

Bendigo Airport upgrade native vegetation removal figures.

As of 20th of November 2013, Adrian Doye

Using Information from Garry Cheers report I was able to calculate the total amount of native vegetation to be removed in hectares as well as display the loss in habitat hectare and offset gain targets. I have separated that calculation further into areas of total vegetation removed and tree canopy loss only, and further more into EVC type, Conservation Significance (CS) and what property boundary the removal is occurring in.

Native Vegetation removal of total project

Complete Removal Of Vegetation

EVC & Conservation Significance	Loss in Hectares	Loss in Habitat Hectares	Offset Gain Target	Patches
High CS Box Ironbark Forest	8 Ha	4.33 HHa	6.51 HHa	17,22,26
Medium CS Box Ironbark Forest	8.6 Ha	4.26 HHa	4.26 HHa	9,11,13,14,27,31,38
Low CS Box Ironbark Forest	0.4 Ha	0.11 HHa	0.11 HHa	39,40,41
Medium CS Heathy Woodland	0.5 Ha	0.28 HHa	0.28 HHa	12, 42
High CS Low Rises Grassy Woodland	1.7	0.73 HHa	1.1	45
Medium CS Low Rises Grassy Woodland	0.5	0.1 HHa	0.11	44
Total	19.7 Ha	9.82 HHa	12.37 HHa	
Canopy Loss Only				
High CS Box Ironbark Forest	5.8 Ha	0.17 HHa	0.26 HHa	17,22(0)
Medium CS Box Ironbark Forest	8.7 Ha	0.5 HHa	0.5 HHa	11,27
Medium CS Heathy Woodland	3.7 Ha	0.19 HHa	0.19 HHa	1,42
Total	18.2 Ha	0.86 HHa	0.95 HHa	
Grand Total	37.9 Ha	10.68 HHa	13.32 HHa	

Note: Patch 22 of canopy loss only has no habitat hectare loss score because its score for canopy cover and large old trees are zero.

Large Old Trees within a patch to be removed

Complete Removal Zone

Patch	Conservation Significance	Number of Large Old Trees to be removed	Offset Multiplier	Offset Gain Targets
11	Medium	2	2	4
17	High	2	4	8
22	High	1	4	4
31	Medium	1	2	2
44	Medium	2	2	4
Total		8		22

Scattered Tree to be removed

For the removal of 32 Small Scattered Trees of Low Conservation Significance 320 plants need to be recruited.

For the removal of 1 Medium Small Scattered Tree of Low Conservation Significance 15 plants need to be recruited.

Removal within current Airport boundary

Complete Removal Of Vegetation

EVC & Conservation Significance	Loss in Hectares	Loss in Habitat Hectares	Offset Gain Target	Patches
High CS Box Ironbark Forest	5.5 Ha	3.08 HHa	4.63 HHa	22,26
Medium CS Box Ironbark Forest	4.4 Ha	2.46 HHa	2.46 HHa	27
High CS Low Rises Grassy Woodland	1.7	0.73 HHa	1.1 HHa	45
Medium CS Low Rises Grassy Woodland	0.5	0.11 HHa	0.11 HHa	44
Total	12.1 Ha	6.38 HHa	8.30 HHa	

Canopy Loss Only

High CS Box Ironbark Forest	2.4 Ha	0 HHa	0 HHa	22
Medium CS Box Ironbark Forest	3.8 Ha	0.11 HHa	0.11 HHa	27
Total	6.2 Ha	0.11 HHa	0.11 HHa	
Grand Total	18.3 Ha	6.49 HHa	8.41 HHa	

Large Old Trees within a patch to be removed

Complete Removal Zone

Patch	Conservation Significance	Number of Large Old Trees to be removed	Offset Multiplier	Offset Gain Targets
22	High	1	4	4
44	Medium	2	2	4
Total		3		8

Removal within COGB owned land north of Heinz Street

Complete Removal Of Vegetation

EVC & Conservation Significance	Loss in Hectares	Loss in Habitat Hectares	Offset Gain Target	Patches
Medium CS Box Ironbark Forest	3.1 Ha	1.30 HHa	1.30 HHa	13, 31, 38
Low CS Box Ironbark Forest	0.3 Ha	0.08 HHa	0.08 HHa	39, 40
Medium CS Heathy Woodland	0.5 Ha	0.28 HHa	0.28 HHa	12
Grand Total	3.9 Ha	1.66 HHa	1.66 HHa	

Large Old Trees within a patch to be removed

Complete Removal Zone

Patch	Conservation Significance	Number of Large Old Trees to be removed	Offset Multiplier	Offset Gain Targets
31	Medium	1	2	2
Total		1		2

Scattered trees to be removed

Tree Number	Tree Size (DBH cm)	Tree Class	Species	Offset Required
31	10	Small	Grey Box	10 new recruits
32	32	Small	Grey Box	10 new recruits
33	30	Small	Grey Box	10 new recruits
34	30	Small	Grey Box	10 new recruits
35	30	Small	Grey Box	10 new recruits
36	21	Small	Grey Box	10 new recruits
37	21	Small	Grey Box	10 new recruits
38	21	Small	Grey Box	10 new recruits
39	20	Small	Grey Box	10 new recruits
40	26	Small	Grey Box	10 new recruits
41	30	Small	Grey Box	10 new recruits
42	21	Small	Grey Box	10 new recruits
43	10	Small	Grey Box	10 new recruits
44	52	Small	Grey Box	10 new recruits
46	28	Small	Red Ironbark	10 new recruits
47	24	Small	Red Ironbark	10 new recruits
48	32	Small	Grey Box	10 new recruits
49	22	Small	Grey Box	10 new recruits
50	22	Small	Grey Box	10 new recruits
Total	19			190 new recruits

Removal within Heinz Road reserve

Complete Removal Of Vegetation

EVC & Conservation Significance	Loss in Hectares	Loss in Habitat Hectares	Offset Gain Target	Patches
Medium CS Box Ironbark Forest	0.1 Ha	0.04 HHa	0.04 HHa	14
Low CS Box Ironbark Forest	0.1 Ha	0.03 HHa	0.03 HHa	41
Grand Total	0.2 Ha	0.07 HHa	0.07 HHa	

Scattered trees to be removed

Tree Number	Tree Size (DBH cm)	Tree Class	Species	Offset Required
45	46	Small	Grey Box	10 new recruits
51	50	Small	Grey Box	10 new recruits
52	49	Small	Grey Box	10 new recruits
53	28	Small	Grey Box	10 new recruits
54	50	Small	Grey Box	10 new recruits
55	67	Medium	Grey Box	15 new recruits
56	48	Small	Grey Box	10 new recruits
57	21	Small	Grey Box	10 new recruits
58	14	Small	Grey Box	10 new recruits
59	14	Small	Grey Box	10 new recruits
60	14	Small	Grey Box	10 new recruits
61	14	Small	Grey Box	10 new recruits
62	14	Small	Grey Box	10 new recruits
63	14	Small	Grey Box	10 new recruits
Total	14			145 new recruits

Removal within Victra Road reserve

Complete Removal Of Vegetation

EVC & Conservation Significance	Loss in Hectares	Loss in Habitat Hectares	Offset Gain Target	Patches
Medium CS Box Ironbark Forest	0.3 Ha	0.14 HHa	0.14 HHa	9
Grand Total	0.3 Ha	0.14 HHa	0.14 HHa	

Removal within Parks Victoria land & unmade road reserve north of runway

Complete Removal Of Vegetation

EVC & Conservation Significance	Loss in Hectares	Loss in Habitat Hectares	Offset Gain Target	Patches
High CS Box Ironbark Forest	2.5 Ha	1.25 HHa	1.88 HHa	17
Medium CS Box Ironbark Forest	0.7 Ha	0.32 HHa	0.32 HHa	11
Total	3.2 Ha	1.57 HHa	2.20 HHa	

Canopy Loss Only

High CS Box Ironbark Forest	3.4 Ha	0.17 HHa	0.26 HHa	17
Medium CS Box Ironbark Forest	4.9 Ha	0.39 HHa	0.39 HHa	11
Medium CS Heathy Woodland	3.7 Ha	0.19 HHa	0.19 HHa	1, 42
Total	12 Ha	0.75 HHa	0.84 HHa	
Grand Total	15.2 Ha	2.32 HHa	3.04 HHa	

Large Old Trees within a patch to be removed

Complete Removal Zone

Patch	Conservation Significance	Number of Large Old Trees to be removed	Offset Multiplier	Offset Gain Targets
11	Medium	2	2	4
17	High	2	4	8
Total		4		12