



24 February 2025

BOTANICAL COMPLIANCE STATEMENT: PROPOSED RE-USE OF FORMER 2.21 HA AGRICULTURAL AREA, NOW NATURALLY 'RESTORED', FOR OLIVE CULTIVATION, AT RE WELVANPAS 238, PAARL

Dr David McDonald of 'Bergwind' was appointed by EnviroAfrica CC on behalf of the Canetsfontein Farm to conduct a botanical-biodiversity assessment of the terrestrial botany and biodiversity (compliance statement) of part of Re Welvanpas 238, Paarl (the 'Site') to inform the environmental application process for re-opening the site for development of an olive orchard.

Section 1.

- (a) The field appraisal was carried out on 17 February 2026, in the summer.
- (b) The site was sampled by walking through part of site. It was clear from that exercise that the entire area was in much the same condition and has the same plant species composition throughout.

Section 2.

- a. **Specialist:** Dr David J. McDonald, Bergwind Botanical Surveys & Tours CC, 14A Thomson Road, Claremont. Mobile – 082-876-4051.
SACNASP Reg. No. 400094/06 Ecological Science (Curriculum vitae appended)

b. Declaration of Independence:

I, David Jury McDonald, as the appointed Specialist, hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that I:

- in terms of the general requirement to be independent:
- other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity;
- in terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the





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- decision of the Department or the objectivity of any report, plan or document prepared or to be prepared as part of the application; and
- am aware that a false declaration is an offence in terms of Regulation 48 of the EIA

Location, History and Background

The study area is part of Re Welvanpas 238, Paarl, and it lies on the foothills of Groenberg, northeast of Wellington, Drakenstein Municipality, Western Cape Province (Figures 1 & 2). The 2.21 ha site was cultivated in the past when vine rootstock was grown for sale to the wine industry. The previous owner of the property allowed the site to lie fallow for approximately 12 years before the sale to the current owner. However, two vineyards on either side of the site were actively managed up to the time of the sale. Those former vineyards have now been cleared, and the land has been ploughed in anticipation of future use for cultivating olives. The expressed areas intention is to integrate the 2.1 ha into the larger area to enable efficient mechanical harvesting of the olives.



Figure 1. Locality map indicating the location of the Welvanpas Study Area in relation to Wellington.

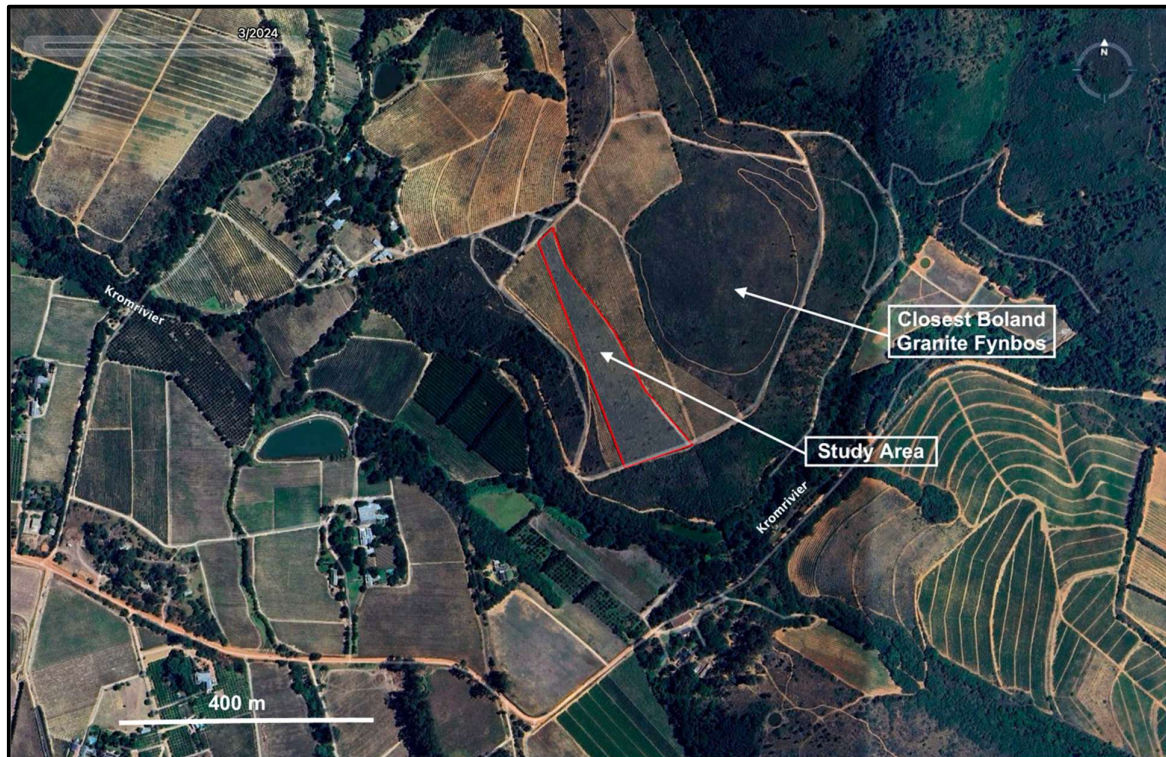


Figure 2. Aerial image (Google Earth Pro TM) showing the Welvanpas Study Area (red boundary) with the closest area of undisturbed Boland Granite Fynbos.

Climate

The South-western Cape, where Wellington is located, has a Mediterranean climate — warm, with dry summers and cool, wetter winters. Meteorological classification under the Köppen system is generally *Csa/Csb* (Mediterranean). Most of the rain falls during the winter months (May – August), with *June typically being the wettest*, while summers (December – February) are much drier. Daytime summer temperature highs commonly range from mid-20s to upper-20s °C, sometimes reaching the high-20s/near 30 °C in warm spells. Nights are mild, often around 15 °C or higher in mid-summer. Daytime winter temperatures drop to the mid-teens °C (around ~15 – 16 °C). Night-time lows in winter average 7 – 8 °C and can occasionally dip lower.

Wellington typically receives around 580 – 820 mm of rain per year, concentrated in the winter months. The wettest months are June and July with 70–150 mm of precipitation common in cooler months. The driest months: January and February receive very little rainfall (often <20 mm).

The area can experience winds, especially southeasterly wind in summer (often referred to locally as the “Cape Doctor”), typical of much of the Western Cape.

Frosts can occasionally occur in the cooler months in some parts of the Winelands (especially at higher elevations), though Wellington itself seldom sees extreme cold.

Topography and Aspect

The slope of the site is moderate with mostly a southwest to west aspect (Figure 3).

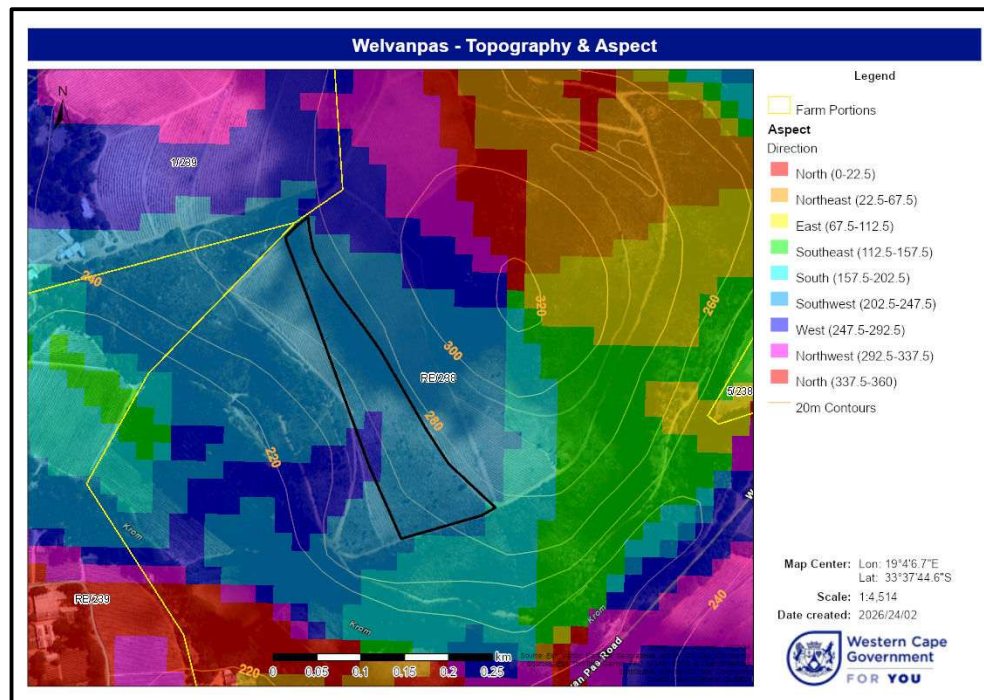


Figure 3. Topographic map showing that the slope at the Welvanpas Study Area (black boundary) is moderate and faces south to southwest.

Geology and Soils

The geology around Wellington is dominated by granite intrusions of the Cape Granite Suite, which form the high-standing hills and deeply weathered landscapes in the region. These include plutons named for local areas such as *Paardeberg*, *Paarl*, *Stellenbosch* and *Wellington*. The Wellington Pluton is thus the principal granite body underlying the study area (Figure 4), and it intruded as part of the late Precambrian to early Cambrian magmatic event that affected the Malmesbury Group and Saldania Belt.

The weathered granite has given rise to the soils that are typically yellow in colour and not pedologically well developed (Figures 5 & 6).

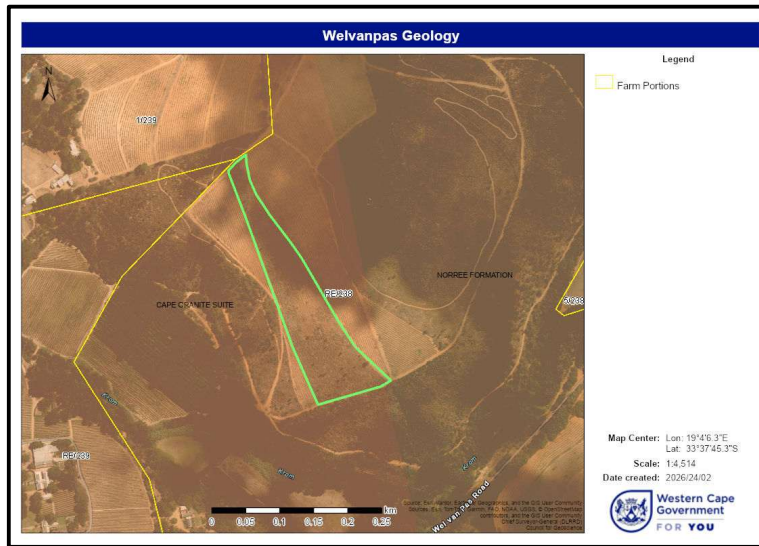


Figure 4. The Welvanpas Study Area is underlain by the Wellington Granite Pluton.

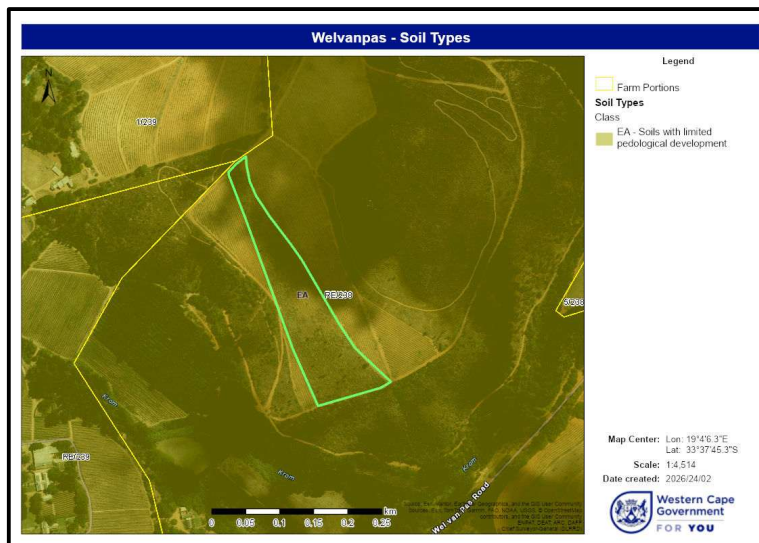


Figure 5. The granite-derived soils are yellow-brown in colour and have limited pedological development.



Figure 6. A soil pit excavated in the Welvanpas Study Area, showing the poorly developed yellow-brown soil.

Vegetation Type

The vegetation originally found at the site was Boland Granite Fynbos (Figure 7). Some of this vegetation is still found near the site but is not contiguous. The site is physically cut off from any surrounding natural fynbos vegetation by cultivated fields. Boland Granite Fynbos is classified as **Endangered** B1 (i) and B1 (iii) for the following reasons: It is 'narrowly distributed with high rates of habitat loss in the past and evidence of ongoing biotic disruption from invasive species' (NEMA, 2022). The closest area of this vegetation is directly upslope from the study area and the ploughed field immediately above it. In this case it is Mid-high Dense Proteoid Fynbos that is mature and also invaded by alien *Hakea sericea* and *Pinus radiata* (Figure 8). The species list given in Figure 16.

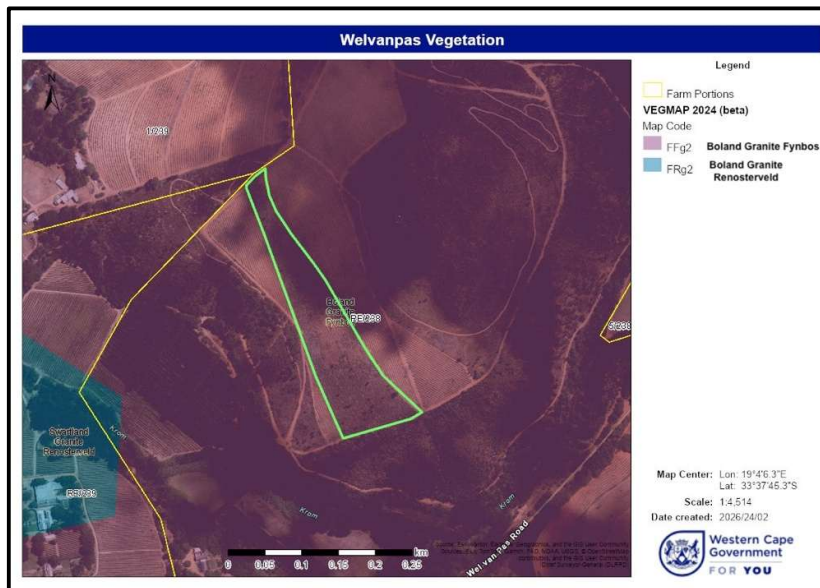


Figure 7. Portion of VEGMAP (SANBI, 2024) showing that the entire study area would have originally supported Boland Granite Fynbos.



Figure 8. Boland Granite Fynbos on the crest of the hill above the study area (invaded by alien *Hakea sericea* and *Pinus radiata*).

Vegetation in the Study Area

The vegetation of the study area is no longer anything like the original type, Boland Granite Fynbos. It is now a typical community of ruderal¹ species that although they may be indigenous, they are 'pioneer' species are the first to colonize disturbed areas (Figures 9—12). Even though they may be the first to inhabit disturbed sites, they often persist for a long time by inhibiting other plant species by outcompeting them for resources such as soil nutrients, or by emitting substances that inhibit the growth of other species.

Owing to the above factors, the vegetation found in the study area is relatively poor in species compared with the original vegetation that would have inhabited the site. This also explains the absence of ecologically sensitive plant species. The study area is now strongly dominated by *Dicerthamnus rhinocerotis* with other species such as *Helichrysum patulum* and *Anthospermum aethiopicum* being prominent but not dominant. Plant species recorded in the study area include *Athanasia trifurcata*, *Dicerthamnus rhinocerotis*, *Eriocephalus africanus*, *Gomphocarpus fruticosus*, *Helichrysum patulum*, *Leucadendron laurifolium*, *Metastasia dregeana*, *Pinus radiata* (alien Monterey Pine), *Protea neriifolia*, *Searsia rehmanniana*, *Senecio pterophorus*, *Seriphium plumosum* and *Tetraria ustulata*. Patches of wild vines are scattered throughout the site, being the remnants of the vine rootstock cultivation (Figure 11).

Plant species in the family Asteraceae are the most common on the site and are mostly shrubs. No geophytes were recorded and this could be attributed to the dry summer season when the site was visited. However, this is not the likely reason. A more plausible reason is that the site has been disturbed to such an extent that all geophytic species have been lost. There is also a notable absence of Restionaceae and Ericaceae with only two species in the Proteaceae recorded. The latter families, by definition, should be present for the vegetation to be considered as fynbos. Their absence attests to the extreme level of disturbance of the site and that it can no longer be described as fynbos despite appearing as such physiognomically.

Figure 12 shows a view over the study area, looking southwards. The pattern of the vegetation is repeated over the entire site. Figures 13—15 illustrate the study area in relation to the upper and lower ploughed area that were formerly planted with grapevines.

¹ **ruderal** refers to plants (or vegetation) that **grow and thrive on disturbed soil or disturbed land** — especially where the original natural plant community has been disrupted by human activities or natural events.



Figure 9. View south-eastwards over the study area with secondary vegetation in the foreground dominated by *Dicrothamnus rhinocerotis* (renosterbos). The light-coloured shrub is *Helichrysum patulum* and trees of *Pinus radiata* (alien Monterey Pine) are seen in the background.



Figure 10. Renosterbos (*Dicrothamnus rhinocerotis*), the grey shrub, with the tall shrub *Anthospermum aethiopicum*.



Figure 11. Wild vines (yellow-green plants in the mid-ground) originating from the rootstock plants are scattered throughout the study area.



Figure 12. View downslope from northwest showing the repeated pattern within the secondary vegetation now inhabiting the site.



Figure 13. The upper ploughed area (not yellow-brown soil) with the study area below on the left. (View north-westwards).



Figure 14. View over the lower ploughed field, the study area in the midground (with invasive *Pinus radiata*) and the upper ploughed field beyond the study area. (View north-eastwards.)



Figure 15. A direct line of sight from the lower ploughed field, over the study area (with invasive *Pinus radiata*), the upper ploughed field and in the background, undisturbed Boland Granite Fynbos

Site Sensitivity

The National Web-based Screening Tool classifies the study area as having **MEDIUM** sensitivity for plant species (Figure 17) and **VERY HIGH** sensitivity for terrestrial biodiversity (Figure 16). Both these classifications are inaccurate and are misleading. The species sensitivity should be **LOW** (VERY LOW) and the terrestrial biodiversity sensitivity should be **LOW** as well. The vegetation type on which the terrestrial biodiversity classification is based is not present on the site with the degraded habitat not representative of this type any longer.

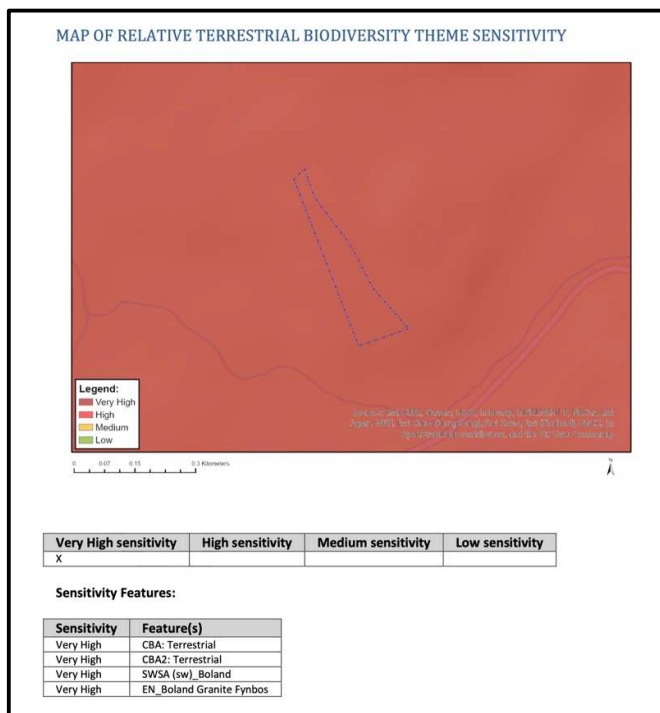
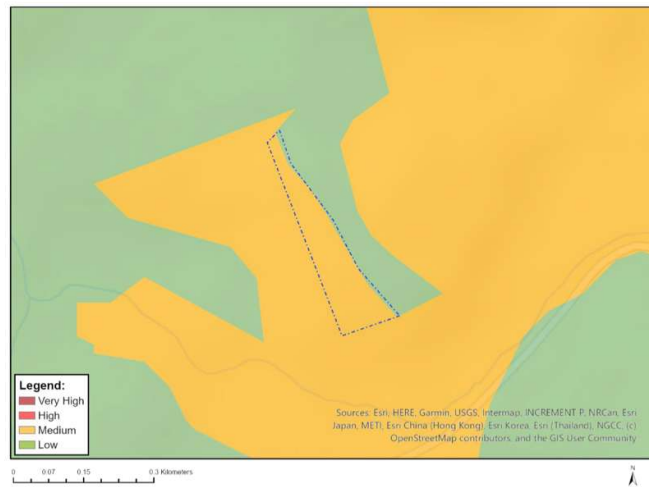


Figure 16. The terrestrial biodiversity sensitivity of the Welvanpas Study Area (dotted boundary) from the National Web-based Screening Tool is classified as **VERY HIGH**.

MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity
Medium	Lampranthus filicaulis
Medium	Lampranthus spiniformis
Medium	Antimima aristulata
Medium	Erepsia patula
Medium	Erepsia ramosa
Medium	Ruschia diversifolia
Medium	Ruschia schollii
Medium	Drosanthemum hispidifolium
Medium	Xiphotheca lanceolata
Medium	Indigofera psoraloides
Medium	Aspalathus aculeata
Medium	Aspalathus araneosa

Medium	Ophioglossum bergianum
Medium	Sensitive species 599
Medium	Elegia squamosa
Medium	Restio paludosus
Medium	Restio rigoratus
Medium	Lachnaea capitata
Medium	Sensitive species 1225

Medium	Aspalathus muraltoides
Medium	Lebeckia plukenetiana
Medium	Leucadendron daphnoides
Medium	Leucadendron lanigerum var. lanigerum
Medium	Leucospermum grandiflorum
Medium	Leucospermum lineare
Medium	Protea burchellii
Medium	Protea lacticolor
Medium	Protea scorzonifolia
Medium	Serruria candicans
Medium	Serruria pinnata
Medium	Serruria gracilis
Medium	Pentameris bachmannii
Medium	Lobostemon regulariflorus
Medium	Aristea lugens
Medium	Tritoniopsis elongata
Medium	Sensitive species 631
Medium	Sensitive species 533
Medium	Sensitive species 1134
Medium	Geissorhiza brehmii
Medium	Geissorhiza furva
Medium	Geissorhiza erosa
Medium	Ixia erubescens
Medium	Ixia rouxii
Medium	Ixia viridiflora
Medium	Ixia sarmentosa
Medium	Sensitive species 560
Medium	Sensitive species 1253
Medium	Sensitive species 1140
Medium	Sensitive species 452
Medium	Sensitive species 863
Medium	Pauridia pygmaea
Medium	Erica filiformis var. filiformis
Medium	Hermannia rugosa
Medium	Sensitive species 222
Medium	Sensitive species 444
Medium	Sensitive species 259
Medium	Sensitive species 478
Medium	Sensitive species 756
Medium	Wachendorfia brachyandra
Medium	Sensitive species 847
Medium	Sensitive species 133
Medium	Restio duthieae
Medium	Sensitive species 120
Medium	Sensitive species 682
Medium	Lachnaea uniflora
Medium	Metasia capitata
Medium	Arctotis angustifolia
Medium	Sensitive species 1042
Medium	Euchaetis pungens
Medium	Muraltia decipiens
Medium	Muraltia macropetala
Medium	Sensitive species 811
Medium	Phyllis strigulosa
Medium	Phyllis thunbergiana
Medium	Codonorhiza azurea
Medium	Skiatophytum skiatophytoides
Medium	Lampranthus glaucus
Medium	Xiphotheca reflexa
Medium	Psoralea alata

Figure 17. The plant species theme sensitivity of the Welvanpas Study Area (dotted boundary) from the National Web-based Screening Tool is classified as **MEDIUM**.

Conservation Status

The Red Listed Ecosystems (RLE) classification is a classification of habitats throughout South Africa based on the Threatened Terrestrial Ecosystems classification. The Welvanpas study area is not classified as a threatened remnant of Boland Granite Fynbos.

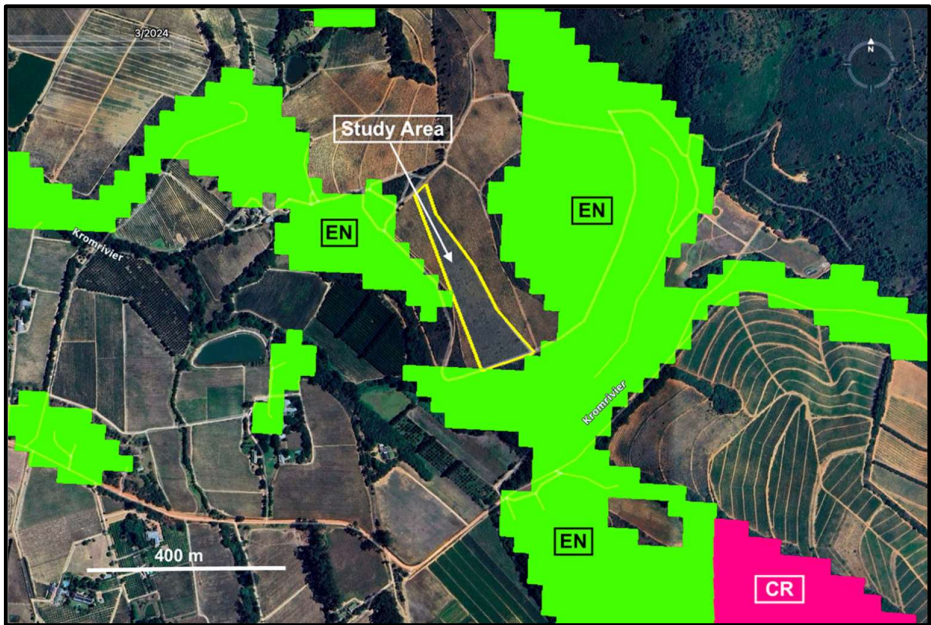


Figure 18. The RLE map as it pertains to the study area (yellow boundary).

The Western Cape Biodiversity Spatial Plan highlights areas of biodiversity conservation value. The classification and map as it pertains to the study area (Figure 19) shows that it is surrounded by critical biodiversity areas but is not in any critical biodiversity area or ecological support area.



Figure 19. The Welvanpas Study Area (green boundary) does not fall within any of the areas of high conservation value.

Threatened Plant Species

Numerous plant species of conservation concern are found in Boland Granite Fynbos, but none of those species are found in the study area due to its a long history of agricultural disturbance, as described above.

Faunal Species

No mammals, reptiles, birds or insects were observed but scats of Cape Porcupine (*Hystrix africaeaustralis*) were observed (Figure 20) so these mammals appear to use the site at times.

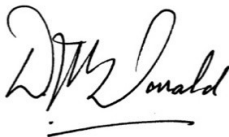


Figure 20. The scats of Cape Porcupine (*Hystrix africaeaustralis*) in the study area.

Conclusions

The site was surveyed February which, in terms of season, was arguably not the best time, since it was late summer, very hot and dry. However, the site is highly degraded and given its long history of disturbance, is highly unlikely to harbour any plant species of conservation importance and certainly does not have any assemblages of plant species that represent the original Boland Granite Fynbos. There is also a very low probability that the site would ever restore to the original vegetation type. In addition, it appears to be logical that the site should be returned to use as productive agricultural.

Given the state of the habitat, secondary vegetation and lack of sensitive plant and animal species, the proposal to re-establish the site as agricultural land is fully supported.

A handwritten signature in black ink, which appears to read 'D J McDonald'.

Dr David J. McDonald Pr. Sci. Nat.
Botanical Specialist

Appendix 1: Curriculum Vitae

Dr David Jury McDonald Pr.Sci.Nat.

Name of Firm: Bergwind Botanical Surveys & Tours CC. (Independent consultant)

Work and Home Address: 14 A Thomson Road, Claremont, 7708

Mobile: 082-8764051

E-mail: dave@bergwind.co.za

Website: www.bergwind.co.za

Profession: Botanist / Vegetation Ecologist / Consultant / Tour Guide

Date of Birth: 7 August 1956

Employment history:

- Nineteen years with National Botanical Institute (now SA National Biodiversity Institute) as researcher in vegetation ecology.
- Five years as Deputy Director / Director Botanical & Communication Programmes of the Botanical Society of South Africa.
- Twenty years as private independent Botanical Specialist consultant (Bergwind Botanical Surveys & Tours CC)

Nationality: South African (ID No. 560807 5018 080)

Languages: English (home language) – speak, read, and write
Afrikaans – speak, read, and write

Membership in Professional Societies:

- International Association for Impact Assessment (SA)
- South African Council for Natural Scientific Professions (**Ecological Science, Registration No. 400094/06**)
- Field Guides Association of Southern Africa

Key Qualifications :

- Qualified with a M. Sc. (1983) in Botany and a PhD in Botany (Vegetation Ecology) (1995) at the University of Cape Town.
- Research in Cape fynbos ecosystems and more specifically mountain ecosystems.
- From 1995 to 2000 managed the Vegetation Map of South Africa Project (National Botanical Institute)
- Conducted botanical survey work for AfriDev Consultants for the Mohale and Katse Dam projects in Lesotho from 1995 to 2002. A large component of this work was the analysis of data collected by teams of botanists.
- **Director: Botanical & Communication Programmes** of the Botanical Society of South Africa (2000—2005), responsible for communications and publications; involved with conservation advocacy particularly with respect to impacts of development on centres of plant endemism.
- Further tasks involved the day-to-day management of a large non-profit environmental organisation.
- **Independent botanical consultant** (2005 – to present) over 1000 projects have been completed related to environmental impact assessments in the Western, Southern and Northern Cape, Karoo, and Lesotho. A list of reports (or selected reports for scrutiny) is available on request.

Higher Education

Degrees obtained and major subjects passed: B.Sc. (1977), University of Natal,
Pietermaritzburg

Botany III

Entomology II (Third year course)

B.Sc. Hons. (1978) University of Natal, Pietermaritzburg

Botany (Ecology /Physiology)

M.Sc - (Botany), University of Cape Town, 1983.

Thesis title: 'The vegetation of Swartboschkloof,
Jonkershoek, Cape Province'.

PhD (Botany), University of Cape Town, 1995.

Thesis title: 'Phytogeography, endemism and diversity of
the fynbos of the southern Langeberg'.

Certificate of Tourism: Guiding (Culture: Local) Level : 4
Code: TGC7 (Registered Tour Guide: WC 2969).

Employment Record :

January 2006 – present: Independent specialist botanical consultant and tour guide in own company: **Bergwind Botanical Surveys & Tours CC**

August 2000 – 2005 : Deputy Director, later Director Botanical & Communication Programmes, Botanical Society of South Africa

January 1981 – July 2000 : Research Scientist (Vegetation Ecology)
at National Botanical Institute

January 1979—Dec 1980 : National Military Service

Further information is available on website: www.bergwind.co.za