water & sanitation
Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

Private Bag X313, Pretoria, 0001, Sedibeng Building, 185 Francis Baard Street, Pretoria,
Tel: (012) 336-7500 Fax: (012) 323-4472 / (012) 326-2715

WATER USE LICENCE APPLICATION SUMMARY REPORT FOR ABSTRACTION FROM A BOREHOLE ON PORTION 5 OF FARM 487 KLEIN STEENBOKS RIVIER, CALEDON (WU41842)

NAME OF APPLICANT: *EFRC Agri Operations (Pty) Ltd*

Compiled by
PHS Consulting

PHS CONSULTING

Date: November 2025

1. Applicant details

Name of applicant: *EFRC Agri Operations (Pty) Ltd (Representative: Jaco Viljoen)*

Postal address: *PO BOX 1176, GRABOUW, 7160*
Office number: *021 859 2795*
E-mail address: *jacov@efrc.co.za*

2. Person submitting application

Consultant on behalf of Applicant: *Amanda Fritz-Whyte*
Qualifications: *BSc; BSc (Hons) Geology; MSc Water Resource Management*
Professional registrations: Fellow Member WISA (21064); Member IAIAsa (5421); Registered Environmental Assessment Practitioner: 2019/367 (EAPASA); Pri.Sci.Nat (118385).
cell: *082 327 2100*
landline: *028 312 1734*
Company postal address: *PO Box 1752, Hermanus, 7200*
e-mail: *amanda@phsconsulting.co.za*
Company website: *www.phsconsulting.co.za*

Candidate consultant: *Josie Howard*
Qualifications: *BSc Ecology; BSc (Hons) Plant Science; MSc Plant Science*
Professional registrations: *Candidate EAP (EAPASA: 2025/19917)*
e-mail: *josie@phsconsulting.co.za*

3. Background and purpose

3.1 Background

Elgin Free Range Chickens (EFRC) Agri Operations own Lottershof Chicken Farm (P5 of the Farm Klein Steenboks Rivier No. 487). This water use application is for a S21(a) for the abstraction from borehole BH03 on site. This application falls under the purview of Breede-Olifants Catchment Management Area (BOCMA).

This application is for the abstraction of borehole water for use on a free-range poultry farm. The total size of the farm is 203.28ha; of which approximately 84ha consists of mountainous terrain. The remaining approximately 118ha has in the past been used to farm wheat and vegetables, with additional sheep, cattle and chicken farming. The existing chicken houses and associated infrastructure was developed in the cultivated areas.

Environmental Authorisation (EA) was obtained for the initial chicken farm development on 17 November 2008, consisting of four (4) chicken houses, and subsequent EA for the expansion by an additional eight (8) houses was obtained on 14 February 2020. In 2022 an EA was granted for an additional four (4) permanent houses and two (2) mobile houses.

An existing lawful use (ELU) is a water use that lawfully took place in the period two years before the commencement of the National Water Act (Act 36 of 1998). This allows any water use that lawfully took place during this period to continue until such time as it can be converted into a Licence. The 5 dams on site have been confirmed as ELU, along with the abstraction and use of 34 500m^3/annum surface water from the Klein Steenboks River for irrigation on site.

In addition, abstraction from BH01 and BH02 for 15 185,75m^3/annum was generally authorised in 2016 (See attached documents).

This water use application is for a S21(a) for the abstraction from borehole BH03 on site, which will replace the General Authorisation of 15 185,75m^3/annum groundwater once issued.

3.2 Location of water uses

The project in respect of which this water use licence application is submitted is located in the Western Cape Province, within the Caledon Magisterial district near Caledon Town (Figure 1). The water use will take place on Portion 5 of the Farm Klein Steenboks Rivier 487 (SG code: C01300000000048700005) within the Theewaterskloof Municipality. The property falls within the G40K quaternary catchment of the BOCMA. The geographic location at the property where the water uses will take place (i.e. Borehole BH03) is 34°18'28.44"S; 19°28'21.11"E (Figure 2).

Table 1: Property details

Property description	Title Deed number	Owner
Portion 5 of the Farm Klein Steenboks Rivier No. 487 (SG code: C01300000000048700005) - also described as Löttershof Chicken Farm	*47099/2018*	*EFRC Agri Operations (Pty) Ltd*

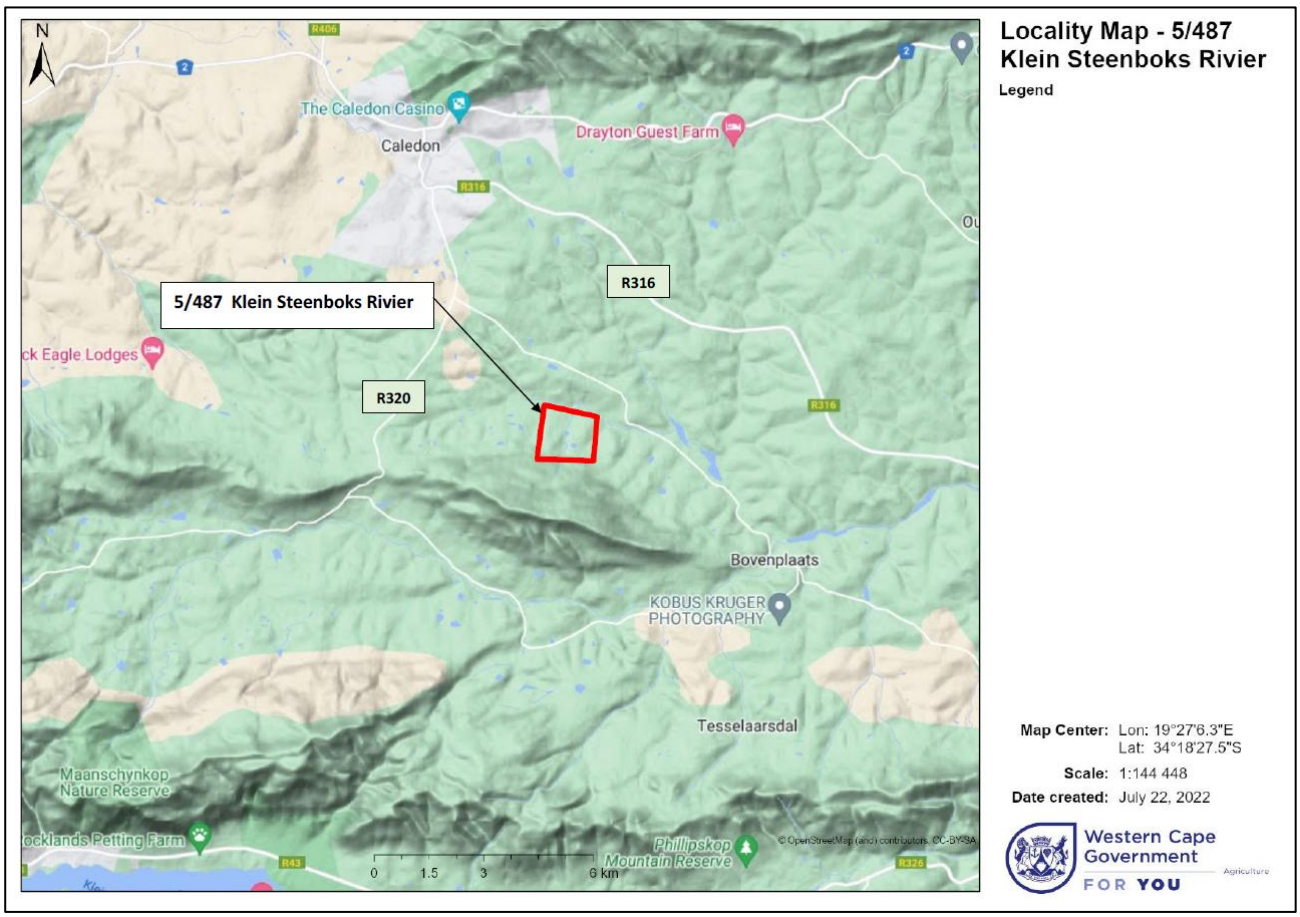

Figure 1: Locality map of Löttershof Chicken Farm.

Figure 2: Location of existing registered water uses, dams (blue pins) and boreholes (yellow pins) on Löttershof Chicken Farm (red outline). BH03 is indicated by a red pin, this is the new application. NOTE: This image is from 2023 and does not show all the current chicken houses. (Google Earth Imagery).

4. Administrative documents and other technical reports submitted to support the WULA

4.1 Administrative documents

1. *National Register of Water Use Registration Record 29011275 (WARMS)*
2. *Property Title Deed for Portion 5 of the Farm Klein Steenboks Rivier (Löttershof Chicken Farm)*
3. *Copy of EFRC Agri Operations (Pty) Ltd company registration certificate.*
4. *2019 GA*
5. *Proof of Payment of Water Use Licence Application Processing Fee*
6. *Power of Attorney for PHS Consulting to lodge the WULA application on behalf of the applicant.*

4.2 Reports and other technical documents

Table 2: List of reports and other technical documents to be submitted.

Number	*Report Title*	*Compiled by*	*Date of report*
1	*Geohydrological Report*	*H2O Consulting (Pty) Ltd*	*October 2025*
2	*Specialist aquatic ecologist input into Basic Assessment and Risk Assessment*	*Liz Day Consulting (Pty) Ltd*	*July 2019*
3	*Borehole Yield and Quality Testing BH03*	*GEOSS South Africa (Pty) Ltd*	*August 2024*
4	*Borehole Yield and Quality Testing BH01*	*Parsons & Associates specialist ground water consultants*	*January 2023*

5. Project Description

The Löttershof Chicken Farm operations currently utilize ground and surface water in various aspects at the farm with a current water demand of 65 396m^3/annum. The existing water supply is 49 686m^3/annum (surface water from the dams and groundwater) that leaves a shortfall of 40 308m^3/annum. The General Authorization (GA) for catchment G40K is 15 185.75m^3/annum. The additional planned groundwater abstraction will be more than the GA allocation and therefore a water use license will be required. The WUL Application is for the abstraction of an additional 40 308m^3/annum groundwater from boreholes BH01 and BH03 (Figure 2). An additional 23 664.25m^3/annum will be taken from BH01, and the remaining additional 16 650m^3/annum will be taken from BH03. Note: BH02 is permanently damaged and cannot be used again in future, therefor the GA volume previously

authorised for BH02 will have to be taken from BH01 or BH03. The Geohydrological study recommended it be taken from BH01 based on borehole capacity.

The farm is authorised for 16 permanent chicken houses that can accommodate 34 000 chickens and 2 mobile chicken houses that accommodate 3 000 chickens.

6. Water Uses applied for

This application includes the following water uses as detailed in Table 3.

Table 3: Water Uses applied for

Water use(s) activities	***Purpose***	***Capacity/ Volume (m³/annum)***	***Property Description***	***Co-ordinates***
Section 21(a)				
Abstraction of groundwater from Boreholes (BH01 and BH03)	*Domestic use Misters and high pressure washing Watering of livestock (chickens)*	*40 308m³/annum (23 664.25 from BH01) (16 650 from BH03)*	*Portion 5 of the Farm Klein Steenboks Rivier No. 487*	*34°18'28.4"S 19°28'21.5"E*

7. Description of the Environment

Site Description

Lottershof is situated 10km southeast of Caledon (Figure 1). The farm has a slope from southwest to northeast with the highest elevation of 320mamsl. Sections of the farm are classified as Terrestrial Critical Biodiversity Area (CBA) according to the Western Cape Biodiversity Plan 2023. These areas are associated with the surface water features that run from South to North through the centre of the property (see Figure 3).

Surface Water

The site lies in Department of Water and Sanitation (DWS) Breede-Gouritz Water Management Area and is located in DWS quaternary catchment G40K. This quaternary includes drainage from the Klein Steenboks Rivier, which flows just North of the site boundary. The Klein Steenboks River flows into the Hartbees Rivier and thereafter into the Klein Rivier, which enters the Klein Rivier Estuary / Hermanus Lagoon (also referred to in some maps as the Klein Rivier Dam). This estuary is an important habitat, both from a conservation

and a recreational perspective, with an overall national importance rating of 97% and ranked in the top five estuaries in South Africa in terms of conservation importance (Turpie and Clark 2007).

The Klein Steenboks River is located adjacent to the northern property boundary with its tributary traversing the middle of the entire property (see Figure 3). The Klein Steenboks River flows North of the farm and drains in an easterly direction. Surface water on site is abstracted from this river.

There is also a small wetland (Figure 4) associated with the in-stream dam and perennial river that runs through the property towards the Klein Steenboks River. The (c) and (i) water uses associated with the farming activities within the regulated area of the wetland has been generally authorised.

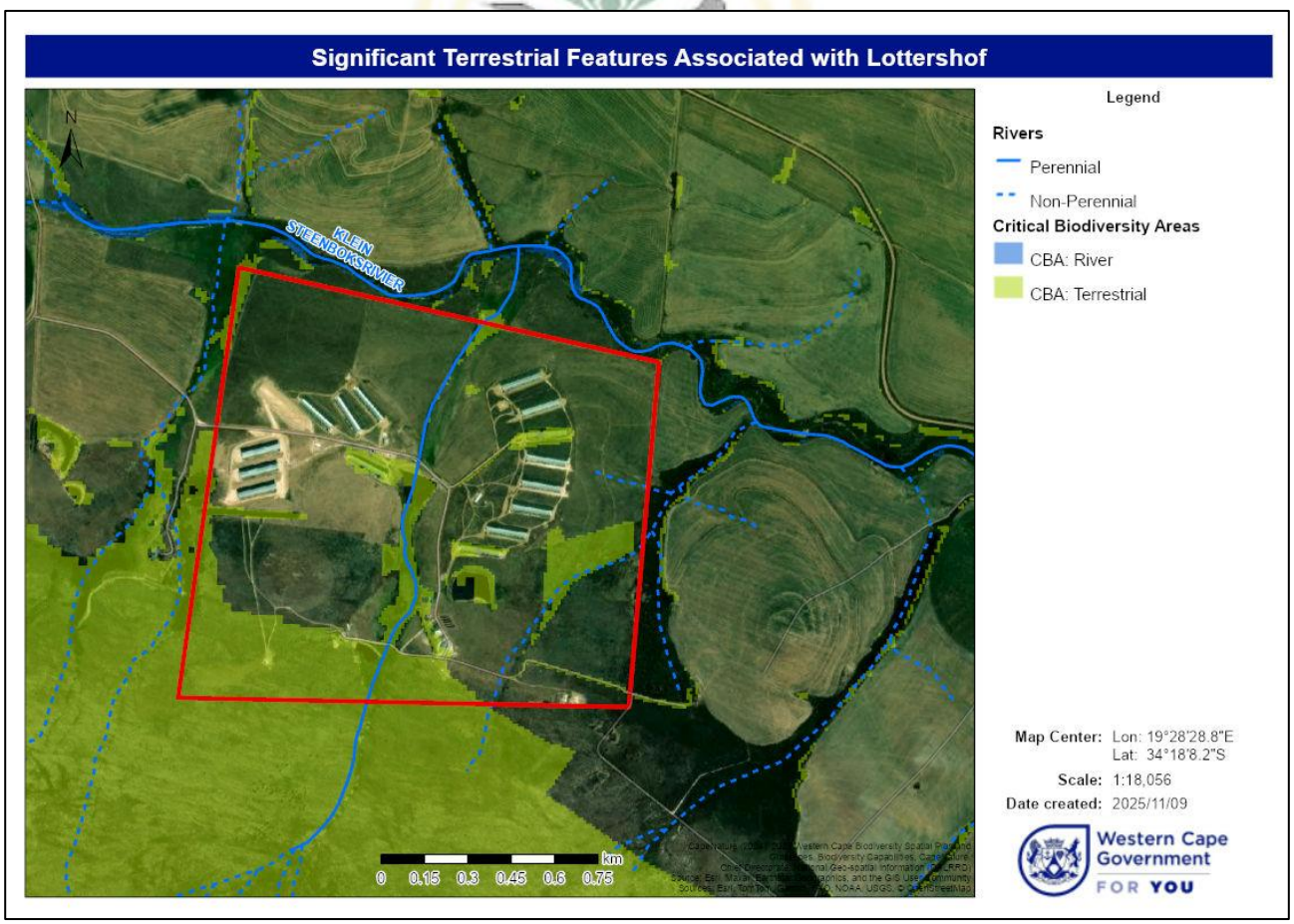

Figure 3: Significant terrestrial features (CBA and Rivers) associated with Löttershof Chicken Farm (Cape Farm Mapper, 2025).

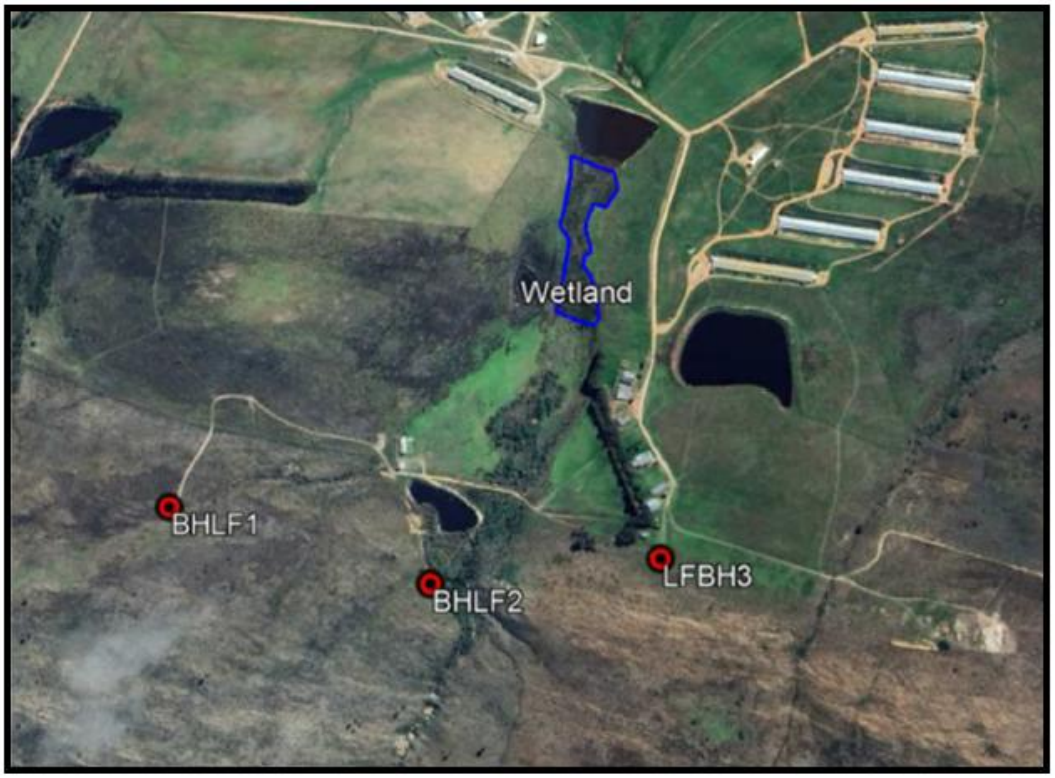

Figure 4: Location of the small wetland in relation to the boreholes (Geohydrological Report - H2O Consulting, 2025).

Groundwater

There are 3 boreholes on the property, BH02 is damaged and not usable, BH01 is in use and BH03 is newly drilled. According to the geohydrological report, groundwater quality is good with slightly elevated iron levels. The water is corrosive, but the primary issue is elevated turbidity, measured at 8.15NTU for BH01 and 27.3NTU for BH03, which exceeds the SANS 241-1:2015 aesthetic standard. This level of turbidity is likely due to fine sediments entering the borehole, and it causes aesthetic issues such as cloudiness in the water.

Geology

The main stratigraphic units in the area belong to the Table Mountain (TMG) and Bokkeveld Groups (Table 4 and Figure 5 and 6). The Steenboks Mountain is formed by rocks of the TMG Group and the valley from rocks of the Bokkeveld Group. The long hiatus and non-conformity between the Bokkeveld Group and overlying strata of the Bredasdorp Group represent an interval of nearly 350 million years, during which time the TMG was deformed by folding and thrust-faulting, followed by extensional-strike-slip faulting and some igneous activity, e.g. dyke intrusion. As a result of this folding and its resistant nature, the TMG forms steep, rugged topography. The Bokkeveld Group predominantly consists of argillaceous layers of shale and siltstone with minor sandstone layers. The Bokkeveld Group Aquifer is considered to be an aquifer of lesser importance because of lower borehole yields and

poorer groundwater quality. Due to its argillaceous nature, the Bokkeveld Group may act as an aquitard. The geological map shows a fault along the Skurweberg and Rietvlei formations contact. Most of the boreholes target this zone of fracturing. Lottershof is underlain by the Rietvlei and Gydo formations. The boreholes were drilled into the Rietvlei Formation.

Table 4: Stratigraphy and lithology of the area surrounding Löttershof (after 1:250 000 Geological Series sheet 3319 Worcester).

Supergroup	Group	Subgroup	Formation	Symbol	Description
Cape Super Group	Bokkeveld	Ceres	Tra-Tra	Dt	Sandy shale and mudstone
			Hex River	Dh	Light grey feldspathic sandstone and siltstone
			Voorstehoek	Dv	Dark grey shale and mudstone
			Gamka	Dga	Feldspathic sandstone and siltstone
			Gydo	Dg	Shale, mudstone and siltstone
	Table Mountain	Nardouw	Rietvlei	Dr	Light grey quartzitic sandstone
			Skurweberg	Ss	Light grey quartzitic sandstone
			Goudini	Sg	Quartzitic sandstone and siltstone
			Cederberg	O-Sc	Shale and siltstone
			Pakhuis	Opa	Greyish blue sandstone
			Peninsula	Ope	Quartzitic sandstone

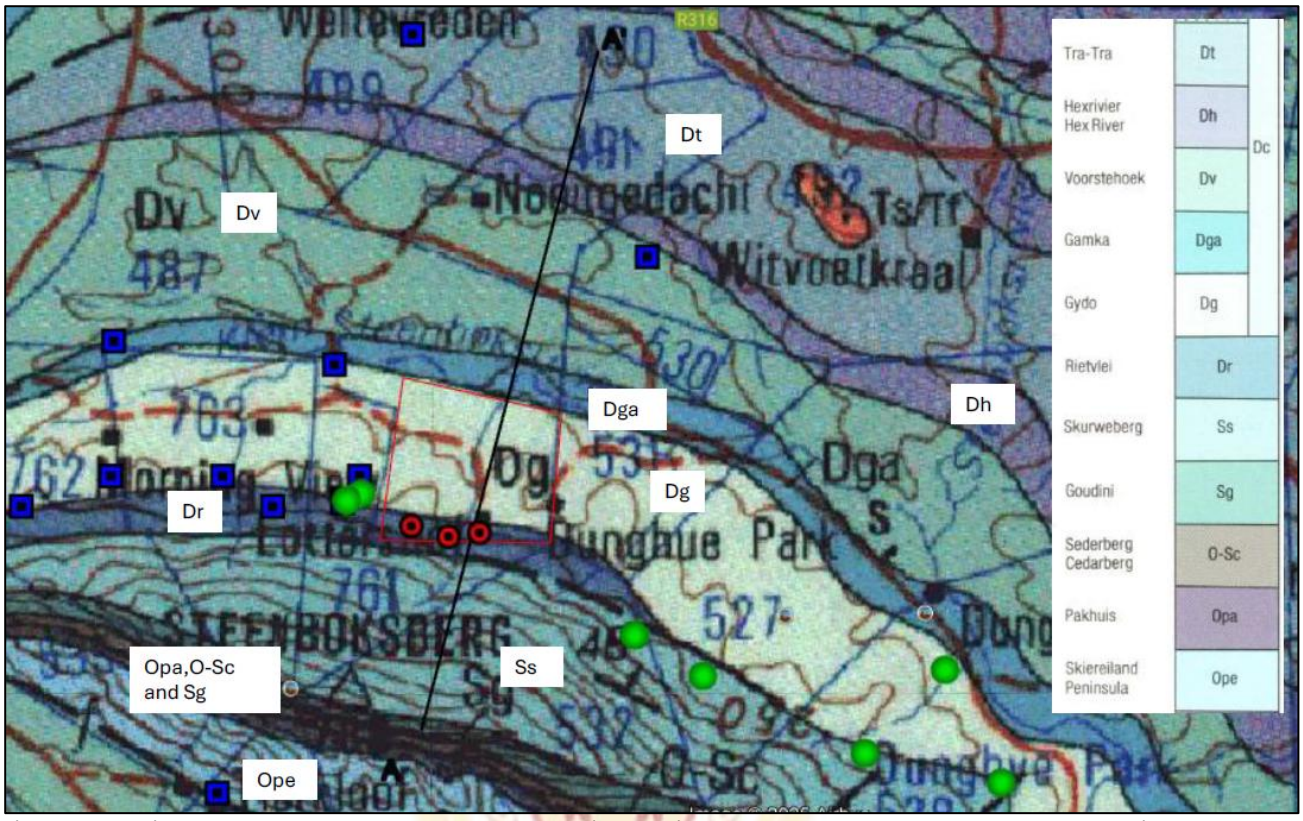

Figure 5: Regional geology (after 1:250 000 Geological Series sheet 3319 Worcester) (Geohydrological Report - H2O Consulting, 2025).

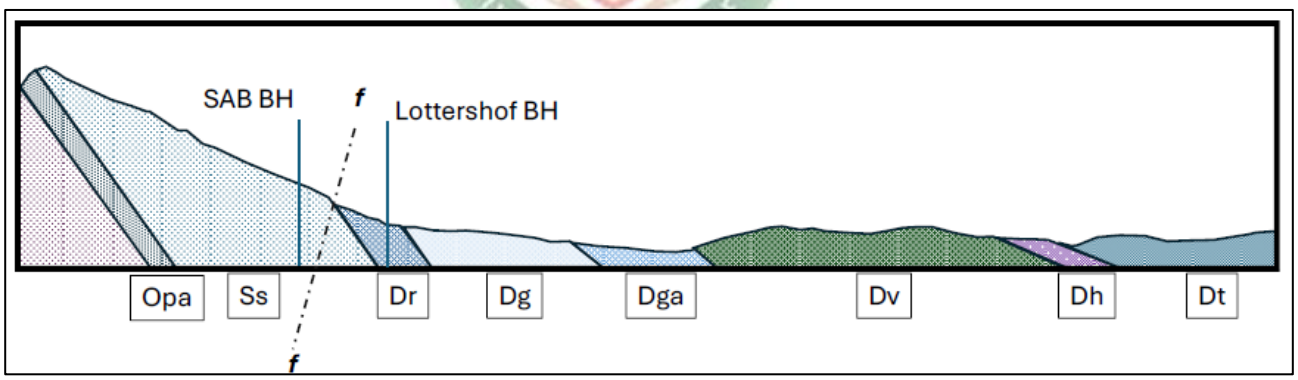

Figure 6: Geological cross section (Geohydrological Report - H2O Consulting, 2025)

<u>*Hydrogeology*</u>

According to the DWAF 1:500 000 hydrogeological map (Geohydrological Report – H2O Consulting) the site is underlain by a fractured aquifer. Expected electrical conductivity is <70mS/m. Data from the NGA range between 19 and 188mS/m with the higher EC associated with the Gamka Formation. The aquifer is classified as a minor aquifer. Locally it can be seen as a major aquifer if boreholes are drilled into fault zones. According to the DWS aquifer vulnerability map (DWAF, 2013), the site's vulnerability rating is 'Least'.

Climate

The site falls in the Western Cape winter-rainfall region, which is typically Mediterranean, with warm, dry summers and mild, wet winters. The mean annual precipitation (MAP), as provided by GRAII (DWAF GRA-2, 2005), for quaternary drainage region G40K, is 495.8mm/a. Most rain falls from June to August, i.e. during the winter months (Figure 7).

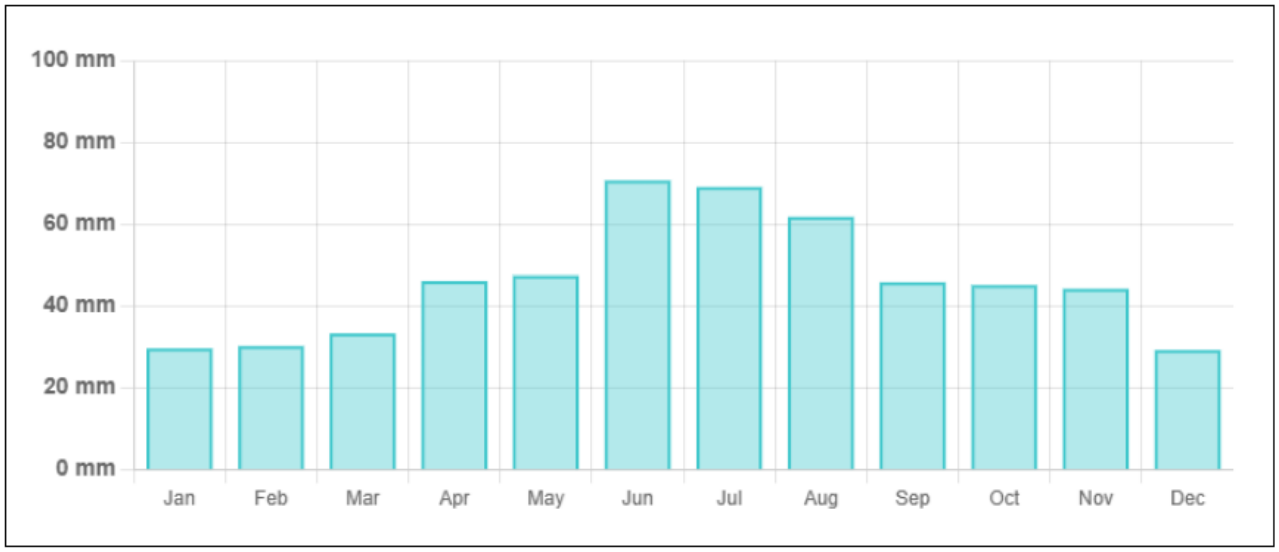

Figure 7: Average monthly rainfall (Geohydrological Report - H2O Consulting, 2025)

8. Impacts and mitigation measures

The significant potential impacts and mitigation measures that are expected from the proposed activities are presented in Table 5.

Impact of BH03 on BH01:

It is expected that groundwater flow will mimic topography and flow in a northeastern direction locally and easterly regionally. The influence of pumping both BH01 and BH03 on each other can be calculated using Cooper-Jacob modelling of radius of influence. Based on this calculation (see Geohydrological Report attached) the impact of pumping at BH03 on BH01 would be an additional 2.5m drawdown over two years. This impact is seen as minimal due to:

- *The aquifer is not homogenous, and impact should be less; and*
- *Both boreholes will be pumped at a rate well below the sustainable rates calculated by the yield test analyses and the operating water levels will be above the critical levels recommended from the yield tests.*

Impact of BH03 on surface water features:

Concerns were raised that groundwater abstraction could impact the wetland and small perennial stream on site (Figures 3 and 4). Borehole BH03 is drilled within the 500m buffer zone of the wetland.

Based on the following no impact on the wetland is expected:

- *The borehole has 6m of 219 mm steel casing installed to seal off the overburden; 25m of 177mm steel casing was installed to seal off the weathered sandstone; The two sets of casing therefore act as a seal between the wetland and the groundwater;*
- *The borehole is drilled into the Rietvlei Formation and the wetland is situated on the Gydo Formation. There is therefore no hydraulic link between the two formations; and*
- *The stream origin is in the Skurweberg Formation and the borehole abstracts groundwater from the Rietvlei Formation.*

Based on the above no impact on the wetland or stream is foreseen due to groundwater abstraction from BH03. It is however recommended that the streamflow be monitored.

Table 5: Summary of impacts and mitigation measures

Water Use activity	Impacts of the activity on the water resources	Impacts of the activity to other water users	Mitigation Measures	How will be the impact after mitigation
Abstraction of groundwater from BH03	• *Drawdown in the local fractured-rock aquifer and possibly influence other users.* • *Over abstraction from BH03 with a result of water level dropping below 63m.*	*Drawdown in the local fractured-rock aquifer can possibly influence other users.*	• *Implement proposed pumping rates and regimes.* • *Install the production pump at recommended depth;* • *Limit abstraction to recommended volumes;* • *Include the borehole in a groundwater monitoring programme:* - *The borehole must be equipped with a conduit pipe (25 – 35mm ID class 6 HDPE pipe) attached to the pump's rising pipes and installed to c.1m above the pump inlet.* - *The water level and volumes abstracted must be recorded on at least a monthly basis. Best results are obtained if automatic flow meters and water level recorders set to take hourly readings are installed;* - *A SACNASP registered hydrogeologist should evaluate the monitoring data on an annual basis and compile a monitoring report.* • *Keep water demand below the safe abstraction volumes.* • *Pump water level must be above 63m.* • *Implement a groundwater monitoring system to monitor groundwater quality, volumes abstracted and water levels:* - *Monitoring frequency should be monthly and reviewed every six months;* - *Monitoring must commence as soon as possible;* - *Water levels in the borehole should be measured on a weekly basis, preferably daily. Best practise is to install an automatic recorder (logger) in the borehole to measure the water level, temperature and electrical conductivity (salinity) hourly.* • *Annual recharge and storage potential of the aquifers naturally mitigate the negative effects of abstraction on the aquifers of this area.*	*After mitigation impacts will be low.*

9. Water demand and water supply Analysis

9.1 Water demand

Table 6: Summary of water demand and uses on Löttershof Chicken Farm.

Description	***Volume (m^3/annum)***	***Source of Water***
Irrigation of areas outside houses during summer	*15 700*	*Surface Water*
Irrigation of vegetables and grazing	*18 064*	*Surface Water*
Sheep watering	*730*	*Surface Water*
Use by workers on site	*10 000*	*Borehole*
Misters and high pressure washing inside houses	*5 000*	*Borehole*
Permanent Houses - watering of birds	*40 000*	*Borehole*
Mobile houses – watering of birds	*500*	*Borehole*
Total Surface Water	***34 494***	
Total Borehole	***55 500***	
Total	***89 994***	

9.2 Water supply analysis

Table 7: Breakdown of water supply. NOTE: BH02 is no longer in use therefore its registered abstraction volume is now taken from BH01

Source	***Name***	***Volume (m^3/annum)***
Groundwater	*BH01*	*38 850*
Groundwater	*BH02*	*0*
Groundwater	*BH03*	*16 650*
Surface Water	*Klein Steenboks River*	*34 494*
Total		***89 994***

10. Water Balance

Table 8: Water balance table for Löttershof Chicken Farm (note: Quantity is indicated in m³/annum)

Facility Name	Water In		Water Out		Balance	Comment
	Water Stream	**Quantity**	**Water Stream**	**Quantity**		
BH01	*Ground Water*	*38 850*	*Use by workers on site*	*10 000*	45 500	
BH02		*0*	*Misters and high pressure washing*	*5000*	40 500	
BH03		*16 650*	*Permanent Houses-watering of birds*	*40 000*	500	
			Mobile houses	*500*	0	Adequate
Klein Steenboks River	*Surface Water*	*34 494*	*Irrigation of areas outside houses during summer*	15 700	18 800	
			Irrigation of vegetables and grazing	18 064	736	
			Sheep watering	730	+6	Adequate
	Total	**89 994**	**Total**	**89 994**		Adequate

Table 9: Water Balance Summary.

Demand	*89 994m³/annum*
Current Supply	*49 686m³/annum*
Shortfall	*40 308m³/annum*

11. Public participation

Planned process:

- *A 60-day commenting period is planned from 12 November 2025 up to and inclusive of 3 February 2026. Extension for the commenting period over the festive season has been allowed for.*
- *An advert will be placed in the local newspaper (The Hermanus Times) in English at the start of the commenting period providing detail on the proposed water use, the application process and how to comment*
- *Site notices providing detail on the proposed water use, the application process and how to comment will be posted at the property boundary in both Afrikaans and English for the duration of the commenting period*
- *The WULA technical summary report and supporting technical reports will be placed on the EAP's website (phsconsulting.co.za) for the duration of the commenting period*
- *Notification of Interested and affected parties (I&APs) eg: neighbours and government officials will be by email*

Table 10: Outcome of the public participation.

Person who commented	Comments (support/ object/ concerns)	Reasons for objections/ concerns	Applicant's response to the objection/concerns
To be completed when PPP completed			

12. Inputs/Authorisations from other Departments /Stakeholders

None at this time.

13. Section 27 (1)

The requirements contained in Section 27(1) of the National Water Act, 1998 (Act 36 of 1998) have been considered and are discussed further below.

a) Existing lawful water uses

An existing lawful use (ELU) is a water use that lawfully took place in the period two years before the commencement of the National Water Act (Act 36 of 1998). This allows any water use that lawfully took place to continue until such time as it can be converted into a Licence. The 5 dams on site have been confirmed as S21(b) ELU (combined volume of 56 340m^3), along with the S21(a) abstraction and use of 34 500m^3/annum surface water for irrigation on site.

In addition, abstraction from BH01 and BH02 for 15 185,75m^3/annum was generally authorised, along with the (c) and (I) water uses on site. BH02 is no longer in use and as such the authorised extracted volume from BH02 will be abstracted from BH01.

This water use application is for a S21(a) for the abstraction from BH03 borehole on site, which will replace the general authorisation of 15 185,75m^3/annum groundwater once issued.

b) Need to redress the results of past racial and gender discrimination

EFRC Agri Operations (Pty) Ltd sees itself as a responsible corporate citizen contributing on an ongoing basis to the wellbeing of the local communities wherein it does business. It runs several community-based upliftment projects in the Grabouw area.

Current projects that EFRC must fulfil its social responsibility:

1. *Donations and sponsorship to individuals in need, including to reputable Non-Profit Making Organisations, for example substantive donations to the Grabouw Development Agency and SA Harvest to mention just a few.*
2. *EFRC continuously invests in education of the youth as well as existing employees through approved study funding opportunities including bursaries, internships and learnerships.*
3. *EFRC supports the growth of the small developing enterprises in its value chain by providing them with cash subsidies and/or business skills through our Broad-based Black Economic Empowerment and Enterprise initiatives.*
4. *EFRC provides socio-economic development support to its workforce through investing in pre-approved employee welfare and wellness initiatives including and not limited to:*
    a) *Free staff transport to and from work for employees residing in Grabouw and surrounding farms.*
    b) *Free primary health care for the immediate employees at the EFRC onsite staff clinic.*
    c) *Access to psychological support through the company's employee assistance program.*
    d) *Sponsor employee extracurricular activities including participation in sporting tournament/s with other companies in our community.*

Regarding BEE there is currently no shareholdings for employees. On suppliers EFRC has a preferential procurement policy in place and endeavour is to use suppliers that are B-BBEE compliant so as to help in the promoting of socio-economic objectives relating to race, gender, disability, job creation and poverty alleviation.

c) Efficient and beneficial use of water in the public interest

The proposed water use linked to the site will make use of underground water. There is no alternative potable supply to the site. The proposed abstraction will enable the required biosecurity on site. Previously surface water was used, but due to the risk from wild birds on the dams and the transfer of birdflu to the stock through water supplies, the decision was made to use water from groundwater supplies that can be contained, enclosed and the risk of birdflu minimised in the process. The additional planting of trees around the houses to provide shade to the chickens during the hot summer months, requires irrigation, which will

then make use of the existing allocated surface water. This will minimise borehole abstraction to only required uses.

d) Socio-economic impact –

i) Of water use or uses if authorised:

The proposed water use is for the abstraction of groundwater. There is no alternative municipal supply to the site.

Eight additional employees were appointed directly as a result of the authorised expansion of the site with at least eight more at suppliers that are servicing the farm. The expansion makes a large contribution to fixed cost, which makes the farm more profitable and sustainable, which in turn leads to job security to all existing and new employees. Total additional income estimated from the authorisation of the WULA is approximately R19,6M (excl VAT).

Table 11: Direct and indirect Job opportunities

Job Opportunities	Number of Job Opportunities	Type of employment	Affected sectors of the economy
Direct	*8*	*Permanent*	*Agriculture*
Indirect	*8*	*Supplier Permanent*	
TOTAL	**16**		

ii) Of the failure to authorise water use or uses:

If the WULA for the abstraction from BH03 and BH01 was not to be authorised, it would cause the entire expansion project of R30m to fail. The existing General Authorisation for groundwater is not sufficient to supply the water needs of the expanded project. Where initially it was estimated that the shortfall would be made up from the surface water ELU volume, the risk of contamination from wild birds on the dams is too high. Biosecurity requires secure borehole supply, while non-risk water uses, such as watering of trees and sheep and irrigation of grazing, can be from the surface water use. The need to plant trees around the bird houses and to irrigate the free-range areas was also not previously identified as additional water uses during the registration of the GA or the previous NEMA process. These

water uses enable grazing for the chickens during the drier summer months and shade to protect from the harsh climate.

Although delivery of the existing borehole BH01 will be able to supply the entire need, the risk of having only one borehole is too big, therefor the volume of abstraction will be split between BH01 and BH03.
The high levels of Iron in the water may also necessitate a back-up borehole to be able to service and clean all biofilm buildup while the other borehole is supplying the farm.
The existing borehole rights is not enough to supply the need of the old and new houses.

e) Any catchment management strategy applicable to the relevant water resource

None at this time.

f) Likely effect of the water use to be authorized on the water resource and on other water users.

The Geohydrological study in support of the WULA has been commissioned and assesses any potential effect from the additional groundwater abstraction on the surrounding landowners' boreholes. A hydrocensus forms part of the study.

Hydrocensus

A borehole survey was conducted at neighbouring farms (Figure 8 and Table 12). Three boreholes were located on Farm Nooitgedacht Fick. Currently the farm uses one borehole to supply the farmhouse with water. The other two boreholes have been abandoned.
There are number of boreholes and springs on the SAB Maltings farm. The main groundwater abstraction is from CD_BH01 which supply water to their plant in Caledon. The abstraction volumes range from 153 425m^3/a to 219 640m^3/a. This groundwater abstraction is licensed with the DWS, and all boreholes and springs are monitored using data loggers.

Table 12: Results of the Hydrocensus

Borehole ID	Latitude	Longitude	Water Use	Water Level
BH01 (EFRC)	-34.307336	19.465878	Domestic	20.6
BH02 (EFRC)	-34.308220	19.469567	Blocked	-
BH03 (EFRC)	-34.307900	19.472640	To be used	8.23
BH1	-34.305357	19.459380	Domestic	Not measured

BH2	*-34.305327*	*19.459335*	*Not in use*	*Not measured*
BH3	*-34.304751*	*19.460795*	*Not in use*	*Artesian*
CD_BH01	*-34.316430*	*19.487970*	*In SAB plant*	*10.45*
CD_BH01_A	*-34.316430*	*19.487990*	*-*	*11.2*
Mon_BH02	*-34.319790*	*19.494800*	*-*	*5.56*
Mon_BH01	*-34.319300*	*19.518900*	*-*	*4.29*
SP01	*-34.326165*	*19.510911*	*-*	*-*
SP02	*-34.328600*	*19.524500*	*-*	*-*

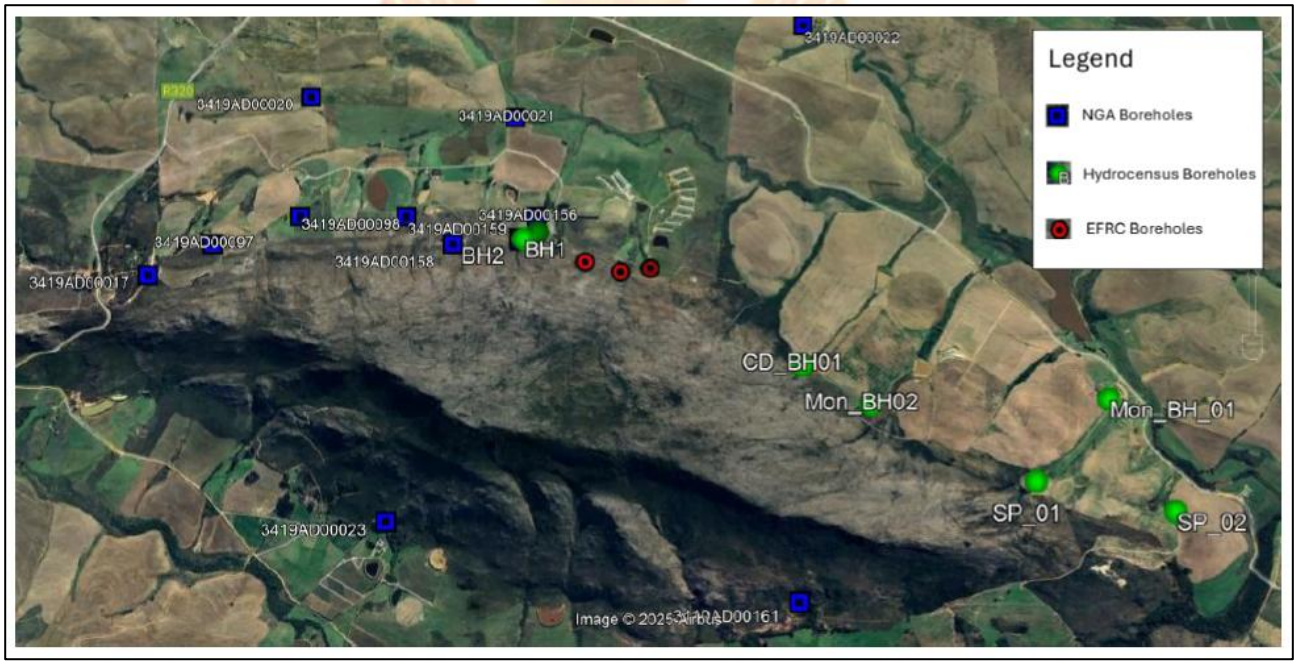

Figure 8: Location of NGA and Hydrocensus boreholes (Geohydrological Report - H2O Consulting, 2025)

g) Class and the resource quality objectives of the water resource

The site lies within quaternary catchment G40K within the Breede-Gouritz Catchment Management Area. A geohydrological study in support of the WULA has been completed as part of the application.

<u>Geohydrological Study</u>

Presented in Table 13 is the recommended production pumping rates, schedules and management details for BH01 and BH03. Table 14 provide the summarised groundwater information for Quaternary Catchment G40K. The current estimated groundwater abstraction from G40K 28 400m³/a. There is 66 575m³/km² stored groundwater in the aquifers of which 6 067m³/km² is available for abstraction.

Table 13: Recommended production pumping rates, schedules and management details (Geohydrological Report - H2O Consulting, 2025)

Borehole ID	Borehole Depth	Rest Water Level	Recommended Pump Intake Depth	Available Drawdown	Recommended 24h/d Safe Pumping Rate		Water Demand	Max Water Demand	Max Pumping Rate (12 hours)	Max. Pumping Water Level Not to Exceed
	mbgl	mbgl	mbgl	m	L/s	m^3/d	m^3/ annum	m^3/d	L/s	mbgl
BH01	114.6	20.6	50	29.4	4	346	38 850	112	2.59	48
BH03	138.6	8.23	66	54.77	1.5	129.6	16 650	43.05	1.11	63

Table 14: Summary of groundwater information of Quaternary Catchment G40K

Information Piece	Unit	Amount
Extent	km^2	429
Estimated Groundwater Storage of Aquifers	m^3/km^2	66 575
Mean Recharge to Groundwater	$m^3/km^2/a$	16 678
Drought Index	Years	1
Mean Groundwater River Baseflow Contribution	$m^3/km^2/a$	4 672 610
Estimated Groundwater Abstraction	m^3/a	28 400
Utilisable Groundwater Exploitation Potential	$m^3/km^2/a$	6 6067

Overall, the water extracted from BH01 and BH03 is of good quality with the only risk factors being aesthetic. The primary issue is elevated turbidity, measured at 8.15NTU for BH01 and 27.3NTU for BH03, which exceeds the SANS 241-1:2015 aesthetic standard. This level of turbidity is likely due to fine sediments entering the borehole, and it causes aesthetic issues such as cloudiness in the water. Although some of the turbidity may clear up during borehole development, the presence of elevated iron (0.95mg/L for BH01 and 0.549mg/L for BH03) poses additional concerns. High iron levels can lead to aesthetic problems like red staining on walls and infrastructure, and they increase the risk of iron biofouling.

Water abstracted from the boreholes is treated and then stored before going to the chicken houses and domestic buildings. The reservoir at BH01 has a capacity of 300m^3 and at BH03 a capacity of 125m^3. See Figures 9 and 10 below for water treatment process.

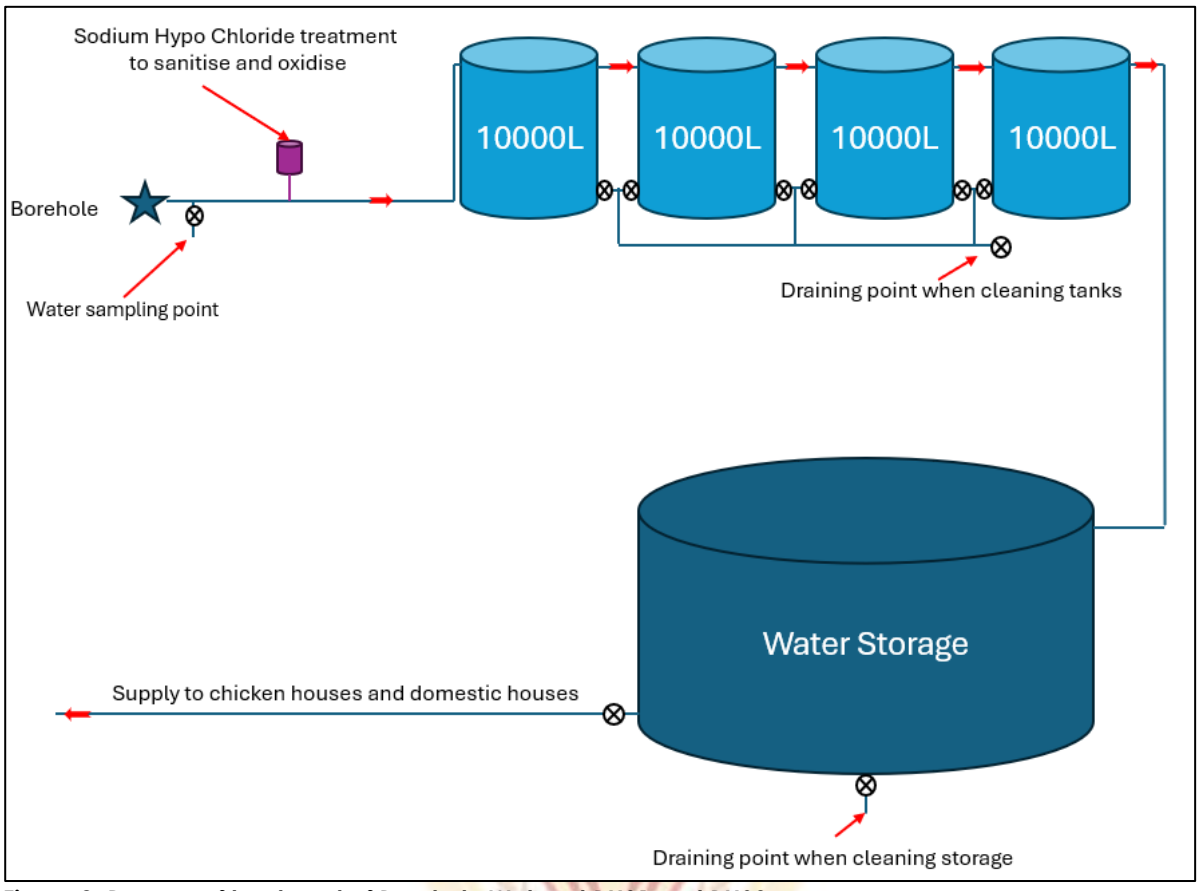

Figure 9: Process of treatment of Borehole Water at BH01 and BH03

Figure 10: Images taken at BH03 of water treatment process. Left: Jojo tanks and dosing system. Right: Water Storage.

h) Investments already made and to be made by the water user in respect of the water use in question

EFRC Agri Operations Pty Ltd has invested extensively in the expansion of the existing infrastructure over time (as authorised by DEA&DP), which shows commitment and long-term investment in the area.

Table 15: Investment into water use infrastructure.

Borehole	*R318 730.49*
Pipework and reservoirs	*R706 020.52*
Total	*R1 024 751.01*

Further to the above, the Applicant has invested extensively in the expansion of operations on site in relation to the approved Environmental Authorisation:

Table 16: Investment made into the expansion of onsite operations.

Groundworks	*R4 225 320.40*
Chicken Houses	*R24 095 774.09*
Water reticulation	*R1 024 751.01*
Other Infra structure	*R3 712 407.58*
Total	*R33 058 253.08*

i) Strategic importance of the water use to be authorised

The authorisation of the proposed water use will be strategic from an economic point of view:

1) enabling the use of available groundwater and,

2) minimising the biosecurity risk to the farm,

3) creation of localised economic activity and securing long term employment opportunities within the community.

j) The quality of water in the water resource which may be required for the Reserve and for meeting international obligations

There is at present no reserve determined for the underlying aquifer.
There are no international obligations to be met as far as water distribution is concerned.

k) Probable duration of any undertaking for which a water use is to be authorised

The WULA is linked to a long-term investment and operational presence of EFRC Agri Operations (Pty) Ltd in the area and should be issued for a minimum 20-year period. Review every 5 years by DWS is recommended.

14. Declaration by the applicant with signature confirming that the information submitted is correct.

We the Applicant, EFRC Agri Operations Pty Ltd (registration number: 2017/074447/07), hereby confirm that the information submitted as part of this WULA application is true.

Signed By: JI Viljoen

Signature: 

Date: 10 November 2025