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

EIA Reference number: 14/12/16/3/3/2/2236

Project name: Loxton WEF 1 (North)

Project title: Loxton WEF 1

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Applicant: Loxton WEF 1

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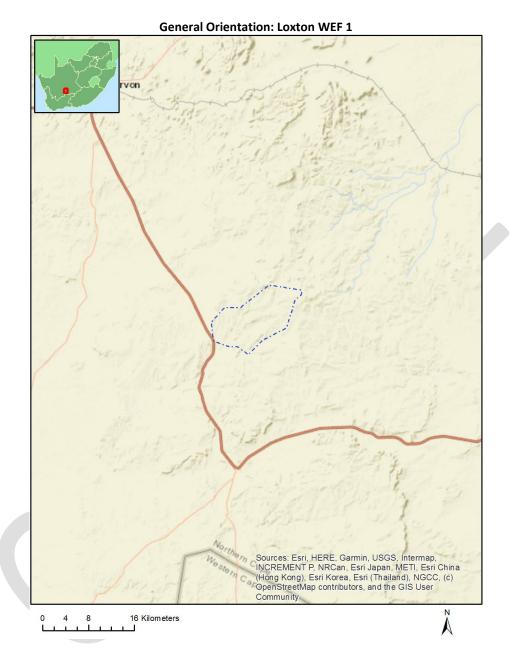
Application Category: Utilities Infrastructure | Electricity | Generation | Renewable | Wind

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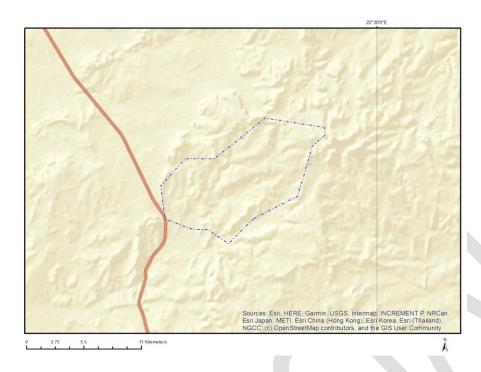
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Proposed Project Location

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	Portion	Latitude	Longitude	Property
		No				Туре
1	SAAIDAM	574	0	31°19'16.61S	22°24'47.04E	Farm
2		582	0	31°18'36.58S	22°18'25.22E	Farm
3	SPRINGFONTEIN	573	0	31°17'9.19S	22°23'13.62E	Farm
4	RIETFONTEIN	572	0	31°18'38.72S	22°29'24.97E	Farm
5	SAAIDAM	574	0	31°19'16.61S	22°24'47.04E	Farm Portion
6		582	0	31°17'52.27S	22°19'49.39E	Farm Portion
7	SPRINGFONTEIN	573	0	31°17'9.19S	22°23'13.62E	Farm Portion
8	RIETFONTEIN	572	12	31°15'21.38S	22°25'0.21E	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 nearby wind or solar developments found.

¹ "development footprint", means the area within the site on which the development will take place and incudes 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.

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:

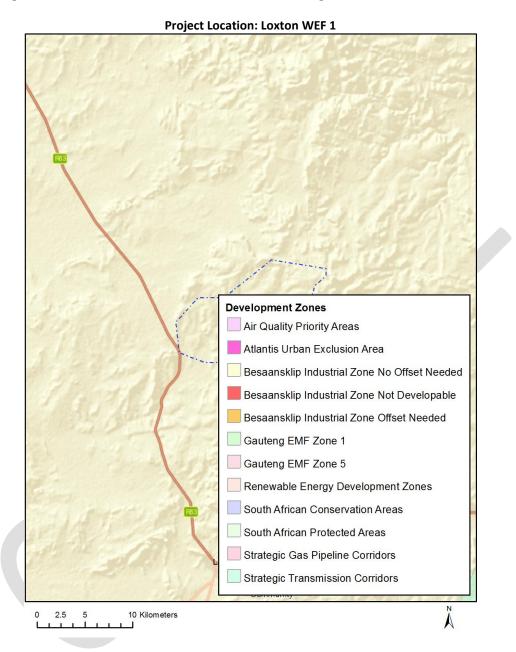
Utilities Infrastructure | Electricity | Generation | Renewable | Wind.

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.

No intersection with any development zones found.

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		Х		
Animal Species Theme		Х		

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

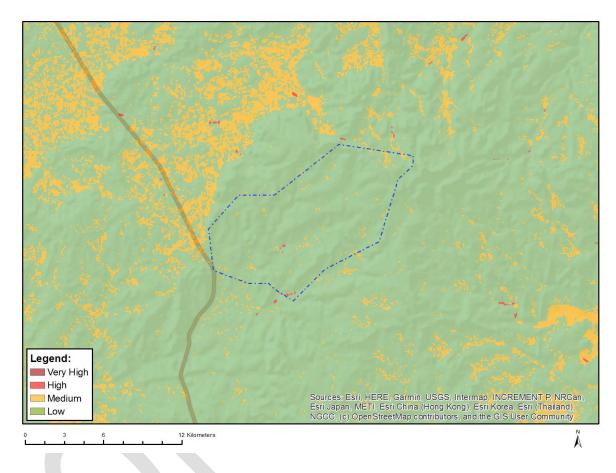
N o	Special ist	Assessment Protocol
	assess	
	ment	
1	Agricult ural Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted WindAndSolar Agriculture Assessment Protocols.pdf
2	Landsca pe/Visu al Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
3	Archaeo logical and Cultural Heritage Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
4	Palaeon tology Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
5	Terrestri al Biodiver sity Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf

6	Aquatic Biodiver sity Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf
7	Avian Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Avifauna_Assessment_Protocols.pdf
8	Civil Aviation Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Civil Aviation Installations Assessment Protocols.pdf
9	Defense Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ /Gazetted_Defence_Installations_Assessment_Protocols.pdf
0	RFI Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
1 1	Noise Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Noise Impacts Assessment Protocol.pdf
1 2	Flicker Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ /Gazetted General Requirement Assessment Protocols.pdf
3	Traffic Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
1 4	Geotech nical Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
1 5	Socio- Economi c Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
1 6	Plant Species Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Plant Species Assessment Protocols.pdf
7	Animal Species Assessm ent	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.

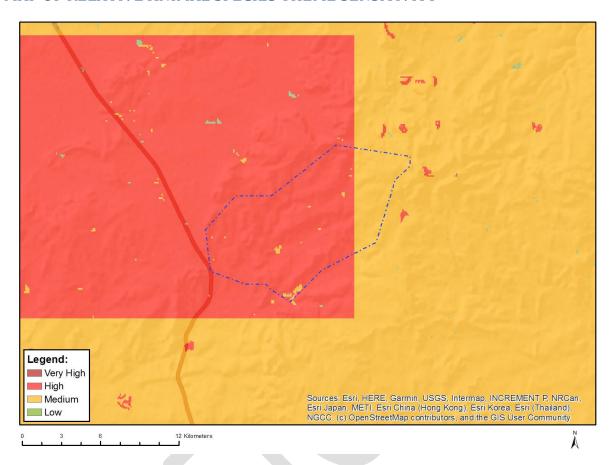
MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity	Feature(s)
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

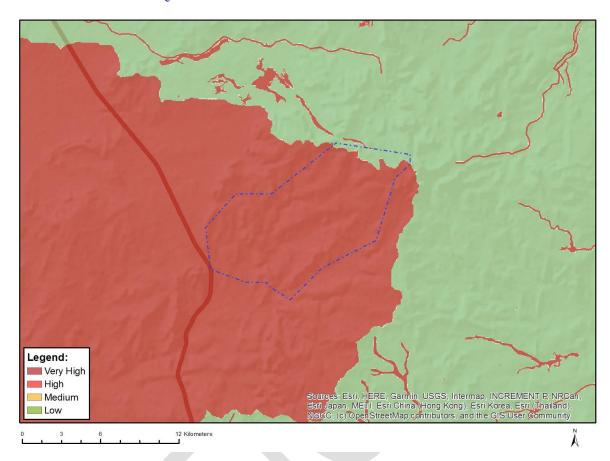


Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their 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	Feature(s)	
High	Aves-Neotis Iudwigii	
High	Aves-Aquila verreauxii	
High	Mammalia-Felis nigripes	
Low	Subject to confirmation	
Medium	Aves-Aquila verreauxii	
Medium Aves-Neotis ludwigii		
Medium Mammalia-Bunolagus montic		
Medium	Reptilia-Chersobius boulengeri	

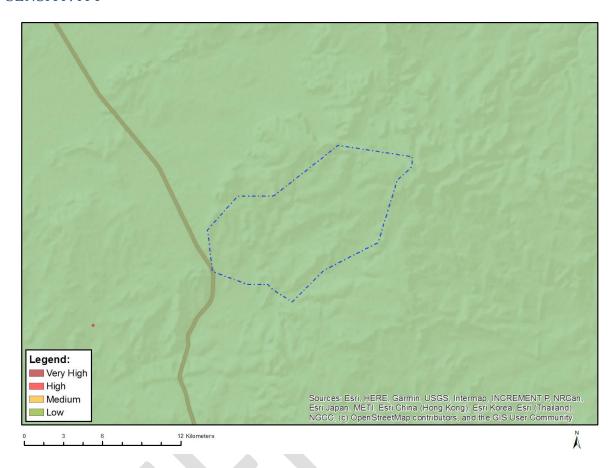
MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

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
			Χ

Sensitivity	Feature(s)	
Low	Low sensitivity	

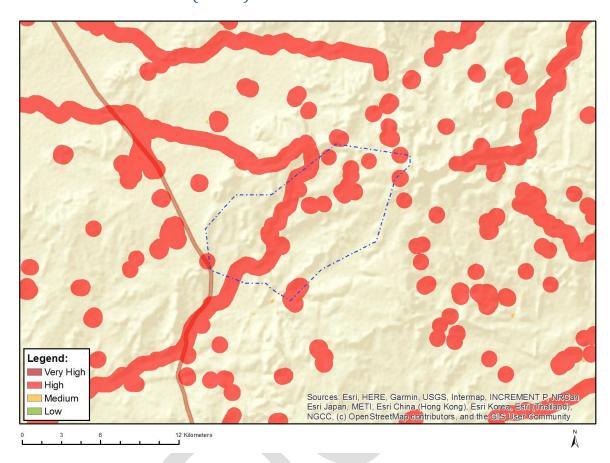
MAP OF RELATIVE AVIAN (WIND) THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

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	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
			Х

Sensitivity	Feature(s)	
Low	Low sensitivity	

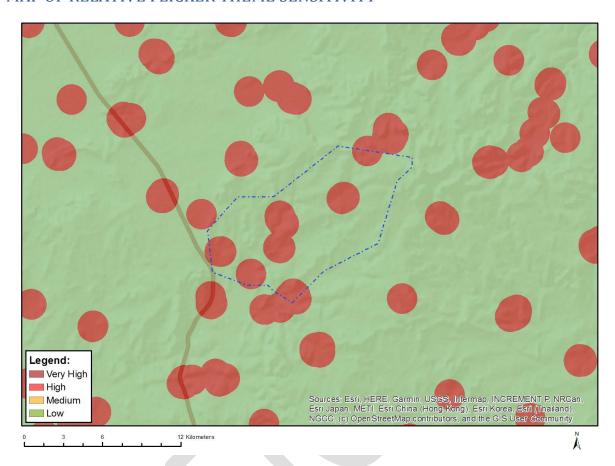
MAP OF RELATIVE DEFENCE (WIND) THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low sensitivity	

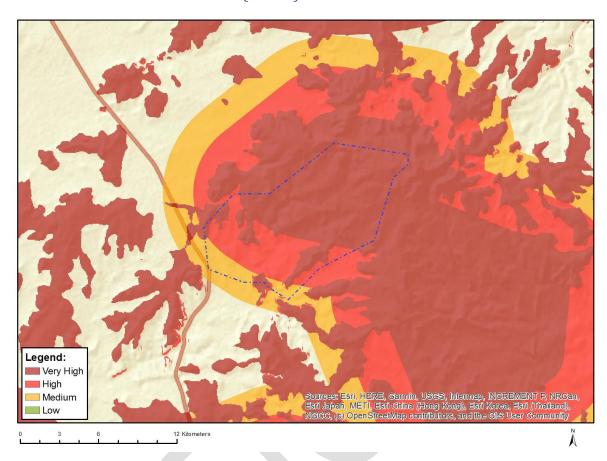
MAP OF RELATIVE FLICKER THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

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

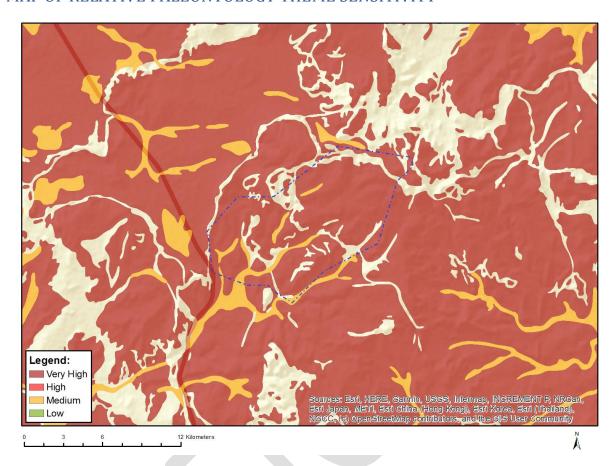
MAP OF RELATIVE LANDSCAPE (WIND) THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)	
High	Slope between 1:4 and 1:10	
High	Between 2 and 5 km of a game farm	
Low	Slope less than 1:10	
Medium	Between 5 and 7 km of a game farm	
Very High	Mountain tops and high ridges	
Very High	Slope more than 1:4	
Very High	Game farm	
Very High	Within 2 km of a game farm	

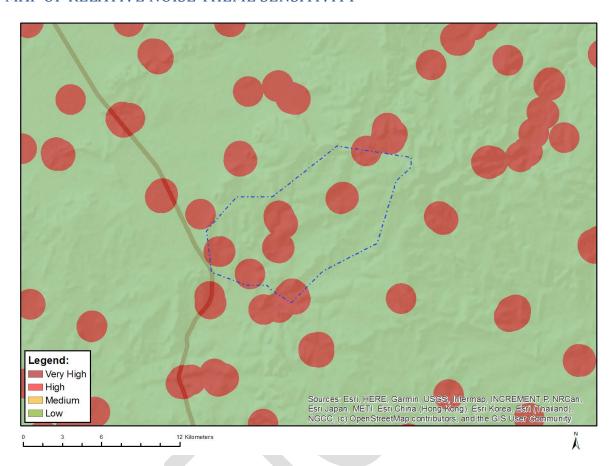
MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

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

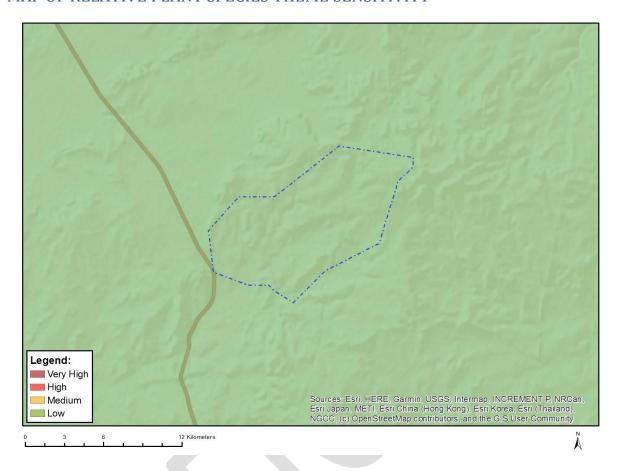
MAP OF RELATIVE NOISE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

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

MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY

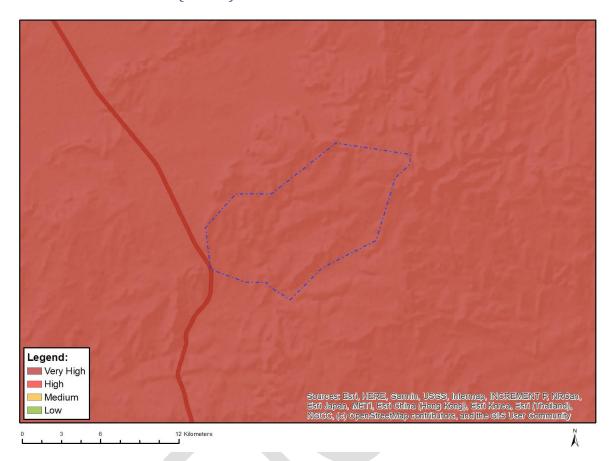


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Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)
Low	Low Sensitivity

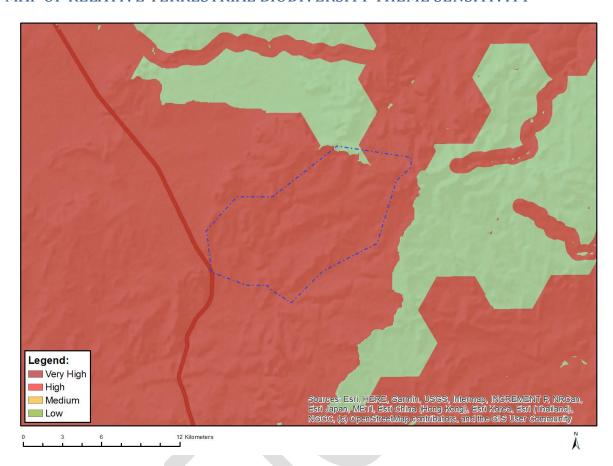
MAP OF RELATIVE RFI (WIND) THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)
High	Low sensitivity for telecommunications; Between 18 km and 26 km of the Radio Astronomy Advantage
	Area;More than 60 km from a Weather Radar installation
Medium	Low sensitivity for telecommunications; Between 26 and 48 km of the Radio Astronomy Advantage
	Area;More than 60 km from a Weather Radar installation
Very High	Low sensitivity for telecommunications;Inside or within 18 km of the Radio Astronomy Advantage
	Area;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	Feature(s)	
Low	Low Sensitivity	
Very High	Critical biodiveristy area 1	
Very High	Critical biodiveristy area 2	
Very High	Ecological support area	
Very High	FEPA Subcatchments	
Very High	Protected Areas Expansion Strategy	