

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

EIA Reference number:

Project name: Expansion of Zwartfontein Dam

Project title: The Proposed Expansion of an Instream Dam on the Remainder of Farm Zwartfontein No. 792 and Portion 8 of the Farm Zwartfontein No. 792, Zwartfontein, Malmesbury, Western Cape

Date screening report generated: 24/11/2020 15:59:53

Applicant: Black Orchid Farming Pty (Ltd)

Compiler: EnviroAfrica

Compiler signature:

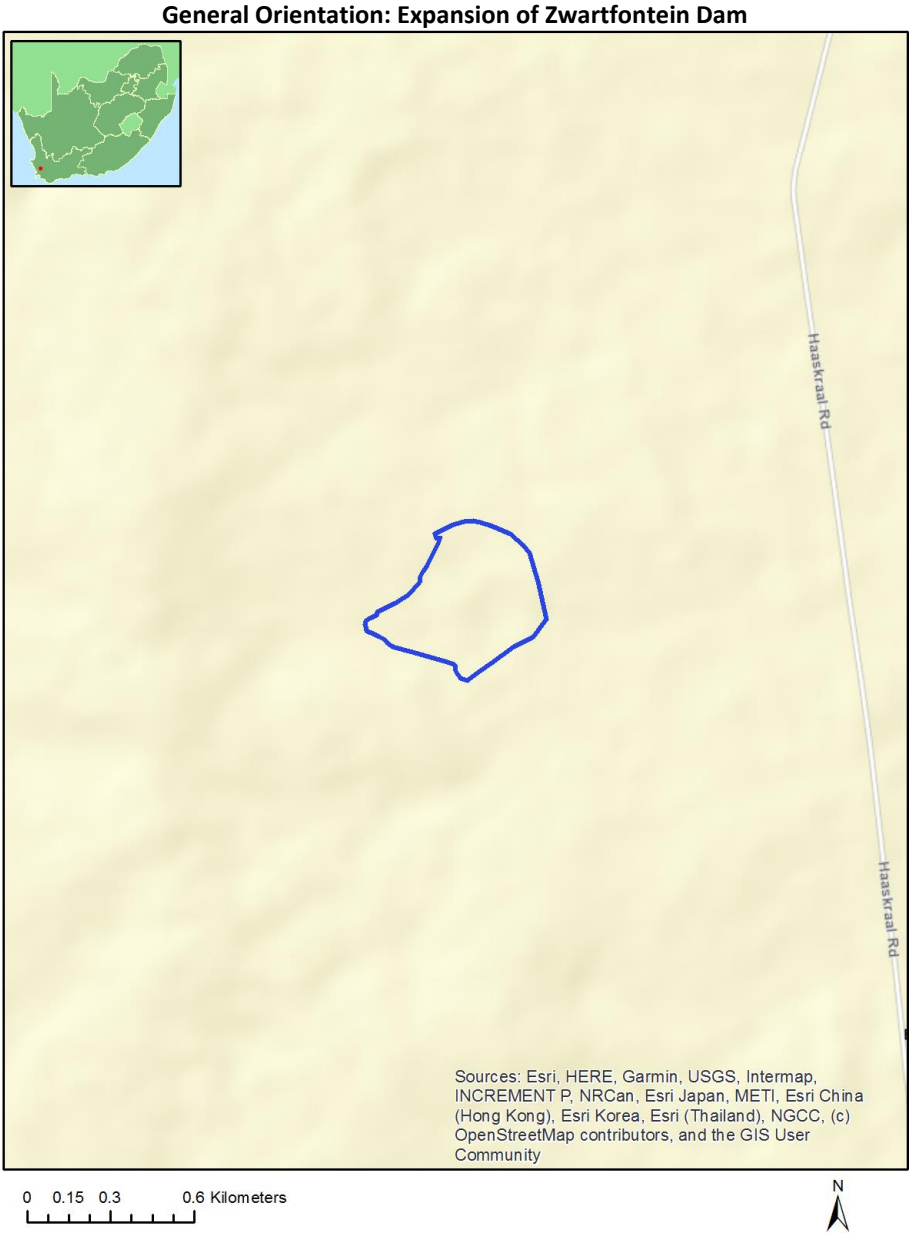
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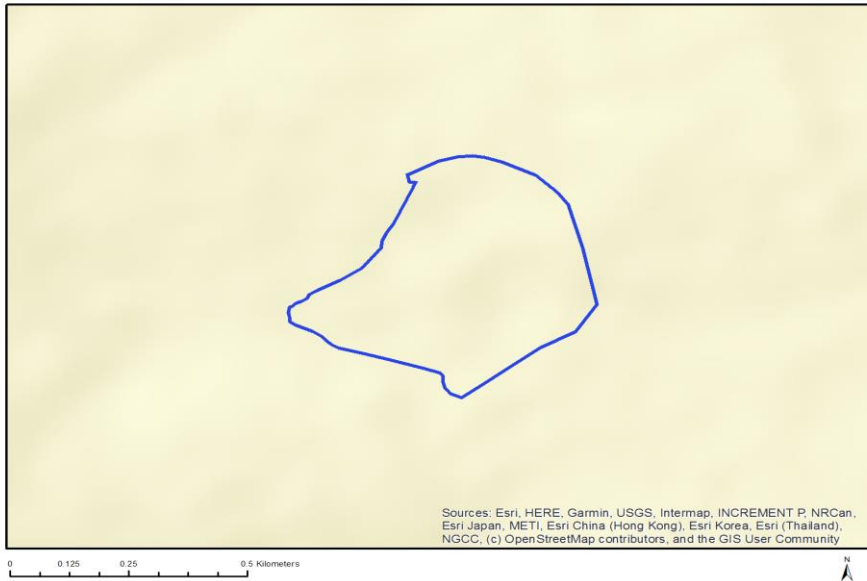
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Proposed Project Location

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	ZWARTFONTEIN	792	0	33°30'9.59S	18°55'4.17E	Farm
2	ZWARTFONTEIN	792	8	33°30'39.62S	18°54'30.07E	Farm Portion
3	ZWARTFONTEIN	792	0	33°30'9.28S	18°54'37.15E	Farm Portion

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	12/12/20/2384	Solar PV	Approved	28.6
2	12/12/20/2400	Solar PV	Approved	15
3	12/12/20/2109	Solar PV	Approved	29.6

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.

Environmental Management Frameworks relevant to the application

No intersections with EMF areas found.

Environmental screening results and assessment outcomes

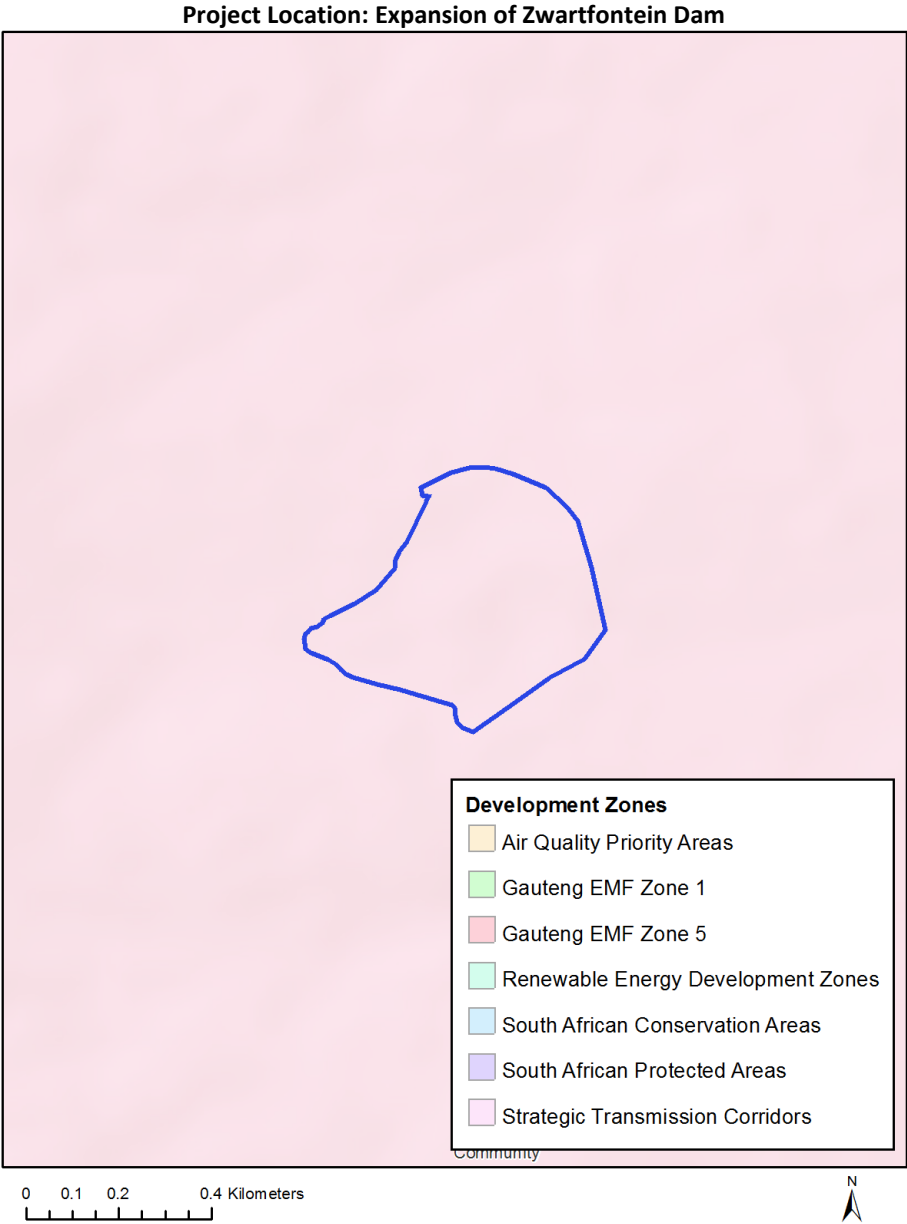
The following sections contain a summary of any development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmental sensitive features on the site based on the site sensitivity screening results for the application classification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

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/GN 113 16 February 2018.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			
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.

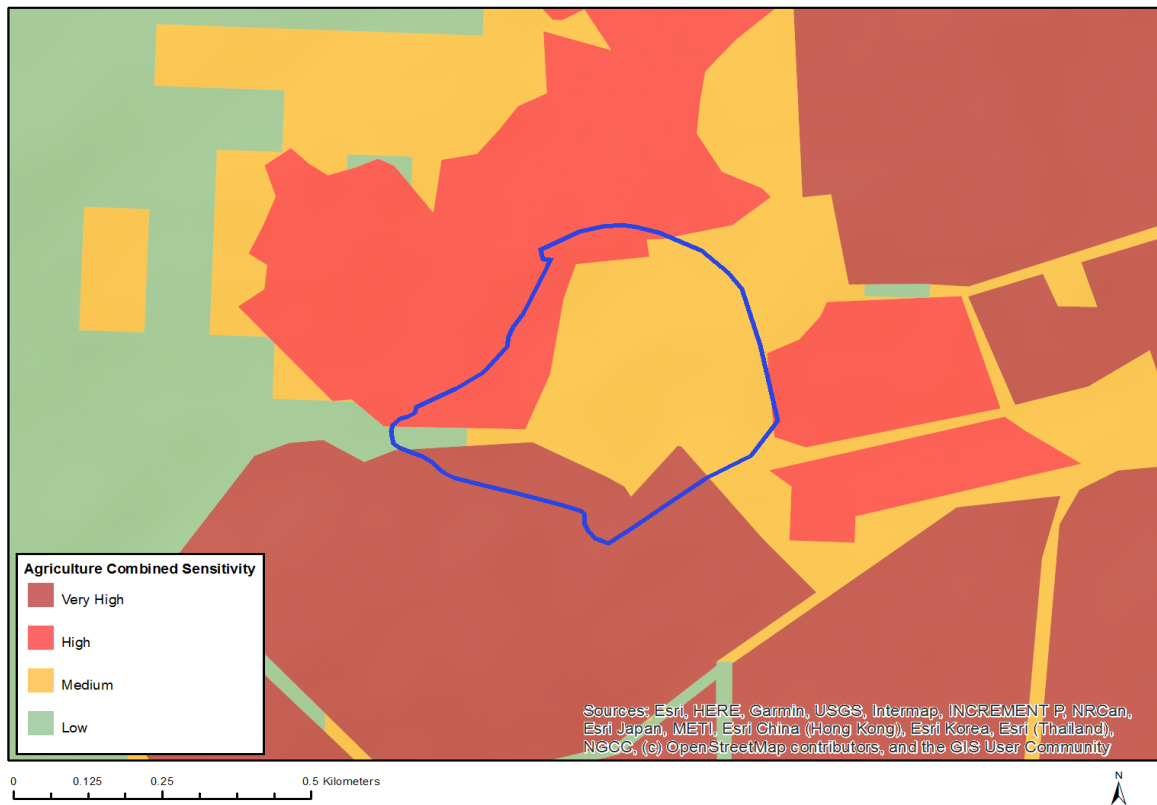
N o	Specialist assessment	Assessment Protocol
1	Agricultural Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Agriculture_Assessment_Protocols.pdf
2	Landscape/Visual Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.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	Hydrology	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols

	Assessment	/Gazetted General Requirement Assessment Protocols.pdf
8	Socio-Economic Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
9	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Plant Species Assessment Protocols.pdf
10	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

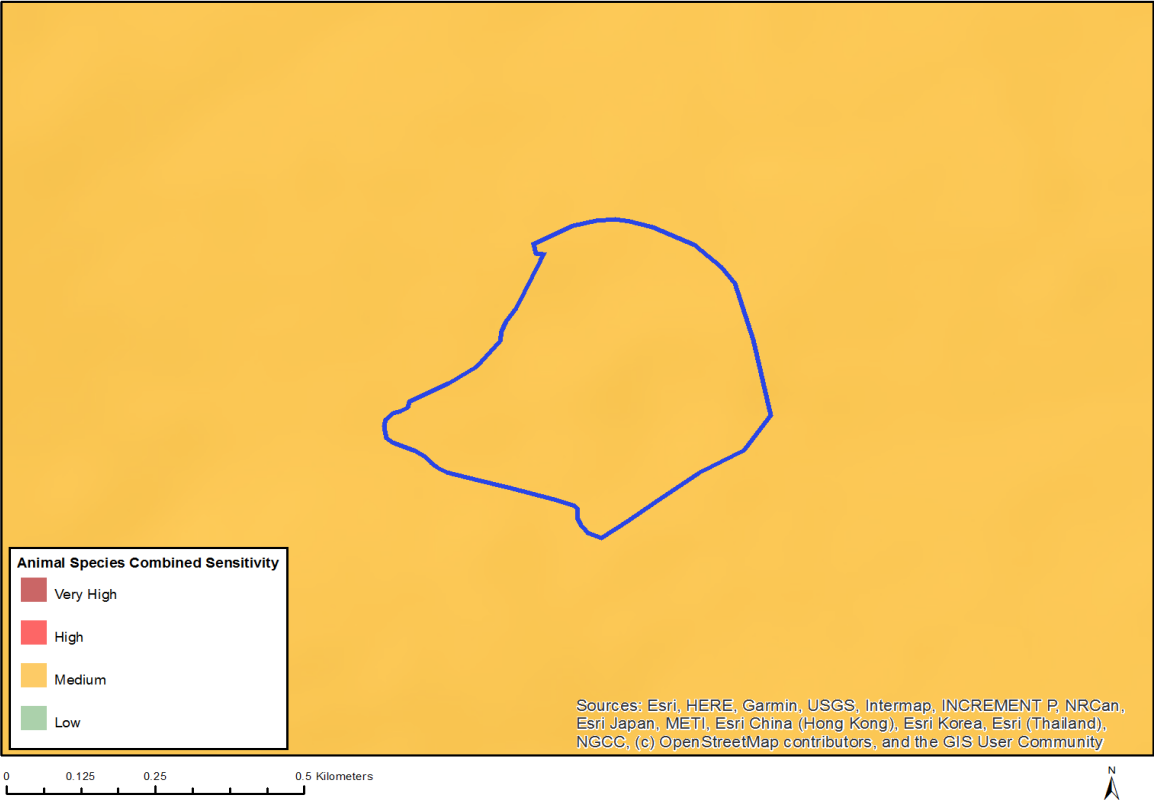


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
High	Annual Crop Cultivation / Planted Pastures Rotation;Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate
High	Annual Crop Cultivation / Planted Pastures Rotation;Land capability;01. Very low/02. Very low/03. Low-Very low/04. Low-Very low/05. Low
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;01. Very low/02. Very low/03. Low-Very low/04. Low-Very low/05. Low
Very High	Viticulture;Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY

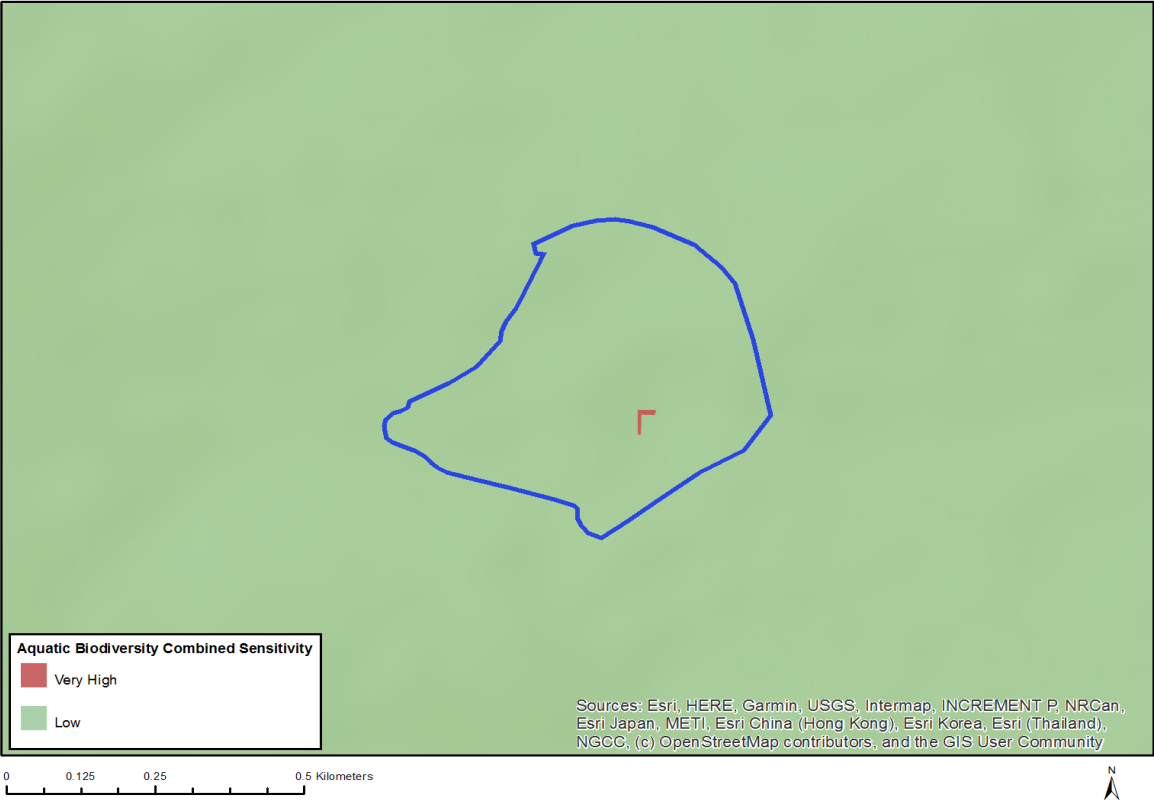


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

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

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 CIVIL AVIATION THEME SENSITIVITY

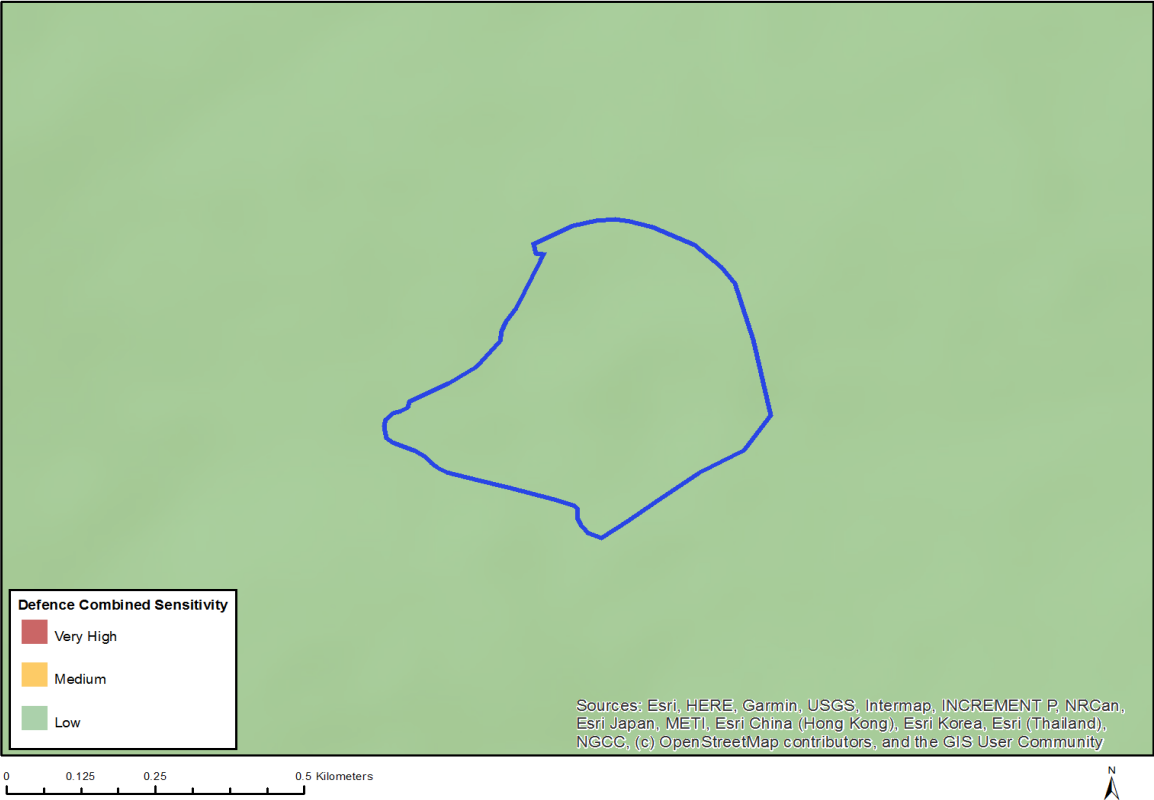


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

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 PALEONTOLOGY THEME SENSITIVITY

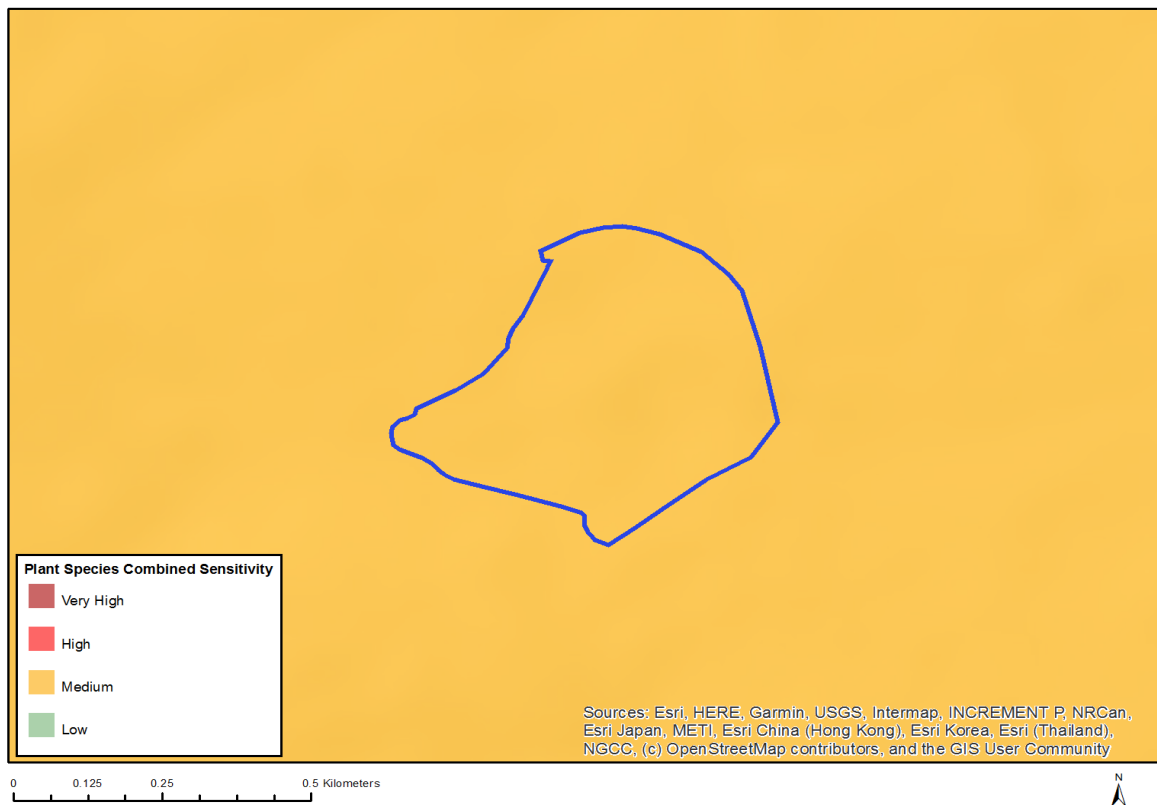


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

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

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>Isolepis leucoloma</i>
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 scoparia</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	Critical Biodiversity Area 1
Very High	Critically endangered ecosystem