SCREENING REPORT FOR AN ENVIRONMENTAL AUTHORIZATION OR FOR A PART TWO AMENDMENT OF AN ENVIRONMENTAL AUTHORISATION AS REQUIRED BY THE 2014 EIA REGULATIONS – PROPOSED DEVELOPMENT FOOTPRINT ENVIRONMENTAL SENSITIVITY

EIA Reference number: TBC **Project name:** Shrubland PV **Project title:** 100 MW PV

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Applicant: Shrubland PV (Pty) Ltd

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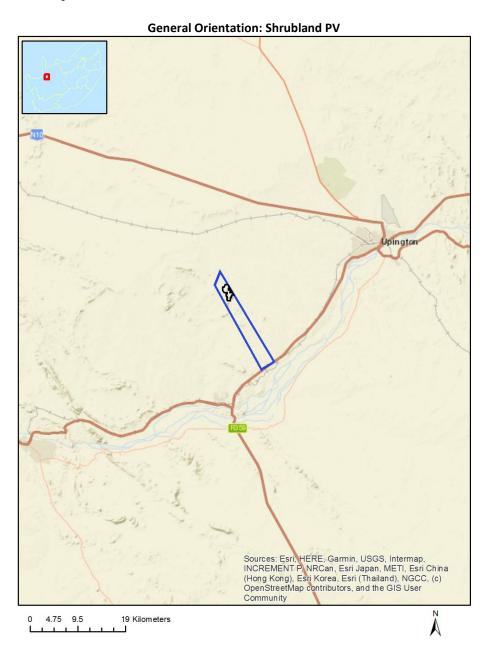
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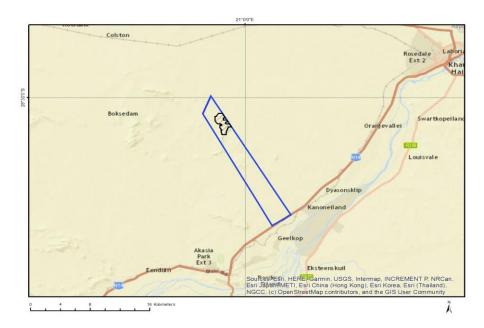
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Proposed Project Location

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	GEELKOP	456	0	28°34'59.55S	21°0'6.12E	Farm
2	GEELKOP	456	0	28°35'1.67S	21°0'7.37E	Farm Portion

Development footprint¹ vertices:

Footprint	Latitude	Longitude
1	28°32'36.25S	20°58'38.63E
1	28°32'39.18S	20°58'38.63E
1	28°32'39.2S	20°58'35.77E
1	28°32'39.2S	20°58'29.29E
1	28°32'39.21S	20°58'20.38E
1	28°32'37.41S	20°58'19.96E
1	28°32'34.25S	20°58'19.24E
1	28°32'33.54S	20°58'19.01E
1	28°32'31.6S	20°58'18.33E
1	28°32'28.86S	20°58'17.37E
1	28°32'24.99S	20°58'16.06E
1	28°32'20.41S	20°58'16.06E
1	28°32'20.38S	20°58'19.62E
1	28°32'18.78S	20°58'19.63E
1	28°32'18.76S	20°58'16.08E
1	28°32'16.53S	20°58'16.06E
1	28°32'14.42S	20°58'15.81E

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.

1	28°32'13.57S	20°58'15.68E
1	28°32'13.44S	20°58'15.66E
1	28°32'13.33S	20°58'15.59E
1	28°32'13.26S	20°58'15.48E
1	28°32'10.83S	20°58'11.98E
1	28°32'6.82S	20°58'11.54E
1	28°32'3.34S	20°58'11.15E
1	28°31'59.8S	20°58'11.17E
1	28°31'59.81S	20°58'19.19E
1	28°31'56.02S	20°58'19.21E
1	28°31'56.02S	20°58'13.47E
1	28°31'53.5S	20°58'13.44E
1	28°31'53.63S	20°58'10.56E
1	28°31'53.63S	20°58'1.07E
1	28°31'50.72S	20°57'58.6E
1	28°31'48.18S	20°57'56.48E
1	28°31'45.46S	20°57'54.21E
1	28°31'42.97S	20°57'52.16E
1	28°31'39.95S	20°57'50.16E
1	28°31'22.05S	20°57'50.16E
1	28°31'22.05S	20°57'51.31E
1	28°31'21.74S	20°57'53.55E
1	28°31'20.92S	20°57'55.23E
1	28°31'20.11S	20°57'55.23E
1	28°31'20.12S	20°57'56.4E
1	28°31'19.37S	20°57'57.22E
1	28°31'17.54S	20°57'58.28E
1	28°31'15.54S	20°57'58.63E
1	28°31'8.25S	20°58'4.27E
1	28°31'8.25S	20°58'21.37E
1	28°31'28.26S	20°58'35.08E
1	28°31'28.23S	20°58'28.02E
1	28°31'28.77S	20°58'26.98E
1	28°31'30.83S	20°58'26.33E
1	28°31'36.58S	20°58'26.33E
1	28°31'36.58S	20°58'40.79E
1	28°31'44.42S	20°58'46.18E
1	28°31'44.42S	20°58'40.44E
1	28°31'45.24S	20°58'40.4E
1	28°31'45.25S	20°58'36.52E
1	28°31'53.24S	20°58'36.5E
1	28°31'53.24S	20°58'52.2E
1	28°32'6.39S	20°59'1.22E
1	28°32'6.4S	20°58'47.74E
1	28°32'25.09S	20°58'38.64E
1	28°32'32.22S	20°58'38.63E
1	28°32'34.65S	20°58'38.63E
1	28°32'36.25S	20°58'38.63E
	•	

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	14/12/16/3/3/2/657	Solar CSP	Approved	5.9
2	12/12/20/1831/2	Solar CSP	Approved	5.9

3	12/12/20/1831/1	Solar CSP	Approved	5.9
4	12/12/20/2229	Solar PV	Approved	9.9
5	12/12/20/2518	Solar PV	Approved	23.3
6	14/12/16/3/3/3/82	Solar CSP	Approved	1.7
7	12/12/20/2230	Solar PV	Approved	0
8	14/12/16/3/3/2/656	Solar CSP	Approved	5.9
9	12/12/20/1831	Solar CSP	Approved	5.9
10	14/12/16/3/3/2/816	Solar PV	Approved	0
11	12/12/20/777	Solar CSP	Approved	10.4
12	12/12/20/1831/3	Solar PV	Approved	5.9

Environmental Management Frameworks relevant to the application



Environme ntal Manageme nt	LINK
Framework Siyanda District Municipality EMF	https://screening.environment.gov.za/ScreeningDownloads/EMF/SIYANDA_EMF_ REPORT_2008.doc

Environmental screening results and assessment outcomes

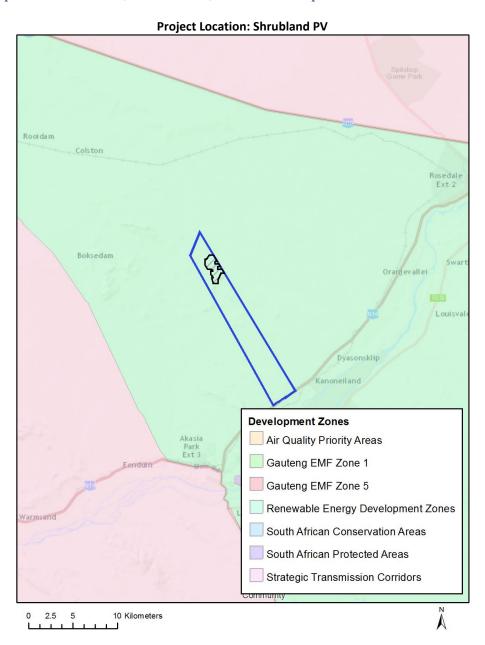
The following sections contain a summary of any development incentives, restrictions, exclusions or prohibitions that apply to the proposed development footprint as well as the most environmental sensitive features on the footprint based on the footprint sensitivity screening results for the application classification that was selected. The application classification selected for this report is:

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

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

Incentiv	Implication
e, restricti	
on or	
prohibit	
ion	
Strategic Transmiss ion Corridor- Northern corridor	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/GNR 350 of 13 April 2017.pdf
Renewabl e energy developm ent zones 7- Upington	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/GNR 350 of 13 April 2017.pdf

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 footprint 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				Χ

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

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 footprint situation.

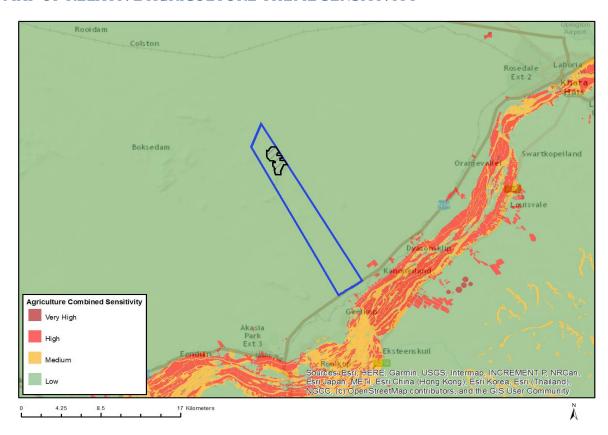
N o	Specia list	Assessment Protocol
	assess	
	ment	
1	Agricult ural Impact Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ DraftGazetted Agriculture Assessment Protocols.pdf
2	Landsca pe/Visu al Impact Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted General Requirement Assessment Protocols.pdf
3	Archaeo logical and Cultural Heritag e Impact Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
4	Palaeon tology Impact Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /DraftGazetted General Requirement Assessment Protocols.pdf
5	Terrestr ial Biodiver sity Impact Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf
6	Aquatic Biodiver	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols

7	sity Impact Assess ment Avian	/DraftGazetted Aquatic Biodiversity Assessment.pdf https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols
	Impact Assess ment	/DraftGazetted General Requirement Assessment Protocols.pdf
8	Civil Aviation Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /DraftGazetted Civil Aviation Installations Assessment Protocols.pdf
9	Defense Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ /DraftGazetted_Defence_Installations_Assessment_Protocols.pdf
1 0	RFI Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ /DraftGazetted_General_Requirement_Assessment_Protocols.pdf
1	Geotec hnical Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ /DraftGazetted General Requirement Assessment Protocols.pdf
1 2	Socio- Econom ic Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /DraftGazetted General Requirement Assessment Protocols.pdf
3	Plant Species Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ /DraftGazetted General Requirement Assessment Protocols.pdf
1 4	Animal Species Assess ment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ /DraftGazetted General Requirement 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 footprint 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.

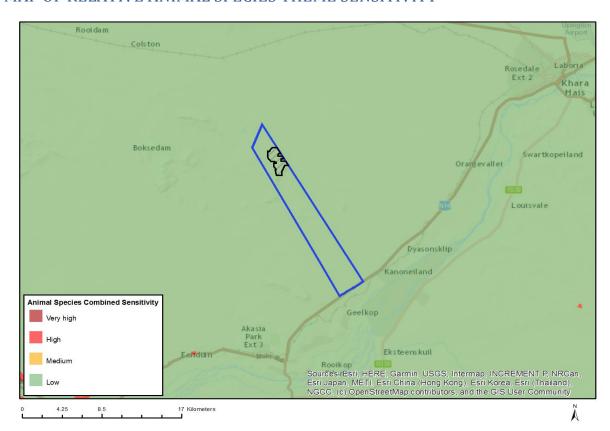
MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Х

Sensitivity	Feature(s)
Low	Land capability;01. Very low/02. Very low/03. Low-Very low/04. Low-Very low/05. Low

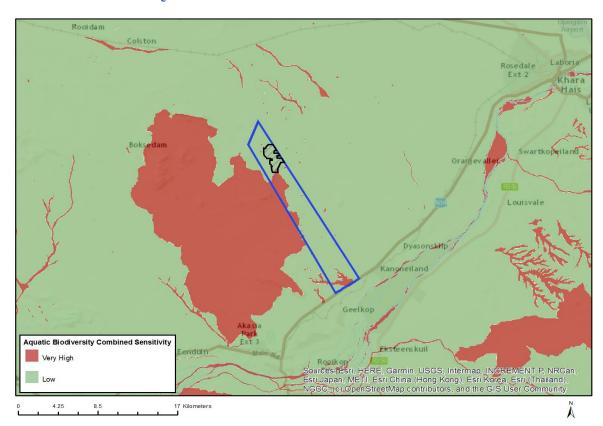
MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)
Low	Low sensitivity

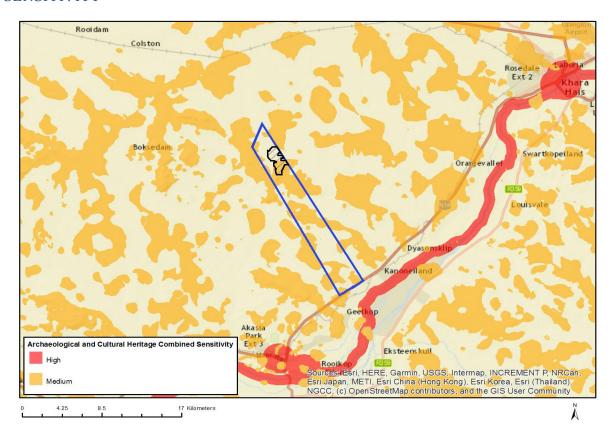
MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Х			

Sensitivity	Feature(s)
Low	Low sensitivity
Very High	Freshwater ecosystem priority area quinary catchments

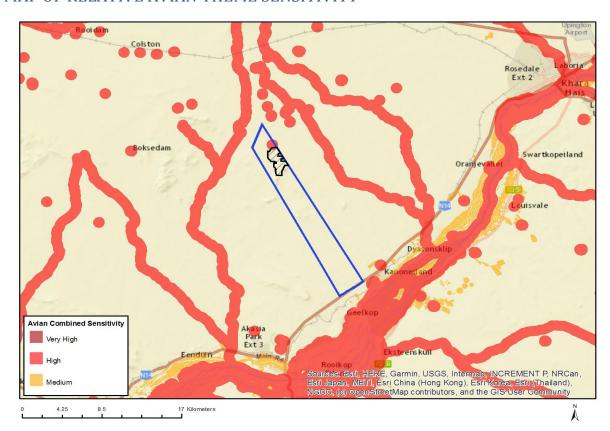
MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity	Feature(s)
Medium	Mountain or ridge

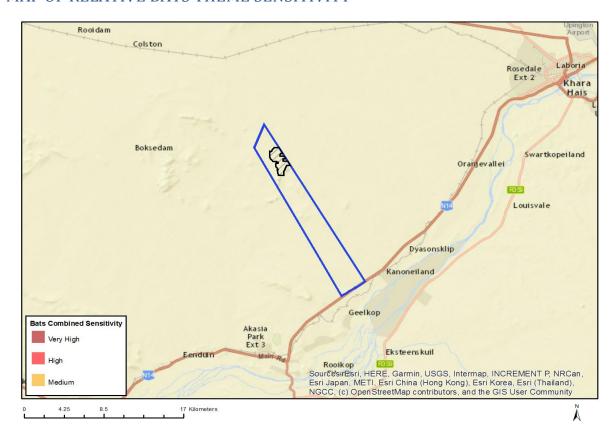
MAP OF RELATIVE AVIAN THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity	Feature(s)
High	Within 500 m of a wetland

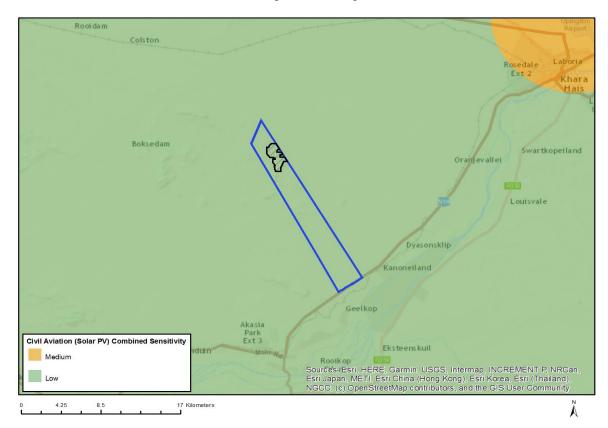
MAP OF RELATIVE BATS THEME SENSITIVITY



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 Features:

Sensitivity	Feature(s)
Low	No major or other types of civil aviation aerodromes

MAP OF RELATIVE DEFENCE THEME SENSITIVITY

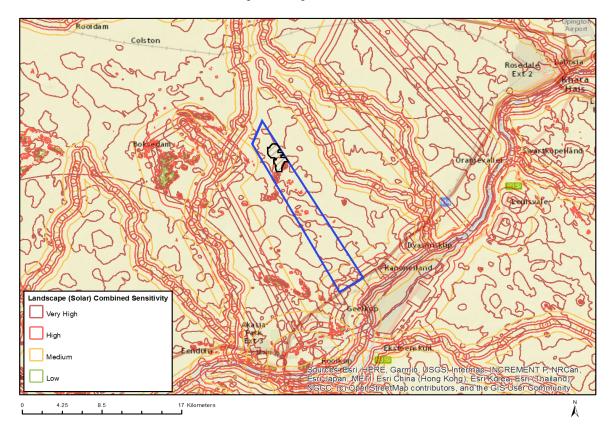
Unable to obtain map image.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity Features:

Sensitivity	Feature(s)	
Low	Low sensitivity	

MAP OF RELATIVE LANDSCAPE (SOLAR) THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Х			

Sensitivity	Feature(s)
High	Slope between 1:4 and 1:10
Very High	Mountain tops and high ridges
Very High	Slope more than 1:4

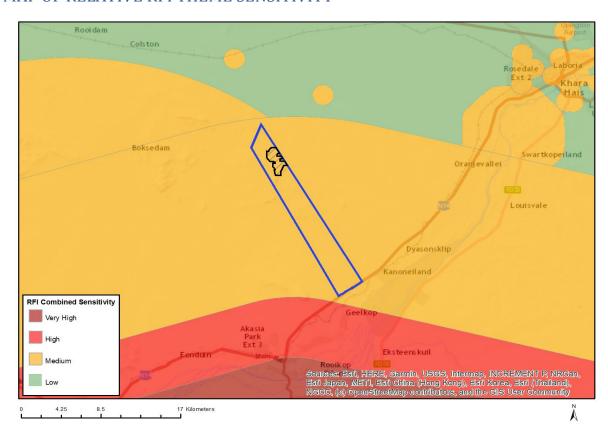
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Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		Х	

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity
Medium	Sensitive species 44

MAP OF RELATIVE RFI THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		Χ	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Between 14 and 32 km of a SKA receptor
Medium	Between 14 and 32 km of the Radio Astronomy Advantage Area

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	Freshwater ecosystem priority area quinary catchments