

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

EIA Reference number: To be assigned

Project name: Great Karoo Renewable Energy Facility

Project title: Great Karoo Renewable Energy Facility - WEF

Date screening report generated: 10/08/2021 13:29:24

Applicant: Great Karoo Renewable Energy (Pty) Ltd

Compiler: Savannah Environmental (Pty) Ltd

Compiler signature:
.....

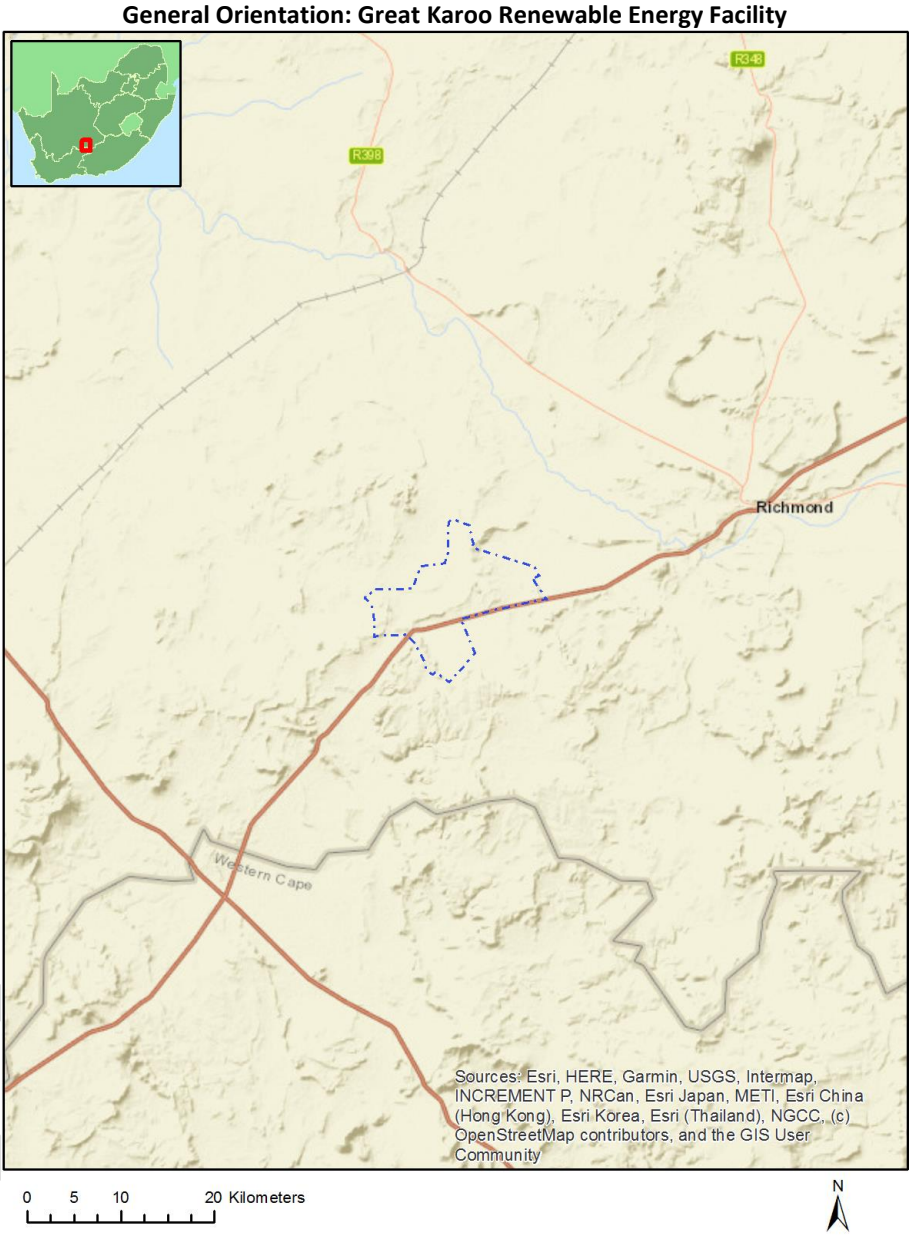
Application Category: Utilities Infrastructure|Electricity|Generation|Renewable|Wind

Table of Contents

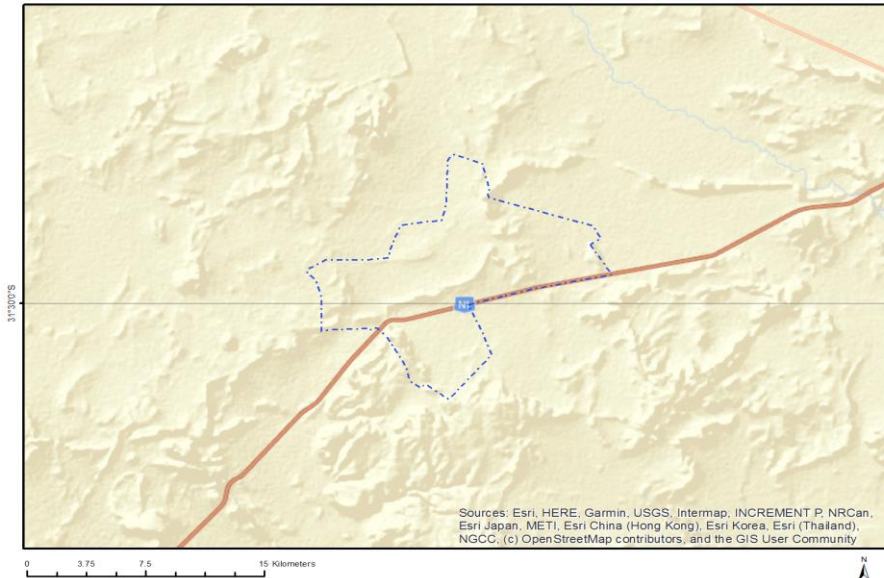
- Proposed Project Location 3
 - Orientation map 1: General location 3
- Map of proposed site and relevant area(s) 4
 - Cadastral details of the proposed site 4
 - Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area 5
 - Environmental Management Frameworks relevant to the application 5
- Environmental screening results and assessment outcomes 5
 - Relevant development incentives, restrictions, exclusions or prohibitions 5
- Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones 6
 - Proposed Development Area Environmental Sensitivity 6
 - Specialist assessments identified 7
- Results of the environmental sensitivity of the proposed area 9
 - MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY 9
 - MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY 10
 - MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY 11
 - MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY 12
 - MAP OF RELATIVE AVIAN (WIND) THEME SENSITIVITY 13
 - MAP OF RELATIVE BATS (WIND) THEME SENSITIVITY 14
 - MAP OF RELATIVE CIVIL AVIATION (WIND) THEME SENSITIVITY 15
 - MAP OF RELATIVE DEFENCE (WIND) THEME SENSITIVITY 16
 - MAP OF RELATIVE FLICKER THEME SENSITIVITY 17
 - MAP OF RELATIVE LANDSCAPE (WIND) THEME SENSITIVITY 18
 - MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY 19
 - MAP OF RELATIVE NOISE THEME SENSITIVITY 20
 - MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY 21
 - MAP OF RELATIVE RFI (WIND) THEME SENSITIVITY 22
 - MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY 23

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		147	0	31°28'3.47S	23°48'12.24E	Farm
2	BULT AND REITFONTEIN	96	0	31°33'47.4S	23°34'43.13E	Farm
3	ANNEX RONDAVEL	86	0	31°29'41.52S	23°33'40.21E	Farm
4	GEGUNDEFONTEIN	53	0	31°25'11.19S	23°42'33.48E	Farm
5	VOGELSTRUISFONTEIN	84	0	31°29'54.07S	23°41'52.38E	Farm
6	RONDAVEL	85	0	31°30'39.91S	23°36'50.72E	Farm
7	GEGUNDEFONTEIN	53	11	31°26'51.2S	23°40'19.76E	Farm Portion
8	VOGELSTRUISFONTEIN	84	0	31°28'43.48S	23°41'12.76E	Farm Portion
9	RONDAVEL	85	4	31°30'33.05S	23°37'10.68E	Farm Portion
10		147	0	31°27'49.57S	23°46'51.57E	Farm Portion
11	VOGELSTRUISFONTEIN	84	0	31°30'56.56S	23°42'16.98E	Farm Portion
12	ANNEX RONDAVEL	86	1	31°28'38.46S	23°34'23.57E	Farm Portion
13	BULT AND REITFONTEIN	96	6	31°34'44.85S	23°36'58.73E	Farm Portion
14	GEGUNDEFONTEIN	53	1	31°26'19.25S	23°43'52.42E	Farm Portion
15	RONDAVEL	85	1	31°28'14.42S	23°36'27.36E	Farm Portion
16	RONDAVEL	85	0	31°31'13.59S	23°37'19.19E	Farm Portion
17	BULT AND REITFONTEIN	96	9	31°32'29.3S	23°38'9.71E	Farm Portion
18	VOGELSTRUISFONTEIN	84	3	31°29'27.19S	23°42'26.64E	Farm Portion
19	VOGELSTRUISFONTEIN	84	2	31°29'27.14S	23°42'20.92E	Farm Portion
20	RONDAVEL	85	5	31°30'41.49S	23°36'56.37E	Farm Portion
21	ANNEX RONDAVEL	86	0	31°29'52.32S	23°33'30.56E	Farm Portion
22	RONDAVEL	85	0	31°30'31.11S	23°35'57.22E	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	12/12/20/2462	Solar PV	Approved	22
2	14/12/16/3/3/2/331	Solar PV	Approved	25.6

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 | Wind.**

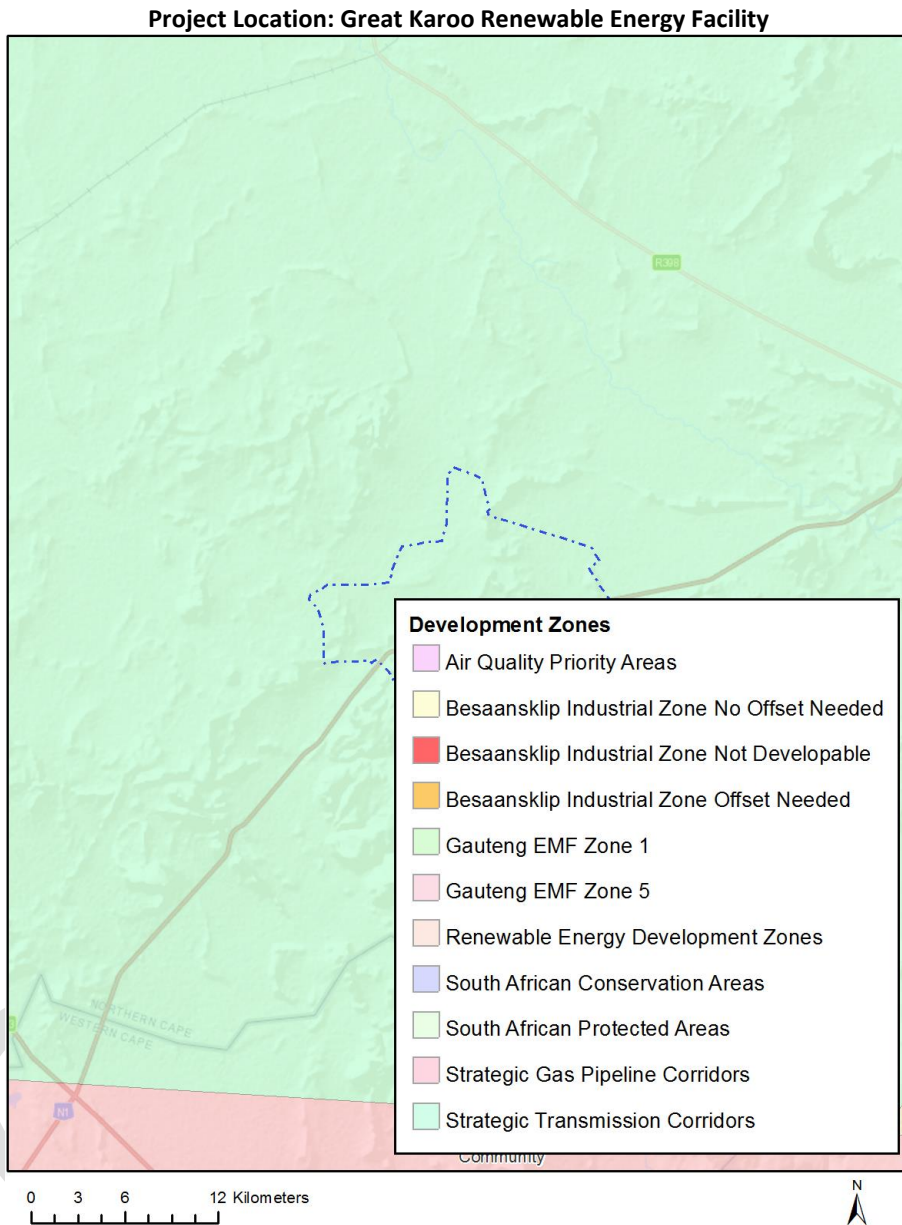
Relevant development incentives, restrictions, exclusions or prohibitions

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

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.

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			
Archaeological and Cultural Heritage Theme				X
Avian (Wind) Theme				X
Bats (Wind) Theme		X		
Civil Aviation (Wind) Theme			X	
Defence (Wind) Theme				X
Flicker Theme	X			
Landscape (Wind) Theme	X			
Paleontology Theme	X			
Noise Theme	X			
Plant Species Theme			X	
RFI (Wind) 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.

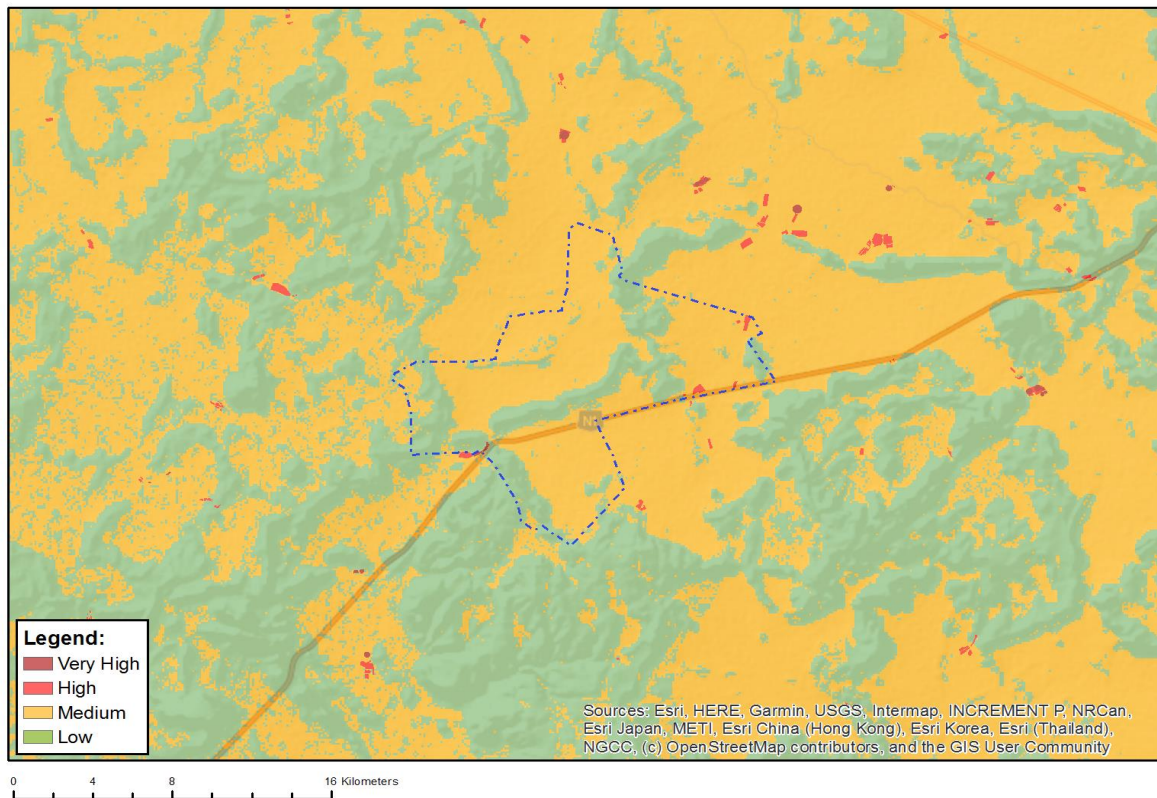
N o	Specialist assessment	Assessment Protocol
1	Agricultural Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_WindAndSolar_Agriculture_Assessment_Protocols.pdf
2	Landscape/Visual Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_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	Avian Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Avifauna Assessment Protocols.pdf
8	Civil Aviation Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Civil Aviation Installations Assessment Protocols.pdf
9	Defense Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Defence Installations Assessment Protocols.pdf
10	RFI Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
11	Noise Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Noise Impacts Assessment Protocol.pdf
12	Flicker Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
13	Traffic Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
14	Geotechnical Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
15	Socio-Economic Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
16	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Plant Species Assessment Protocols.pdf
17	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

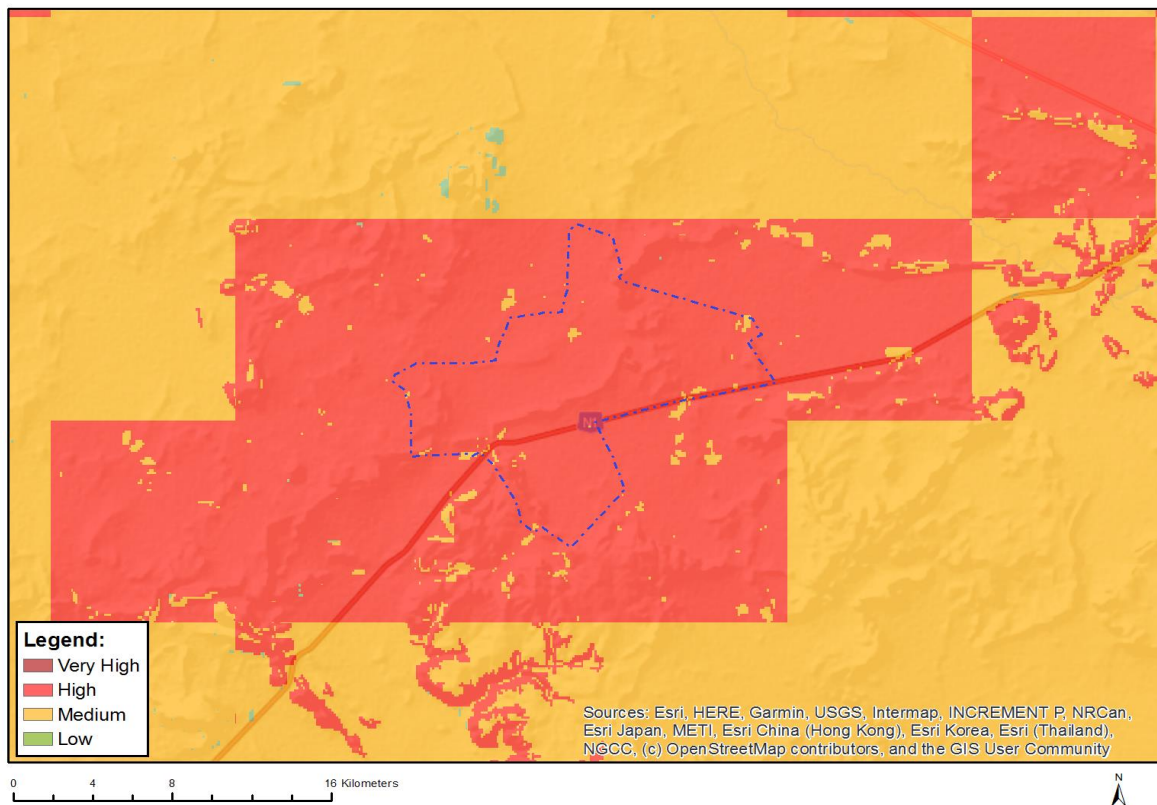


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

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	Horticulture / Viticulture;Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate
Very High	Horticulture / Viticulture;Land capability;01. Very low/02. Very low/03. Low-Very low/04. Low-Very low/05. Low

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



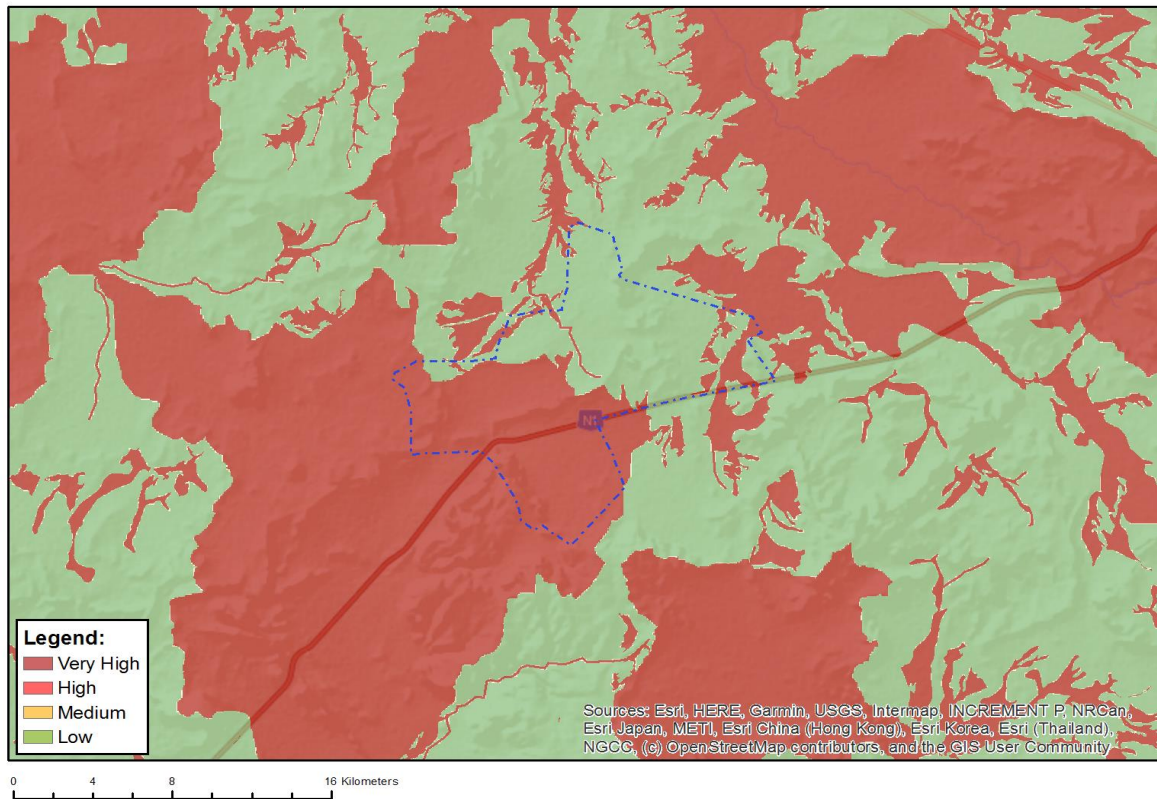
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their 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-Neotis ludwigii
High	Aves-Aquila verreauxii
Medium	Aves-Aquila verreauxii
Medium	Mammalia-Bunolagus monticularis

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

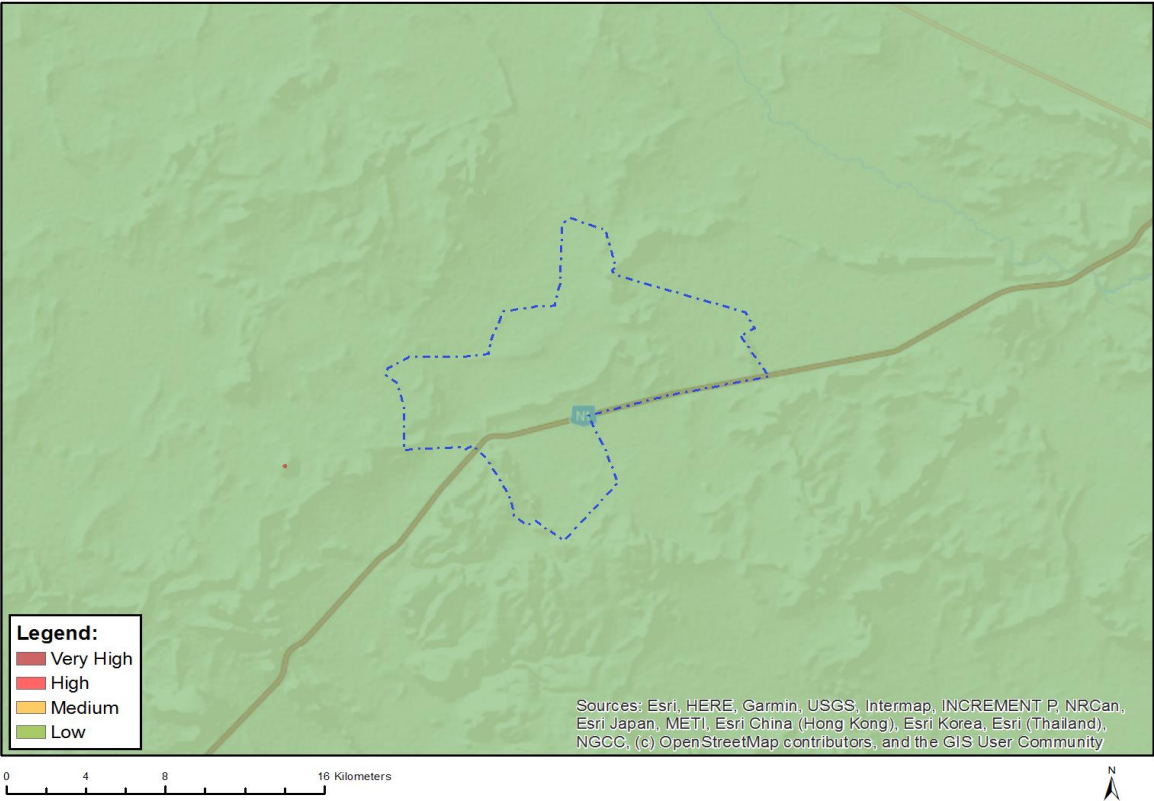


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity
Very High	Rivers
Very High	Wetlands and Estuaries
Very High	Freshwater ecosystem priority area quinary catchments

MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY

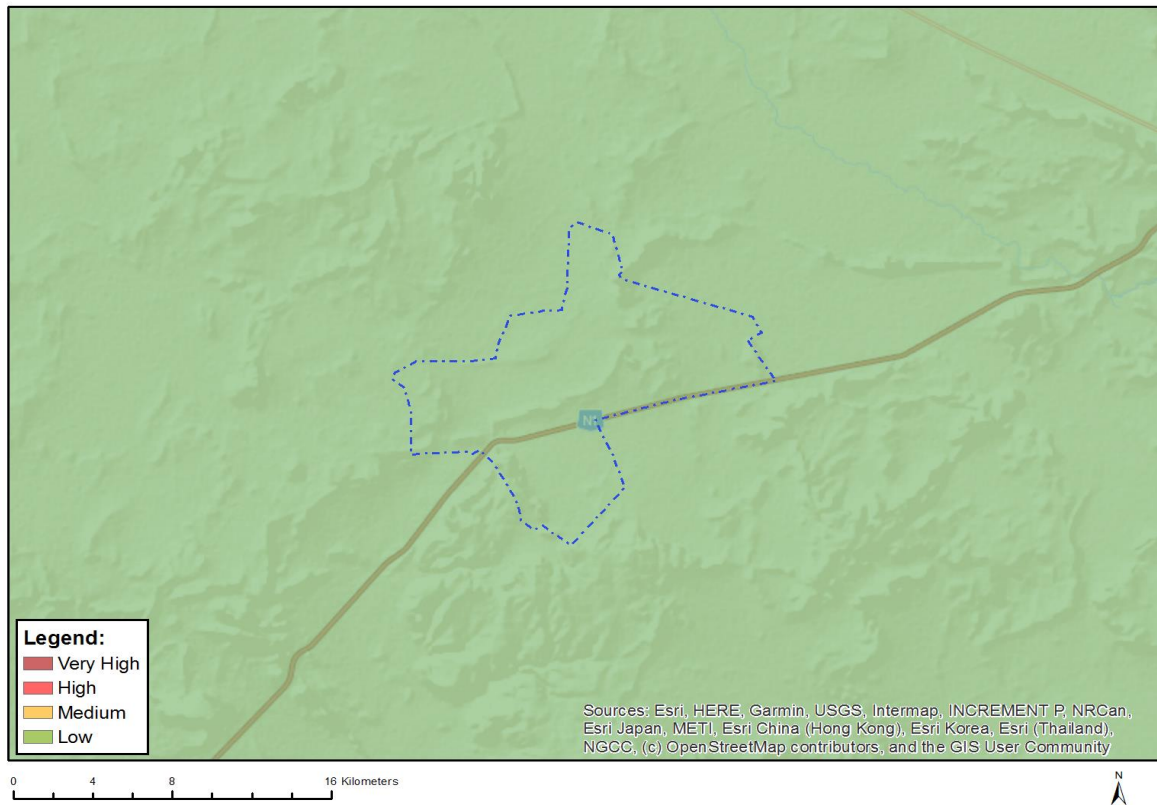


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

MAP OF RELATIVE AVIAN (WIND) THEME SENSITIVITY

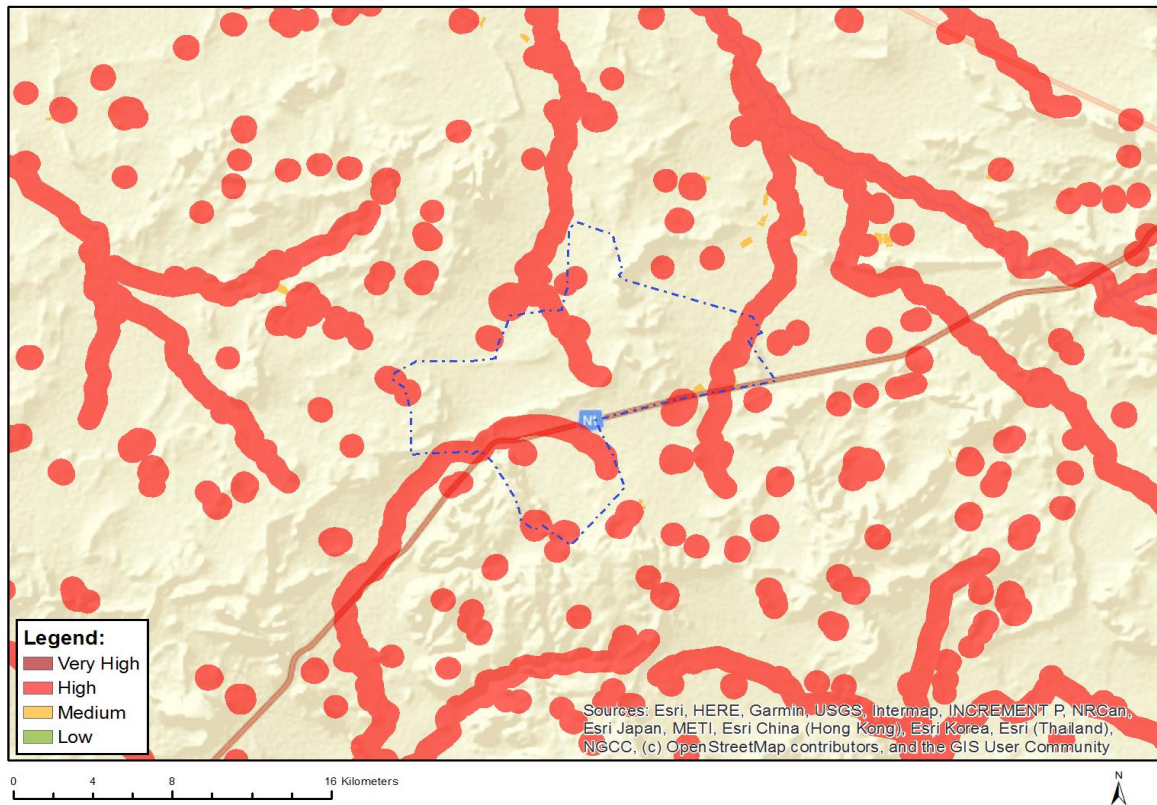


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Area Outside Sensitivities

MAP OF RELATIVE BATS (WIND) THEME SENSITIVITY

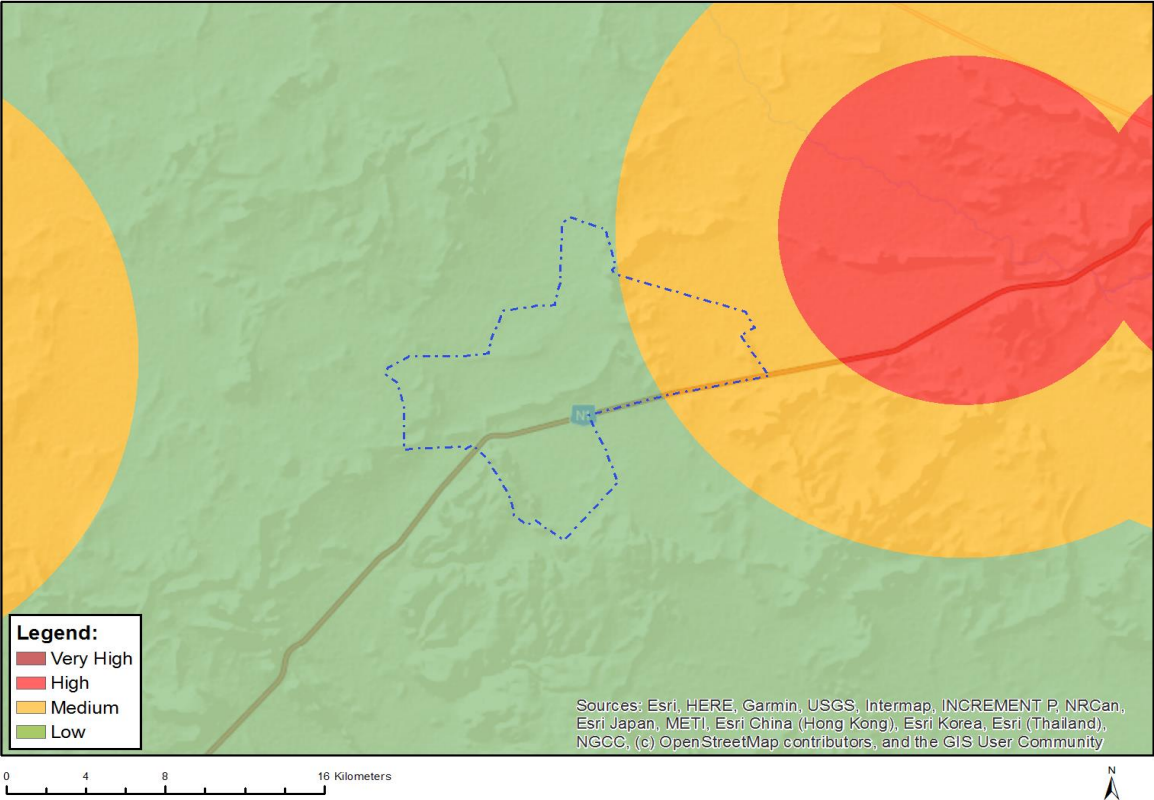


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Within 500 m of a river
High	Wetland
High	Within 500 m of a wetland
Medium	Croplands

MAP OF RELATIVE CIVIL AVIATION (WIND) THEME SENSITIVITY

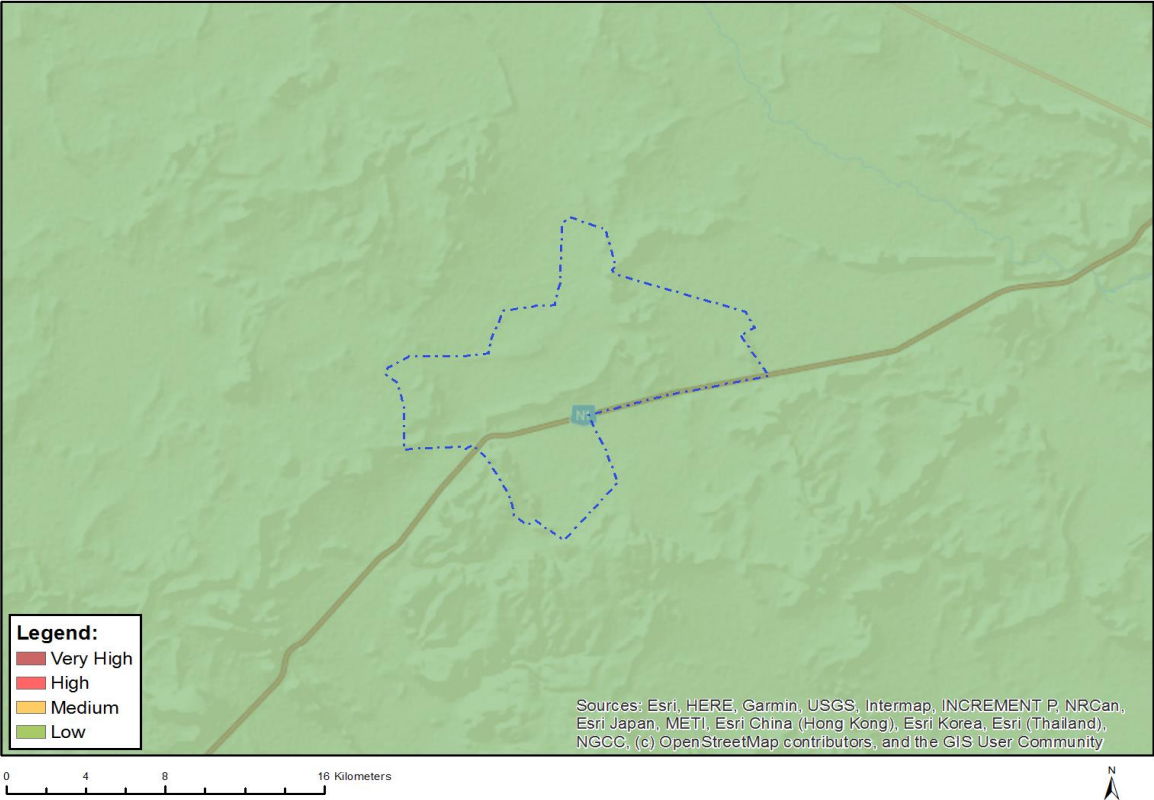


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

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

MAP OF RELATIVE DEFENCE (WIND) THEME SENSITIVITY

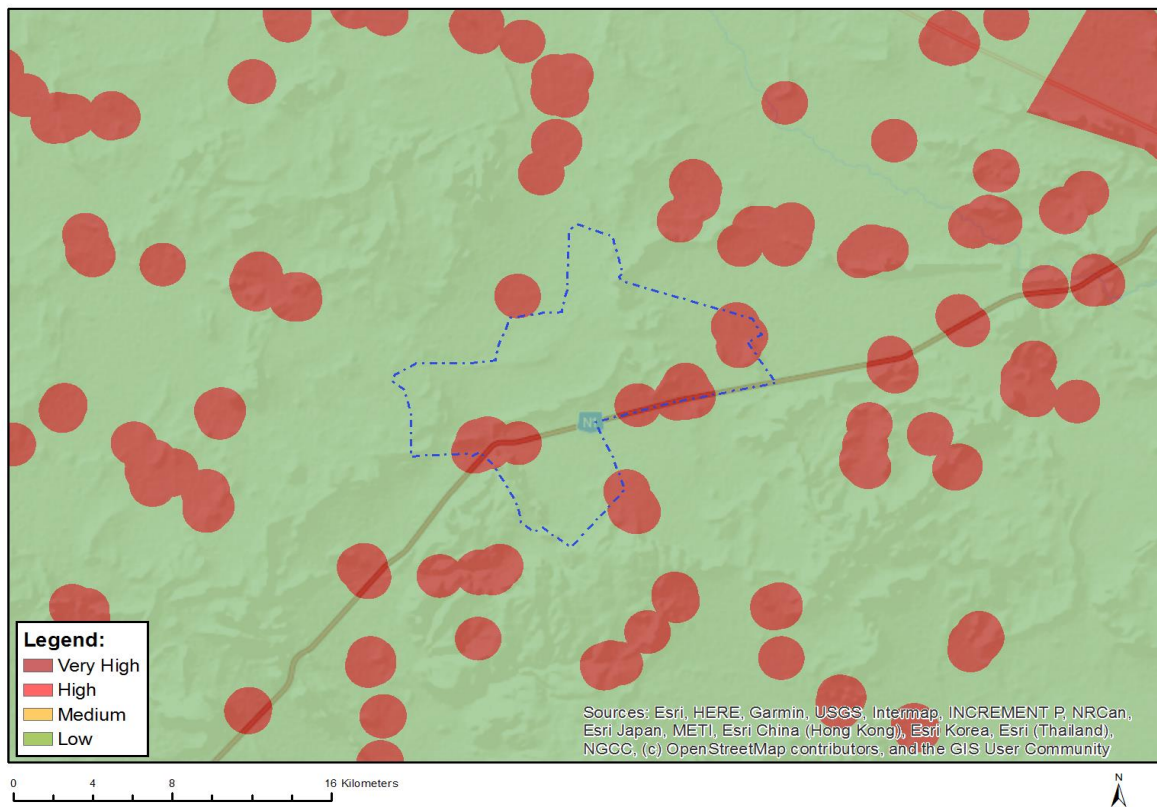


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

MAP OF RELATIVE FLICKER THEME SENSITIVITY

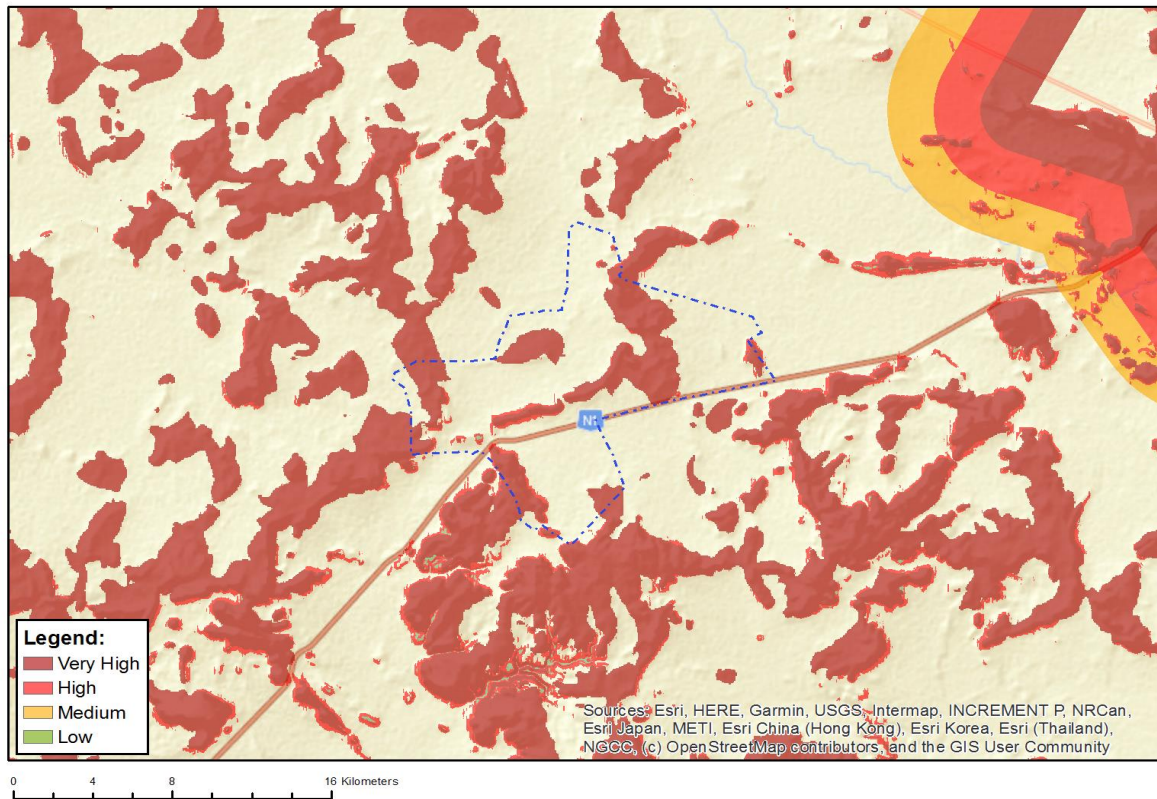


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Low	Area of low sensitivity
Very High	Potential temporarily or permanently inhabited residence

MAP OF RELATIVE LANDSCAPE (WIND) THEME SENSITIVITY

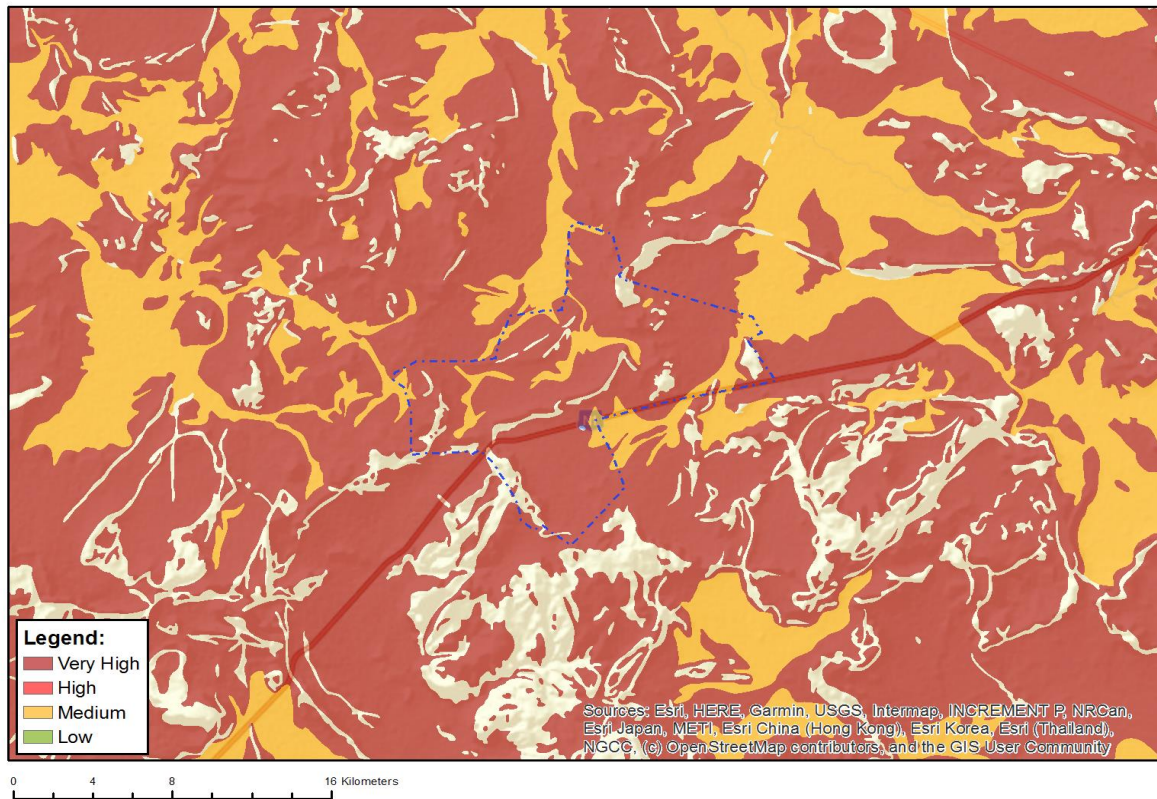


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
High	Slope between 1:4 and 1:10
Low	Slope less than 1:10
Very High	Mountain tops and high ridges
Very High	Slope more than 1:4

MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY

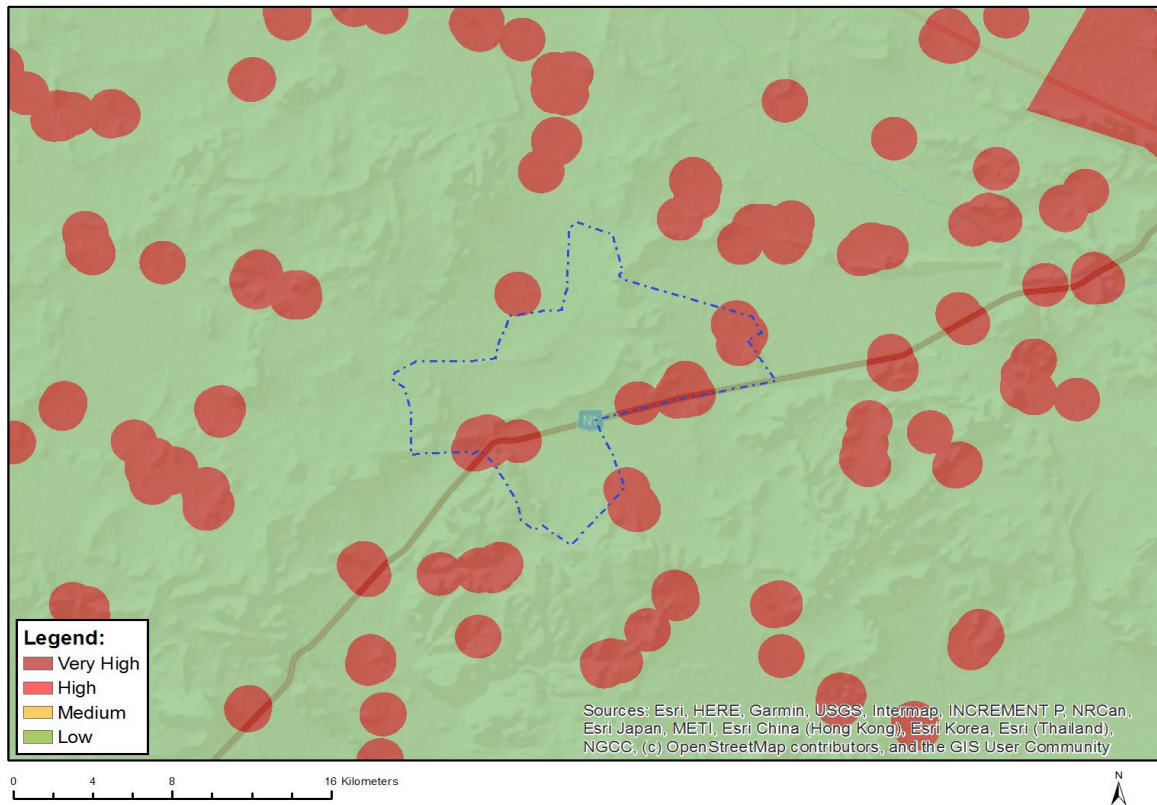


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

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

MAP OF RELATIVE NOISE THEME SENSITIVITY

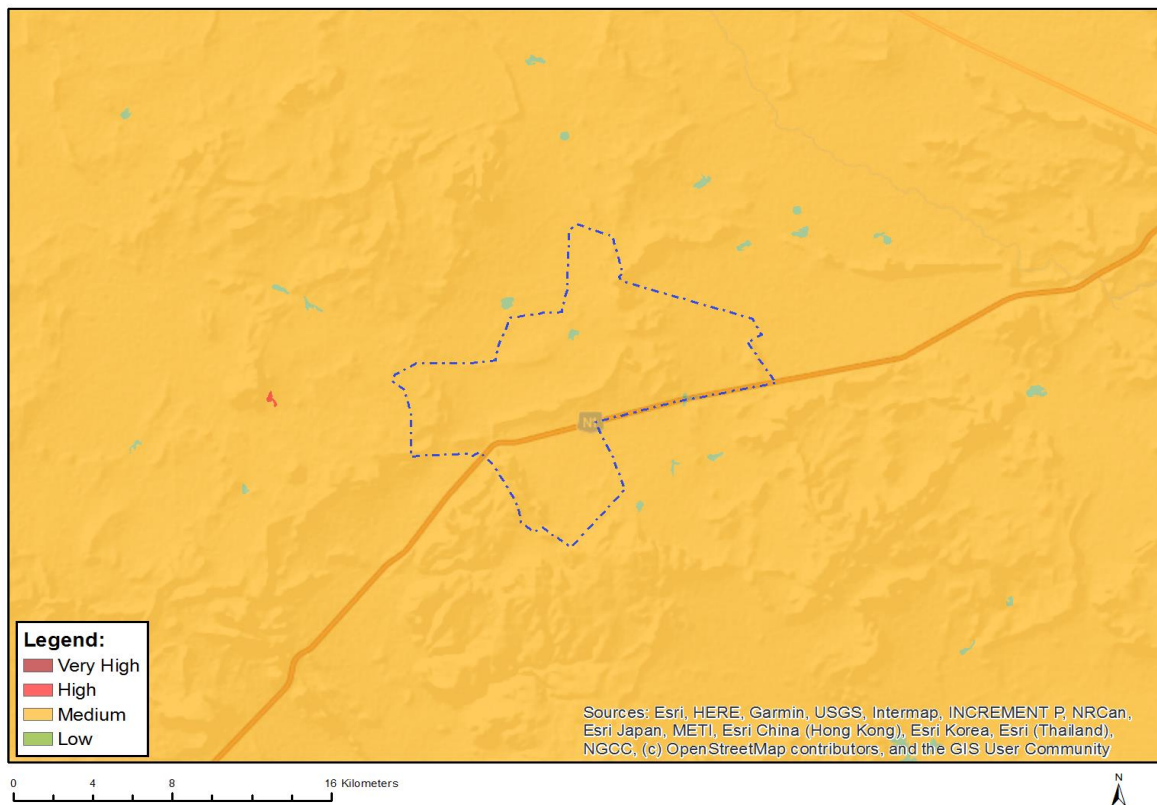


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Low	Area of low sensitivity
Very High	Potential temporarily or permanently inhabited residence

MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



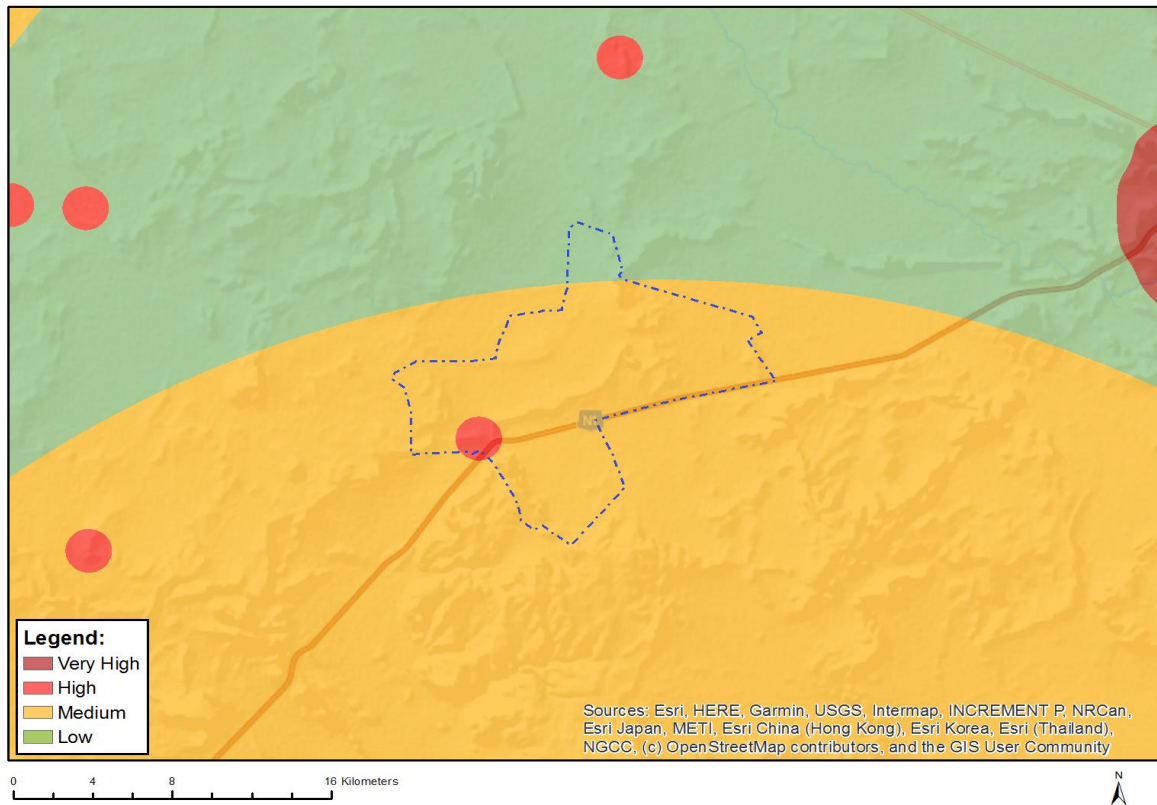
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their 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	Hereroa concava
Medium	Sensitive species 945

MAP OF RELATIVE RFI (WIND) THEME SENSITIVITY

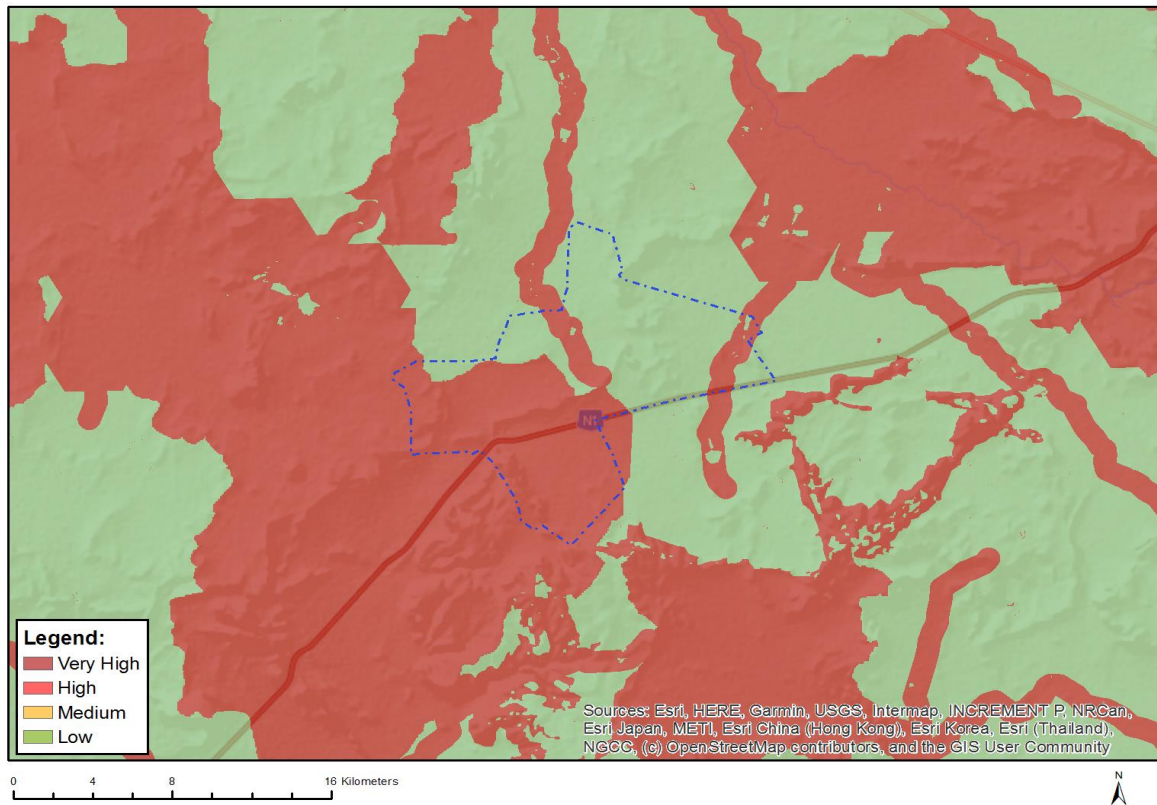


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Within 1 km of a telecommunication facility;Between 26 and 48 km of a SKA receptor;More than 60 km from a Weather Radar installation
Low	Low sensitivity for telecommunications;None;More than 60 km from a Weather Radar installation
Medium	Low sensitivity for telecommunications;Between 26 and 48 km of a SKA receptor;More than 60 km from a Weather Radar installation

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	Critical Biodiversity Area 1
Very High	Ecological Support Area
Very High	Freshwater ecosystem priority area quinary catchments