

**SCREENING REPORT FOR AN ENVIRONMENTAL AUTHORIZATION OR  
FOR A PART TWO AMENDMENT OF AN ENVIRONMENTAL AUTHORISATION  
AS REQUIRED BY THE 2014 EIA REGULATIONS – PROPOSED DEVELOPMENT  
FOOTPRINT ENVIRONMENTAL SENSITIVITY**

**EIA Reference number:** TBC

**Project name:** The proposed development of an instream dam on Portions 2 and 3 of Farm No. 1100, Bonathaba, Malmesbury, Western Cape

**Project title:** The proposed development of an instream dam on Portions 2 and 3 of Farm No. 1100, Bonathaba, Malmesbury, Western Cape

**Date screening report generated:** 13/10/2020 16:46:28

**Applicant:** Black Orchid Farming (Pty) Ltd

**Compiler:** EnviroAfrica

**Compiler signature:**  
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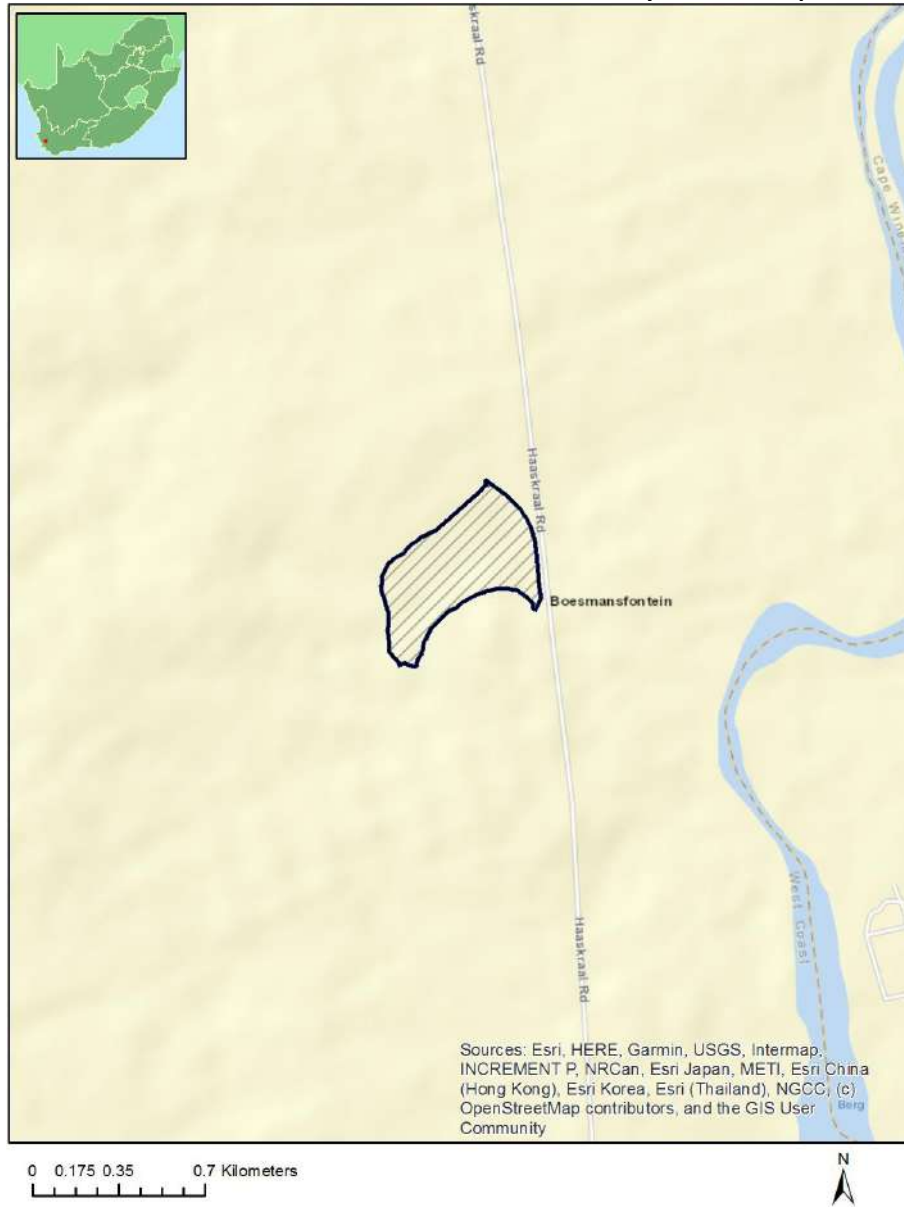
# Table of Contents

- Proposed Project Location ..... 3
  - Orientation map 1: General location ..... 3
- Map of proposed site and relevant area(s) ..... 4
  - Cadastral details of the proposed site ..... 4
  - Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area ..... 6
  - Environmental Management Frameworks relevant to the application ..... 6
- Environmental screening results and assessment outcomes ..... 6
  - Relevant development incentives, restrictions, exclusions or prohibitions ..... 7
- Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones ..... 8
  - Proposed Development Area Environmental Sensitivity ..... 8
  - Specialist assessments identified ..... 9
- Results of the environmental sensitivity of the proposed area ..... 11
  - MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY ..... 11
  - MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY ..... 12
  - MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY ..... 13
  - MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY ..... 14
  - MAP OF RELATIVE DEFENCE THEME SENSITIVITY ..... 15
  - MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY ..... 16
  - MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY ..... 19

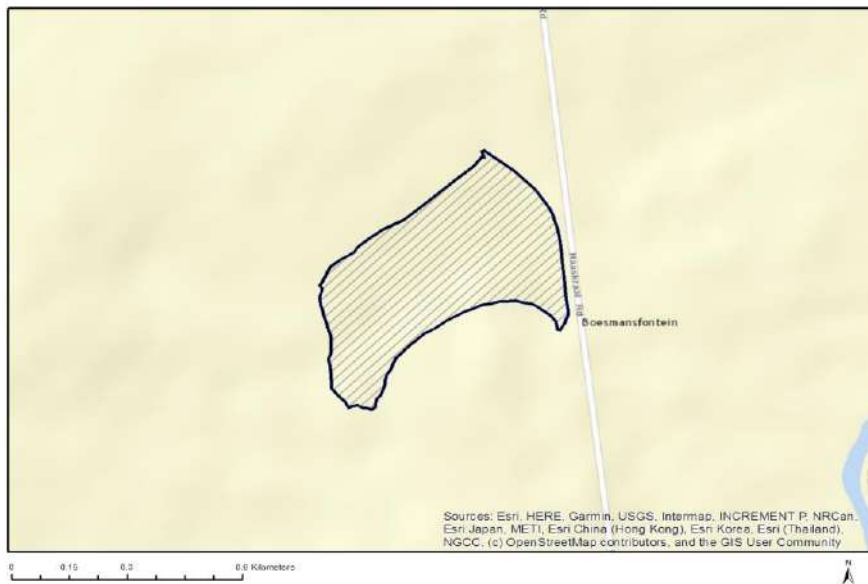
# Proposed Project Location

## Orientation map 1: General location

**General Orientation: The proposed development of an instream dam on Portions 2 and 3 of Farm No. 1100, Bonathaba, Malmesbury, Western Cape**



## Map of proposed site and relevant area(s)



## Cadastral details of the proposed site

Property details:

No	Farm Name	Farm/ Erf No	Portion	Latitude	Longitude	Property Type
1		1100	0	33°31'18.21S	18°55'10.63E	Farm
2		1100	2	33°31'3.87S	18°55'10.12E	Farm Portion
3		1100	3	33°31'22.51S	18°55'8.67E	Farm Portion

Development footprint<sup>1</sup> vertices:

Footprint	Latitude	Longitude
1	33°31'4.41S	18°55'20.75E
1	33°31'5.95S	18°55'23.16E
1	33°31'6.3S	18°55'23.65E
1	33°31'7.02S	18°55'24.53E
1	33°31'7.54S	18°55'25.12E
1	33°31'8.14S	18°55'25.6E
1	33°31'8.57S	18°55'25.95E
1	33°31'9.02S	18°55'26.26E
1	33°31'9.35S	18°55'26.47E
1	33°31'10.13S	18°55'26.75E
1	33°31'10.57S	18°55'26.89E
1	33°31'11.08S	18°55'27.04E
1	33°31'12.44S	18°55'27.23E
1	33°31'15.59S	18°55'27.59E
1	33°31'16.81S	18°55'27.78E
1	33°31'17.28S	18°55'27.83E

<sup>1</sup> “development footprint”, means the area within the site on which the development will take place and includes all ancillary developments for example roads, power lines, boundary walls, paving etc. which require vegetation clearance or which will be disturbed and for which the application has been submitted.

1	33°31'18.03S	18°55'27.46E
1	33°31'18.52S	18°55'27.15E
1	33°31'18.46S	18°55'26.9E
1	33°31'17.82S	18°55'26.75E
1	33°31'17.36S	18°55'26.28E
1	33°31'17.03S	18°55'25.73E
1	33°31'16.67S	18°55'25.14E
1	33°31'16.48S	18°55'24.71E
1	33°31'16.38S	18°55'24.07E
1	33°31'16.23S	18°55'23.4E
1	33°31'16.27S	18°55'22.86E
1	33°31'16.29S	18°55'22.54E
1	33°31'16.25S	18°55'22.16E
1	33°31'16.31S	18°55'21.94E
1	33°31'16.44S	18°55'21.3E
1	33°31'16.55S	18°55'20.68E
1	33°31'16.68S	18°55'20.25E
1	33°31'16.81S	18°55'19.87E
1	33°31'17.07S	18°55'19.12E
1	33°31'17.29S	18°55'18.63E
1	33°31'17.58S	18°55'17.99E
1	33°31'17.84S	18°55'17.5E
1	33°31'18.37S	18°55'16.61E
1	33°31'18.68S	18°55'16E
1	33°31'18.74S	18°55'15.77E
1	33°31'19.1S	18°55'15.32E
1	33°31'19.51S	18°55'14.75E
1	33°31'20.13S	18°55'14.01E
1	33°31'20.56S	18°55'13.54E
1	33°31'20.75S	18°55'13.33E
1	33°31'21.82S	18°55'12.78E
1	33°31'21.93S	18°55'12.65E
1	33°31'22.12S	18°55'12.52E
1	33°31'22.3S	18°55'12.49E
1	33°31'22.44S	18°55'12.45E
1	33°31'22.64S	18°55'12.45E
1	33°31'22.84S	18°55'12.38E
1	33°31'23.18S	18°55'12.23E
1	33°31'23.5S	18°55'12.17E
1	33°31'23.66S	18°55'12.05E
1	33°31'23.78S	18°55'11.9E
1	33°31'23.95S	18°55'11.73E
1	33°31'24.25S	18°55'11.6E
1	33°31'24.48S	18°55'11.6E
1	33°31'24.62S	18°55'11.59E
1	33°31'24.8S	18°55'11.29E
1	33°31'24.7S	18°55'10.94E
1	33°31'24.64S	18°55'10.51E
1	33°31'24.48S	18°55'10.15E
1	33°31'24.47S	18°55'9.86E
1	33°31'24.5S	18°55'9.62E
1	33°31'24.66S	18°55'9.34E
1	33°31'24.17S	18°55'9.06E
1	33°31'24S	18°55'8.88E
1	33°31'23.56S	18°55'8.33E
1	33°31'23.17S	18°55'7.94E
1	33°31'22.99S	18°55'7.95E
1	33°31'21.86S	18°55'7.84E
1	33°31'21.27S	18°55'7.73E
1	33°31'20.83S	18°55'7.66E

1	33°31'20.24S	18°55'7.91E
1	33°31'19.17S	18°55'7.91E
1	33°31'17.66S	18°55'7.35E
1	33°31'16.63S	18°55'7.01E
1	33°31'16.04S	18°55'6.91E
1	33°31'15.61S	18°55'7.03E
1	33°31'15.43S	18°55'7.12E
1	33°31'15.24S	18°55'7.11E
1	33°31'15S	18°55'6.93E
1	33°31'14.86S	18°55'7.05E
1	33°31'13.57S	18°55'7.8E
1	33°31'13.37S	18°55'8.05E
1	33°31'12.94S	18°55'8.71E
1	33°31'12.62S	18°55'9.39E
1	33°31'12.39S	18°55'9.83E
1	33°31'12.03S	18°55'10.05E
1	33°31'11.33S	18°55'11.04E
1	33°31'11.04S	18°55'11.51E
1	33°31'10.63S	18°55'12.17E
1	33°31'9.86S	18°55'13.99E
1	33°31'8.76S	18°55'15.56E
1	33°31'6.67S	18°55'18.38E
1	33°31'5.62S	18°55'19.87E
1	33°31'4.93S	18°55'20.51E
1	33°31'4.93S	18°55'20.73E
1	33°31'4.49S	18°55'20.57E
1	33°31'4.41S	18°55'20.75E

## Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area

No	EIA Reference No	Classification	Status of application	Distance from proposed area (km)
1	12/12/20/2400	Solar PV	Approved	15.8

## Environmental Management Frameworks relevant to the application

No intersections with EMF areas found.

## Environmental screening results and assessment outcomes

The following sections contain a summary of any development incentives, restrictions, exclusions or prohibitions that apply to the proposed development footprint as well as the most environmental sensitive features on the footprint based on the footprint sensitivity screening results for the application classification that was selected. The application classification selected for this report is:

Any activities within or close to a watercourse | Any activities within or close to a watercourse.

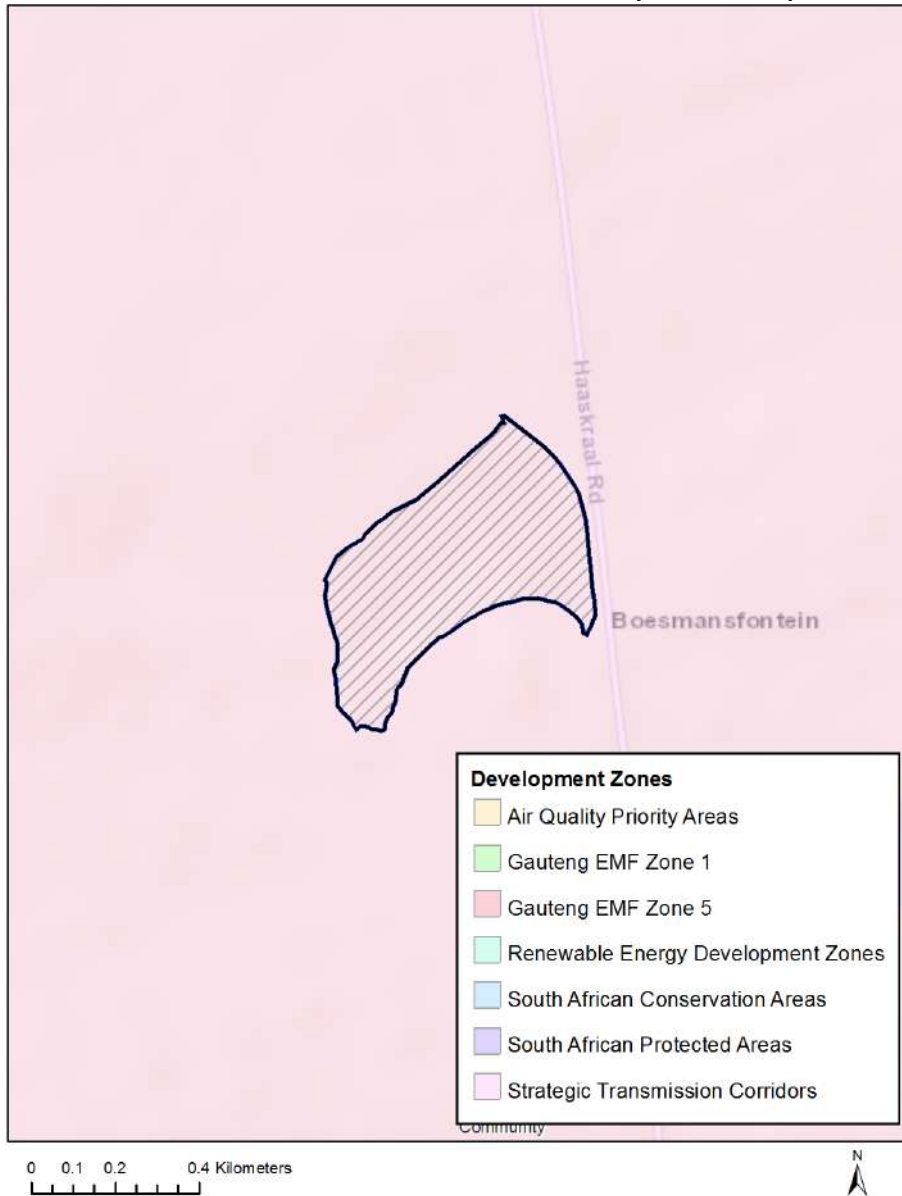
**Relevant development incentives, restrictions, exclusions or prohibitions**

The following development incentives, restrictions, exclusions or prohibitions and their implications that apply to this footprint are indicated below.

Incentive, restriction or prohibition	Implication
Strategic Transmission Corridor-Central corridor	<a href="https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/GNR_350_of_13_April_2017.pdf">https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/GNR_350_of_13_April_2017.pdf</a>

## Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones

**Project Location: The proposed development of an instream dam on Portions 2 and 3 of Farm No. 1100, Bonathaba, Malmesbury, Western Cape**



### Proposed Development Area Environmental Sensitivity

The following summary of the development footprint environmental sensitivities is identified. Only the highest environmental sensitivity is indicated. The footprint environmental sensitivities for the proposed development footprint as identified, are indicative only and must be verified on site by a suitably qualified person before the specialist assessments identified below can be confirmed.

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
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Agriculture Theme	X			
Animal Species Theme			X	
Aquatic Biodiversity Theme				X
Civil Aviation Theme		X		
Defence Theme				X
Plant Species Theme			X	
Terrestrial Biodiversity Theme	X			

### Specialist assessments identified

Based on the selected classification, and the environmental sensitivities of the proposed development footprint, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the footprint situation.

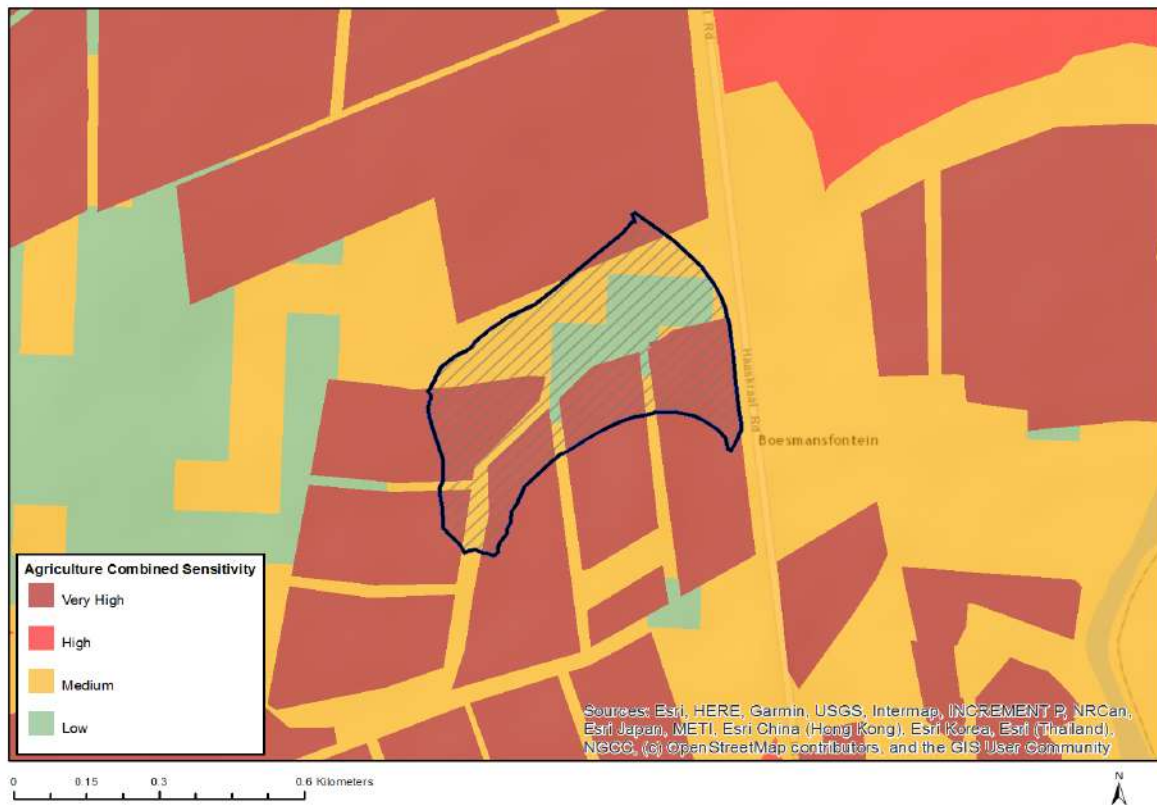
<b>N o</b>	<b>Specialist assessment</b>	<b>Assessment Protocol</b>
1	Landscape/Visual Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
2	Archaeological and Cultural Heritage Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
3	Palaeontology Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
4	Terrestrial Biodiversity Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf</a>
5	Aquatic Biodiversity Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf</a>
6	Hydrology Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
7	Socio-Economic	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols</a>

	c Assessment	<a href="#">/Gazetted General Requirement Assessment Protocols.pdf</a>
8	Plant Species Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf</a>
9	Animal Species Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf</a>

## Results of the environmental sensitivity of the proposed area.

The following section represents the results of the screening for environmental sensitivity of the proposed footprint for relevant environmental themes associated with the project classification. It is the duty of the EAP to ensure that the environmental themes provided by the screening tool are comprehensive and complete for the project. Refer to the disclaimer.

### MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY

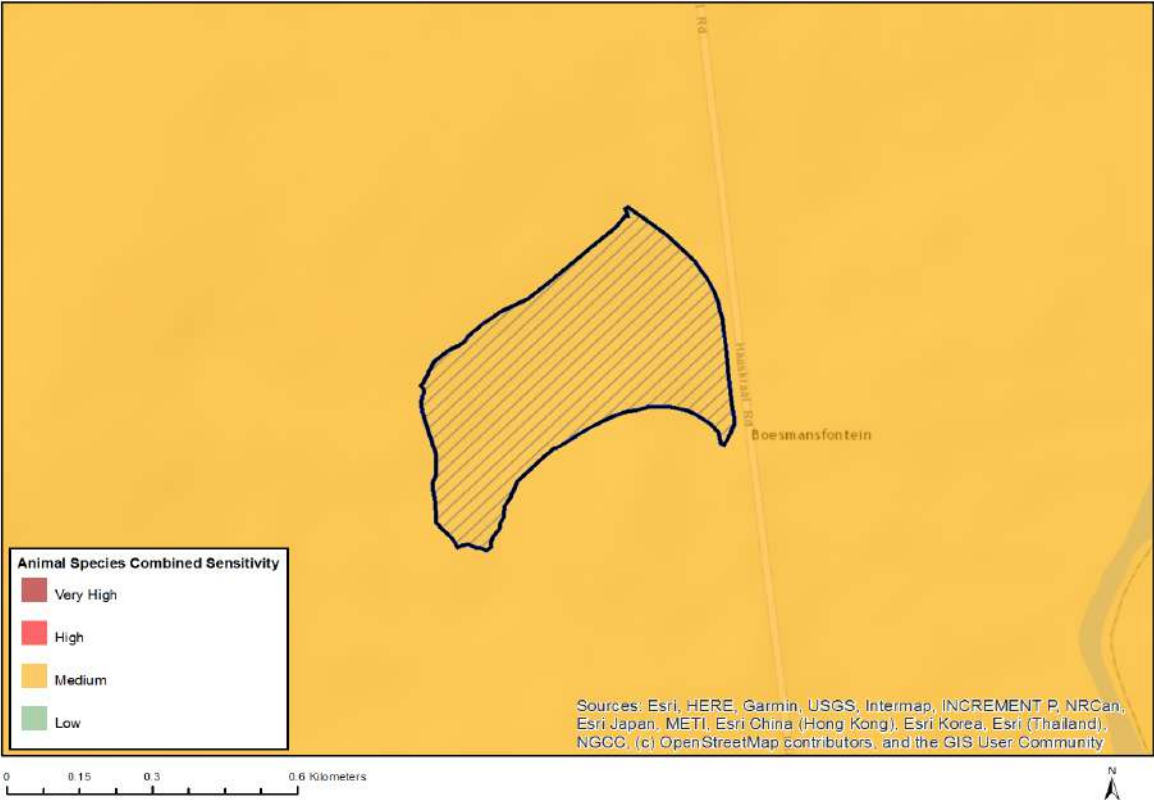


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

#### Sensitivity Features:

Sensitivity	Feature(s)
Low	Land capability;01. Very low/02. Very low/03. Low-Very low/04. Low-Very low/05. Low
Medium	Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate
Very High	Viticulture;Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate
Very High	Viticulture;Land capability;01. Very low/02. Very low/03. Low-Very low/04. Low-Very low/05. Low

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY

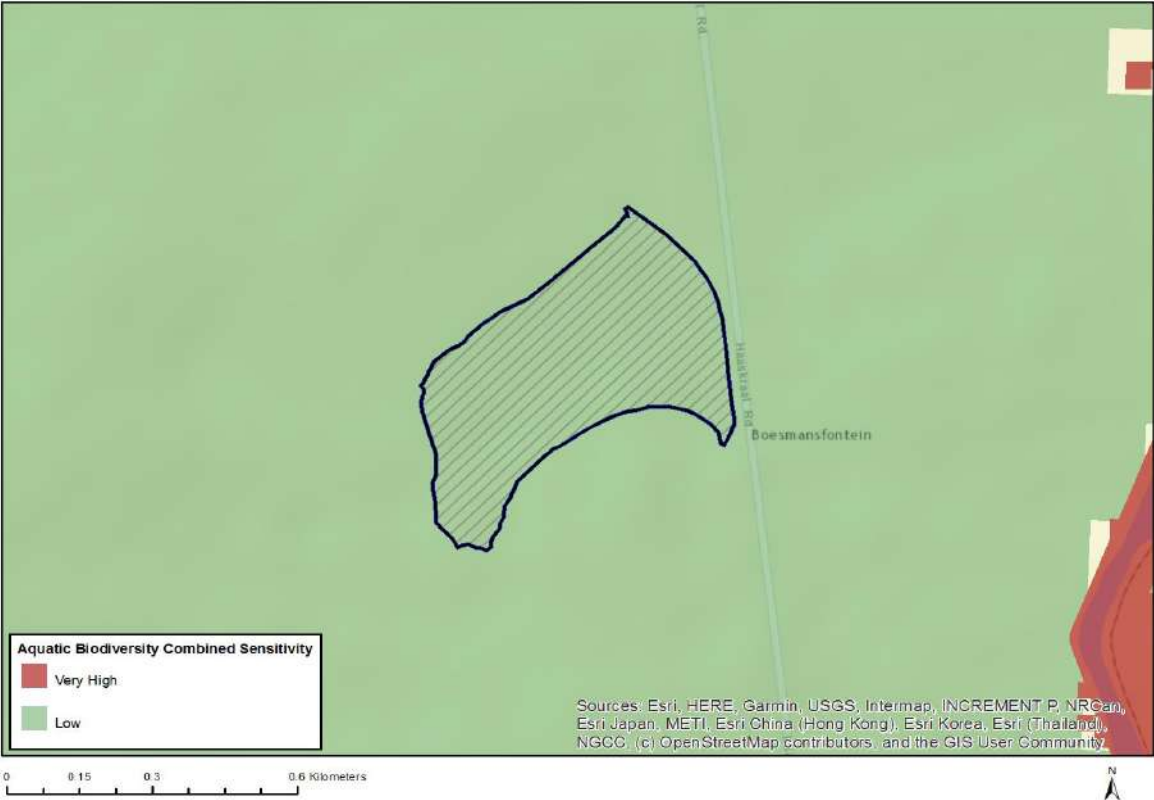


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Invertebrate-Aneuryphymus montanus
Medium	Invertebrate-Brinckiella aptera
Medium	Invertebrate-Conocephalus peringueyi
Medium	Aves-Sagittarius serpentarius

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

## MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY

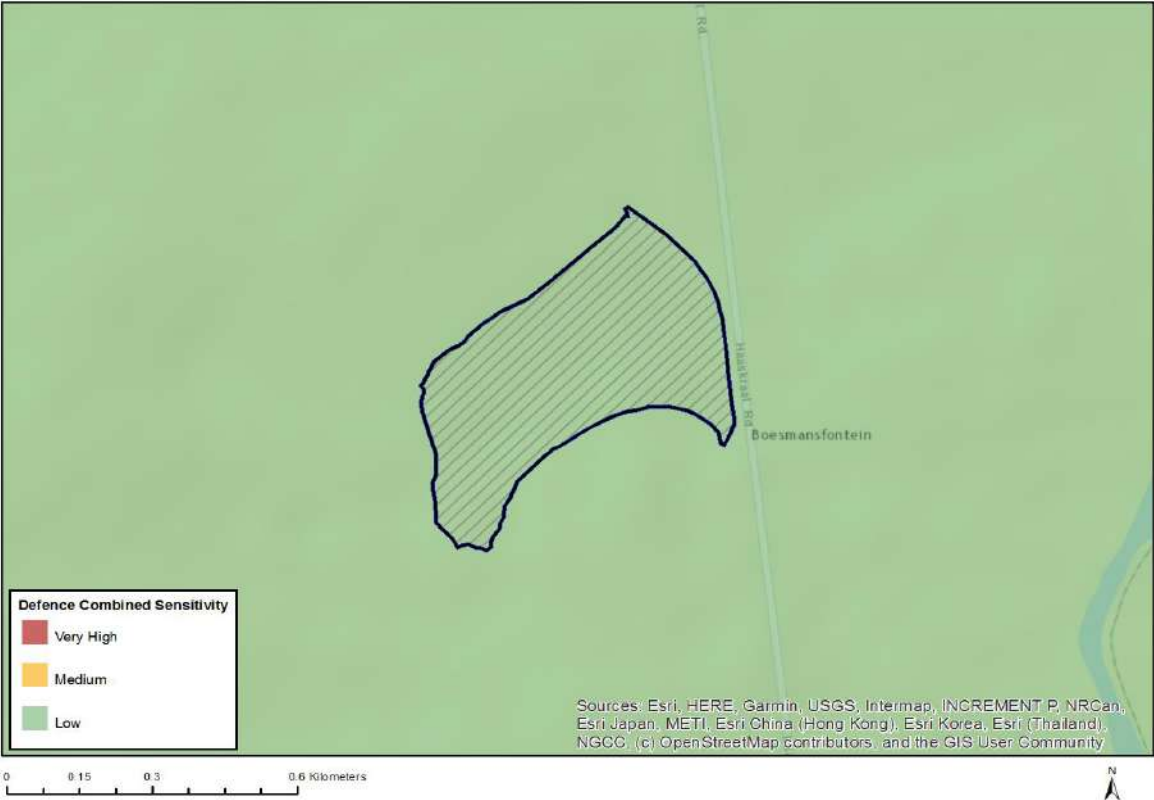


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

### Sensitivity Features:

Sensitivity	Feature(s)
High	Within 8 km of other civil aviation aerodrome
High	Dangerous and restricted airspace as demarcated

MAP OF RELATIVE DEFENCE THEME SENSITIVITY

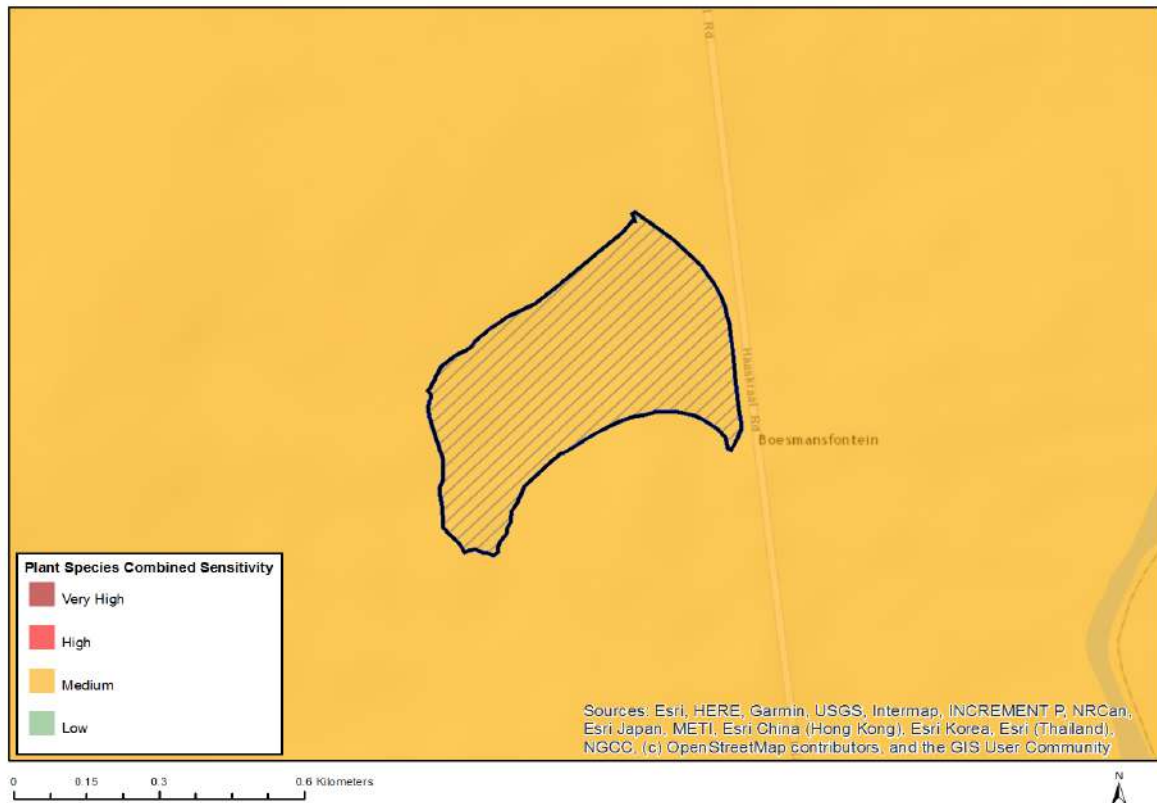


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

## MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

### Sensitivity Features:

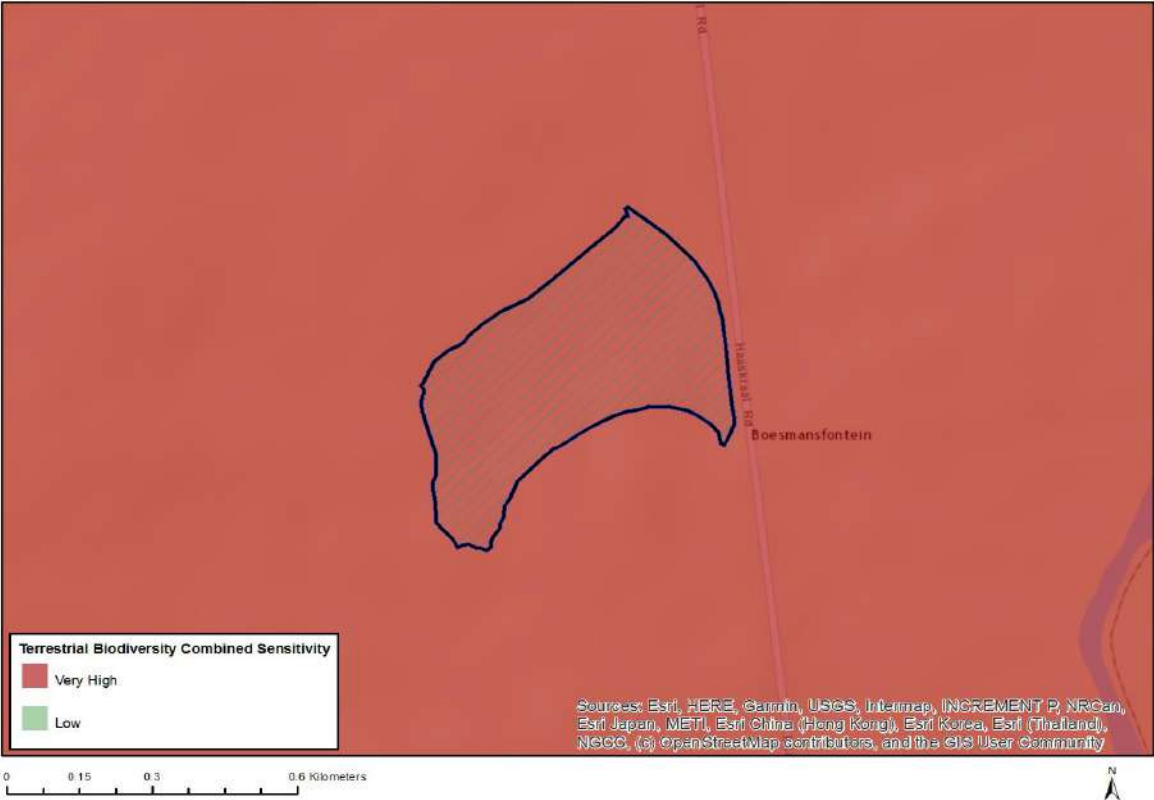
Sensitivity	Feature(s)
Medium	<i>Pentameris bachmannii</i>
Medium	<i>Antimima aristulata</i>
Medium	<i>Erepsia patula</i>
Medium	<i>Erepsia ramosa</i>
Medium	<i>Anthospermum ericifolium</i>
Medium	<i>Lobostemon capitatus</i>
Medium	<i>Echiostachys incanus</i>
Medium	<i>Echiostachys spicatus</i>
Medium	<i>Aristea lugens</i>
Medium	<i>Tritoniopsis elongata</i>
Medium	<i>Hesperantha spicata</i> subsp. <i>spicata</i>
Medium	Sensitive species 78
Medium	Sensitive species 90
Medium	Sensitive species 96
Medium	<i>Geissorhiza tulbaghensis</i>
Medium	<i>Geissorhiza erosa</i>
Medium	<i>Geissorhiza furva</i>
Medium	<i>Geissorhiza radians</i>
Medium	<i>Geissorhiza setacea</i>
Medium	<i>Sparaxis grandiflora</i> subsp. <i>grandiflora</i>
Medium	<i>Ezoloba macrocarpa</i>
Medium	<i>Thereianthus bulbiferus</i>



Medium	<i>Ixia abbreviata</i>
Medium	<i>Ixia erubescens</i>
Medium	<i>Ixia rouxii</i>
Medium	<i>Codonorhiza azurea</i>
Medium	Sensitive species 458
Medium	Sensitive species 464
Medium	Sensitive species 636
Medium	Sensitive species 642
Medium	Sensitive species 590
Medium	Sensitive species 640
Medium	Sensitive species 599
Medium	Sensitive species 621
Medium	Sensitive species 772
Medium	Sensitive species 557
Medium	<i>Pauridia pygmaea</i>
Medium	<i>Pauridia alba</i>
Medium	<i>Ruschia geminiflora</i>
Medium	<i>Ruschia diversifolia</i>
Medium	<i>Drosanthemum striatum</i>
Medium	<i>Drosanthemum hispifolium</i>
Medium	<i>Monopsis variifolia</i>
Medium	<i>Oxalis natans</i>
Medium	<i>Oxalis variifolia</i>
Medium	<i>Cephalophyllum parviflorum</i>
Medium	<i>Hermannia rugosa</i>
Medium	Sensitive species 364
Medium	Sensitive species 690
Medium	Sensitive species 676
Medium	Sensitive species 697
Medium	Sensitive species 679
Medium	Sensitive species 588
Medium	Sensitive species 479
Medium	<i>Isoetes capensis</i>
Medium	Sensitive species 744
Medium	<i>Elegia extensa</i>
Medium	<i>Hypodiscus rugosus</i>
Medium	<i>Restio impolitus</i>
Medium	<i>Restio rigoratus</i>
Medium	<i>Restio duthieae</i>
Medium	<i>Restio paludosus</i>
Medium	<i>Anisodonteia biflora</i>
Medium	Sensitive species 306
Medium	Sensitive species 293
Medium	Sensitive species 299
Medium	<i>Pterygodium inversum</i>
Medium	<i>Xiphotheca lanceolata</i>
Medium	<i>Xiphotheca reflexa</i>
Medium	<i>Metalasia capitata</i>
Medium	<i>Metalasia octoflora</i>
Medium	<i>Senecio cadiscus</i>
Medium	<i>Athanasia crenata</i>
Medium	<i>Athanasia adenantha</i>
Medium	<i>Perdicium capense</i>
Medium	Sensitive species 666
Medium	<i>Psoralea alata</i>
Medium	<i>Agathosma latipetala</i>
Medium	<i>Indigofera psoraloides</i>
Medium	<i>Muraltia decipiens</i>
Medium	<i>Muraltia macropetala</i>
Medium	<i>Aspalathus aculeata</i>

Medium	<i>Aspalathus muraltioides</i>
Medium	<i>Aspalathus araneosa</i>
Medium	<i>Aspalathus puberula</i>
Medium	<i>Aspalathus recurva</i>
Medium	<i>Aspalathus varians</i>
Medium	Sensitive species 514
Medium	Sensitive species 518
Medium	Sensitive species 534
Medium	Sensitive species 535
Medium	Sensitive species 541
Medium	<i>Wurmbea inusta</i>
Medium	<i>Phylica stenopetala</i> var. <i>stenopetala</i>
Medium	<i>Phylica strigulosa</i>
Medium	<i>Phylica thunbergiana</i>
Medium	<i>Rafnia lancea</i>
Medium	<i>Lebeckia plukenetiana</i>
Medium	<i>Podalyria microphylla</i>
Medium	<i>Aponogeton angustifolius</i>
Medium	<i>Aponogeton fugax</i>
Medium	<i>Leucadendron stellare</i>
Medium	<i>Leucadendron thymifolium</i>
Medium	<i>Leucadendron corymbosum</i>
Medium	<i>Leucadendron lanigerum</i> var. <i>lanigerum</i>
Medium	<i>Leucospermum grandiflorum</i>
Medium	<i>Leucospermum hypophyllocarpodendron</i> subsp. <i>canaliculatum</i>
Medium	<i>Protea scorzonerifolia</i>
Medium	<i>Protea burchellii</i>
Medium	<i>Serruria candicans</i>
Medium	<i>Serruria incrassata</i>
Medium	<i>Serruria roxburghii</i>
Medium	<i>Lampranthus leptaleon</i>
Medium	<i>Lampranthus peacockiae</i>
Medium	<i>Lampranthus scaber</i>
Medium	<i>Lampranthus sociorum</i>
Medium	<i>Lampranthus debilis</i>
Medium	<i>Lampranthus dilutus</i>
Medium	<i>Lampranthus filicaulis</i>
Medium	<i>Lampranthus glaucus</i>
Medium	<i>Merciera tetraloba</i>

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Very High	Ecological Support Area 2
Very High	Critically endangered ecosystem