

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

EIA Reference number:

Project name: 132 kV grid connection transmission line between the Orange River Solar Facility 1 and Eskom's high voltage Groblershoop substation.

Project title: 132 kV grid connection transmission line between the Orange River Solar Facility 1 and Eskom's high voltage Groblershoop substation.

Date screening report generated: 26/09/2022 15:33:13

Applicant: Orange River Solar Facility

Compiler: Environmental Management Group

Compiler signature:
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Application Category: Utilities Infrastructure | Electricity | Distribution and Transmission | Powerline

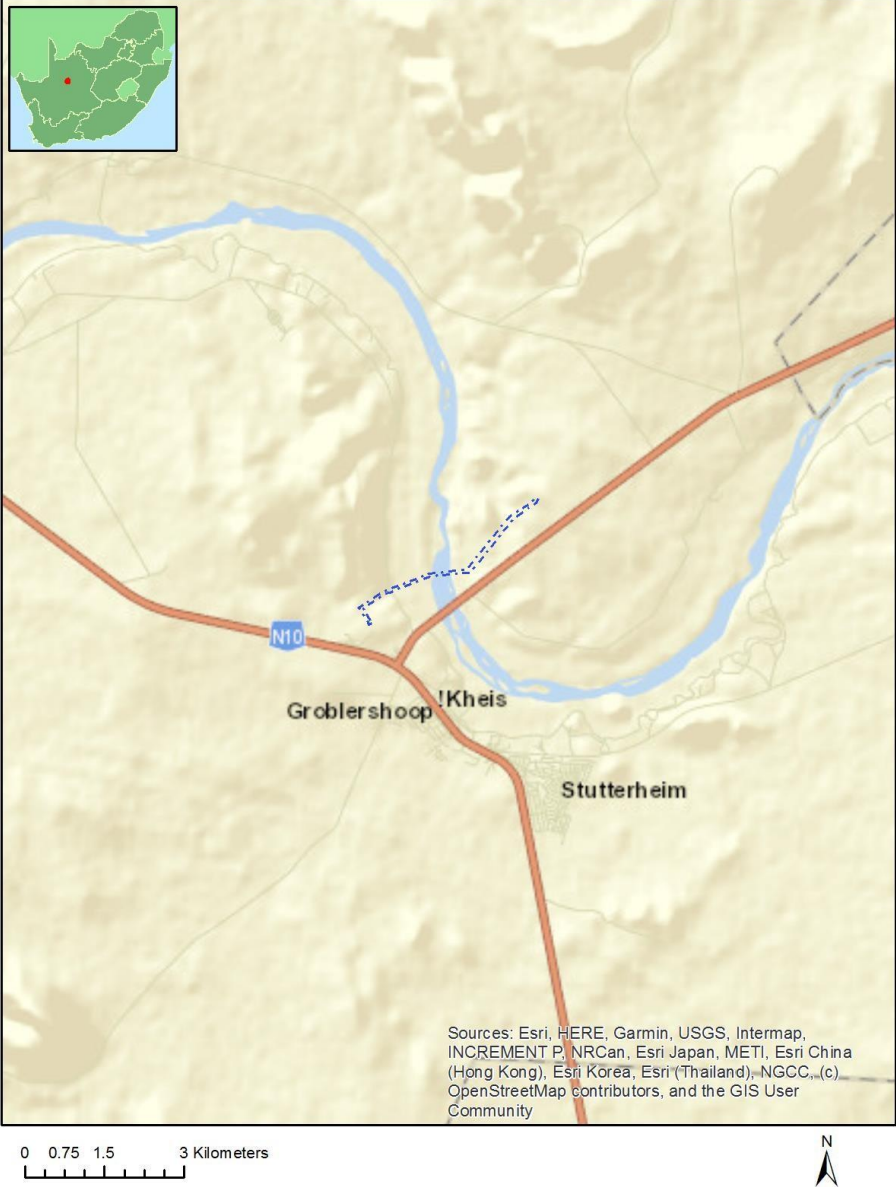
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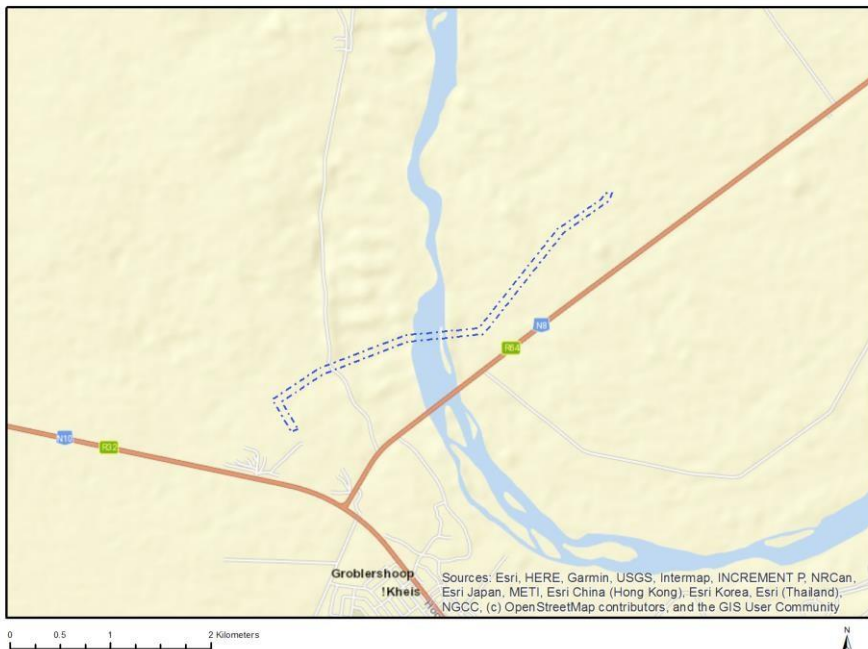
Proposed Project Location

Orientation map 1: General location

General Orientation: 132 kV grid connection transmission line between the Orange River Solar Facility 1 and Eskom's high voltage Groblershoop substation.



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	LOUISVALE ROAD	362	0	28°28'59.73S	21°16'28.56E	Erven
2	BOEGOEBERG SETTLEMENT (In Kenhardt)	650	0	28°50'44.48S	21°58'36.34E	Erven
3	LOUISVALE ROAD	355	0	28°28'56.79S	21°16'28.56E	Erven
4	CALVINIA	768	0	31°28'2.43S	19°48'13.64E	Erven
5	KENHARDT	2332	0	29°20'38.76S	21°9'55.15E	Erven
6	CALVINIA	3611	0	31°28'2.78S	19°48'13.72E	Erven
7	MARCHAND	43	0	28°43'47.85S	20°30'5.47E	Erven
8	LOUISVALE ROAD	1107	0	28°28'42.81S	21°16'6.78E	Erven
9	BOEGOEBERG SETTLEMENT (In Kenhardt)	2642	0	28°51'54.43S	21°57'15.66E	Erven
10	MARCHAND	45	0	28°43'48.65S	20°30'6.08E	Erven
11	ROOI SAND	387	0	28°48'20.86S	22°3'16.03E	Farm
12	BOEGOEBERGNEDERSETTING	48	0	28°39'16.16S	21°45'49.16E	Farm
13	ROOI SAND	387	18	28°51'36.03S	21°59'54.91E	Farm Portion
14	BOEGOEBERGNEDERSETTING	48	0	28°39'13.47S	21°45'48.83E	Farm Portion

Development footprint¹ vertices:

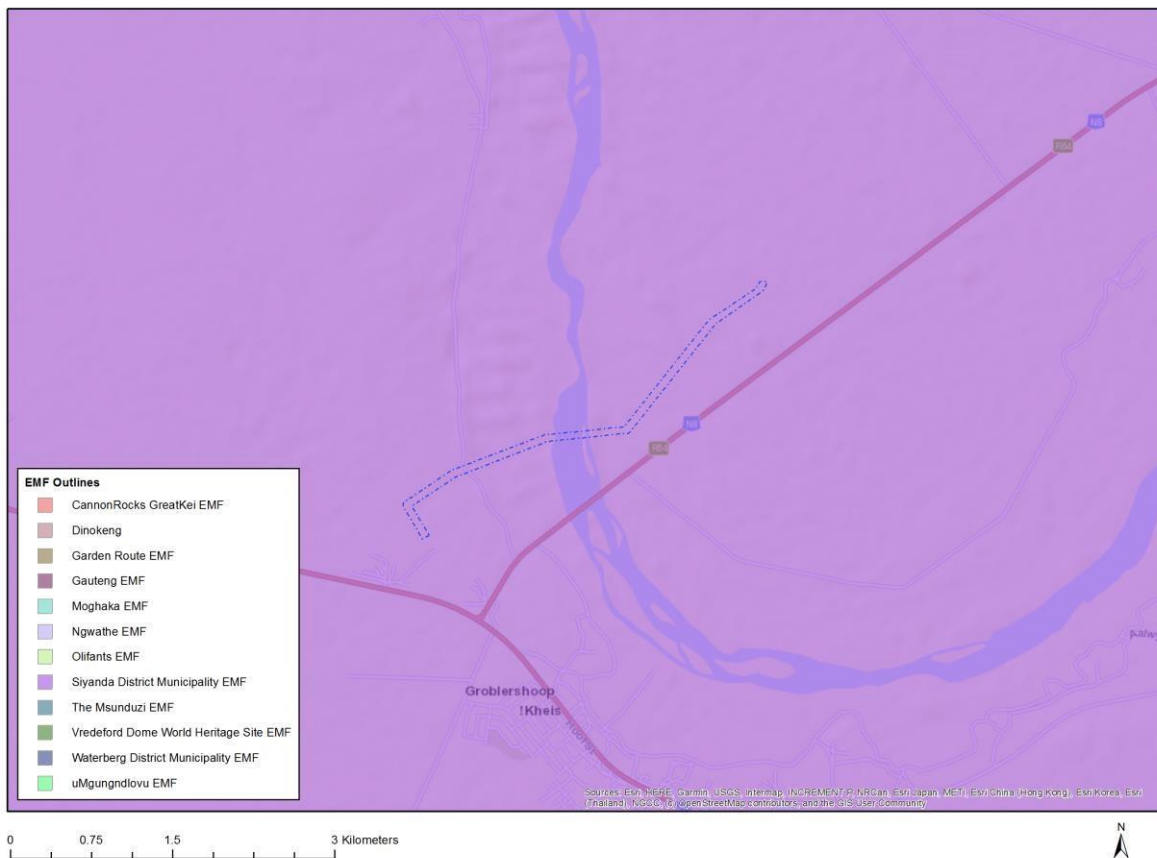
¹ “development footprint”, means the area within the site on which the development will take place and includes all ancillary developments for example roads, power lines, boundary walls, paving etc. which require vegetation clearance or which will be disturbed and for which the application has been submitted.

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	14/12/16/3/3/1/2151	Solar PV	Approved	15.4
2	14/12/16/3/3/1/2150	Solar PV	Approved	15.4
3	14/12/16/3/3/1/2148	Solar PV	Approved	15.4
4	12/12/20/1920	Solar CPV	Approved	8.5
5	14/12/16/3/3/1/2145/AM1	Solar PV	Approved	15.4
6	14/12/16/3/3/2/800	Solar CSP	Approved	9.1
7	14/12/16/3/3/2/880	Solar PV	Approved	13.9
8	14/12/16/3/3/1/2142	Solar PV	Approved	15.4
9	14/12/16/3/3/2/803	Solar PV	Approved	9.1
10	14/12/16/3/3/2/881	Solar PV	Approved	13.9
11	14/12/16/3/3/1/909	Solar CPV	Approved	13.8
12	14/12/16/3/3/1/2146	Solar PV	Approved	15.4
13	14/12/16/3/3/2/805	Solar PV	Approved	9.1
14	14/12/16/3/3/2/879	Solar CSP	Approved	15.4
15	14/12/16/3/3/2/804	Solar PV	Approved	9.1
16	14/12/16/3/3/1/658	Solar PV	Approved	15.8
17	14/12/16/3/3/1/2143	Solar PV	Approved	15.4
18	14/12/16/3/3/1/2145	Solar PV	Approved	15.4
19	14/12/16/3/3/2/801	Solar CSP	Approved	9.1
20	14/12/16/3/3/2/802	Solar PV	Approved	9.1

Environmental Management Frameworks relevant to the application



Environmental Management Framework	LINK
Siyanda District Municipality EMF	https://screening.environment.gov.za/ScreeningDownloads/EMF/SIYANDA_EMF_REPORT_2008.doc

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 | Distribution and Transmission | Powerline.

Relevant development incentives, restrictions, exclusions or prohibitions

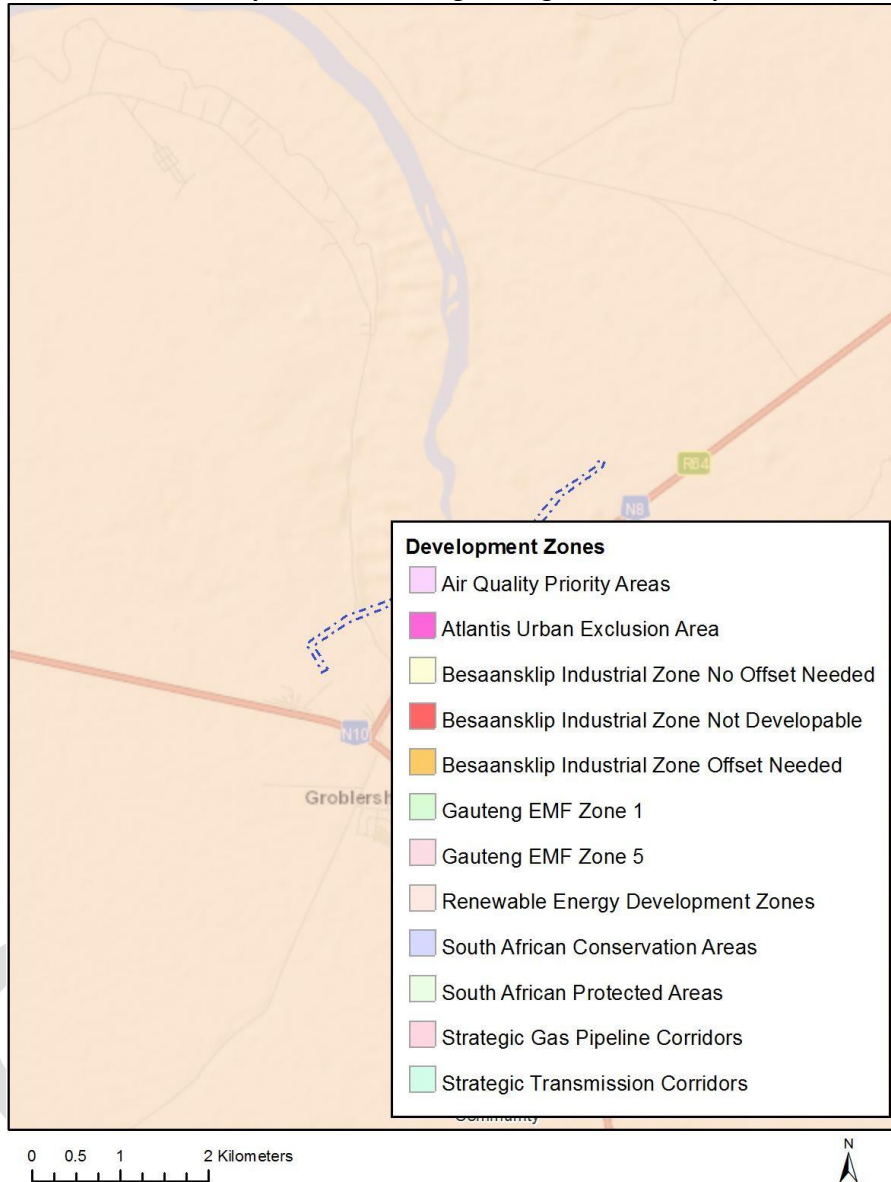
The following development incentives, restrictions, exclusions or prohibitions and their implications that apply to this site are indicated below.

Incentive, restriction or prohibition	Implication
Renewable energy development zones 7-Upington	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_REDZ.pdf

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

Project Location: 132 kV grid connection transmission line between the Orange River Solar Facility 1 and Eskom's high voltage Groblershoop substation.



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
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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 site situation.

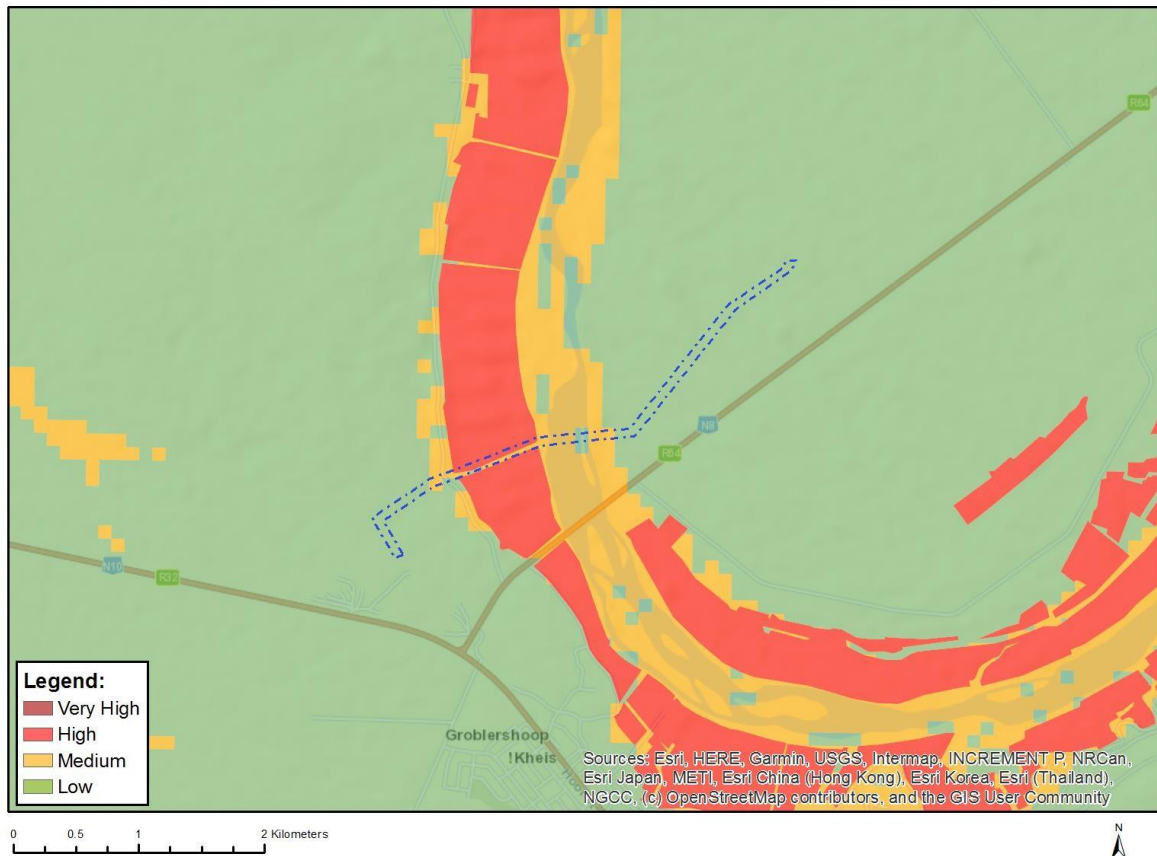
N	Specialist assessment	Assessment Protocol
1	Agricultural Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Agriculture Assessment Protocols.pdf
2	Landscape/Visual Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted 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

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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	RFI Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
10	Geotechnical Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
11	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf
12	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

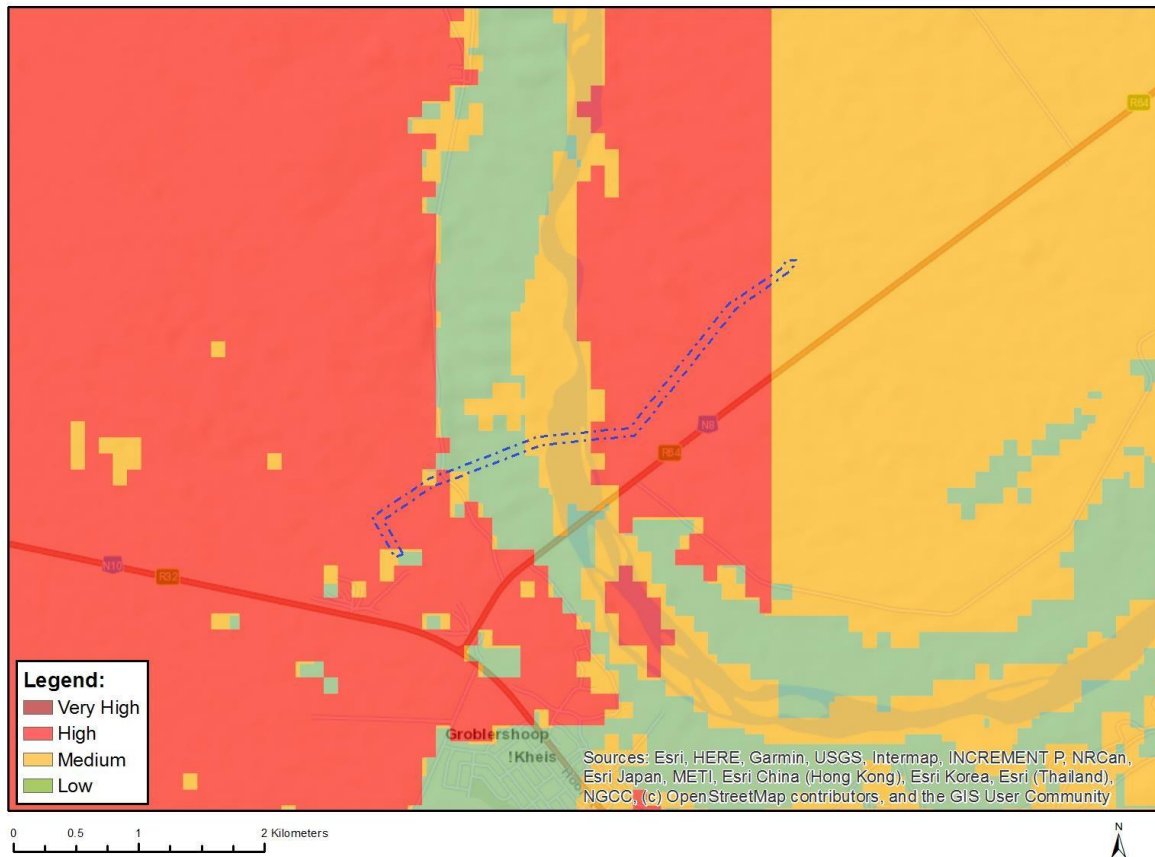


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

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

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



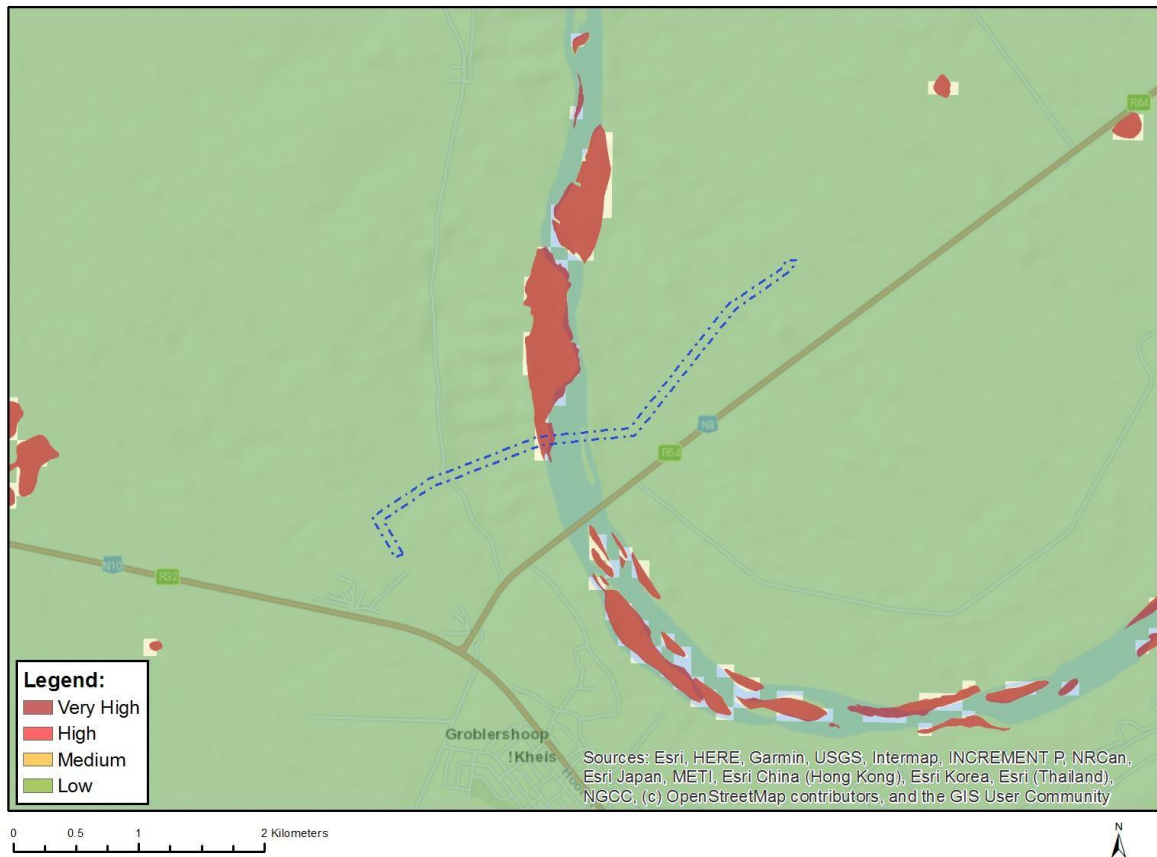
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their 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-Falco biarmicus
Low	Subject to confirmation
Medium	Aves-Hydroprogne caspia
Medium	Aves-Neotis ludwigii

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

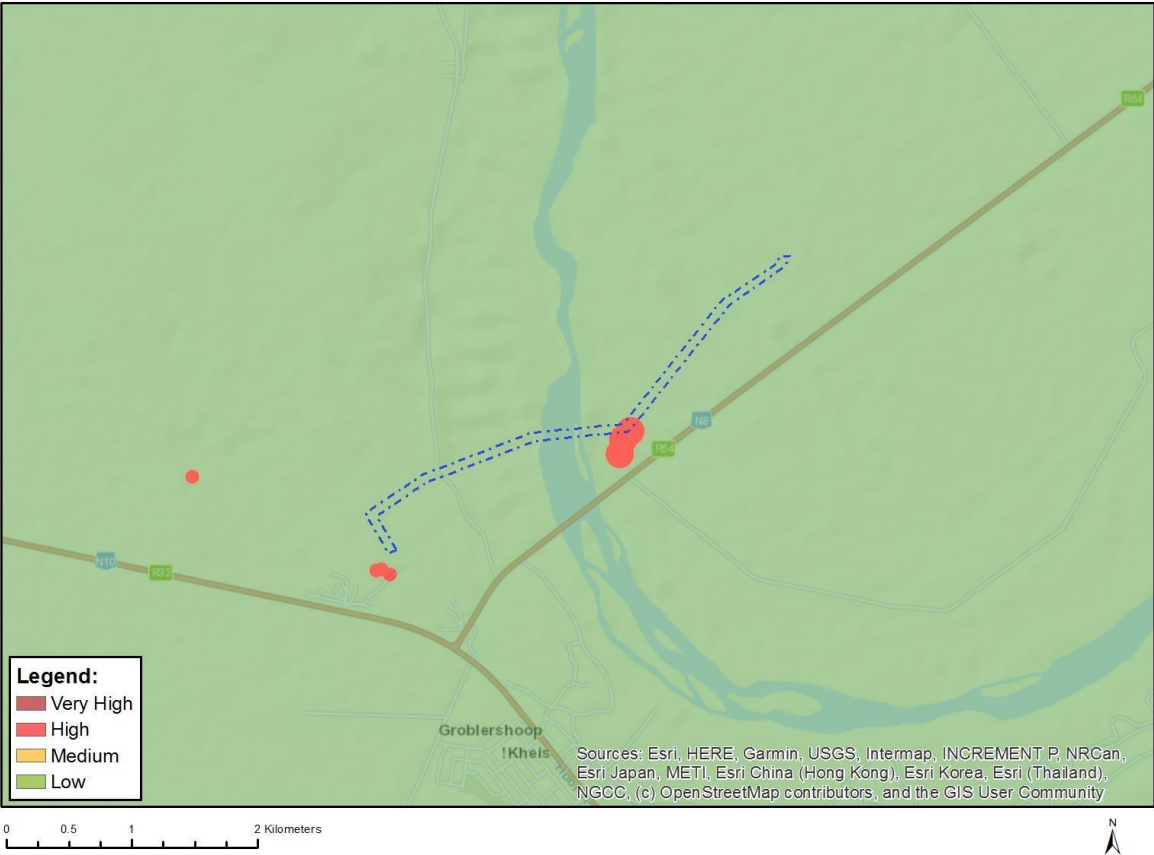


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity
Very High	Wetlands and Estuaries

MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY

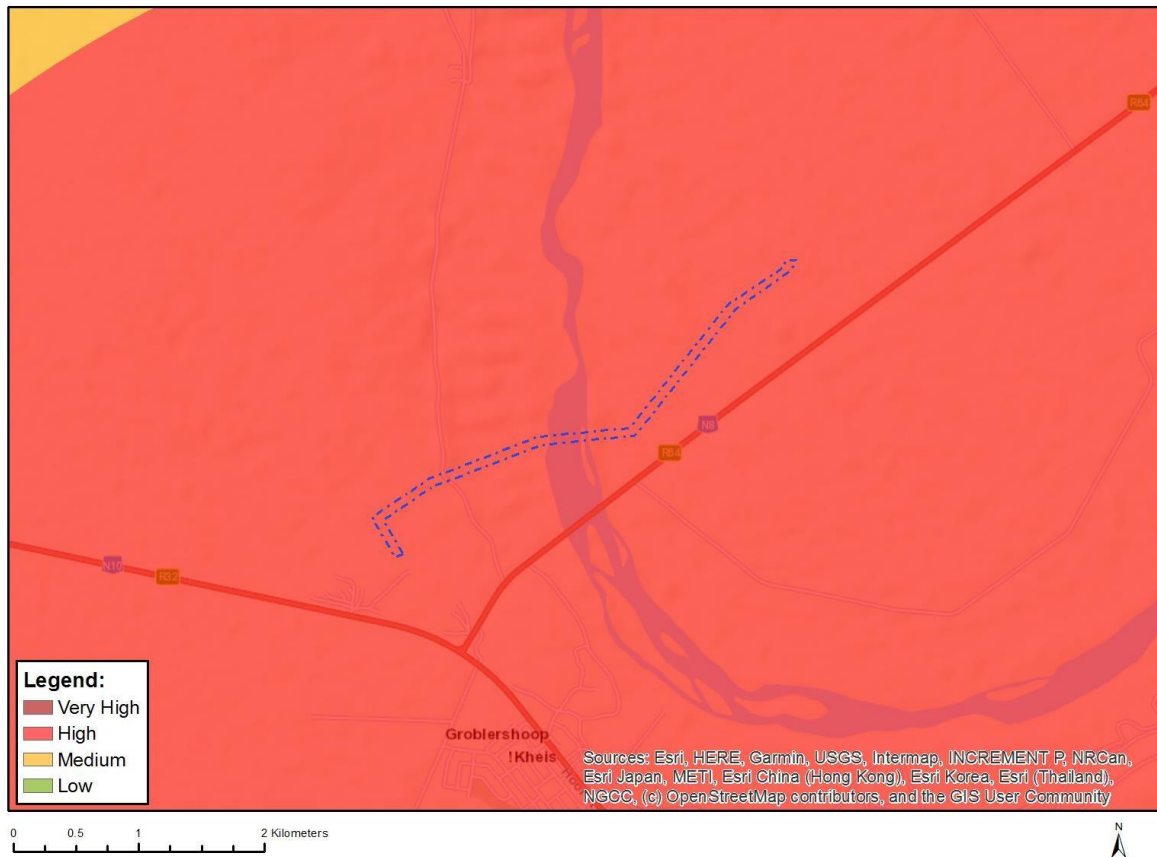


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Within 100m of a Grade IIIb Heritage site
Low	Low sensitivity

MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY

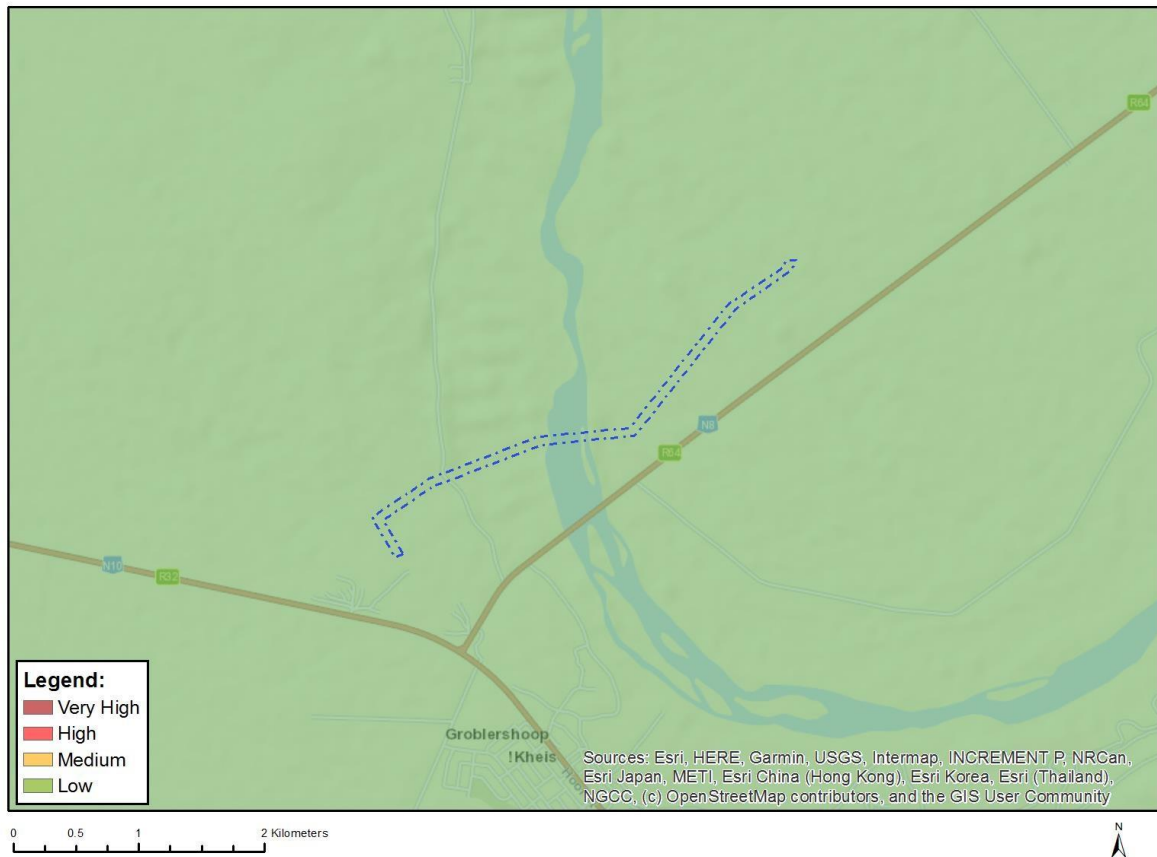


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Within 8 km of other civil aviation aerodrome

MAP OF RELATIVE DEFENCE THEME SENSITIVITY

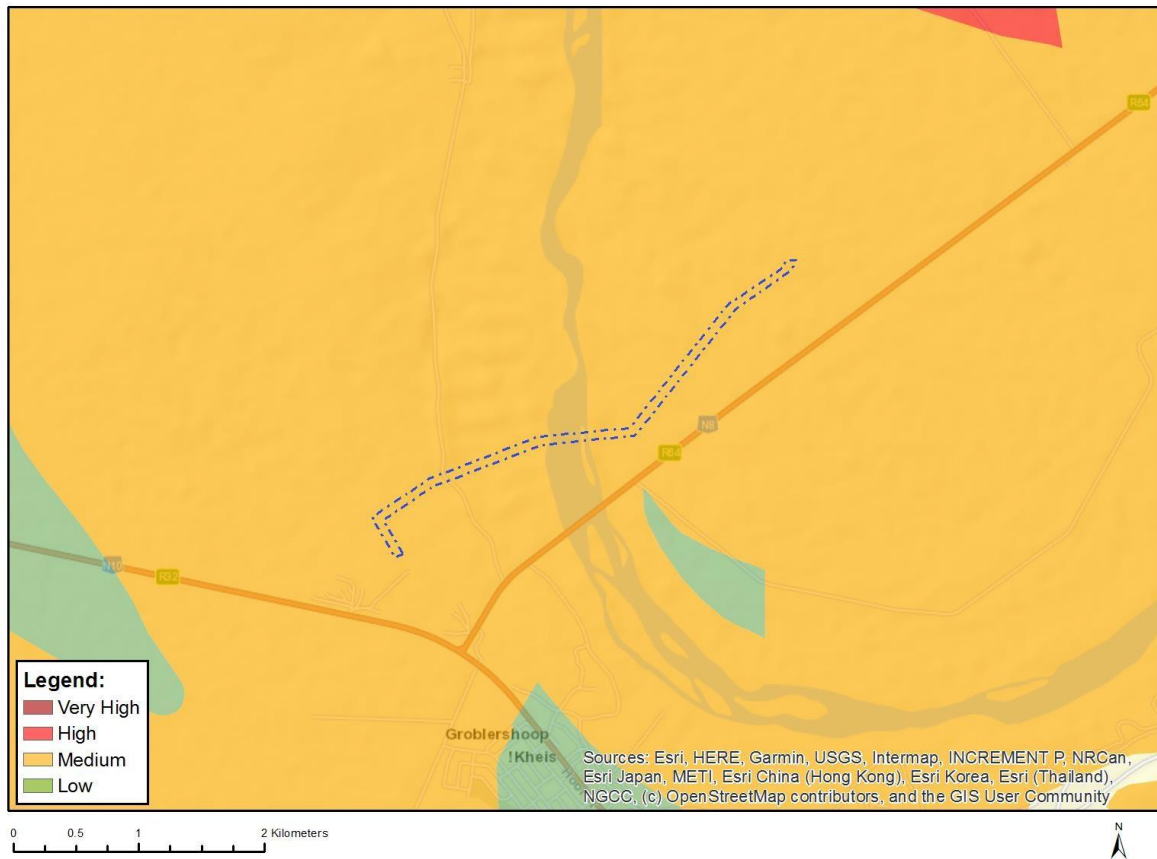


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY

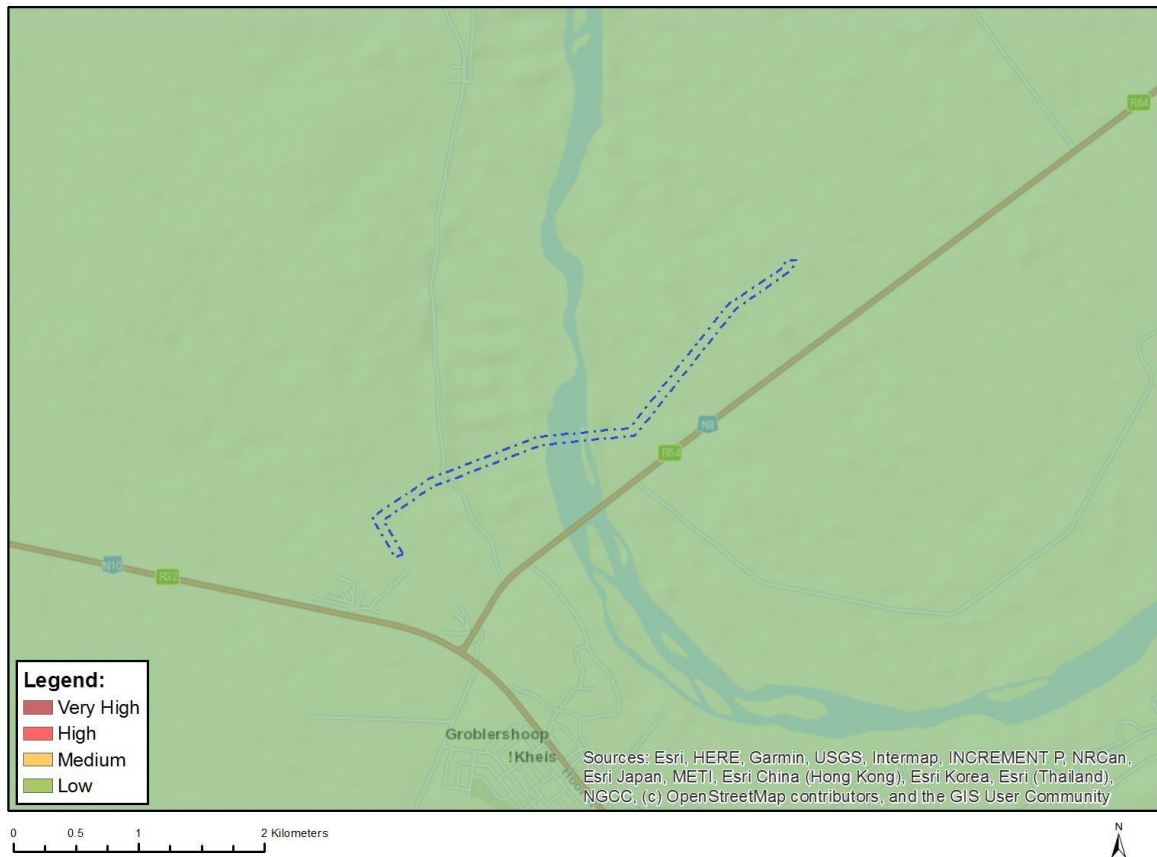


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

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

MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



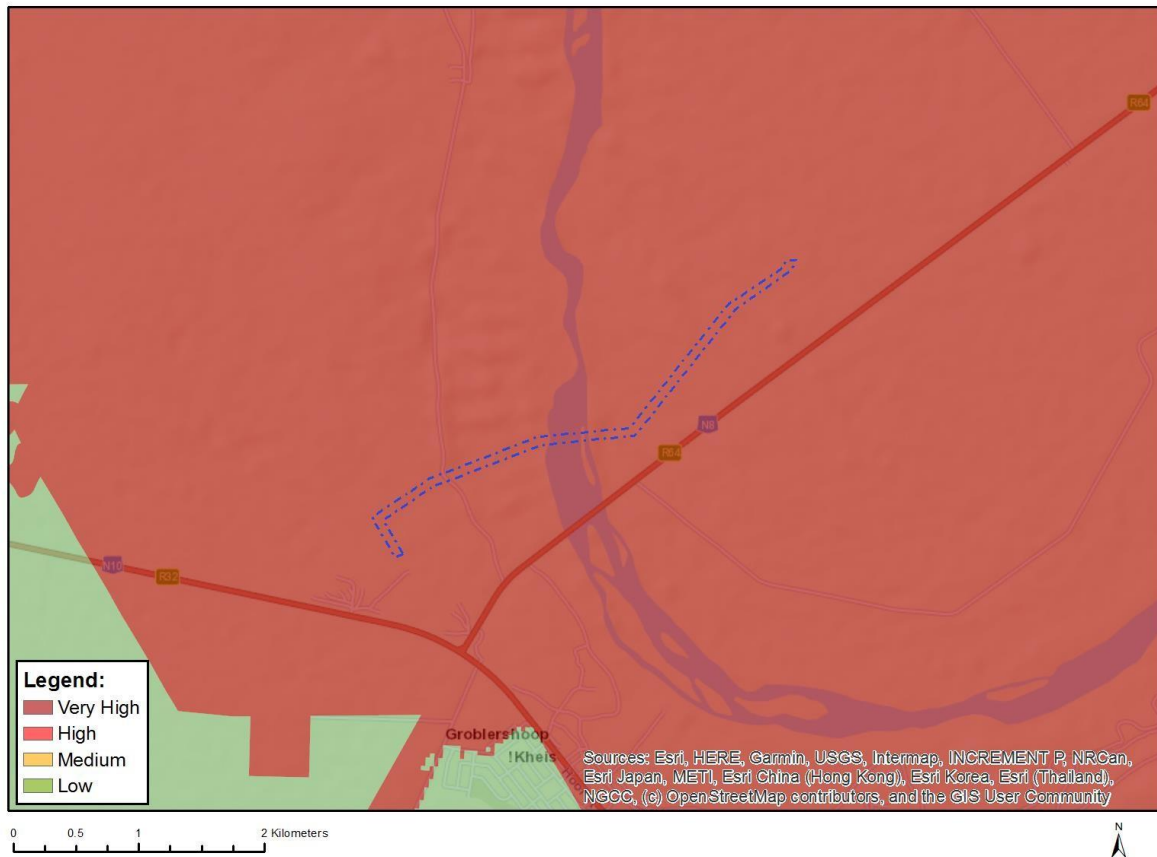
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Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

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	Protected Areas Expansion Strategy
Very High	Endangered ecosystem