

**SCREENING REPORT FOR AN ENVIRONMENTAL AUTHORIZATION AS
REQUIRED BY THE 2014 EIA REGULATIONS – PROPOSED SITE
ENVIRONMENTAL SENSITIVITY**

EIA Reference number: 14/3/1/1/B4/45/0244/17

Project name: Bulk Water Augmentation Scheme

Project title: Muldersvlei Component

Date screening report generated: 06/01/2023 13:51:59

Applicant: Zutari / City of Cape Town

Compiler: Zutari

Compiler signature:

Application Category: Any activities within or close to a watercourse



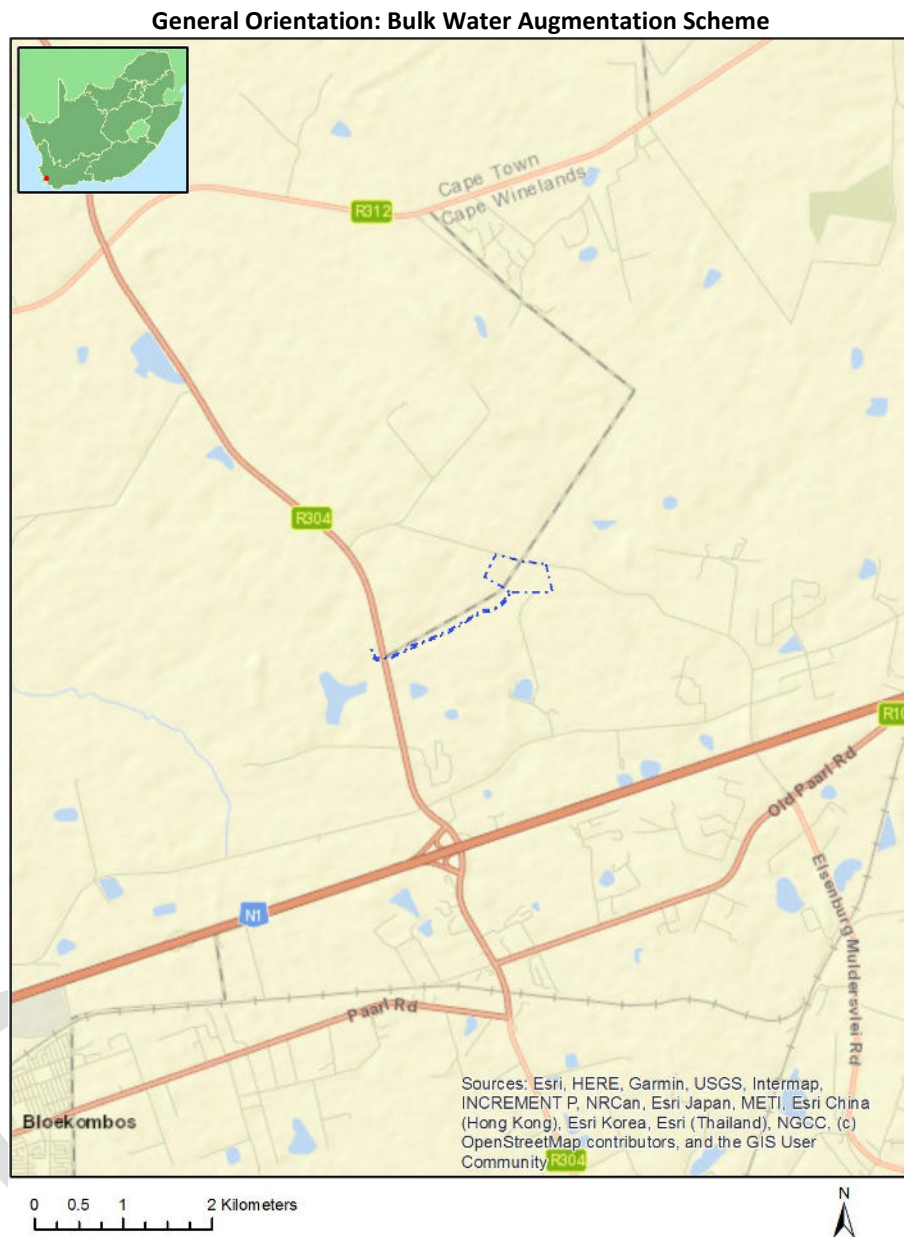
ZUTARI
IMPACT. ENGINEERED.

Table of Contents

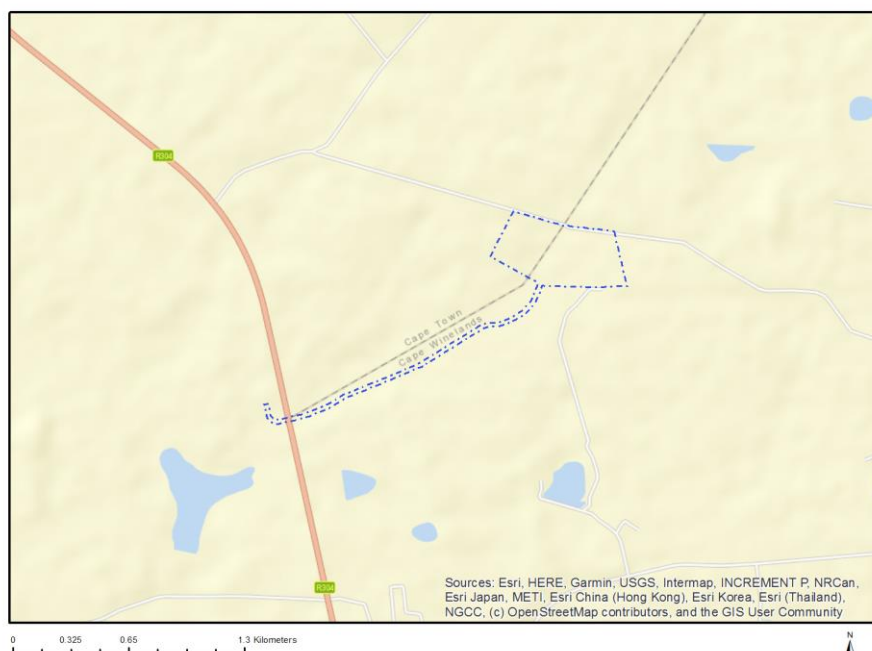
Proposed Project Location	3
Orientation map 1: General location	3
Map of proposed site and relevant area(s)	4
Cadastral details of the proposed site	4
Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area	5
Environmental Management Frameworks relevant to the application	5
Environmental screening results and assessment outcomes	5
Relevant development incentives, restrictions, exclusions or prohibitions	5
Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones	6
Proposed Development Area Environmental Sensitivity	6
Specialist assessments identified	7
Results of the environmental sensitivity of the proposed area	9
MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY	9
MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY	10
MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY	11
MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY	12
MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY	13
MAP OF RELATIVE DEFENCE THEME SENSITIVITY	14
MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY	15
MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY	16
MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY	20

Proposed Project Location

Orientation map 1: General location



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	WELTEVREDEN	721	0	33°48'27.92S	18°48'27.39E	Farm
2	HERCULES PILAAR	475	0	33°47'24.72S	18°47'44.88E	Farm
3		1370	0	33°48'5.45S	18°46'44.91E	Farm
4	WELTEVREDEN	719	0	33°48'33.44S	18°47'21.94E	Farm
5	WELTEVREDEN	719	0	33°47'33.56S	18°48'42.29E	Farm
6	WELTEVREDEN	719	3	33°48'33.38S	18°47'21.95E	Farm Portion
7	WELTEVREDEN	721	0	33°48'21.96S	18°48'1.45E	Farm Portion
8	HERCULES PILAAR	475	2	33°47'24.72S	18°47'44.88E	Farm Portion
9	WELTEVREDEN	719	2	33°47'33.56S	18°48'42.29E	Farm Portion
10		1370	0	33°48'3.55S	18°46'45.27E	Farm Portion
11	HERCULES PILAAR	475	12	33°47'43.45S	18°47'48.65E	Farm Portion

Development footprint¹ vertices:
No development footprint(s) specified.

¹ "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.

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

No nearby wind or solar developments found.

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 site as well as the most environmental sensitive features on the site based on the site sensitivity screening results for the application classification that was selected. The application classification selected for this report is:

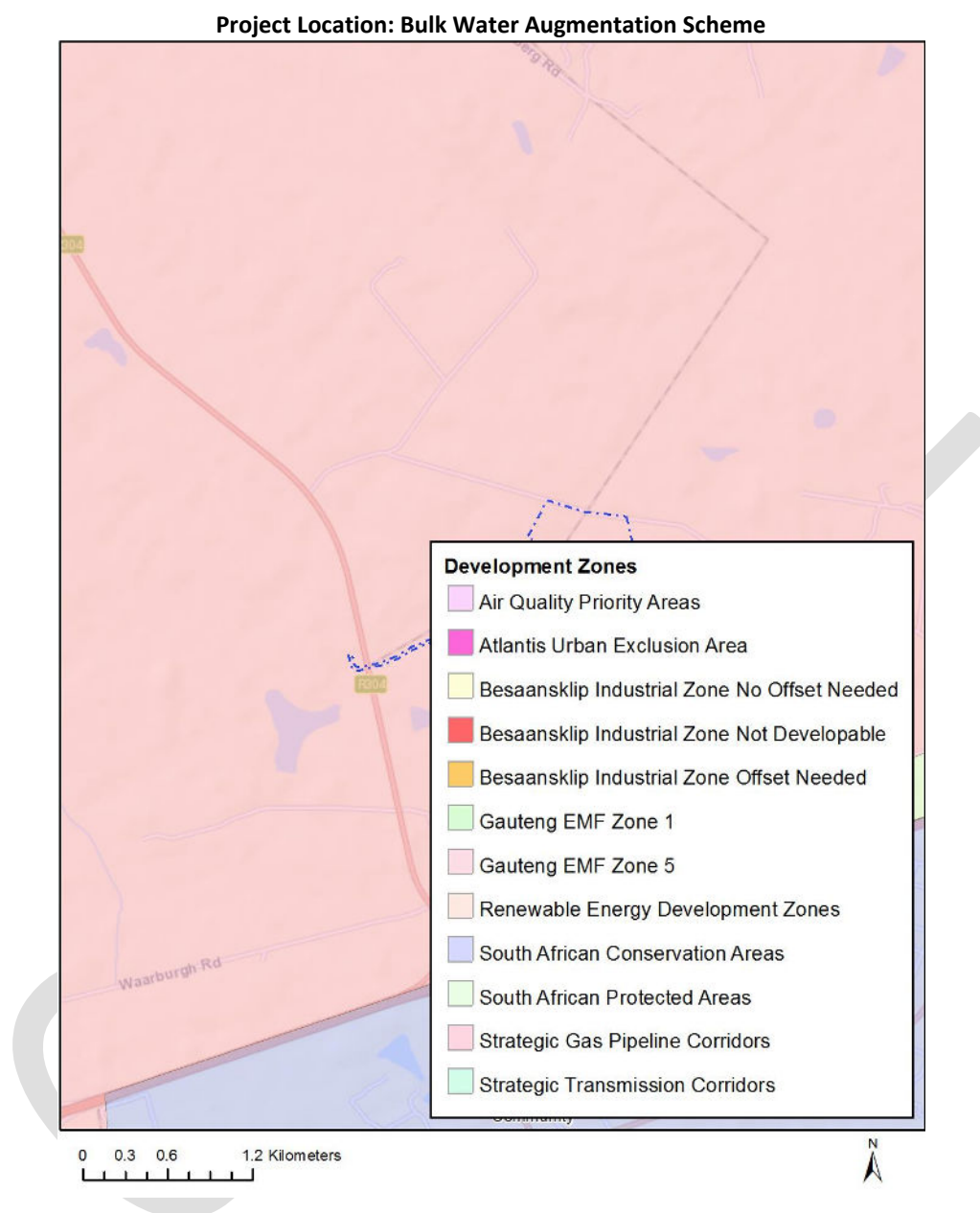
Any activities within or close to a watercourse.

Relevant development incentives, restrictions, exclusions or prohibitions

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

Incentive, restriction or prohibition	Implication
Strategic Transmission Corridor-Central corridor	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_EGI.pdf
Strategic Gas Pipeline Corridors-Phase 1a & 1b: Saldanha to Ankerlig and Saldanha to Mossel Bay	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_GAS.pdf

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



Proposed Development Area Environmental Sensitivity

The following summary of the development site 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
Agriculture Theme	X			
Animal Species Theme		X		

Aquatic Biodiversity Theme	X			
Archaeological and Cultural Heritage Theme	X			
Civil Aviation Theme		X		
Defence Theme			X	
Paleontology 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 site situation.

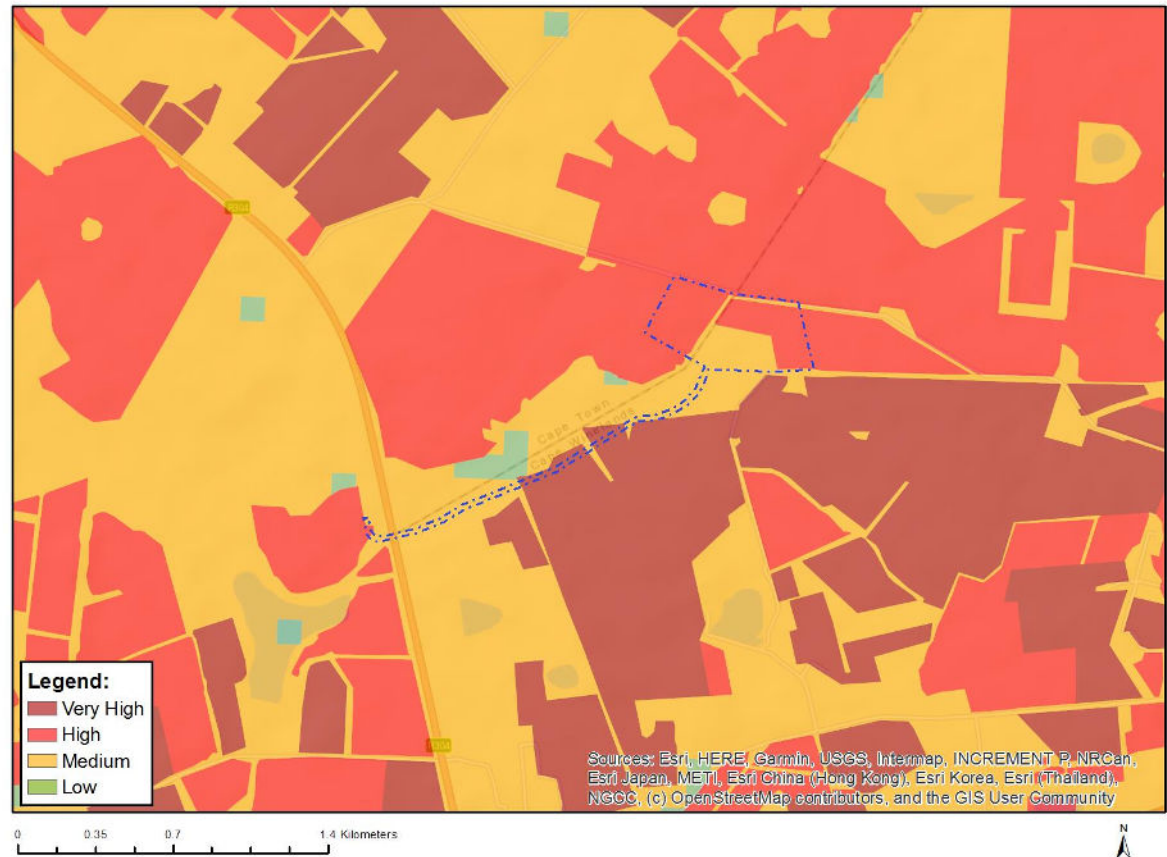
N o	Special ist assess ment	Assessment Protocol
1	Landscape/Visual Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
2	Archaeological and Cultural Heritage Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
3	Palaeontology Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
4	Terrestrial Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf
5	Aquatic Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf
6	Hydrology Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
7	Socio-Economic	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf

	Assessment	
8	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf
9	Animal Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Animal_Species_Assessment_Protocols.pdf

Results of the environmental sensitivity of the proposed area.

The following section represents the results of the screening for environmental sensitivity of the proposed site 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

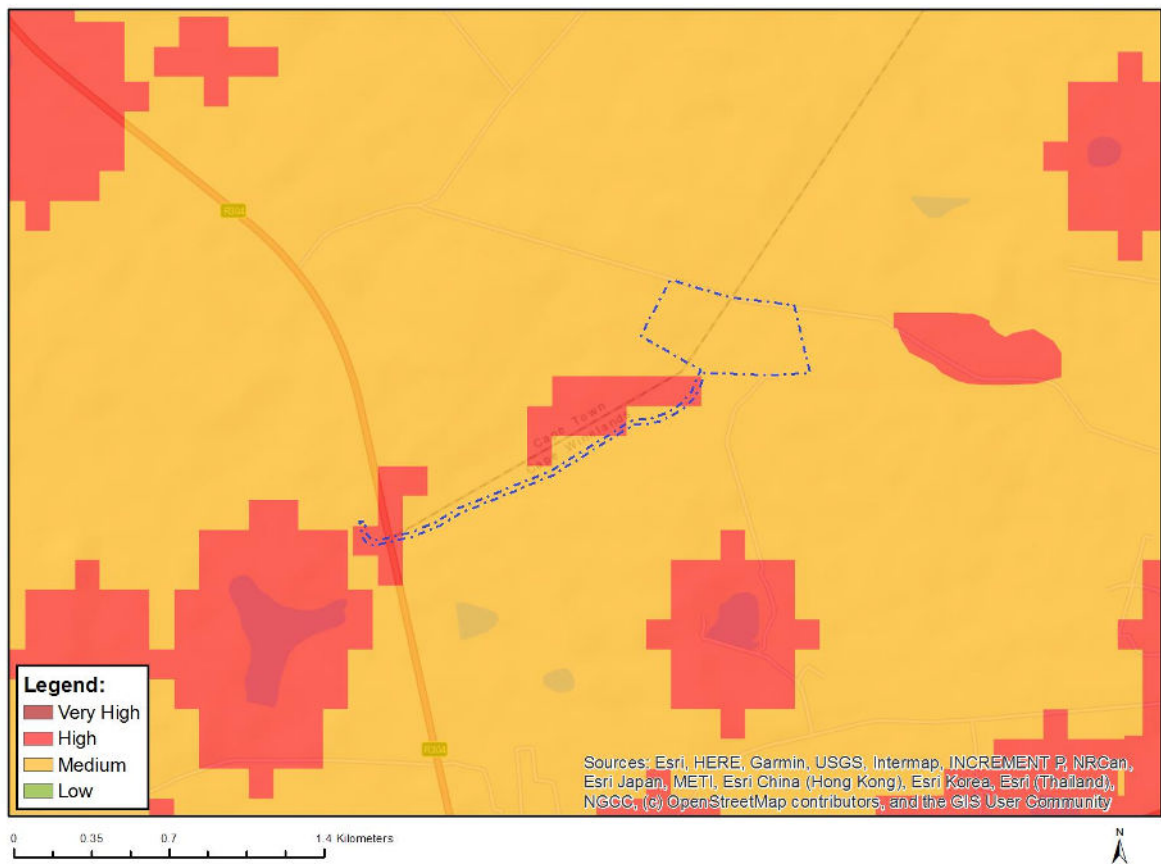


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
High	Annual Crop Cultivation / Planted Pastures Rotation;Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate
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



Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Aves-Sagittarius serpentarius
Medium	Invertebrate-Pachysoma aesculapius
Medium	Invertebrate-Conocephalus peringueyi
Medium	Invertebrate-Aneuryphymus montanus

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

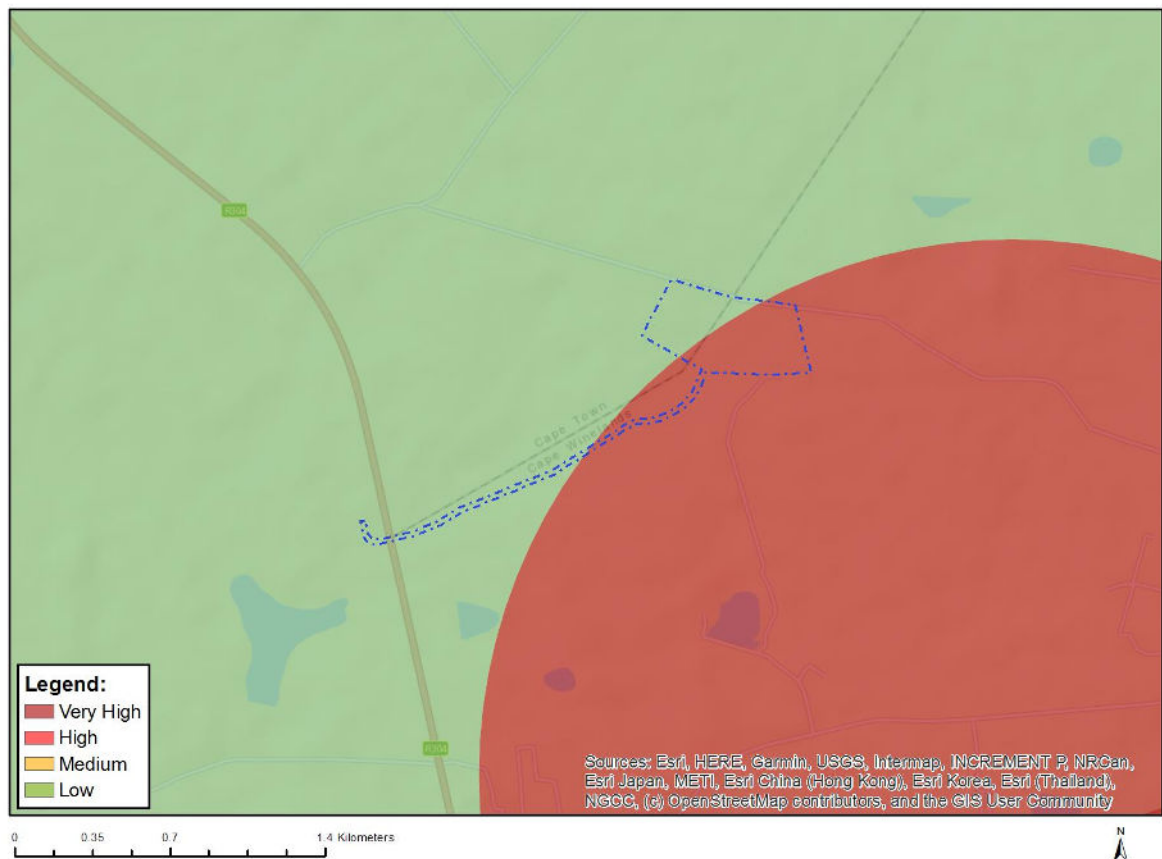


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity
Very High	Aquatic CBAs

MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY

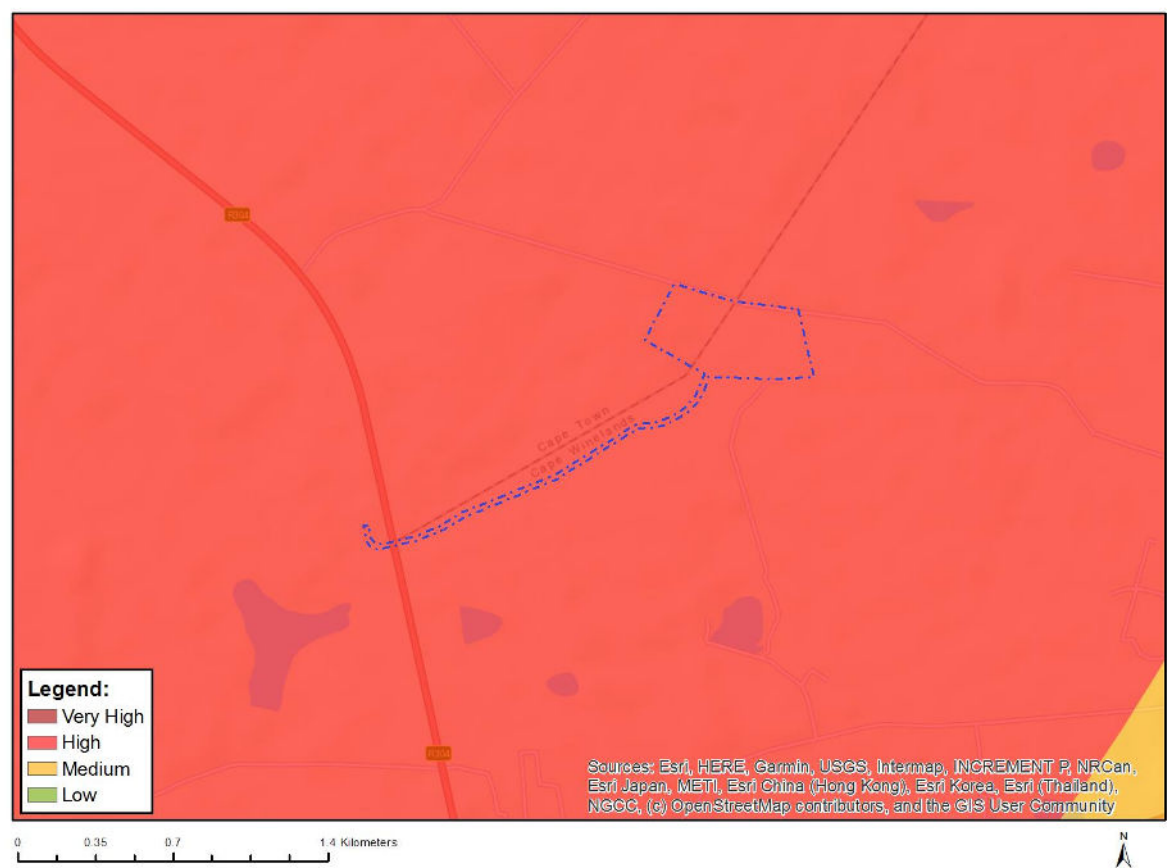


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity
Very High	Within 2km of a Grade II Heritage site

MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY

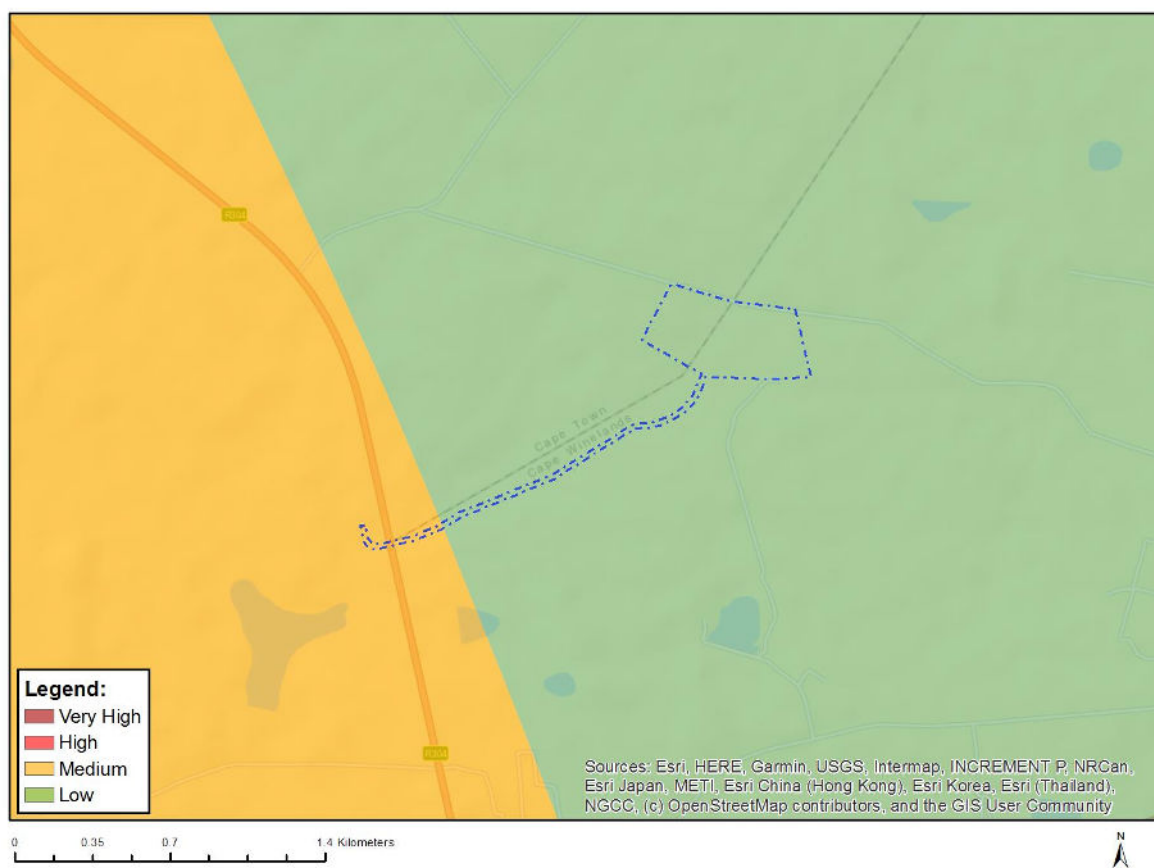


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Within 8 km of other civil aviation aerodrome
Medium	Between 15 and 35 km from a civil aviation radar
Medium	Between 15 and 35 km from a major civil aviation aerodrome

MAP OF RELATIVE DEFENCE THEME SENSITIVITY

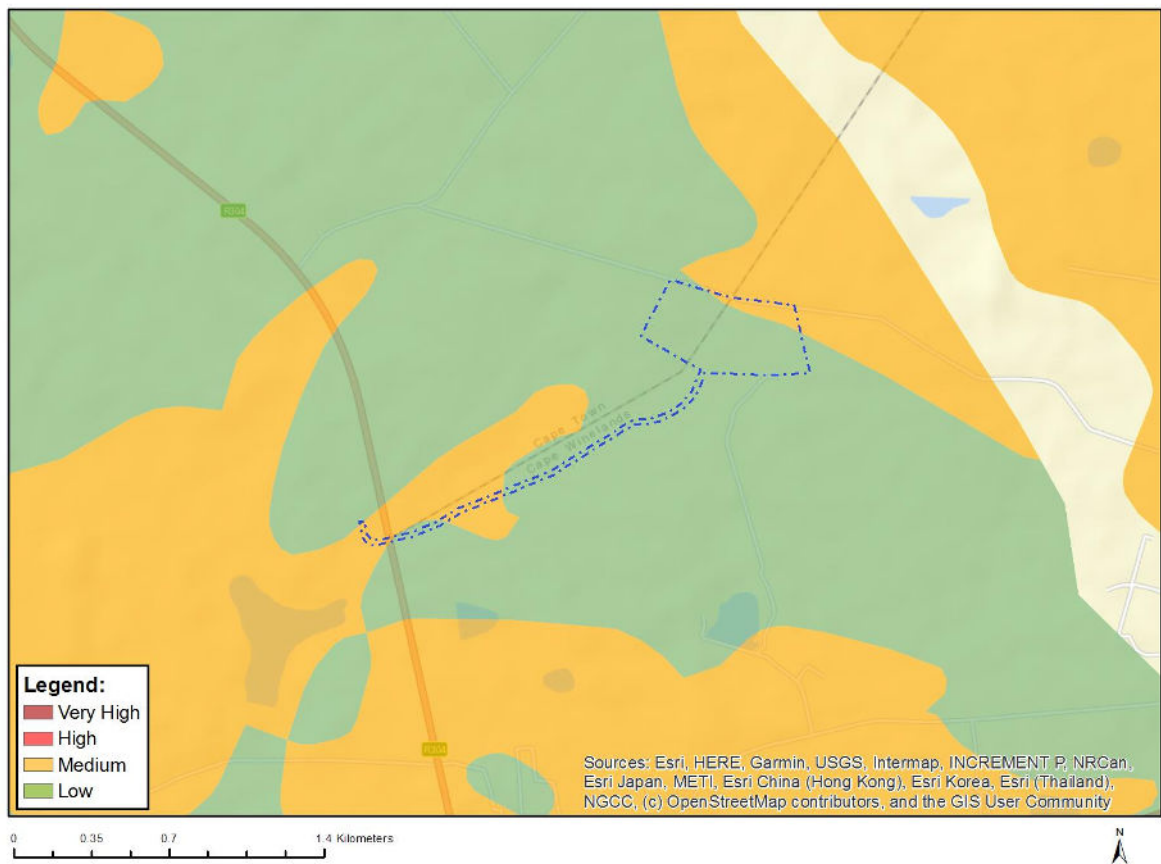


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity
Medium	Military and Defence Site

MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY

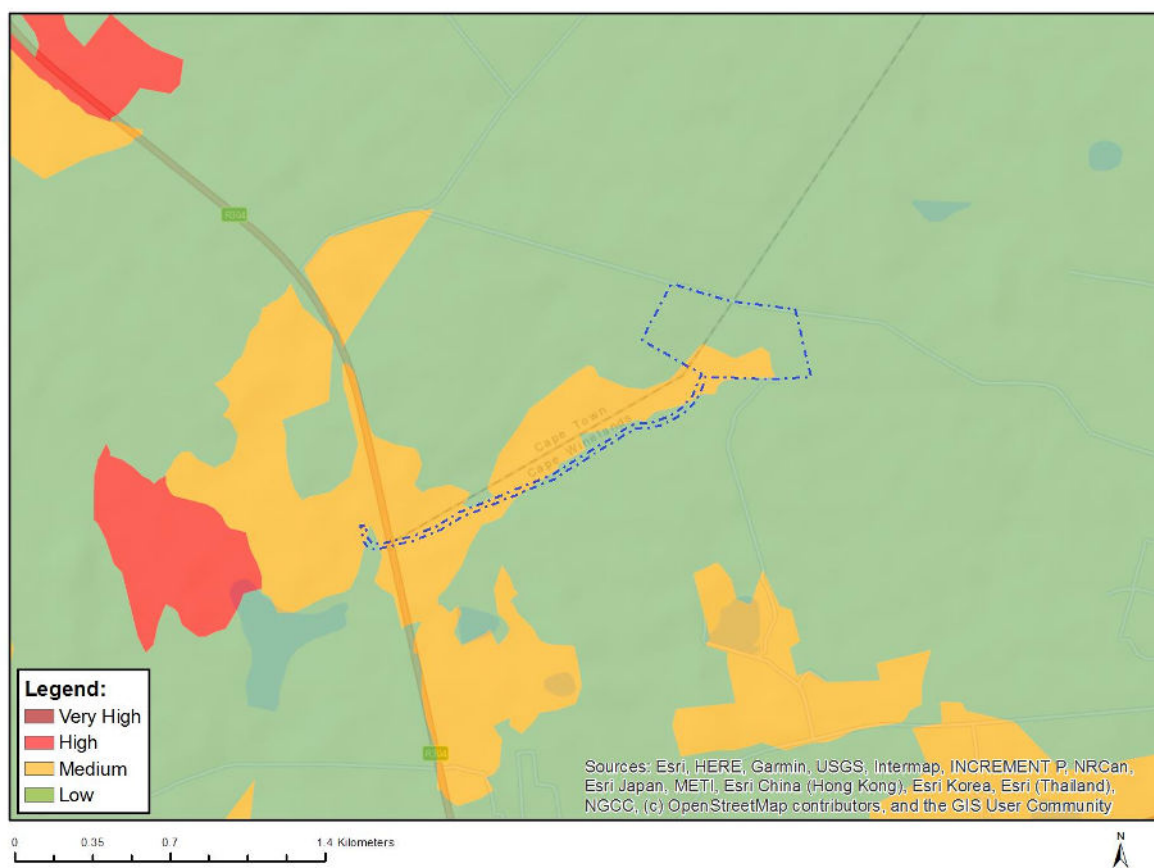


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Low	Features with a Low paleontological sensitivity
Medium	Features with a Medium paleontological sensitivity

MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

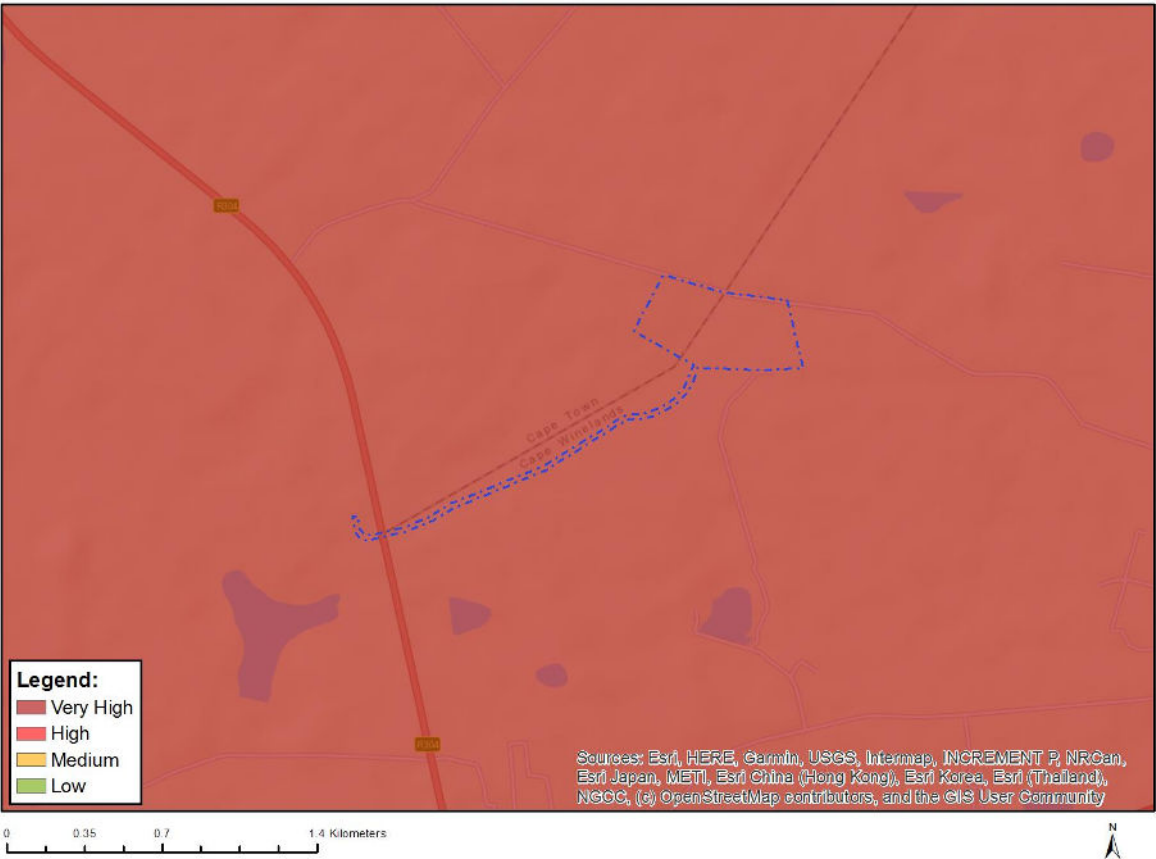
Sensitivity	Feature(s)
Low	Low Sensitivity
Medium	Lampranthus aureus
Medium	Lampranthus dilutus
Medium	Lampranthus filicaulis
Medium	Lampranthus leptaleon
Medium	Lampranthus peacockiae
Medium	Lampranthus scaber
Medium	Lampranthus sociorum
Medium	Lampranthus spiniformis
Medium	Antimima aristulata
Medium	Erepsia patula
Medium	Erepsia ramosa
Medium	Ruschia diversifolia

Medium	<i>Ruschia geminiflora</i>
Medium	<i>Ruschia schollii</i>
Medium	<i>Drosanthemum hispidifolium</i>
Medium	<i>Cephalophyllum parviflorum</i>
Medium	<i>Xiphotheca lanceolata</i>
Medium	<i>Liparia splendens</i> subsp. <i>splendens</i>
Medium	<i>Indigofera psoraloides</i>
Medium	<i>Aspalathus acanthophylla</i>
Medium	<i>Aspalathus aculeata</i>
Medium	<i>Aspalathus araneosa</i>
Medium	<i>Aspalathus attenuata</i>
Medium	<i>Aspalathus muraltioides</i>
Medium	<i>Aspalathus puberula</i>
Medium	<i>Aspalathus varians</i>
Medium	<i>Aspalathus crewiana</i>
Medium	<i>Rafnia lancea</i>
Medium	<i>Rafnia angulata</i> subsp. <i>ericifolia</i>
Medium	<i>Lebeckia plukenetiana</i>
Medium	<i>Podalyria argentea</i>
Medium	<i>Podalyria microphylla</i>
Medium	<i>Podalyria sericea</i>
Medium	<i>Leucadendron corymbosum</i>
Medium	<i>Leucadendron lanigerum</i> var. <i>lanigerum</i>
Medium	<i>Leucadendron stellare</i>
Medium	<i>Leucadendron verticillatum</i>
Medium	<i>Leucospermum grandiflorum</i>
Medium	<i>Leucospermum hypophyllocarpodendron</i> subsp. <i>canaliculatum</i>
Medium	<i>Leucospermum hypophyllocarpodendron</i> subsp. <i>hypophyllocarpodendron</i>
Medium	<i>Protea burchellii</i>
Medium	<i>Diastella proteoides</i>
Medium	<i>Serruria brownii</i>
Medium	<i>Serruria incrassata</i>
Medium	<i>Merciera tetraloba</i>
Medium	<i>Roella arenaria</i>
Medium	<i>Treichelia dodii</i>
Medium	<i>Pentameris bachmannii</i>
Medium	<i>Pentameris pholiuroides</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	<i>Hesperantha sufflava</i>
Medium	Sensitive species 14
Medium	Sensitive species 631
Medium	Sensitive species 331
Medium	Sensitive species 533
Medium	Sensitive species 975
Medium	Sensitive species 1134
Medium	Sensitive species 878
Medium	<i>Geissorhiza furva</i>
Medium	<i>Geissorhiza monanthos</i>
Medium	<i>Geissorhiza purpurascens</i>
Medium	<i>Geissorhiza radians</i>
Medium	<i>Geissorhiza setacea</i>
Medium	<i>Geissorhiza erosa</i>
Medium	<i>Sparaxis grandiflora</i> subsp. <i>grandiflora</i>
Medium	<i>Thereianthus bulbiferus</i>

Medium	<i>Ixia erubescens</i>
Medium	<i>Ixia rouxii</i>
Medium	Sensitive species 560
Medium	<i>Romulea eximia</i>
Medium	Sensitive species 1253
Medium	Sensitive species 1
Medium	Sensitive species 830
Medium	Sensitive species 1140
Medium	Sensitive species 995
Medium	Sensitive species 807
Medium	Sensitive species 863
Medium	Sensitive species 1266
Medium	<i>Pauridia alba</i>
Medium	<i>Pauridia canaliculata</i>
Medium	<i>Pauridia pygmaea</i>
Medium	<i>Monopsis variifolia</i>
Medium	<i>Oxalis falcata</i>
Medium	<i>Oxalis natans</i>
Medium	<i>Oxalis strigosa</i>
Medium	<i>Hermannia rugosa</i>
Medium	Sensitive species 769
Medium	Sensitive species 222
Medium	Sensitive species 444
Medium	Sensitive species 1240
Medium	Sensitive species 18
Medium	Sensitive species 259
Medium	Sensitive species 478
Medium	Sensitive species 756
Medium	<i>Adenogramma rigida</i>
Medium	<i>Wachendorfia brachyandra</i>
Medium	Sensitive species 847
Medium	<i>Isoetes capensis</i>
Medium	Sensitive species 133
Medium	<i>Trianoptiles solitaria</i>
Medium	<i>Elegia extensa</i>
Medium	<i>Hypodiscus rugosus</i>
Medium	<i>Restio duthieae</i>
Medium	<i>Restio papillosus</i>
Medium	<i>Anisodonteia biflora</i>
Medium	Sensitive species 985
Medium	Sensitive species 120
Medium	Sensitive species 266
Medium	<i>Pterygodium cruciferum</i>
Medium	<i>Pterygodium inversum</i>
Medium	<i>Gnidia spicata</i>
Medium	<i>Metalasia capitata</i>
Medium	<i>Metalasia octoflora</i>
Medium	<i>Marasmodes dummeri</i>
Medium	<i>Senecio cadiscus</i>
Medium	<i>Athanasia capitata</i>
Medium	<i>Athanasia crenata</i>
Medium	Sensitive species 1042
Medium	<i>Arctotheca forbesiana</i>
Medium	<i>Agathosma latipetala</i>
Medium	<i>Agathosma propinqua</i>
Medium	<i>Adenandra villosa</i> subsp. <i>biseriata</i>
Medium	<i>Macrostylis villosa</i> subsp. <i>villosa</i>
Medium	<i>Cliffortia acockii</i>
Medium	<i>Cliffortia hirta</i>
Medium	<i>Cliffortia marginata</i>

Medium	Muraltia decipiens
Medium	Muraltia macropetala
Medium	Sensitive species 1218
Medium	Sensitive species 262
Medium	Sensitive species 1135
Medium	Sensitive species 158
Medium	Sensitive species 1265
Medium	Sensitive species 723
Medium	Sensitive species 616
Medium	Wurmbea inusta
Medium	Phylica strigulosa
Medium	Phylica thunbergiana
Medium	Codonrhiza azurea
Medium	Lampranthus debilis
Medium	Lampranthus glaucus
Medium	Drosanthemum striatum
Medium	Xiphotheca reflexa
Medium	Psoralea alata
Medium	Aspalathus recurva
Medium	Aponogeton fugax
Medium	Sensitive species 593
Medium	Sensitive species 335
Medium	Sensitive species 599
Medium	Elegia squamosa
Medium	Restio paludosus
Medium	Restio rigoratus
Medium	Cotula pusilla
Medium	Perdicium capense
Medium	Sensitive species 1225

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Very High	Critical biodiveristy area 1
Very High	Ecological support area 2
Very High	Strategic Water Source Areas
Very High	Critically endangered ecosystem