

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

EIA Reference number:

Project name: Tronox Port Durnford ESIA

Project title: Port Durnford

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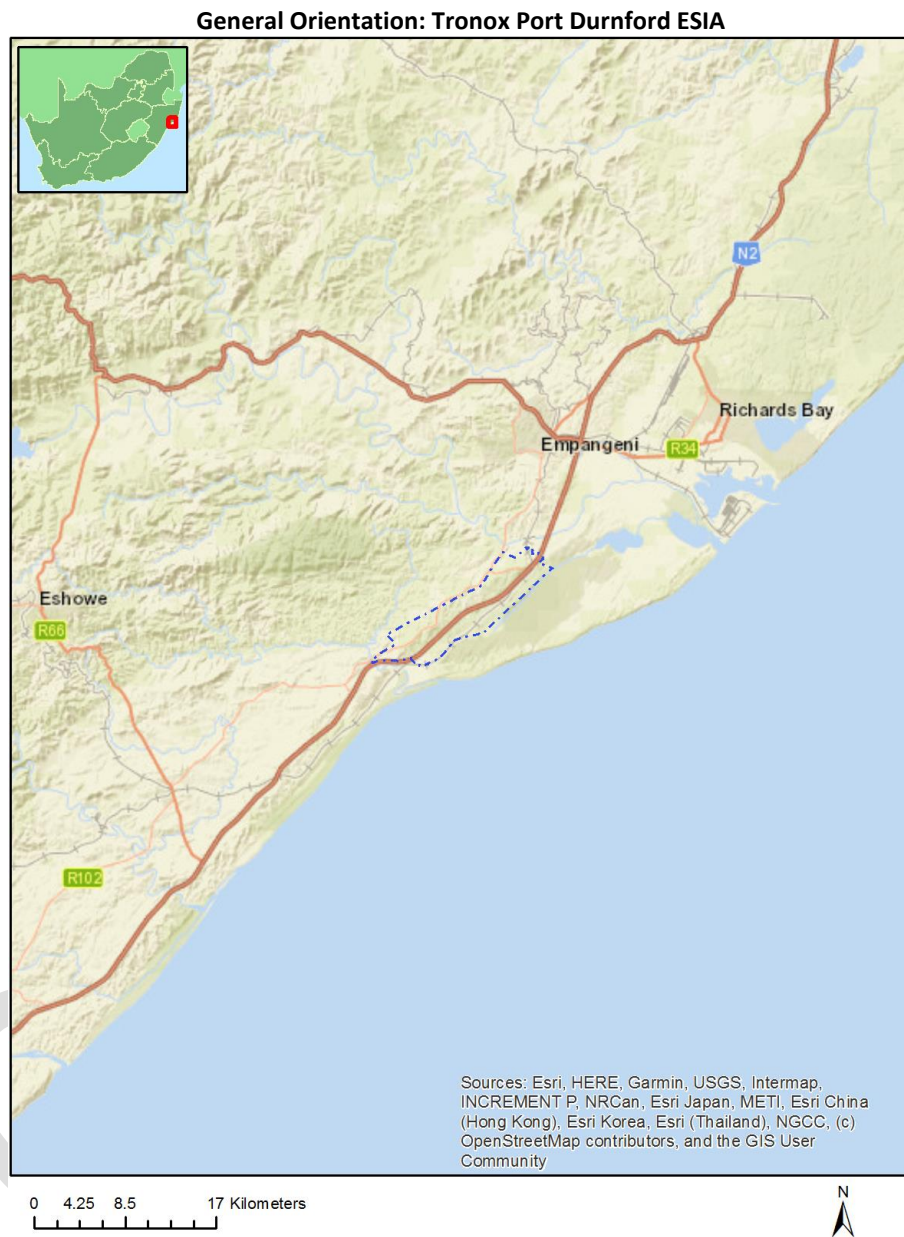
Application Category: Mining|Mining Right

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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	LOT 103 UMLALAZI	13880	0	28°55'34.59S	31°46'12.24E	Farm
2	LOT 104 UMLALAZI	13853	0	28°55'48.48S	31°46'56.61E	Farm
3		16832	0	28°52'49.07S	31°50'56.79E	Farm
4	DURNFORD RAIL	16836	0	28°53'35.53S	31°51'21.04E	Farm
5	MZINGWENYA RAIL	16837	0	28°51'29.05S	31°53'26.65E	Farm
6	UMHLATUZI SAR	13580	0	28°51'46.01S	31°53'25.38E	Farm
7	LOT 131 UMLALAZI	14098	0	28°55'27.35S	31°47'34.14E	Farm
8	KRAAL HILL ANNEXE	14519	0	28°54'49.35S	31°49'52.4E	Farm
9	LOT PORT DURNFORD	15105	0	28°54'13.94S	31°49'23.4E	Farm
10	LOT 102 UMLALAZI	13860	0	28°55'7.37S	31°45'49.81E	Farm
11	LOT 132 UMLALAZI	13602	0	28°54'46.05S	31°46'55.53E	Farm
12		16838	0	28°50'56.44S	31°53'6.7E	Farm
13	LOT 171 UMHLATUZI	13767	0	28°51'22.19S	31°53'11.83E	Farm
14		16802	0	28°54'41.17S	31°48'28.34E	Farm
15		16833	0	28°52'36.11S	31°53'1.16E	Farm
16	MKHWANAZI	17488	0	28°55'8.77S	31°51'39.44E	Farm
17	PORT DURNFORDSTATION	14520	0	28°54'50.87S	31°49'45.49E	Farm
18	LOT 104 UMLALAZI	13853	5	28°55'44.71S	31°47'5.11E	Farm Portion
19		16832	0	28°52'49.34S	31°51'11.79E	Farm Portion
20	LOT 131 UMLALAZI	14098	0	28°55'20.82S	31°47'25.91E	Farm Portion
21		16832	0	28°51'45.33S	31°53'20.23E	Farm Portion
22	LOT 131 UMLALAZI	14098	2	28°54'52.73S	31°47'25.64E	Farm Portion
23	LOT 131 UMLALAZI	14098	3	28°55'36.06S	31°47'35.75E	Farm Portion
24		16802	0	28°55'13.7S	31°48'45.59E	Farm Portion
25		16832	4	28°51'48.93S	31°53'6.72E	Farm Portion
26	LOT 132 UMLALAZI	13602	0	28°54'55.19S	31°46'57.74E	Farm Portion

27	LOT 131 UMLALAZI	14098	1	28°54'59.79S	31°47'32.61E	Farm Portion
28	LOT 171 UMHLATUZI	13767	2	28°51'9.59S	31°53'20.63E	Farm Portion
29		16832	0	28°51'28.01S	31°53'19.83E	Farm Portion
30		16832	3	28°53'0.62S	31°51'47.03E	Farm Portion
31		16832	1	28°51'39.27S	31°52'40.28E	Farm Portion
32	LOT PORT DURNFORD	15105	0	28°53'47.54S	31°49'28.44E	Farm Portion
33	LOT 104 UMLALAZI	13853	0	28°55'37.26S	31°46'54.26E	Farm Portion
34		16833	0	28°52'36.11S	31°53'1.16E	Farm Portion
35	LOT PORT DURNFORD	15105	1	28°54'11.75S	31°49'21.64E	Farm Portion
36		16802	1	28°54'50.32S	31°48'34.89E	Farm Portion
37		16833	1	28°51'21.48S	31°53'40.37E	Farm Portion
38	LOT PORT DURNFORD	15105	0	28°54'31.55S	31°49'26.76E	Farm Portion
39	RESERVE NO 10	15830	0	28°54'23.61S	31°53'42.56E	Farm Portion
40	KRAAL HILL ANNEXE	14519	0	28°54'49.55S	31°49'52E	Farm Portion
41		16838	0	28°50'56.44S	31°53'6.7E	Farm Portion
42	MZINGWENYA RAIL	16837	0	28°51'29.05S	31°53'26.65E	Farm Portion
43	DURNFORD RAIL	16836	0	28°53'35.53S	31°51'21.04E	Farm Portion
44	MZINGWENYA RAIL	16837	1	28°51'33.39S	31°53'28.91E	Farm Portion
45	LOT 103 UMLALAZI	13880	0	28°55'31.47S	31°46'17.4E	Farm Portion
46	LOT 171 UMHLATUZI	13767	4	28°51'8.94S	31°53'15.24E	Farm Portion
47		16832	0	28°52'51.48S	31°51'4.56E	Farm Portion
48	UMHLATUZI SAR	13580	0	28°51'46.01S	31°53'25.38E	Farm Portion
49		16832	5	28°51'53.62S	31°53'11.17E	Farm Portion
50	LOT 104 UMLALAZI	13853	0	28°55'42.16S	31°46'53.33E	Farm Portion
51	LOT 132 UMLALAZI	13602	1	28°54'29.54S	31°46'53.03E	Farm Portion
52	LOT 171 UMHLATUZI	13767	1	28°51'12.2S	31°53'18.03E	Farm Portion
53		16832	0	28°53'41.45S	31°50'44.89E	Farm Portion
54	MKHWANAZI	17488	0	28°55'52.31S	31°49'36.55E	Farm Portion
55		16802	0	28°54'16.29S	31°48'23.76E	Farm Portion
56	PORT DURNFORDSTATION	14520	0	28°54'51.19S	31°49'45.19E	Farm Portion
57	LOT 171 UMHLATUZI	13767	0	28°51'22.19S	31°53'11.83E	Farm Portion
58	LOT 102 UMLALAZI	13860	0	28°55'8.26S	31°45'49.19E	Farm Portion
59	LOT 171 UMHLATUZI	13767	3	28°51'14.21S	31°53'19.59E	Farm Portion
60		16832	2	28°51'41.63S	31°53'7.35E	Farm Portion
61	LOT 131 UMLALAZI	14098	0	28°55'49.01S	31°47'46.5E	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	12/12/20/2387/AM1	Wind	Approved	15.5
2	14/12/16/3/3/1/462	Solar PV	Approved	8.7
3	14/12/16/3/3/2/867	Solar PV	Approved	20.1
4	12/12/20/2356	Solar PV	Approved	28.4

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.

5	14/12/16/3/3/2/2041	Solar PV	Approved	13.6
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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:

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 site are indicated below.

Incentive, restriction or prohibition	Implication
Strategic Transmission Corridor-Expanded Eastern Corridor	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_EGI.pdf
Strategic Gas Pipeline Corridors-Phase 7: Coega to Richards Bay	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_GAS.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			
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 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.

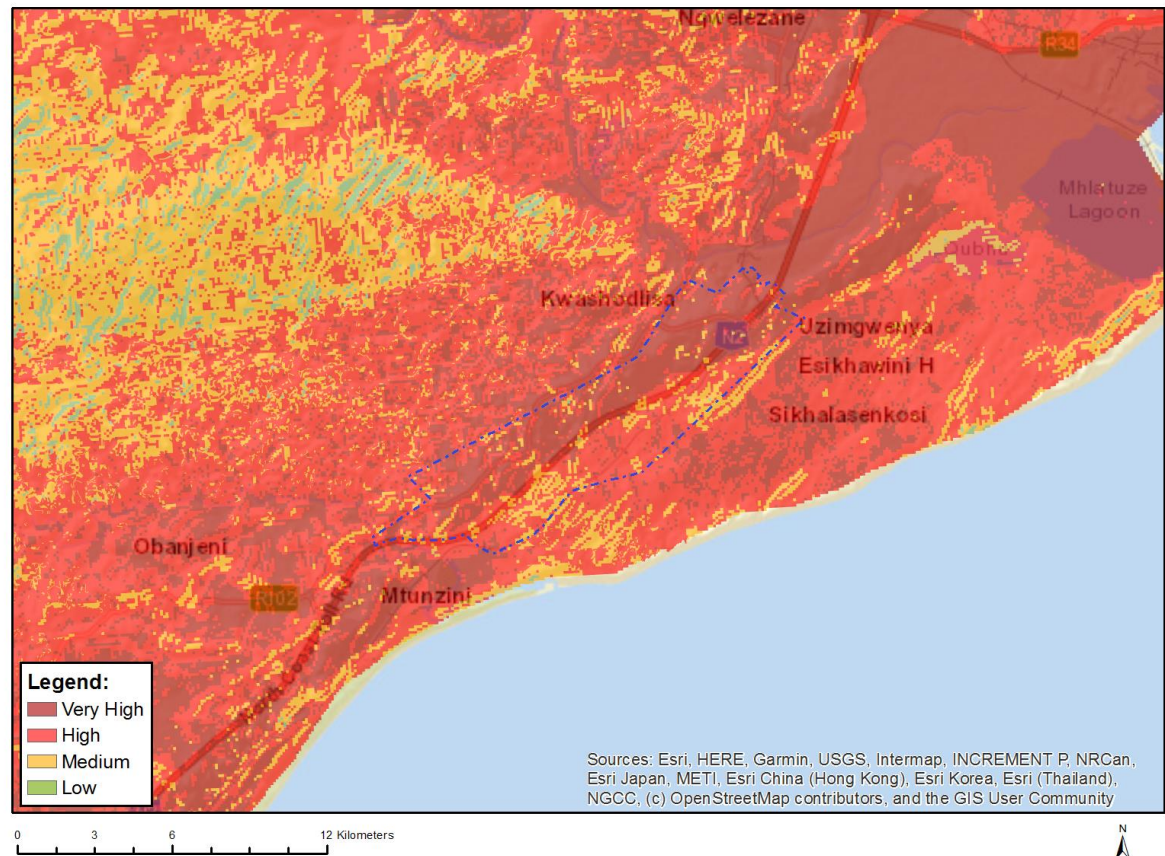
No	Specialist assessment	Assessment Protocol
1	Agricultural Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Agriculture_Assessment_Protocols.pdf
2	Landscape/Visual Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.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 Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/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 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

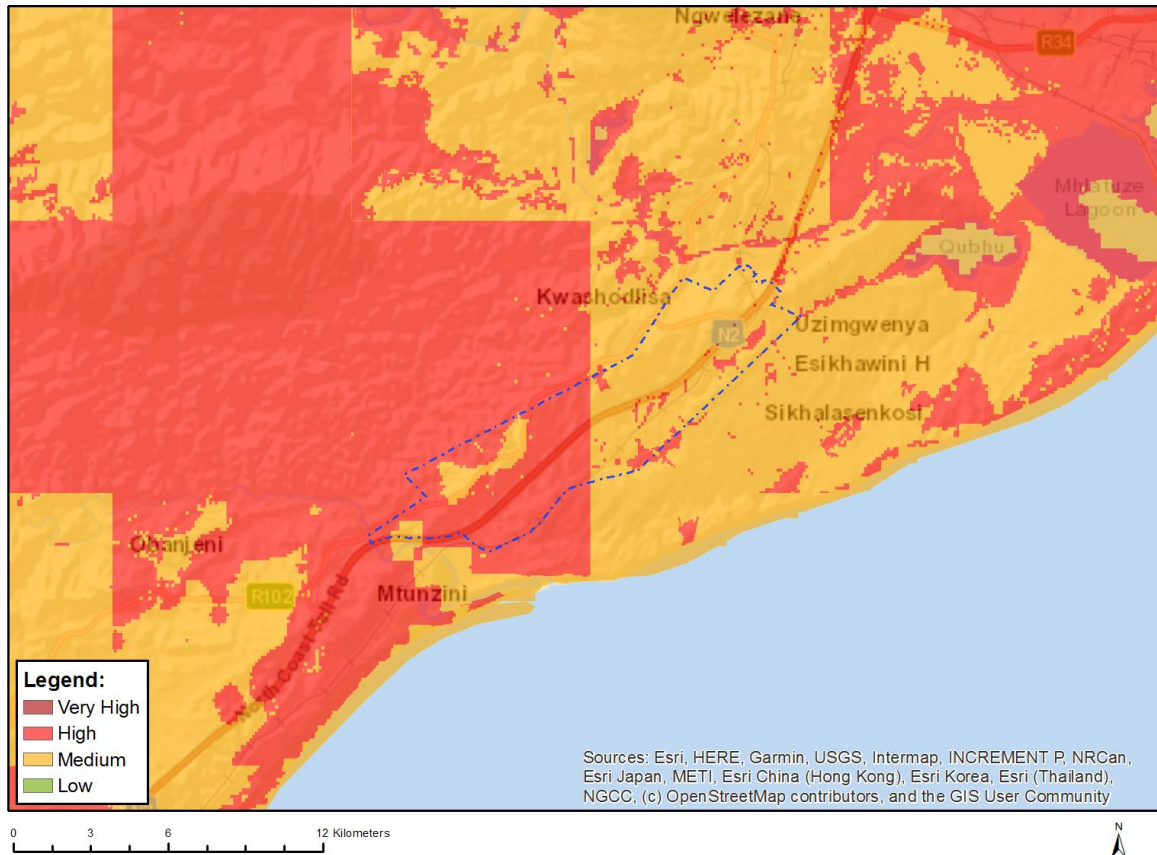


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
High	Land capability;09. Moderate-High/10. Moderate-High
High	Subsistence Farming 1;Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate
High	Subsistence Farming 1;Land capability;09. Moderate-High/10. Moderate-High
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	Land capability;11. High/12. High-Very high/13. High-Very high/14. Very high/15. Very high
Very High	Horticulture / Viticulture;Land capability;11. High/12. High-Very high/13. High-Very high/14. Very high/15. Very high
Very High	Subsistence Farming 1;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.

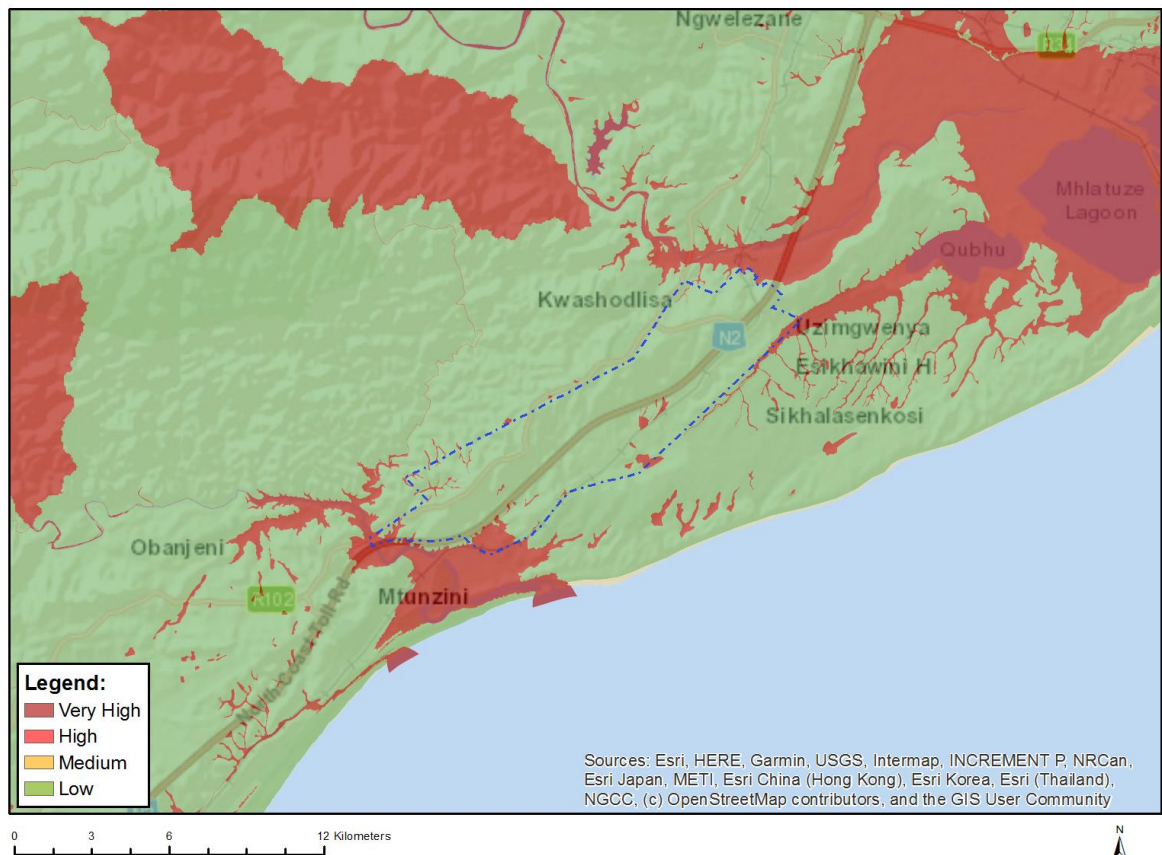
Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Amphibia-Hyperolius pickersgilli
High	Aves-Polemaetus bellicosus
High	Aves-Circaetus fasciolatus
High	Aves-Smithornis capensis
High	Aves-Halcyon senegaloides
High	Aves-Geokichla guttata
High	Aves-Caprimulgus natalensis
High	Aves-Podica senegalensis
High	Aves-Circus ranivorus
High	Aves-Nettapus auritus
High	Aves-Stephanoaetus coronatus
High	Aves-Hydroprogne caspia

High	Aves-Balearica regulorum
High	Aves-Pelecanus onocrotalus
High	Aves-Pelecanus rufescens
High	Aves-Mycteria ibis
High	Sensitive species 33
Medium	Amphibia-Hyperolius pickersgilli
Medium	Aves-Smithornis capensis
Medium	Aves-Halcyon senegaloides
Medium	Aves-Geokichla guttata
Medium	Aves-Podica senegalensis
Medium	Aves-Stephanoaetus coronatus
Medium	Aves-Balearica regulorum
Medium	Insecta-Deloneura millari millari
Medium	Insecta-Iolais diametra natalica
Medium	Insecta-Teriomima zuluana
Medium	Mammalia-Cercopithecus albogularis labiatus
Medium	Mammalia-Dendrohyrax arboreus
Medium	Sensitive species 8
Medium	Reptilia-Crocodylus niloticus
Medium	Reptilia-Dendroaspis angusticeps
Medium	Reptilia-Pelusios rhodesianus
Medium	Invertebrate-Forest invertebrate
Medium	Invertebrate-Arytropteris basalis
Medium	Invertebrate-Pomatonota dregii
Medium	Invertebrate-Physophorina livingstonii

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

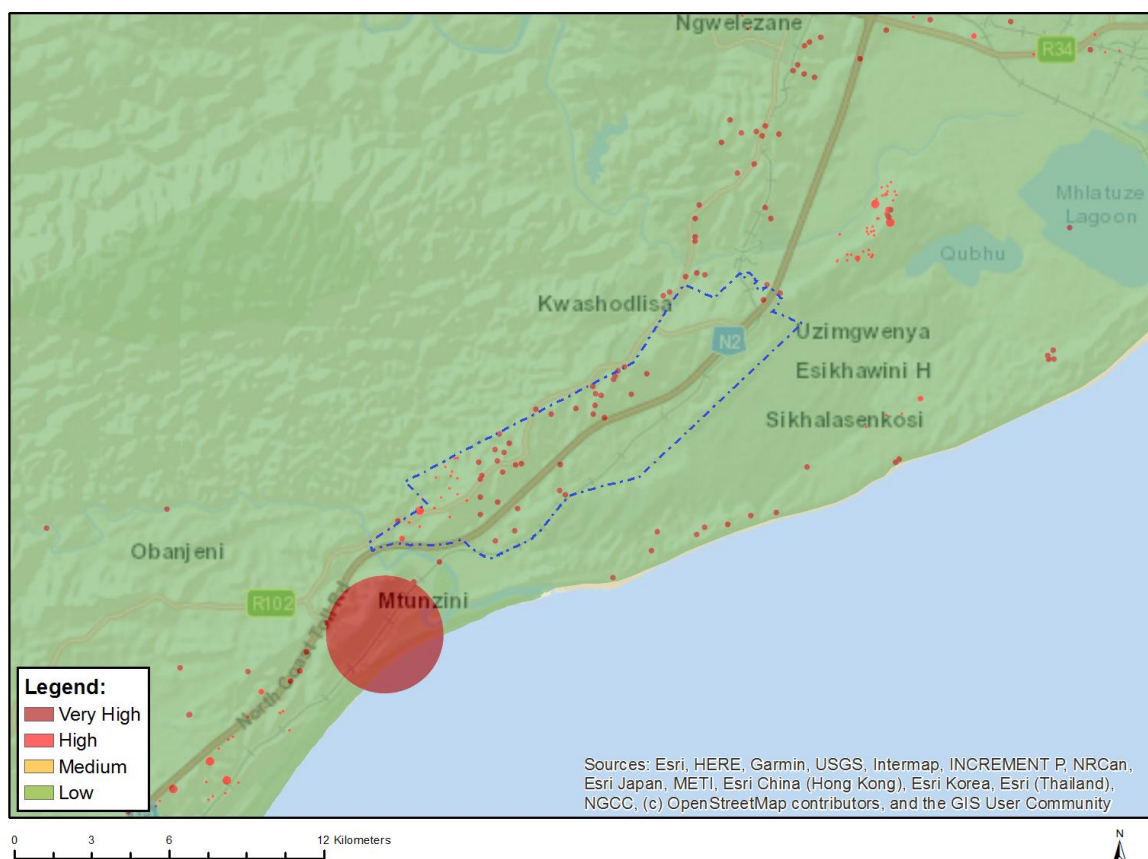


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity
Very High	Estuary_uMhlathuze
Very High	Estuary_uMlalazi
Very High	Rivers_C
Very High	Wetlands_(Estuary)
Very High	Wetlands_Indian Ocean Coastal Belt Bioregion (Depression)
Very High	Wetlands_Indian Ocean Coastal Belt Bioregion (Floodplain)
Very High	Wetlands_Indian Ocean Coastal Belt Bioregion (Seep)
Very High	Wetlands_Indian Ocean Coastal Belt Bioregion (Valley-bottom)

MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY

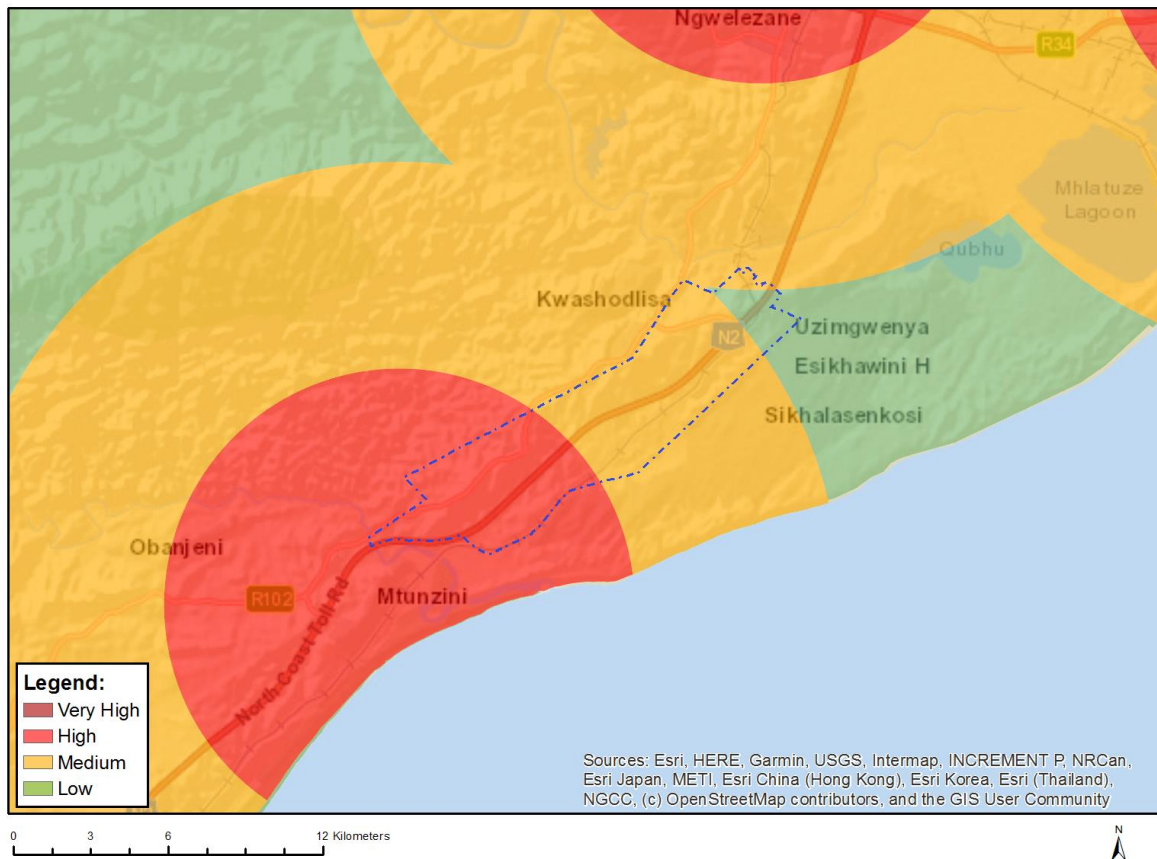


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
High	Within 150m of a Grade IIIa Heritage site
High	Within 100m of a Grade IIIb Heritage site
High	Within 50m of a Grade IIIc Heritage site
Low	Low sensitivity
Very High	Within 100m of an Ungraded Heritage site

MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY

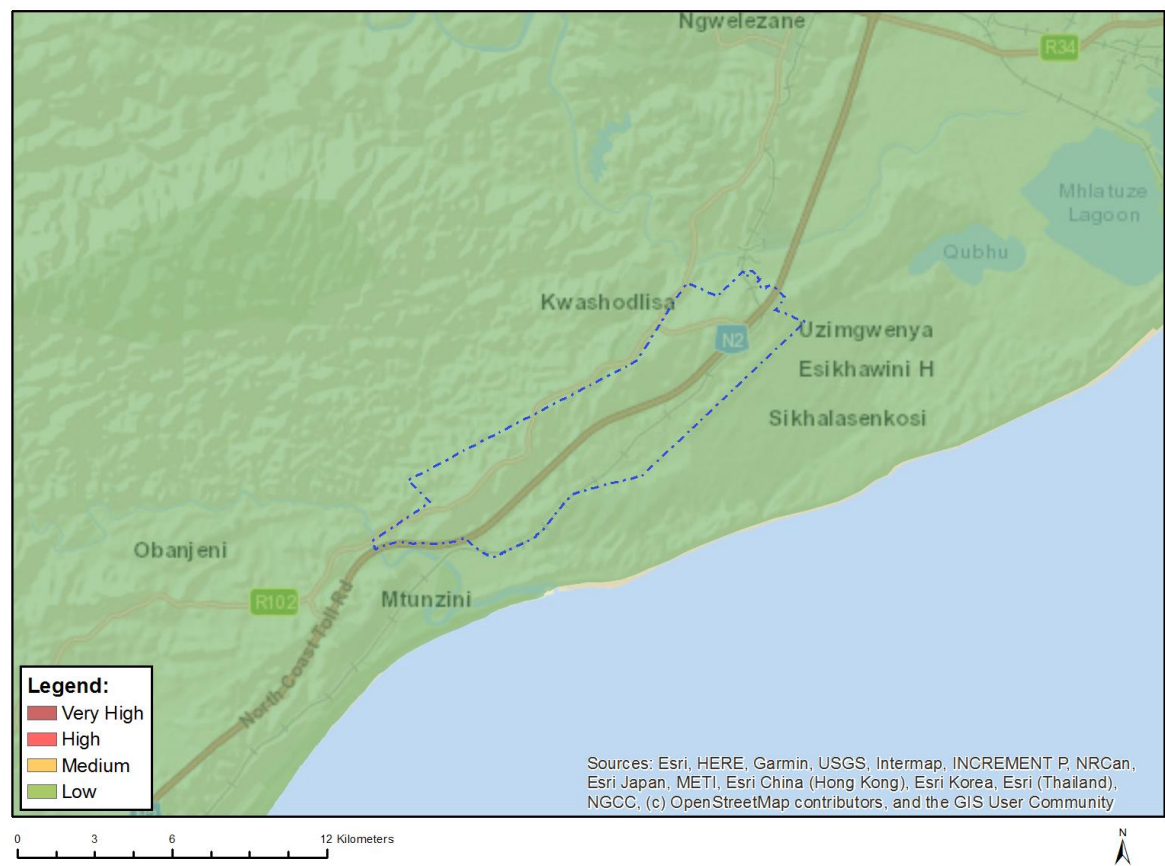


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Within 8 km of other civil aviation aerodrome
Low	Low sensitivity
Medium	Between 8 and 15 km of other civil aviation aerodrome

MAP OF RELATIVE DEFENCE THEME SENSITIVITY

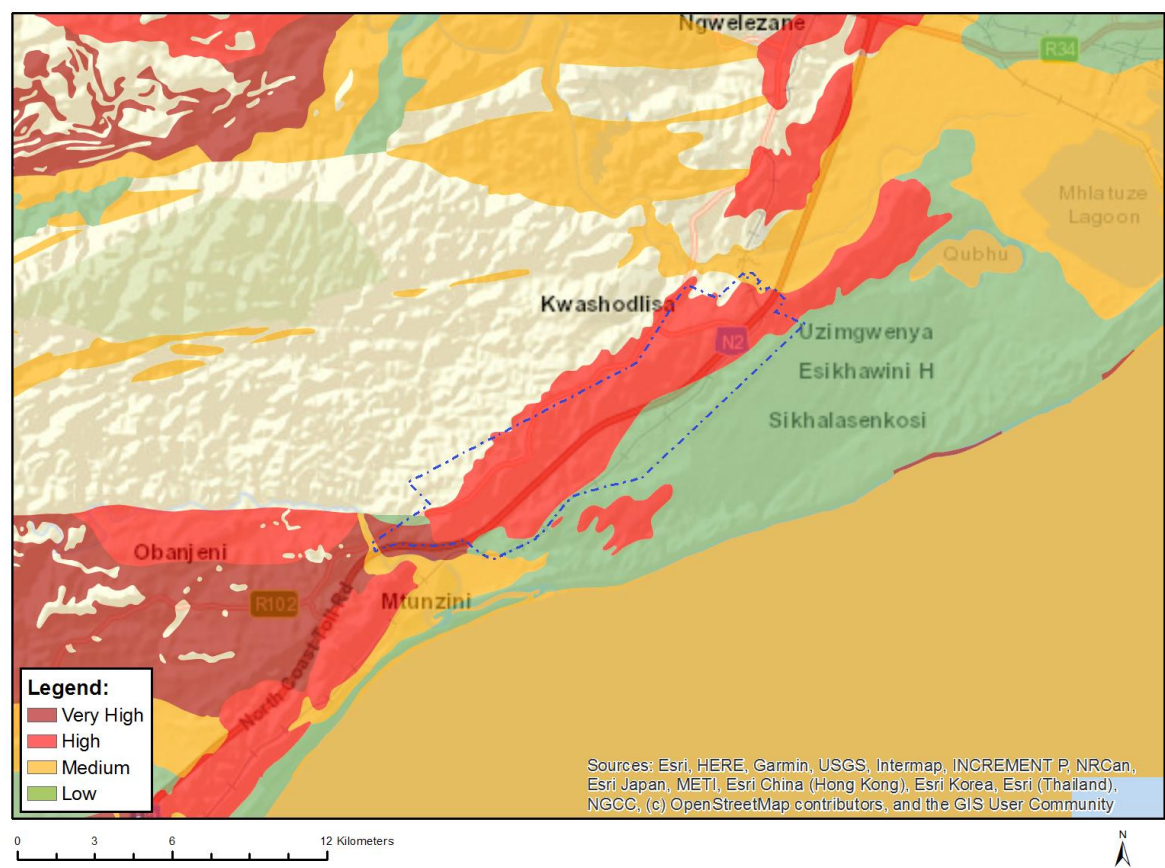


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY

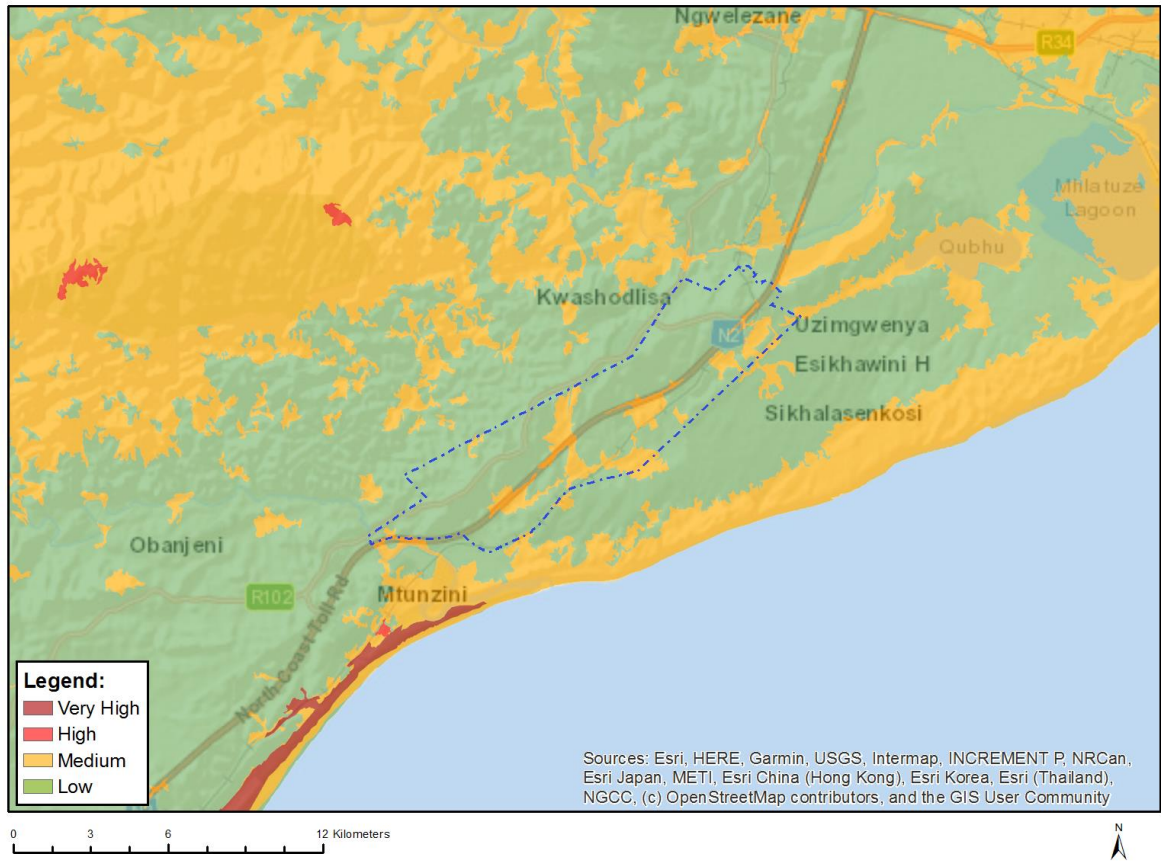


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
High	Features with a High paleontological sensitivity
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.

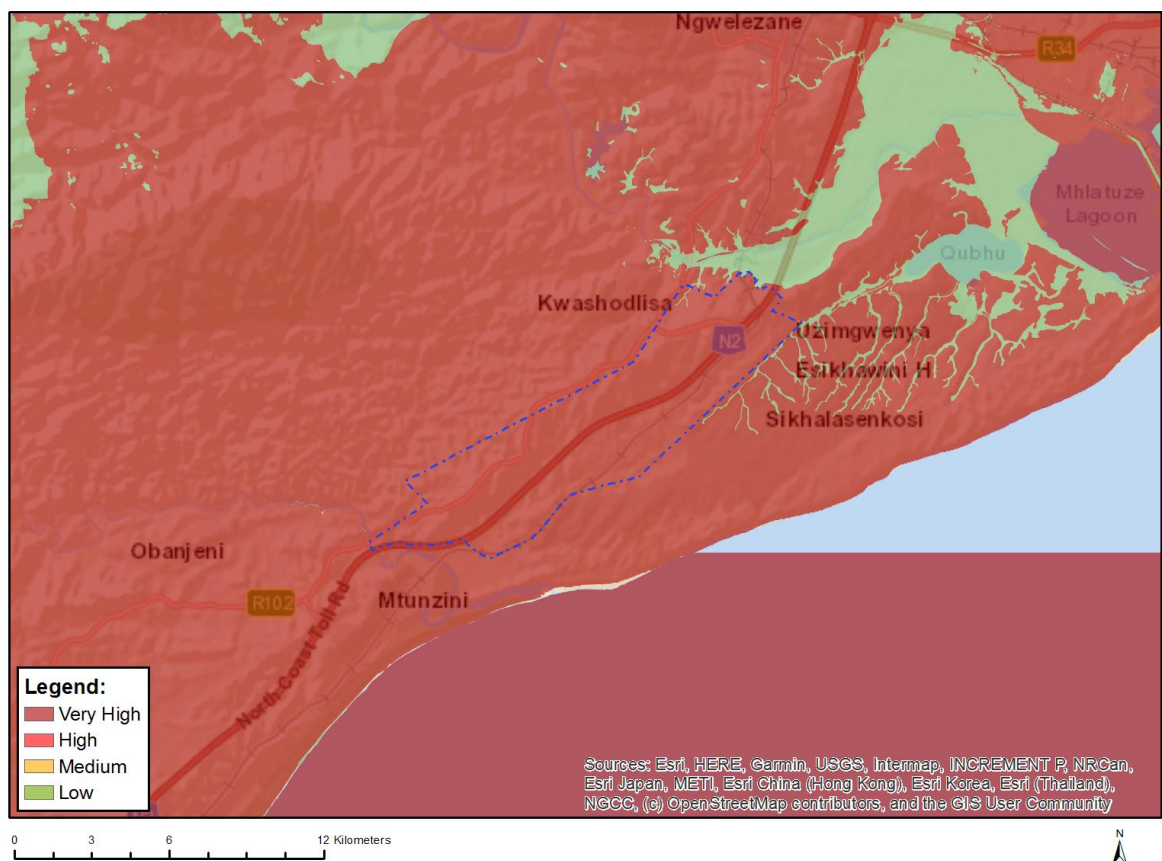
Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity
Medium	Sensitive species 1252
Medium	Aspalathus gerrardii
Medium	Tephrosia inandensis
Medium	Thesium polygaloides
Medium	Sensitive species 89
Medium	Fimbristylis aphylla
Medium	Pachycarpus concolor subsp. arenicola
Medium	Nidorella tongensis
Medium	Senecio ngoyanus
Medium	Wolffiella denticulata
Medium	Salpinctium natalense
Medium	Cassipourea gummiflua var. verticillata

Medium	Sensitive species 814
Medium	Oxygonum dregeanum subsp. streyi
Medium	Pavonia dregei
Medium	Sensitive species 649
Medium	Sensitive species 1221
Medium	Disperis woodii
Medium	Sensitive species 191

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity
Very High	CBA: Optimal
Very High	CBA: Irreplaceable
Very High	Indigenous Forest (VegMap_2018) Northern Coastal Forest
Very High	Indigenous Forest (VegMap_2018) Swamp Forest
Very High	National Protected Area Expansion Strategy (NPAES)
Very High	EN_Maputaland Coastal Belt
Very High	EN_KwaZulu-Natal Coastal Belt Grassland