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

EIA Reference number: To be confirmed

Project name: The proposed of Palladium Power Plant, near Northam, Limpopo Province **Project title:** The proposed of Palladium Power Plant, near Northam, Limpopo Province

Date screening report generated: 12/06/2023 12:28:32

Applicant: Palladium Power Plant (RF) (Pty) Ltd

Compiler: Solis-Environmental

Compiler signature:

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

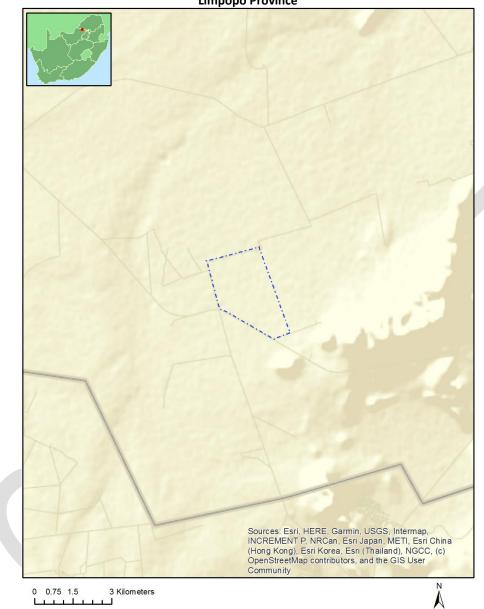
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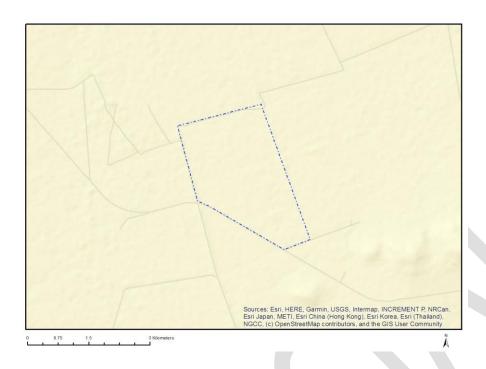
Proposed Project Location

Orientation map 1: General location

General Orientation: The proposed of Palladium Power Plant, near Northam, Limpopo Province



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	ROODEPAN	19	0	25°3'43.12S	27°23'53.15E	Farm
2	MAKAYSKRAAL	18	0	25°0'28.8S	27°20'10.73E	Farm
3	ZWARTDOORNS	421	0	24°59'53.84S	27°22'25.73E	Farm
4	MAKAYSKRAAL	18	1	25°1'49.44S	27°20'13.58E	Farm Portion
5	ROODEPAN	19	6	25°2'33.31S	27°23'13.79E	Farm Portion
6	MAKAYSKRAAL	18	0	25°0'55.11S	27°20'19.47E	Farm Portion
7	ZWARTDOORNS	421	1	25°0'57.7S	27°23'32.17E	Farm Portion
8	ZWARTDOORNS	421	3	25°1'11.27S	27°22'26.76E	Farm Portion
9	ZWARTDOORNS	421	4	25°0'29.62S	27°22'2.64E	Farm Portion
10	ZWARTDOORNS	421	2	25°1'40.53S	27°22'4.42E	Farm Portion
11	ROODEPAN	19	5	25°1'52.58S	27°23'58.32E	Farm Portion
12	MAKAYSKRAAL	18	3	24°59'53.08S	27°20'8.21E	Farm Portion
13	ZWARTDOORNS	421	0	24°58'58.97S	27°22'2.21E	Farm Portion
14	ZWARTDOORNS	421	5	25°0'14.16S	27°23'14.97E	Farm Portion

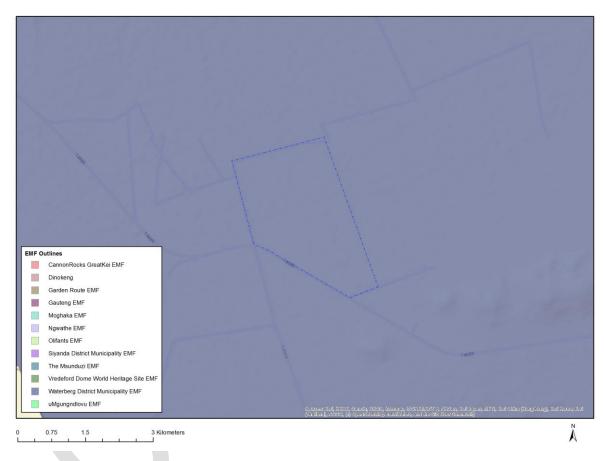
Development footprint¹ vertices: No development footprint(s) specified.

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.

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	14/12/16/3/3/1/969	Solar PV	Approved	16.9
2	14/12/16/3/1/969	Solar PV	Approved	16.9
3	12/12/20/2129	Solar PV	Approved	13.4

Environmental Management Frameworks relevant to the application



Environmental	LINK
Management	
Framework	
Waterberg District Municipality EMF	https://screening.environment.gov.za/ScreeningDownloads/EMF/WDEM F Final EMF Report.pdf

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.

Incentive, restriction or prohibition	Implication
Air Quality-Waterberg- Bojanala Priority Area	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/gg39489_nn1207a.pdf
South African Protected Areas	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/SAPAD OR 2022 Q4 Metadata.pdf

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	1	,	,
Animal Species Theme			Χ	
Aquatic Biodiversity Theme				Х
Archaeological and Cultural Heritage Theme				Х
Avian Theme				Х
Civil Aviation (Solar PV)			Х	
Theme				
Defence Theme				Х
Landscape (Solar) Theme	X			
Paleontology Theme		Χ		
Plant Species Theme				Х
RFI Theme			Х	
Terrestrial Biodiversity Theme	X			

Specialist assessments identified

Based on the selected classification, and the known impacts associated with the proposed development, 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.

No	Specialist	Assessment Protocol	
	assessment		
1	Agricultural Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse ssmentProtocols/Gazetted_WindAndSolar_Agriculture_Assessme nt_Protocols.pdf	
2	Landscape/Visual Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse	

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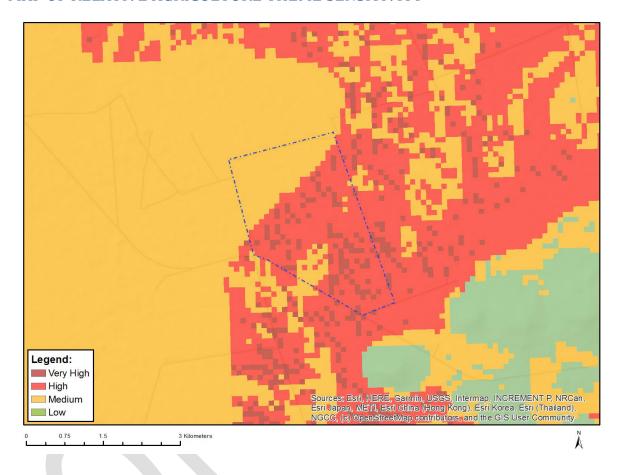
<u>Disclaimer applies</u>
12/06/2023

		<u>ssmentProtocols/Gazetted General Requirement Assessment P</u> rotocols.pdf
3	Archaeological and	https://screening.environment.gov.za/ScreeningDownloads/Asse
	Cultural Heritage Impact	
	Assessment	ssmentProtocols/Gazetted General Requirement Assessment P
		<u>rotocols.pdf</u>
4	Palaeontology Impact	https://screening.environment.gov.za/ScreeningDownloads/Asse
	Assessment	ssmentProtocols/Gazetted General Requirement Assessment P
		<u>rotocols.pdf</u>
5	Terrestrial Biodiversity	https://screening.environment.gov.za/ScreeningDownloads/Asse
	Impact Assessment	ssmentProtocols/Gazetted Terrestrial Biodiversity Assessment
		Protocols.pdf
6	Aquatic Biodiversity	https://screening.environment.gov.za/ScreeningDownloads/Asse
	Impact Assessment	ssmentProtocols/Gazetted Aquatic Biodiversity Assessment Pr
	impact Assessment	
	Ci il A i ii	otocols.pdf
7	Civil Aviation Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse
		ssmentProtocols/Gazetted Civil Aviation Installations Assessme
		nt_Protocols.pdf
8	8 Defense Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse
		ssmentProtocols/Gazetted Defence Installations Assessment Pr
		otocols.pdf
9	9 RFI Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse
		ssmentProtocols/Gazetted General Requirement Assessment P
		rotocols.pdf
10	Geotechnical Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse
	George Illical Assessifie III	ssmentProtocols/Gazetted General Requirement Assessment P
		rotocols.pdf
11	Socio Economic	
11	Socio-Economic Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse
	Assessificiti	ssmentProtocols/Gazetted General Requirement Assessment P
		<u>rotocols.pdf</u>
12	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse
		ssmentProtocols/Gazetted Plant Species Assessment Protocols.
		<u>pdf</u>
13	Animal Species	https://screening.environment.gov.za/ScreeningDownloads/Asse
	Assessment	ssmentProtocols/Gazetted Animal Species Assessment Protoco
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L		Torker.

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.

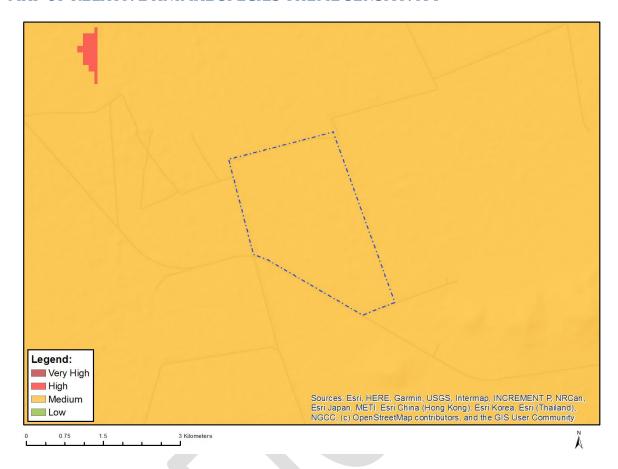
MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)
High Land capability;09. Moderate-High/10. Moderate-High	
Medium	Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate
Very High	Land capability;11. High/12. High-Very high/13. High-Very high/14. Very high/15. Very high

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY

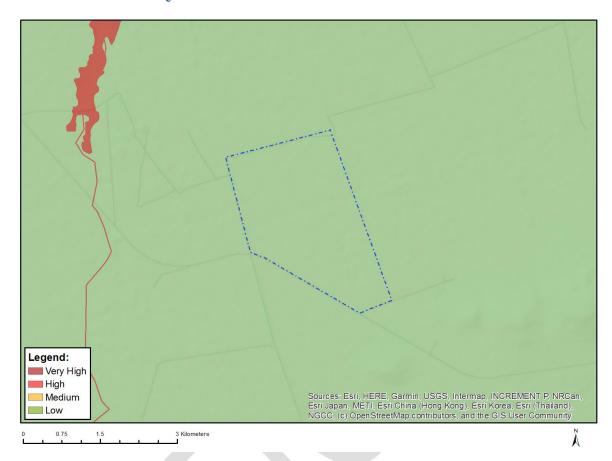


Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their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

Sensitivity	Feature(s)	
Medium	Aves-Aquila rapax	
Medium	Sensitive species 5	
Medium	Mammalia-Crocidura maquassiensis	
Medium	Mammalia-Lycaon pictus	
Medium	Reptilia-Kinixys lobatsiana	

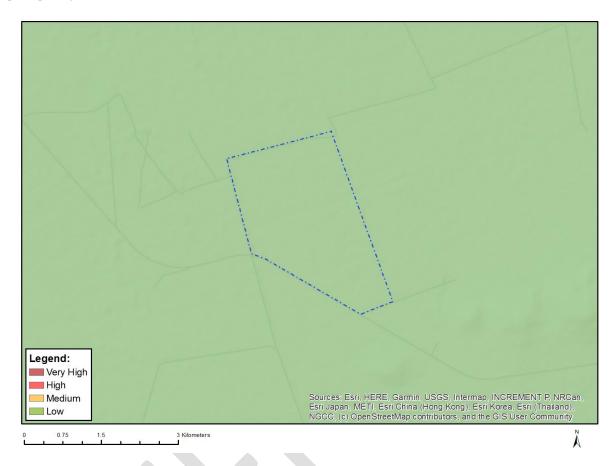
MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low sensitivity	

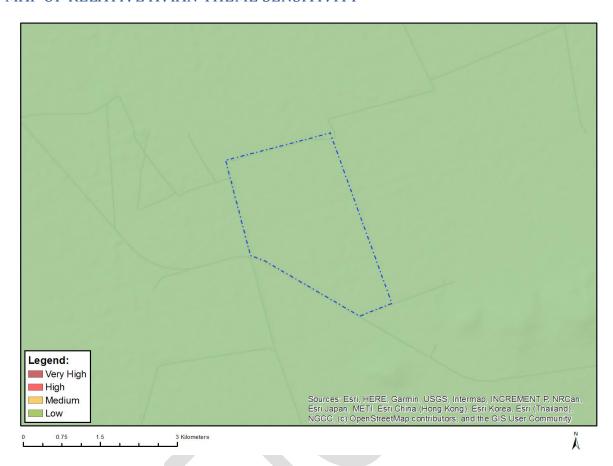
MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low sensitivity	

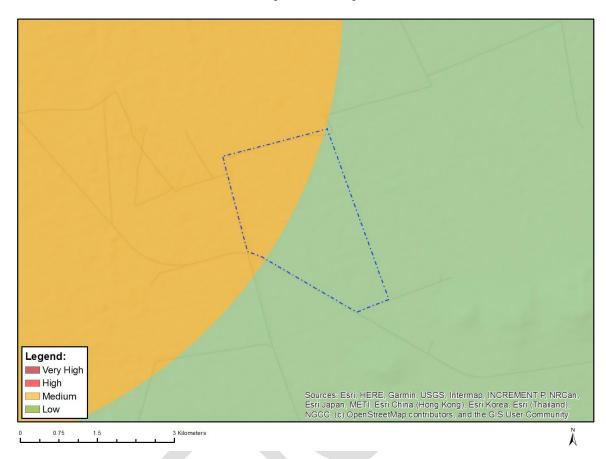
MAP OF RELATIVE AVIAN THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low Sensitivity	

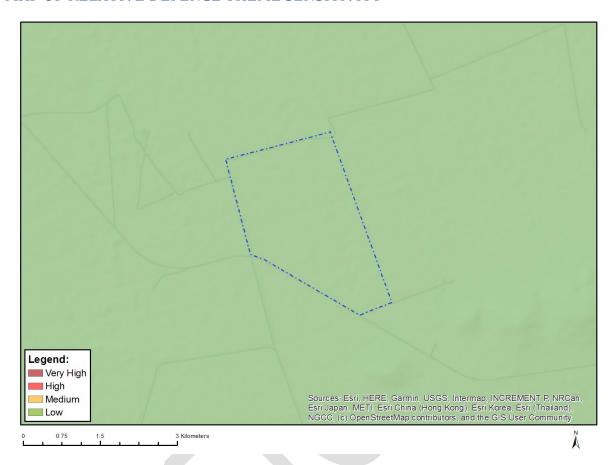
MAP OF RELATIVE CIVIL AVIATION (SOLAR PV) THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		Х	

Sensitivity	Feature(s)
Low	No major or other types of civil aviation aerodromes
Medium	Within 8 km of an other civil aviation aerodrome

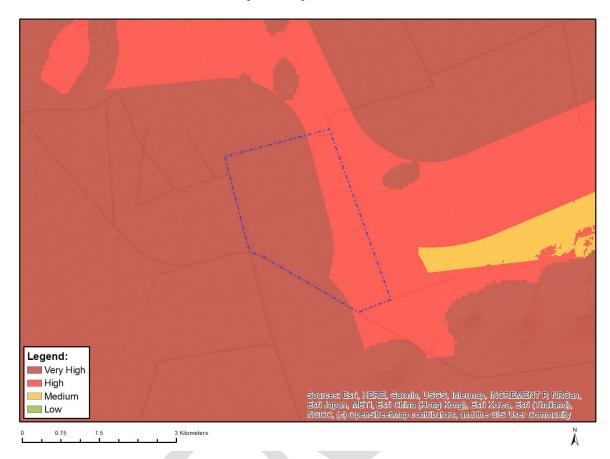
MAP OF RELATIVE DEFENCE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low sensitivity	

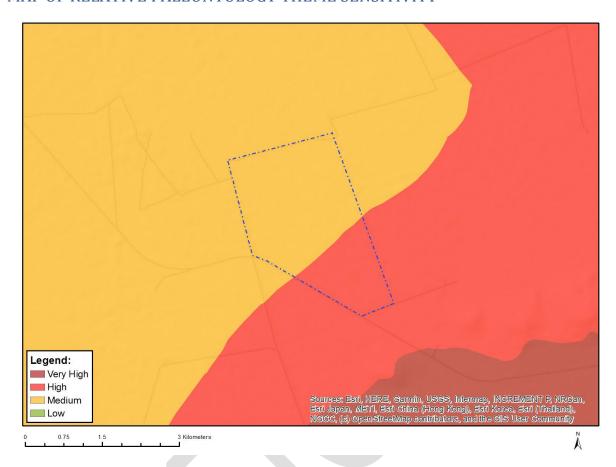
MAP OF RELATIVE LANDSCAPE (SOLAR) THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)	
High	Between 1.5 and 3 km of a nature reserve	
Very High	Mountain tops and high ridges	
Very High	Nature Reserve	
Very High	Within 1.5 km of a nature reserve	

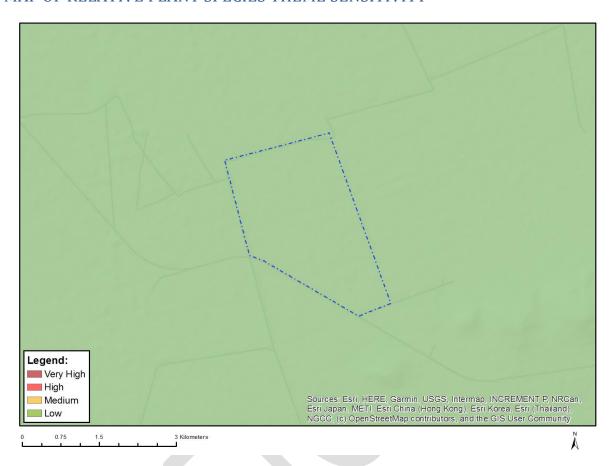
MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

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

MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY

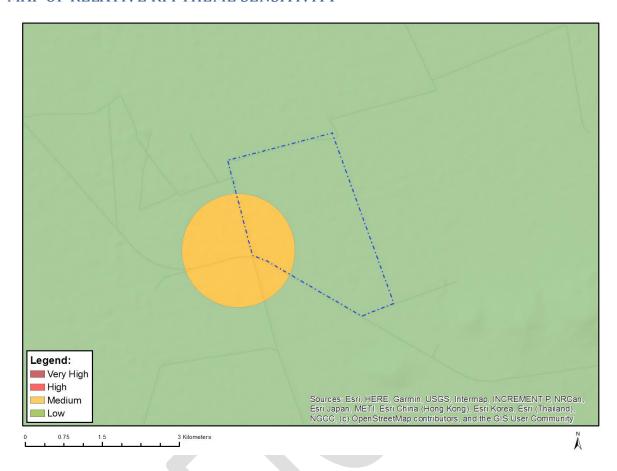


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Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)
Low	Low Sensitivity

MAP OF RELATIVE RFI THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		Х	

Sensitivity	Feature(s)	
Low	Low sensitivity	
Medium	Within 1 km of a telecommunication facility	

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	ESA 1
Very High	Philip Wulfsohn Private Nature Reserve