

Common name	Scientific name	Last documented record	Total # of documented records	Hollow use	Mi/ Ma	Present survey
Dandenong Burrowing Cray	<i>Engaeus urostrictus</i>	1962	1	-	-	-
Central Victorian Spiny Crayfish	<i>Euastacus woiwuru</i>	1983	1	-	-	-
Common Freshwater Shrimp	<i>Paratya australiensis</i>	2009	32	-	-	-
Gippsland Spiny Crayfish	<i>Euastacus kershawi</i>	1998	1	-	-	-
Granular Burrowing Crayfish	<i>Engaeus cunicularius</i>	1998	3	-	-	-
Lowland Burrowing Crayfish	<i>Engaeus quadrimanus</i>	1998	5	-	-	-
Richards Burrowing Crayfish	<i>Engaeus laevis</i>	1982	2	-	-	-
Southern Victorian Spiny Crayfish	<i>Euastacus yarraensis</i>	2009	22	-	-	-

Appendix 3.2 – Significant Fauna Species

Table A3.2. Significant fauna within 10 kilometres of the study area.

Habitat characteristics of significant fauna species previously recorded within 10 kilometres of the study area, or that may potentially occur within the study area were assessed to determine their likelihood of occurrence. The likelihood of occurrence rankings for each of the threatened species are:

1	High Likelihood	- Known resident in the study area based on site observations, database records, or expert advice; and/or, - Recent records (i.e. within five years) of the species in the local area (DEPI 2011); and/or, - The study area contains the species' preferred habitat.
2	Moderate Likelihood	- The species is likely to visit the study area regularly (i.e. at least seasonally); and/or, - Previous records of the species in the local area (DEPI 2011); and/or, - The study area contains some characteristics of the species' preferred habitat.
3	Low Likelihood	- The species is likely to visit the study area occasionally or opportunistically whilst en route to more suitable sites; and/or, - There are only limited or historical records of the species in the local area (i.e. more than 20 years old); and/or, - The study area contains few or no characteristics of the species' preferred habitat.

4	Unlikely	- No previous records of the species in the local area; and/or, - The species may fly over the study area when moving between areas of more suitable habitat; and/or, - Out of the species' range; and/or, - No suitable habitat present.
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Common name	Scientific name	Last documented record	Total # of documented records	EPBC	DSE	FFG	NAP	Likely use of study area
NATIONAL SIGNIFICANCE								
Australasian Bittern	<i>Botaurus poiciloptilus</i>	1978	1	EN	EN	L	VU	1
Southern Brown Bandicoot	<i>Isodon obesulus obesulus</i>	2011	100	EN	NT	L	NT	2
Leadbeater's Possum	<i>Gymnobelideus leadbeateri</i>	1915	2	EN	EN	L	EN	3
Helmeted Honeyeater	<i>Lichenostomus melanops cassidix</i>	2001	3	EN	CR	L	CR	3
Growling Grass Frog	<i>Litoria raniformis</i>	2008	2	VU	EN	L	VU	2
Dwarf Galaxias	<i>Galaxiella pusilla</i>	2009	23	VU	EN	L	VU	1
Australian Grayling	<i>Prototroctes maraena</i>	1998	9	VU	VU	L	VU	4
# Australian Painted Snipe	<i>Rostratula australis</i>	-	-	VU	CR	L	VU	4
# Fairy Tern	<i>Sternula nereis</i>	-	-	VU	EN	L	-	4
# Golden Sun Moth	<i>Synemon plana</i>	-	-	CR	EN	L	-	4
# Grey-headed Flying-fox	<i>Pteropus poliocephalus</i>	-	-	VU	VU	L	VU	3
# New Holland Mouse	<i>Pseudomys novaehollandiae</i>	-	-	VU	VU	L	-	4
# Regent Honeyeater	<i>Anthochaera phrygia</i>	-	-	EN	CR	L	EN	4
# Smoky Mouse	<i>Pseudomys fumeus</i>	-	-	EN	CR	L	RA	4
# Spot-tailed Quoll	<i>Dasyurus maculatus</i>	-	-	EN	EN	L	VU	4
# Swift Parrot	<i>Lathamus discolor</i>	-	-	EN	EN	L	EN	3
STATE SIGNIFICANCE								
Swamp Antechinus	<i>Antechinus minimus maritimus</i>	1981	1	-	NT	L	NT	4

Common name	Scientific name	Last documented record	Total # of documented records	EPBC	DSE	FFG	NAP	Likely use of study area
White-footed Dunnart	<i>Sminthopsis leucopus</i>	1990	1	-	NT	L	DD	2
Greater Glider	<i>Petauroides volans</i>	2009	36	-	VU	-	-	2
Common Bent-wing Bat	<i>Miniopterus schreibersii</i> GROUP	1992	1	-	-	L	CD	4
Broad-toothed Rat	<i>Mastacomys fuscus mordicus</i>	1993	3	-	EN	-	-	3
Musk Duck	<i>Biziura lobata</i>	1991	2	-	VU	-	-	4
Freckled Duck	<i>Stictonetta naevosa</i>	1980	2	-	EN	L	-	3
Australasian Shoveler	<i>Anas rhynchotis</i>	1990	3	-	VU	-	-	3
Hardhead	<i>Aythya australis</i>	1981	2	-	VU	-	-	3
Blue-billed Duck	<i>Oxyura australis</i>	1981	1	-	EN	L	-	3
White-throated Needletail	<i>Hirundapus caudacutus</i>	2001	45	-	VU	-	-	4
Black Bittern	<i>Ixobrychus flavicollis australis</i>	2008	1	-	VU	L	-	2
Eastern Great Egret	<i>Ardea modesta</i>	2000	12	-	VU	L	-	2
Intermediate Egret	<i>Ardea intermedia</i>	1994	1	-	EN	L	-	2
White-bellied Sea-Eagle	<i>Haliaeetus leucogaster</i>	2011	2	-	VU	L	-	4
Grey Goshawk	<i>Accipiter novaehollandiae</i>	1978	1	-	VU	L	-	4
Powerful Owl	<i>Ninox strenua</i>	2009	68	-	VU	L	-	2
Barking Owl	<i>Ninox connivens connivens</i>	1988	2	-	EN	L	NT	2
Sooty Owl	<i>Tyto tenebricosa tenebricosa</i>	2009	32	-	VU	L	-	2
Masked Owl	<i>Tyto novaehollandiae novaehollandiae</i>	1993	2	-	EN	L	NT	2
Brown Treecreeper (south-eastern ssp.)	<i>Climacteris picumnus victoriae</i>	1974	1	-	NT	-	NT	4
Chestnut-rumped Heathwren	<i>Calamanthus pyrrhopygius</i>	1981	3	-	VU	L	-	3
Hooded Robin	<i>Melanodryas cucullata cucullata</i>	1980	3	-	NT	L	NT	4

Common name	Scientific name	Last documented record	Total # of documented records	EPBC	DSE	FFG	NAP	Likely use of study area
Lace Goanna	<i>Varanus varius</i>	2010	14	-	EN	-	-	3
Southern Toadlet	<i>Pseudophryne semimarmorata</i>	1993	90	-	VU	-	-	2
Southern Pygmy Perch	<i>Nannoperca australis</i>	2009	59	-	VU	-	-	3
Brush-tailed Phascogale	<i>Phascogale tapoatafa</i>	1960	1	-	VU	L	NT	3
Swamp Skink	<i>Egernia coventryi</i>	2001	1	-	VU	L	-	2
Warragul Burrowing Cray	<i>Engaeus sternalis</i>	1996	4	-	CR	L	-	3
Dandenong Burrowing Cray	<i>Engaeus urostrictus</i>	1962	1	-	CR	L	-	3
REGIONAL SIGNIFICANCE								
Eastern Pygmy-possum	<i>Cercartetus nanus</i>	1994	3	-	NT	I	-	3
Pied Cormorant	<i>Phalacrocorax varius</i>	1994	2	-	NT	-	-	4
Nankeen Night Heron	<i>Nycticorax caledonicus hillii</i>	1992	1	-	NT	-	-	3
Glossy Ibis	<i>Plegadis falcinellus</i>	1977	1	-	NT	-	-	4
Royal Spoonbill	<i>Platalea regia</i>	2000	4	-	NT	-	-	3
Latham's Snipe	<i>Gallinago hardwickii</i>	1993	8	-	NT	-	-	2
Azure Kingfisher	<i>Alcedo azurea</i>	2001	11	-	NT	-	-	2
Spotted Quail-thrush	<i>Cinclosoma punctatum</i>	2007	11	-	NT	-	-	3
River Blackfish	<i>Gadopsis marmoratus</i>	1998	32	-	DD	-	-	3

APPENDIX 4

Appendix 4.1 – Biodiversity Impact and Offset Report (BIOR), DEPI

Biodiversity impact and offset requirements report

This report provides additional biodiversity information for moderate and high risk-based pathway applications for permits to remove native vegetation under clause 52.16 or 52.17 of the planning schemes in Victoria

Date of issue: 12/11/2014

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Summary of marked native vegetation

Risk-based pathway	Moderate
Total extent	46.378 ha
Remnant patches	44.337 ha
Scattered trees	29 trees
Location risk	A
Strategic biodiversity score of all marked native vegetation	0.359

Offset requirements if a permit is granted

If a permit is granted to remove the marked native vegetation, a requirement to obtain a native vegetation offset will be included in the permit conditions. The offset must meet the following requirements:

Offset type	General offset
General offset amount (general biodiversity equivalence units)	0.009 general units
General offset attributes	
Vicinity	Port Phillip and Westernport Catchment Management Authority (CMA) or the Local Municipal District where clearing takes place
Minimum strategic biodiversity score	0.125 ¹
Offset type	Specific offset(s)
Specific offset amount (specific biodiversity equivalence units) and attributes	33.712 specific units of habitat for Spotted Gum 37.491 specific units of habitat for Cobra Greenhood 37.347 specific units of habitat for Green Scentbark

See Appendices 1 and 2 for details in how offset requirements were determined.

NB: values presented in tables throughout this document may not add to totals due to rounding

¹ Minimum strategic biodiversity score is 80 per cent of the weighted average score across habitat zones where a general offset is required

Biodiversity impact and offset requirements report

Next steps

This proposal to remove native vegetation must meet the application requirements of the moderate risk-based pathway and it will be assessed under the moderate risk-based pathway.

If you wish to remove the marked native vegetation you are required to apply for a permit from your local council. The biodiversity assessment report from NVIM and this biodiversity impact and offset report should be submitted with your application for a permit to remove native vegetation you plan to remove, lop or destroy.

The Biodiversity assessment report generated by the tool within NVIM provides the following information:

- The location of the site where native vegetation is to be removed.
- The area of the patch of native vegetation and/or the number of any scattered trees to be removed.
- Maps or plans containing information set out in the *Permitted clearing of native vegetation – Biodiversity assessment guidelines*
- The risk-based pathway of the application for a permit to remove native vegetation

This report provides the following information to meet application requirements for a permit to remove native vegetation:

- Confirmation of the risk-based pathway of the application for a permit to remove native vegetation
- The strategic biodiversity score of the native vegetation to be removed
- Information to inform the assessment of whether the proposed removal of native vegetation will have a significant impact on Victoria's biodiversity, with specific regard to the proportional impact on habitat for any rare or threatened species.
- The offset requirements should a permit be granted to remove native vegetation.

Additional application requirements must be provided with an application for a permit to remove native vegetation in the moderate or high risk-based pathways. These include:

- A habitat hectare assessment report of the native vegetation that is to be removed
- A statement outlining what steps have been taken to ensure that impacts on biodiversity from the removal of native vegetation have been minimised
- An offset strategy that details how a compliant offset will be secured to offset the biodiversity impacts of the removal of native vegetation.

Refer to the *Permitted clearing of native vegetation – Biodiversity assessment guidelines* and for a full list and details of application requirements.

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This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication.

Obtaining this publication does not guarantee that an application will meet the requirements of clauses 52.16 or 52.17 of the Victoria Planning Provisions or that a permit to remove native vegetation will be granted.

Notwithstanding anything else contained in this publication, you must ensure that you comply with all relevant laws, legislation, awards or orders and that you obtain and comply with all permits, approvals and the like that affect, are applicable or are necessary to undertake any action to remove, lop or destroy or otherwise deal with any native vegetation or that apply to matters within the scope of clauses 52.16 or 52.17 of the Victoria Planning Provisions.

Biodiversity impact and offset requirements report

Appendix 1 – Biodiversity impact of removal of native vegetation

Habitat hectares

Habitat hectares are calculated for each habitat zone within your proposal using the extent and condition scores in the GIS data you provided.

Habitat zone	Site assessed condition score	Extent (ha)	Habitat hectares
15_HrFFd	0.480	0.942	0.452
16_HrFFa	0.290	0.608	0.176
17_HrFFa	0.290	0.392	0.114
18_HrFFa	0.290	0.795	0.230
19_HrFFd	0.480	0.185	0.089
20_HrFFg	0.630	9.054	5.704
21_HrFFh	0.240	0.112	0.027
22_HrFFb	0.430	0.169	0.072
23_HrFFa	0.290	1.049	0.304
26_HrFFe	0.550	0.416	0.229
27_HrFFe	0.550	0.474	0.260
28_HrFFb	0.430	0.949	0.408
29_HrFFb	0.430	0.610	0.262
30_HrFFd	0.480	2.835	1.361
31_HrFFa	0.290	1.043	0.302
32_HrFFb	0.430	0.363	0.156
33_HrFFb	0.430	0.113	0.049
34_HrFFa	0.290	0.446	0.129
36_HrFFb	0.430	0.501	0.215
43_LFa	0.340	0.355	0.121
50_HrFFb	0.430	0.148	0.064
52_HrFFc	0.330	0.037	0.012
56_LFa	0.340	0.230	0.078
57_LFb	0.220	0.045	0.010
63_HrFFh	0.240	0.177	0.042
65_HrFFh	0.240	0.869	0.209
67_HrFFc	0.330	0.381	0.126
68_HrFFa	0.290	0.059	0.017
116_LFd	0.420	1.415	0.594

Biodiversity impact and offset requirements report

Habitat zone	Site assessed condition score	Extent (ha)	Habitat hectares
117_LFf	0.730	5.859	4.277
118_HrFFd	0.480	1.406	0.675
121_HrFFh	0.240	1.344	0.323
122_HrFFf	0.710	0.623	0.442
170_HrFFh	0.240	1.147	0.275
25_LFe	0.420	0.701	0.295
37_HrFFa	0.290	0.003	0.001
49_RSa	0.630	3.214	2.025
114_HrFFa	0.290	0.004	0.001
115_LFc	0.490	0.533	0.261
35_HrFFd	0.480	1.516	0.728
119_HrFFd	0.480	3.216	1.543
1_TR1	0.200	0.070	0.014
2_TR2	0.200	0.070	0.014
3_TR3	0.200	0.070	0.014
4_TR4	0.200	0.070	0.014
5_TR5	0.200	0.070	0.014
6_TR6	0.200	0.070	0.014
7_TR7	0.200	0.070	0.014
8_TR8	0.200	0.070	0.014
9_TR9	0.200	0.070	0.014
10_TR10	0.200	0.070	0.014
11_TR11	0.200	0.070	0.014
12_TR12	0.200	0.070	0.014
13_TR13	0.200	0.070	0.014
14_TR14	0.200	0.070	0.014
15_TR15	0.200	0.070	0.014
50_TR50	0.200	0.070	0.014
51_TR51	0.200	0.070	0.014
52_TR52	0.200	0.070	0.014
53_TR53	0.200	0.070	0.014
57_TR57	0.200	0.070	0.014
62_TR62	0.200	0.070	0.014

Biodiversity impact and offset requirements report

Habitat zone	Site assessed condition score	Extent (ha)	Habitat hectares
63_TR63	0.200	0.070	0.014
64_TR64	0.200	0.070	0.014
65_TR65	0.200	0.070	0.014
66_TR66	0.200	0.070	0.014
67_TR67	0.200	0.070	0.014
70_TR70	0.200	0.070	0.014
71_TR71	0.200	0.070	0.014
72_TR72	0.200	0.070	0.014
TOTAL			23.068

Impacts on rare or threatened species habitat above specific offset threshold

The specific-general offset test was applied to your proposal. The test determines if the proposed removal of native vegetation has a proportional impact on any rare or threatened species habitats above the specific offset threshold. The threshold is set at 0.005 per cent of the total habitat for a species. When the proportional impact is above the specific offset threshold a specific offset for that species' habitat is required.

The specific-general offset test found your proposal has a proportional impact above the specific offset threshold for the following rare or threatened species' habitats.

Species number	Species common name	Species scientific name	Species type	Area of mapped habitat (ha)	Proportional impact (%)
501295	Spotted Gum	Corymbia maculata	Dispersed	44.251	0.009
502798	Cobra Greenhood	Pterostylis grandiflora	Dispersed	45.504	0.023
505175	Green Scentbark	Eucalyptus fulgens	Dispersed	44.777	0.042

Clearing site biodiversity equivalence score(s)

Where a habitat zone requires specific offset(s), the specific biodiversity equivalence score(s) for each species in that habitat zone is calculated by multiplying the habitat hectares of the habitat zone by the habitat importance score for each species impacted in the habitat zone.

Habitat zone	Habitat hectares	Habitat for rare or threatened species				Specific biodiversity equivalence score (SBES)
		Species number	Species common name	Species scientific name	Habitat importance score	
15_HrFFd	0.452	501295	Spotted Gum	Corymbia maculata	0.752	0.340
		502798	Cobra Greenhood	Pterostylis grandiflora	0.804	0.364
		505175	Green Scentbark	Eucalyptus fulgens	0.825	0.373
16_HrFFa	0.176	501295	Spotted Gum	Corymbia maculata	0.715	0.126
		502798	Cobra Greenhood	Pterostylis grandiflora	0.791	0.139

Biodiversity impact and offset requirements report

Habitat zone	Habitat hectares	Habitat for rare or threatened species				Specific biodiversity equivalence score (SBES)
		Species number	Species common name	Species scientific name	Habitat importance score	
17_HrFFa	0.114	505175	Green Scentbark	Eucalyptus fulgens	0.791	0.139
		501295	Spotted Gum	Corymbia maculata	0.710	0.081
		502798	Cobra Greenhood	Pterostylis grandiflora	0.790	0.090
		505175	Green Scentbark	Eucalyptus fulgens	0.791	0.090
18_HrFFa	0.230	501295	Spotted Gum	Corymbia maculata	0.729	0.168
		502798	Cobra Greenhood	Pterostylis grandiflora	0.811	0.187
		505175	Green Scentbark	Eucalyptus fulgens	0.812	0.187
19_HrFFd	0.089	502798	Cobra Greenhood	Pterostylis grandiflora	0.830	0.074
		505175	Green Scentbark	Eucalyptus fulgens	0.820	0.073
20_HrFFg	5.704	501295	Spotted Gum	Corymbia maculata	0.777	4.433
		502798	Cobra Greenhood	Pterostylis grandiflora	0.845	4.820
		505175	Green Scentbark	Eucalyptus fulgens	0.854	4.873
21_HrFFh	0.027	501295	Spotted Gum	Corymbia maculata	0.698	0.019
		502798	Cobra Greenhood	Pterostylis grandiflora	0.777	0.021
		505175	Green Scentbark	Eucalyptus fulgens	0.797	0.021
22_HrFFb	0.072	501295	Spotted Gum	Corymbia maculata	0.680	0.049
		502798	Cobra Greenhood	Pterostylis grandiflora	0.710	0.051
		505175	Green Scentbark	Eucalyptus fulgens	0.720	0.052
23_HrFFa	0.304	501295	Spotted Gum	Corymbia maculata	0.713	0.217
		502798	Cobra Greenhood	Pterostylis grandiflora	0.767	0.233
		505175	Green Scentbark	Eucalyptus fulgens	0.777	0.236
26_HrFFe	0.229	501295	Spotted Gum	Corymbia maculata	0.707	0.162
		502798	Cobra Greenhood	Pterostylis grandiflora	0.780	0.178
		505175	Green Scentbark	Eucalyptus fulgens	0.799	0.183
27_HrFFe	0.260	501295	Spotted Gum	Corymbia maculata	0.672	0.175
		502798	Cobra Greenhood	Pterostylis grandiflora	0.742	0.193
		505175	Green Scentbark	Eucalyptus fulgens	0.769	0.200
28_HrFFb	0.408	501295	Spotted Gum	Corymbia maculata	0.682	0.278
		502798	Cobra Greenhood	Pterostylis grandiflora	0.752	0.307
		505175	Green Scentbark	Eucalyptus fulgens	0.771	0.315
29_HrFFb	0.262	501295	Spotted Gum	Corymbia maculata	0.721	0.189
		502798	Cobra Greenhood	Pterostylis grandiflora	0.795	0.209

Biodiversity impact and offset requirements report

Habitat zone	Habitat hectares	Habitat for rare or threatened species				Specific biodiversity equivalence score (SBES)
		Species number	Species common name	Species scientific name	Habitat importance score	
30_HrFFd	1.361	505175	Green Scentbark	Eucalyptus fulgens	0.814	0.214
		501295	Spotted Gum	Corymbia maculata	0.688	0.936
		502798	Cobra Greenhood	Pterostylis grandiflora	0.760	1.035
		505175	Green Scentbark	Eucalyptus fulgens	0.773	1.053
31_HrFFa	0.302	501295	Spotted Gum	Corymbia maculata	0.723	0.219
		502798	Cobra Greenhood	Pterostylis grandiflora	0.759	0.230
		505175	Green Scentbark	Eucalyptus fulgens	0.764	0.231
32_HrFFb	0.156	501295	Spotted Gum	Corymbia maculata	0.739	0.115
		502798	Cobra Greenhood	Pterostylis grandiflora	0.784	0.122
		505175	Green Scentbark	Eucalyptus fulgens	0.803	0.125
33_HrFFb	0.049	501295	Spotted Gum	Corymbia maculata	0.650	0.032
		502798	Cobra Greenhood	Pterostylis grandiflora	0.690	0.034
		505175	Green Scentbark	Eucalyptus fulgens	0.700	0.034
34_HrFFa	0.129	501295	Spotted Gum	Corymbia maculata	0.697	0.090
		502798	Cobra Greenhood	Pterostylis grandiflora	0.748	0.097
		505175	Green Scentbark	Eucalyptus fulgens	0.755	0.098
36_HrFFb	0.215	501295	Spotted Gum	Corymbia maculata	0.758	0.163
		502798	Cobra Greenhood	Pterostylis grandiflora	0.798	0.172
		505175	Green Scentbark	Eucalyptus fulgens	0.801	0.172
43_LFa	0.121	501295	Spotted Gum	Corymbia maculata	0.691	0.083
		502798	Cobra Greenhood	Pterostylis grandiflora	0.741	0.089
		505175	Green Scentbark	Eucalyptus fulgens	0.761	0.092
50_HrFFb	0.064	501295	Spotted Gum	Corymbia maculata	0.716	0.046
		502798	Cobra Greenhood	Pterostylis grandiflora	0.779	0.050
		505175	Green Scentbark	Eucalyptus fulgens	0.783	0.050
52_HrFFc	0.012	501295	Spotted Gum	Corymbia maculata	0.640	0.008
		502798	Cobra Greenhood	Pterostylis grandiflora	0.690	0.008
		505175	Green Scentbark	Eucalyptus fulgens	0.710	0.009
56_LFa	0.078	501295	Spotted Gum	Corymbia maculata	0.674	0.053
		505175	Green Scentbark	Eucalyptus fulgens	0.736	0.058
63_HrFFh	0.042	501295	Spotted Gum	Corymbia maculata	0.729	0.031
		505175	Green Scentbark	Eucalyptus fulgens	0.799	0.034

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Habitat zone	Habitat hectares	Habitat for rare or threatened species				Specific biodiversity equivalence score (SBES)
		Species number	Species common name	Species scientific name	Habitat importance score	
65_HrFFh	0.209	501295	Spotted Gum	Corymbia maculata	0.707	0.148
		502798	Cobra Greenhood	Pterostylis grandiflora	0.766	0.160
		505175	Green Scentbark	Eucalyptus fulgens	0.783	0.163
67_HrFFc	0.126	501295	Spotted Gum	Corymbia maculata	0.746	0.094
		502798	Cobra Greenhood	Pterostylis grandiflora	0.811	0.102
		505175	Green Scentbark	Eucalyptus fulgens	0.810	0.102
68_HrFFa	0.017	502798	Cobra Greenhood	Pterostylis grandiflora	0.690	0.012
		505175	Green Scentbark	Eucalyptus fulgens	0.690	0.012
116_LFd	0.594	502798	Cobra Greenhood	Pterostylis grandiflora	0.800	0.476
117_LFf	4.277	501295	Spotted Gum	Corymbia maculata	0.798	3.411
		502798	Cobra Greenhood	Pterostylis grandiflora	0.857	3.666
		505175	Green Scentbark	Eucalyptus fulgens	0.877	3.750
118_HrFFd	0.675	501295	Spotted Gum	Corymbia maculata	0.768	0.518
		502798	Cobra Greenhood	Pterostylis grandiflora	0.833	0.562
		505175	Green Scentbark	Eucalyptus fulgens	0.843	0.569
121_HrFFh	0.323 0.323 0.323	501295	Spotted Gum	Corymbia maculata	0.729	0.235
		502798	Cobra Greenhood	Pterostylis grandiflora	0.805	0.260
		505175	Green Scentbark	Eucalyptus fulgens	0.808	0.261
122_HrFFf	0.442	501295	Spotted Gum	Corymbia maculata	0.755	0.334
122_HrFFf	0.442	502798	Cobra Greenhood	Pterostylis grandiflora	0.802	0.355
		505175	Green Scentbark	Eucalyptus fulgens	0.818	0.362
170_HrFFh	0.275	501295	Spotted Gum	Corymbia maculata	0.765	0.211
		502798	Cobra Greenhood	Pterostylis grandiflora	0.829	0.228
		505175	Green Scentbark	Eucalyptus fulgens	0.839	0.231
25_LFe	0.295	501295	Spotted Gum	Corymbia maculata	0.698	0.206
		502798	Cobra Greenhood	Pterostylis grandiflora	0.742	0.219
		505175	Green Scentbark	Eucalyptus fulgens	0.747	0.220
37_HrFFa	0.001	501295	Spotted Gum	Corymbia maculata	0.774	0.001
		502798	Cobra Greenhood	Pterostylis grandiflora	0.837	0.001
		505175	Green Scentbark	Eucalyptus fulgens	0.851	0.001
49_RSa	2.025	501295	Spotted Gum	Corymbia maculata	0.785	1.590
		502798	Cobra Greenhood	Pterostylis grandiflora	0.859	1.739

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Habitat zone	Habitat hectares	Habitat for rare or threatened species				Specific biodiversity equivalence score (SBES)
		Species number	Species common name	Species scientific name	Habitat importance score	
114_HrFFa	0.001	505175	Green Scentbark	Eucalyptus fulgens	0.868	1.758
		501295	Spotted Gum	Corymbia maculata	0.680	0.001
		502798	Cobra Greenhood	Pterostylis grandiflora	0.760	0.001
		505175	Green Scentbark	Eucalyptus fulgens	0.770	0.001
115_LFc	0.261	501295	Spotted Gum	Corymbia maculata	0.655	0.171
		502798	Cobra Greenhood	Pterostylis grandiflora	0.687	0.179
		505175	Green Scentbark	Eucalyptus fulgens	0.707	0.185
35_HrFFd	0.728	501295	Spotted Gum	Corymbia maculata	0.754	0.548
		502798	Cobra Greenhood	Pterostylis grandiflora	0.794	0.578
		505175	Green Scentbark	Eucalyptus fulgens	0.805	0.586
119_HrFFd	1.543	501295	Spotted Gum	Corymbia maculata	0.755	1.165
		502798	Cobra Greenhood	Pterostylis grandiflora	0.823	1.271
		505175	Green Scentbark	Eucalyptus fulgens	0.834	1.288
1_TR1	0.014	501295	Spotted Gum	Corymbia maculata	0.680	0.010
		502798	Cobra Greenhood	Pterostylis grandiflora	0.740	0.010
		505175	Green Scentbark	Eucalyptus fulgens	0.740	0.010
2_TR2	0.014	501295	Spotted Gum	Corymbia maculata	0.690	0.010
		502798	Cobra Greenhood	Pterostylis grandiflora	0.750	0.011
		505175	Green Scentbark	Eucalyptus fulgens	0.759	0.011
3_TR3	0.014	501295	Spotted Gum	Corymbia maculata	0.690	0.010
		502798	Cobra Greenhood	Pterostylis grandiflora	0.750	0.011
		505175	Green Scentbark	Eucalyptus fulgens	0.760	0.011
4_TR4	0.014	501295	Spotted Gum	Corymbia maculata	0.710	0.010
		505175	Green Scentbark	Eucalyptus fulgens	0.780	0.011
5_TR5	0.014	501295	Spotted Gum	Corymbia maculata	0.535	0.008
		502798	Cobra Greenhood	Pterostylis grandiflora	0.570	0.008
		505175	Green Scentbark	Eucalyptus fulgens	0.575	0.008
8_TR8	0.014	501295	Spotted Gum	Corymbia maculata	0.629	0.009
		502798	Cobra Greenhood	Pterostylis grandiflora	0.659	0.009
		505175	Green Scentbark	Eucalyptus fulgens	0.699	0.010
9_TR9	0.014	501295	Spotted Gum	Corymbia maculata	0.630	0.009
		502798	Cobra Greenhood	Pterostylis grandiflora	0.660	0.009

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Habitat zone	Habitat hectares	Habitat for rare or threatened species				Specific biodiversity equivalence score (SBES)
		Species number	Species common name	Species scientific name	Habitat importance score	
10_TR10	0.014	505175	Green Scentbark	Eucalyptus fulgens	0.700	0.010
		501295	Spotted Gum	Corymbia maculata	0.665	0.009
		502798	Cobra Greenhood	Pterostylis grandiflora	0.708	0.010
		505175	Green Scentbark	Eucalyptus fulgens	0.735	0.010
11_TR11	0.014	501295	Spotted Gum	Corymbia maculata	0.701	0.010
		502798	Cobra Greenhood	Pterostylis grandiflora	0.751	0.011
		505175	Green Scentbark	Eucalyptus fulgens	0.771	0.011
12_TR12	0.014	501295	Spotted Gum	Corymbia maculata	0.670	0.009
		502798	Cobra Greenhood	Pterostylis grandiflora	0.720	0.010
		505175	Green Scentbark	Eucalyptus fulgens	0.740	0.010
13_TR13	0.014	502798	Cobra Greenhood	Pterostylis grandiflora	0.782	0.011
		505175	Green Scentbark	Eucalyptus fulgens	0.773	0.011
14_TR14	0.014	502798	Cobra Greenhood	Pterostylis grandiflora	0.710	0.010
		505175	Green Scentbark	Eucalyptus fulgens	0.710	0.010
15_TR15	0.014	502798	Cobra Greenhood	Pterostylis grandiflora	0.705	0.010
		505175	Green Scentbark	Eucalyptus fulgens	0.705	0.010
50_TR50	0.014	501295	Spotted Gum	Corymbia maculata	0.647	0.009
		502798	Cobra Greenhood	Pterostylis grandiflora	0.703	0.010
		505175	Green Scentbark	Eucalyptus fulgens	0.707	0.010
51_TR51	0.014	501295	Spotted Gum	Corymbia maculata	0.660	0.009
		502798	Cobra Greenhood	Pterostylis grandiflora	0.720	0.010
		505175	Green Scentbark	Eucalyptus fulgens	0.720	0.010
52_TR52	0.014	501295	Spotted Gum	Corymbia maculata	0.610	0.009
		502798	Cobra Greenhood	Pterostylis grandiflora	0.650	0.009
		505175	Green Scentbark	Eucalyptus fulgens	0.660	0.009
53_TR53	0.014	501295	Spotted Gum	Corymbia maculata	0.520	0.007
		505175	Green Scentbark	Eucalyptus fulgens	0.560	0.008
57_TR57	0.014	501295	Spotted Gum	Corymbia maculata	0.640	0.009
		505175	Green Scentbark	Eucalyptus fulgens	0.696	0.010
62_TR62	0.014	501295	Spotted Gum	Corymbia maculata	0.583	0.008
		505175	Green Scentbark	Eucalyptus fulgens	0.628	0.009
63_TR63	0.014	501295	Spotted Gum	Corymbia maculata	0.640	0.009

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Habitat zone	Habitat hectares	Habitat for rare or threatened species				Specific biodiversity equivalence score (SBES)
		Species number	Species common name	Species scientific name	Habitat importance score	
64_TR64	0.014	502798	Cobra Greenhood	Pterostylis grandiflora	0.780	0.011
		505175	Green Scentbark	Eucalyptus fulgens	0.725	0.010
		502798	Cobra Greenhood	Pterostylis grandiflora	0.783	0.011
		505175	Green Scentbark	Eucalyptus fulgens	0.773	0.011
65_TR65	0.014	501295	Spotted Gum	Corymbia maculata	0.640	0.009
		502798	Cobra Greenhood	Pterostylis grandiflora	0.727	0.010
		505175	Green Scentbark	Eucalyptus fulgens	0.725	0.010
66_TR66	0.014	501295	Spotted Gum	Corymbia maculata	0.620	0.009
		502798	Cobra Greenhood	Pterostylis grandiflora	0.770	0.011
		505175	Green Scentbark	Eucalyptus fulgens	0.756	0.011
67_TR67	0.014	501295	Spotted Gum	Corymbia maculata	0.720	0.010
		502798	Cobra Greenhood	Pterostylis grandiflora	0.770	0.011
		505175	Green Scentbark	Eucalyptus fulgens	0.790	0.011
70_TR70	0.014	501295	Spotted Gum	Corymbia maculata	0.680	0.010
		502798	Cobra Greenhood	Pterostylis grandiflora	0.740	0.010
		505175	Green Scentbark	Eucalyptus fulgens	0.740	0.010
71_TR71	0.014	501295	Spotted Gum	Corymbia maculata	0.770	0.011
		502798	Cobra Greenhood	Pterostylis grandiflora	0.810	0.011
		505175	Green Scentbark	Eucalyptus fulgens	0.810	0.011
72_TR72	0.014	501295	Spotted Gum	Corymbia maculata	0.680	0.010
		502798	Cobra Greenhood	Pterostylis grandiflora	0.730	0.010
		505175	Green Scentbark	Eucalyptus fulgens	0.750	0.011

There are habitat zones in your proposal which are not habitat for the species above. A general offset is required for the(se) habitat zone(s).

The general biodiversity equivalence score for the habitat zone(s) is calculated by multiplying the habitat hectares by the strategic biodiversity score.

Habitat zone	Habitat hectares	Strategic biodiversity score	General biodiversity equivalence score (GBES)
57_LFb	0.010	0.156	0.002
6_TR6	0.014	0.156	0.002
7_TR7	0.014	0.156	0.002

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Mapped rare or threatened species' habitats on site

This table sets out the list of rare or threatened species' habitats mapped at the site beyond those species for which the impact is above the specific offset threshold. These species habitats do not require a specific offset according to the specific-general offset test.

Species number	Species common name	Species scientific name
10045	Lewin's Rail	<i>Lewinia pectoralis pectoralis</i>
10220	Grey Goshawk	<i>Accipiter novaehollandiae novaehollandiae</i>
10230	Square-tailed Kite	<i>Lophoictinia isura</i>
10246	Barking Owl	<i>Ninox connivens connivens</i>
10248	Powerful Owl	<i>Ninox strenua</i>
10250	Masked Owl	<i>Tyto novaehollandiae novaehollandiae</i>
10253	Sooty Owl	<i>Tyto tenebricosa tenebricosa</i>
10498	Chestnut-rumped Heathwren	<i>Calamanthus pyrrhopygius</i>
10598	Painted Honeyeater	<i>Grantiella picta</i>
11280	Grey-headed Flying-fox	<i>Pteropus poliocephalus</i>
11303	Eastern Horseshoe Bat	<i>Rhinolophus megaphyllus megaphyllus</i>
12283	Lace Monitor	<i>Varanus varius</i>
12407	Swamp Skink	<i>Lissolepis coventryi</i>
13117	Brown Toadlet	<i>Pseudophryne bibronii</i>
13125	Southern Toadlet	<i>Pseudophryne semimarmorata</i>
500044	Sticky Wattle	<i>Acacia howittii</i>
500159	Rough Blown-grass	<i>Lachnagrostis scabra</i>
500839	Fringed Helmet-orchid	<i>Corybas fimbriatus</i>
502145	Giant Honey-myrtle	<i>Melaleuca armillaris subsp. armillaris</i>
502709	Maroon Leek-orchid	<i>Prasophyllum frenchii</i>
502881	Swamp Bush-pea	<i>Pultenaea weindorferi</i>
503583	One-flower Early Nancy	<i>Wurmbea uniflora</i>
505337	Austral Crane's-bill	<i>Geranium solanderi var. solanderi s.s.</i>

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Appendix 2 – Offset requirements detail

If a permit is granted to remove the marked native vegetation the permit condition will include the requirement to obtain a native vegetation offset.

To calculate the required offset amount required the biodiversity equivalence scores are aggregated to the proposal level and multiplied by the relevant risk multiplier.

Offsets also have required attributes:

- General offsets must be located in the same Catchment Management Authority (CMA) boundary or Local Municipal District (local council) as the clearing and must have a minimum strategic biodiversity score of 80 per cent of the clearing.²
- Specific offsets must be located in the same species habitat as that being removed, as determined by the habitat importance map for that species.

The offset requirements for your proposal are as follows:

Offset type	Clearing site biodiversity equivalence score	Risk multiplier	Offset requirements	
			Offset amount (biodiversity equivalence units)	Offset attributes
Specific	16.856 SBES	2	33.712 specific units	Offset must provide habitat for 501295, <i>Spotted Gum</i> , <i>Corymbia maculata</i>
Specific	18.745 SBES	2	37.491 specific units	Offset must provide habitat for 502798, <i>Cobra Greenhood</i> , <i>Pterostylis grandiflora</i>
Specific	18.673 SBES	2	37.347 specific units	Offset must provide habitat for 505175, <i>Green Scentbark</i> , <i>Eucalyptus fulgens</i>
General	0.006 GBES	1.5	0.009 general units	Offset must be within Port Phillip and Westernport CMA or the same Municipal District as the vegetation removal Offset must have a minimum strategic biodiversity score of 0.125

² Strategic biodiversity score is a weighted average across habitat zones where a general offset is required

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Appendix 3 – Images of marked native vegetation

Image 1. Native vegetation location risk map

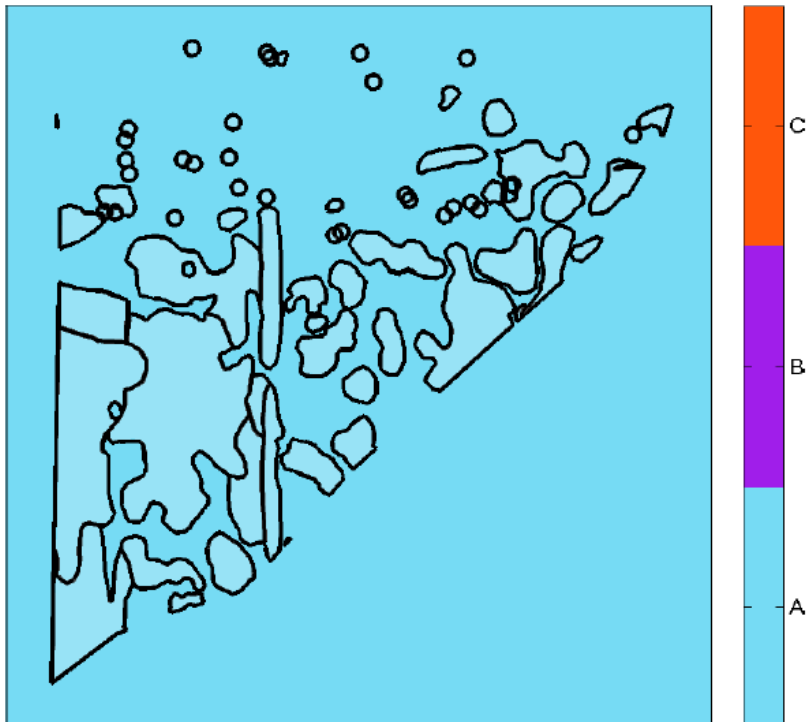


Image 2. Strategic biodiversity score map

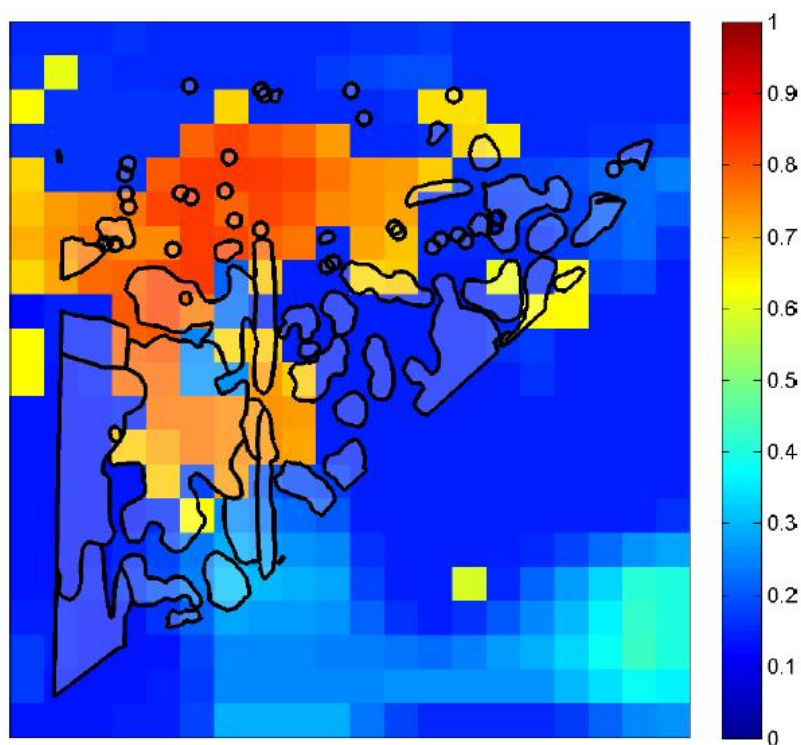
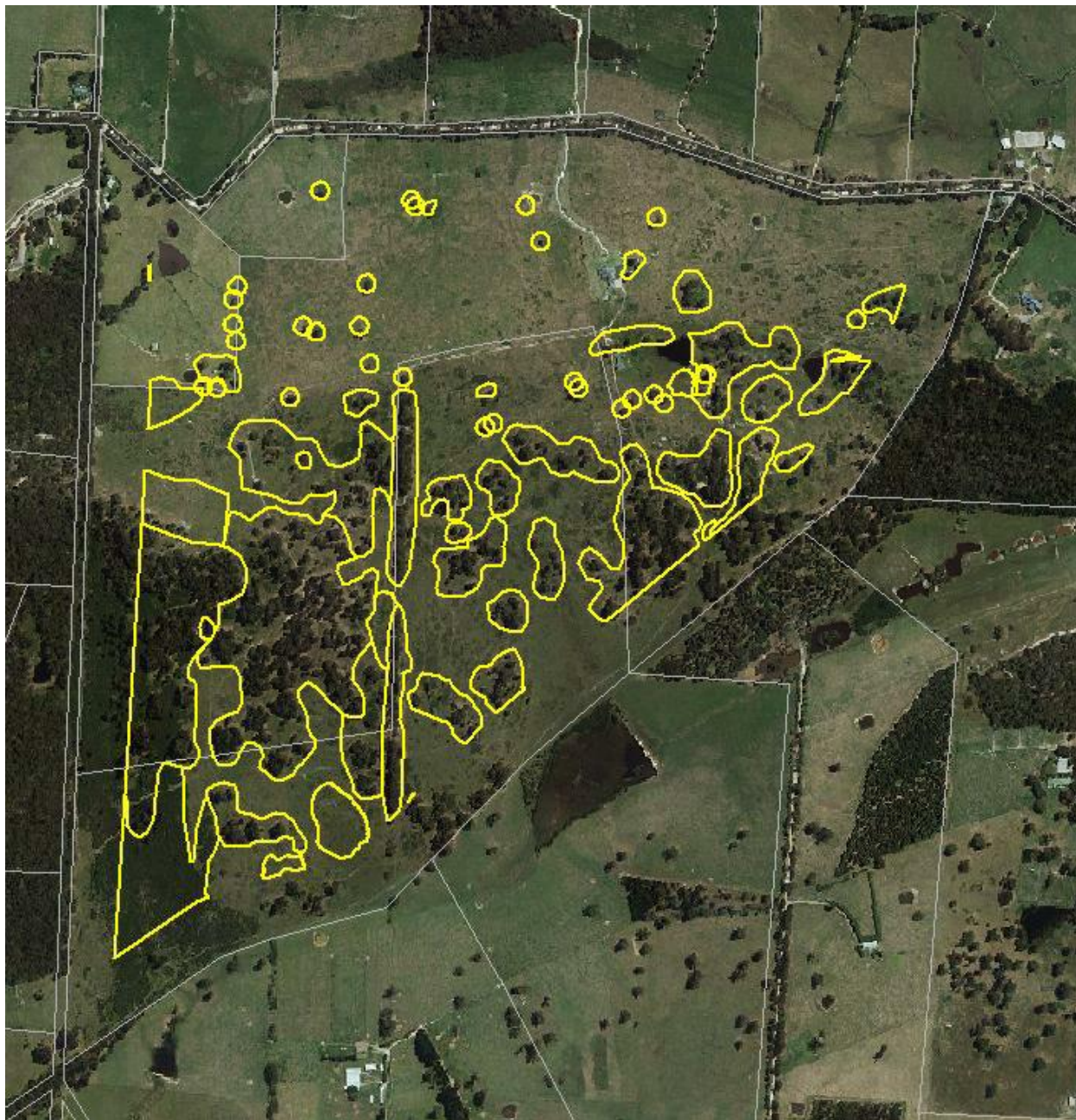


Image 3. Aerial photograph showing marked native vegetation



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Image 4. Habitat importance map – 501295, Spotted Gum, *Corymbia maculata*

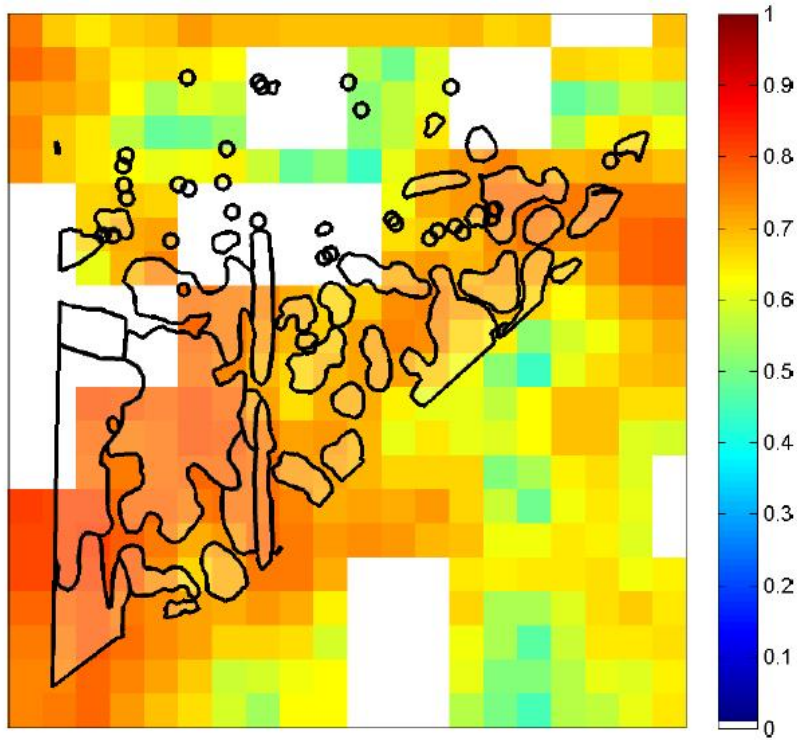
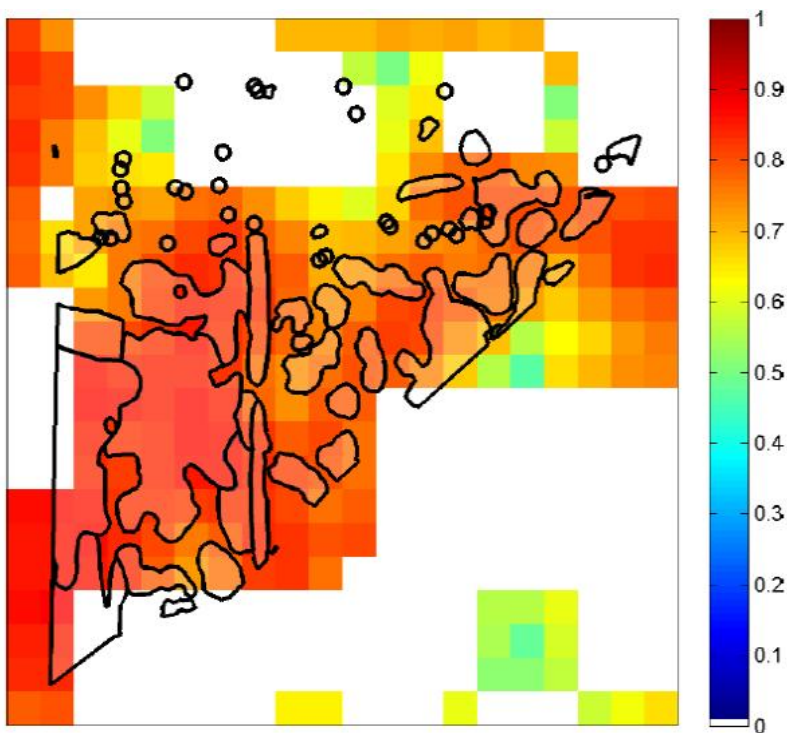


Image 5. Habitat importance map – 502798, Cobra Greenhood, *Pterostylis grandiflora*



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Image 6. Habitat importance map – 505175, Green Scentbark, *Eucalyptus fulgens*

