

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

EIA Reference number: MP 30/5/1/23/2/1/133 & 134 EM

Project name: Maquasa WML & EA

Project title: Maquasa Co-Disposal Facility and Treatment Plant

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Applicant: Kangra

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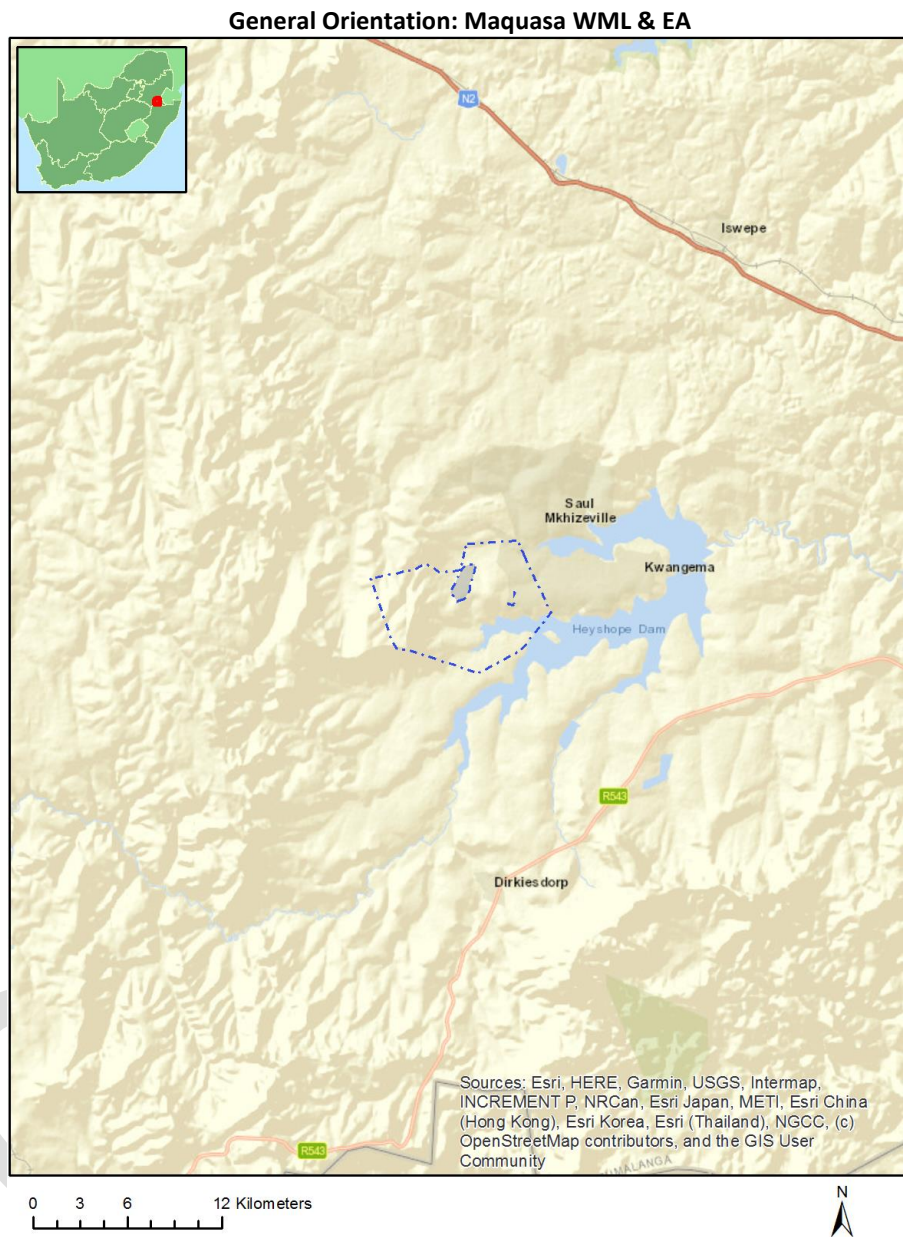
Application Category: Mining|Mining Right

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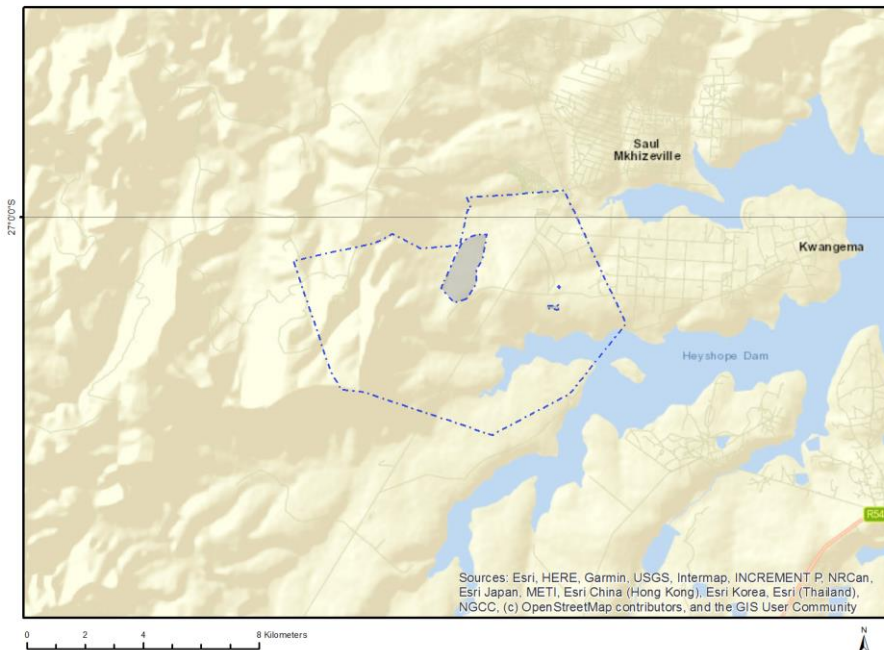
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Proposed Project Location

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	DUITSCHLAND	27	0	27°4'3.28S	30°25'19.28E	Farm
2	MAQUASA	19	0	27°2'18.7S	30°22'29.32E	Farm
3	ROOIKOP	18	0	27°0'16.17S	30°21'44.03E	Farm
4	ROODEKRAAL	21	0	27°1'28.12S	30°24'39.19E	Farm
5	DRIEFONTEIN	388	0	26°58'51.68S	30°26'27.41E	Farm
6	ROODEKRAAL	21	38	27°0'58.22S	30°25'35.24E	Farm Portion
7	ROODEKRAAL	21	16	27°0'26.35S	30°24'54.11E	Farm Portion
8	ROODEKRAAL	21	47	27°1'31.92S	30°25'30.79E	Farm Portion
9	ROODEKRAAL	21	51	27°1'31.52S	30°25'52.04E	Farm Portion
10	ROODEKRAAL	21	42	27°1'14.65S	30°25'28.95E	Farm Portion
11	ROODEKRAAL	21	27	27°0'37.68S	30°25'4.42E	Farm Portion
12	ROODEKRAAL	21	26	27°0'51.96S	30°24'49.44E	Farm Portion
13	ROODEKRAAL	21	58	26°59'37.54S	30°24'41.15E	Farm Portion
14	ROODEKRAAL	21	34	27°1'2.95S	30°24'59.61E	Farm Portion
15	ROODEKRAAL	21	41	27°1'16.49S	30°25'19.05E	Farm Portion
16	ROODEKRAAL	21	53	27°1'39.79S	30°25'56.23E	Farm Portion
17	ROODEKRAAL	21	5	26°59'40.19S	30°24'56.28E	Farm Portion
18	ROODEKRAAL	21	45	27°1'25.87S	30°25'21.85E	Farm Portion
19	ROODEKRAAL	21	40	27°1'13.64S	30°25'10.17E	Farm Portion
20	ROODEKRAAL	21	60	26°59'55.45S	30°24'29.08E	Farm Portion
21	ROODEKRAAL	21	61	27°0'3.58S	30°24'28.23E	Farm Portion
22	MAQUASA	19	2	27°2'15.86S	30°23'41.71E	Farm Portion
23	ROODEKRAAL	21	21	27°0'22.09S	30°24'31.58E	Farm Portion
24	ROODEKRAAL	21	43	27°1'7.81S	30°25'39.14E	Farm Portion
25	ROODEKRAAL	21	52	27°1'45.59S	30°25'36.67E	Farm Portion
26	ROODEKRAAL	21	14	27°0'15.96S	30°24'42.2E	Farm Portion
27	ROODEKRAAL	21	66	26°59'50.62S	30°24'56.18E	Farm Portion
28	ROODEKRAAL	21	17	27°0'22.01S	30°25'1.01E	Farm Portion

29	DRIEFONTEIN	388	45	27°1'20.61S	30°25'58.61E	Farm Portion
30	ROODEKRAAL	21	20	27°0'31.91S	30°25'2.33E	Farm Portion
31	ROODEKRAAL	21	25	27°0'45.76S	30°24'49.29E	Farm Portion
32	ROODEKRAAL	21	9	27°0'5.31S	30°24'51.75E	Farm Portion
33	ROODEKRAAL	21	12	27°0'10.92S	30°25'12.07E	Farm Portion
34	ROODEKRAAL	21	13	27°0'11.54S	30°24'35.78E	Farm Portion
35	ROODEKRAAL	21	32	27°0'43.46S	30°25'6.68E	Farm Portion
36	ROODEKRAAL	21	37	27°1'1.48S	30°25'27.5E	Farm Portion
37	ROODEKRAAL	21	2	26°59'47.76S	30°24'26.83E	Farm Portion
38	ROOIKOP	18	0	27°1'3.08S	30°21'45.33E	Farm Portion
39	ROODEKRAAL	21	15	27°0'19.93S	30°24'48.67E	Farm Portion
40	ROODEKRAAL	21	30	27°0'45.2S	30°25'25.46E	Farm Portion
41	ROODEKRAAL	21	6	26°59'45.5S	30°24'56.48E	Farm Portion
42	ROODEKRAAL	21	39	27°1'8.67S	30°24'58.36E	Farm Portion
43	ROODEKRAAL	21	50	27°1'35.77S	30°25'42.22E	Farm Portion
44	ROODEKRAAL	21	49	27°1'39.74S	30°25'32.89E	Farm Portion
45	ROODEKRAAL	21	24	27°0'39.63S	30°24'48.69E	Farm Portion
46	ROODEKRAAL	21	62	27°0'6.22S	30°24'20.75E	Farm Portion
47	ROODEKRAAL	21	63	27°0'30.98S	30°24'40.69E	Farm Portion
48	ROODEKRAAL	21	57	26°59'39.54S	30°24'27.1E	Farm Portion
49	ROODEKRAAL	21	23	27°0'34.79S	30°24'44.51E	Farm Portion
50	ROODEKRAAL	21	28	27°0'32.81S	30°25'19.29E	Farm Portion
51	ROODEKRAAL	21	8	27°0'1.83S	30°24'43.86E	Farm Portion
52	ROODEKRAAL	21	10	27°0'9.39S	30°24'57.32E	Farm Portion
53	ROODEKRAAL	21	11	27°0'8.54S	30°25'4.98E	Farm Portion
54	ROODEKRAAL	21	29	27°0'39.02S	30°25'22.07E	Farm Portion
55	ROODEKRAAL	21	35	27°1'3.49S	30°25'12.54E	Farm Portion
56	ROODEKRAAL	21	33	27°0'53.56S	30°24'58.63E	Farm Portion
57	DRIEFONTEIN	388	44	27°1'30.02S	30°26'0.76E	Farm Portion
58	ROODEKRAAL	21	31	27°0'48.77S	30°25'11.57E	Farm Portion
59	ROODEKRAAL	21	18	27°0'20.13S	30°25'11.09E	Farm Portion
60	ROODEKRAAL	21	36	27°1'5.53S	30°25'21.28E	Farm Portion
61	ROODEKRAAL	21	1	27°2'33.2S	30°24'35.33E	Farm Portion
62	ROODEKRAAL	21	56	26°59'56.5S	30°24'56.45E	Farm Portion
63	ROODEKRAAL	21	54	27°1'19.66S	30°25'43.27E	Farm Portion
64	ROODEKRAAL	21	44	27°1'15.65S	30°25'41.76E	Farm Portion
65	ROODEKRAAL	21	59	26°59'55.15S	30°24'15.1E	Farm Portion
66	ROODEKRAAL	21	67	26°59'38.82S	30°24'49.29E	Farm Portion
67	ROODEKRAAL	21	55	27°0'54.7S	30°25'14.39E	Farm Portion
68	ROODEKRAAL	21	0	27°0'45.48S	30°24'13.79E	Farm Portion
69	DRIEFONTEIN	388	43	27°1'10.25S	30°25'51.04E	Farm Portion
70	DRIEFONTEIN	388	319	26°59'43.95S	30°25'10.42E	Farm Portion
71	DRIEFONTEIN	388	74	27°1'40.08S	30°26'8.22E	Farm Portion
72	ROODEKRAAL	21	70	26°59'45.71S	30°24'45.54E	Farm Portion
73	MAQUASA	19	0	27°2'12.92S	30°22'22.32E	Farm Portion
74	MAQUASA	19	1	27°3'10.78S	30°23'19.47E	Farm Portion
75	ROODEKRAAL	21	46	27°1'23.96S	30°25'32.08E	Farm Portion
76	ROODEKRAAL	21	48	27°1'25.62S	30°25'45.65E	Farm Portion
77	ROODEKRAAL	21	19	27°0'26.31S	30°25'16.29E	Farm Portion
78	ROODEKRAAL	21	22	27°0'27.83S	30°24'37.72E	Farm Portion
79	DUITSCHLAND	27	5	27°3'44.52S	30°24'11.87E	Farm Portion
80	DRIEFONTEIN	388	9	26°59'53.37S	30°25'12.69E	Farm Portion

Development footprint¹ vertices:

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.

Footprint	Latitude	Longitude
1	27°0'27.71S	30°23'1.54E
1	27°0'20.89S	30°23'9.07E
1	27°0'17.07S	30°23'18.81E
1	27°0'17.59S	30°23'30.51E
1	27°0'42.57S	30°23'25.18E
1	27°0'51.66S	30°23'18.93E
1	27°1'4.76S	30°23'19.27E
1	27°1'21.28S	30°23'7.57E
1	27°1'25.13S	30°22'53.97E
1	27°1'10.27S	30°22'39.45E
1	27°0'27.71S	30°23'1.54E
2	27°1'8.05S	30°24'51.19E
2	27°1'8.87S	30°24'52.2E
2	27°1'10.59S	30°24'50.89E
2	27°1'9.6S	30°24'49.84E
2	27°1'8.05S	30°24'51.19E
3	27°1'28.21S	30°24'37.66E
3	27°1'27.62S	30°24'49.6E
3	27°1'30.93S	30°24'50.98E
3	27°1'32.09S	30°24'49.48E
3	27°1'30.69S	30°24'38.98E
3	27°1'30S	30°24'38E
3	27°1'30S	30°24'38E
3	27°1'28.21S	30°24'37.66E

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 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:

Mining | Mining Right.

Relevant development incentives, restrictions, exclusions or prohibitions

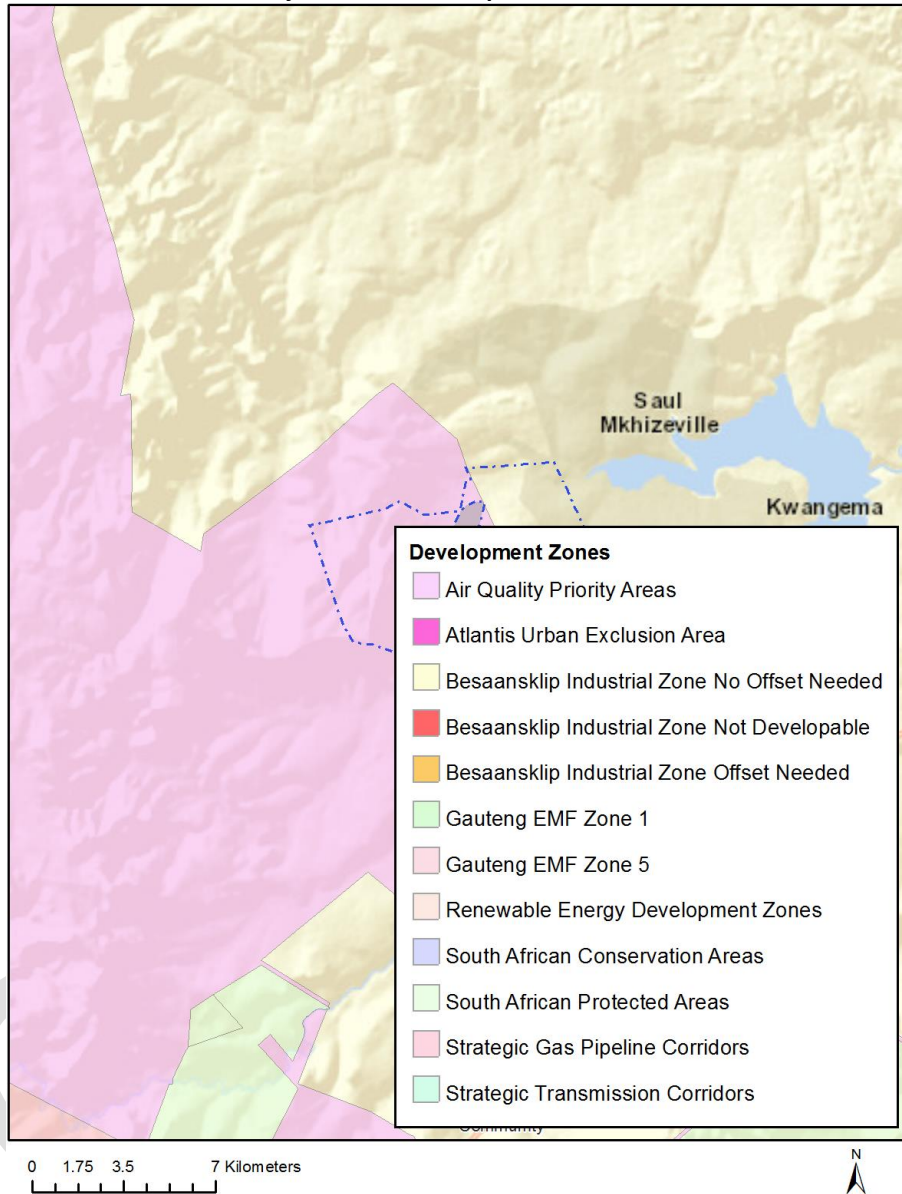
The following development incentives, restrictions, exclusions or prohibitions and their implications that apply to this footprint are indicated below.

Incentive, restriction or prohibition	Implication
Air Quality-Highveld Priority Area	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/HIGHVELD_PRIORITY_AREA_AQMP.pdf

OFFICIAL

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

Project Location: Maquasa WML & EA



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
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 footprint situation.

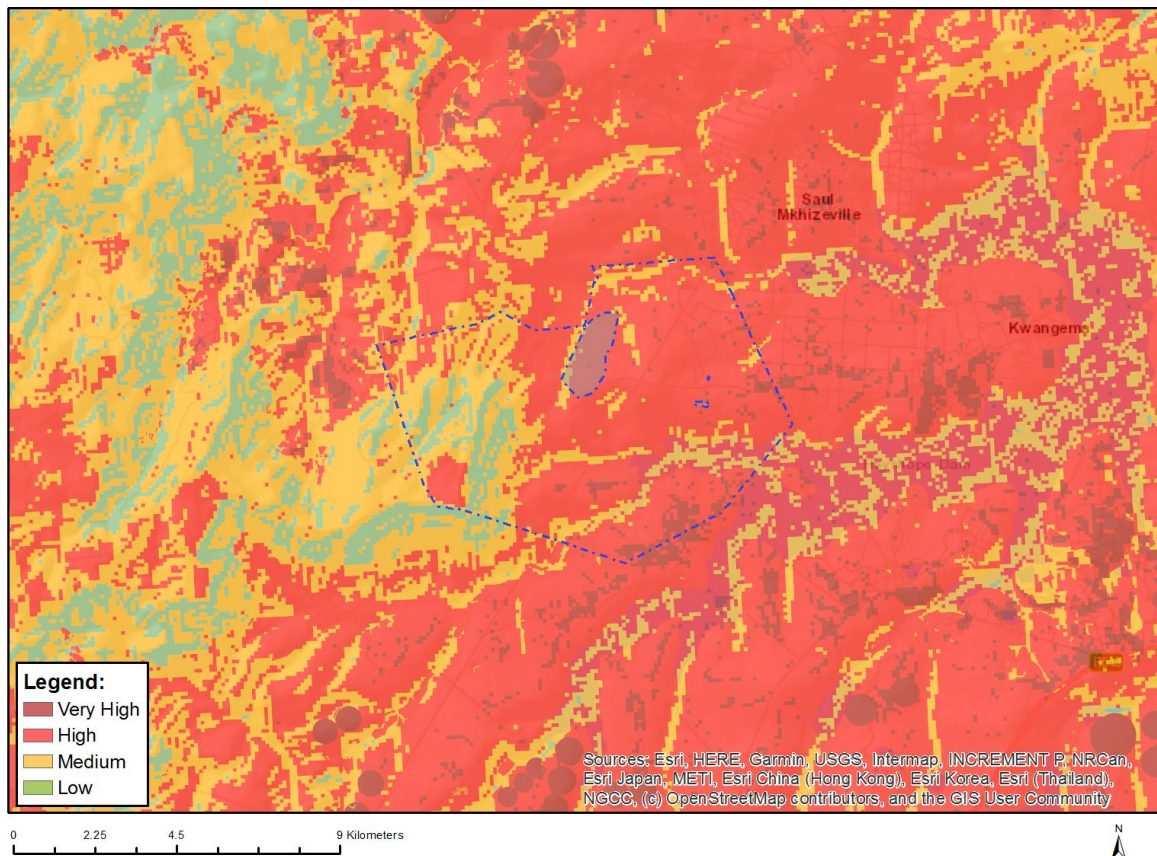
N o	Specialist assessment	Assessment Protocol
1	Agricultural Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Agriculture_Assessment_Protocols.pdf
2	Landscape/Visual Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.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	Noise Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Noise Impacts Assessment Protocol.pdf
9	Radioactivity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
10	Traffic Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
11	Geotechnical Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
12	Climate Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
13	Health Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
14	Socio-Economic Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
15	Ambient Air Quality Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
16	Seismicity Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
17	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Plant Species Assessment Protocols.pdf
18	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 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

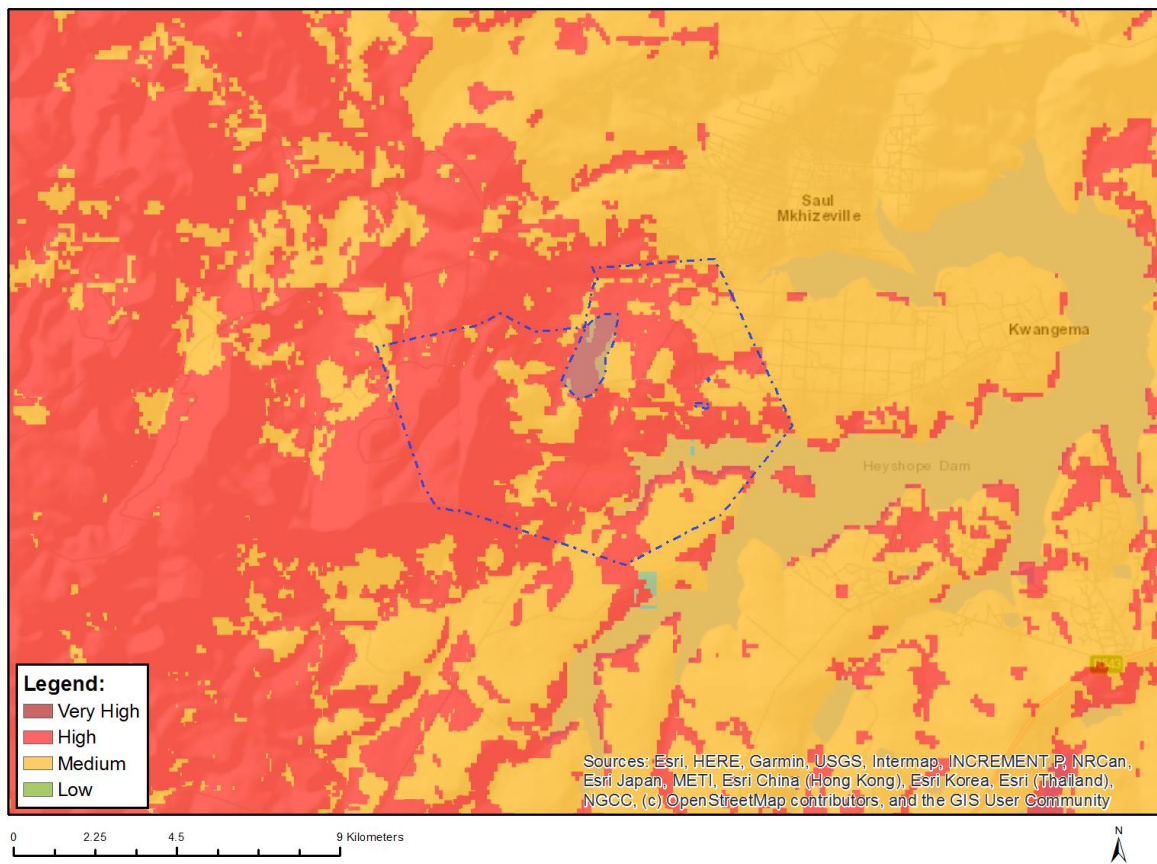


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
High	Land capability;09. Moderate-High/10. Moderate-High
Medium	Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate
Very High	Land capability;11. High/12. High-Very high/13. High-Very high/14. Very high/15. Very high

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



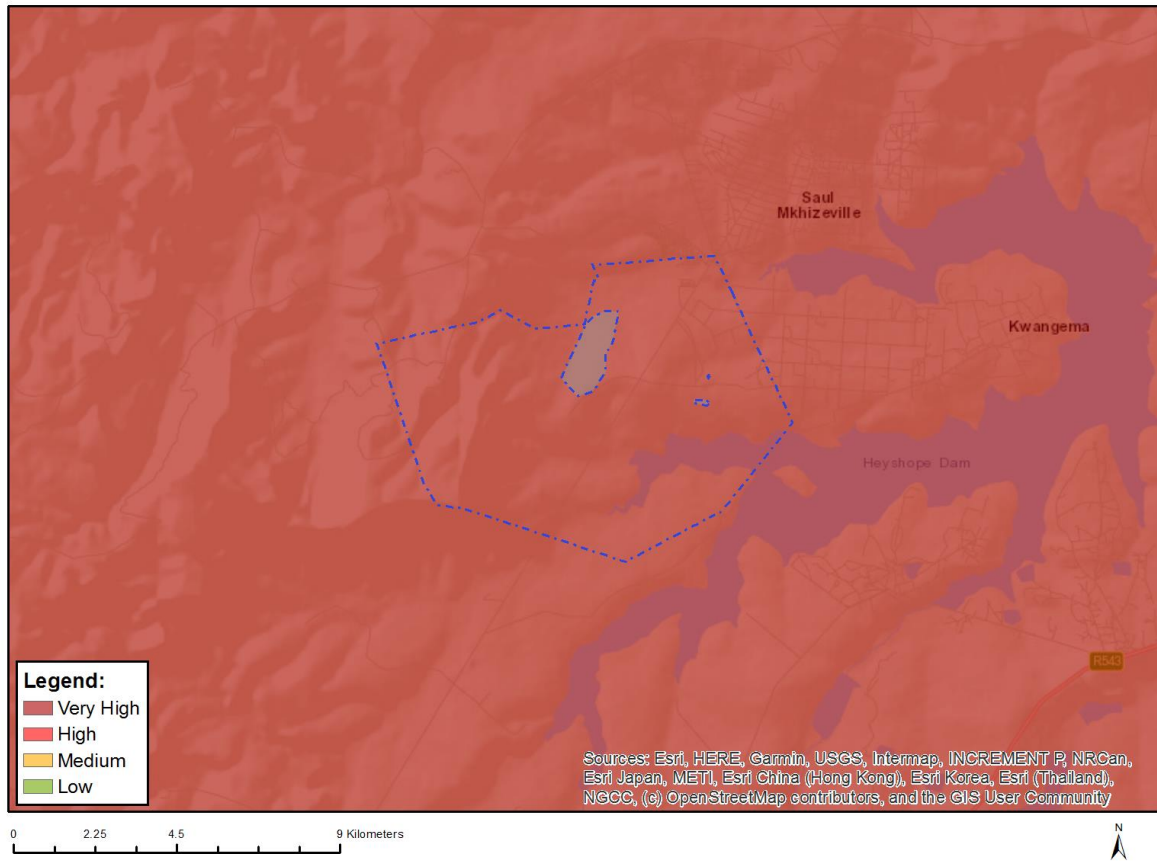
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their 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-Balearica regulorum
High	Aves-Eupodotis senegalensis
High	Aves-Sagittarius serpentarius
High	Aves-Geronticus calvus
Medium	Mammalia-Chrysospalax villosus
Medium	Mammalia-Crocidura maquassiensis
Medium	Mammalia-Hydrictis maculicollis
Medium	Mammalia-Ourebia ourebi ourebi
Medium	Invertebrate-Doratogonus praealtus

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

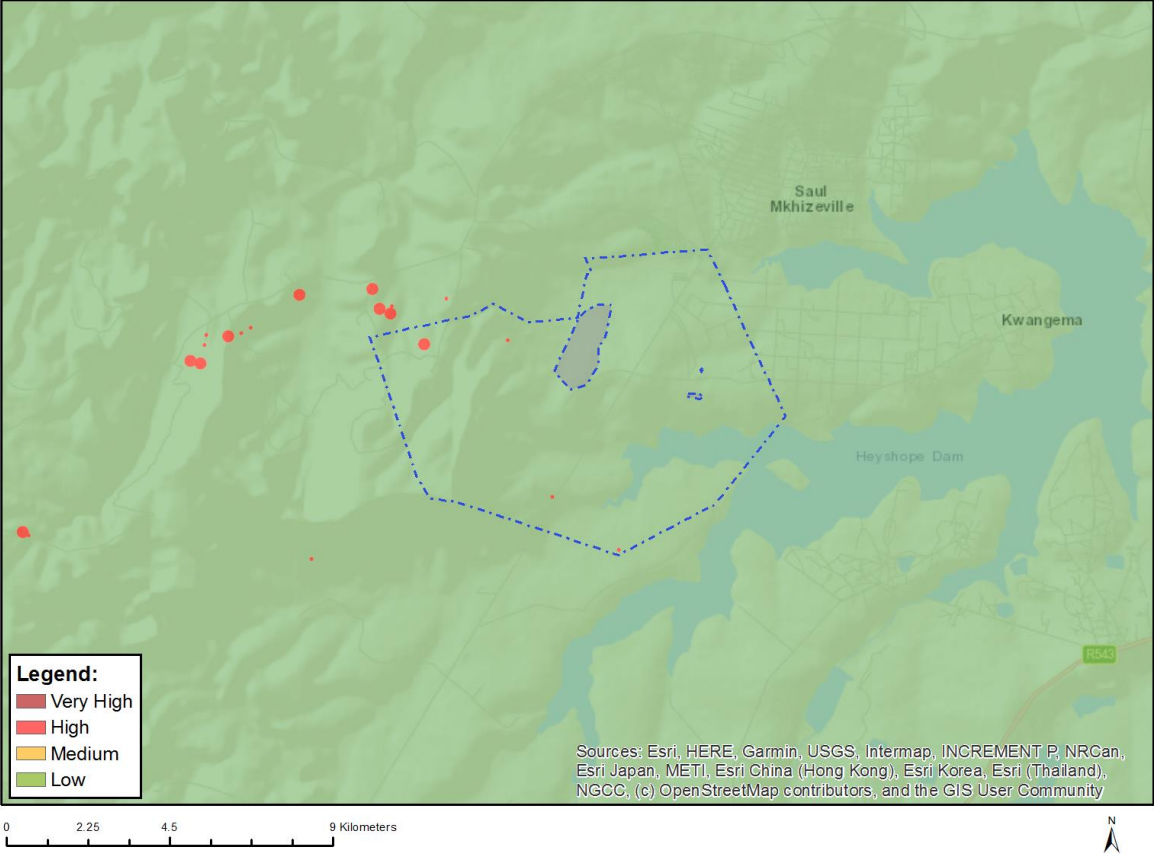


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Very High	Aquatic CBAs
Very High	Strategic water source area
Very High	Wetlands and Estuaries
Very High	Freshwater ecosystem priority area quinary catchments

MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY

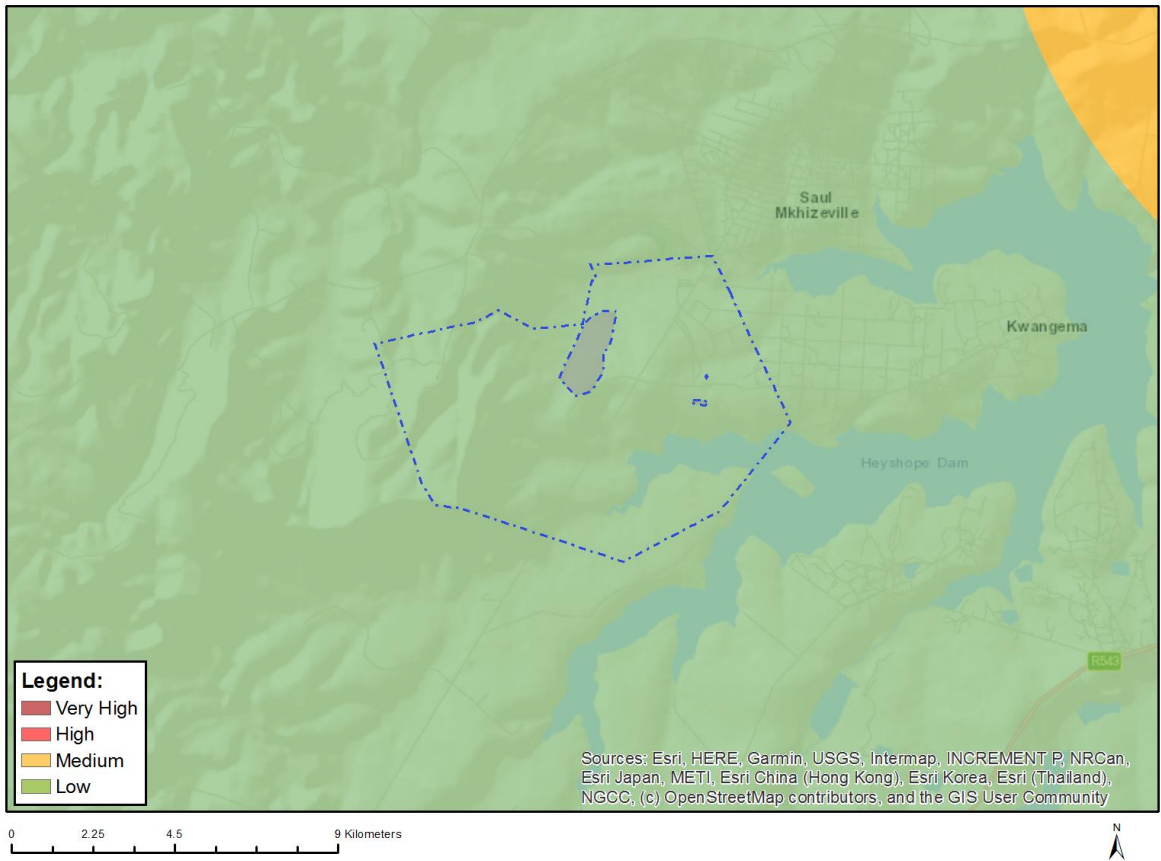


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY

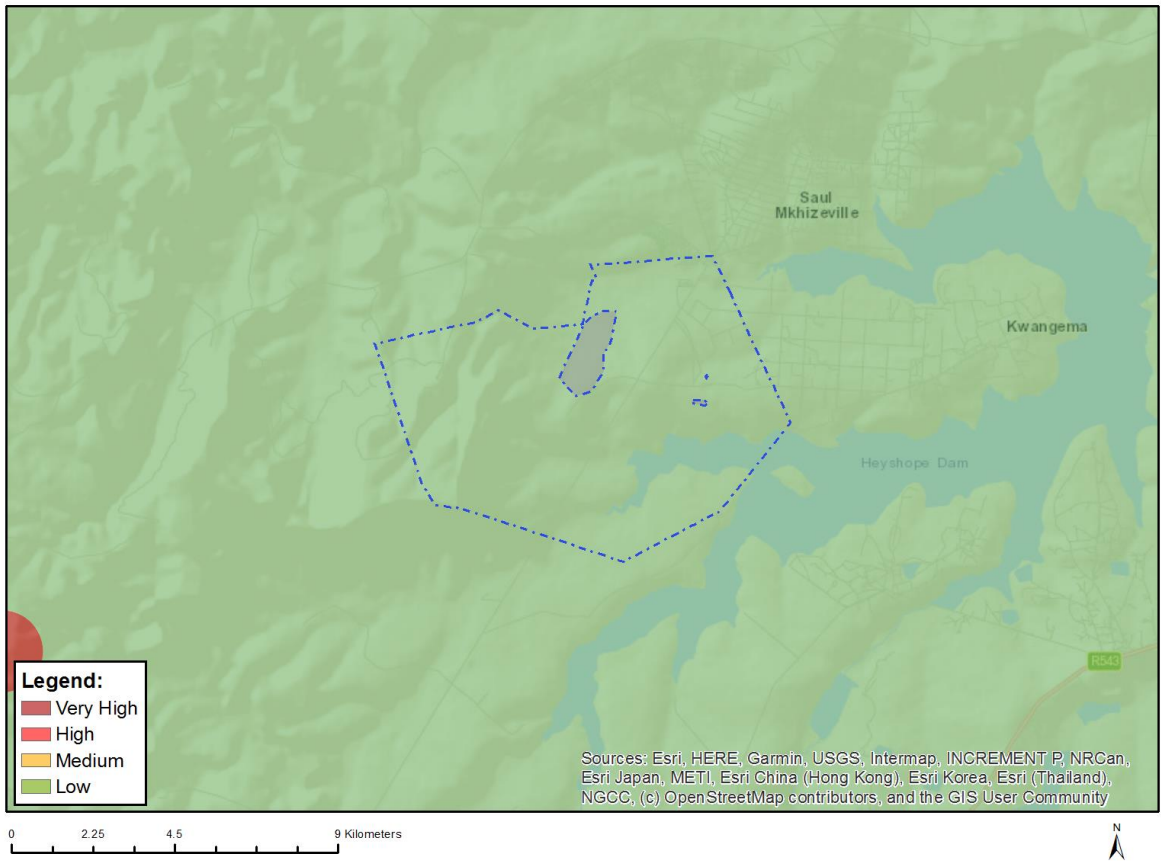


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

MAP OF RELATIVE DEFENCE THEME SENSITIVITY

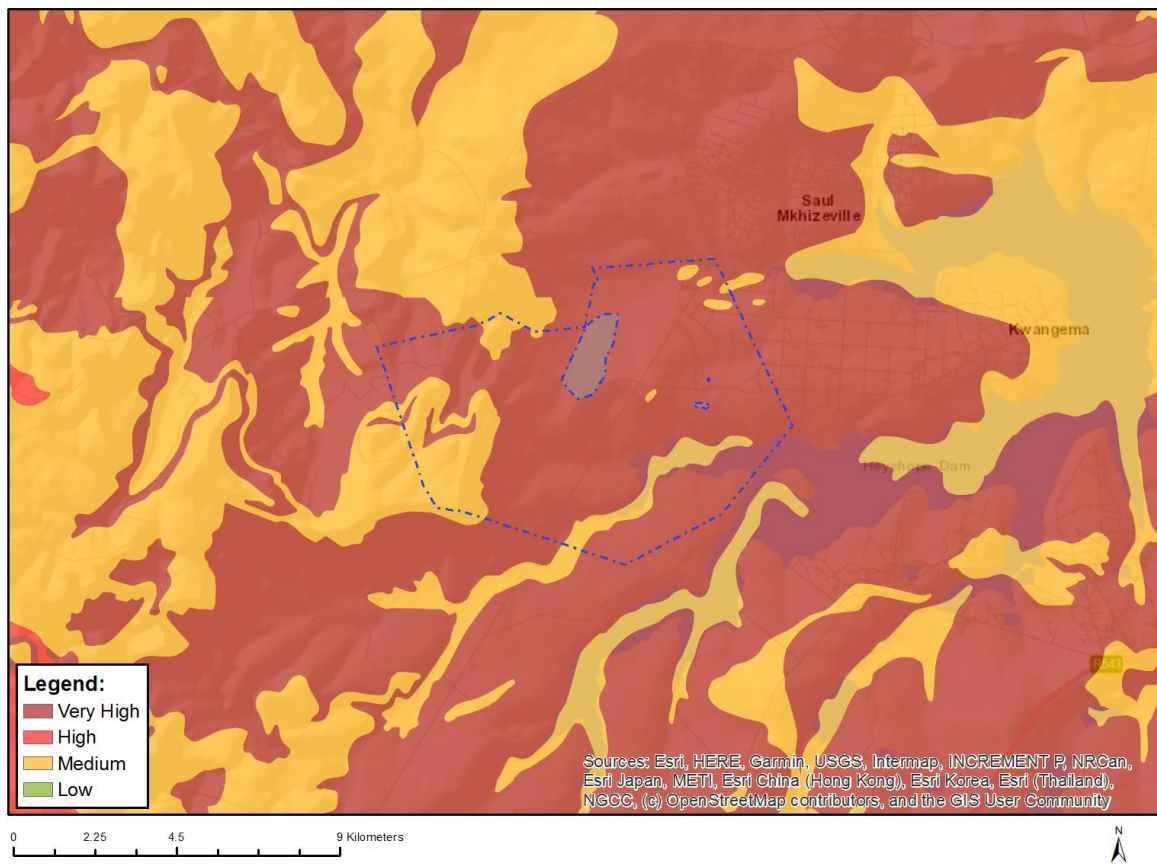


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY

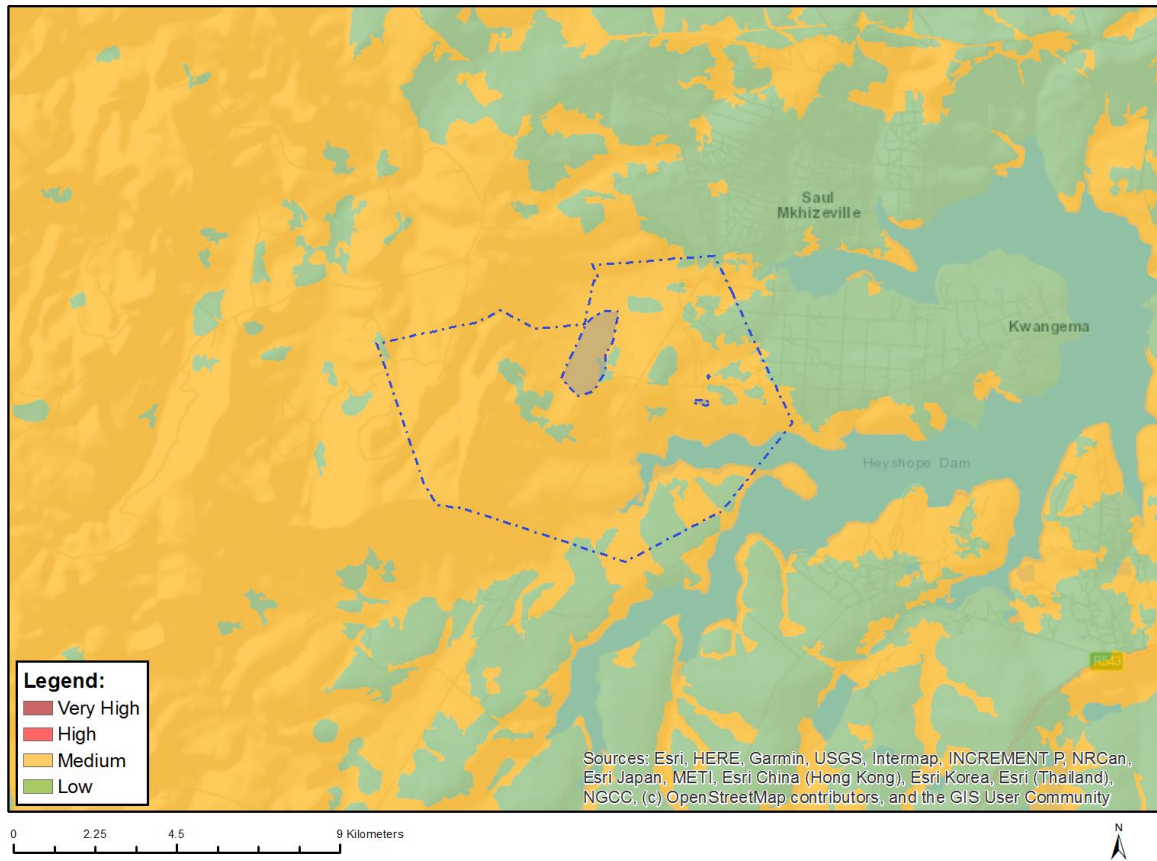


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

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

MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



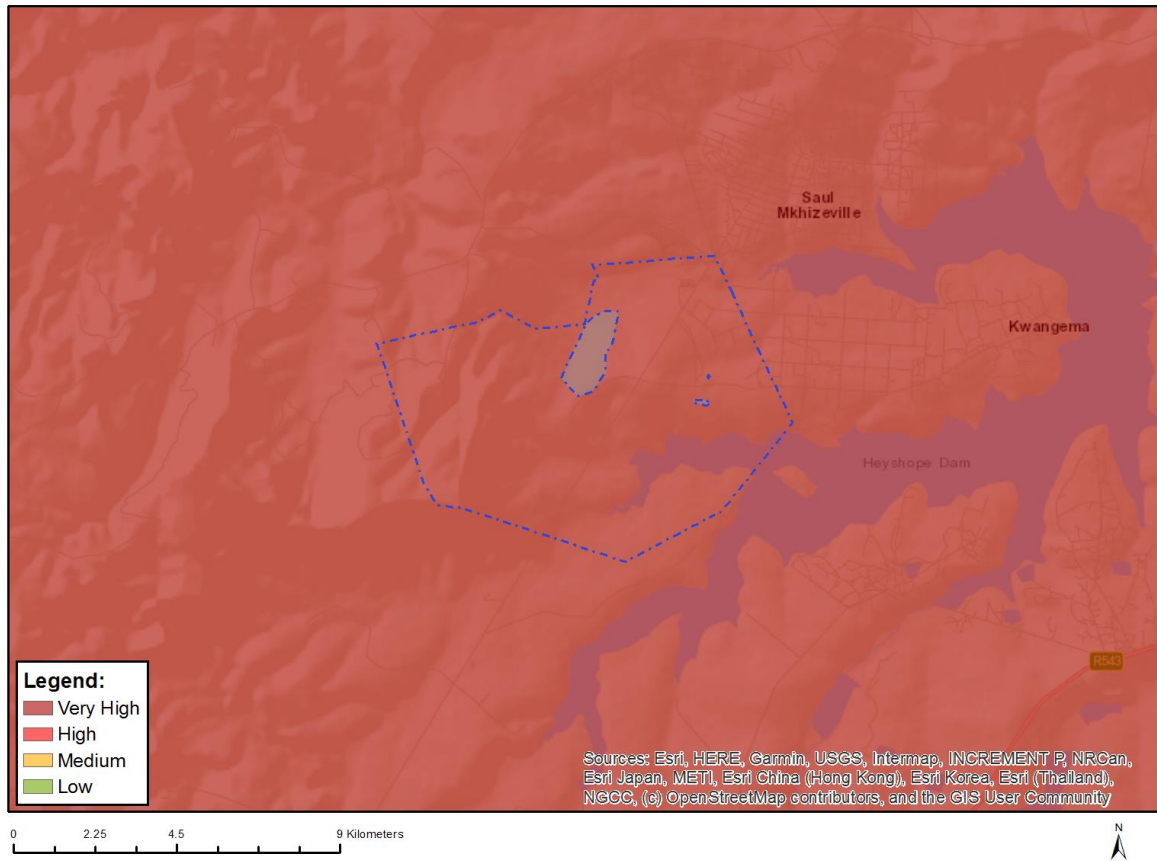
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their 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	Indigofera hybrida
Medium	Sensitive species 41
Medium	Sensitive species 691

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 biodiversity area 1
Very High	Critical biodiversity area 2
Very High	FEPA Subcatchments
Very High	Protected Areas Expansion Strategy
Very High	Vulnerable ecosystem