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

EIA Reference number: 16/3/3/1/F5/5/2016/24

Project name: Darling Solar PVProject title: Darling Solar PV

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Applicant: Swartland Municipality

Compiler: Clinton Geyser - EnviroAfrica

Compiler signature:

Application Category: Utilities Infrastructure | Electricity | Generation | Renewable | Solar | PV

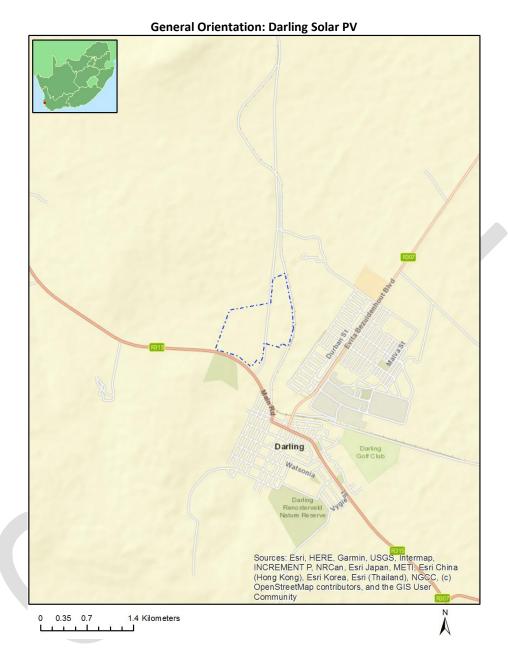


Table of Contents

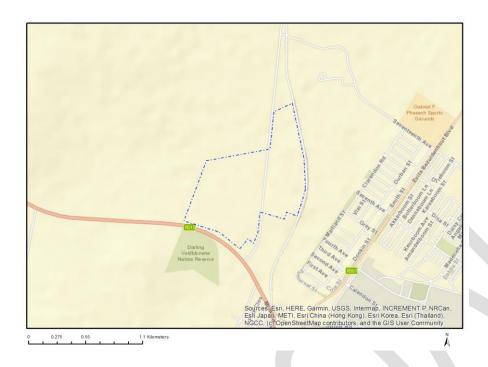
P	roposed Project Location	3
	Orientation map 1: General location	3
١	Nap of proposed site and relevant area(s)	4
	Cadastral details of the proposed site	4
	Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area	4
	Environmental Management Frameworks relevant to the application	5
E	nvironmental screening results and assessment outcomes	5
	Relevant development incentives, restrictions, exclusions or prohibitions	5
	Proposed Development Area Environmental Sensitivity	
	Specialist assessments identified	6
R	esults of the environmental sensitivity of the proposed area	8
	MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY	
	MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY	
	MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY	10
	MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY	
	MAP OF RELATIVE AVIAN THEME SENSITIVITY	12
	MAP OF RELATIVE CIVIL AVIATION (SOLAR PV) THEME SENSITIVITY	13
	MAP OF RELATIVE DEFENCE THEME SENSITIVITY	14
	MAP OF RELATIVE LANDSCAPE (SOLAR) THEME SENSITIVITY	15
	MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY	16
	MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY	17
	MAP OF RELATIVE RFI THEME SENSITIVITY	20
	MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY	21

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	DARLING	552	0	33°21'56.57S	18°22'53.96E	Erven
2	DARLING	551	0	33°21'59.5S	18°22'34.06E	Erven
3	DARLING	551	0	33°21'56.3S	18°22'34.95E	Erven

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

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	12/12/20/1302/AM5	Wind	Approved	28.8
2	14/12/16/3/3/1/2342	Wind	Approved	11.8
3	12/12/20/2217/AM3	Wind	Approved	14.3
4	12/12/20/1928	Wind	Approved	11.8
5	14/12/16/3/3/2/779	Wind	Approved	8.2

¹ "development footprint", means the area within the site on which the development will take place and incudes 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.

6	12/12/20/2217	Wind	Approved	13
7	12/12/20/1582/AM3	Wind	Approved	3.9
8	12/12/20/2638	Wind	Approved	16.2
9	12/12/20/2393	Solar PV	Approved	14.3
10	12/12/20/1582/AM4	Wind	Approved	3.9
11	12/12/20/2393/AM2	Solar PV	Approved	14.3
12	12/12/20/1582	Wind	Approved	3.9
13	12/12/20/2638/AM2	Wind	Approved	16.2
14	12/12/20/1985	Solar PV	Approved	14.6
15	12/12/20/2638/AM3	Wind	Approved	16.2
16	12/12/20/1302	Wind	Approved	28.8
17	12/12/20/2217/AM2	Wind	Approved	14.3
18	12/12/20/1582/A1	Wind	Approved	3.9
19	12/12/20/1582/AM2	Wind	Approved	3.9

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:

Utilities Infrastructure | Electricity | Generation | Renewable | Solar | PV.

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	Implication
or prohibition	
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
South African Conservation Areas	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/SACAD OR 2023 Q3 Metadata.pdf
Main Electricity Distribution Substation	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Distribution Transmission.pdf

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		Χ		
Animal Species Theme		Χ		
Aquatic Biodiversity Theme				X
Archaeological and Cultural				Х
Heritage Theme				
Avian Theme				X
Civil Aviation (Solar PV)				Х
Theme				
Defence Theme				Х
Landscape (Solar) Theme	Х			
Paleontology Theme			Х	
Plant Species Theme			X	
RFI Theme				X
Terrestrial Biodiversity Theme	Х			

Specialist assessments identified

Based on the selected classification, and the known impacts associated with the proposed development, 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.

No	Specialist	Assessment Protocol
	assessment	
1	Agricultural Impact	https://screening.environment.gov.za/ScreeningDownloads/Asse
	Assessment	ssmentProtocols/Gazetted WindAndSolar Agriculture Assessme
		nt Protocols.pdf
2	Landscape/Visual Impact	https://screening.environment.gov.za/ScreeningDownloads/Asse
	Assessment	ssmentProtocols/Gazetted General Requirement Assessment P
		<u>rotocols.pdf</u>
3	Archaeological and	https://screening.environment.gov.za/ScreeningDownloads/Asse
	Cultural Heritage Impact	ssmentProtocols/Gazetted General Requirement Assessment P
	Assessment	<u>rotocols.pdf</u>
4	Palaeontology Impact	https://screening.environment.gov.za/ScreeningDownloads/Asse
	Assessment	ssmentProtocols/Gazetted General Requirement Assessment P
		<u>rotocols.pdf</u>
5	5 Terrestrial Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse
		ssmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_
		<u>Protocols.pdf</u>
6	Aquatic Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse
		ssmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Pr
		<u>otocols.pdf</u>
7	Civil Aviation Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse
		ssmentProtocols/Gazetted_Civil_Aviation_Installations_Assessme
		nt_Protocols.pdf
8	Defense Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse

		ssmentProtocols/Gazetted Defence Installations Assessment Pr otocols.pdf
9	RFI Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
10	Geotechnical Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
11	Socio-Economic Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
12	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Plant Species Assessment Protocols.pdf
13	Animal Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse ssmentProtocols/Gazetted Animal Species Assessment Protoco ls.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.

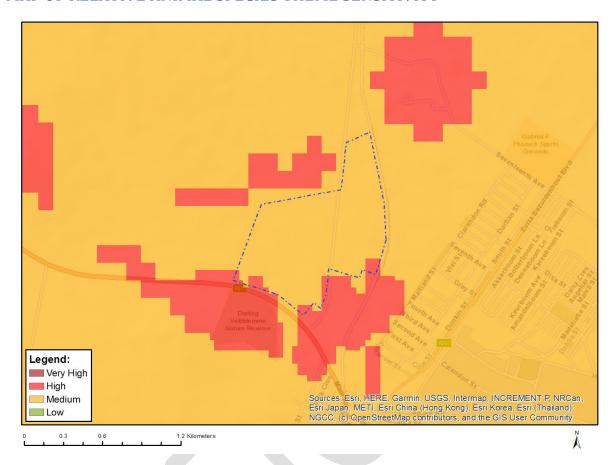
MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity	Feature(s)	
High Land capability;09. Moderate-High/10. Moderate-High		
High	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	

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY

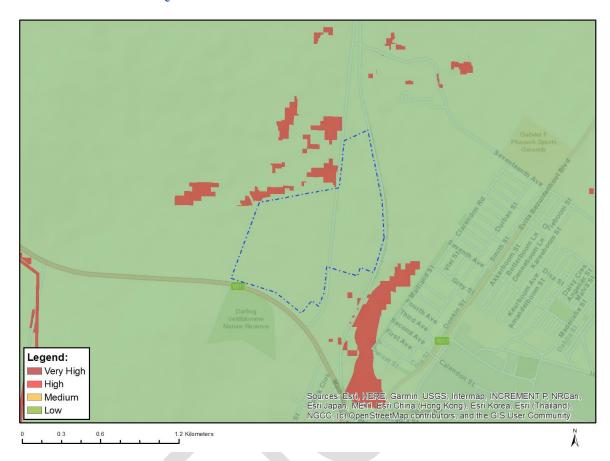


Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their 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	itivity Feature(s)	
High	Aves-Circus maurus	
High	Aves-Falco biarmicus	
High	Aves-Afrotis afra	
Medium	Insecta-Stygionympha dicksoni	
Medium	Insecta-Trimenia wallengrenii wallengrenii	
Medium	Invertebrate-Pachysoma aesculapius	
Medium	Invertebrate-Bullacris obliqua	

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low sensitivity	

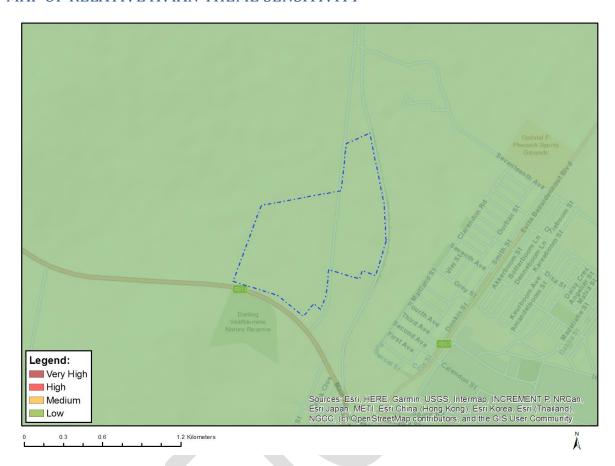
MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low sensitivity	

MAP OF RELATIVE AVIAN THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low Sensitivity	

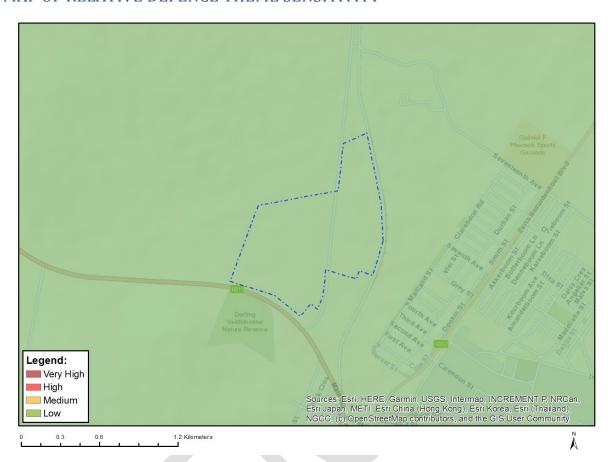
MAP OF RELATIVE CIVIL AVIATION (SOLAR PV) THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)
Low	No major or other types of civil aviation aerodromes

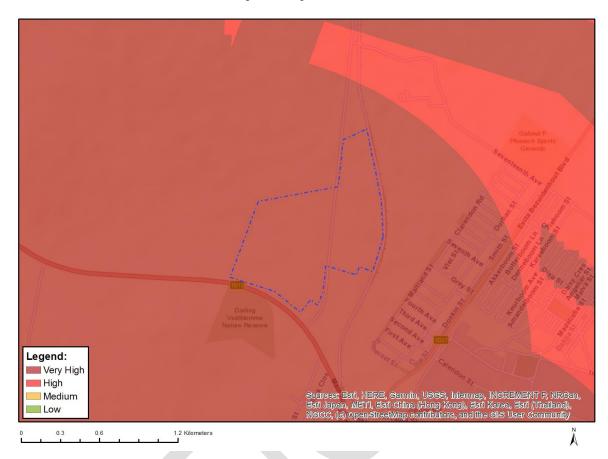
MAP OF RELATIVE DEFENCE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low sensitivity	

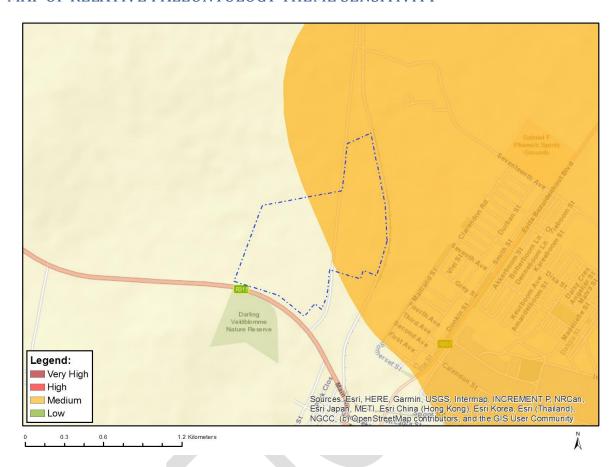
MAP OF RELATIVE LANDSCAPE (SOLAR) THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)	
Very High	Within 1.5 km of a nature reserve	

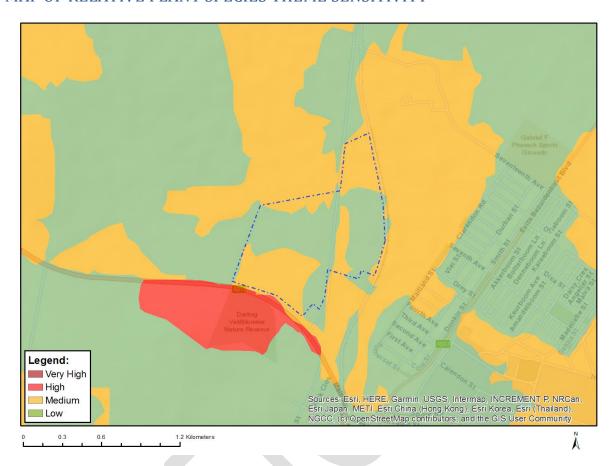
MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

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

MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



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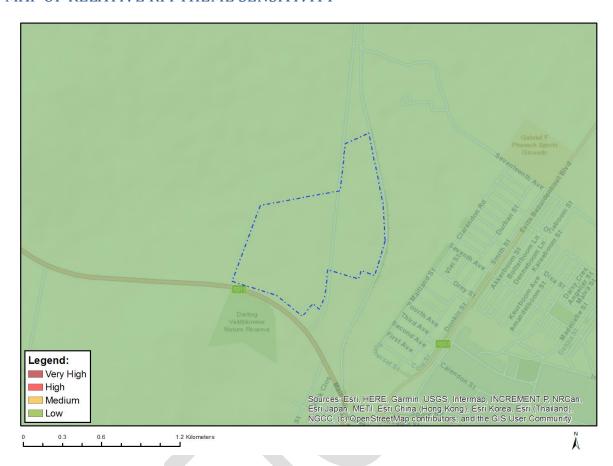
Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		Х	

Sensitivity	Feature(s)
Low	Low Sensitivity
Medium	Lampranthus amoenus
Medium	Lampranthus aureus
Medium	Lampranthus coccineus
Medium	Lampranthus dilutus
Medium	Lampranthus filicaulis
Medium	Lampranthus leptaleon
Medium	Lampranthus peacockiae
Medium	Lampranthus scaber
Medium	Lampranthus sociorum
Medium	Lampranthus spiniformis
Medium	Sensitive species 210
Medium	Antimima mucronata

Medium	Antimima aristulata
Medium	Erepsia hallii
Medium	Erepsia patula
Medium	Cleretum clavatum
Medium	Ruschia diversifolia
Medium	Ruschia geminiflora
Medium	Ruschia langebaanensis
Medium	Drosanthemum hispifolium
Medium	Cephalophyllum parviflorum
Medium	Xiphotheca lanceolata
Medium	Aspalathus acanthophylla
Medium	Aspalathus aculeata
Medium	Aspalathus glabrata
Medium	Aspalathus lotoides subsp. lagopus
Medium	Aspalathus lotoides subsp. lotoides
Medium	Aspalathus stricticlada
Medium	Lebeckia plukenetiana
Medium	Podalyria sericea
Medium	Leucadendron lanigerum var. lanigerum
Medium	Leucospermum hypophyllocarpodendron subsp. canaliculatum
Medium	Leucospermum tomentosum
Medium	Protea burchellii
Medium	Roella arenaria
Medium	Microdon capitatus
Medium	Manulea corymbosa
Medium	Lobostemon capitatus
Medium	Echiostachys spicatus
Medium	Sensitive species 267
Medium	Sensitive species 631
Medium	Sensitive species 703
Medium	
Medium	Sensitive species 919 Sensitive species 1134
Medium	
Medium	Sensitive species 878
Medium	Geissorhiza darlingensis
	Geissorhiza eurystigma
Medium	Geissorhiza monanthos
Medium	Geissorhiza radians
Medium	Sparaxis parviflora
Medium	lxia abbreviata
Medium	Ixia curta
Medium	Ixia monadelpha
Medium	Ixia aurea
Medium	Ixia fuscocitrina
Medium	Romulea eximia
Medium	Sensitive species 995
Medium	Pauridia alba
Medium	Pauridia canaliculata
Medium	Pauridia pygmaea
Medium	Oxalis stictocheila
Medium	Hermannia procumbens subsp. myrrhifolia
Medium	Sensitive species 222
Medium	Sensitive species 324
Medium	Sensitive species 478
Medium	Sensitive species 756
Medium	Adenogramma rigida
Medium	Wachendorfia brachyandra
Medium	Sensitive species 133
Medium	Anisodontea biflora
Medium	Sensitive species 985
Medium	Pterygodium cruciferum
	. —

Medium	Pterygodium inversum
Medium	Metalasia capitata
Medium	Metalasia octoflora
Medium	Senecio cadiscus
Medium	Athanasia rugulosa
Medium	Sensitive species 1042
Medium	Agathosma glandulosa
Medium	Agathosma latipetala
Medium	Adenandra villosa subsp. biseriata
Medium	Macrostylis villosa subsp. villosa
Medium	Limonium purpuratum
Medium	Muraltia macropetala
Medium	Sensitive species 782
Medium	Sensitive species 158
Medium	Sensitive species 616
Medium	Wurmbea capensis
Medium	Phylica stenopetala var. stenopetala
Medium	Phylica strigulosa
Medium	Phylica thunbergiana
Medium	Ezoloba macrocarpa
Medium	Lampranthus debilis
Medium	Lampranthus glaucus
Medium	Xiphotheca reflexa
Medium	Aponogeton fugax
Medium	Sensitive species 593
Medium	Sensitive species 335
Medium	Sensitive species 599
Medium	Restio rigoratus
Medium	Cotula pusilla
Medium	Sensitive species 1225

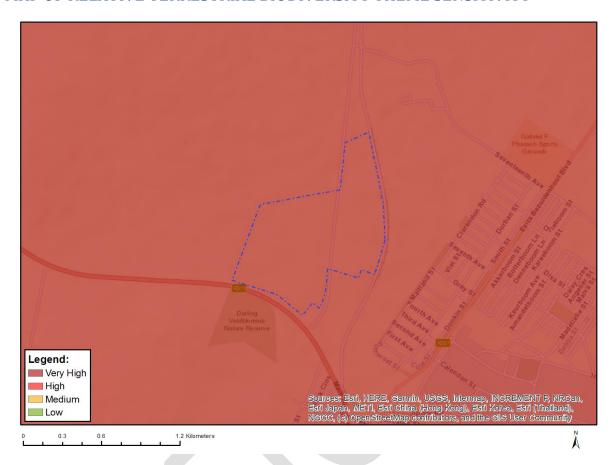
MAP OF RELATIVE RFI THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low sensitivity	

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)	
Very High	ESA 2: Restore from other land use	
Very High	CBA 1: Terrestrial	
Very High	EN_Swartland Granite Renosterveld	