

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

EIA Reference number: DEA&DP REF: 16/3/3/2/A3/54/2018/24

Project name: PAARDEVLEI SOLAR PV & BATTERY ENERGY STORAGE SYSTEM PROJECT

Project title: PAARDEVLEI SOLAR PV & BATTERY ENERGY STORAGE SYSTEM PROJECT

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

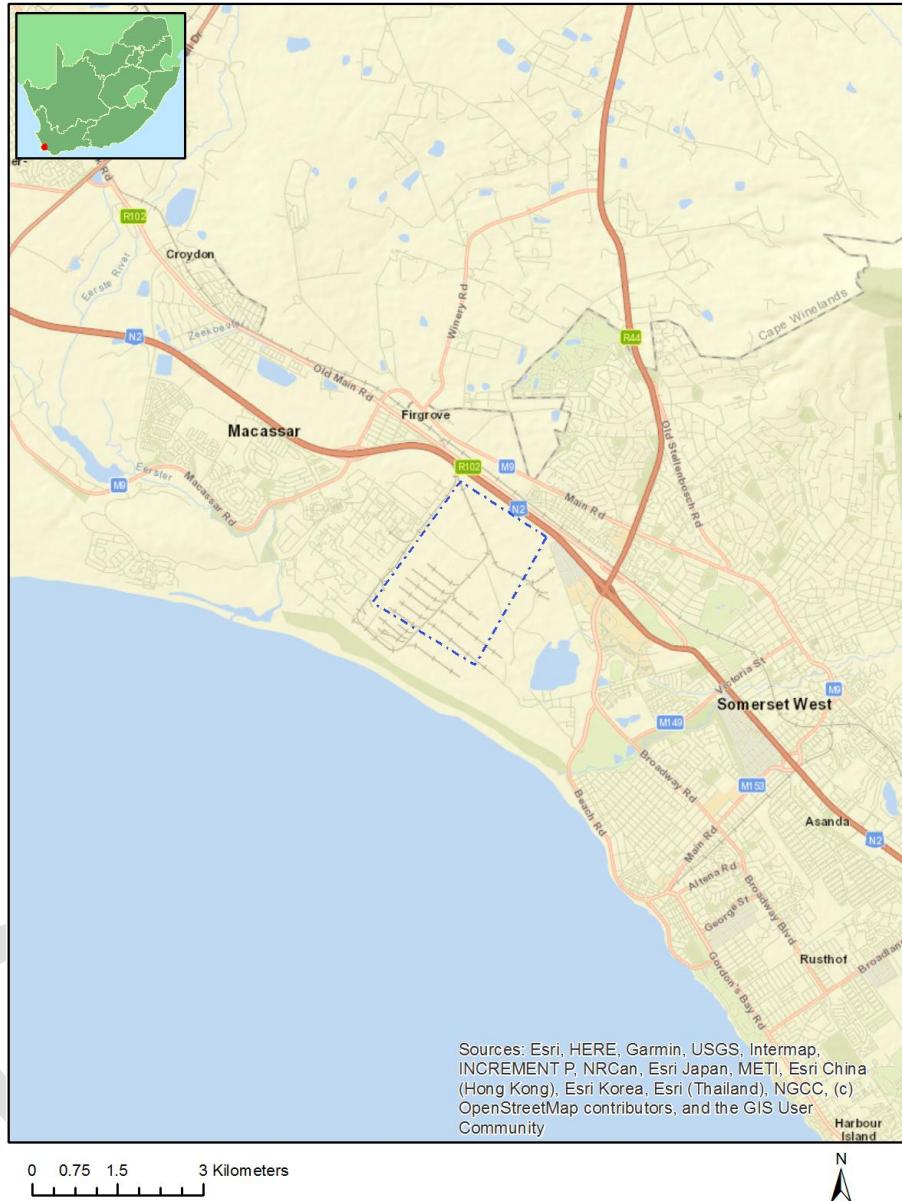
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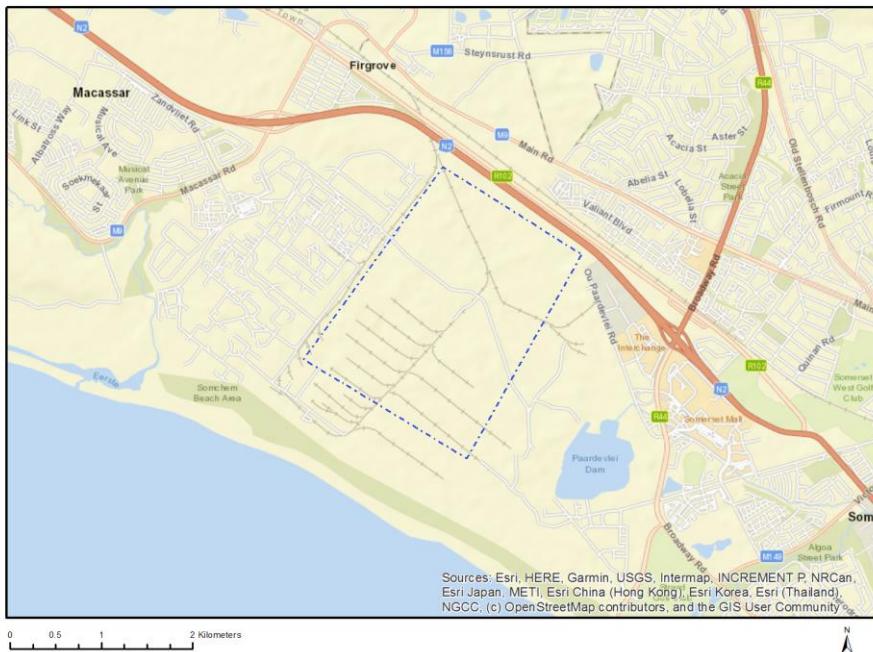
Proposed Project Location

Orientation map 1: General location

General Orientation: PAARDEVLEI SOLAR PV & BATTERY ENERGY STORAGE SYSTEM PROJECT



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	SOMERSET WEST	18762	0	34°4'45.73S	18°47'23.42E	Erven
2	FIRGROVE	635	0	34°4'26.03S	18°46'53.2E	Erven
3	FIRGROVE	635	0	34°4'26.49S	18°46'53.22E	Erven
4	HELDERBERG SLEEPER PLANTATION	787	0	34°4'11.7S	18°47'52.12E	Farm
5		794	0	34°4'53.14S	18°48'43.37E	Farm
6		792	0	34°4'44.31S	18°47'27.88E	Farm
7		794	38	34°4'52.68S	18°48'3.99E	Farm Portion
8	HELDERBERG SLEEPER PLANTATION	787	11	34°4'3.58S	18°47'58.72E	Farm Portion
9		794	37	34°4'12.53S	18°48'25.19E	Farm Portion
10		792	0	34°4'45.62S	18°47'28.02E	Farm Portion
11		794	37	34°4'11.28S	18°48'24.89E	Farm Portion
12	HELDERBERG SLEEPER PLANTATION	787	10	34°4'26.25S	18°47'38.96E	Farm Portion
13		794	139	34°4'11.11S	18°48'35.76E	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:

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 or prohibition	Implication
Strategic Transmission Corridor-Central corridor	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_EGI.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		X		
Animal Species Theme		X		
Aquatic Biodiversity Theme	X			
Archaeological and Cultural Heritage Theme	X			
Avian Theme				X
Civil Aviation (Solar PV) Theme				X

Defence Theme				X
Landscape (Solar) Theme	X			
Paleontology Theme	X			
Plant Species Theme			X	
RFI Theme			X	
Terrestrial Biodiversity Theme	X			

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	Assessment Protocol
1	Agricultural Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_WindAndSolar_Agriculture_Assessment_Protocols.pdf
2	Landscape/Visual Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
3	Archaeological and Cultural Heritage Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
4	Palaeontology Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
5	Terrestrial Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf
6	Aquatic Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf
7	Civil Aviation Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Civil_Aviation_Installations_Assessment_Protocols.pdf
8	Defense Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Defence_Installations_Assessment_Protocols.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_General_Requirement_Assessment_Protocols.pdf

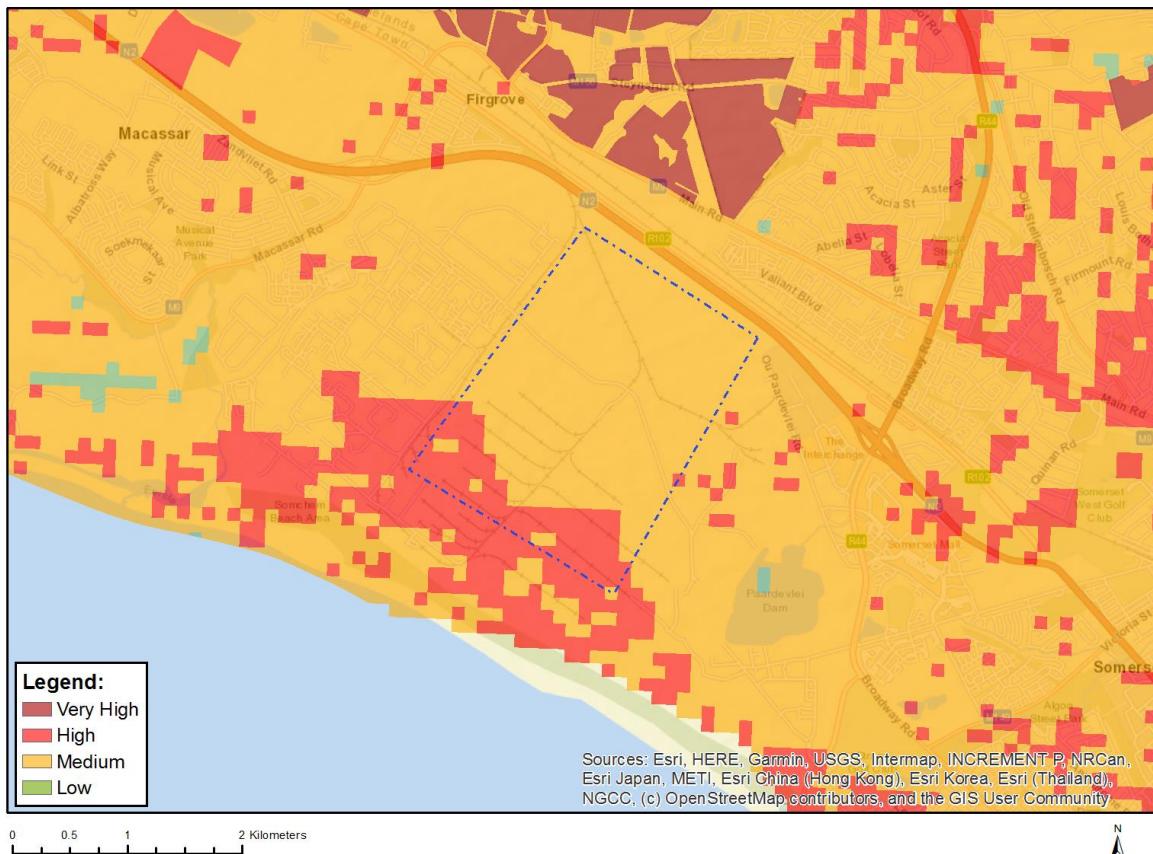
		<u>ssmentProtocols/Gazetted_Plant_Species_Assessment_Proto</u> <u>cols.pdf</u>
13	Animal Species Assessment	<u>https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Animal_Species_Assessment_Proocols.pdf</u>

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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

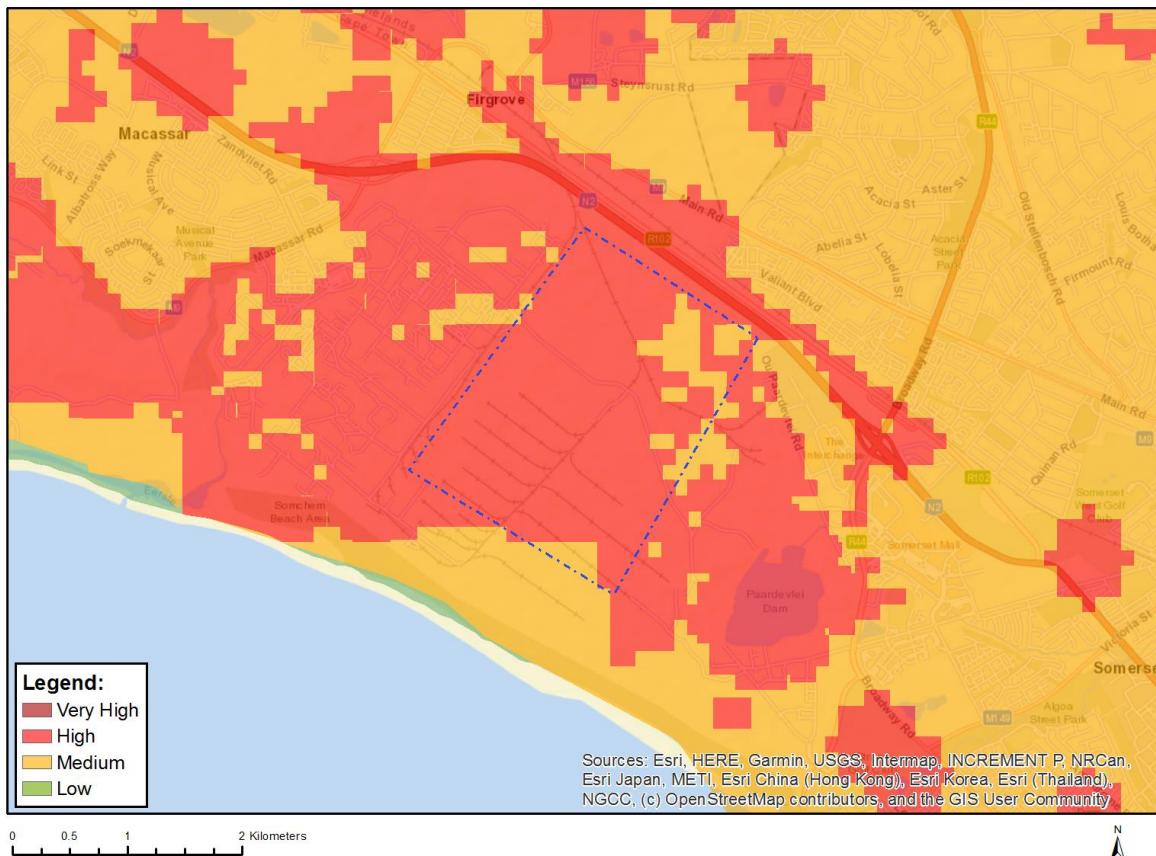


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Land capability;09. Moderate-High/10. Moderate-High
Medium	Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



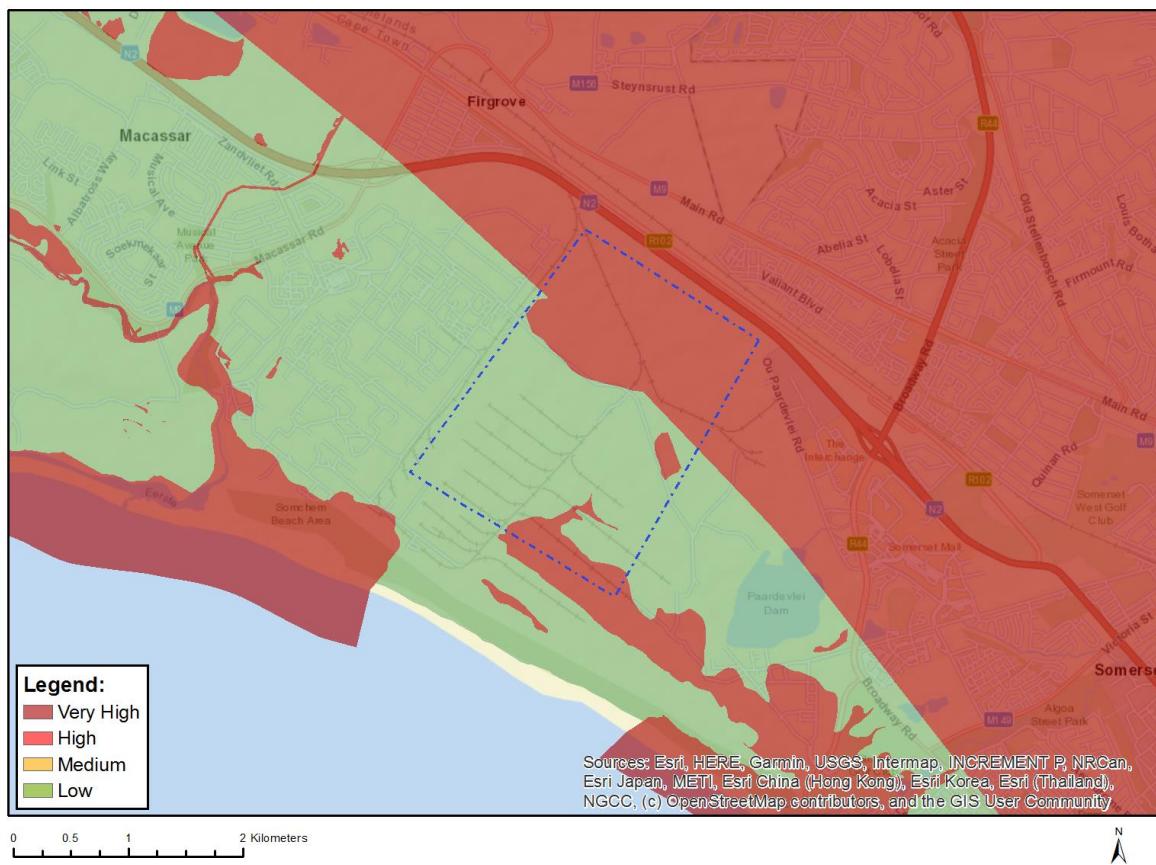
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their 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 Features:

Sensitivity	Feature(s)
High	Aves-Polemaetus bellicosus
High	Aves-Circus ranivorus
High	Aves-Circus maurus
Medium	Aves-Circus maurus
Medium	Aves-Turnix hottentottus
Medium	Aves-Afrrotis afra
Medium	Aves-Sarothrura affinis
Medium	Invertebrate-Frankenbergerius opacus
Medium	Invertebrate-Pachysoma aesculapius
Medium	Invertebrate-Aneuryphymus montanus

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

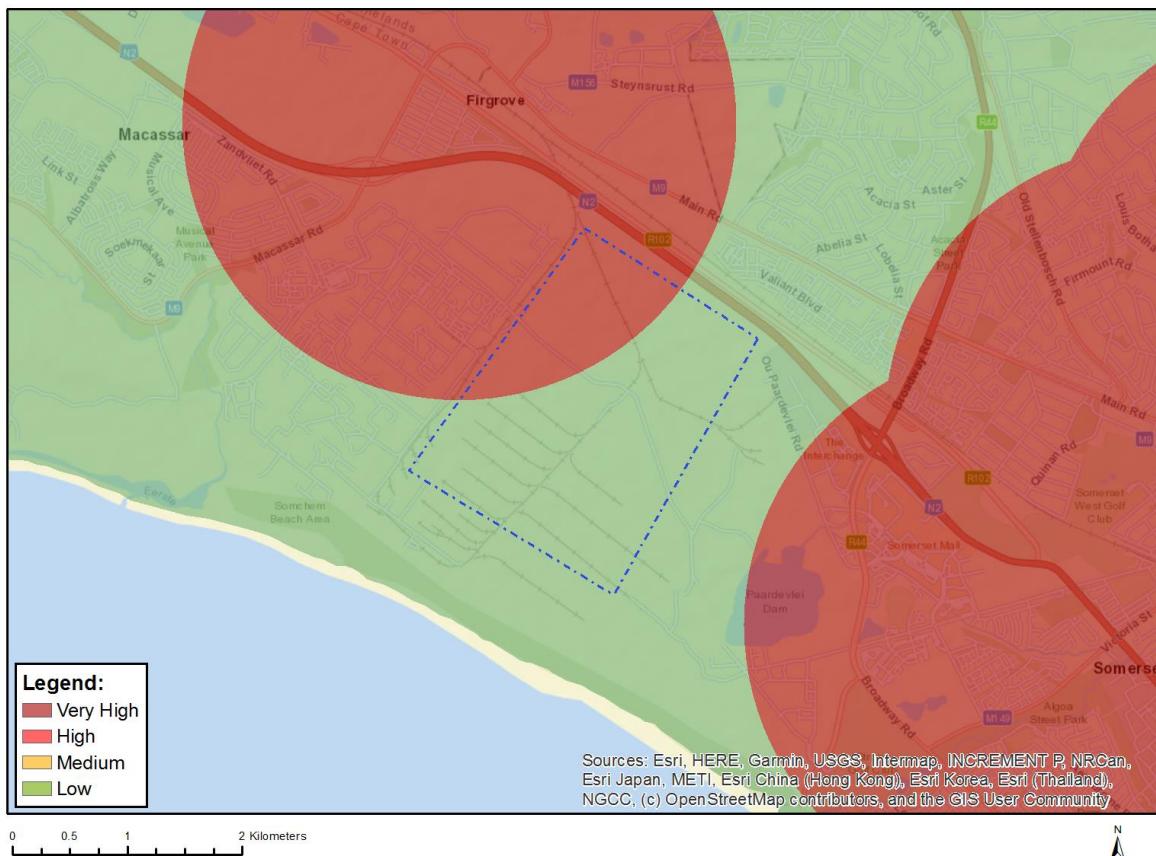


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity
Very High	Estuary_Lourens
Very High	SWSA (SW)_Boland
Very High	Wetlands_(Estuary)
Very High	Wetlands_Southwest Fynbos Bioregion (Floodplain)

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 AVIAN THEME SENSITIVITY

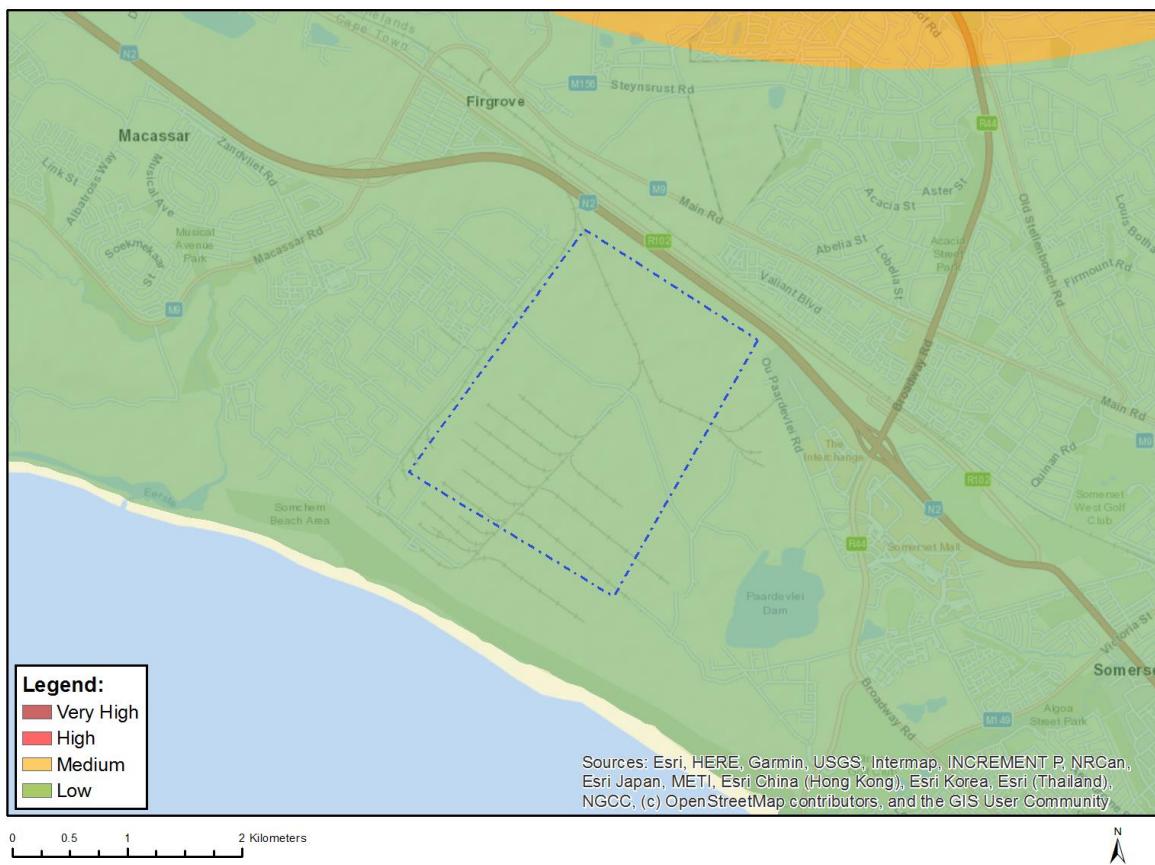


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

MAP OF RELATIVE CIVIL AVIATION (SOLAR PV) THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

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

MAP OF RELATIVE DEFENCE THEME SENSITIVITY

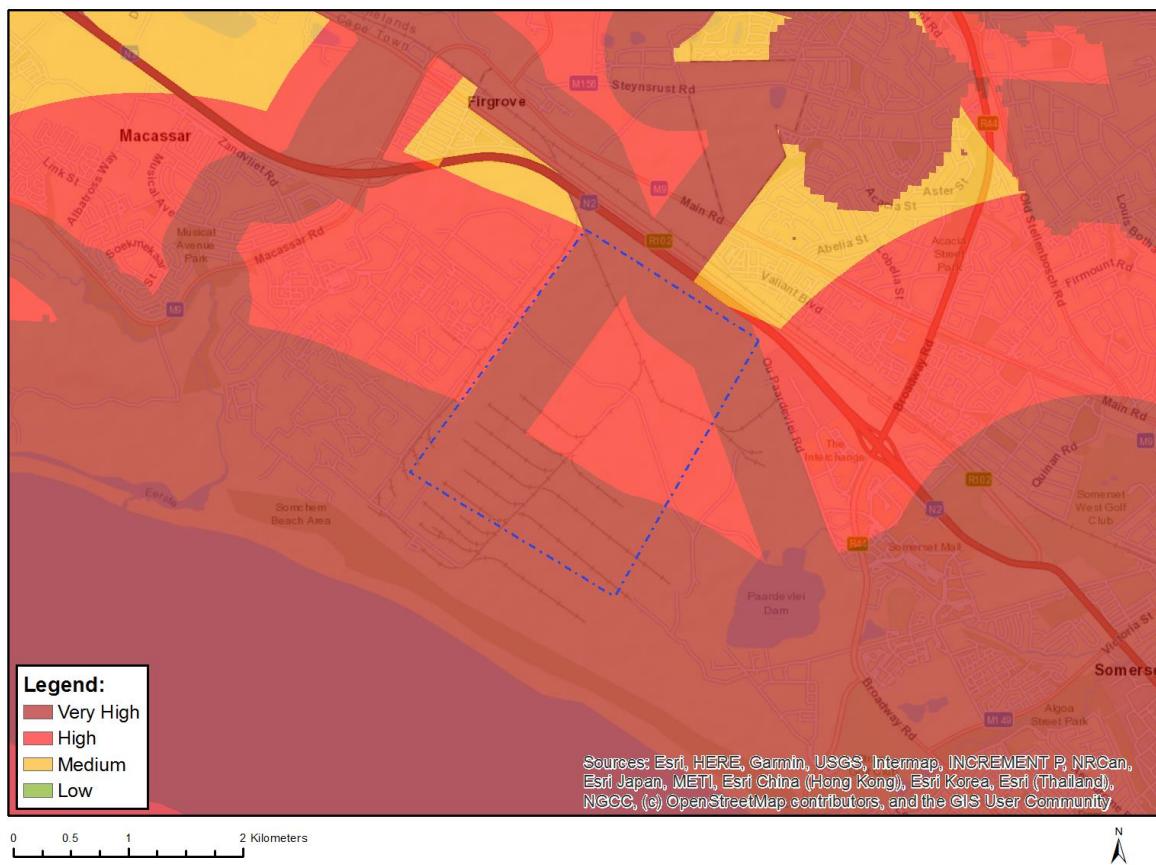


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

MAP OF RELATIVE LANDSCAPE (SOLAR) THEME SENSITIVITY

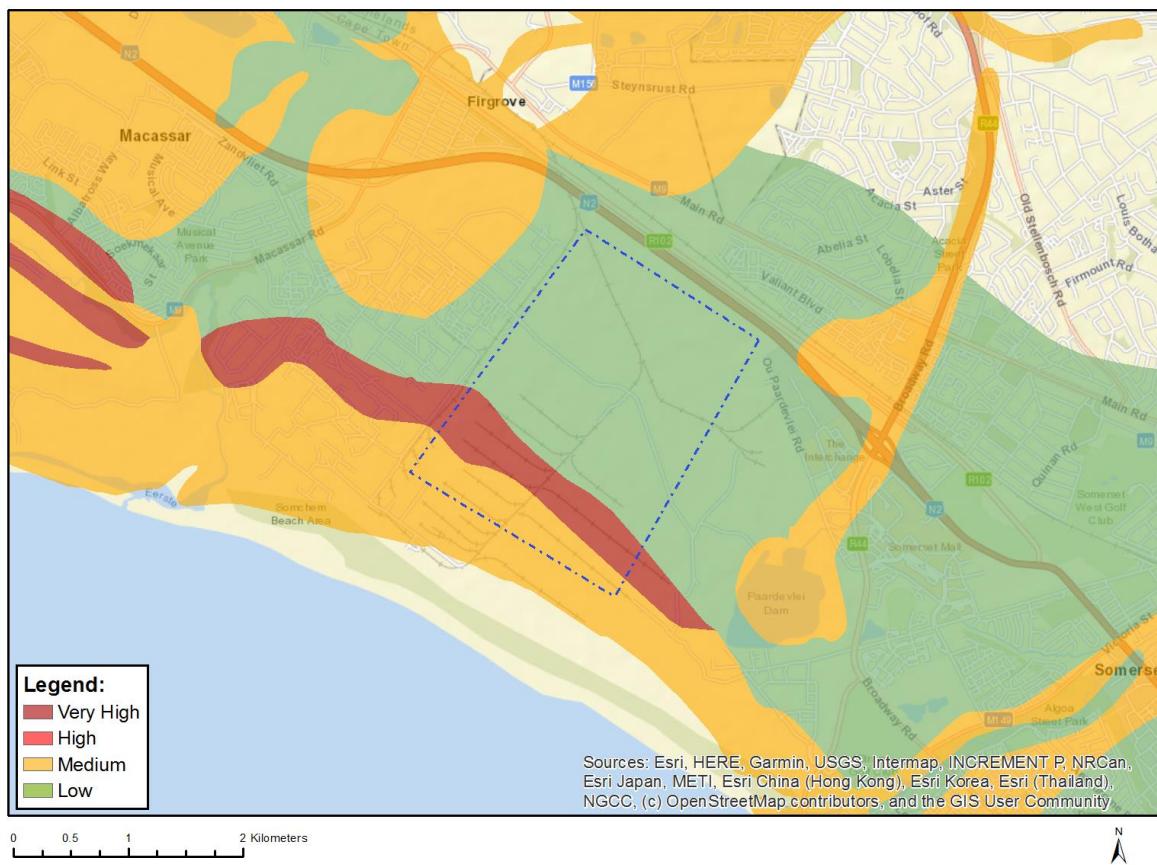


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
High	Between 1 and 2 km of the coast
High	Between 500 and 1000 m of a town or village
High	Between 1.5 and 3 km of a nature reserve
Medium	Between 2 and 4 km of the coast
Medium	Between a and 2 km of a town or village
Very High	Within 1 km of the coast
Very High	Within 500 m of a town or village
Very High	Within 1.5 km of a nature reserve

MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY

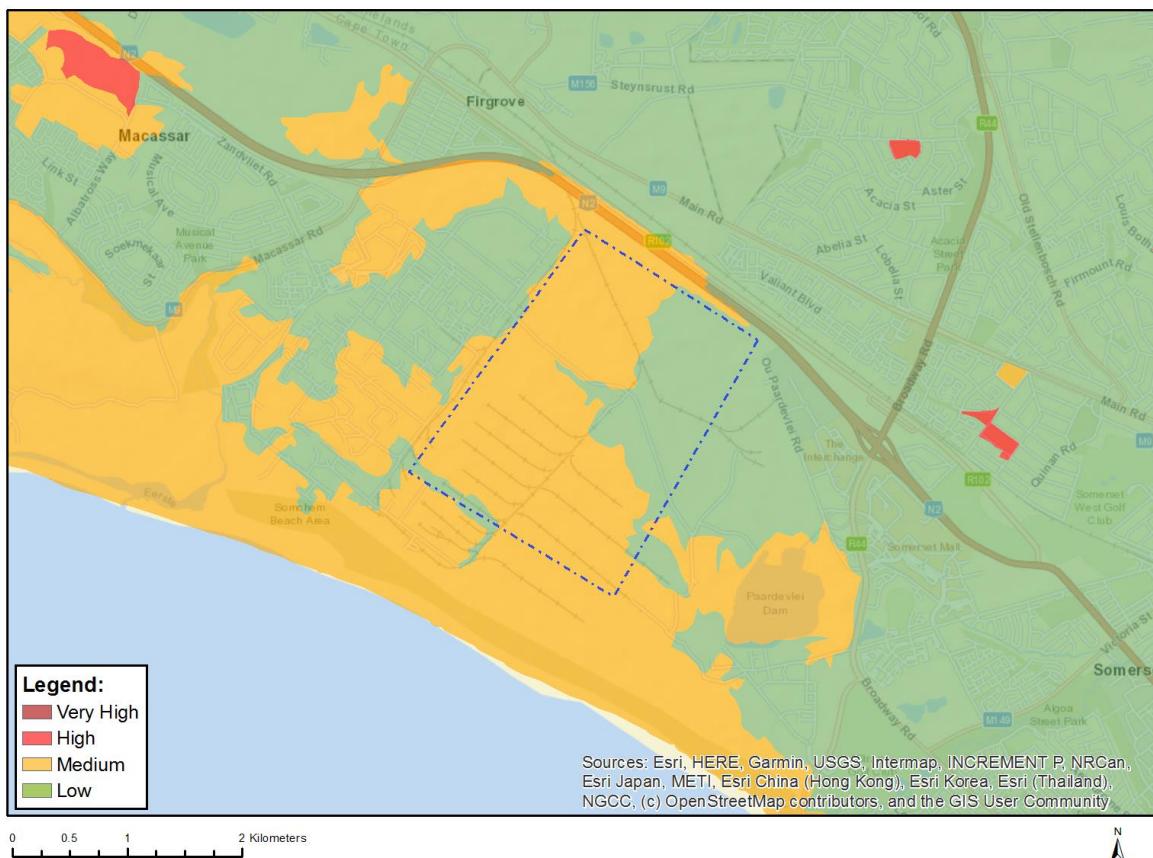


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

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

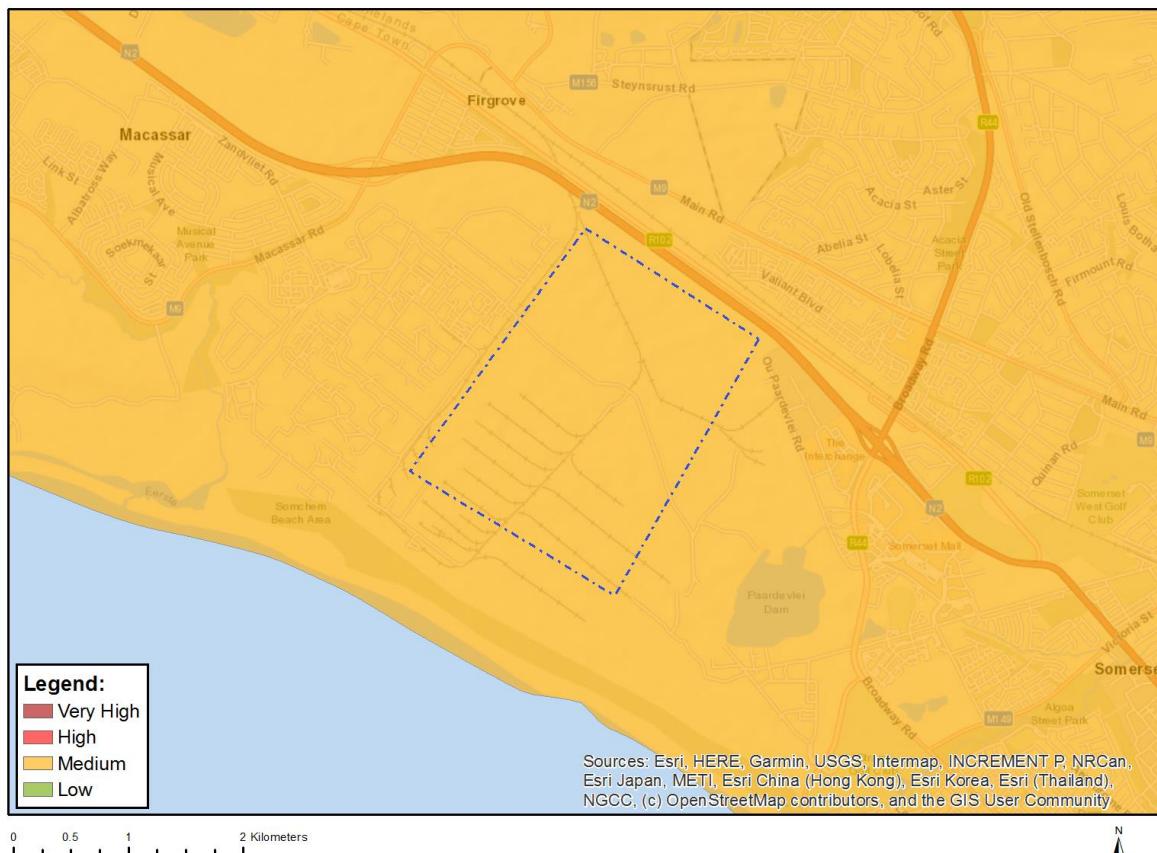
Sensitivity	Feature(s)
Low	Low Sensitivity
Medium	<i>Lampranthus dilutus</i>
Medium	<i>Lampranthus filicaulis</i>
Medium	<i>Lampranthus glomeratus</i>
Medium	<i>Lampranthus leptaleon</i>
Medium	<i>Lampranthus scaber</i>
Medium	<i>Lampranthus spiniformis</i>
Medium	<i>Lampranthus stenopetalus</i>
Medium	<i>Lampranthus stenus</i>
Medium	<i>Lampranthus tenuifolius</i>
Medium	<i>Antimima aristulata</i>
Medium	<i>Erepsia patula</i>
Medium	<i>Erepsia ramosa</i>

Medium	<i>Erepsia dunensis</i>
Medium	<i>Ruschia geminiflora</i>
Medium	<i>Drosanthemum hispifolium</i>
Medium	<i>Jordaaniella anemoniflora</i>
Medium	<i>Lessertia argentea</i>
Medium	<i>Xiphotheca lanceolata</i>
Medium	<i>Psoralea fascicularis</i>
Medium	<i>Psoralea glaucina</i>
Medium	<i>Liparia splendens</i> subsp. <i>splendens</i>
Medium	<i>Indigofera psoraloides</i>
Medium	<i>Aspalathus araneosa</i>
Medium	<i>Aspalathus globulosa</i>
Medium	<i>Aspalathus muraltooides</i>
Medium	<i>Podalyria argentea</i>
Medium	<i>Podalyria sericea</i>
Medium	<i>Thesium ecklonianum</i>
Medium	<i>Leucadendron coniferum</i>
Medium	<i>Leucadendron lanigerum</i> var. <i>lanigerum</i>
Medium	<i>Leucadendron levisanus</i>
Medium	<i>Leucadendron linifolium</i>
Medium	<i>Leucospermum bolusii</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 aemula</i>
Medium	<i>Serruria brownii</i>
Medium	<i>Merciera tetraloba</i>
Medium	<i>Pentameris bachmannii</i>
Medium	<i>Pentameris pholiuroides</i>
Medium	<i>Ehrharta setacea</i> subsp. <i>uniflora</i>
Medium	<i>Anthospermum ericifolium</i>
Medium	<i>Lobostemon hottentoticus</i>
Medium	<i>Echiostachys incanus</i>
Medium	<i>Echiostachys spicatus</i>
Medium	Sensitive species 533
Medium	<i>Geissorhiza brehmii</i>
Medium	<i>Geissorhiza humilis</i>
Medium	<i>Geissorhiza lithicola</i>
Medium	<i>Geissorhiza setacea</i>
Medium	<i>Geissorhiza erosa</i>
Medium	<i>Ixia sarmentosa</i>
Medium	Sensitive species 683
Medium	Sensitive species 1
Medium	Sensitive species 830
Medium	Sensitive species 1140
Medium	Sensitive species 298
Medium	Sensitive species 807
Medium	Sensitive species 863
Medium	<i>Pauridia alba</i>
Medium	<i>Pauridia pygmaea</i>
Medium	<i>Oxalis natans</i>
Medium	<i>Erica capillaris</i> var. <i>capillaris</i>
Medium	Sensitive species 769
Medium	Sensitive species 222
Medium	<i>Sebaea rara</i>
Medium	Sensitive species 444
Medium	Sensitive species 756
Medium	<i>Tetragonia caesia</i>
Medium	<i>Adenogramma rigida</i>

Medium	<i>Wachendorfia brachyandra</i>
Medium	<i>Hessea cinnamomea</i>
Medium	Sensitive species 847
Medium	<i>Isoetes capensis</i>
Medium	Sensitive species 133
Medium	<i>Isolepis inconspicua</i>
Medium	<i>Isolepis venustula</i>
Medium	<i>Trianoptiles solitaria</i>
Medium	<i>Ficinia elatior</i>
Medium	<i>Ficinia pinguior</i>
Medium	<i>Cannomois arenicola</i>
Medium	<i>Elegia prominens</i>
Medium	<i>Hypodiscus rugosus</i>
Medium	<i>Restio duthieae</i>
Medium	<i>Restio harveyi</i>
Medium	<i>Restio sabulosus</i>
Medium	<i>Restio impolitus</i>
Medium	<i>Restio papillosum</i>
Medium	<i>Restio pratensis</i>
Medium	<i>Cynanchum zeyheri</i>
Medium	Sensitive species 985
Medium	Sensitive species 120
Medium	Sensitive species 384
Medium	Sensitive species 1139
Medium	<i>Acrolophia bolusii</i>
Medium	<i>Pterygodium cruciferum</i>
Medium	<i>Gnidia spicata</i>
Medium	<i>Passerina paludosa</i>
Medium	<i>Lachnaea uniflora</i>
Medium	<i>Marasmodes polyccephala</i>
Medium	<i>Poecilolepis maritima</i>
Medium	<i>Steirodiscus tagetes</i>
Medium	<i>Cotula eckloniana</i>
Medium	<i>Athanasia capitata</i>
Medium	<i>Arctotis angustifolia</i>
Medium	<i>Arctotheca forbesiana</i>
Medium	<i>Cullumia squarrosa</i>
Medium	<i>Dimorphotheca walliana</i>
Medium	<i>Diosma dichotoma</i>
Medium	<i>Macrostylis villosa</i> subsp. <i>villosa</i>
Medium	<i>Cliffortia ericifolia</i>
Medium	<i>Cliffortia hirta</i>
Medium	<i>Cliffortia longifolia</i>
Medium	<i>Cliffortia marginata</i>
Medium	<i>Muraltia aspalatha</i>
Medium	<i>Muraltia macropetala</i>
Medium	<i>Muraltia mitior</i>
Medium	Sensitive species 214
Medium	Sensitive species 1265
Medium	Sensitive species 616
Medium	<i>Wurmbea inusta</i>
Medium	<i>Phyllica dioica</i>
Medium	<i>Phyllica plumosa</i> var. <i>squarrosa</i>
Medium	<i>Phyllica thunbergiana</i>
Medium	<i>Codonorhiza azurea</i>
Medium	<i>Skiatophytum skiatophytoides</i>
Medium	<i>Lampranthus debilis</i>
Medium	<i>Lampranthus glaucus</i>
Medium	<i>Xiphotheca reflexa</i>
Medium	<i>Psoralea alata</i>

Medium	<i>Aspalathus lebeckioides</i>
Medium	<i>Aspalathus recurva</i>
Medium	<i>Aspalathus tylodes</i>
Medium	<i>Protea scolymocephala</i>
Medium	Sensitive species 593
Medium	Sensitive species 335
Medium	Sensitive species 599
Medium	<i>Elegia squamosa</i>
Medium	<i>Elegia verreauxii</i>
Medium	<i>Restio paludosus</i>
Medium	<i>Restio rigoratus</i>
Medium	Sensitive species 500
Medium	Sensitive species 53
Medium	Sensitive species 654
Medium	<i>Lachnaea capitata</i>
Medium	<i>Lachnaea grandiflora</i>
Medium	<i>Cotula pusilla</i>
Medium	Sensitive species 1225

MAP OF RELATIVE RFI THEME SENSITIVITY

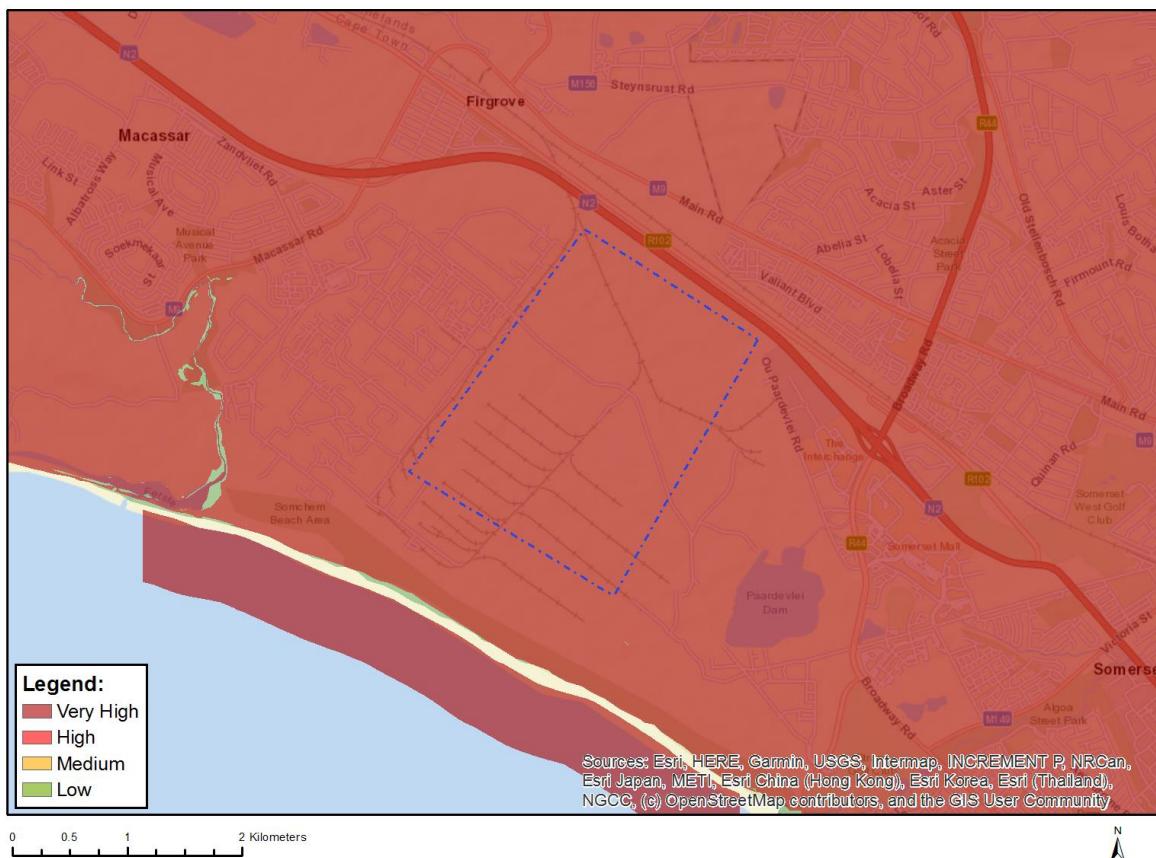


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Within 1 km of a telecommunication facility
Medium	Between 30 and 60 km from a Weather Radar installation and within the radar's line of sight

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Very High	SWSA (SW) _Boland
Very High	CR_Cape Flats Sand Fynbos
Very High	EN_Boland Granite Fynbos
Very High	EN_Cape Flats Dune Strandveld