Bushfire Mitigation = APZ

The area determined as an Asset Protection Zone (inner Protection Zone) Figure 1.4 is to be managed in accordance with the Bushfire Mgt Plan and based on the RFS General Terms of Agreement. Extract below and implementation within the APZ on-site.



Figure 1.4a APZ~ 3000m2 of area. Distance of 18m for all but South West (36m) from residential dwelling.

DA20220130002154-CL55-1

Asset Protection Zones

Intent of measures: to provide sufficient space and maintain reduced fuel loads to ensure radiant heat levels at the buildings are below critical limits and prevent direct flame contact.

Appendix 4 of Planning for Bush Fire Protection 2019 is the base of the required APZ management to Inner Protection Area (IPA) level	Bushfire Report (2024). Creation and
Tree canopy cover should be less than 15% at maturity	As per the Bushfire Plan (2024) the APZ will have up to 20% canopy and this will be discontinuous from the main potential fire source;
Trees at maturity should not touch or overhang the building	Canopy will not be overhanging or touching the building
Lower limbs should be removed up to a height of 2 m above the ground	This will occur on an on-going basis to ensure no connection of ground and canopy fuels.
Tree canopies should be separated by 2 to 5 m	A separation of 2-5m will be created and retained between the out APZ and the west (potential fire source)

Large discontinuities or gaps in the shrubs layer should be provided to slow down or break the progress of fire towards building shrubs not be located under trees; Shrubs should not form more than 10% ground cover	20% (currently < 5%) and be separated from
	Currently no shrubs. Shrubs and / or Ferns (any shrubby-vegetation over 10cm in height will be maintained such that it is separated from exposed windows and doors by a distance of at least twice the height of the vegetation;
Grass should be kept low (as a guide, grass should be kept to no more than 100mm in height);	Grass / Ferns will be kept low (as a guide, grass no more than 100mm in height);
Leaves and vegetation debris to be removed regularly	Leaves and vegetation debris will be removed regularly (leaf litter kept to a depth of not more than 5cm deep cover in APZ and not present within 5m of dwelling

..

APZ Creation and Tree Removals

In addition to the trees listed in the Arborist report there are 5 other trees for removal to create the APZ. The required canopy separation from the bushland to the west is achieved through the tree removals and pruning. Fire mitigation will also be in place on the western side due to the proposed uses (paddock, pathway). T

his VMP notes the pruning required and Figure xx shows the area to be kept as a canopy separation.

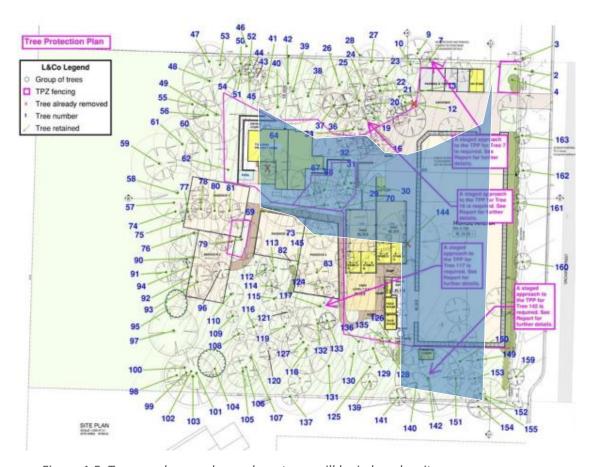


Figure 1.5 Tree numbers and are where trees will be in low density.



Figure 1.5b post tree removals and pruning canopy gaps (white). Break of 2-5 from surrounding treed areas and less than 20% and none overhanging the dwelling. The five additional trees will be selected from the list below. Tahs is those with no habitat hollow and no key feed trees. All ones that are not directly impacted by the works, are mostly in the APZ and are priority for removal according to the arborist. Removals and pruning will be undertaken with fire consultant and ecologist on-site for minimal tree impacts while achieving eh outcome needed.

Tree No.	Species	Height (m)	Radial Crown Spread (m)	DBH comb. (mm)	Radial TPZ (m)	TPZ Area (m²)	Radial SRZ (m)	Health Rating	Structural Rating	Age Class	ULE (years)	L/Sign	Retention Value	Comments	TPZ Encroachment (%)
9	Angophora floribunda (Rough Barked Apple)	12	4	200	2	18	1.8	Poor	Fair	Senescent	<5	Moderate	Priority for Removal	Crown density 0-25%. Small (<25mmø) & medium (25- 75mmø) deadwood in high volumes. Crown consists mainly of epicormic growth. Codominant inclusions, minor.	No Encroachment
21	Angophora floribunda (Rough Barked Apple)	11	3	180	2	15	1.7	Poor	Good	Semi-mature	5-15	Low	Consider for Removal	Group of 2 trees. Tags 132 and 133. Crown density 0-25%. Small (<25mmg), medium (25-75mmg) & large (>75mmg) deadwood in high volumes. Crown consists mainly of epicormic growth.	No Encroachment
42	Syncarpia glomulifera (Turpentine)	9	3	100	2	13	1.5	Good	Good	Semi-mature	15-40	Low	Consider for Removal	Not full VTA.	No Encroachment
43	Glochidion ferdinandi (Cheese Tree)	8	3	75	2	13	1.5	Good	Good	Young	5-15	Low	Consider for Removal	Partially suppressed.	No Encroachment
														Crown density 0-25%. Small	
47	Angophora floribunda (Rough Barked Apple)	15	4	300	4	41	2.1	Poor	Good	Senescent	ø	Moderate	Priority for Removal	(<25mmø), medium (25-75mmø) & large (>75mmø) deadwood in high volumes. Crown consists mainly of epicormic growth.	No Encroachment
98	Angophora floribunda (Rough Barked Apple)	10	2	100	2	13	1.5	Poor	No access to base. No rating.	Senescent	<5	Low	Priority for Removal	Localised crown death. Crown density 0-25%. Crown consists mainly of epicormic growth.	No Encroachment
37	Allocasuarina littoralis (Black She Oak)	9	4	175	2	14	1.7	Poor	Good	Senescent	<5	Low	Priority for Removal	Crown density 0-25%. Small (<25mmg) deadwood in high volumes. Small (<25mmg) epicormic growth in high volumes.	No Encroachment
40	Eucalyptus resinifera (Red Mahogany)	18	4	300	4	41	2.1	Poor	Fair	Senescent	<5	Moderate	Priority for Removal	Crown density 0-25%. Small (<25mmø) & medium (25- 75mmø) deadwood in high volumes. Crown consists mainly of epicormic growth.	1.8%
47	Angophora floribunda (Rough Barked Apple)	15	4	300	4	41	2.1	Poor	Good	Senescent	<5	Moderate	Priority for Removal	Crown density 0-25%. Small (<25mmø), medium (25-75mmø) & large (>75mmø) deadwood in high volumes. Crown consists mainly of epicormic growth.	No Encroachment
78	Angophora floribunda (Rough Barked Apple)	10	3	250	3	28	1.9	Poor	Poor	Senescent	<5	Low	Priority for Removal	Crown density 0-25%. Crown consists mainly of epicormic growth.	No Encroachment
67	Angophora floribunda (Rough Barked Apple)	10	2	100	2	13	1.5	Poor	No access to base. No rating.	Senescent	<5	Low	Priority for Removal	Localised crown death. Crown density 0-25%. Crown consists mainly of epicormic growth.	No Encroachment
80	Angophora floribunda (Rough Barked Apple)	8	3	100	2	13	1.5	Poor	Good	Senescent	<5	Low	Priority for Removal	Crown consists of epicormics. Crown density 0-25%.	No Encroachment
81	Angophora floribunda (Rough Barked Apple)	3		0	0	0	1.5	Poor	Good	Senescent	<5	Low	Priority for Removal	Crown consists of epicormics. Crown density 0-25%.	No Encroachment
91	Angophora floribunda (Rough Barked Apple)	9	2	150	2	13	1.6	Poor	Good	Senescent	<5	Low	Priority for Removal	Localised crown death. Crown density 0-25%. Crown consists mainly of epicormic growth.	No Encroachment
99	Angophora floribunda (Rough Barked Apple)	12	4	200	2	18	1.8	Poor	Good	Senescent	<5	Moderate	Priority for Removal	Localised crown death. Crown density 0-25%. Crown consists mainly of epicormic growth.	No Encroachment
102	Angophora floribunda (Rough Barked Apple)	12	4	225	3	23	1.8	Poor	Good	Senescent	<5	Moderate	Priority for Removal	Localised crown death. Crown density 0-25%. Crown consists mainly of epicormic growth.	No Encroachment
127	Angophora floribunda (Rough Barked Apple)	10	3	225	3	23	1.8	Poor	Good	Senescent	<5	Low	Priority for Removal	Localised crown death. Crown density 0-25%. Crown consists mainly of epicormic growth.	No Encroachment

														wound(s), early signs of decay.	
137	Syncarpia glomulifera (Turpentine)	14	5	300	4	41	2.1	Poor	Good	Senescent	< 5	Moderate	Priority for Removal	Localised crown death. Crown consists mainly of epicormic growth.	No Encroachment

Trees with hollows and potential of hollows to be retained

19	Angophora floribunda (Rough Barked Apple)	11	3	150	2	13	1.6	Poor	Poor	Senescent	<5	Low	Priority for Removal	Localised crown death. Crown density 0-25%. Crown consists mainly of epicormic growth. Trunk cavity(s), minor.	No Encroachment
															'
22	Syncarpia glomulifera (Turpentine)	12	4	283	3	36	2.0	Fair	Poor	Mature	5-15	Moderate	Consider for Retention	Group of 2 trees. Crown density 50-75%. Small (<25mmø) & medium (25-75mmø) deadwood in moderate volumes. Co- dominant inclusions, major. Trunk cavity(s), minor.	No Encroachment
23	Syncarpia glomulifera (Turpentine)	6	2	100	2	13	1.5	Fair	Poor	Semi-mature	<5	Low	Priority for Removal	Loss of central leader. Crown density 50-75%. Trunk cavity(s), major.	No Encroachment
	'	'			'	'					'	'			
25	Eucalyptus botryoides (Bangalay)	14	4	400	5	72	2.3	Poor	Poor	Senescent	<5	Moderate	Priority for Removal	Crown density 0-25%. Small (<25mmg), medium (25-75mmg) deadwood in high volumes. Small (<25mmg) epicormic growth in moderate volumes. Wound(s), advanced stages of decay. Trunk cavity(s), major. Adaptive growth.	No Encroachment
39	Eucalyptus piperita (Syndey Peppermint)	22	6	485	6	107	2.5	Fair	Poor	Late Mature	5-15	Moderate	Consider for Retention	Crown density 25-50%. Small (<25mmp), medium (25-75mmp) & large (>75mmp) deadwood in high volumes. Small (<25mmp), medium (25-75mmp) & large (>75mmp) picormic growth in high volumes. Trunk cavity(s), major.	No Encroachment
49	Eucalyptus piperita (Sydney Peppermint)	12	6	700	8	222	3.0	Poor	Poor	Senescent	<5	Moderate	Priority for Removal	Localised crown death. Crown density 0-25%. Small (<25mmø), medium (25-75mmø) & large (>75mmø) deadwood in high volumes. Crown consists mainly of epicormic growth. Trunk cavity(s), major. Order branch cavity, major.	No Encroachment
54	Angophora costata (Sydney Red Gum)	7	1	75	2	13	1.5	Poor	Good	Young	<5	Low	Priority for Removal	Crown density 0-25%.	No Encroachment

All Forest She-oaks (Allocasuarina torulosa) to be retained.



Few to no shrubs currently – up to 10% can be accommodated in the APZ.



Pruning including deadwood removal (where no habitat). To achieve canopy separation. This will be part of APZ creation and on-going maintenance.