

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

**EIA Reference number:** 14-12-16-3-3-1-2114

**Project name:** Merino Wind Farm

**Project title:** Merino Wind Farm

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**Applicant:** Great Karoo Renewable Energy (Pty) Ltd

**Compiler:** Savannah Environmental (Pty) Ltd

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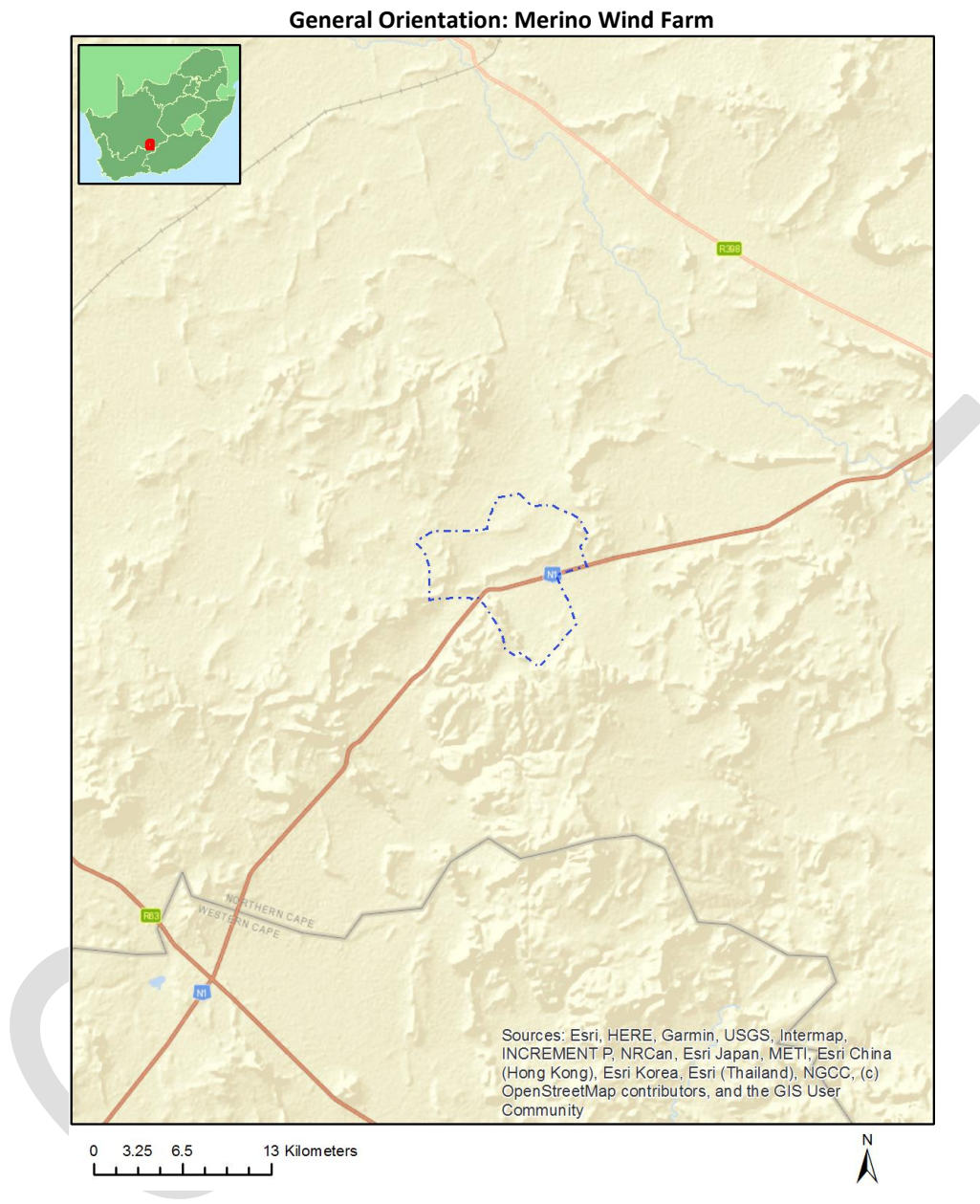
**Application Category:** Utilities Infrastructure | Electricity | Generation | Renewable | Wind

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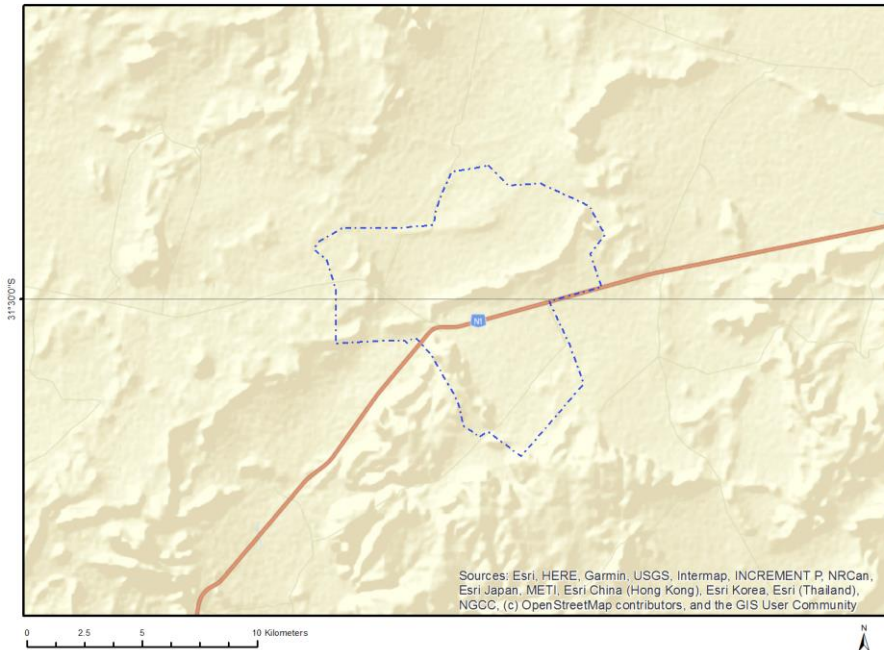
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# Proposed Project Location

## 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	ANNEX RONDAVEL	86	0	31°29'41.52S	23°33'40.21E	Farm
2	RONDAVEL	85	0	31°30'39.91S	23°36'50.72E	Farm
3	BULT AND REITFONTEIN	96	0	31°33'47.4S	23°34'43.13E	Farm
4	VOGELSTRUISFONTEIN	84	0	31°29'54.07S	23°41'52.38E	Farm
5	BULT AND REITFONTEIN	96	9	31°32'29.3S	23°38'9.71E	Farm Portion
6	VOGELSTRUISFONTEIN	84	2	31°29'27.14S	23°42'20.92E	Farm Portion
7	BULT AND REITFONTEIN	96	6	31°34'44.85S	23°36'58.73E	Farm Portion
8	ANNEX RONDAVEL	86	0	31°29'52.32S	23°33'30.56E	Farm Portion
9	ANNEX RONDAVEL	86	1	31°28'38.46S	23°34'23.57E	Farm Portion
10	RONDAVEL	85	4	31°30'33.05S	23°37'10.68E	Farm Portion
11	RONDAVEL	85	0	31°30'31.11S	23°35'57.22E	Farm Portion
12	VOGELSTRUISFONTEIN	84	0	31°28'43.48S	23°41'12.76E	Farm Portion
13	RONDAVEL	85	5	31°30'41.49S	23°36'56.37E	Farm Portion
14	VOGELSTRUISFONTEIN	84	3	31°29'27.19S	23°42'26.64E	Farm Portion
15	RONDAVEL	85	0	31°31'13.59S	23°37'19.19E	Farm Portion
16	VOGELSTRUISFONTEIN	84	0	31°30'56.56S	23°42'16.98E	Farm Portion
17	RONDAVEL	85	1	31°28'14.42S	23°36'27.36E	Farm Portion

Development footprint<sup>1</sup> 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	22.4
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.**

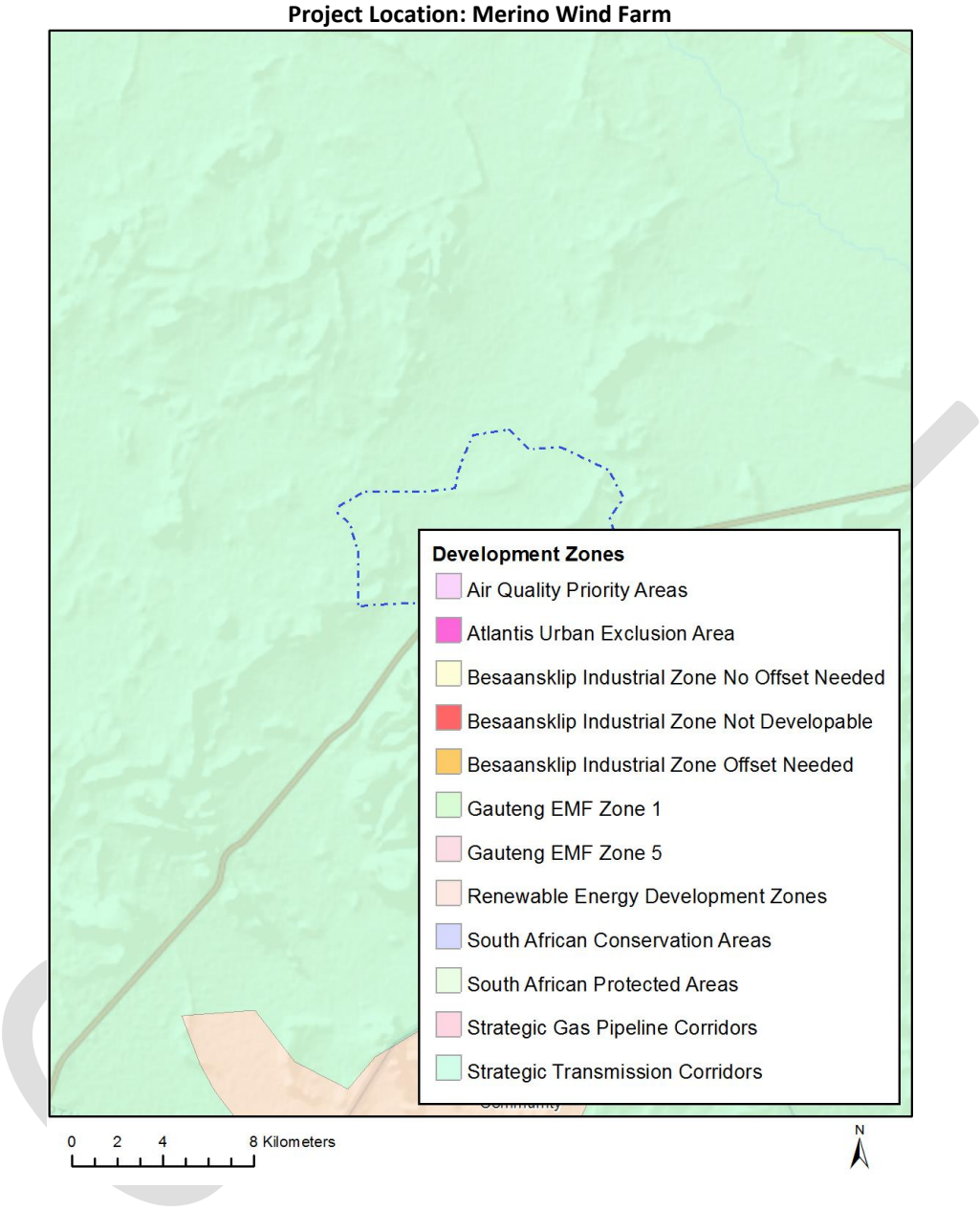
## Relevant development incentives, restrictions, exclusions or prohibitions

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	<a href="https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_EGI.pdf">https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_EGI.pdf</a>

<sup>1</sup> “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.

<b>N o</b>	<b>Specialist assessment</b>	<b>Assessment Protocol</b>
1	Agricultural Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_WindAndSolar_Agriculture_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_WindAndSolar_Agriculture_Assessment_Protocols.pdf</a>
2	Landscape/Visual Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
3	Archaeological and Cultural Heritage Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
4	Palaeontology Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
5	Terrestrial Biodiversity Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf</a>

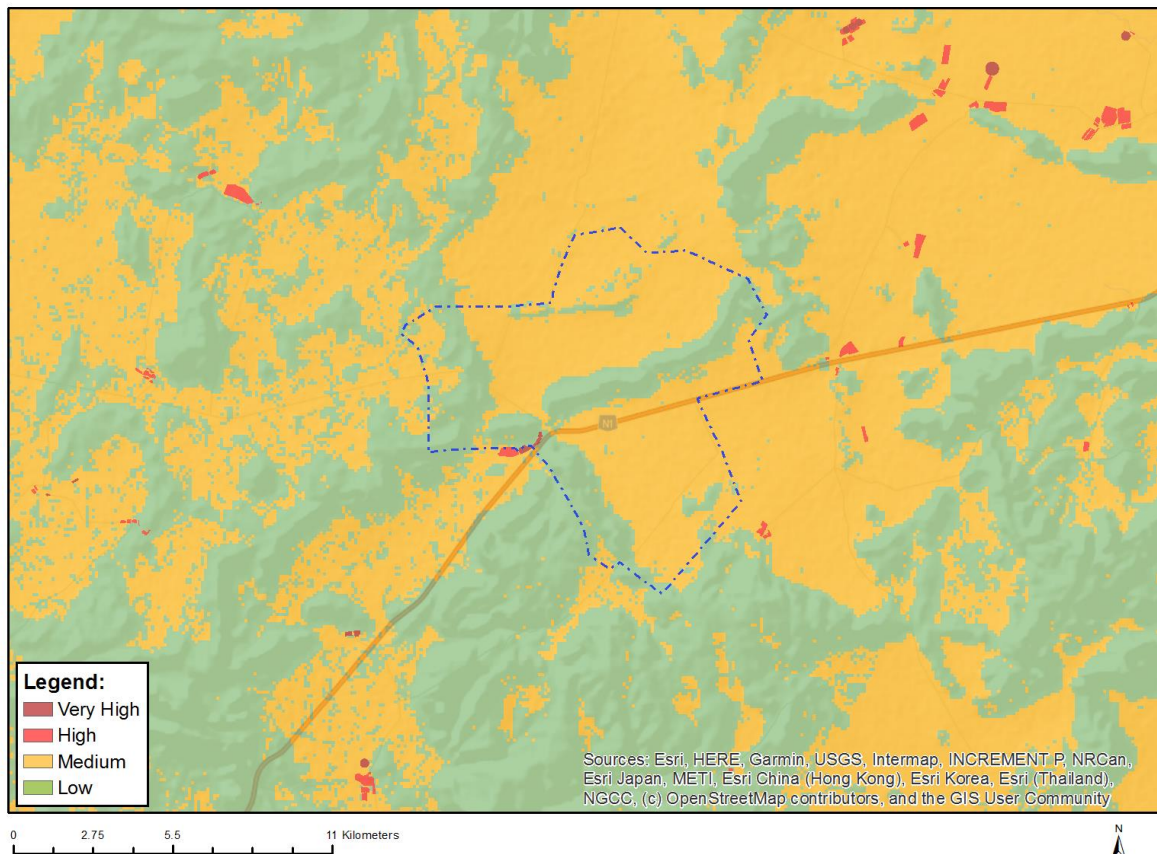
6	Aquatic Biodiversity Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Aquatic Biodiversity Assessment Protocols.pdf</a>
7	Avian Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Avifauna_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Avifauna Assessment Protocols.pdf</a>
8	Civil Aviation Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Civil_Aviation_Installations_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Civil Aviation Installations Assessment Protocols.pdf</a>
9	Defense Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Defence_Installations_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Defence Installations Assessment Protocols.pdf</a>
10	RFI Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf</a>
11	Noise Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Noise_Impacts_Assessment_Protocol.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Noise Impacts Assessment Protocol.pdf</a>
12	Flicker Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf</a>
13	Traffic Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf</a>
14	Geotechnical Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf</a>
15	Socio-Economic Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf</a>
16	Plant Species Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Plant Species Assessment Protocols.pdf</a>
17	Animal Species Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Animal_Species_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Animal Species Assessment Protocols.pdf</a>



## 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

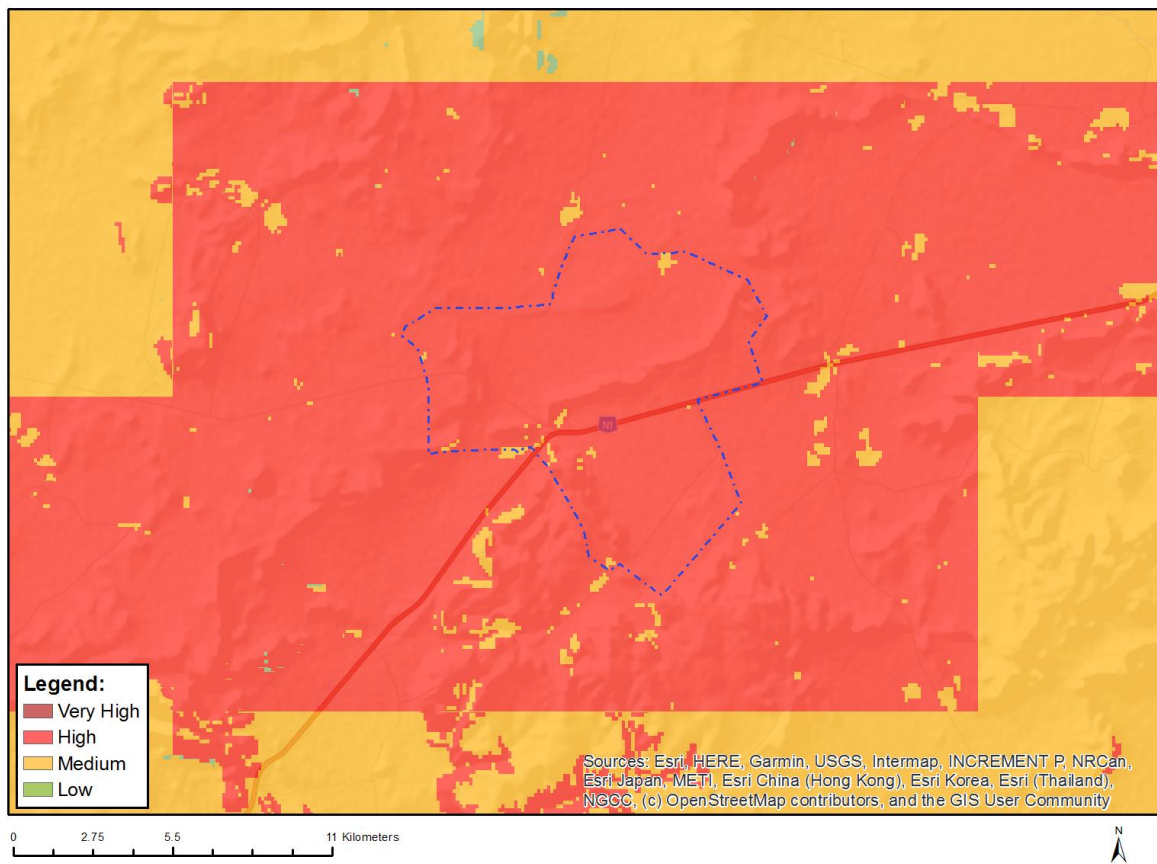


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

#### 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



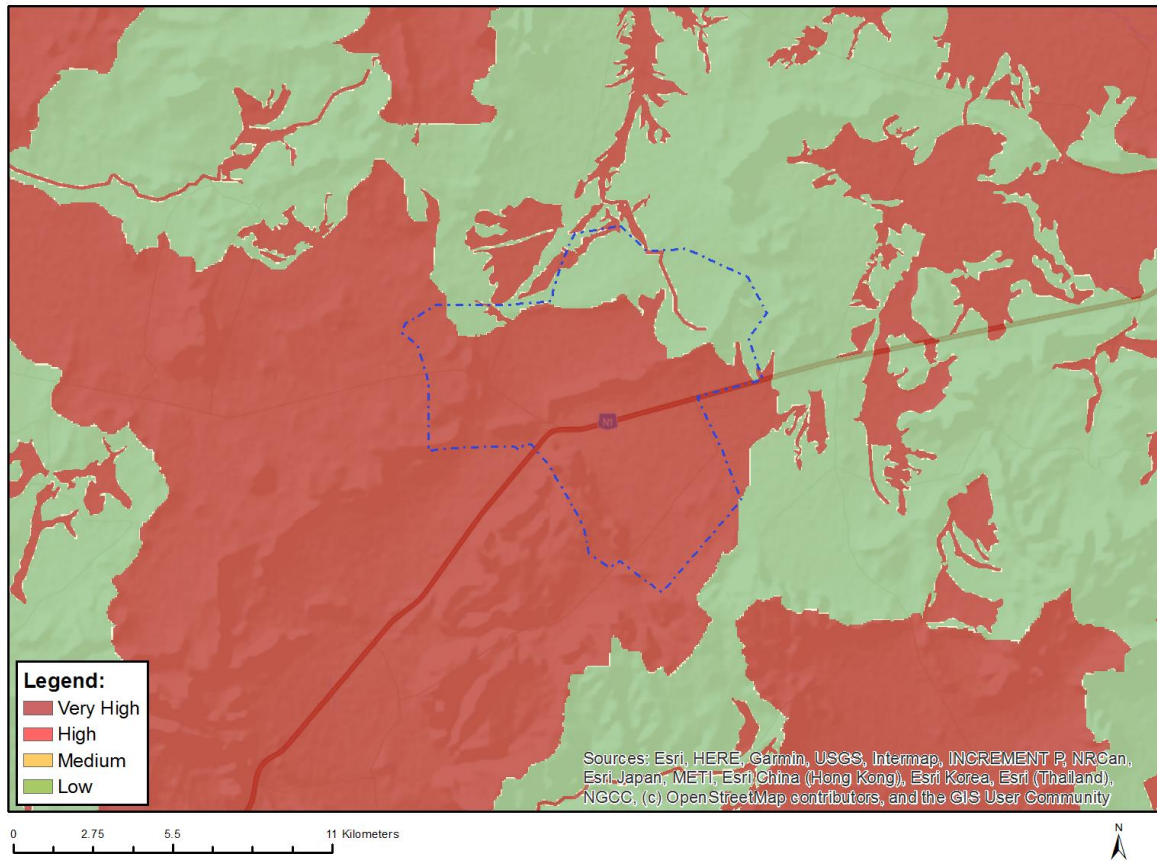
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at [eiadatarequests@sanbi.org.za](mailto:eiadatarequests@sanbi.org.za) 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 rapax
High	Aves-Aquila verreauxii
Medium	Aves-Hydroprogne caspia
Medium	Aves-Aquila rapax
Medium	Aves-Aquila verreauxii
Medium	Mammalia-Bunolagus monticularis

## MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

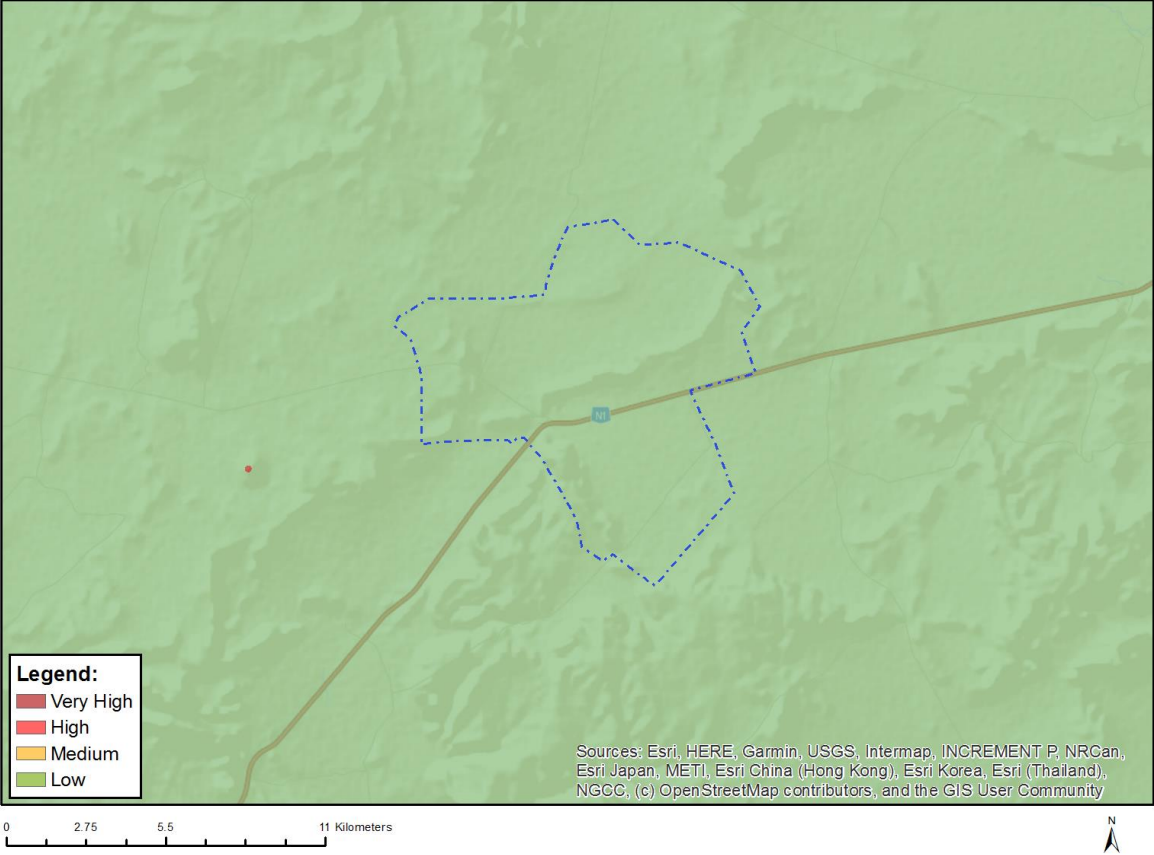


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

### 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



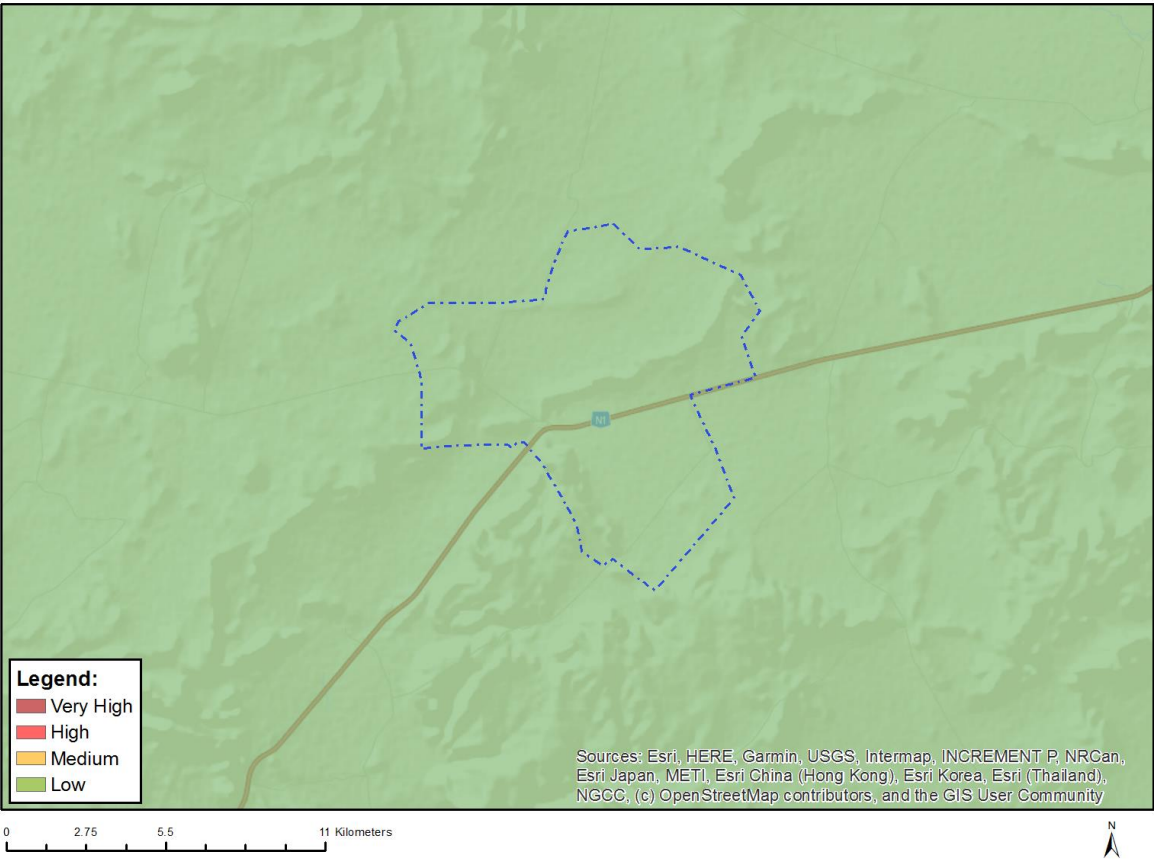
Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

**Sensitivity Features:**

Sensitivity	Feature(s)
Low	Low sensitivity



# MAP OF RELATIVE AVIAN (WIND) THEME SENSITIVITY

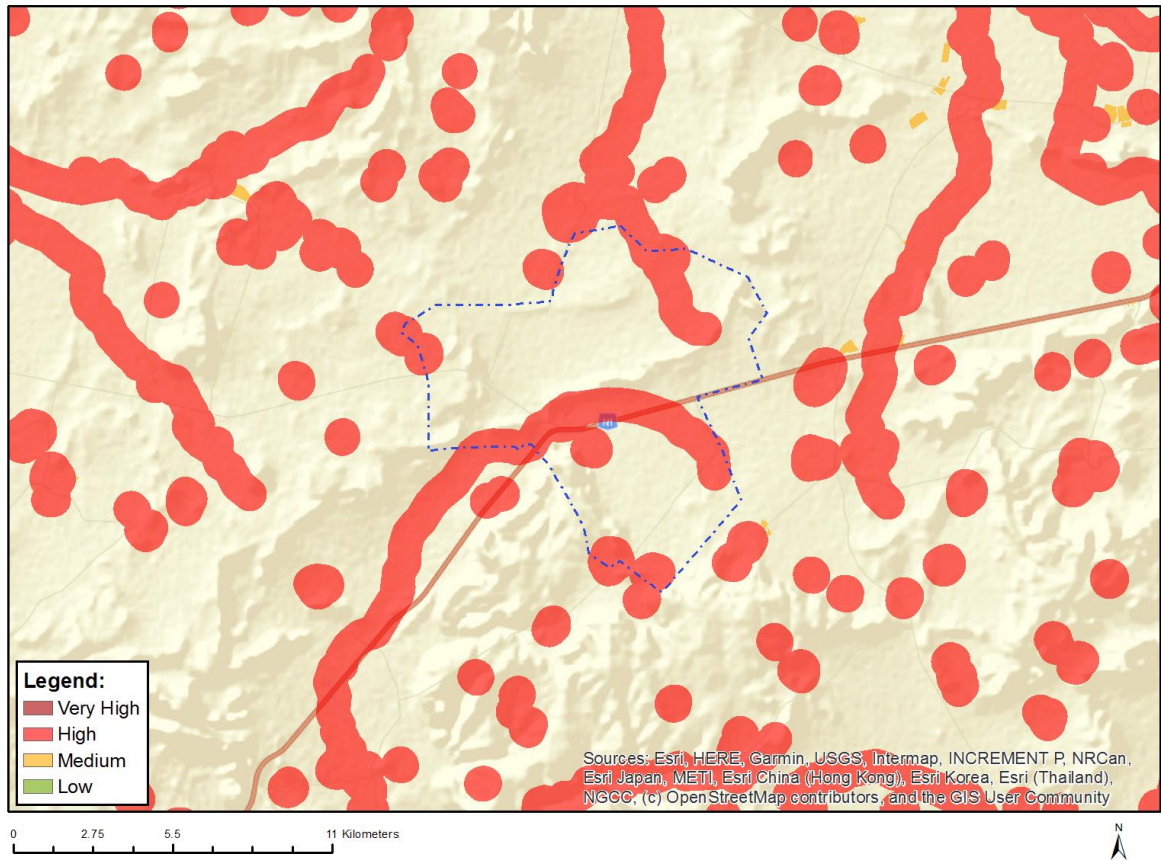


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

**Sensitivity Features:**

Sensitivity	Feature(s)
Low	Area Outside Sensitivities

## MAP OF RELATIVE BATS (WIND) THEME SENSITIVITY

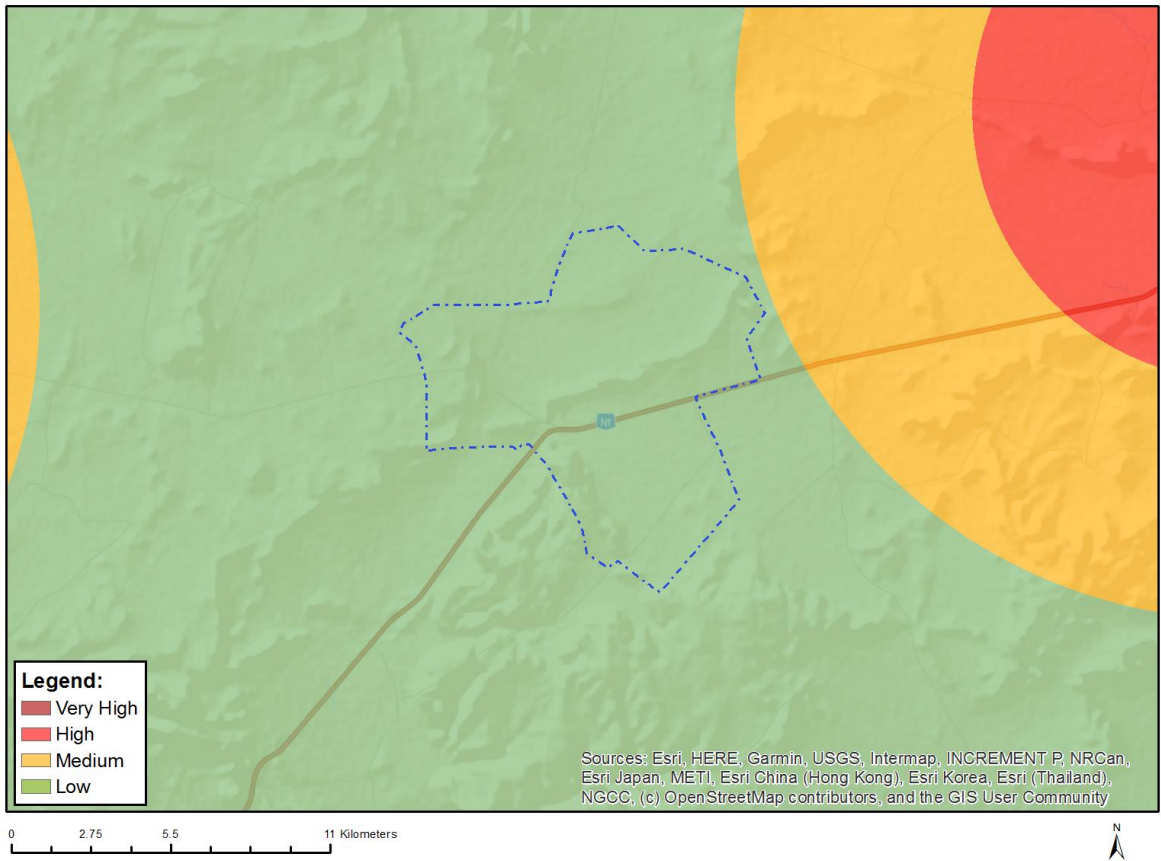


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

### 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



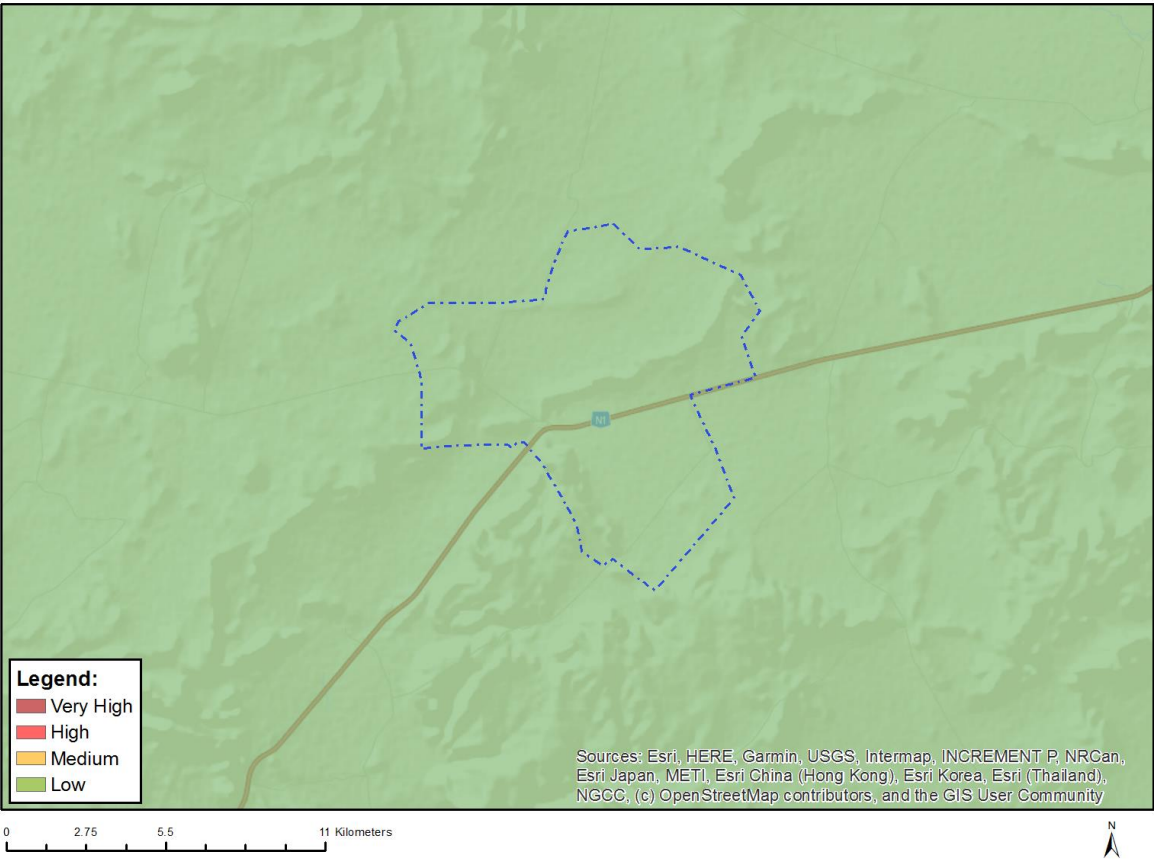
Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

## Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity



MAP OF RELATIVE DEFENCE (WIND) THEME SENSITIVITY

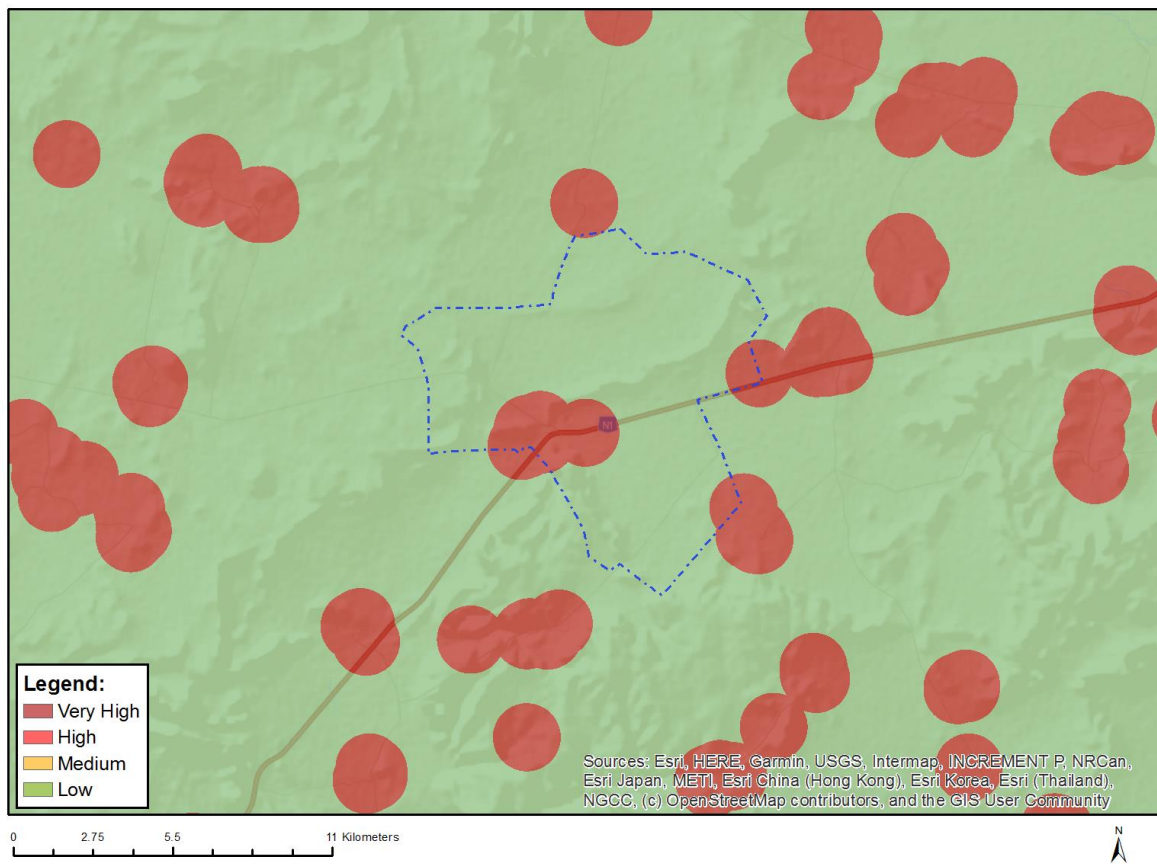


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

## MAP OF RELATIVE FLICKER THEME SENSITIVITY

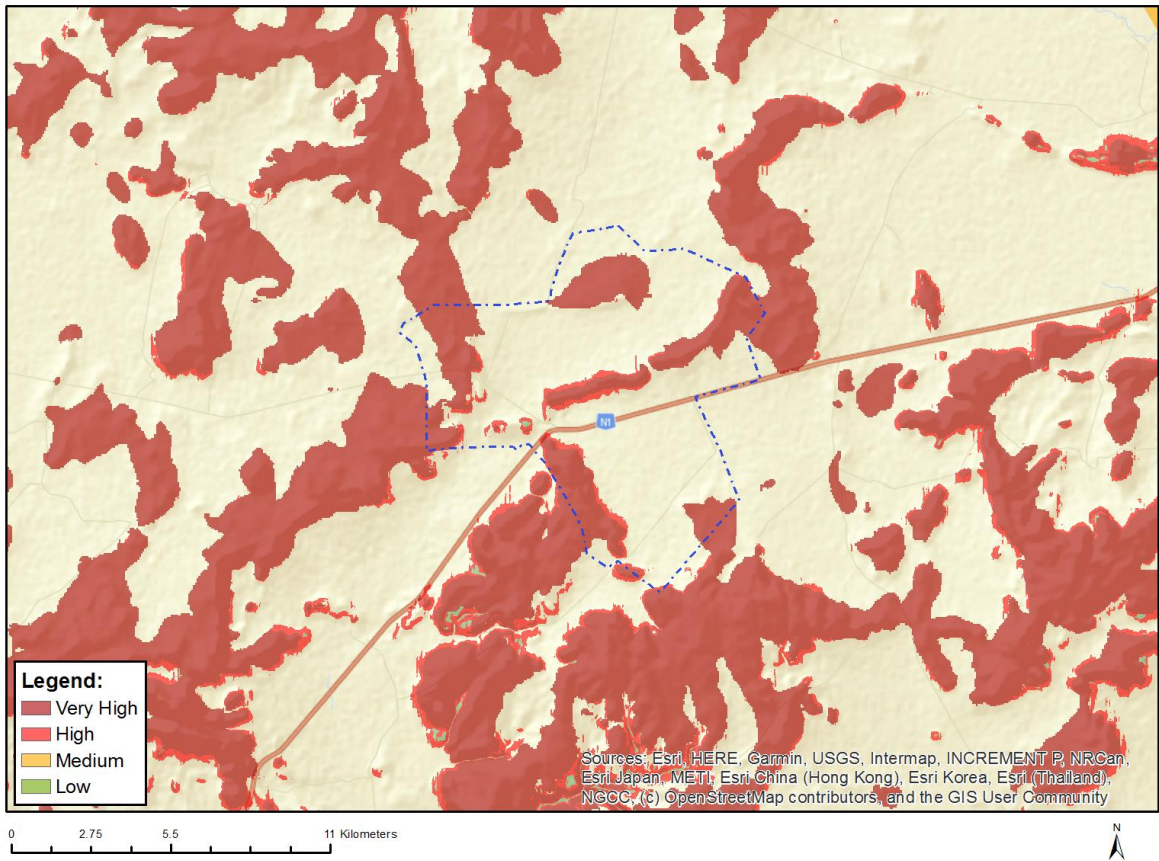


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

### 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

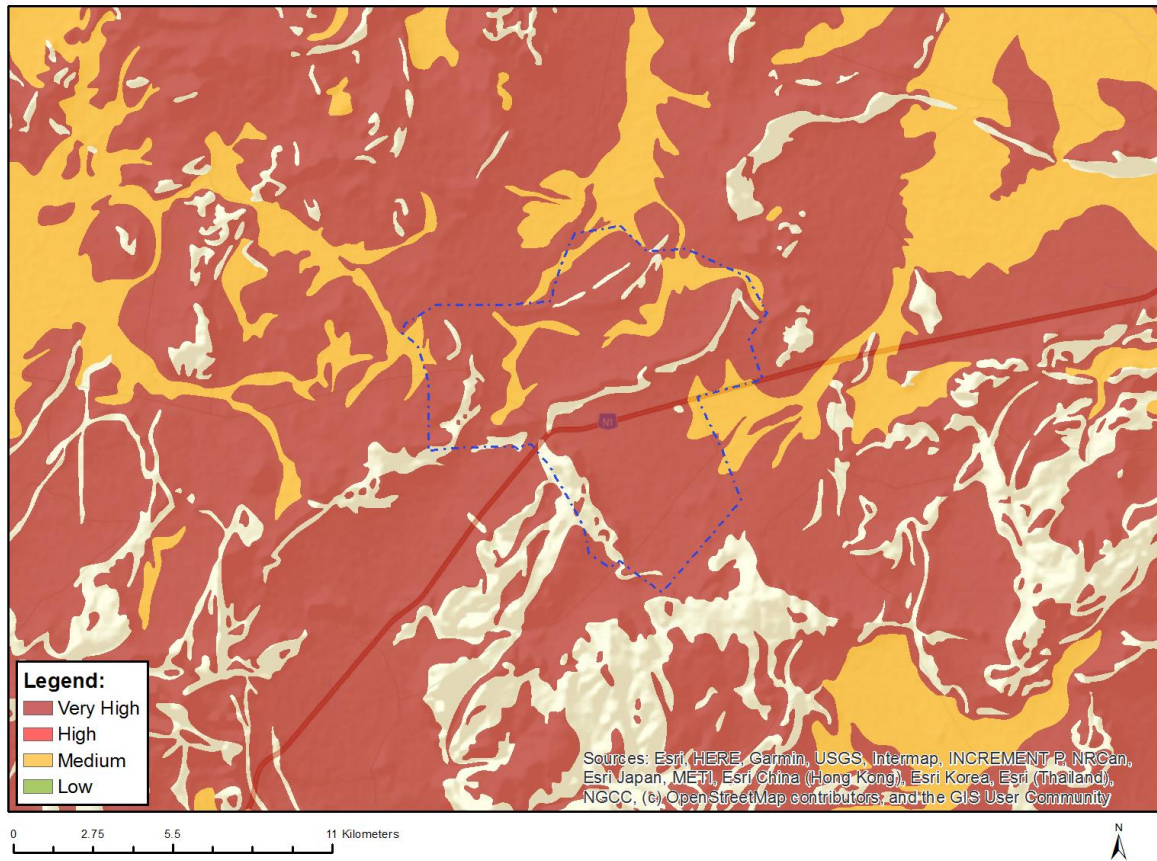


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

### 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



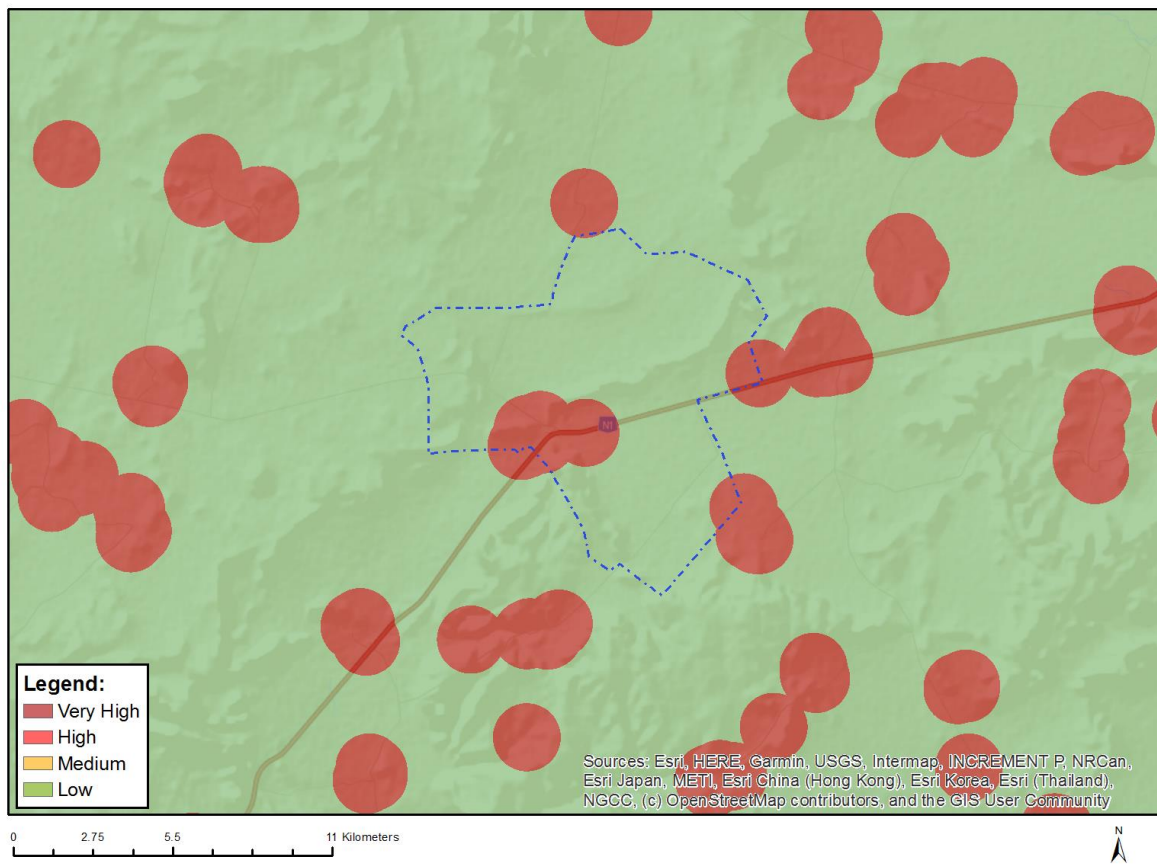
Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

### 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

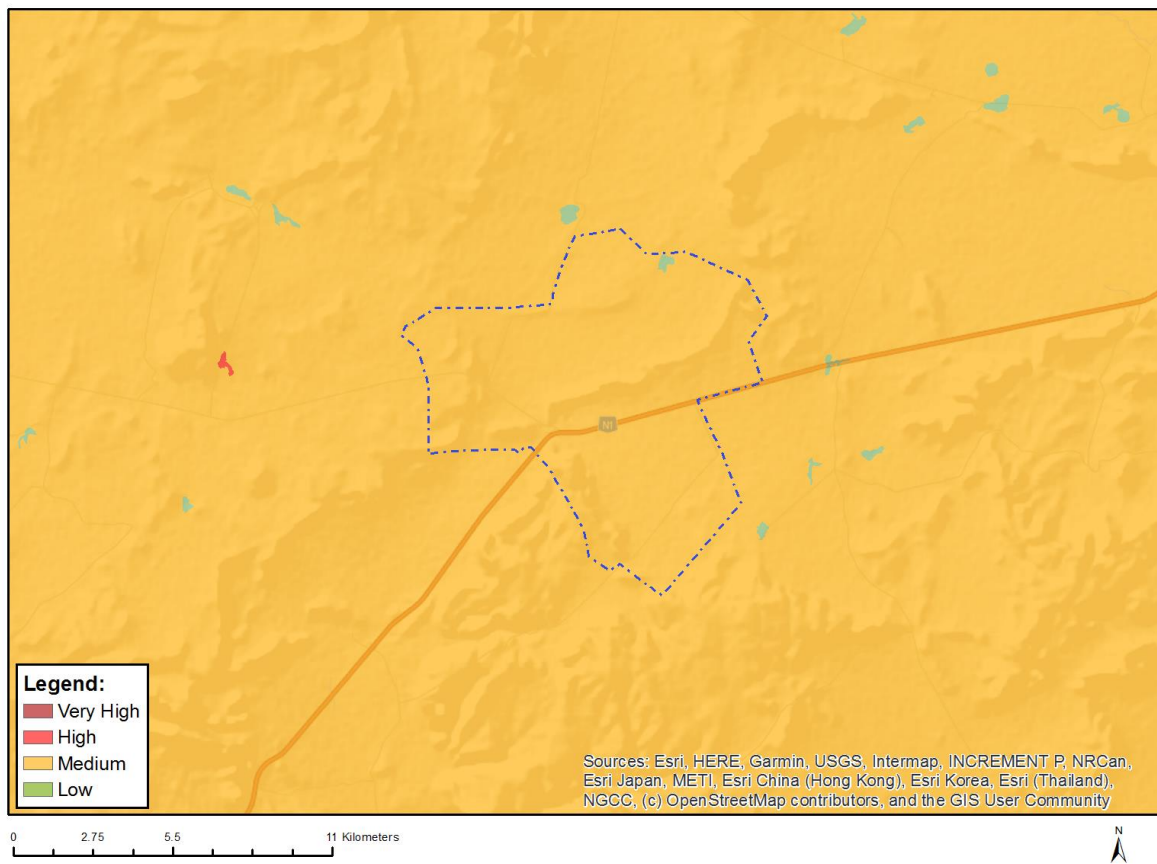


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

### 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



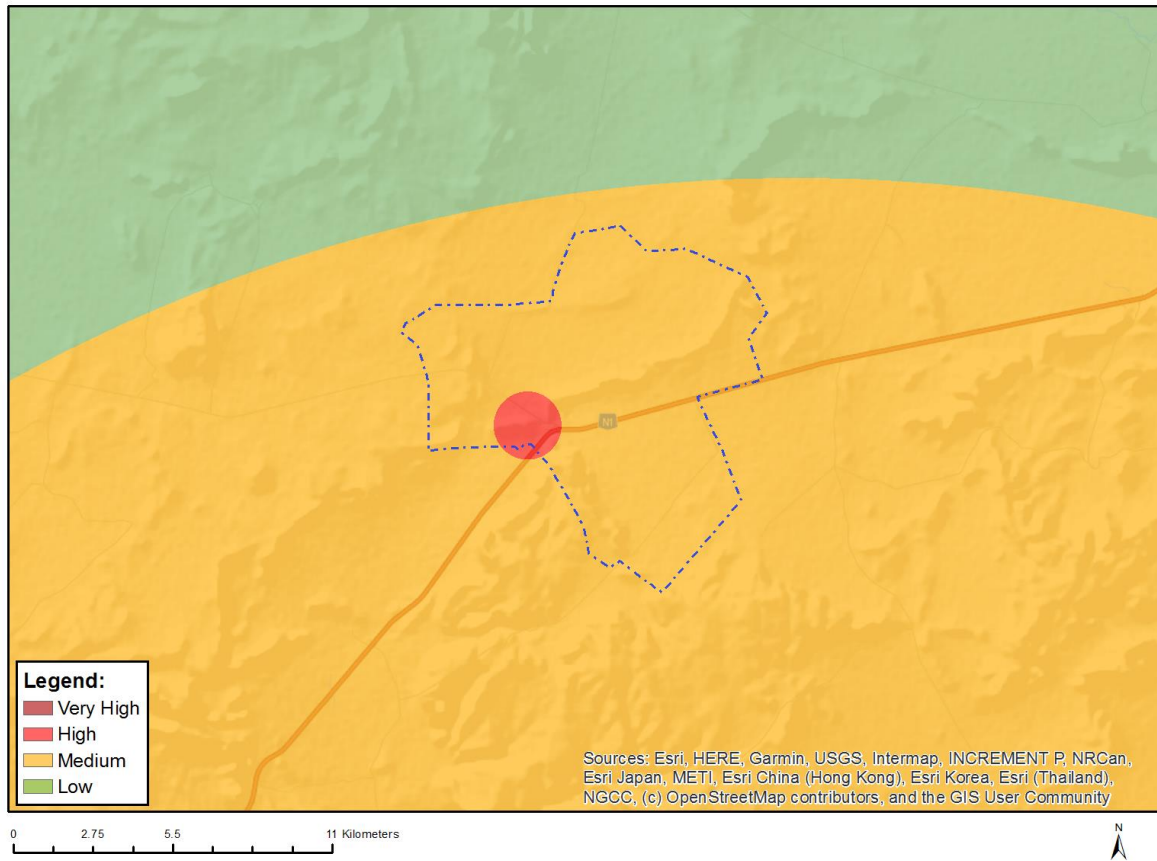
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at [eiadatarequests@sanbi.org.za](mailto:eiadatarequests@sanbi.org.za)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



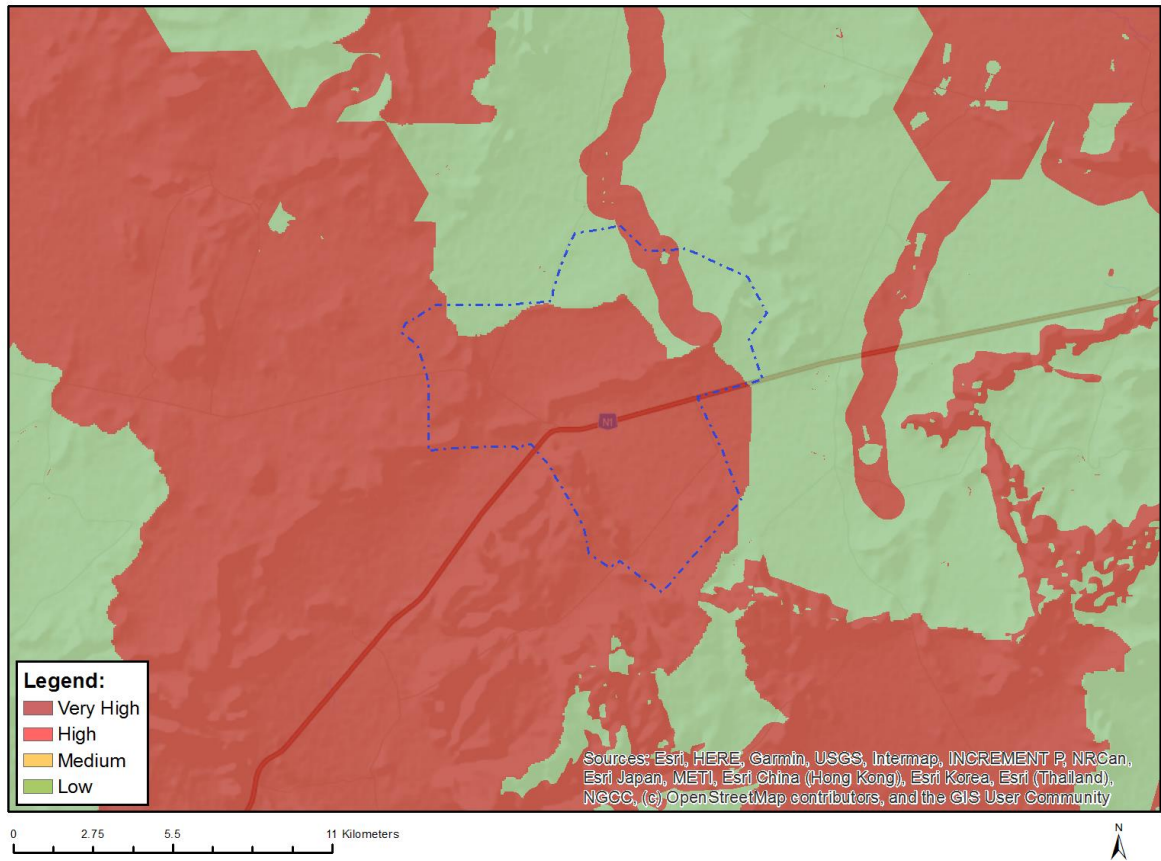
Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

### 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
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	FEPA Subcatchments