

Falk Real Estate (Pty) Ltd

Canetsfontein Farm
Bovlei Road
Wellington
7655

Aquatic biodiversity assessment for an envisaged olive orchard on the Remainder of Farm Welvanpas No. 238 Wellington.

A requirement of the National Environmental Management Act 107 of 1998

February 2026



WATSAN *Africa*



Index

	Executive Summary	3
	Abbreviations	4
1	Introduction	5
2	Methodology	7
3	Locality	7
4	Wellington Rainfall	9
5	The Project	10
6	What is a Wetland?	12
7	Wetland Verification	12
8	Site Sensitivity Verification	16
9	Water Use License Application	16
10	Mitigating Measures	17
11	Conclusion	17
12	References	18
13	Declaration	19
14	Résumé	20

Executive Summary

A vineyard on the Farm Welvanpas 238 Wellington was recently decommissioned and ploughed over. The owner, Falk Real Estate (Pty) Ltd wants to establish an olive orchard on the ground. A strip of land splits the envisaged orchard in two parts. This land previously was part of the orchard as well. The owner wants to incorporate this land into the proposed orchard to form one single orchard.

This strip of land has been laying fallow for more than 10 years. According to the National Environmental Management Act, if land was unused for such a long period, an Environmental Impact Assessment must be undertaken prior to any development.

In addition, the national Department of Fisheries, Forestry and the Environment's online screening tool must be applied to this land. The screening showed that the land is in an area with seep wetlands.

The presence of mountainside seep wetlands is supported. The district and the region have numerous such wetlands. However, on this patch of land, there is no such wetland. The presence of a wetland, as indicated by the screening tool, is disputed, according to the prescribed screening tool protocol.

It is therefore recommended that the incorporation of this patch of land be incorporated into the proposed olive orchard.

Abbreviations

Critical Biodiversity Area	CBA
Department of Forestry, Fisheries & Environment	DFFE
Department of Water Affairs and Forestry	DWAF
Department of Water and Sanitation	DWA
Environmental Impact Assessment	EIA
Government Notice	GN
Metres Above Sea Level	masl
National Environmental Management Act (107 of 1998)	NEMA
National Water Act (36 of 1998)	NWA
Section of an Act	S
South Africa National Biodiversity Institute	SANBI
Water Use License Application	WULA

1 Introduction

Canetsfontein is a farming operation to the west of Wellington in the Western Cape. The Remainder of Farm Welvanpas 238, Wellington is included in this operation. There was a vineyard on this land that was recently decommissioned. The vines were removed and the land was ploughed over. The ploughed-over land is in two sections, with a strip of the old vineyard in between. The owner (Falk Real Estate Pty, Ltd) wishes to join these two sections to form a single olive orchard, with the strip in the middle turned into orchard as well.

The middle strip was left fallow for more than 10 years. The NEMA and its regulations demand that if land was not farmed that long, an EIA must be undertaken to re-introduce this land into farmland. Such an EIA is currently underway. Enviro Africa of Somerset West was appointed to conduct this process. The public participation process as a part of the EIA is underway as well, with the mandatory posters (Figure 1) displayed for public comment.

Concomitant to the EIA, the online DFFE screening tool must be applied in term so the NEMA and its regulations. This screening tool indicated that the strip of land that must be turned into a part of an olive orchard is of concern. It was rated as of a “Very High” sensitivity and that a Specialist Assessment must be provided.

WATSAN Africa was appointed to investigate the situation on the ground and to follow the verification process as stipulated in the official DFFE screening tool notice. The sensitivity rating, as indicated by the applied screening tool, must be according to legislation, verified or disputed. A registered SACNASP scientist must undertake such a verification.

The process demands that a site visit be undertaken. Such a site visit was undertaken on 13 February 2026, along with Canetsfontein staff members.

NEMA PUBLIC PARTICIPATION PROCESS

THE PROPOSED AGRICULTURAL DEVELOPMENT ON REMAINDER OF FARM WELVENPAS NO. 238, WELVENPAS, WELLINGTON, WESTERN CAPE

Notice is hereby given of the intention to submit an application, and the public participation process, in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended ("NEMA"), Environmental Impact Assessment Regulations 2014, as well as a Water Use License Application in terms of the National Water Act (Act 36 of 1998)(NWA). The proposed agricultural development includes activities listed in terms of the NEMA EIA Regulations 2014.

EnviroAfrica cc has been appointed by Falk Real Estate (Pty) Ltd to undertake the NEMA application process for Environmental Authorisation.

Application for environmental authorisation to undertake the following activities*:

Government Notice R327 (Listing Notice 1): Activity No. 27
Government Notice R324 (Listing Notice 3): Activity No. 12

Application in terms of NWA: To be confirmed.

*Please note that should the listed activities above change or additional activities be identified during the course of the NEMA Application process, registered I&APs will be notified of any changes.

Project Description & Location: The proposed development includes the clearance of approximately 2.24ha (22 400m²) of indigenous vegetation for the establishment and cultivation of olive trees. The proposed site was under vineyard cultivation in the past, however, it has remained uncultivated for more than 10 years.

The site is located on Remainder of Farm Welvenpas No. 238, Welvenpas, Wellington, approximately 5km east-north-east of Wellington. Access to the site is via R301 and Boxlei Rd. Approximate centre-point site co-ordinates: 33° 37' 45.95" S, 19° 04' 06.65" E

Public Participation: Interested and Affected Parties (I&APs) are hereby notified of the applications and invited to register (in writing) and/or provide initial comments and identify any issues, concerns or opportunities relating to either, or all of, the projects to the contact details provided below, on or before 04 February 2026 in terms of the environmental aspects (NEMA Application) and on or before 06 March 2026 for water related issues (NWA application). In order to register or submit comment, I&APs should refer to the project name/s, and provide their name, address & contact details (*indicating your preferred method of notification*) and an indication of any direct business, financial, personal, or other interest which they have in the application. You are also requested to pass this information to any person you feel should be notified.

Please note that only Registered I&APs will be notified of the availability of reports and other written submissions made (or to be made) to the Department by the applicant, and be entitled to comment on these reports and submissions; will be notified of the outcome of the application, the reasons for the decision, and that an appeal may be lodged against a decision; and will be notified of the applicant's intention to appeal the decision, and where and for what period the appeal submission will be available for inspection.

Consultant: EnviroAfrica cc / E-mail: bianca@enviroafrica.co.za / Tel: 021 8511616 / Postnet Suite 341, Private Bag X29, Somerset West, 7129

By registering as an I&AP, you hereby give EnviroAfrica cc the permission to circulate your name and contact details to the relevant stakeholders as stated, per statutory requirements, in line with the Protection of Personal Information (POPI) Act No. 4 of 2013 (as amended), unless otherwise informed, in writing to us. Please note that a full list of registered I&APs, as well as all correspondence with I&APs, will be submitted to the competent authority.

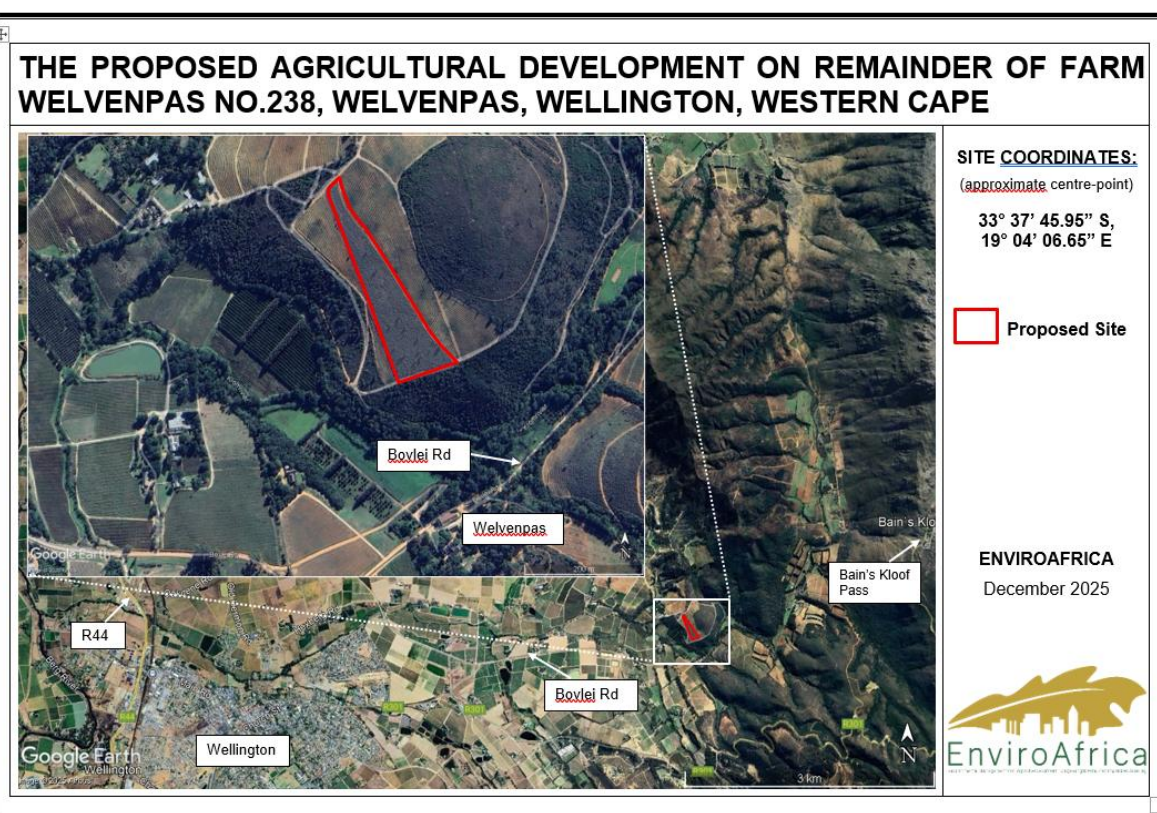


Figure 1 Public Participation

2 Location

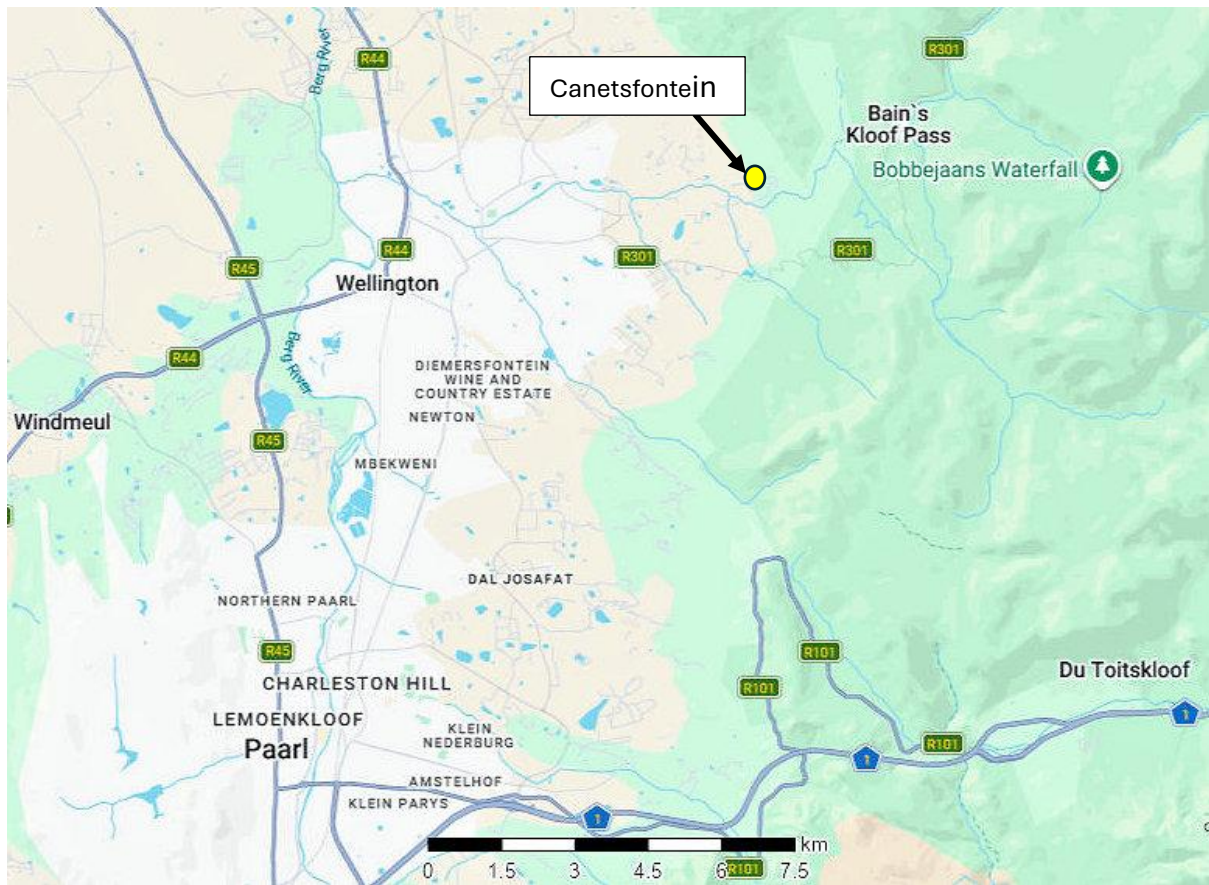


Figure 1 Location

The farm Canetsfontein on which the envisaged olive orchard is located is 6.1km to the northeast of the Wellington city centre measured in a straight line. The city centre is taken as the corner of Church and Piet Retief Street.

The coordinates are:

33°38'01.44"S and 19°03'48.84"E

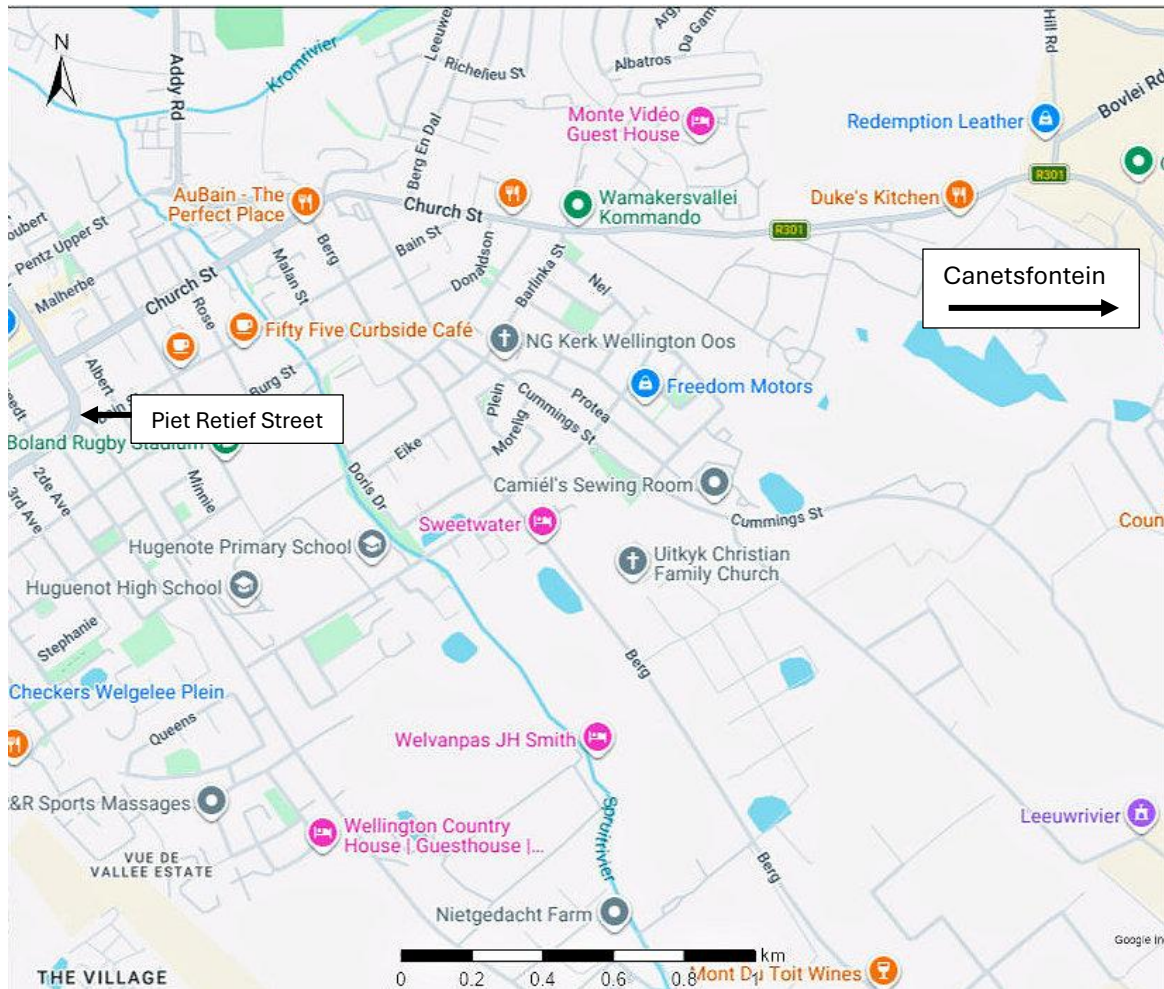


Figure 1 Continued

From Piet Retief Street, turn into Church Street to the west to out of town. Find Hill Street, turn left. From here it is a short distance to Bovlei Road. Turn right into Bovlei Road to the west. Where the tar ends, where the dirt road starts, Canetsfontein Farm is on the right.

The site is not easy to find, unless the farm manager is called to aid visitors for site inspections through the narrow farm roads up the steep and winding inclines of the mountains.

3 Wellington Rainfall

https://www.meteoblue.com/en/weather/historyclimate/climatemodelled/wellington_south-africa_3359510

Wellington
33.64°S, 19.01°E (127 m asl).
Model: ERA5T.

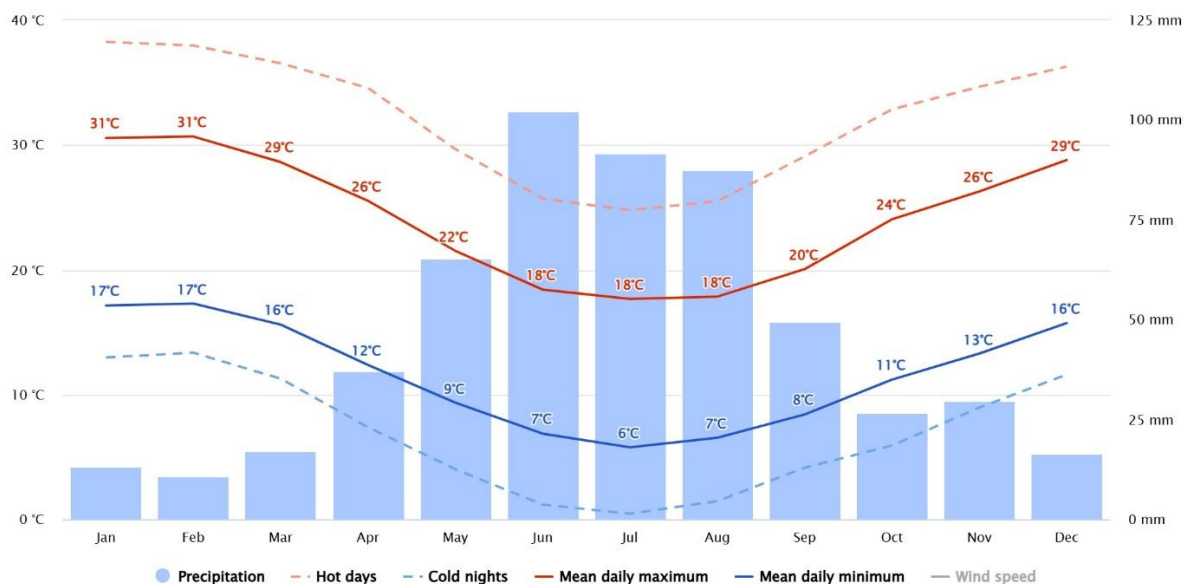


Figure 1 Wellington Climate

The rainfall in Wellington is mainly during winter from May to September. The average annual rainfall is 821mm.

<https://en.climate-data.org/africa/south-africa/western-cape/wellington-23411/>

The summers are hot and dry, with desiccating winds. This is a typical Mediterranean climate prevalent in the Western Cape.

Rainfall is dependent on elevation, with much more rain on the peaks and the high ridges of the mountains. This higher rainfall may support the formation of mountainside seep wetlands. The larger ones may be wet or at least moist throughout the summer until the next rainy season. Most of them completely dry out and are at most temporary seasonal wetlands.

4 The Project

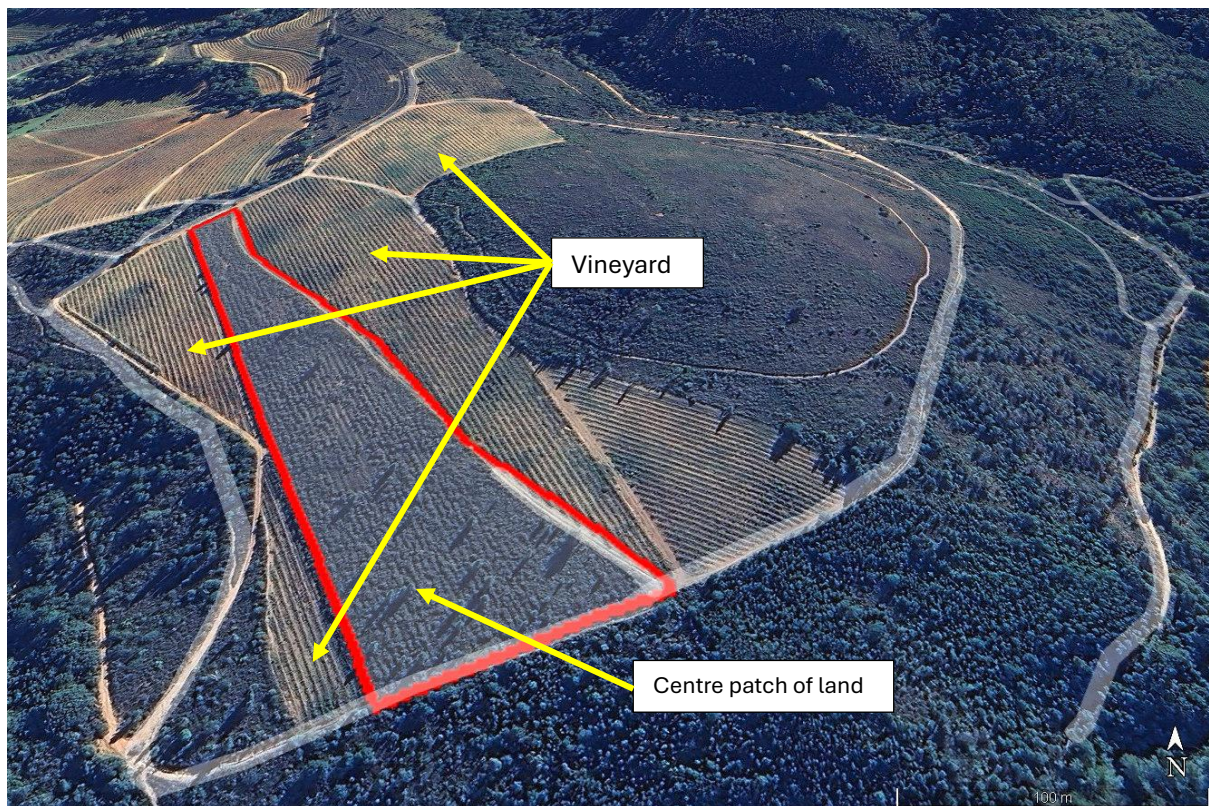


Figure 1 The Project



Figure 1 Ploughed over, view to the south

The area indicated in Figure 1 was until as recent as October 2025 an actively farmed vineyard. The rows of vines can be seen on the image. The owner decided to cease farming vines and plant olive trees instead. Subsequently the land was freshly ploughed over (Figure 1) in preparation for the new orchard.

The middle part (Figure 1) of 2.24ha was planted with vines as well but was not farmed for the past 10 years. It was lying fallow for a considerable period. The owner wants to add this centre patch of land to the envisaged olive tree orchard to form a single, continuous operation of 7.7ha without the fallow land in between the two parts of the ploughed-over land.

The patch of land under consideration is 365m long and 102m wide along its southern boundary. The coordinates in the middle of this land are as follows:

33°37'46.57"S and 19°04'06.80"E

Because of this land not being farmed for more than 10 years, the proposed inclusion of this land into the envisaged farming activity must be subjected to an EIA process in terms of the NEMA. This legal requirement prompted the EIA and the compilation of this compliance statement.

5 DFFE Screening Tool

The DFFE screening tool as published on the DFFE webpage must be applied to this patch of land, according to the NEMA and its regulations (Government Notice No. 320 of 20 March 2020). The screening tool yielded that this land has a "Very High" environmental sensitivity because it is in a Southwest Fynbos Bioregion Seep that is classified as a wetland.

Because of this very high environmental listing, an *Aquatic Biodiversity Specialist Assessment* must be undertaken upon which a report must be compiled.

The screening tool makes provision for a verification process according to which the status as a wetland can be confirmed or disputed. If disputed, the very high rating can be re-assigned to a low rating for which an *Aquatic Biodiversity Compliance Statement* is required.

6 What is a Wetland?

The National Water Act (36 of 1998) defines a wetland as follows:

“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.”

Wetlands must have one or more of the following attributes:

- Wetland (hydromorphic) soils that display characteristics resulting from prolonged saturation
- The presence, at least occasionally, of water loving plants (hydrophytes)
- A high water table that results in saturation at or near the surface, leading to anaerobic conditions developing in the top 50cm of the soil.

A wetland can be identified according to attributes listed in an official manual that is available on the DWS webpage (DWAF, date not specified). These attributes are as follows:

Landform

Wetness

Hydrophytes

Hydromorphic soils

The validity of a wetland on the site can be tested against these attributes.

7 Wetland Verification

Landform

The envisaged olive orchard is on elevated land surrounded by drainage lines. These drainage lines end up in the Krom River, a tributary of the Berg River, one of the main waterways in the Western Cape. The Krom River rises on the Limietberg Mountains on the summit above Bainskloof Pass to the east of Wellington. The Krom River from its origin to its confluence with the Berg River to the northwest of Wellington is 13.6km long, measured along the curve of the river. Most of the river is engineered, straightened and manicured as it flows through numerous vineyards.

The Canetsfontein Farm, as many of the properties in the area, is located against a steep mountainside. Soils and underlying sandstone are saturated with groundwater during winter with its high rainfall. Groundwater under gravitational force migrates down the slopes. In places it will back up against a bank of less pervious rock such as granite, forcing the groundwater to the surface to then typically form these mountainside seeps. This natural mechanism is described in the DWAF online document. These seeps are realistically listed in the DFFE screening tool. No doubt, such seeps are present on the mountainside and slopes in the district.

The local situation on the site now under discussion is different since it is located on elevated land isolated from the mountainside. It is a knoll or a “koppie” sitting against the mountainside, as is illustrated by the contour map (Figure 1).

The summit of this knoll is at an elevation of 310masl. The Krom River at an elevation of 210masl follows the foot of the knoll, flows around it on the southern side. The distance directly to the south from the summit to the river is 376m. This translates into an average slope of 26.6 vertical metres in every 100 horizontal metres. This is an extremely steep slope with potentially fast runoff velocities. The relatively small

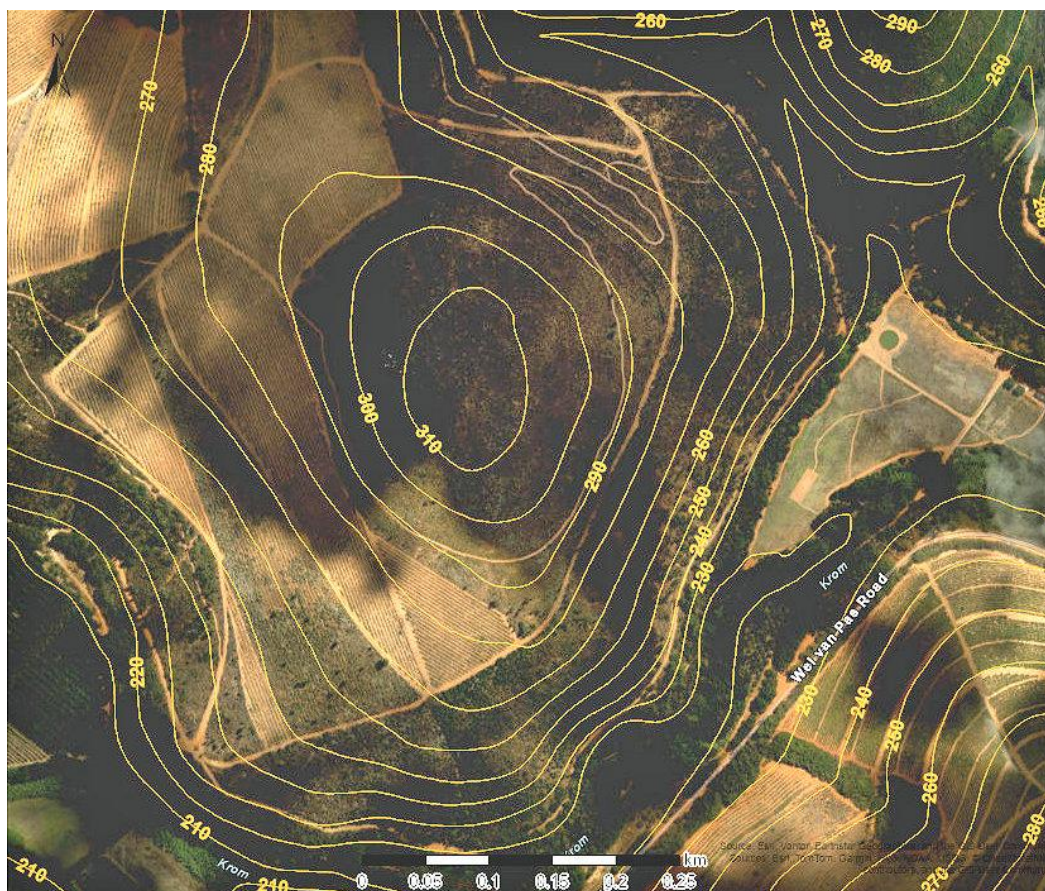


Figure 1 Contours

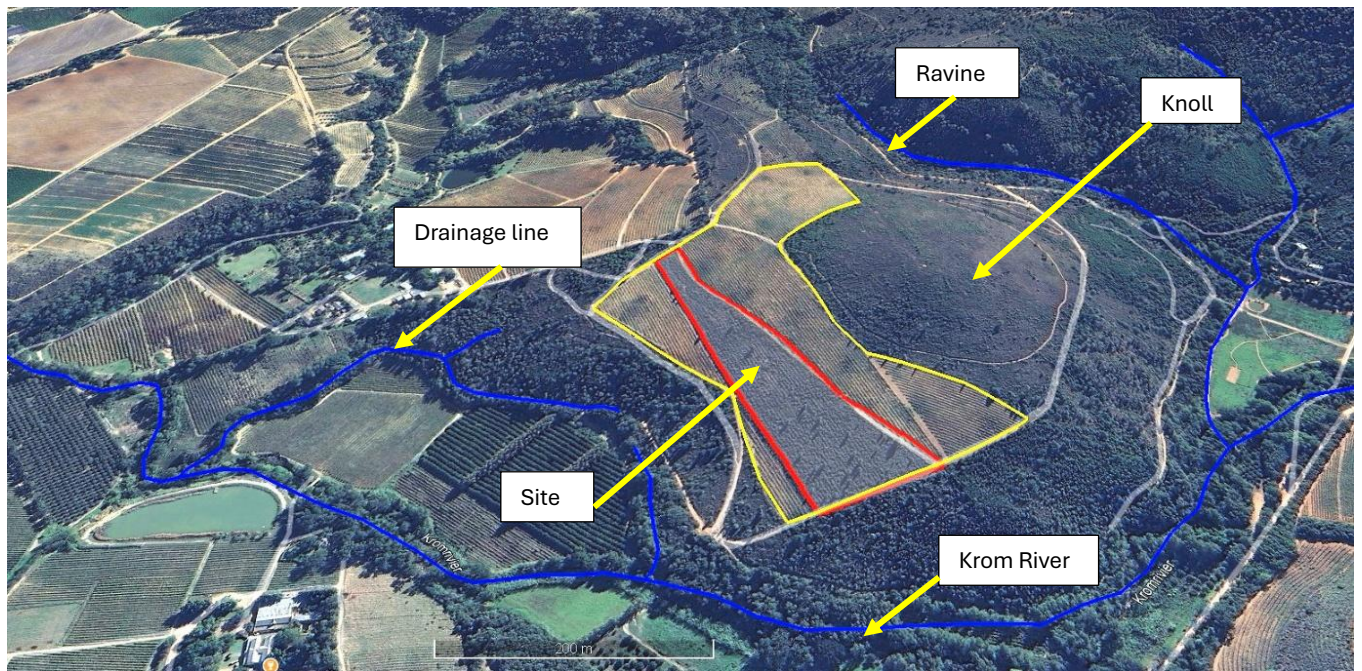


Figure 1 Drainage



Figure 1 Ravine

surface area of this knoll combined with the smooth surface does not allow for much replenishment of ground water by precipitation. This, along with the absence of any aquicludes near the surface in a ploughed-over land to block subsurface runoff, effectively rule out the formation of a mountain side seep on this specific location.

The site is hydrologically isolated from the mountain slope to the north. A deep ravine to the north of the knoll (Figure 1) and the site cuts off any surface flow as well as shallow groundwater. Runoff is more likely to end up in the drainage lines around the site than to collect on the steep slopes of the site.

The ravine and the drainage lines are entirely overgrown with mainly black wattle, with pine and blue gum as well as all sorts of other declared weeds and invasive vegetation. There is still some indigenous vegetation such as *Searsia* and *Olea* left. No wetland indicator species were noted in the drainage lines.

In contrast with the trend on the mountain slopes, the topography at the site does not suggest the formation of wetlands.

Wetness

The site and the ploughed-over land were bone dry during the site visit. There was no sign of seepage or pooling.

Hydrophyte Vegetation

The vegetation on the site is listed as Boland Granite Fynbos.

The site was ploughed over, more than 10 years ago. Secondary growth was evident on the site, mostly Fynbos species. The remnants of the previous vineyard were obvious, with rows of neglected vines over the site.

No wetland species were encountered on the site during the site visit.

Hydromorphic Soils

No test hole was made during the site visit to look for hydromorphic soils to illustrate the possibility of a temporary seasonal wetland with chroma mottles.

The site and surrounds are made up of light coloured, yellowish sandy soils with little if any clay content (Figure 1).

The ploughed over area was inspected for any grey soils. There were no grey soils to indicate wetland conditions.



Figure 1 View to the north

8 Site Sensitivity Verification

The mountain slopes to the east of Wellington indeed have mountain side seeps, as is correctly indicated by the DFFE screening tool. However, the local conditions at the site, the elevated ground adjacent to the site to the east (the knoll) and the ploughed over land to the west do not support the formation of any seep or wetland.

The DFFE screening tool correctly assigned a “Very High” sensitivity to the site, as it is in an area where such seeps occur. However, the local conditions at the site do not support the presence of such a seep. No such seep was detected during the site visit.

It is therefore concluded that the sensitivity must be rated as “Low”.

9 Water Use License Application

The strip of land that is now to be transformed into an olive orchard, along with the already prepared land, is more than 100m away from the closest aquatic feature. This was measured with the Google Earth line function. A follow-up Freshwater Report to support a future WULA is therefore not required, in terms of GN 509 and subsequent government notices.

10 Mitigating Measures

The addition of the patch of land under discussion and its incorporation into the envisaged olive orchard represents an accumulative impact, an addition to the large-scale agriculture along the Krom River.

Sand and mud can wash into the river from the orchard along with stormwater during winter high-rainfall events. At present, the land is loose after being recently ploughed over. The risk will predictably increase when the irrigation system and the olive saplings are added. It is therefore necessary that suitable cover vegetation is planted as soon as possible to bind the topsoil and to prevent it from washing away.

Likewise, agrichemicals along with agricultural return flow may end up in the river. Using contemporary state-of-the-art irrigation technology, over irrigation resulting in return flow can be prevented.

These aspects may be included in the conditions of approval for the development of the envisaged olive orchard, along with other conditions that agricultural experts may add.

11 Conclusion

While it is true that mountain side wetland seeps occur in the region, the specific site does not possess such an attribute. The patch of land between the two ploughed-over sections of land was labelled as of a “Very High” aquatic biodiversity sensitivity when assessed with the online DFFE screening tool.

This strip of land proved to have a “Low” sensitivity.

The incorporation of this land into a single olive orchard, as envisaged, should be officially allowed.

Likewise, a WULA is not required.

12 References

Anonymous. Date not specified. *A practical field procedure for identification and delineation of wetlands and riparian areas*. Department of Water Affairs and Forestry, Pretoria.

Mucina, L. & M.C Rutherford. 2006. *The vegetation of South Africa, Lesotho and Swaziland*. SANBI, Pretoria.

13 Declaration of Independence

I, Dirk van Driel, as the appointed independent specialist hereby declare that I:

- Act/ed as the independent specialist in this application.
- Regard the information contained in this report as it relates to my specialist input/study to be true and correct and;
- Do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the NEMA, the Environmental Impact Assessment Regulations, 2010 and any specific environmental management act;
- Have and will not have vested interest in the proposed activity;
- Have disclosed to the applicant, EAP and competent authority any material information have or may have to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the NEMA, the environmental Impact Assessment Regulations, 2010 and any specific environmental management act.
- Am fully aware and meet the responsibilities in terms of the NEMA, the Environmental Impacts Assessment Regulations, 2010 (specifically in terms of regulation 17 of GN No. R543) and any specific environmental management act and that failure to comply with these requirements may constitute and result in disqualification;
- Have ensured that information containing all relevant facts on respect of the specialist input / study was distributed or made available to interested and affected parties and the public and that participation by interested and affected parties facilitated in such a manner that all interested and affected parties were provided with reasonable opportunity to participate and to provide comments on the specialist input / study;
- Have ensured that all the comments of all the interested and affected parties on the specialist input were considered, recorded and submitted to the competent authority in respect of the application;
- Have ensured that the names of all the interested and affected parties that participated in terms of the specialist input / study were recorded in the register of interested and affected parties who participated in the public participation process;
- Have provided the competent authority with access to all information at my disposal regarding the application, whether such information is favourable or not and;
- Am aware that a false declaration is an offence in terms of regulation 71 of GN No. R543.

Signature of the specialist:



22 February 2026

Dr Dirk van Driel

PhD, MBA, PrSciNat, MWISA

Water Scientist

348 Dolphin Avenue

Brenton-on-Lake 6571

saligna2030@gmail.com

079 333 5800

Experience

USAID/RTI, ICMA & Chemonics. Iraq & Afghanistan **2007 -2011**
Program manager.

City of Cape Town **1999-2007**
Acting Head: Scientific Services, Manager: Hydrobiology.

Department of Water & Sanitation, South Africa **1989 – 1999**
Senior Scientist

Tshwane University of Technology, Pretoria **1979 – 1998**
Head of Department

University of Western Cape and Stellenbosch University 1994 - 1998 part-time

- Lectured post-graduate courses in Water Management and Environmental Management to under-graduate civil engineering students
- Served as external dissertation and thesis examiner

Service Positions

- Project Leader, initiator, member and participator: Water Research Commission (WRC), Pretoria.
 - Director: UNESCO West Coast Biosphere, South Africa
- Director (Past Deputy Chairperson): Grotto Bay Homeowner's Association
 - Past Member Dassen Island Protected Area Association (PAAC)

Membership of Professional Societies

- South African Council for Scientific Professions. Registered Scientist No. 400041/96
 - Water Institute of South Africa. Member

Dr Dirk van Driel produced more than 150 reports on aquatic related issues since 2013. These include Freshwater Reports for Water Use License Applications for wastewater treatment works, mining, roads, power lines, pipelines, agricultural developments, water abstractions, dams, canals, irrigation, urban developments and industry. Other reports include wetland delineations, biodiversity and botanical assessments and on a wide range of environmental matters from small to mega developments.