

CPS 9578/1 – Supporting documentation – Desktop Assessment Report for Native Vegetation Clearing Application

Report generated: Thu Dec 12 12:46:52 AEDT 2019

Please complete the details below:

Applicant:

Your reference:

Property: 100 SPOT VIEW, TWO ROCKS

50 TWO ROCKS RD, TWO ROCKS

94 TWO ROCKS RD, TWO ROCKS

120 TWO ROCKS RD, TWO ROCKS

0,

110 SPOT VIEW, TWO ROCKS

LGA: WANNEROO, CITY OF

Proposed Clearing: 12.68 hectares ____ trees

Purpose:

Land Tenure:

Buffer distance: 5km

Notes

- This report is designed to support Local Governments with native vegetation clearing permit applications.
- This report is a desktop study and does not replace a site assessment
- The information generated in this report is correct to the best of WALGA's knowledge. WALGA takes no responsibility for decisions made using this report.
- Further information on how to interpret the datasets is available in the [Explanatory Notes](#).
- Further information about the clearing principles is available from the [Department of Water and Environment Regulation \(DWER\)](#) *"A guide to the assessment of applications to clear native vegetation"*.

Interpreting this report

- This report will assist the user to determine if the proposed clearing is 'at variance', 'may be at variance', 'not likely to be at variance' or 'not at variance' to any of the clearing principles contained Schedule 5 of the Environmental Protection Act 1986 (EP Act).
- If using this report to complete an assessment as part of your desktop study under your Strategic Purpose Permit and an 'at variance' result is produced, you may refer

your application to DER for clarification. Please use the template referral email located here (link to the template I have prepared). Please note that the Strategic Purpose Permit applies to clearing that is 'not at variance' or 'not likely to be at variance' to any of the clearing principles proposed clearing that 'may be at variance' or 'is at variance' will need to be referred to DER for review.

- If using this report as supporting information for a clearing permit application, please email this report, a covering sheet and accompanying shapefile with the application form and [payment \(Form C3\)](#) to the [DWER](#)
- If you are unsure about the levels of variance identified in this report and require further clarification, please seek further advice from DER by submitting a [referral form](#) via [email](#) or alternatively phone (08) 6364 7000.
- The 'may be at variance' and 'at variance' levels determined in this report identifies that a clearing principle requires further attention. A more detailed assessment (including a site visit may be required) and further identification of impacts may alter the variance levels. If you wish to seek clarification on the altered variance level, please seek advice from your Local Government Environment Team in the first instance and DWER via [email](#) or alternatively phone (08) 6364 7000, using your Permit Number for reference..

NB: Any actions you take should be accounted for and recorded. This information should be provided in your annual report and is subject to DWER auditing.

Distance and area calculations are performed using the following map projection:
EPSG:28350

1.1 Site details



Property:

100 SPOT VIEW, TWO ROCKS
50 TWO ROCKS RD, TWO
ROCKS

94 TWO ROCKS RD, TWO
ROCKS

120 TWO ROCKS RD, TWO
ROCKS

0,

110 SPOT VIEW, TWO ROCKS

WANNEROO, CITY OF

SWAN

SWAN COASTAL

31.5072S,115.5948E

 y

n

on site

Local Government Authority:

DER Region:

DBCA District:

GPS coordinates lat/long:

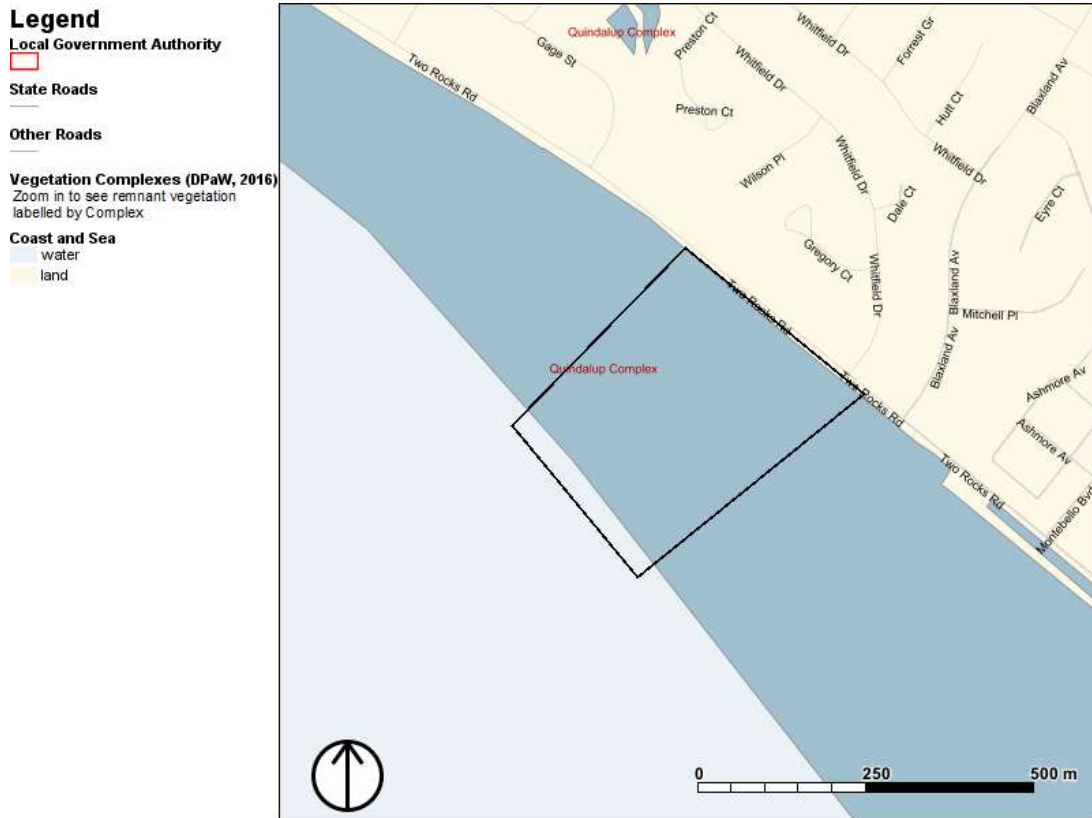
Environmentally Sensitive Area:

EPA Position Statement No.2 Area:

EPA Red Book Area:

Country Areas Water Supply Act 1947 - Clearing Control Catchment:	No
Rights in Water and Irrigation Act 1914 area:	Yanchep Groundwater Area
Clearing Area (ha):	12.68

1.2 (Principle (e)) Mapped vegetation description



Interim Biogeographic Regionalisation for Australia (IBRA) region:
Swan Coastal Plain / Perth(SWA02)

Beard vegetation associations by IBRA region:

IBRA Region	Association	Rarity %	Area (ha)
Swan Coastal Plain	1007	68.61	4.55

Beard vegetation associations by Local Government Authority:

LGA	Association	Rarity %	Area (ha)
WANNEROO, CITY OF	1007	59.94	4.55

Beard Association : description

1007 : Mosaic: Shrublands; *Acacia lasiocarpa* & *Melaleuca acerosa* heath / Shrublands; *Acacia rostellifera* & *Acacia cyclops* thicket

Area of remnant vegetation remaining within 10km of the selected area (local area vegetation retention). Land area is based on pre-European extent of Beard Vegetation Association mapping within the 10km buffer.

Veg area = 116.01 sqkm, land area = 159.79 sqkm. Percentage rem veg remaining = 72.60%

South West Region vegetation complexes:

Complex	Classification	Area (ha)
Quindalup Complex	d, e	11.52

Vegetation complexes occurring within the Swan Coastal Plain and Jarrah Forest are classified into the following categories shown in brackets after the complex name:

- a) Vegetation complexes with less than 10% of pre-European extent remaining and < 10% being protected within the Swan Coastal Plain and Jarrah Forest IBRA regions
- b) Vegetation complexes with less than 30% of pre-European extent remaining and less than 10% being protected within the Swan Coastal Plain and Jarrah Forest IBRA regions
- c) Vegetation complexes with only 1500 ha or 15% or less protected for conservation in the Jarrah Forest IBRA-region
- d) Vegetation complexes with only 400 ha or 10% or less protected for conservation on the Swan Coastal Plain portion of Perth and Peel
- e) Vegetation complexes with less than 10% of pre-European extent protected within the Swan Coastal Plain and Jarrah Forest IBRA regions (and not already listed above)
- f) Vegetation complexes with less than 30% of pre-European extent remaining within the Swan Coastal Plain and Jarrah Forest IBRA regions
- g) Vegetation complexes not meeting any of the above criteria

1.3 Geoscientific information

Rainfall (mm): 722

Evapotranspiration (mm): 602

Elevation (topographic contours) m: 10, 6, 8, 4, 12, 14, 16, 18, 20

Geology: Water 2.07 ha
Unlithified sand of mollusc and foram fragments, and quartz and heavy mineral grains. 10.61 ha

Soils: Quindalup South youngest dune Phase (211Qu_Q4): The youngest phase. Irregular dunes with slopes up to 20%. Loose pale brown calcareous sand with no soil profile development. -

3.15 ha

Quindalup South water, beach Phase (211QuU_BEACH): Beach.
- 0.98 ha

Quindalup South unstable sand Phase (211Qu_Qu): Presently
unstable sand. - 0.74 ha

Quindalup South shallow sand flat Phase (211Qu_Qs):
Undulating landscapes with shallow calcareous sands over
limestone and much rock outcrop. - 2.71 ha

Quindalup South third dune Phase (211Qu_Q3): The third
phase. Irregular dunes with high relief and slopes up to 20%.
Loose calcareous sand with little surface organic staining and
incipient cementation at depth. - 1.47 ha

1.4 Other Considerations

Department of Aboriginal Affairs heritage sites: No

Time Constraints (please complete)

Funding (Y/N):

Seasonal (Y/N):

Hazard Reduction (Y/N):

Other:








2 Assessment of clearing principles

2.1 Identified Potential Impacts Summary

Desktop assessment against clearing principles:

■ Likely to be at variance ■ May be at variance ■ Not likely to be at variance

Clearing Principle	Impact	Reason	Action Required
Principle (a) - High biodiversity	■	Principle (b) red impact. Principle (e) red impact. Assessment area is in an Environmentally Sensitive Area.	
Principle (b) - Significant habitat for fauna	■	Carnaby's cockatoo habitat. Specially Protected Fauna within 5km. Important Birding Area.	

Principle (c) - Habitat for rare flora		Declared Rare Flora within 5km.	Ground survey for vegetation condition and tree hollows in the application area may raise flag status.
Principle (d) - Habitat for TECs		Threatened Ecological Community (buffer) within 5km.	
Principle (e) - Significant remnant in an extensively cleared area		Vegetation complexes with only 400 ha or 10% or less protected for conservation on the Swan Coastal Plain portion of Perth and Peel. Vegetation complexes with less than 10% of pre-European extent protected within the Swan Coastal Plain and Jarrah Forest IBRA regions (and not already listed above).	
Principle (f) - Growing in association with a watercourse or wetland			
Principle (g) - Likely to cause appreciable land degradation			
Principle (h) - Impacts to conservation area		Within or directly adjacent to Bush Forever site Within or directly adjacent to EPA Redbook 1976-91 reserve.	
Principle (i) - Deterioration in the quality of surface or underground water			

The following section lists the data used to inform the assessment against clearing principles. Further information might be available for your application site in specific project reports or site specific assessments that you might like to attach to this desktop assessment.

2.1 Principle (a) Native vegetation should not be cleared if it comprises a high level of biological diversity

Specially Protected Fauna

The following fauna record counts have been located within 5km of the application area:

Class	Rank	No. records
BIRD	EN	13
REPTILE	VU	1
REPTILE	P3	2
MAMMAL	P4	2
MAMMAL	CD	1
MAMMAL	VU	1
INVERTEBRATE	P4	6
BIRD	IA	3

Key to conservation status ranking:

EX = Presumed Extinct

EN = Endangered

CR = Critically Endangered

VU = Vulnerable

P1-5 = Priority 1 to 5 fauna

Priority Fauna

The following priority fauna records have been located within 5km of the application area:

DBNo	Class	WA_RANKING	Certainty	Distance (m)
23437	MAMMAL	P4	Certain	861
68322	MAMMAL	P4	Moderately certain	1525
366656	INVERTEBRATE	P4	Certain	4786
99591	INVERTEBRATE	P4	Certain	4792
99592	INVERTEBRATE	P4	Certain	4792
366655	INVERTEBRATE	P4	Certain	4802
366657	INVERTEBRATE	P4	Certain	4811
99616	INVERTEBRATE	P4	Certain	4877
15126	REPTILE	P3	Certain	4993
15130	REPTILE	P3	Certain	4993

Specially Protected Flora

The following flora record counts have been located within 5km of the application area:

ConsStatus	WARank	No. records
------------	--------	-------------

-	VU	2
Priority 4		1
Priority 3		1

Key to the Conservation Status:

CR - Critically Endangered

EN - Endangered

VU - Vulnerable

1 = Priority 1: Poorly Known Taxa

2 = Priority 2: Poorly Known Taxa

3 = Priority 3: Poorly Known Taxa

4 = Priority 4: Rare Taxa

Priority Flora

The following priority flora records have been located within 5km of the application area:

Popn Id	Priority	Proximity (m)
90811	Priority 3	992
110749	Priority 4	4447

Threatened Ecological Communities

The following threatened ecological community records have been located within 5km of the application area:

Ranking	Count
Priority 3	34
Critically Endangered	4

Priority Ecological Communities

The following priority ecological community records have been located within 5km of the application area:

Record ID	Ranking	Proximity (m)
5042	Priority 3	4744
5041	Priority 3	4801

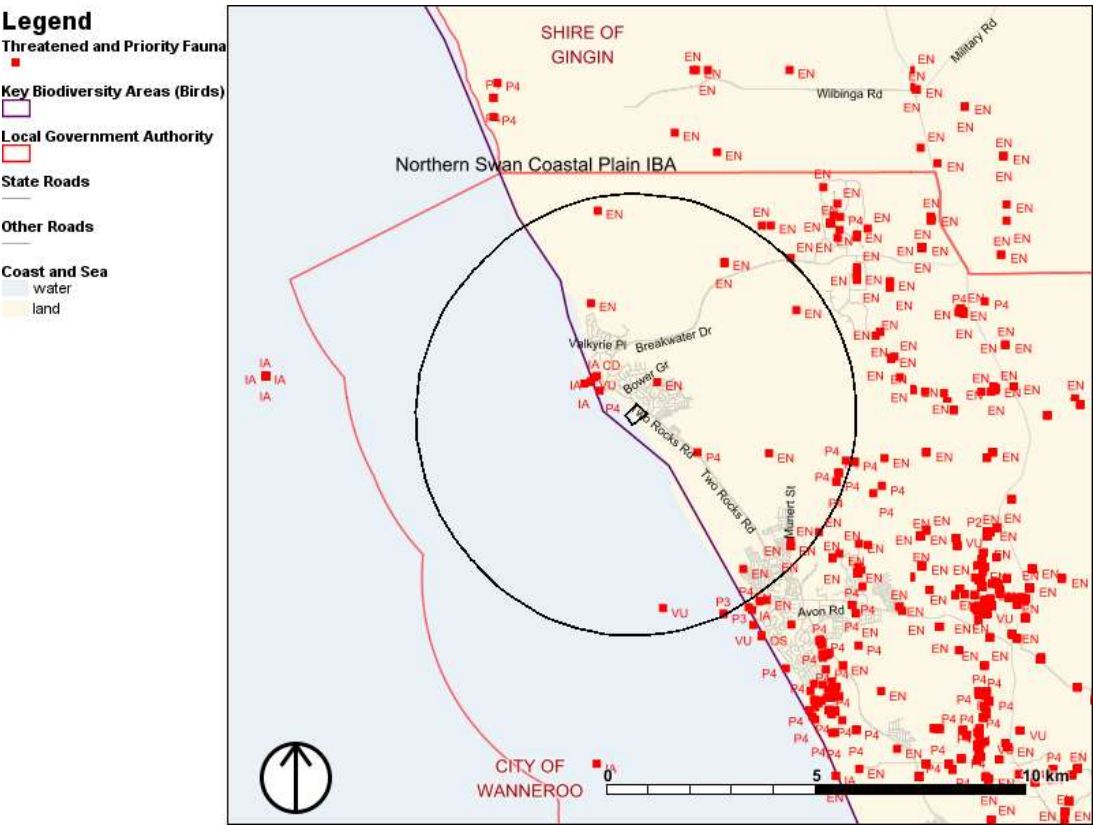
Apiary Sites

The following apiary site records have been located within 5km of the application area:

Environmentally Sensitive Area

Area of site within Environmentally Sensitive Area (ha):8.12

2.2 Principle (b) Native vegetation should not be cleared if it comprises the whole or part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.



Carnaby's Cockatoo Habitat

The site contains 2.23ha of potential feeding areas.
The site contains 10.57ha of confirmed breeding areas.
The site contains 10.57ha of unconfirmed breeding areas.

Important Birding Areas

The site is within the following Important Birding Areas.
26933 - Northern Swan Coastal Plain IBA

Specially Protected Fauna

The following fauna records have been located within 5km of the application area:

DBNo	Class	WA_RANKING	Certainty	Distance (m)
8200	BIRD	EN	Certain	731
5366	MAMMAL	CD	Certain	1155

10459	REPTILE	VU	Certain	1160
262266 115	BIRD	IA	Moderately Certain	1162
135345 115	BIRD	IA	Moderately Certain	1172
61764 115	BIRD	IA	Moderately Certain	1248
26011	BIRD	EN	Certain	2644
89501	BIRD	EN	Very Certain (photo, specimen, expert)	3062
25150	BIRD	EN	Certain	3967
25149	BIRD	EN	Certain	3994
199108 794	BIRD	EN	Moderately Certain	4329
89502	BIRD	EN	Very Certain (photo, specimen, expert)	4331
5224	MAMMAL	VU	Certain	4425
25158	BIRD	EN	Certain	4580
25159	BIRD	EN	Certain	4663
25160	BIRD	EN	Certain	4663
25161	BIRD	EN	Certain	4663
89505	BIRD	EN	Very Certain (photo, specimen, expert)	4701
89499	BIRD	EN	Very Certain (photo, specimen, expert)	4986

Key to conservation status ranking:

EX = Presumed Extinct

EN = Endangered

CR = Critically Endangered

VU = Vulnerable

IA = migratory birds protected under an international agreement

Ecological linkages and vegetation connectivity

The application area is within a Regional Ecological Linkage. Regional Ecological Linkages should be maintained wherever possible.

The application area is within the following Perth Regional Ecological Linkages:

1

The application area is within the following Gngangara Mound Ecological Linkages:

Bush Forever associated with Conceptual Linkage - 8.12 ha

Conceptual Linkage - 4.56 ha

Legend

Perth Regional Ecological Linkages



Local Government Authority



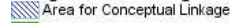
State Roads




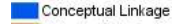
Other Roads



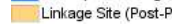
Gnangara Mound Ecological Linkages



 Bush Forever associated with Conceptual Linkage

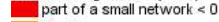


Conceptual Linkage



Linkage Site (Post-Pine Banksia Rehabilitation)

Connectivity Reach (2016)



- part of a small network < 0



0 - 10



10 - 20



20 - 30



20 - 30
30 - 40



30 - 40
40 - 50



40 - 50
50 - 60



- 50 - 60
- part of a large network > 60

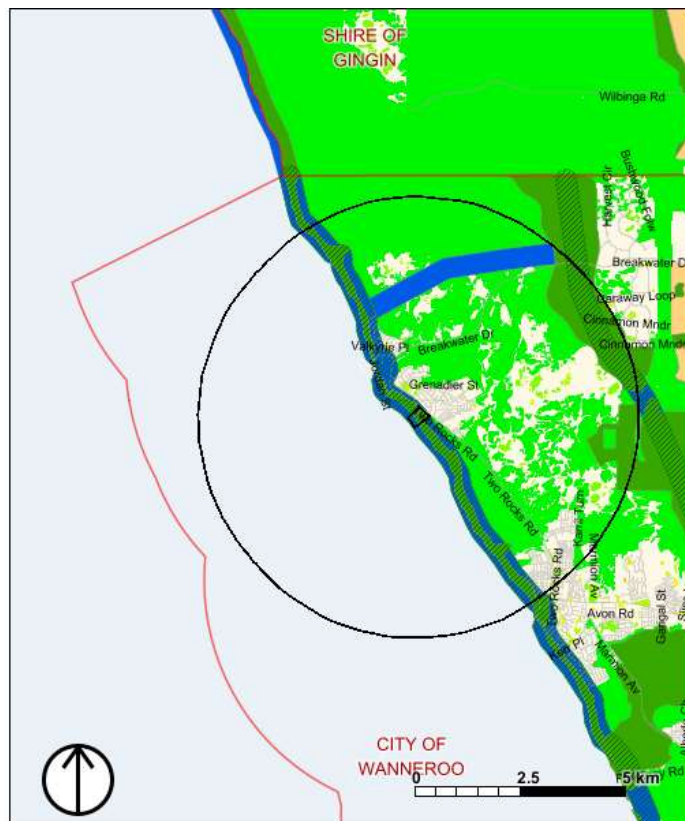
Coast and Sea



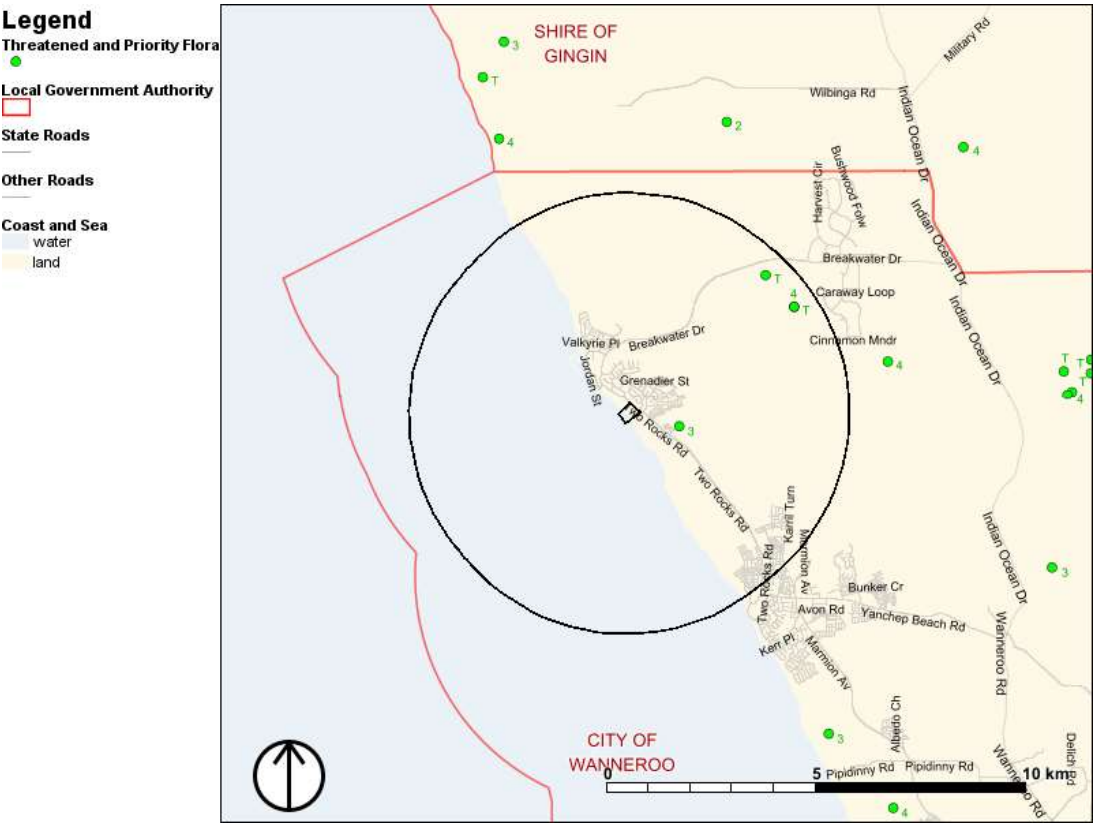
water



land



2.3 Principle (c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of rare flora.



Specially Protected Flora

The following flora records have been located within 5km of the application area:

Popn Id	WA Rank	Proximity (m)
90758	VU	4426
90768	VU	4447

Key to the Conservation Status:

- CR - Critically Endangered
- EN - Endangered
- VU - Vulnerable
- EX - Extinct

2.4 Principle (d) Native vegetation should not be cleared if it comprises the whole or a part or, or is necessary for the maintenance of, a threatened ecological community.

Threatened Ecological Communities

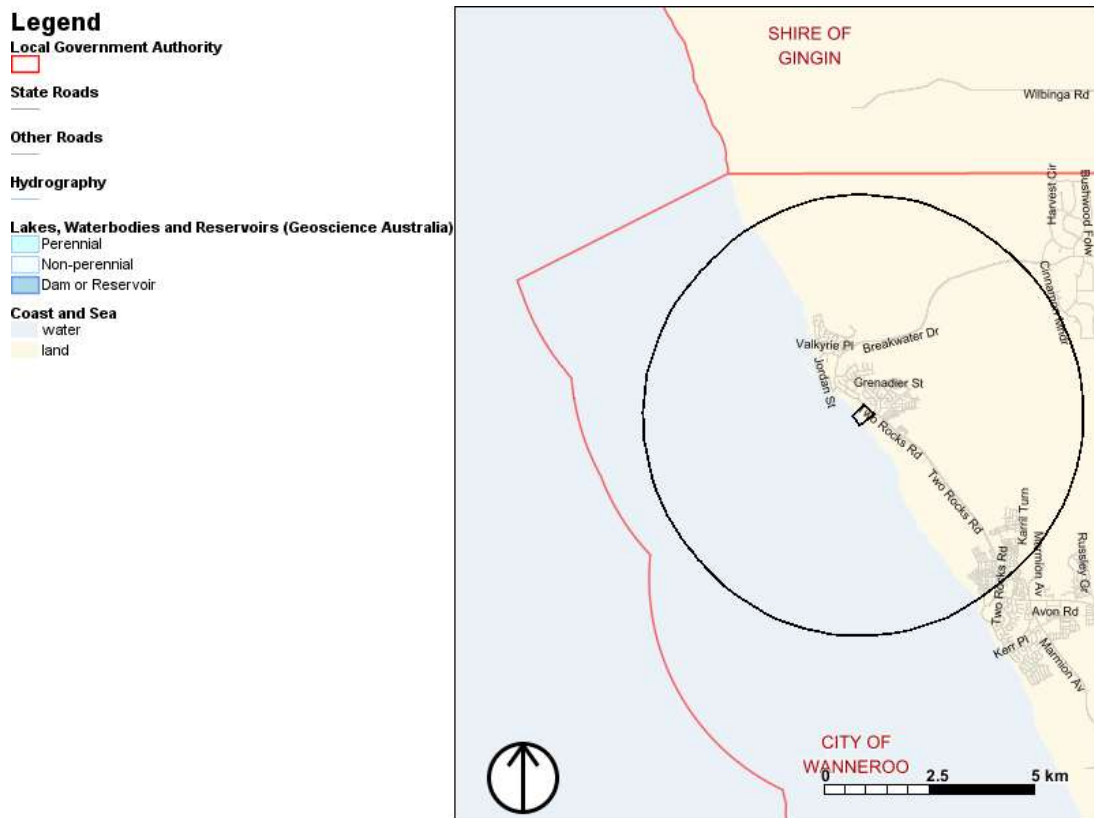
The following threatened ecological community records have been located within 5km of

the application area:

Record ID	Ranking	Proximity (m)
122581	Priority 3	3080
122580	Priority 3	3085
122568	Priority 3	3099
122687	Priority 3	3117
122569	Priority 3	3125
122930	Priority 3	3157
122950	Priority 3	3220
122570	Priority 3	3249
122947	Priority 3	3814
122958	Priority 3	4073
122960	Priority 3	4386
192	Critically Endangered	4426
122959	Priority 3	4428
122703	Priority 3	4518
122571	Priority 3	4519
191	Critically Endangered	4522
122723	Priority 3	4579
122961	Priority 3	4579
190	Critically Endangered	4602
122945	Priority 3	4606
122949	Priority 3	4618
122764	Priority 3	4645
122952	Priority 3	4650
122909	Priority 3	4666
122587	Priority 3	4710
122948	Priority 3	4728
187	Critically Endangered	4766
122753	Priority 3	4794
122934	Priority 3	4805
122763	Priority 3	4815
122939	Priority 3	4823
122951	Priority 3	4829
122938	Priority 3	4835

122935	Priority 3	4861
122941	Priority 3	4949
122940	Priority 3	4981

2.6 Principle (f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.



2.7 Principle (g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Acid Sulphate Soil Risk:	No
Groundwater Salinity (Total Dissolved Solids):	500-1000mg/l - 10.57 ha
Hydrogeology:	Surficial Sediments - Shallow Aquifers, Limestone, calcrete - 10.85 ha
Soils:	Quindalup South youngest dune Phase (211Qu_Q4): The youngest phase. Irregular dunes with slopes up to 20%. Loose pale brown calcareous sand with no soil profile development. - 3.15 ha

Quindalup South water, beach Phase (211QuU_BEACH): Beach. - 0.98 ha

Quindalup South unstable sand Phase (211Qu_Qu): Presently unstable sand. - 0.74 ha

Quindalup South shallow sand flat Phase (211Qu_Qs): Undulating landscapes with shallow calcareous sands over limestone and much rock outcrop. - 2.71 ha

Quindalup South third dune Phase (211Qu_Q3): The third phase. Irregular dunes with high relief and slopes up to 20%. Loose calcareous sand with little surface organic staining and incipient cementation at depth. - 1.47 ha

2.8 Principle (h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

Legend

Bush Forever Areas



DBCA Managed Lands and Waters



Legislated Lands and Waters



Lands of Interest

EPA Redbook Recommended Conservation Reserves 1976-91



Local Government Authority



State Roads



Other Roads



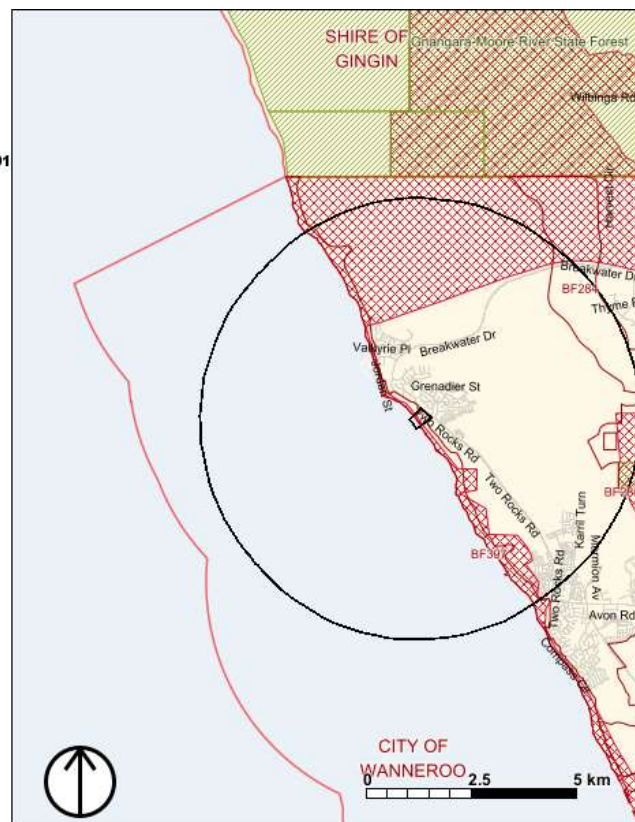
Coast and Sea



water



land



Bush Forever Sites:

BF397 - 0m

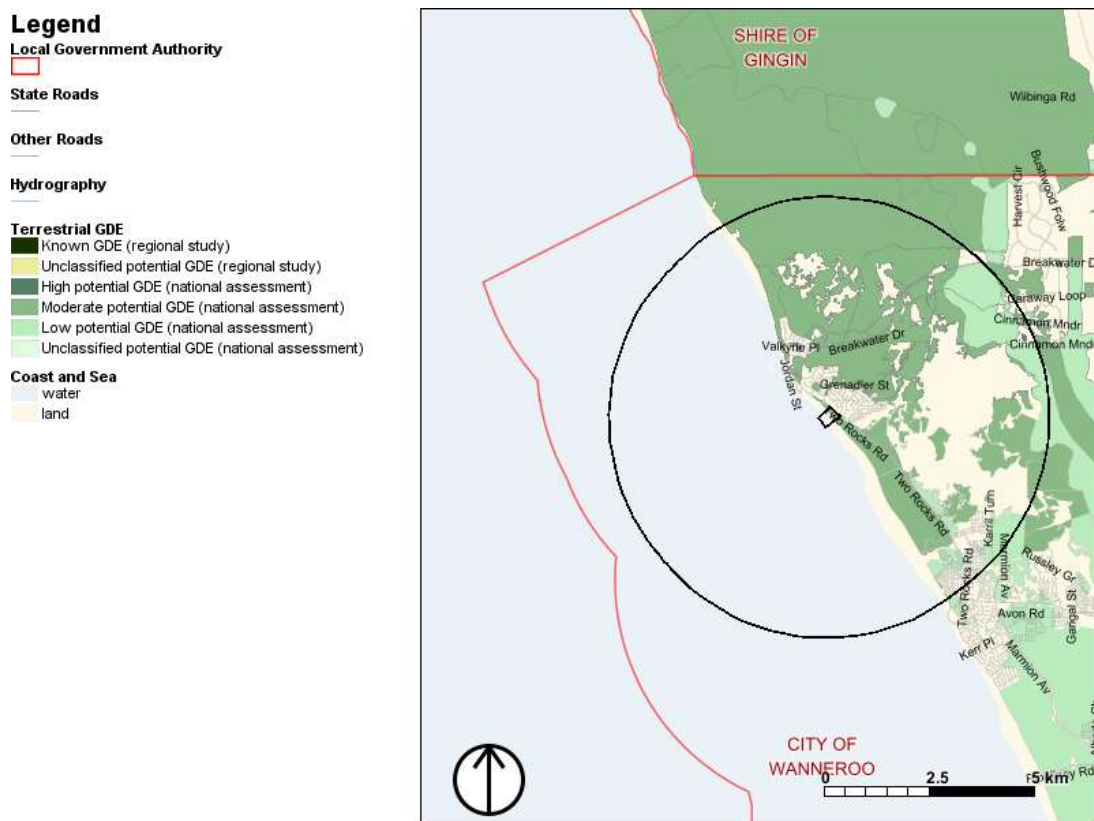
BF288 - 3778m

BF284 - 3880m

DBCA Conservation Estate: Yanchep National Park:R 9868:National Park:Class A - 4598m

EPA Redbook 1976-91
Reserves: M3 File:DPAW-025.1707 - 4405m
M1 File:DPAW-025.1702 - 2253m
M2 File:DPAW-025.1704 - 0m

2.9 Principle (i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.



For surface water features affected by clearing area see 2.6 Principle (f).

The site is within the following RIWI Act areas:
Yanchep Groundwater Area

The site is within the following Terrestrial Water Dependent Ecosystems:
Vegetation, Moderate potential GDE - from national assessment - 4.40 ha

2.10 Principle (j) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

The site is within the following DAFWA Land Quality flood risk categories:

0 - 8.07 ha

100 - 0.98 ha

3 Planning instruments and other relevant matters

The site is within the following EPA Policy Areas:

EPA System 6 and the Swan Coastal Plain portion of System 1 region (EPA Guidance Statement No 10, 2003) 11.37 ha

The site overlies or is adjacent to the following local planning scheme zones:

Urban development -

The site overlies or is adjacent to the following Regional Scheme classes:

MRS - Other regional roads

MRS - Urban

MRS - Urban deferred

MRS - Waterways

MRS - Parks and recreation

©Western Australian Land Information Authority (2017):

Cadastral/Property boundaries

Hydrography lines

Crown Reserves

Roads

Local Government Administrative Boundaries

