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

EIA Reference number:

Project name: Phala Solar Power PlantProject title: Phala Solar Power Plant

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Applicant: Phala Solar Power Plant (RF) (Pty) Ltd

Compiler: Environamics

Compiler signature:

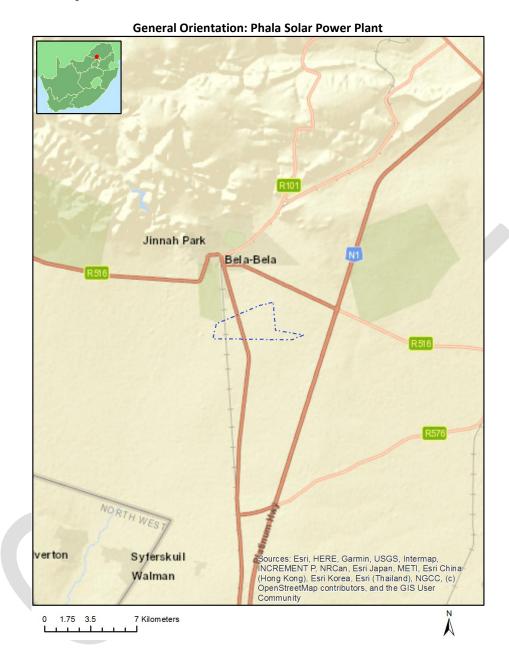
Application Category: Utilities Infrastructure | Electricity | Generation | Renewable | Solar | PV

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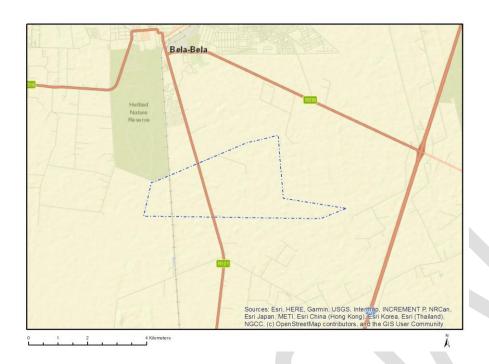
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Proposed Project Location

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	WARMBATHS	1394	8	24°55'22.85S	28°17'49.53E	Erven
2	HET BAD	465	0	24°54'1.98S	28°17'30.88E	Farm
3	TURFBULT	494	0	24°55'50.67S	28°19'15.13E	Farm
4	ROODEKUIL	496	0	24°57'42.51S	28°21'8.66E	Farm
5	ENTEBBE	497	0	24°56'56.82S	28°17'4.45E	Farm
6	ROODEKUIL	498	0	24°54'10.45S	28°19'37.01E	Farm
7	NOODHULP	492	0	24°55'17.49S	28°14'32.99E	Farm
8	HET BAD	465	14	24°54'33.32S	28°17'10.94E	Farm Portion
9	HET BAD	465	51	24°54'28.08S	28°17'40.78E	Farm Portion
10	HET BAD	465	57	24°54'38.27S	28°17'53.56E	Farm Portion
11	ROODEKUIL	498	1	24°54'10.45S	28°19'37.01E	Farm Portion
12	TURFBULT	494	4	24°56'22.09S	28°19'21.36E	Farm Portion
13	TURFBULT	494	1	24°55'25.89S	28°19'11.29E	Farm Portion
14	ROODEKUIL	496	37	24°56'10.01S	28°21'0.02E	Farm Portion
15	TURFBULT	494	3	24°55'22.64S	28°20'24.14E	Farm Portion
16	TURFBULT	494	5	24°56'7.16S	28°19'3.72E	Farm Portion
17	TURFBULT	494	7	24°55'34.55S	28°18'3.84E	Farm Portion
18	NOODHULP	492	2	24°56'5.38S	28°16'55.02E	Farm Portion
19	TURFBULT	494	2	24°55'54.58S	28°18'36.4E	Farm Portion
20	TURFBULT	494	9	24°56'22.57S	28°18'10.78E	Farm Portion
21	ROODEKUIL	496	17	24°56'43.73S	28°20'36.31E	Farm Portion
22	ENTEBBE	497	0	24°57'6.77S	28°16'53.69E	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	Classification	Status of	Distance from proposed
	No		application	area (km)
1	14/12/16/3/3/2/688	Solar PV	Approved	5.9
2	14/12/16/3/3/2/576	Solar PV	Approved	0
3	12/12/20/2130	Solar PV	Approved	5.9

Environmental Management Frameworks relevant to the application





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.

Waterberg	https://screening.environment.gov.za/ScreeningDownloads/EMF/WDEMF_Final_
District	EMF Report.pdf
Municipality	
EMF	

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:

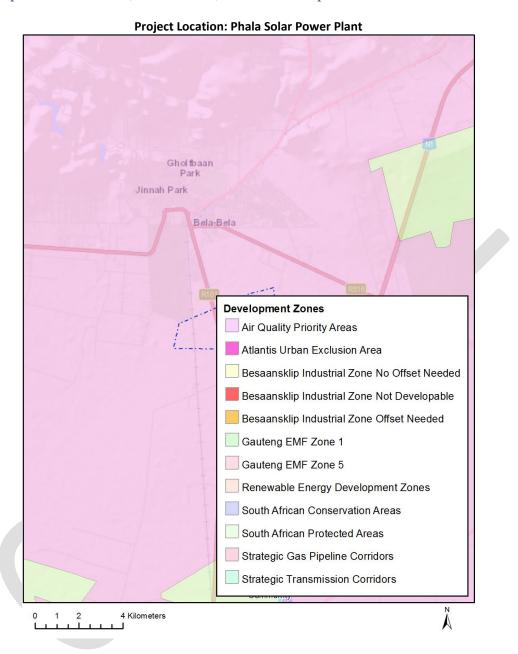
Utilities Infrastructure | Electricity | Generation | Renewable | Solar | PV.

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.

Incentiv	Implication
e,	
restricti	
on or	
prohibiti	
on	
Air	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/gg3
Quality-	9489 nn1207a.pdf
Waterberg	
-Bojanala	
Priority	
Area	

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	Χ			
Animal Species Theme			Х	

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Aquatic Biodiversity Theme				Х
Archaeological and Cultural		Х		
Heritage Theme				
Avian Theme		Х		
Civil Aviation (Solar PV)			Х	
Theme				
Defence Theme				X
Landscape (Solar) Theme	X			
Paleontology Theme			X	
Plant Species Theme			Х	
RFI Theme				Х
Terrestrial Biodiversity Theme	Х			

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.

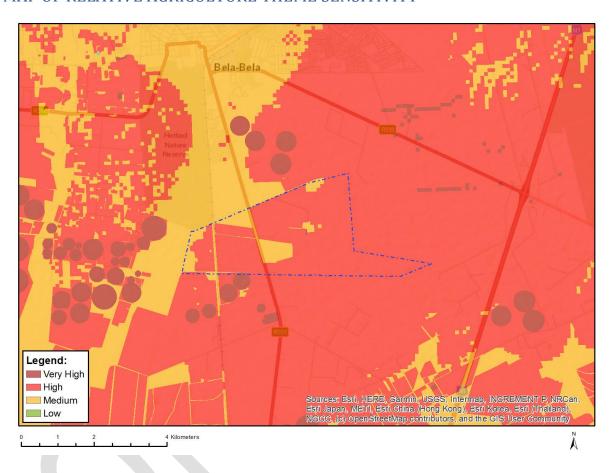
N	Special	Assessment Protocol
0	ist	
	assess	
	ment	
1	Agricult ural Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted WindAndSolar Agriculture Assessment Protocols.pdf
2	Landsca pe/Visu al Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted 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	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ /Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf

	Impact	
	Assessm	
	ent	
7	Civil Aviation Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Civil_Aviation_Installations_Assessment_Protocols.pdf
8	Defense Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ /Gazetted_Defence_Installations_Assessment_Protocols.pdf
9	RFI Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ /Gazetted_General_Requirement_Assessment_Protocols.pdf
0	Geotech nical Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
1	Socio- Economi c Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
1 2	Plant Species Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Plant Species Assessment Protocols.pdf
3	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.

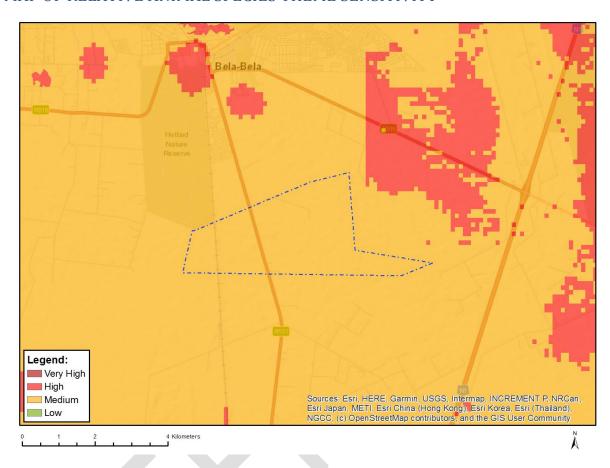
MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)	
High	Land capability;09. Moderate-High/10. Moderate-High	
High	Old Fields;Land capability;09. Moderate-High/10. Moderate-High	
High	Annual Crop Cultivation / Planted Pastures Rotation; Land capability; 09. Moderate-High/10. Moderate-	
	High	
High	Annual Crop Cultivation / Planted Pastures Rotation; Land capability; 06. Low-Moderate/07. Low-	
	Moderate/08. Moderate	
Medium	Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate	
Very High Horticulture / Viticulture;Land capability;09. Moderate-High/10. Moderate-High Very High Horticulture / Viticulture;Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate Very High Pivot Irrigation;Land capability;09. Moderate-High/10. Moderate-High		

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY

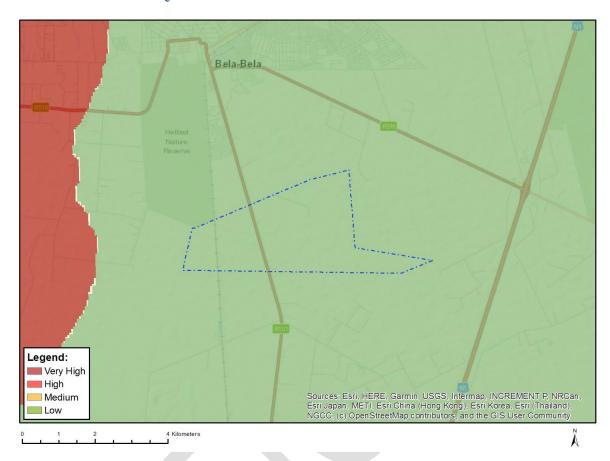


Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their 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	Feature(s)	
Medium	Sensitive species 5	
Medium	Mammalia-Crocidura maquassiensis	
Medium	Mammalia-Dasymys robertsii	
Medium	Mammalia-Lycaon pictus	
Medium	Mammalia-Neamblysomus julianae	
Medium	Reptilia-Kinixys lobatsiana	

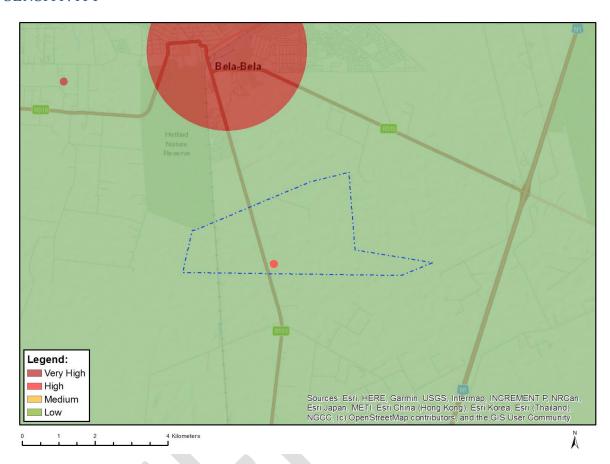
MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low sensitivity	

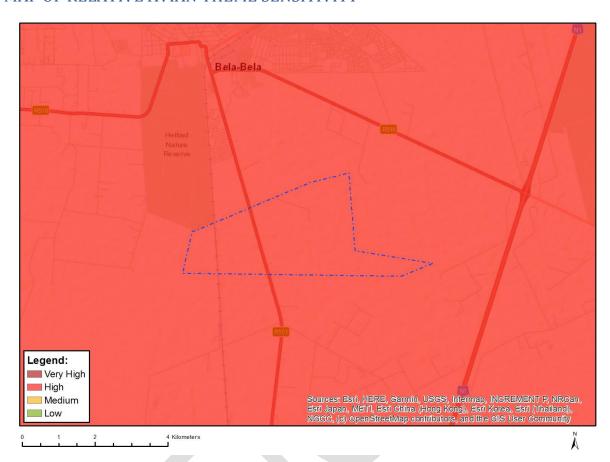
MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

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

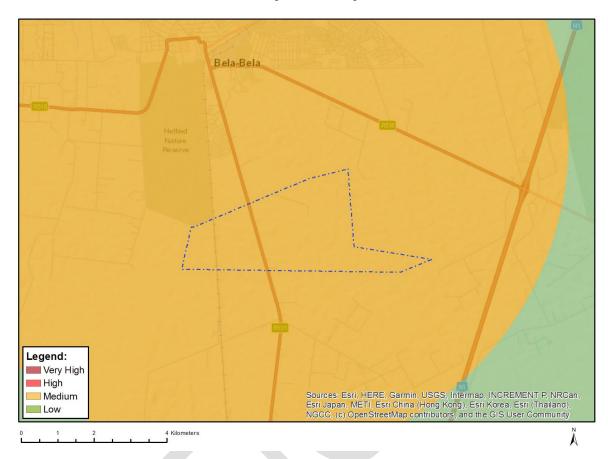
MAP OF RELATIVE AVIAN THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity	Feature(s)
High	within 20 km of known Cape Vulturerestuarants sites

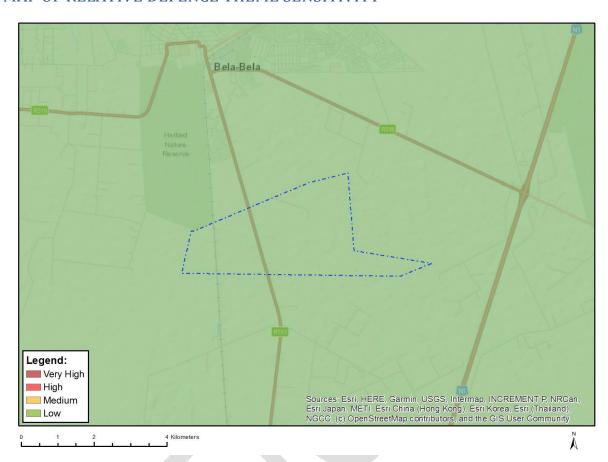
MAP OF RELATIVE CIVIL AVIATION (SOLAR PV) THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

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

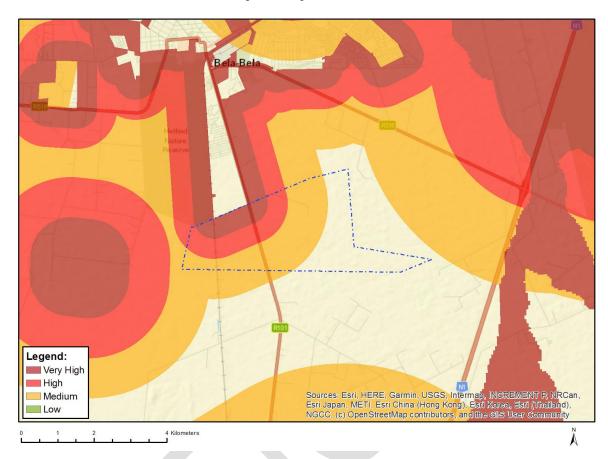
MAP OF RELATIVE DEFENCE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low sensitivity	

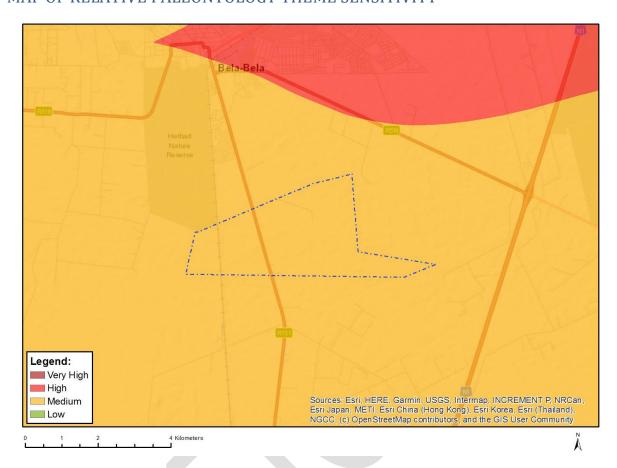
MAP OF RELATIVE LANDSCAPE (SOLAR) THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)
High	Between 500 and 1000 m of a town or village
Medium	Between 2 and 3 km of a game farm
Medium	Between a and 2 km of a town or village
Very High	Within 500 m of a town or village

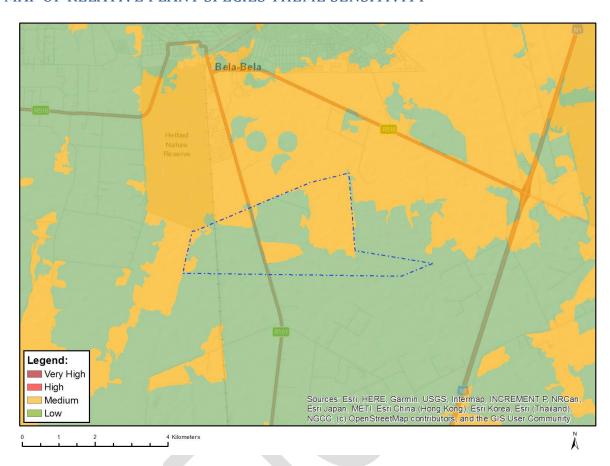
MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		Х	

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

MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY

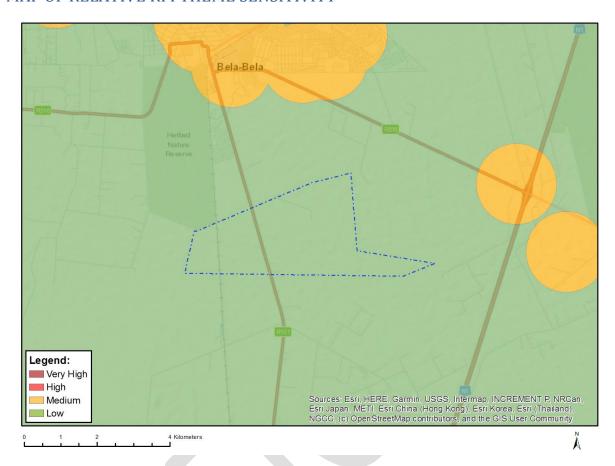


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Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity	Feature(s)
Low	Low Sensitivity
Medium	Sensitive species 1252
Medium	Cullen holubii

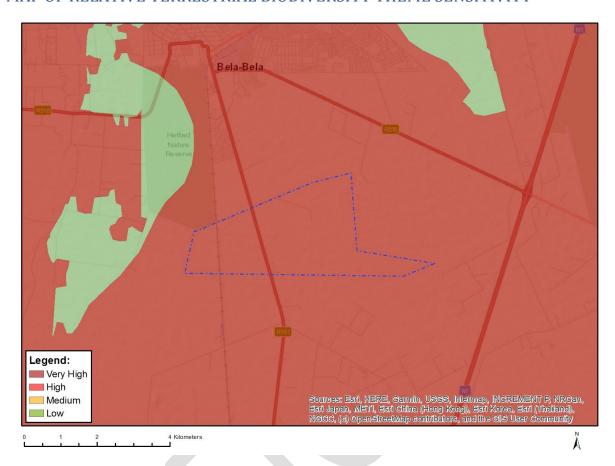
MAP OF RELATIVE RFI THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low sensitivity	

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)
Very High	Critical biodiveristy area 1
Very High	Critical biodiveristy area 2
Very High	Ecological support area 1
Very High	Vulnerable ecosystem