of impacts	If all mitigation measures are implemented the severity of the impact will be Low.
Measures to mitigate the severity of the impact	• Conduct routine maintenance to minimize the risk of infrastructure failures that could necessitate more extensive work within regulated wetland areas. • Only existing roadways should be utilized during maintenance and repairs to avoid indiscriminate movement of vehicles within the wetlands.

	• No vehicles are permitted to enter the river ecosystems. • Any AIPs within the maintenance area must ideally be removed prior to the initiation of soil disturbing maintenance activities. This will assist in reducing the long-term AIP management requirements. • The soil within 15m of the freshwater ecosystems must be suitably loosened on completion of maintenance activities and revegetated to prevent erosion. • Stockpiling of excavated materials may only be temporary (i.e. may only be stockpiled during the period of maintenance at a particular site). Soil must be stockpiled on the upgradient side of the excavated area to avoid sedimentation of the downgradient areas. • Excavated areas must be backfilled as soon as infrastructure has been installed/repaired in any given section to reduce potential erosion of exposed soil. • Limit routine maintenance activities to the dry summer months as far as possible. • As far as possible, physical movement in the freshwater ecosystems by personnel must be limited. • Dispose of excess sediment outside of any watercourses or other areas of ecological sensitivity, and such that it will not wash into such watercourses • Regular inspection of culverts and drainage structures must be undertaken (specifically prior to the onset of the winter rains and after large storm events) to ensure unobstructed flow and monitor the occurrence of erosion. If erosion has occurred, it must immediately be rehabilitated through stabilisation of the road verges and revegetation, where applicable.
Remedial measures	There are no additional remedial mitigation measures other than those listed above if implemented in full.
Method of Access	Existing access roads should be utilised as far as possible.
Period of activity	The period of the maintenance management activity will vary depending on the level of maintenance required. The activity will be ongoing.

8. MONITORING AND REPORTING

8.1. Monitoring

Twente Partners Farms (Pty) Ltd is responsible for overseeing the monitoring of maintenance and management activities under this MMP. It is critical that all management actions outlined in the plan are strictly adhered to. Regular and thorough monitoring is essential to ensure compliance with MMP specifications, identify any issues of non-conformance, and implement corrective actions to minimize risks and prevent environmental damage.

Proactive, ongoing monitoring will address potential impacts to the ecological integrity of the associated aquatic ecosystems. Key monitoring activities include:

- **Structural Integrity Checks**: Routine inspection and maintenance of service, stormwater, and linear infrastructure to ensure structural stability and prevent potential disruptions.
- **Pollution Prevention**: Identify and mitigate potential pollution sources that could impact soil, surface water, or groundwater quality.
- **Erosion and Sedimentation Control**: Frequent visual inspections across stormwater systems, roads, and natural areas to identify erosion or sediment buildup, with prompt corrective actions to prevent habitat degradation and downstream sedimentation impacts.

Seasonal maintenance is essential for all stormwater infrastructure and access roads. Prior to the rainy season, thorough cleaning and inspection should be conducted, including clearing of culverts and drainage channels. Annual condition assessments should be undertaken for all infrastructure within the 32m Zone of Regulation (ZoR) and associated wetlands to identify longer-term repair needs. It should however be noted that these monitoring requirements are the minimum required to facilitate the implementation of this MMP. All service infrastructure must be maintained in accordance with manufactures' instructions and no less frequently than the manufactures statutory timeframes.

All activities undertaken **outside the scope** of the MMP, will be subject to Section 24(F) of NEMA and appropriate enforcement and compliance requirements will follow.

8.2. Reporting

Form A below must be completed by the relevant person(s) **before** maintenance activities are undertaken and Form B below **after** a maintenance activity has been completed. Form A should be completed **at least 7 working days before** the commencement of any maintenance activity and **Form B a minimum of 3 working days after** the completion of the maintenance activity(ies). At least two photographs are required from two different points of perspective (A and B) looking at the site (coordinates of these points are required). The type and reference code relates to the relevant detail within the adopted MMP.

Twente Partners Farms (Pty) Ltd is responsible to ensure a record of all maintenance activities is recorded as per Form A & B.

DEA&DP may, within a reasonable notice period, request to evaluate the maintenance activities and assess the maintenance sites as per the adopted MMP.

FORM A REPORTING FOR INTENT TO UNDERTAKE MAINTENANCE ACTIVITIES	
Section A: Landowner Details	
Landowner Name & Surname	
Farm/Erf No	
Today's Date	
Section B: Details of proposed maintenance activity	
WUA/GA reference number:	
DEA&DP MMP reference number:	
Activity Type:	
Reference code (*make reference to MMP*):	
Footprint area (m^2):	
Volume of material (m^3):	
Equipment to be used:	
Description of method for planned activity:	
Date when work will commence:	
Date of last flood event for site:	
Note any further damage and comments regarding the state of the site:	
Section C: Photographs of activity location before maintenance	
Photo A – Before Maintenance Activities	
Coordinates:	
Photo B – After Maintenance Activities	
Coordinates:	

FORM B

REPORTING FOR COMPLETION OF MAINTENANCE ACTIVITIES

Section A: Landowner Details				
Landowner Name & Surname				
Farm/Erf No				
Today's Date				
Section B: Details of proposed maintenance activity				
WUA/GA reference number and DEA&DP reference number for MMP.	**Activity Type:**	**Reference code (*make reference to MMP*)**	**Footprint area (m^2)**	**Volume of material (m^3)**
WUA/GA reference number:				
DEA&DP MMP reference number:				
Activity Type:				
Reference code (*make reference to MMP*):				
Footprint area (m^2):				
Volume of material (m^3):				
Equipment to be used:				
Description of method for completed activity and if commence date changed:				
Date activity completed:				
Date of last flood event for site:				
Note any challenges or difficulties experienced in following the MMP method statement				
Section C: Photographs of activity location after maintenance				
Photo A – Before Maintenance Activities				
Coordinates:				
Photo B – After Maintenance Activities				
Coordinates:				

Appendix A: Freshwater Assessment by Delta Ecology (August 2025) – See attached.

Appendix B: MMP maintenance coordinates – See Figure 11.

Description	Coordinates		Comments
Dam 1	Latitude	32°47'49.03"S	Centre of Dam
	Longitude	18°47'14.80"E	
Dam 2	Latitude	32°47'59.83"S	Centre of Dam
	Longitude	18°47'27.86"E	
Pipe to Dam 1	Latitude	32°47'53.24"S	See Figure 6
	Longitude	18°47'14.06"E	
Pipe to Dam 2	Latitude	32°48'3.84"S	Going over dam wall
	Longitude	18°47'26.46"E	
Pump House	Latitude	32°47'53.75"S	Located South of Dam 1
	Longitude	18°47'14.71"E	
Road 1	Latitude	32°47'58.85"S	Crosses the non-perennial river south of Dam 1
	Longitude	18°47'6.10"E	
Road 2	Latitude	32°47'59.22"S	West of Dam 2
	Longitude	18°47'24.30"E	
Road 3	Latitude	32°47'59.15"S	North of Dam 2
	Longitude	18°47'30.31"E	
Road 4	Latitude	32°47'50.47"S	East of Dam 1
	Longitude	18°47'16.41"E	

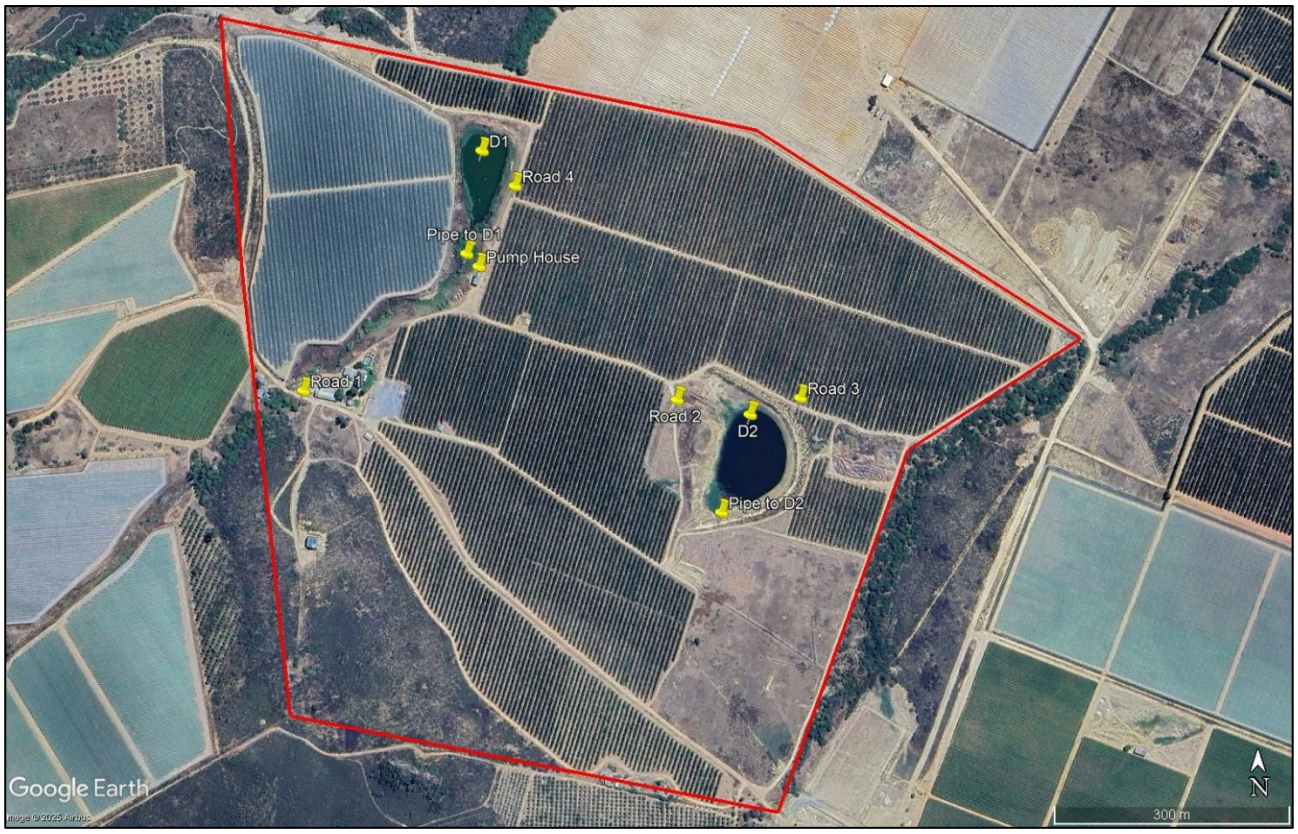
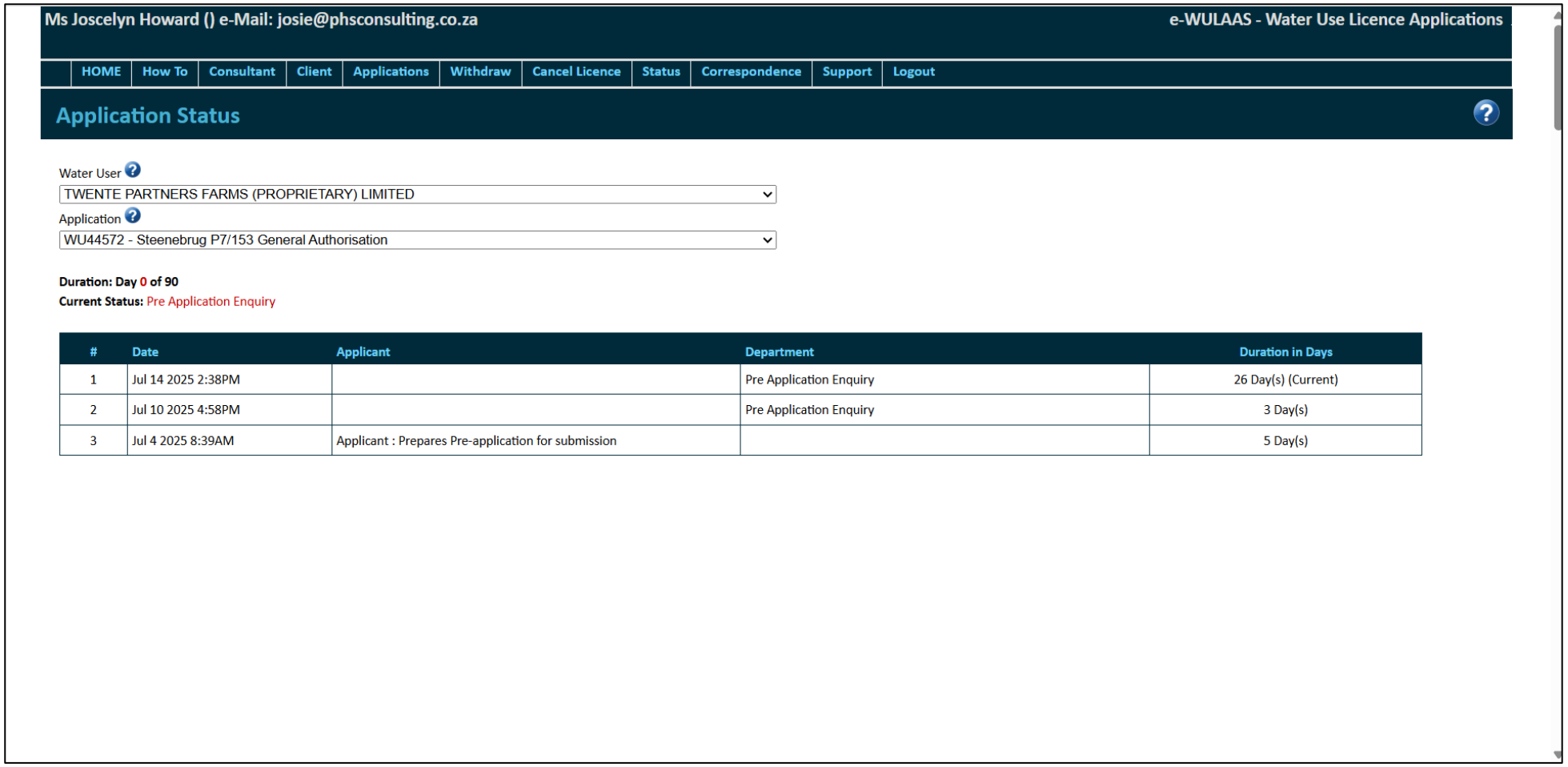


Figure 11: Location of management practices.

Appendix C: Proof of Water Use Licensing Application Process



Ms Joscelyn Howard () e-Mail: josie@phsconsulting.co.za

e-WULAAS - Water Use Licence Applications

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Application Status

Water User

TWENTE PARTNERS FARMS (PROPRIETARY) LIMITED

Application

WU44572 - Steenebrug P7/153 General Authorisation

Duration: Day 0 of 90

Current Status: Pre Application Enquiry

#	Date	Applicant	Department	Duration in Days
1	Jul 14 2025 2:38PM		Pre Application Enquiry	26 Day(s) (Current)
2	Jul 10 2025 4:58PM		Pre Application Enquiry	3 Day(s)
3	Jul 4 2025 8:39AM	Applicant : Prepares Pre-application for submission		5 Day(s)