

# BUSHFIRE ATTACK LEVEL ASSESSMENT



**Stages 8 - 10 (Subdivision of Lot 101 on SP297314)**

**Raynbird Road, Narangba**

**Client Reference: 05.08.21**



**Bushfire Risk Reducers**  
ABN28 355 366 321

PO Box 4645 Toowoomba East 4350  
T] 07 46366367 F] 07 46366383 M] 0438 994465



**BPAD**  
Bushfire  
Planning & Design  
Accredited Practitioner  
Level 3

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## REPORT AUTHOR

### Alistair Hill

Director - Bushfire Risk Reducers  
FPAA BPAD - Level 3 Certified Practitioner  
Certification Number: BPD-PA-19034  
M] 0438 994465  
T] 07 46366367  
F] 07 46366383  
W] [www.bushfire.biz](http://www.bushfire.biz)

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## 1.0 Introduction

This report has been commissioned by Satterley, to comply with the Building Code of Australia (BCA), in respect of functional performance objectives for bushfire attack relating to residential Lots in Stages 8 - 10 of the subdivision of Lot 101 on SP297314.

Moreton Bay Regional Council (MBRC) bushfire hazard overlay mapping classifies the interface with Stage 9 as “bushfire prone area” (BPA) in terms of Section 12 of Building Regulation 2006, and based on *A new methodology for State-wide mapping of bushfire prone areas in Queensland* (CSIRO 2014) which is also used by State Government.

The designation by Council of land being “bushfire prone” invokes the Building Code of Australia (BCA), requiring compliance with its bushfire related functional performance objectives and with AS3959-2018 *Construction of buildings in bushfire prone areas* providing “Deemed to Satisfy” construction solutions.

The scope of this requested assessment relates solely to BAL determination for construction, and not to all the other considerations which would make up a comprehensive Bushfire Management Plan. Some of the lots covered by this Bushfire Attack Level (BAL) Assessment Report have been included in previous BAL assessments, but due to enhancements in acceptable fire modelling, improvements have been made for the situation facing those Lots. This BAL Assessment Report supercedes and previous BAL assessments undertaken.

This assessment serves to determine the Bushfire Attack Level (BAL) requirement for the proposed buildings under AS3959.

## 2.0 Site and Development Description

### 2.1 Property Description

Site ID:	Subdivision of Lot 101 on SP297314. Parish of WHITESIDE. County of STANLEY.
Current address of property:	Raynbird Road, Narangba, QLD 4504.
Local Government Area:	Moreton Bay Regional Council (MBRC).
Total Area:	N/A
Zoning:	General Residential.

### 2.2 Proposed Development

The proposed development involves 135 new lots created in Stages 8 - 10 of the subdivision.



## 2.3 Site Location and Layout



**Figure 1. Broader Area showing the location of the subject lot.**

The site in question is located in undulating terrain north of Raynbird Road and west of Oakey Flat Road. To the east of Stage 9 retained forest vegetation is classified under AS3959-2018.

South east of Stage 8, rehabilitation planting of the drainage reserve represents future hazard, which this assessment takes into account.

Figure 2 shows a closer view of affected Lots in Stages 8 - 10.

The assessment uses both Method 1 and 2 under AS3959-2018 to determine the Bushfire Attack Level (BAL) for construction.





**Figure 2. Lot layout showing location of the relevant Stages of development.**

Figure 2 shows the four proposed Stages of development.

The site is within approximately 7km by road of the nearest Queensland Fire and Emergency Services (Burpengary Fire Station) with local Narangba Rural Fire Brigade (3km away) also potential responders, with a response time dependant on the availability of volunteers to turn out.

## 3.0 Bushfire Hazard Assessment

### 3.1 Bushfire hazard classification

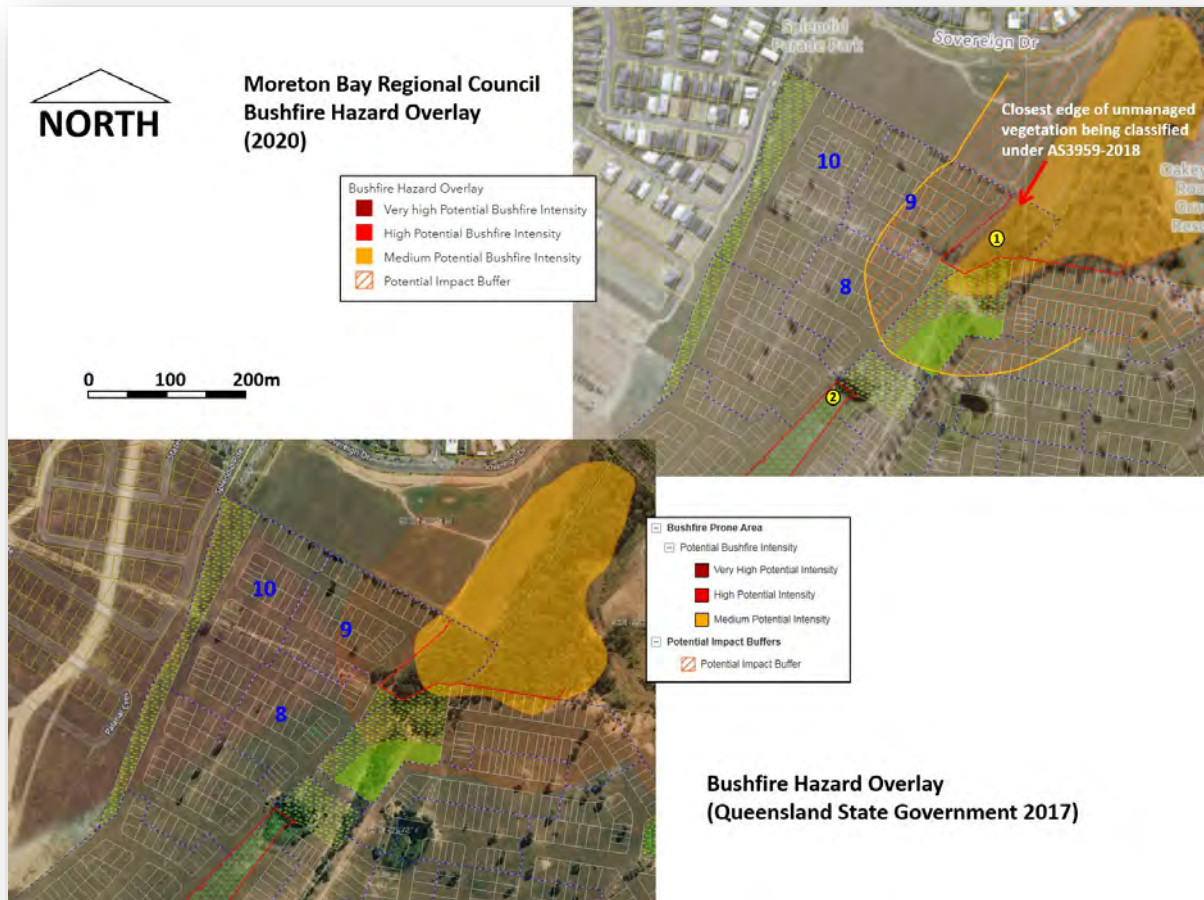


Figure 3. Council bushfire hazard mapping

“Bushfire Prone Land” is defined under Building Regulation 2006 and the BCA as an area **identified as such by Local Government** (in this case using a methodology outlined in *A new methodology for State-wide mapping of bushfire prone areas in Queensland* (CSIRO 2014)).

Despite applying the same methodology to bushfire hazard mapping, different settings and filtering results in differences in the overlays seen in Figure 3. Neither set of mapping claims to be perfectly accurate and both are subject to ground truthing and validation by qualified and experienced bushfire practitioners.

Section 6 of the Assessment summarizes the design fire parameters and validates the BPA status of land within 100m of Fuel Areas 1 and 2 (identified in Figure 3).

The effect of this mapping is to trigger the BCA and its functional performance objectives for bushfire, with AS3959 providing “Deemed to Satisfy” building solutions.

The BCA bushfire requirements relate to Class 1, 2 and 3 buildings constructed in a “designated bushfire prone area”.

This assessment compares Bushfire Attack Levels (BALs) using Methods 1 and 2 under AS3959-2018.



### 3.2 Vegetation Assessment, Slope and Separation Distances from Proposed Development



**Figure 4. Fuel accumulation, slopes and setback.** Solid arrows show most likely direction of bushfire attack.

The yellow numbered circles in Figure 4 represent potentially hazardous vegetation communities. The future edge of hazardous vegetation is taken to be the solid red line in Figure 4.

The vegetation type in terms of AS3959 is “Forest” and the effective slope beneath vegetation being classified is taken as  $0^{\circ}$  in Areas 1 and 2.

Section 6 objectively calculates and determines the potential nature and severity of bushfire attack more thoroughly. This serves as a basis for determining the construction and other bushfire protection measures outlined in this BAL Assessment.

Fuel assessments were undertaken using the Overall Fuel Hazard Assessment - DSE Victoria (Oct 2010), although the fuel values applied to fire modelling in Section 6.3 are taken from the Queensland Government (QFES) dataset, as required under AS3959-2018.



### 3.3 Fuel Accumulation Assessment - Vegetation Community / Area 1



Figure 5. Fuel Accumulation Assessment Area 1

Fuel hazard estimate	Assessment according to Hines et al 2010		
Date: 16 <sup>th</sup> July 2018	Area 1		
Layer	Rating	Description / Comments	Equivalent fuel load t/ha
Surface and near surface	High	Very High litter bed average 30 - 40mm with Moderate near surface fuels shaded out with time since fire, largely <i>Lomandra sp.</i> , <i>Themeda sp.</i>	10
Elevated	High	Canopy recruiters and <i>Acacia spp</i> spindly with most fuel at top of layer.	2 - 3
Bark	High	Some ribbon barks ( <i>E. tereticornis</i> ) Some papery barks ( <i>L.suavolens</i> , <i>M.quinquinervia</i> ) with lower bark hazard species – <i>E.propinqua</i> , <i>E.siderophloia</i> .	2 - 3
<b>Overall rating</b>	<b>High</b>		<b>14 - 16t/ha</b>

Table 1. Fuel Assessment Area 1

The vegetation community present is consistent with mapped RE12.3.11, for which the State Government (Queensland Fire and Emergency Services – QFES dataset) attributes a default value of 17.2t/ha to total available fuel.

For the purpose of site specific fire modelling in Section 6, 17.2t/ha to total available fuel, of which 14.9t/ha is surface and near surface fuel, is considered reasonable and consistent with the requirements of AS3959.

### **3.4 Fuel Accumulation Assessment – Vegetation Community / Area 2**

The Ecological Restoration Plan for the Drainage reserve intends to create a future forest vegetation community generally consistent with RE12.3.11, for which the State Government (Queensland Fire and Emergency Services – QFES dataset) attributes a default value of 17.2t/ha to total available fuel.

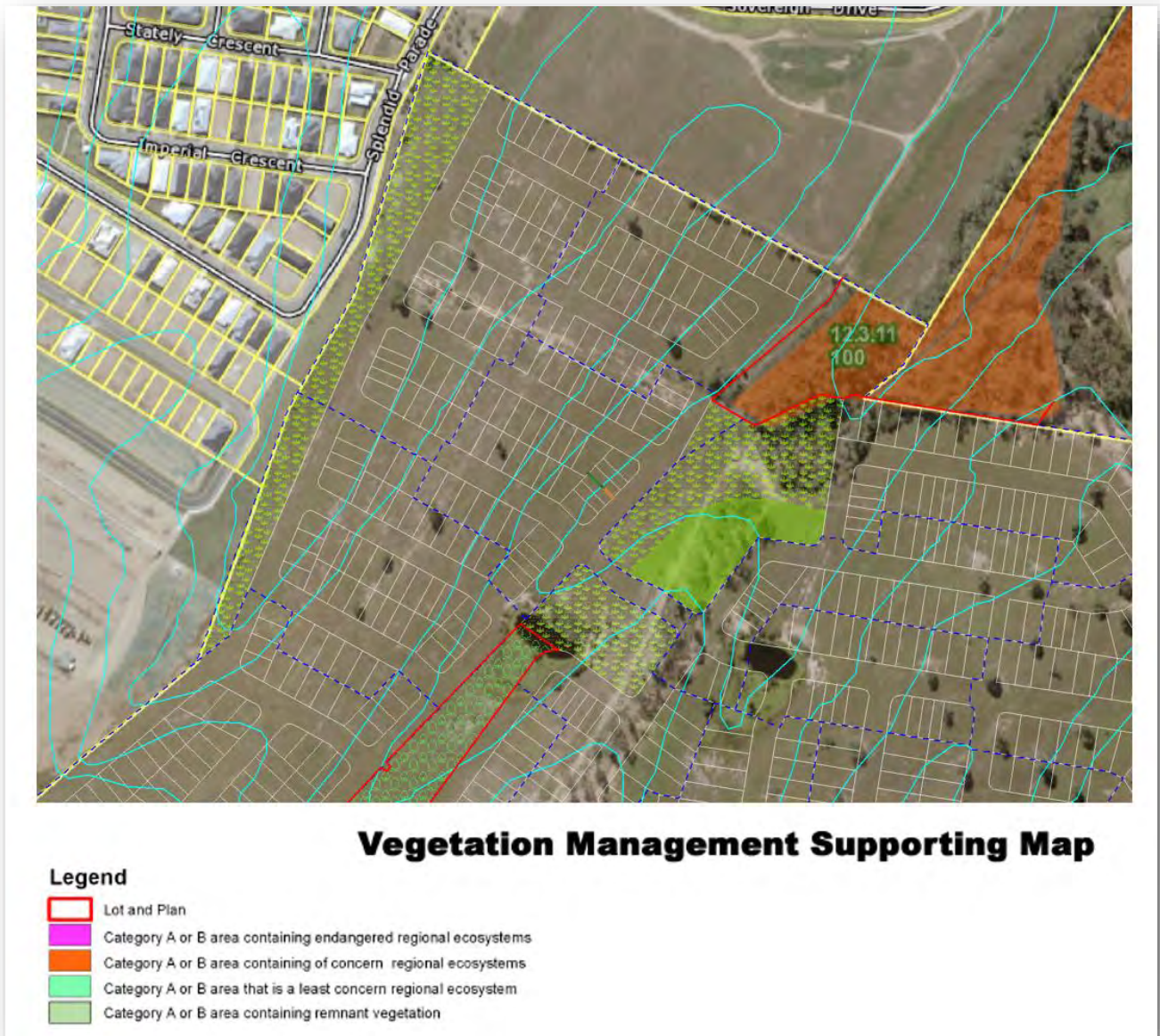
For the purpose of site specific fire modelling in Section 6, 17.2t/ha is applied to total available fuel, of which 14.9t/ha is surface and near surface fuel, is considered reasonable and consistent with the requirements of AS3959.

Area 2 represents RE12.3.11 on a slope that is 0° or upslope and with a 25m flame width.



## 4.0 Site constraints and environmental values which may limit mitigation options

The Queensland Department of Natural Resources, Mines and Energy (DNRME) shows mapped remnant vegetation of “Of Concern” RE12.3.11 abutting the subdivision. Site assessments supports this classification.



**Figure 6. Regional Ecosystem Mapping**

DNRME provides the following Description and recommended fire guidelines for the vegetation communities mapped.

Regional Ecosystem	Description	Fire Guidelines
<b>RE 12.3.11</b>	Open-forest to woodland of <i>Eucalyptus tereticornis</i> , <i>E. siderophloia</i> and <i>Corymbia</i>	SEASON: Summer to late-autumn. INTENSITY: Low.

<p><b>Of Concern</b></p>	<p><i>intermedia</i>, <i>Corymbia tessellaris</i>, <i>Lophostemon suaveolens</i> and <i>Melaleuca quinquenervia</i> frequently occur and often form a low tree layer. Other species present in scattered patches or low densities include <i>Angophora leiocarpa</i>, <i>E. exserta</i>, <i>E. grandis</i>, <i>C. trachyphloia</i>, <i>C. citriodora</i>, <i>E. latisinensis</i>, <i>E. tindaliae</i>, <i>E. racemosa</i>, <i>Melaleuca sieberi</i> and <i>M. viridiflora</i>. <i>E. seeana</i> may be present south of Landsborough. Occurs on Quaternary alluvial plains and drainage lines along coastal lowlands. Rainfall usually exceeds 1000mm/y (BVG1M: 16c)</p> <p>Major vegetation communities include:  12.3.11a: Open-forest of <i>Eucalyptus tereticornis</i> and/or <i>E. siderophloia</i> with vine forest understorey. Other canopy species include <i>Corymbia intermedia</i>, <i>Araucaria cunninghamii</i> and <i>Agathis robusta</i>. Frequently occurring understorey species include <i>Flindersia spp.</i>, <i>Lophostemon suaveolens</i>, <i>L. confertus</i>, <i>Cupaniopsis parvifolia</i>, <i>Acronychia spp.</i>, <i>Alphitonia excelsa</i> and <i>Acacia disparrima</i> subsp. <i>disparrima</i>. Occurs on sub-coastal Quaternary alluvial plains. Rainfall usually exceeds 1000mm/y. (BVG1M: 16c)</p> <p>Vegetation Hazard Class (VHC) 16.1  15.9t/ha Total Available Fuel Load (State Default Value)</p>	<p>INTERVAL: 3-6 years.  STRATEGY: Aim to burn 40-60% of any given area. Spot ignition in cooler or moister periods encourages mosaics.  ISSUES: Control of weeds is a major focus of planned burning in most areas. Maintain ground litter and fallen timber habitats by burning only with sufficient soil moisture. Burning should aim to produce fine scale mosaics of unburnt areas.</p>
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**Table 2. Regional Ecosystems Descriptions and Fire Guidelines**

The retained areas of forest vegetation are unlikely to be provided with managed fire, along with the temporary hazard reduction benefits this brings.

Planning is not based on any assumptions regarding hazard reduction; and has to be based on fuel levels reaching a long term maximum stable state, coinciding with ignition under worst case foreseeable fire weather conditions.

#### 4.1 Fire History and Frequency

This study found several indicators of prior fire, dating back more than 10 years. Recurrence of fire at some time has to be regarded as possible, potentially coinciding with maximum fuel accumulation and worst case fire weather conditions.

## **5.0 Specific risk factors associated with the development proposal**

### **5.1 Nature of activities anticipated on site**

Normal residential activities are anticipated to occur in the area, which includes the potential inclination of juveniles and others to make temporary “camps” in bushland, and others to undertake acts of deliberate arson. The number of fire incidents expected by QFES varies in direct proportion to the numbers of people present. The proposed development makes a considerable addition to the number of people living in the area and potentially exposed to unplanned fire and its effects.

No storage or handling of hazardous materials in bulk is envisaged.

### **5.2 Numbers of people likely to be present**

Many more people can be expected to be present in the area depending on the time of day and day of the week; however the limited extent of retained hazard and the bushfire protection measures required reduce risk to an acceptable level.

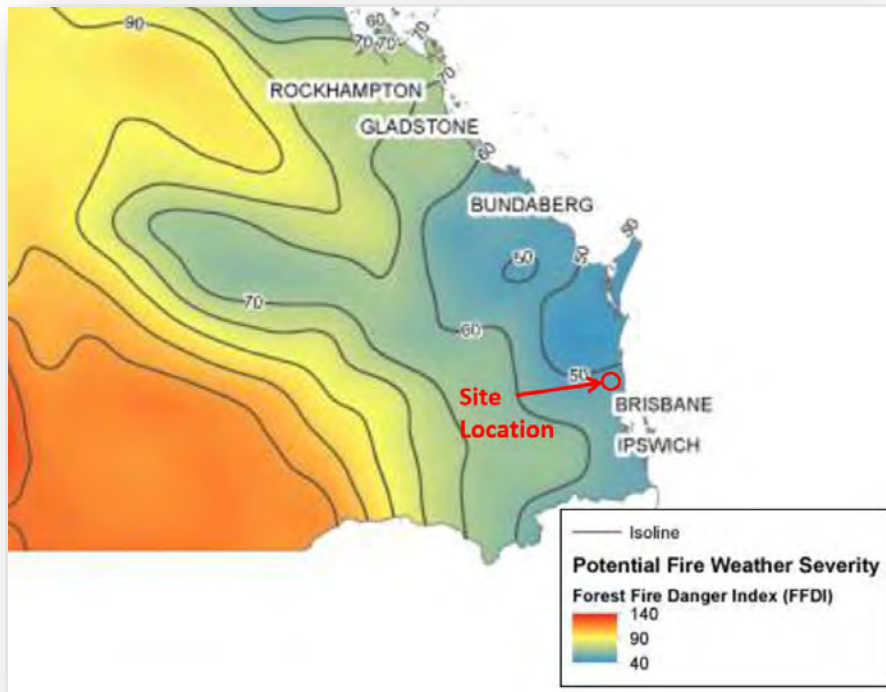
## **6.0 Nature and Severity of Potential Bushfire Attack**

### **6.1 Bushfire season and Fire Weather**

The “typical fire season” in this area peaks between September and November. The predominant winds in the area are south easterly, however during the fire season, hot gusty westerlies of over 30 kph can be expected, with Relative Humidity falling to 10% and less. Temperatures on these days can climb over 35°C , and for two or three days a year, fire weather conditions equivalent to FDI levels of around 60 can be anticipated. (Note that this is in contrast to the value of 40 which is being used in the recently revised AS3959 - 2018).

*A new methodology for State-wide mapping of bushfire prone areas in Queensland (CSIRO, 2014) defines new regional FDI values for planning purposes, as shown in Figure 7 below, attributing an FDI value of 60 to the area in question.*





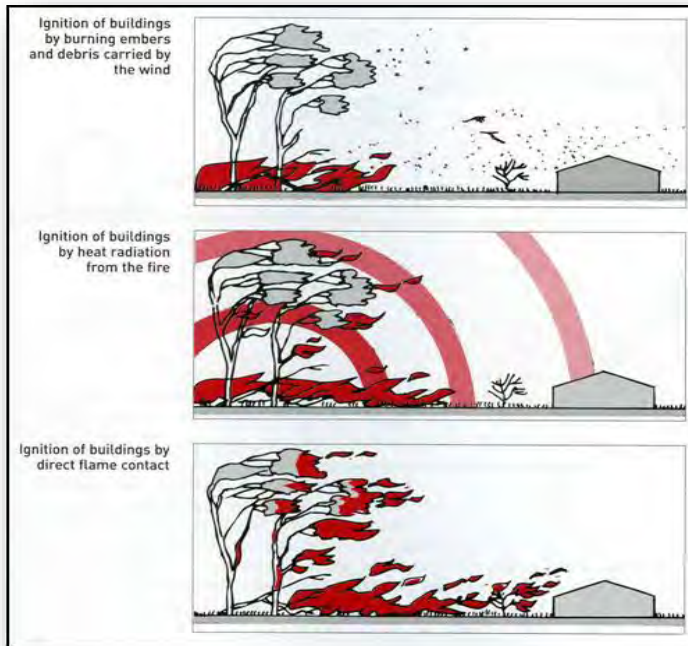
**Figure 7. State based indications of a revision of “worst case” FDI values to FDI 60 for the area involved. A FDI value of 55 is currently accepted for the greater Brisbane area.**

## 6.2 Anticipated direction of bushfire attack

Worst fire weather conditions are anticipated from the west through northwest to north, associated with the direction of traditionally worst case fire weather conditions. Stages 8 - 10 would expect attack from the east or south, generally not aligned with the direction of worst case fire weather.

Anticipated directions of attack are reflected in Figure 4.

Bushfire attack comes in a number of forms: direct flame, radiant heat, embers, smoke and wind. Research shows that over 80% of houses lost to bushfire in Australia can be attributed to ember attack, within 100m of bushland. The proposed buildings would be expected to face some radiant heat along with minor ember attack.



**Figure 8. Main Bushfire Attack mechanisms** (Image courtesy of Ramsay & Rudolf 2003)

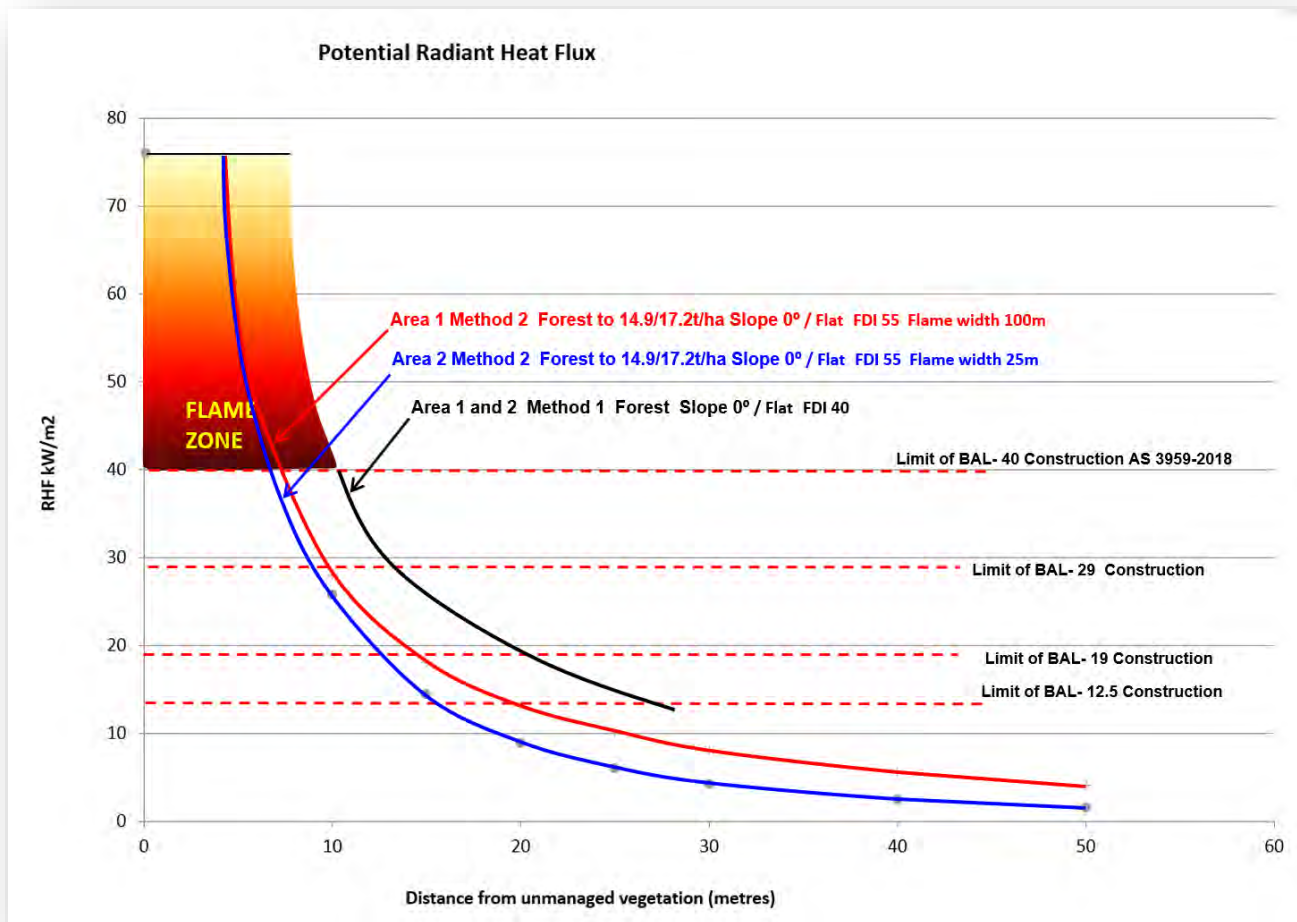
### 6.3 Anticipated severity of bushfire attack

Values for vegetation type, fuel load and slope are carried forward to Table 3 to predict the key fire parameters for the potential worst case fire scenarios.

Fire Scenario – Area 1	Fire Scenario – Area 2	Fire Scenario – Areas 1 and 2
<b>Method 2 AS3959</b> <b>FDI 55</b> <b>Forest @ 14.9/17.2t/ha.</b> <b>Effective Slope under vegetation 0°</b>	<b>Method 2 AS3959</b> <b>FDI 55</b> <b>Forest @ 14.9/17.2t/ha.</b> <b>Effective Slope under vegetation 0°</b>	<b>Method 1 AS3959</b> <b>FDI 40</b> <b>Forest</b> <b>Effective Slope under vegetation 0° and Upslope</b>
Fire Intensity (Byram, 1959) 8 739kW/m ("MEDIUM")	Fire Intensity (Byram, 1959) 8 739kW/m ("MEDIUM")	
Rate of Spread (Noble et al, 1980) 0.98kph	Rate of Spread (Noble et al, 1980) 0.98kph	
Flame Height (modified Mc Arthur V equation, NSW RFS 2001) 8.46m	Flame Height (modified Mc Arthur V equation, NSW RFS 2001) 8.46m	
Flame Width 100m	Flame Width 25m	
Elevation of Receiver 2.4m	Elevation of Receiver 2.4m	
BAL FZ within <8m of intact unmanaged vegetation BAL 40 from 8 - <10m BAL 29 from 10 - <15m BAL 19 from 15 - <21m BAL 12.5 from 21 – 100m	BAL FZ within <7m of intact unmanaged vegetation BAL 40 from 7 - <10m BAL 29 from 10 - <13m BAL 19 from 13 - <17m BAL 12.5 from 17 – 100m	BAL FZ within <10m of intact unmanaged vegetation BAL 40 from 10 - <13m BAL 29 from 13 - <20m BAL 19 from 20 - <28m BAL 12.5 from 28 – 100m

**Table 3. Calculated values for potential bushfire characteristics, and methods used.**

Projected fireline intensity in terms of latest State bushfire hazard assessment methodology is “Medium” as indicated in Council and State bushfire hazard mapping. This validates the BPA status of interfaces with Areas 1 and 2.



**Figure 9. Radiant Heat Flux Predicted by Methods 1 and 2 under AS3959 - 2018.**

Table 3 and Figure 9 show the tradeoff between BAL rating faces of dwellings and the setback that is constructed and maintained as Asset Protection Zone for affected Lots.

Shielded faces of the dwelling may be constructed to one BAL level lower, under AS3959-2018.

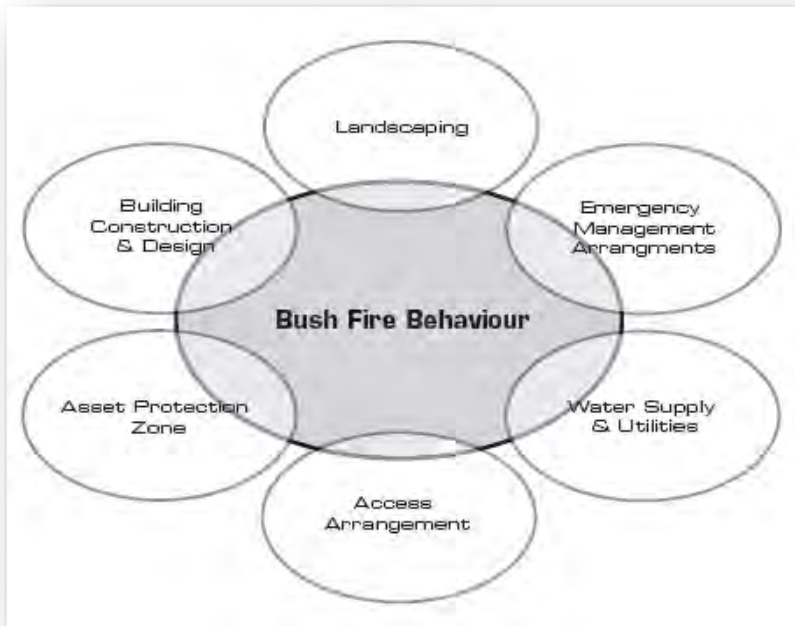
Table 4 below shows the significance of various levels of radiant heat flux.

Radiant Heat Flux (kW/m <sup>2</sup> )	Likely Effects
> 40 - 110	Flame Zone. Even the strongest toughened glass fails.
29 - 40	Latest technology in toughened glass may survive. Most will not. Timber ignites without pilot flame. Limit of BAL-40 Construction AS3959 - 2009.
29	Ignition of timbers without piloted ignition (3 minutes exposure) during the passage of a bushfire. Most types of toughened glass could fail. Limit of BAL-29 Construction AS3959 - 2009.
19	Screened float glass could fail during the passage of a bushfire. Limit of BAL-19 Construction AS3959 - 2009.
12.5	Standard float glass could fail during the passage of a bushfire. Limit of BAL-12.5 Construction AS3959 - 2009. Some timbers can ignite with prolonged exposure and with pilot ignition sources (eg embers)
10	Critical conditions. Firefighters not expected to operate in these conditions. Considered life threatening in under a minute in protective equipment. Fabrics inside a building could ignite spontaneously with long exposures.
7	Likely fatal to unprotected persons after exposure of several minutes.
4.7	Extreme conditions. Firefighter in protective clothing will feel pain after 60 seconds exposure.
3	Hazardous conditions. Firefighters expected to operate for a short period (10 minutes).
2.1	Unprotected person will feel pain after 1 minute exposure - non fatal.

**Table 4. Significance of various RHF levels (Source: NSW RFS, 2006)**



## 7.0 Bushfire Protection Measures in Combination



**Figure 10. Bushfire Planning Measures in Combination (Source: NSW RFS, 2006)**

Figure 10, taken from *Planning for Bushfire Protection* (NSW Rural Fire Service, 2006) illustrates that there are other factors and measures which need to be integrated to mutually support one another to provide protection against bushfire.

Simply removing the hazard is one possible way of removing risk to life and property, but this approach is not desirable. The safety of life and property can be achieved whilst retaining the natural amenity and value of bushland areas, provided these integrated bushfire protection measures are applied.

### 7.1 Building Construction and Design

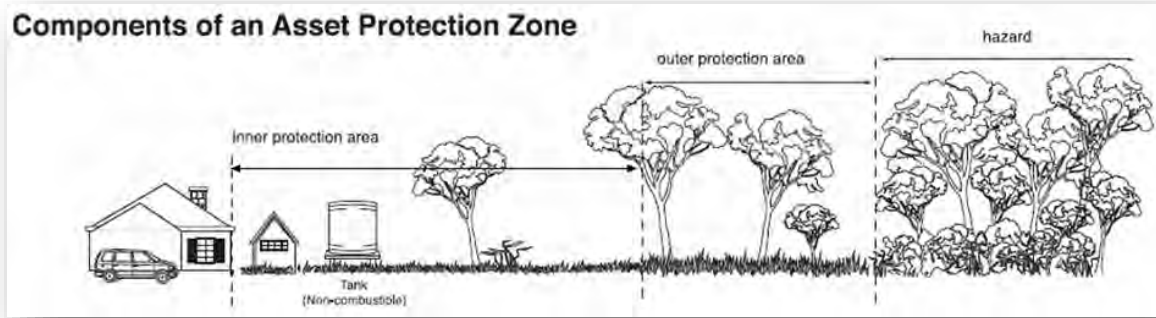
Figure 11 show the BAL contours for the site, and based on the final location of dwelling footprints, determines the minimum BAL rating for construction under AS3959-2018.



**Figure 11. BAL contours for Stages 8 - 10.**



## 7.2 Asset Protection Zones and Landscaping



**Figure 12. Components of an Asset Protection Zone (APZ)**

Asset protection zones provide the most strategically valuable defense against radiant heat and flame, and to a lesser extent embers. As shown in Figure 9, the relationship between radiant heat level and distance is not linear, and great reductions in radiant heat exposure can be gained with separation distance from unmanaged fuels.

The function of the Inner Protection Area (IPA) is to distance the Asset from Flame and Radiant Heat. The Outer Protection Area (OPA) separates ground fuels from canopy fuels, causing canopy fires to collapse and become ground fires.

The IPA should be maintained as free as possible of available fuel, through short mowing of grass and removal of fine flammable debris. Plants retained in or introduced into the IPA should be selected based on low combustibility, by virtue of high moisture content, low volatile oil content, high leaf mineral levels, large fleshy leaves, absence of shedding bark. Plant arrangement is just as important as low combustibility. Plants should be placed so as to not provide either vertical or horizontal connectedness of plant material. Appendix 1 provides examples of less hazardous plant species. Combustible vegetation shall not be allowed to come into contact with combustible parts of buildings. Trees shall not be allowed to directly overhang roof lines.

In this case the APZ on each Lot affected under AS3959 (identified in Figure 11) is to be entirely constructed and maintained as IPA.

The bio detention basins shall be managed in a low hazard state, with a predominantly mown surface, similar to Figure 13.





**Figure 13. Detention basins to be managed in a low hazard state.**

## **8.0 Recommendations**

1. The minimum construction level under AS3959 should be determined by Table 3 and Figure 11 of this report.  
Any structure built within 6m of residential buildings will also need to be constructed in accordance with this Standard. Builders shall warrant that they have a copy of this Standard, and that it shall be used consistently throughout the design and construction of any residential building.
2. The unbuilt portion of all Lots affected under AS3959, and identified in Figures 11, shall be managed as Inner Protection Area.
3. Residents should give consideration to their preparedness for fire (beyond the scope of this BAL Assessment) in terms of their emergency response plan, guidance for which is available upon request, or from material published and made available by Queensland Fire and Rescue Service.

## **9.0 Summary**

The identification of the area as “bushfire prone” by Council, invokes the application of the BCA, which calls up AS3959 as the relevant building standard for new dwellings and associated Class10a structures.

This report supersedes any existing BMP or BAL assessment in as far as prescribed BAL ratings is concerned.

## 10.0 References

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## Appendix 1

### Less combustible native plants list

**Source: Bowden, J (1999)**

# 10

APPENDIX

## Fire Retardant Native Plants

Form: S = Shrub; T = Tree; V = Vine; H = Herb; Gc = Ground cover; eO = epiphytic Orchid; eF = epiphytic Fern; tF = terrestrial Fern.

Fire-retardance: Lm = due to leaf water contents; St = due to salt content; Sl = succulent leaves

Comments: Wb = suitable for windbreak/fire barrier; Ad = suitable as addition to windbreak/fire barrier but not as main species; Us = suitable for understory of windbreak/fire barrier; Oa = suitable for open areas near houses; Sa = suitable for sheltered areas near house; Pf = suitable if protected from direct flames; De = Deciduous in winter, in flower or in dry periods

(-) = may not occur naturally in Pine Rivers Valley but has not proved invasive.

### Fire-Retardant Plants for Small Gardens

Scientific Name	Common Name	Form	Fire Retardance	Comments
<b>GYMNOSPERMS</b>				
<b>Zamaceae</b>				
<i>Lepidozamia peroffskyana</i>	Shining Burrawang	S	Lm	Us Sa
<i>Macrozamia lucida</i>	Pineapple Zamia	S	Lm	Us Sa
<i>Macrozamia miquelii</i>	Wild Pineapple	S	Lm	Us Oa Sa
<b>Agavaceae</b>				
<i>Cordyline petiolaris</i>	Broad-leaf Palm Lily	S	Lm	Us Sa
<i>Cordyline rubra</i>	Red-fruit Palm Lily	S	Lm	Us Sa
<i>Cordyline stricta</i>	Slender Palm Lily	S	Lm	Us Sa
<b>MONOCOTYLEDONS</b>				
<b>Amaryllidaceae</b>				
<i>Critium pedunculatum</i>	River Lily	H	Lm Sl	Us Oa Sa
<i>Doryanthes palmeri</i> (-)	Spear Lily	H	Lm Sl	Us Oa Sa
<i>Proiphys cunninghamii</i>	Brisbane Lily	H	Lm Sl	Us Sa
<b>Araceae</b>				
<i>Alocasia brisbanensis</i>	Conjevoi	H	Lm	Us Sa
<i>Gymnostachys anceps</i>	Settlers Flax	H	Lm	Us Sa
<i>Pothos longipes</i>	Pothos	V	Lm	Us Sa
<i>Typhonium brownii</i>	Stinking Lily	H	Lm	Us Sa
<b>Araceae</b>				
<i>Linosyris monostachya</i>	Walking Stick Palm	P	Lm	Us Sa

Scientific Name	Common Name	Form	Fire Retardance	Comments
<b>Commelinaceae</b>				
<i>Aneilema acuminatum</i>	Aneilema	H Gc	Lm	Us Sa
<i>Aneilema biflorum</i> (-)	Aneilema	H Gc	Lm	Us Sa
<i>Commelina cyanea</i>	Scurvy Plant	H Gc	Lm	Us Op Sa
<i>Pollia crispata</i>	Snake Weed	H Gc	Lm	Us Sa
<i>Pollia macrophylla</i>	Large Snake Weed	H Gc	Lm	Us Sa
<b>Dioscoreaceae</b>				
<i>Dioscorea transversa</i>	Native Yam	V	Lm	Us Sa
<b>Liliaceae</b>				
<i>Bulbine bulbosa</i> (-)	Bulbine Lily	H	Lm Sl	Oa
<i>Dianella brevipedunculata</i>	Blue Flax Lily	H	Lm	Us Oa Sa
<i>Dianella caerulea</i>	Blue Flax Lily	H	Lm	Us Oa Sa
<i>Dianella revoluta</i>	Flax Lily	H	Lm	Us Oa Sa
<i>Drymophila moorei</i> (-)	Orange Berry	H	Lm	Us Sa
<i>Tripladenia cunninghamii</i>	Bush Lily	H	Lm	Us Sa
<b>Orchidaceae</b>				
<i>Dendrobium gracilicaule</i>	Spotted Orchid	eO	Lm	Sa
<i>Dendrobium X gracillimum</i>	Natural Hybrid	eO	Lm	Sa
<i>Dendrobium monophyllum</i>	Lily of the Valley			
	Orchid	eO	Lm	Sa
<i>Dendrobium schoenitum</i>				
<i>(D. beckeri)</i>	Pencil Orchid	eO	Lm	Sa
<i>Dendrobium speciosum</i>	King Orchid	eO	Lm	Sa
<i>Dendrobium teretifolium</i>	Bridal Veil Orchid	eO	Lm	Sa
<i>Dendrobium tetragonum</i>	Spider Orchid	eO	Lm	Sa
<b>Philetiaceae</b>				
<i>Eustrephus latifolius</i>	Wombat Berry	V	Lm	Us Oa Sa
<i>Geitonoplesium cymosum</i>	Scrambling Lily	V	Lm	Us Sa
<b>Philydraceae</b>				
<i>Philydrum lanuginosum</i>	Frogmouth	aH	Lm Sl	Oa Wet areas
<b>Smilacaceae</b>				
<i>Smilax glycyphylla</i>	Sweet Satsparilla	V	Lm	Us Sa
<b>Xanthorrhoeaceae</b>				
<i>Lomandra confertifolia</i>	Mat Rush	H	Lm	Oa
<i>Lomandra hystrix</i>	Creek Mat Rush	H	Lm	Us Sa
<i>Lomandra longifolia</i>	Long-leaf Mat Rush	H	Lm	Us Oa Sa
<i>Lomandra filiformis</i>	Fine-leaf Mat Rush	H	Lm	Oa
<i>Lomandra multiflora</i>	Many-flower Mat Rush	H	Lm	Oa
<i>Lomandra spicata</i>	Mountain Mat Rush	H	Lm	Us Oa Sa
<b>Zingiberaceae</b>				
<i>Alpinia arundeliana</i>	Wild Ginger	H	Lm	Us Sa
<i>Alpinia coerulea</i>	Native Ginger	H	Lm	Us Sa



Scientific Name	Common Name	Form	Fire Retardance	Comments
<b>DICOTYLEDONS</b>				
<b>Aizoaceae</b>				
<i>Carpobrotus glaucescens</i>	Pig Face	H Gc	Lm SI	Oa
<b>Acanthaceae</b>				
<i>Graptophyllum excelsum</i> (-)	Scarlet Fuchsia	S	Lm	Us Sa
<i>Graptophyllum spinigerum</i>	Samford Holly	S	Lm	Us Sa
<i>Pseuderanthemum tenellum</i>	Pseuderanthemum	H	Lm	Us Sa
<i>Pseuderanthemum variabile</i>	Love Flower	H	Lm	Us Sa
<b>Apiaceae</b>				
<i>Centella australis</i>	Pennywort	H Gc	Lm	Oa
<i>Hydrocotyle acutiloba</i>	Pennywort	H Gc	Lm	Us Sa
<i>Hydrocotyle pedicellosa</i>	Pennywort	H Gc	Lm	Us Sa
<b>Apocynaceae</b>				
<i>Alyxia ruscifolia</i>	Chain fruit	S	Lm	Us Sa
<i>Carissa ovata</i>	Current Bush	S	Lm	Us Oa Sa
<i>Neisosperma poweri</i> (-)	Milkbush	S	Lm	Us Sa
<i>Ochrosia moorei</i> (-)	Southern Ochrosia	S	Lm	Us Sa
<i>Parsonsia lenticellata</i>	Narrow-leaf Silkpod	V	Lm	Us Sa
<i>Parsonsia litacina</i>	Delicate Silkpod	V	Lm	Us Sa
<i>Tabernaemontana pandacagu</i>	Banana Bush	S	Lm	Us Sa
<b>Aristolochiaceae</b>				
<i>Aristolochia</i> sp. aff. <i>pubera</i>	Pipe Vine	V	Lm	Us Sa
<i>Aristolochia praevanosa</i>	Richmond Birdwing Vine	V	Lm	Us Sa
<b>Asclepiadaceae</b>				
<i>Hoya australis</i>	Wax Flower	V	Lm	Us Sa
<i>Marsdenia longiloba</i>	Slender Milk Vine	V	Lm	Us Sa
<i>Secamone elliptica</i>	Corky Milk Vine	V	Lm	Us Sa
<i>Tylophora paniculata</i>	Thin-leaf Tylophora	V	Lm	Us Sa
<b>Bignoniaceae</b>				
<i>Pandorea floribunda</i>	New sp. Pine R	V	Lm	Us Oa Sa
<i>Pandorea jasminoides</i>	Bower of Beauty	V	Lm	Us Oa Sa
<b>Caesalpiniaceae</b>				
<i>Cassia artemisioides</i> (-)	Silver Cassia	S		Oa
<b>Campanulaceae</b>				
<i>Lobelia trigonocaulis</i>	Forest Lobelia	H Gc	Lm	Us Oa
<i>Wahlenbergia gracilis</i>	Bluebells	H		Oa
<b>Capparidaceae</b>				
<i>Capparis arborea</i>	Native Caper	S/T	Lm	Us Sa
<i>Capparis sarmentosa</i>	Scrambling Caper	V	Lm	Us Sa

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<b>Celastraceae</b>				
<i>Cassine australis</i>	Red Olive Berry	S/T	Lm	Us Sa
<i>Denhamia celastroides</i>	Orange Boxwood	S/T	Lm	Us Sa
<i>Denhamia pittosporoides</i>	Orange Boxwood	S/T	Lm	Us Sa
<i>Maytenus bilocularis</i>	Orangebark	S/T	Lm	Us Sa
<b>Chenopodiaceae</b>				
<i>Einadia hastata</i>	Berry Salt Bush	S Gc	St	Oa
<i>Enchylaena tomentosa</i>	Ruby Salt Bush	S Gc	St SI	Oa
<i>Halosarcia indica</i>	Samphire	S Gc	St SI	Oa Salty soil
<i>Sarcocornia quinqueflora</i>	Samphire	S Gc	St SI	Oa Salty soil
<i>Suaeda australis</i>	Seablite	S Gc	St SI	Oa Salty soil
<i>Suaeda arbusculoides</i>	Jellybean Plant	S Gc	St SI	Oa Salty soil
<b>Convolvulaceae</b>				
<i>Convolvulus erubescens</i>	Australian Bindweed	V	Lm	Oa
<i>Dichondra repens</i>	Kidney Weed	H Gc	Lm	Us Sa
<i>Polymeria calycina</i>	Swamp Bindweed	V	Lm	Oa
<b>Cunoniaceae</b>				
<i>Aphanopetalum resinosum</i>	Gum Vine	V Gc	Lm	Us Sa
<i>Vesselowskyia rubifolia</i> (-)	Southern Marara	S/T	Lm	Us Sa
<b>Davidsoniaceae</b>				
<i>Davidsonia pruriens</i> (-)	Davidson's Plum	T	Lm	Us Sa
<b>Dilleniaceae</b>				
<i>Hibbertia aspera</i>	Rough Guinea Flower	S	Lm	Oa
<i>Hibbertia dentata</i>	Toothed Guinea Flower	V	Lm	Us Oa Sa
<i>Hibbertia linearis</i>	Showy Guinea Flower	S	Lm	Oa
<i>Hibbertia linearifolia</i>	Hoary Guinea Flower	S	Lm	Oa
<i>Hibbertia stricta</i>	Erect Guinea Flower	S	Lm	Oa
<i>Hibbertia scandens</i>	Twining Guinea Flower	V	Lm	Us Oa Sa
<b>Elaeocarpaceae</b>				
<i>Elaeocarpus reticulatus</i>	Blueberry Ash	S/T	Lm	Us Oa Sa
<b>Epacridaceae</b>				
<i>Trochocarpa laurina</i>	Tree Heath	S/T	Lm	Us Sa
<b>Escalloniaceae</b>				
<i>Abrophyllum ornans</i>	Native Hydrangea	S	Lm	Us Sa
<i>Polyosma cunninghamii</i>	Featherwood	S/T	Lm	Us Sa
<b>Euphorbiaceae</b>				
<i>Acalypha capillipes</i>	Small-leaf Acalypha	S	Lm	Us Sa
<i>Acalypha eremorum</i>	Native Acalypha	S	Lm	Us Sa
<i>Acalypha nemorum</i>	Southern Acalypha	S	Lm	Us Sa
<i>Actephila lindleyi</i>	Actephila	S/T	Lm	Us Sa
<i>Alchornea ilicifolia</i>	Native Holly	S	Lm	Us Sa
<i>Breynia oblongifolia</i>	Native Coffee Bush	S	Lm	Us Oa Sa
<i>Cleistanthes cunninghamii</i>	Cleistanthes	S/T	Lm	Us Sa

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<i>Croton phlebalioides</i>	Narrow-leaf Croton	S	Lm	Us Sa
<i>Croton verrucosus</i>	Native Cascarilla	S/T	Lm	Us Sa
<i>Macaranga tanarius</i>	Macaranga	S/T	Lm	Us
<i>Mallotus laevis</i>	Scrub Odour Bush	S/T	Lm	Us Sa
<i>Oncocalymmun nutans</i> ( <i>O. populifolius</i> )	Old Bleeding Heart	S/T	Lm	Us Sa
<b>Eupomatiaceae</b>				
<i>Eupomatia bennettii</i>	Small Bolwarra	S	Lm	Us Sa
<i>Eupomatia laurina</i>	Bolwarra	S	Lm	Us Sa
<b>Escaloniaeaceae</b>				
<i>Cuttisia viburnea</i> (-)	Native Elderberry	T	Lm	Us Sa
<b>Fabaceae</b>				
<i>Abrus precatorius</i>	Crabs Eye Vine	V	Lm	Us Oa St
<i>Aotus lanigera</i>	Pointed Aotis	S	Lm	Oa Sa
<i>Glycine clandestina</i>	Twining Glycine	V	Lm	Oa
<i>Glycine tomentella</i>	Woolly Glycine	V	Lm	Oa
<i>Hardenbergia violacea</i>	False Sarsparilla	V	Lm	Oa
<i>Hovea linearis</i>	Common Hovea	S	Lm	Oa
<i>Hovea longipes</i> (-)	Brush Hovea	S	Lm	Oa
<i>Indigophora australis</i>	Australian Indigo	S	Lm	Oa
<i>Kennedia rubicunda</i>	Dusky Coral Pea	V	Lm	Oa
<i>Oxylobium ilicifolium</i> (-)	Holly Pea	S	Lm	Oa
<i>Oxylobium scandens</i> (-)	Netted Shaggy Pea	S	Lm	Oa
<i>Pultenaea retusa</i>	Blunt-leaf Bush Pea	S	Lm	Oa
<i>Pultenaea spinulosa</i> (-)	Prickly Pea	S	Lm	Oa
<i>Pultenaea villosa</i> (-)	Hairy Bush Pea	S	Lm	Oa
<i>Swinsona galegifolia</i>	Darling Pea	S	Lm	Oa
<b>Goodeniaceae</b>				
<i>Goodenia rotundifolia</i>	Star Goodenia	H Gc	Lm	Oa
<i>Scaevola aemula</i> (-)	Fairy Fan Flower	H Gc	Lm	Oa
<i>Scaevola albida</i> (-)	Fan Flower	H Gc	Lm	Oa
<i>Scaevola calandulacea</i> (-)	Scented Fan Flower	H Gc	Lm	Oa
<i>Scaevola ramosissima</i> (-)	A Fan Flower	H Gc	Lm	Oa
<b>Lamiaceae</b>				
<i>Ajuga australis</i>	Southern Bugle	H	Lm	Oa
<i>Plectranthus argenteus</i> (-)	Silver Native Coleus	H	Lm	Us Sa
<i>Plectranthus graveolens</i>	Native Coleus	H	Lm	Us Sa
<i>Plectranthus parviflorus</i>	Cockspur Flower	H	Lm	Us Sa
<i>Prostanthera ovalifolia</i>	Oval-leaf Mint Bush	S	Lm	Os Sa
<b>Lauraceae</b>				
<i>Cryptocarya laevigata</i>	Glossy Laurel	S/T	Lm	Us Sa
<i>Cryptocarya meisneriana</i>	Thick-leaf Laurel	S/T	Lm	Us Sa
<b>Leeaceae</b>				
<i>Leea indica</i> (-)	Bandicoot Berry	S	Lm	Us Sa

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<b>Lythraceae</b>				
<i>Lagerstroemia archeriana</i> (-)	Native Crepe Myrtle	S/T	Lm	Us Oa Sa De
<b>Malvaceae</b>				
<i>Pavonia hastata</i> (-)	Pavonia	S	Lm	Oa Sa
<i>Hibiscus heterophyllus</i>	Native Rosella	S/T	Lm	Us Sa
<i>Hibiscus geranioides</i> (-)		S	Lm	Oa
<b>Melastomaceae</b>				
<i>Melastoma affine</i>	Pink Lasiandra	S	Lm	Us Sa Oa
<b>Meliaceae</b>				
<i>Turraca pubescens</i> ( <i>brownii</i> )	Native Witch-Hazel	S/T	Lm	Us Sa
<b>Menispermaceae</b>				
<i>Pleogyne australis</i>	Pleogyne	V	Lm	Us Sa
<b>Mimosaceae</b>				
<i>Acacia complanata</i>	Flat-stem Wattle	S		Oa Pf
<i>Acacia hubbardiana</i>	Yellow Prickly Moses	S		Oa Pf
<i>Acacia irrorata</i>	Blue Skin	S		Oa Pf
<i>Acacia myrtifolia</i>	Myrtle Wattle	S		Oa Pf
<i>Acacia suaveolens</i>	Sweet Wattle	S		Oa Pf
<i>Acacia ulicifolia</i>	Prickly Moses	S		Oa Pf
<i>Archidendron lovelliae</i> (-)	Baconwood	S/T	Lm	Us Sa
<b>Monimiaceae</b>				
<i>Wilkiea huegeliana</i>	Tetra Beech	S/T	Lm	Us Sa
<i>Wilkiea macrophylla</i>	Large-leaf Wilkiea	S/T	Lm	Us Sa
<b>Myoporaceae</b>				
<i>Erenophila debilis</i>	Winter Apple	S Gc	Lm	Os
<i>Myoporum boninense</i> ( <i>M. ellipticum</i> )	Boobialla	S Gc	Lm	Os
<i>Myoporum montanum</i>	Mountain Boobialla	S	Lm	Os
<b>Myrsinaceae</b>				
<i>Aegiceras corniculatum</i>	Milky Mangrove	S/T	Lm St	Oa Constal
<i>Rapanea howittiana</i>	Scrub Muttonwood	S/T	Lm	Us Sa
<i>Rapanea subsessilis</i>	Red Muttonwood	S/T	Lm	Us Sa
<b>Myrtaceae</b>				
<i>Archirohodomyrtus beckeri</i> (-)	Rose Myrtle	S	Lm	Us Sa
<i>Austroryrtus fragrantissima</i> (-)	Sweet Myrtle	T	Lm	Us Sa
<i>Austroryrtus hillii</i>	Scaly Myrtle	S/T	Lm	Us Sa
<i>Austroryrtus inophloia</i>	Thread-bark Myrtle	S/T	Lm	Us Sa
<i>Austroryrtus aff. lasioclada</i> (-)	Velvet Myrtle	T	Lm	Us Sa
<i>Austroryrtus metrosideros</i> (-)		S	Lm	Us Sa
<i>Ptilidostigma glabrum</i> (-)	Plum Myrtle	S	Lm	Us Sa
<i>Ptilidostigma rhytisperma</i>	Small-leaf Plum Myrtle	S	Lm	Us Sa
<i>Rhodamnia acuminata</i> (-)	Cooloola Ironwood	S	Lm	Us Sa



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<i>Rhodamnia dumicola</i>	Rib-fruit Malletwood	S/T	Im	Us Sa
<i>Rhodamnia maidenii</i> (-)	Smooth Scrub Turpentine	S	Im	Us Sa
<i>Rhodomyrtus psidioides</i>	Native Guava	S	Im	Us Sa
<i>Syzygium wilsonii</i> (-)	Powder-puff Lilly Pilly	S	Im	Us Sa
<b>Nyctaginaceae</b>				
<i>Pisonia aculeata</i>	Native Bougainvillea	V	Im	Us Sa
<b>Oleaceae</b>				
<i>Jasminum simplicifolium</i>	Slender Jasmine	V	Im	Us Sa
<i>Notelaea ovata</i>	Netted Mock Olive	S	Im	Us Sa
<i>Notelaea venosa</i>	Veined Mock Olive	S	Im	Us Sa
<b>Passifloraceae</b>				
<i>Passiflora aurantia</i>	Red Passion Flower	V	Im	Us Oa Sa
<i>Passiflora herbertaina</i>	Yellow Passion Flower	V	Im	Us Oa Sa
<b>Peperoniaceae</b>				
<i>Peperomia blanda</i> ( <i>leptostachya</i> )	Native Peperomia	H	Im	Us Sa
<i>Peperomia tetraphylla</i>	Native Peperomia	H	Im	Us Sa
<b>Pittosporaceae</b>				
<i>Citriobatus linearis</i>	Black-fruit Thornbush	S	Im	Us Sa
<i>Citriobatus paucifloris</i>	Orange Thornbush	S	Im	Us Sa
<i>Pittosporum revolutum</i>	Brisbane Laurel	S	Im	Us/Wb Sa/Oa
<b>Proteaceae</b>				
<i>Banksia oblongifolia</i>	Dwarf Banksia	S		Oa Pf
<i>Banksia robur</i>	Swamp Banksia	S		Oa Pf
<i>Grevillea leptophylla</i>	Wallum Grevillea	S		Oa Pf
<i>Grevillea 'Robyn Gordon'</i>	G. 'Robyn Gordon'	S		Oa Pf
<i>Grevillea sericea</i>	Pink Spider Flower	S		Oa Pf
<i>Grevillea 'Shirley Howie'</i>	G. 'Shirley Howie'	S		Oa Pf
<i>Grevillea 'Superb'</i>	G. 'Superb'	S		Oa Pf
<i>Hakea florulenta</i>	Hakea	S		Oa Pf
<i>Hakea purpurea</i>	Purple Hakea	S		Oa Pf
<i>Lambertia formosa</i> (-)	Mountain Devil	S		Oa Pf
<i>Lomatia silaifolia</i>	Crinkle-Bush	S		Oa Pf
<i>Stenocarpus angusifolia</i> (-)		S		Oa Pf
<b>Rhizophoraceae</b>				
<i>Bruguiera gymnorhiza</i>	Orange Mangrove	S/T	Lm St	Oa Coastal
<i>Ceriops tagal</i>	Yellow Mangrove	S/T	Lm St	Oa Coastal
<i>Rhizophora stylosa</i>	Stilted Mangrove	S/T	Lm St	Oa Coastal
<b>Rosaceae</b>				
<i>Rubus parvifolia</i>	Pink Raspberry	S	Im	Oa
<i>Rubus rosifolius</i>	Native Raspberry	S	Im	Us Sa
<b>Rubiaceae</b>				
<i>Canthium coprosmoides</i>	Coast Canthium	S/T	Im	Us Oa Sa
<i>Canthium lamprophyllum</i>	Large-leaf Canthium	S/T	Im	Us Sa

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<i>Canthium microphyllum</i>	Small-leaf Canthium	S	Im	Us Sa
<i>Ixora bleckleri</i>	Brown Coffeewood	S/T	Im	Us Sa
<i>Morinda acutifolia</i>	Veiny Morinda	V	Im	Us Sa
<i>Morinda jasminoides</i>	Sweet Morinda	V	Im	Us Sa
<i>Pavetta australiensis</i>	Pavetta	S	Im	Us Sa
<i>Psychotria daphnoides</i>	Smooth Psychotria	S	Im	Us Sa
<i>Psychotria loniceroides</i>	Hairy Psychotria	S	Im	Us Sa
<i>Psychotria simmondsiana</i>	Small Psychotria	S	Im	Us Sa
<i>Randia benthamiana</i>	Native Gardenia	S	Im	Us Sa
<i>Randia chartacea</i>	Narrow-leaf Gardenia	S	Im	Us Sa
<b>Rutaceae</b>				
<i>Clausena brevistyla</i> (-)	Clausena	S	Im	Us Sa
<i>Microcitrus australasica</i> (-)	Finger Lime	S	Im	Us Sa
<i>Murraya ovatifoliolata</i> (-)	Native Murraya	S/T	Im	Us Sa
<i>Phebalium woomybe</i> (-)	Phebalium	S	Im	Oa
<b>Sambucaceae</b>				
<i>Sambucus australasica</i>	Yellow Elderberry	S	Im	Us Sa
<b>Sapindaceae</b>				
<i>Alecryon coriaceous</i> (-)	Beach Bird's Eye	S/T	Im	Wb Oa
<i>Arytera microphylla</i> (-)	Dwarf Coogara	S	Im	Us Sa
<i>Cupaniopsis newmanii</i> (-)	Long-leaf Tuckeroo	T	Im	Us Sa Oa
<i>Cupaniopsis serrata</i>	Rusty Tuckeroo	S/T	Im	Us Sa Oa
<i>Cupaniopsis wadswoorthii</i> (-)	Dwarf Tuckeroo	S	Im	Us Sa
<i>Harpullia alata</i> (-)	Wing-leaf Tulip	S	Im	Us Sa
<i>Mischocarpus sundaticus</i>	Red Pear-fruit	T	Im	Us Sa
<b>Sapotaceae</b>				
<i>Planchonella myrsinoides</i>	Yellow Plumwood	S/T	Im	Us Sa
<b>Scrophulariaceae</b>				
<i>Artenema fimbriatum</i>	Koala bells	H	Im	Oa
<b>Tetragoniaceae</b>				
<i>Tetragonia tetragonioides</i>	Native Spinach	H Gc	St Sc	Oa
<b>Solanaceae</b>				
<i>Dubboisia myoporoides</i>	Corkwood	S/T	Im	Us Sa
<i>Solanum aviculare</i>	Kangaroo Apple	S	Im	Us Sa Oa
<i>Solanum densevestitum</i> (-)	Furry Nightshade	S	Im	Us Sa
<i>Solanum stelligerum</i> (-)	Star Nightshade	S	Im	Us Sa
<b>Sterculiaceae</b>				
<i>Brachyhiton bidwillii</i>	Little Kurrajong	S	Im	Us Sa Oa
<i>Commersonia fraserii</i>	Scrub Kurrajong	S	Im	Us Sa Oa
<b>Symplocaceae</b>				
<i>Symplocos baeuerlenii</i> (-)	Shrubby Hazelwood	S	Im	Us Sa



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<b>Thymeliaceae</b>				
<i>Phaleria clerodendron</i> (-)		S	Lm	Us Sa
<i>Phaleria chermisideana</i>	Scrub Daphne	S/T	Lm	Us Sa
<i>Pimelea linifolia</i>	Slender Rice Flower	S		Oa
<i>Wikstroemia indica</i>	Tie Bush	S	Lm	Us Oa Sa
<b>Tiliaceae</b>				
<i>Corchorus cunninghamii</i>	Corchorus	S	Lm	Us Sa
<b>Urticaceae</b>				
<i>Elatostema reticulatum</i>	Rainforest Spinach	H	Lm	Us Sa
<i>Elatostema stipitatum</i> (-)	Small Soft Nettle	H	Lm	Us Sa
<i>Pipturus argenteus</i>	Native Mulberry	S/T	Lm	Us Sa
<b>Verbenaceae</b>				
<i>Callicarpa pedunculata</i>	Velvet-leaf	S	Lm	Us Sa
<i>Clerodendrum floribundum</i>	Lolly Bush	S/T	Lm	Us Oa Sa
<i>Clerodendrum tomentosum</i>	Hairy Lolly Bush	S/T	Lm	Us Oa Sa
<i>Phyla nodiflora</i> (-)	Condamine Couch	H Gc	Lm	Oa
<i>Vitex ovata</i> (-)	Vitex	S Gc	Lm	Oa
<b>Violaceae</b>				
<i>Viola betonicifolia</i>	Purple Violet	H	Lm	Us Sa
<i>Viola hederacea</i>	Native Violet	H	Lm	Us Sa
<b>Vitaceae</b>				
<i>Cayratia acris</i>	Hairy Water Vine	V	Lm	Us Sa
<i>Cayratia clematidea</i>	Slender Grape	V	Lm	Us Oa Sa
<i>Cayratia euryneia</i>	Soft Water Vine	V	Lm	Us Sa
<i>Cissus opaca</i>	Small-leaf Water Vine	V	Lm	Us Oa Sa
<b>Winteraceae</b>				
<i>Tasmannia insipida</i>	Pepper Bush	S	Lm	Us Sa
<b>PTERIDOPHYTES</b>				
<b>Asplenaceae</b>				
<i>Asplenium attenuatum</i>	A Spleenwort	F	Lm	Sa
<i>Asplenium australasicum</i>	Crow's Nest Fern	eF	Lm	Sa
<b>Osmondaceae</b>				
<i>Todea barbara</i>	King Fern	tF	Lm	Us Sa
<b>Polypodiaceae</b>				
<i>Drynaria rigidula</i>	Basket Fern	eF	Lm	Sa
<i>Phymatodes scandens</i>	Scented Climbing Fern	tF	Lm	Sa
<i>Platyserium bifurcatum</i>	Elkhorn	eF	Lm	Sa
<i>Platyserium superbum</i>	Staghorn	F	Lm	Sa
<i>Pyrosia confluenta</i>	Felt Fern	eF	Lm	Sa
<i>Pyrosia rupestris</i>	Rock Felt Fern	eF	Lm	Sa

## Fire-Retardant Plants for Medium Gardens

The following plants can be used in addition to the list of plants for small gardens.

Scientific Name	Common Name	Form	Fire Retardance	Comments
<b>MONOCOTYLEDONS</b>				
<b>Areaceae</b>				
<i>Archontophoenix cunninghamii</i>	Picabeen Palm	P	Lm	Ad
<i>Calamus muelleri</i>	Lawyer Cane Vine	P	Lm	Ad
<i>Livistona australis</i>	Cabbage Palm	P	Lm	Ad
<b>Smilacaceae</b>				
<i>Ripogonum fawcettianum</i>	Small Supplejack	V	Lm	Sa
<i>Smilax australis</i>	Barb-wire Vine	V	Lm	Sa Oa
<b>DICOTYLEDONS</b>				
<b>Akaniaceae</b>				
<i>Akania lucens</i>	Turnipwood	T	Lm	Us
<b>Alangiaceae</b>				
<i>Alangium villosum polyosmoides</i>	Muskwood	T	Lm	Us
<i>Alangium villosum tomentosum</i>	Muskwood	T	Lm	Us
<b>Annonaceae</b>				
<i>Polyalthia nitidissima</i>	Canary Beech	T	Lm	Us
<b>Apocynaceae</b>				
<i>Alstonia constricta</i>	Quinine Tree	T	Lm	Us
<i>Melodinus acutiflorus</i>	Merangarra	V	Lm	Sa
<i>Melodinus australis</i>	Southern Melodinus	V	Lm	Sa
<b>Araliaceae</b>				
<i>Cephalalaria cephalobotrys</i>	Climbing Panax	V	Lm	Sa
<b>Bignoniaceae</b>				
<i>Pandorea pandorana</i>	Wonga Vine	V	Lm	Oa Sa
<b>Caesalpinjiaceae</b>				
<i>Barklya syringifolia</i>	Crown of Gold Tree	T	Lm	Us Sa Oa
<i>Cassia tomentella</i> (-)	Velvet Bean	S/T	Lm	Us Oa
<b>Cunoniaceae</b>				
<i>Callicoma serratifolia</i> (-)	White Alder	S/T	Lm	Us
<b>Dilleniaceae</b>				
<i>Tecomanthe hillii</i> (-)	Fraser Island Climber	V	Lm	Su

Scientific Name	Common Name	Form	Fire Retardance	Comments
<b>Ebenaceae</b>				
<i>Diospyros australis</i>	Black Plum	T	Lm	Us/Wb
<i>Diospyros geminata</i>	Scaly Ebony	T	Lm	Us/Wb
<i>Diospyros mabacea</i> (-)	Red-fruited Ebony	T	Lm	Us
<b>Escalloniaceae</b>				
<i>Anopteryx macleanus</i> (-)	Queensland Laurel	T	Lm	Us
<i>Polyalthia nitidissima</i>	Canary Beech	T	Lm	Us
<b>Euphorbiaceae</b>				
<i>Claoxylon australe</i>	Brittlewood	S/T	Lm	Us
<i>Croton achroynchioides</i>	Thick-leaved Croton	S/T	Lm	Us
<i>Croton insularis</i>	Queensland Cascarilla	S/T	Lm	Us
<i>Croton stigmatosus</i>	White Croton	T	Lm	Us
<b>Fabaceae</b>				
<i>Erythrina vespertilio</i>	Bat's Wing Coral Tree	T	Lm	Ad De
<b>Hernandiaceae</b>				
<i>Hernandia bivalvis</i>	Cudgerie	T	Lm	Wb
<b>Lauraceae</b>				
<i>Cryptocarya bidwillii</i>	Yellow Laurel	T	Lm	Wb
<i>Cryptocarya meisneriana</i>	Thick-leaf Laurel	T	Lm	Wb
<i>Cryptocarya sclerophylla</i>	Boonah Laurel	T	Lm	Wb
<i>Cryptocarya triplinervis</i>	Brown Laurel	T	Lm	Wb
<i>Cryptocarya triplinervis</i> var. <i>pubens</i>	Hairy Brown Laurel	T	Lm	Wb
<b>Meliaceae</b>				
<i>Owenia venosa</i>	Crow's Apple	T	Lm	Us/Wb
<i>Synoum glandulosum</i>	Scentless Rosewood	S/T	Lm	Us
<i>Turraea pubescens</i> (T. brownii)	Native Witch-Hazel	T	Lm	Us
<b>Menispermaceae</b>				
<i>Stephania japonica</i> var. <i>discolor</i>	Tape Vine	V	Lm	Sa Oa
<b>Mimosaceae</b>				
<i>Acacia aulacocarpa</i>	Hickory Wattle	T	Lm	Wb/Pf
<i>Acacia implexa</i>	Light Wood	T	Lm	Wb/Pf
<i>Acacia melanoxylon</i>	Blackwood	T	Lm	Wb/Pf
<i>Acacia cincinnata</i>	Wattle	S/T	Lm	Wb/Pf
<i>Pararchidendron pruinosum</i>	Snowwood	T	Lm	Us/Wb
<b>Moraceae</b>				
<i>Ficus coronata</i>	Creek Sandpaper Fig	T	Lm	Us/Wb
<i>Ficus fraseri</i>	A Sandpaper Fig	T	Lm	Us/Wb
<i>Ficus opposita</i>	A Sandpaper Fig	T	Lm	Us/Wb
<i>Streblus brunonianus</i> (S. pendulinus)	Whalebone Tree	T	Lm	Us/Wb

Scientific Name	Common Name	Form	Fire Retardance	Comments
<b>Myoporaceae</b>				
<i>Myoporum acuminatum</i>	Coast Boobialla	S/T	Lm	Wb Oa
<b>Myrsinaceae</b>				
<i>Rapanea variabilis</i>	Muttonwood	T	Lm	Us
<b>Myrtaceae</b>				
<i>Acmena smithii</i> (small varieties)	Creek Lilly Pilly	T	Lm	Us/Wb
<i>Decaspermum humile</i>	Silky Myrtle	S/T	Lm	Us
<i>Metrosideros queenslandica</i> (-)	Pink Myrtle	T	Lm	Us
<i>Rhodamnia rubescens</i>	Brown Malletwood	T	Lm	Us/Wb
<i>Syzygium hodgkinsonia</i> (-)	Smooth-bark Rose Apple	T	Lm	Us
<b>Oleaceae</b>				
<i>Notelaea johnsonii</i>	Veinless Mock Olive	S/T	Lm	Us
<i>Notelaea longifolia</i>	Large Mock Olive	S/T	Lm	Us/Wb
<i>Notelaea microcarpa</i>	Velvet Mock Olive	S/T	Lm	Us/Wb
<b>Pittosporaceae</b>				
<i>Hymenosporum flavum</i>	Native Frangipani	T	Lm	Us Ad
<i>Pittosporum undulatum</i>	Mock Orange	T	Lm	Us/Wb
<b>Proteaceae</b>				
<i>Buckinghamia celsissima</i> (-)	Ivory Curl Flower	T	Lm	Wb
<i>Grevillea helmsiae</i> (-)	Red Boppel Nut	T	Lm	Us Pf
<i>Hicksbeachia pinnatifolia</i> (-)	Tree Lomatia	T	Lm	Us Ad Pf
<i>Lomatia arborescens</i> (-)	Queensland Nut	S/T	Lm	Us Pf
<i>Macadamia integrifolia</i>	Maroochy Nut	T	Lm	Wb
<i>Macadamia ternifolia</i>	Rough Shell Bush Nut	T	Lm	Wb
<i>Macadamia tetraphylla</i>	Spice Bush	T	Lm	Wb
<i>Triunia youngiana</i>		T	Lm	Us
<b>Rubiaceae</b>				
<i>Coelospermum paniculatum</i>	Coelospermum	V	Lm	Sa
<i>Hodgkinsonia ovatiflora</i>	Golden Ash	T	Lm	Us/Wb
<b>Rununculaceae</b>				
<i>Clematis glycinoides</i>	Headache Vine	V	Lm	Sa
<b>Rutaceae</b>				
<i>Acronychia imperforata</i>	Coast Aspen	S/T	Lm	Us/Wb
<i>Acronychia pauciflora</i>	Soft Acronychia	S/T	Lm	Us
<i>Microcitrus australis</i>	Round Lime	S	Lm	Us
<b>Sapindaceae</b>				
<i>Alectryon connatus</i>	Alectryon	T	Lm	Wb Show at first
<i>Alectryon subcinereus</i>	Wild Quince	T	Lm	Wb
<i>Alectryon subdentatus</i>	Holly-leaf Bird's Eye	T	Lm	Wb
<i>Alectryon tomentosus</i>	Hairy Bird's Eye	T	Lm	Wb
<i>Arytera distylis</i>	Twin-leaf Coogera	T	Lm	Wb



Scientific Name	Common Name	Form	Fire Retardance	Comments
<i>Arytera divaricata</i>	Rose Tamarind	T	Lm	Wb
<i>Arytera foveolata</i>	Pitted Coogera	T	Lm	Wb
<i>Cupaniopsis parvifolia</i>	Small-leaf Tuckeroo	T	Lm	Wb
<i>Cupaniopsis shirleyana</i> (-)	Wedge-leaf Tuckeroo	T	Lm	Us/Wb
<i>Cupaniopsis tomentella</i> (-)	Boonah Tuckeroo	T	Lm	Wb
<i>Elattostachys nervosa</i>	Beetroot	T	Lm	Us/Wb
<i>Elattostachys xylocarpa</i>	White Tamarind	T	Lm	Wb
<i>Guioa semiglaucula</i>	Wild Quince	T	Lm	Wb
<i>Lepiderema pulchella</i> (-)	Fine-leaf Tuckeroo	T	Lm	Wb
<i>Mischocarpus australis</i>	Red Pear-fruit	T	Lm	Wb
<i>Toechima tenax</i>	Scrub Teak	T	Lm	Wb
<b>Sapotaceae</b>				
<i>Planchonella chartacea</i>	Thin-leaf Plum	S/T	Lm	Us Sa
<i>Planchonella cotinifolia</i>	Small-leaf Plum	S/T	Lm	Us Sa
<b>Simaroubaceae</b>				
<i>Guifsoyia monostylis</i>	Native Plum	T	Lm	Us
<b>Symplocaceae</b>				
<i>Symplocos thwaitesii</i>	Buff Hazelwood	S/T	Lm	Us
<b>PTERIDOPHYTES</b>				
<b>Cyatheaceae</b>				
<i>Cyathea australis</i>	Rough Tree Fern	tF	Lm	Us
<i>Cyathea cooperi</i>	Common Tree Fern	tF	Lm	Us
<i>Cyathea leichhardtiana</i>	Prickly Tree Fern	tF	Lm	Us

### Fire-Retardant Plants for Large Gardens, Acreage Blocks, Parks and Farms

The following plants can be used in addition to the lists of plants for small and medium gardens.

Scientific Name	Common Name	Form	Fire Retardance	Comments
<b>GYMNOSPERMS</b>				
<b>Araucariaceae</b>				
<i>Agathis robusta</i> (-)	Qld Kauri	T	Lm	Pf - resin
<i>Araucaria bidwillii</i> (-)	Bunya Pine	T	Lm	Pf - resin
<i>Araucaria cunninghamii</i>	Hoop Pine	T	Lm	Pf - resin
<b>Podocarpaceae</b>				
<i>Podocarpus elatus</i>	Brown or Plum Pine	T	Lm	Pf - resin
<b>MONOCOTYLEDONS</b>				
<b>Araceae (Palmae)</b>				
<i>Calamus muelleri</i>	Lawyer Cane Vine	V	Lm	Sa Oa

Scientific Name	Common Name	Form	Fire Retardance	Comments
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<b>Flagellariaceae</b>				
<i>Flagellaria indica</i>	Supplejack	V	Lm	Sa
<b>Pandanaceae</b>				
<i>Freyinetia excelsa</i>	Climbing Pandanus	V	Lm	Sa
<i>Freyinetia scandens</i>	Climbing Pandanus	V	Lm	Sa
<b>Smilacaceae</b>				
<i>Ripogonum album</i>	White Supplejack	V	Lm	Sa
<i>Ripogonum brevifolium</i>	Supplejack	V	Lm	Sa
<i>Ripogonum discolor</i>	Prickly Supplejack	V	Lm	Sa
<i>Ripogonum elseyanum</i>	Hairy Supplejack	V	Lm	Sa

### DICOTYLEDONS

<b>Anacardiaceae</b>				
<i>Euroschinus falcata</i>	Ribbonwood	T	Lm	Wb
<i>Rhodospaera rhodanthema</i>	Deep Yellowwood	T	Lm	Wb
<b>Annonaceae</b>				
<i>Melodorum leichhardtii</i> ( <i>Rauwenhoffia</i> L.)	Zig-Zag Vine	V	Lm	Sa
<b>Apocynaceae</b>				
<i>Alstonia constricta</i>	Quinine Tree	T	Lm	Wb
<i>Melodinus acutiflorus</i>	Merangarra	V	Lm	Sa
<i>Melodinus australis</i>	Southern Melodinus	V	Lm	Sa
<i>Parsonsia eucalyptophylla</i>	Gargaloo	V	Lm	Sa Oa
<i>Parsonsia fulva</i>	Furry Silkpod	V	Lm	Sa
<i>Parsonsia lanceolata</i>	Northern Silkpod	V	Lm	Sa
<i>Parsonsia latifolia</i>	Monkey Vine	V	Lm	Sa
<i>Parsonsia straminea</i>	Monkey Rope	V	Lm	Sa Oa
<i>Parsonsia velutina</i>	Velvet Silkpod	V	Lm	Sa Oa
<i>Parsonsia ventricosa</i>	Pointed Silkpod	V	Lm	Sa
<b>Araceae</b>				
<i>Calamus muelleri</i>	Lawyer Cane	V	Lm	Sa
<b>Araliaceae</b>				
<i>Cephalalaria cephalobotrys</i>	Climbing Panax	V	Lm	Sa
<i>Polyscias elegans</i>	Celerywood	T	Lm	Wb/Ad Oa
<i>Polyscias murrayi</i>	Pencil Cedar	T	Lm	Sa
<b>Asclepiadaceae</b>				
<i>Marsdenia rostrata</i>	Common Milk Vine	V	Lm	Sa
<b>Atherospermataceae</b>				
<i>Daphnandra micrantha</i>	Socketwood	T	Lm	Wb



A P P E N D I C E S

Scientific Name	Common Name	Form	Fire Retardance	Comments
<b>Avicenniaceae</b>				
<i>Avicennia marina</i>	Grey Mangrove	T	Lm St	Oa Coastal
<b>Burseraceae</b>				
<i>Canarium australasicum</i>	Carrotwood	T	Lm	Wb
<b>Caesalpinjiaceae</b>				
<i>Cassia marksiiana</i> (-)	Native Laburnum	T	Lm	Wb
<i>Caesalpinia bonduc</i>	Caesalpinia	V	Lm	Sa
<i>Caesalpinia scortechinii</i>	Large Prickle Vine	V	Lm	Sa
<i>Caesalpinia subtropica</i>	Corky Prickle Vine	V	Lm	Sa
<b>Celastraceae</b>				
<i>Celastrus australis</i>	Staff Climber	V	Lm	Sa
<i>Celastrus subspicatus</i>	Large Staff Vine	V	Lm	Sa
<i>Loeseneriella barbata</i> ( <i>Hippocratea</i> b.)	Knot Vine	V	Lm	Sa
<b>Cunoniaceae</b>				
<i>Caldcluvia paniculosa</i>	Rose-leaf Marara	T	Lm	Wb
<i>Ceratopetalum apetalum</i> (-)	Coachwood	T	Lm	Wb
<i>Geissois benthamii</i>	Red Carabeen	T	Lm	Wb
<i>Pseudoweinmannia lachnocarpa</i>	Marara	T	Lm	Wb
<i>Schizomeria ovata</i>	White Birch	T	Lm	Us/Wb
<b>Ebenaceae</b>				
<i>Diospyros fasciculosa</i>	Grey Ebony	T	Lm	Wb
<i>Diospyros pentamera</i>	Myrtle Ebony	T	Lm	Wb
<b>Ehretiaceae</b>				
<i>Cordia dichotoma</i> (-)	Cordia	T	Lm	Wb
<i>Ehretia acuminata</i>	Koda	T	Lm	Ad De
<b>Elaeocarpaceae</b>				
<i>Elaeocarpus eumundi</i>	Eumundi Quandong	T	Lm	Wb
<i>Elaeocarpus grandis</i>	Blue Quandong	T	Lm	Wb
<i>Elaeocarpus kirtonii</i>	White Quandong	T	Lm	Wb
<i>Elaeocarpus obovatus</i>	Hard Quandong	T	Lm	Wb
<i>Sloanea australis</i>	Maiden's Blush	T	Lm	Wb
<i>Sloanea woollsi</i>	Yellow Carabeen	T	Lm	Wb
<b>Escalloniaceae</b>				
<i>Quintinia verdonii</i>	Grey Possumwood	T	Lm	Wb
<b>Euphorbiaceae</b>				
<i>Austrobauxus swainii</i> (-)	Pink Cherry	T	Lm	Wb
<i>Baloghia inophylla</i> ( <i>B. lucida</i> )	Scrub Bloodwood	T	Lm	Wb
<i>Bridelia exaltata</i>	Scrub Ironbark	T	Lm	Wb
<i>Bridelia leichhardtii</i>	Leichhardt's Ironbark	T	Lm	Wb
<i>Claoxylon australe</i>	Brittlewood	T	Lm	Wb
<b>Scientific Name</b>	<b>Common Name</b>	<b>Form</b>	<b>Fire Retardance</b>	<b>Comments</b>
<i>Dissiliaria baloghoides</i>	Lancewood	T	Lm	Wb
<i>Drypetes australasica</i>	Yellow Tulip	T	Lm	Wb
<i>Excoecaria agallocha</i>	Milky Mangrove	T	Lm St	Ad Coastal
<i>Excoecaria dallachyana</i>	Scrub Poison Tree	T	Lm	Wb
<i>Glochidion ferdinandi</i>	Cheese Tree	T	Lm	Wb
<i>Glochidion sumatranum</i>	Buttonwood	T	Lm	Wb
<i>Mallotus discolor</i>	Yellow Kamala	T	Lm	Wb
<i>Mallotus philippensis</i>	Red Kamala	T	Lm	Wb
<b>Fabaceae</b>				
<i>Austrosteenisia blackii</i>	Blood Vine	V	Lm	Sa Oa
<i>Castanospermum australe</i>	Black Bean	T	Lm	Wb
<i>Derris involuta</i>	Native Derris	V	Lm	Sa
<i>Erythrina sp. Lacey's Creek</i>	Corkwood	T	Lm	Ad De
<i>Erythrina vesperitilo</i>	Batswing Coral Tree	T	Lm	Ad De
<i>Mucuna gigantea</i>	Bumy Bean	V	Lm	Sa
<b>Flacourtiaceae</b>				
<i>Scolopia braunii</i>	Flintwood	T	Lm	Wb
<b>Flindersiaceae</b>				
<i>Flindersia australis</i>	Crows Ash	T	Lm	Wb
<i>Flindersia bennettiana</i>	Bennett's Ash	T	Lm	Wb
<i>Flindersia collina</i>	Leopard Ash	T	Lm	Wb
<i>Flindersia schottiana</i>	Cudgerie or Bumpy Ash	T	Lm	Wb
<i>Flindersia xanthoxyla</i>	Yellowwood	T	Lm	Wb
<b>Icacinaceae</b>				
<i>Citronella moorei</i>	Churnwood	T	Lm	Wb
<i>Pennantia cunninghamii</i>	Brown Beech	T	Lm	Wb
<b>Lauraceae</b>				
<i>Cryptocarya erythroxylon</i>	Pigeonberry Ash	T	Lm	Wb
<i>Cryptocarya hypospodia</i>	Rib-fruit Pepperberry	T	Lm	Wb
<i>Cryptocarya macdonaldii</i>	Cooloola Laurel	T	Lm	Wb
<i>Cryptocarya microneura</i>	Murrogum	T	Lm	Wb
<i>Cryptocarya obovata</i>	Pepperberry Tree	T	Lm	Wb
<i>Endiandra muelleri</i>	Mueller's Walnut	T	Lm	Wb
<i>Endiandra pubens</i>	Hairy Walnut	T	Lm	Wb
<i>Endiandra sieberi</i> (-)	Hard Corkwood	T	Lm	Wb
<i>Neolitsea australiensis</i>	Grey Bolly Gum	T	Lm	Wb
<i>Neolitsea dealbata</i>	White Bolly Gum	T	Lm	Us/Wb
<b>Malvaceae</b>				
<i>Hibiscus tiliaceus</i>	Cotton Tree	T	Lm	Wb
<i>Lagunaria patersonii</i> (-)	Norfolk Is Hibiscus	T	Lm	Wb
<b>Meliaceae</b>				
<i>Anthocarapa nitidula</i> ( <i>Pseudocarapa nitidula</i> )	Incense Cedar	T	Lm	Wb
<i>Dysoxylum fraserianum</i>	Rosewood	T	Lm	Wb

Scientific Name	Common Name	Form	Fire Retardance	Comments
<i>Dysoxylum mollissimum</i>	Red Bean	T	Lm	Wb
<i>ssp. molle (D. muelleri)</i>	Hairy Rosewood	T	Lm	Wb
<i>Dysoxylum rufum</i>	White Cedar	T	Lm	Wb/Ad Dv
<i>Melia azedarach</i>	Onion Cedar	T	Lm	Wb
<i>Owenia cepiodora</i>	Red Cedar	T	Lm	Wb/Ad Dv
<i>Toona australis</i>				
<b>Menispermaceae</b>				
<i>Legnephora moorei</i>	Wild Grape	V	Lm	Sa
<i>Sarcopetalum harveyanum</i>	Pearl Vine	V	Lm	Sa
<i>Stephania aculeata</i>	Prickly Snake Vine	V	Lm	Sa
<i>Tinospora smilacina</i>	Snake Vine	V	Lm	Sa
<i>Tinospora tinosporoides</i>	Arrow-head Vine	V	Lm	Sa
<b>Mimosaceae</b>				
<i>Acacia aulacocarpa</i> var. <i>aulacocarpa</i>	Hickory Wattle	T	Lm	Wb Pf
<i>Acacia bakeri</i>	Marblewood	T	Lm	Wb Pf
<i>Acacia harpophylla</i> (-)	Brigalow Wattle	T	Lm	Wb
<i>Acacia melanoxylon</i>	Blackwood	T	Lm	Wb Pf
<i>Archidendron grandiflorum</i>	Lace Flower	T	Lm	Wb
<b>Monimiaceae</b>				
<i>Palmeria scandens</i>	Anchor Vine	V	Lm	Sa
<b>Moraceae</b>				
<i>Ficus macrophylla</i>	Moreton Bay Fig	T	Lm	Wb
<i>Ficus obliqua</i>	Small-leafed Fig	T	Lm	Wb
<i>Ficus platypoda</i>	Rock Fig	T	Lm	Wb
<i>Ficus superba</i> var. <i>henniana</i>	Deciduous Fig	T	Lm	Ad De
<i>Ficus virens</i> var. <i>sublanceolata</i>	White Fig	T	Lm	Wb
<i>Ficus waltkinsiana</i>	Nipple Fig	T	Lm	Wb
<i>Maclura cochinchinensis</i> (Cudrania c.)	Cockspear Thorn	V	Lm	Oa Sa
<i>Malaisia scandens</i>	Burny Vine	V	Lm	Sa
<b>Myrtaceae</b>				
<i>Acmena hemilampra</i>	Blush Satinash	V	Lm	Wb
<i>Acmena ingens</i> (A. brachyandra)	Red Apple	V	Lm	Wb
<i>Acmena smithii</i>	Creek Lilly Pilly	T	Lm	Wb
<i>Lophostemon confertus</i>	Brush Box	T	Lm	Wb
<i>Syncarpia glomulifera</i>	Turpentine	T	Lm	Wb
<i>Syzygium australe</i>	Scrub Cherry	T	Lm	Wb
<i>Syzygium corynanthum</i>	Sour cherry	T	Lm	Wb
<i>Syzygium crebrinerve</i>	Purple Cherry	T	Lm	Wb
<i>Syzygium moorei</i> (-)	Durobby	T	Lm	Wb
<b>Nyctaginaceae</b>				
<i>Pisonia aculeata</i>	Native Bougainvillea	V	Lm	Sa

Scientific Name	Common Name	Form	Fire Retardance	Comments
<b>Oleaceae</b>				
<i>Olea paniculata</i>	Native Olive	T	Lm	Wb
<b>Piperaceae</b>				
<i>Piper novae-hollandiae</i>	Native Pepper Vine	V	Lm	Sa
<b>Pittosporaceae</b>				
<i>Pittosporum rhombifolium</i>	Hollywood	T	Lm	Wb
<b>Proteaceae</b>				
<i>Floydia praealta</i>	Ball Nut	T	Lm	Wb
<i>Grevillea hilliana</i> (-)	Hill's Silky Oak	T	Lm	Pf
<i>Grevillea robusta</i>	Silky Oak	T	Lm	Pf
<i>Helictia glabriflora</i>	Smooth Helictia	T	Lm	Pf
<i>Macadamia integrifolia</i>	Queensland Nut	T	Lm	Wb
<i>Macadamia ternifolia</i>	Maroochy Nut	T	Lm	Wb
<i>Macadamia tetraphylla</i> (-)	Rough-shell Bush Nut	T	Lm	Wb
<i>Oriocallis pinnata</i> (-)	Pink Silky Oak	T	Lm	Pf
<i>Oriocallis wickhamii</i> (-)	Satin Oak	T	Lm	Pf
( <i>Alloxylon flammeum</i> )				
<i>Stenocarpus salignus</i> (-)	Scrub Beefwood	T	Lm	Pf
<i>Stenocarpus sinuatus</i>	Wheel of Fire Tree	T	Lm	Wb
<b>Ranunculaceae</b>				
<i>Clematis aristata</i>	Old Man's Beard	V	Lm	Sa
<b>Rhamnaceae</b>				
<i>Alphitonia excelsa</i>	Red Ash	T	Lm	Wb
<i>Alphitonia petrei</i>	Pink Ash	T	Lm	Wb
<i>Emmenosperma alphitonioides</i>	Yellow Ash	T	Lm	Wb
<b>Rosaceae</b>				
<i>Rubus moluccanus</i>	Moltucca Bramble	V	Lm	Sa
<b>Rutaceae</b>				
<i>Acronychia oblongifolia</i>	White Lilly Pilly	ST	Lm	Wb
<i>Acronychia suberosa</i>	Corky Acronychia	T	Lm	Wb
<i>Sarcomelicope simplicifolia</i>	Bauerella	T	Lm	Wb
<b>Sapindaceae</b>				
<i>Alectryon reticulatus</i>	Alectryon	T	Lm	Wb
<i>Arytera lautererana</i>	Corduroy Tamarind	T	Lm	Wb
<i>Atalaya multiflora</i>	Broad-leaf Whitewood	T	Lm	Wb
<i>Atalaya salicifolia</i> (A. virens)	Scrub Whitewood	T	Lm	Wb
<i>Castanospora aphanandi</i> (-)	Brown Tamarind	T	Lm	Wb
<i>Cupaniopsis anacardioides</i>	Tuckeroo	T	Lm	Wb
<i>Cupaniopsis flagelliformis</i> (-)	Brown Tuckeroo	ST	Lm	Wb
<i>Diploglottis campbellii</i> (-)	Small-leaf Tamarind	T	Lm	Wb
<i>Diploglottis cunninghamii</i>	Native Tamarind	T	Lm	Wb/Ad
<i>Harpullia hillei</i>	Blunt-leaf Tulip	T	Lm	Wb
<i>Harpullia pendula</i>	Tulipwood	T	Lm	Wb



Scientific Name	Common Name	Form	Fire Retardance	Comments
<i>Jagera pseudorhus</i>	Foam Bark Tree	T	Lm	Wb
<i>Mischocarpus anodontus</i>	Veiny Pear-fruit	T	Lm	Wb
<i>Mischocarpus pyriformis</i>	Yellow Pear-fruit	T	Lm	Wb
<i>Rhysotoechia bifoliolata</i> (-)	Twin-leaf Tuckeroo	T	Lm	Wb
<i>Sarcopteryx stipata</i>	Corduroy	T	Lm	Wb
<i>Toechima dasyrrhache</i>	Blunt-leaf Steelwood	T	Lm	Wb
<b>Sapotaceae</b>				
<i>Amorphospermum antilogum</i>	Brown Pearwood	T	Lm	Wb
<i>Amorphospermum whitei</i> (-)	Rusty Plum	T	Lm	Wb
<i>Planchonella australis</i>	Black Apple	T	Lm	Wb
<i>Planchonella laurifolia</i> (-)	Blush Coondoo	T	Lm	Wb
<i>Planchonella pohimantana</i>	Yellow Boxwood	T	Lm	Wb
<b>Simaroubaceae</b>				
<i>Ailanthus triphysa</i>	White Siris	T	Lm	Wb
<i>Guilfoylia monostylis</i>	Native Plum	T	Lm	Wb
<b>Siphonodontaceae</b>				
<i>Siphonodon australis</i>	Ivorywood	T	Lm	Wb
<b>Sterculiaceae</b>				
<i>Argyrodendron actinophyllum</i>	Black Booyong	T	Lm	Wb
<i>Argyrodendron trifoliolatum</i>	Brown Tulip Oak	T	Lm	Wb
<i>Brachychiton acerifolius</i>	Flame Tree	T	Lm	Ad De
<i>Brachychiton discolor</i>	Lace Bark	T	Lm	Ad De
<i>Brachychiton populneus</i>	Kurrajong	T	Lm	Wb
<i>Brachychiton rupestris</i> (-)	Qld Bottletree	T	Lm	Ad De
<i>Brachychiton</i> sp. (-)	Ormeau Bottletree	T	Lm	Ad De
<i>Commersonia bartramia</i>	Brown Kurrajong	T	Lm	Us/Wb
<i>Sterculia quadrifida</i>	Peanut Tree	T	Lm	Ad De
<b>Symplocaceae</b>				
<i>Symplocos stawelli</i>	White Hazelwood	T	Lm	Wb
<b>Ulmaceae</b>				
<i>Aplatanthe philippinensis</i>	Native Elm	T	Lm	Wb
<i>Celtis paniculata</i>	Investigator Tree	T	Lm	Wb
<b>Urticaceae</b>				
<i>Dendrocnide excelsa</i>	Giant Stinging Tree	T	Lm	Wb
<i>Dendrocnide photinophylla</i>	Mulberry Stinger	T	Lm	Wb
<b>Verbenaceae</b>				
<i>Gmelina leichhardtii</i>	White Beech	T	Lm	Wb
<i>Premna lignum-vitae</i>	Lignum-vitae	T	Lm	Wb
<b>Vitaceae</b>				
<i>Cissus antarctica</i>	Kangaroo Vine	V	Lm	Wb
<i>Cissus hypoglauca</i>	Five-leaf Watervine	V	Lm	Wb
<i>Cissus sterculiifolia</i>	Long-leaf Watervine	V	Lm	Wb
<i>Tetrasigma nitens</i>	Shining Grape	V	Lm	Wb



## **Appendix 2**

### **Bushfire Survival Plan Guideline / Template**

# Bushfire Survival Plan

**PREPARE. ACT. SURVIVE.**

Tomorrow's Queensland: strong, green, smart, healthy and fair



## You must **PREPARE** . **ACT** . **SURVIVE** .

Your main priority is to ensure that you and your family are safe. During a bushfire you and your family's survival and safety depend on your preparations, and the decisions you make.

The lives of you and your family are more important than any building.

Whether your plan is to leave early or stay, you must prepare your home and property to increase their level of resilience and your chances of survival.

## Bushfires in Queensland

The fire season in Queensland normally commences in the far north of the state in July and progresses through to southern areas as spring approaches. The fire season can extend through to February in southern and far south-western Queensland. These time frames can vary significantly from year to year, depending on the fuel loads, long-term climate and short-term weather conditions in each area.

There are four key considerations for dealing with bushfire:

- The safety of you and your family.
- The resilience of your property.
- The protection of irreplaceable valuables and important documents.
- The maintenance of adequate levels of insurance.

This document will provide you with information about the things you need to consider to prepare yourself and your home for the bushfire season, and how to make your own personal Bushfire Survival Plan.

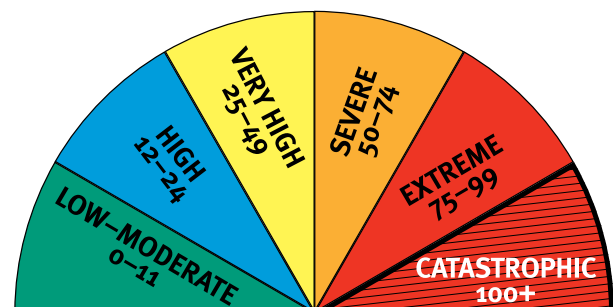
It is your responsibility  
to prepare yourself, your  
family and your  
home for the threat  
of bushfire.

## Understand your risk

The first step in planning to survive a bushfire is to understand your own level of risk. By understanding your own level of risk you will be able to make informed decisions that are right for you and your family. Included with this Bushfire Survival Plan is a self-assessment tool that will enable you to assess the risk level associated with your property. If you are still unsure of your level of risk or require assistance contact your local fire station for more information. To book a Bushfire Safety presentation call 1300 369 003.

## Fire danger ratings

The increased frequency of extreme bushfires in Australia in the last 10 years and the recent experience of the Black Saturday fires in Victoria have encouraged fire services throughout Australia to introduce new levels of Fire Danger Rating (FDR). A lift-out chart of the FDR system is contained within this document. Display it in a prominent place in your home or keep it with your Bushfire Survival Plan.





## Catastrophic fire danger rating

The highest level is catastrophic. On a day of catastrophic FDR leaving early is the only option to ensure your survival. You must relocate early to a safer location, hours or the day before a fire occurs. Under no circumstances will it be safe to stay with your property.

## Extreme fire danger rating

The second highest level is extreme. Should a fire occur in your area on a day of extreme FDR leaving early will always be the only option. Staying can only be considered for homes that:

- Have been designed and constructed specifically to address the threat of bushfire.
- Have been maintained to those levels and are currently well prepared.
- Can be actively defended by people with the skills, knowledge and confidence to implement a well-rehearsed Bushfire Survival Plan.

## On days of catastrophic or extreme FDR:

- Fires are likely to be uncontrollable, unpredictable and very fast moving with highly aggressive flames extending high above tree tops and buildings.
- Thousands of embers may be violently blown into and around homes causing other fires to start rapidly and spread quickly up to 20 kilometres ahead of the main fire.
- Fire can threaten suddenly, without warning, and the heat and wind will make it difficult to see, hear and breathe as the fire approaches.
- People in the path of such fires will almost certainly be injured or die and a significant number of homes and businesses will be destroyed or damaged.
- Even well-prepared and constructed homes will not be safe.
- Expect power, water and phone networks to fail as severe winds bring down trees, power lines and blow roofs off buildings well ahead of the fire.

It is vital that you understand on these days that your survival will depend solely on how well you have prepared and how decisively you act.

Leaving late can be  
a deadly option.  
If you are in any doubt,  
make the decision to  
**LEAVE EARLY.**

## What will you do?

At all times you need to **PREPARE.ACT.SURVIVE.**

When the fire danger rating is '**catastrophic**' leaving early is the safest option.

When the fire danger rating is lower than '**catastrophic**', one of the most important decisions you need to make is whether you will leave early or stay with a well prepared property. This decision is the basis of your Bushfire Survival Plan.

The following questions may help you make the right decision for whether you will leave early or stay:

- Do you need to consider family members who are young, elderly or infirm?
- Are you physically and emotionally prepared to stay with your property?
- Do you have the knowledge, skills, and confidence to stay with your property?
- Is your home adequately constructed, maintained and prepared to withstand the impact of a fire? In other words, is your home prepared to withstand the impact of a bushfire?
- Do you have well-maintained resources and equipment to fight fire, and do you know how to use them?
- Do you have appropriate protective clothing to fight a fire?
- What will you do if a rapid onset fire leaves you with no time to leave? Where will you shelter?



## Leave early

If you plan to leave early then you must leave your home well before a bushfire threatens and travelling by road becomes hazardous. Your leave early preparations include:

**Step 1: Preparation** – your property should be well prepared for bushfire even if you intend to leave early.

**Step 2: What you will do** – make your Bushfire Survival Plan in accordance with your decision to leave early.

**Step 3: Make a contingency plan** – the FDR, the preparedness of your home, a change in household circumstances, a change in your physical preparedness or unexpected visitors are some things that may require you to reconsider your Bushfire Survival Plan.

## Planning to stay

Planning is critical to successfully staying with your home may involve the risk of psychological trauma, injury or death.

**Step 1: Preparation** – your property must be able to withstand the impact of bushfire and well prepared to shelter you and your family.

**Step 2: What you will do** – make your Bushfire Survival Plan in accordance with your decision to stay.

**Step 3: Make a contingency plan** – the FDR, the preparedness of your home, a change in household circumstances, a change in your physical preparedness or unexpected visitors are some things that may require you to reconsider your Bushfire Survival Plan.

In making your decision to stay, here are a few things you need to consider.

- Is your property able to withstand the impact of a bushfire?
- Are you physically and emotionally prepared to stay with your property?
- Do you have well-maintained resources and equipment and do you know how to use them?
- Do you have appropriate protective clothing?
- Will your bushfire survival plan need to be different for weekdays, weekends or if someone is sick at home?
- Do you have a contingency plan?

## Preparing your Bushfire Survival Plan

Preparation is the key to survival. Being involved in a fire will be one of the most traumatic experiences of your life.

- Prepare yourself – you need to be both mentally and physically prepared to carry out your Bushfire Survival Plan.
- Prepare your Bushfire Survival Plan.
- Prepare your Bushfire Survival Kit.
- Prepare your Bushfire Relocation Kit.
- Prepare your property.

When writing your plan you need to consider:

- Have you made the right choice: to leave early or stay?
- Have you discussed your choice with your family, friends and neighbours?
- Who will take charge and lead other family members by carefully communicating the various tasks set out in the plan?
- If you have chosen to stay what will you do to protect your property when the fire arrives?
- What will you put in your Bushfire Survival Kit and where will you store it?
- Do your friends, family and neighbours know the details of your plan?

- What will you do if your Bushfire Survival Plan fails?
- Do you have an alternative option or contingency plan if your plan fails?
- Do you have a Neighbourhood Safer Place (NSP) you can go to as a last resort? For more information on NSPs see [www.ruralfire.qld.gov.au](http://www.ruralfire.qld.gov.au).
- Is it safe to travel there?

If your decision is to leave early, you must include the following information or action items in your Bushfire Survival Plan:

- Monitor media outlets – radio, TV, mobile phone and internet for bushfire alerts.
- When will you leave?
- What will be your trigger for action?
- Will your plan be different for weekdays, weekends, or if someone is at home sick or injured?
- What will you take with you (Relocation Kit)?
- Where will you and your family go when you leave early?
- What route will you take to get there?
- What will you do with your pets?
- What will you do if there are consecutive or multiple **'catastrophic'** or extreme fire danger days?
- Will you go into work on days when the FDR is in the upper levels?
- Will you send your children to school when the FDR is in the upper levels?
- Will all members of your household leave early?
- What will you do to prepare your property?
- What is your contingency plan in the event that it is unsafe to leave?

If your decision is to stay you must include the following information or actions items in your Bushfire Survival Plan:

- Monitor media outlets – Radio, TV, mobile phone and internet.
- Locate your Bushfire Survival Kit.
- Put on protective clothing.
- Remain hydrated by drinking lots of water.

- Move any stock to fully grazed paddocks.
- Move cars to a safe location.
- Remove garden furniture, doormats and other items.
- Close windows and doors and shut blinds.
- Take down curtains and move furniture away from windows.
- Seal gaps under doors and window screens with wet towels.
- Place pets inside, restrain them, and provide water.
- Block downpipes and fill gutters with water.
- Wet down the sides of buildings facing the approaching fire front.
- Wet down decks and verandas.
- Wet down fine fuels close to buildings.
- Turn on sprinklers in garden before bushfire arrives.
- Fill containers with water; bath, sinks, buckets, wheelie bins, etc.
- Have ladders ready for roof space access (inside) and against roof (outside).
- Have generator or petrol pump ready.
- Start checking and patrolling for embers outside.

When the fire front arrives:

- Take all fire fighting equipment inside such as hoses and pumps as they may melt during the fire.
- Go inside and shelter away from the fire front.
- Patrol the inside of your home, including the ceiling space, for embers or small fires that may start.
- Drink lots of water.
- Check family and pets.

After the fire front has passed:

- Wear protective equipment.
- Go outside once it is safe.
- Check for small spot fires and burning embers:
  - inside roof space
  - under floor boards
  - under house space
  - on veranda and decks



- on window ledges and door sills
- in roof lines and gutters
- garden beds and mulch
- wood heaps
- outdoor furniture
- sheds and carports
- Continue to drink lots of water.
- Stay at your property until the surrounding area is clear of fire.
- Monitor media outlets – radio, TV, mobile phone and internet.

## You need to be both mentally and physically prepared to carry out your Bushfire Survival Plan

There may be other actions to include, depending on your individual property and the level of bushfire risk you are exposed to.

Include the whole family in creating your Bushfire Survival Plan. You and your family should be aware of the actions you will take at the various FDR levels and it is important to ensure this is incorporated into your Bushfire Survival Plan. The FDR for your area can be found on roadside signs and by visiting [www.ruralfire.qld.gov.au](http://www.ruralfire.qld.gov.au) and following the FDR link.

It is important that your Bushfire Survival Plan does not rely solely on receiving an alert.

Once you have completed your Bushfire Survival Plan, practise it regularly to ensure everyone involved knows exactly what to do in the event of a fire.

## Preparing your Bushfire Survival Kit

It is essential that you have a Bushfire Survival Kit if your choice is to stay with your property. This kit will ensure you and your family have the important equipment you need to stay. For a comprehensive list of equipment needed in a Bushfire Survival Kit see page 14.

## Preparing your Bushfire Relocation Kit

It is equally important to have a relocation kit if your choice is to leave early. This kit will ensure you and your family have important items and equipment required to relocate for the time needed. For a comprehensive list of items and equipment needed in a Bushfire Relocation Kit see page 15.

## Making a contingency plan

No matter whether your decision is to leave early, well before a bush fire threatens or to stay you should still have a contingency plan as part of your Bushfire Survival Plan. There are many scenarios to consider, such as what you will do if a rapid onset fire starts in your local area making roads impassable or travel particularly dangerous. You should have other options if road travel is not safe.

- Is your house well prepared?
- Can it provide you with protection from radiant heat?
- Have you identified a safer location such as an NSP?

## Sheltering in a well-prepared property is far safer than being out in the open or in a vehicle

## Preparing your property

An unprepared property is not only at risk itself, but may also present an increased danger for your neighbours and their homes.

Planning is absolutely critical to safely staying with your home. Staying home involves the risk of psychological trauma, injury and death.

There are a number of measures you can take to prepare your home and property for bushfire. These include several preparations you must take annually prior to the bushfire season.

Your pre-season property preparations should include:

- Displaying a prominent house number.
- Ensuring there is adequate access for fire trucks to your property – 4 metres wide by 4 metres high with a turn-around area. Reduce vegetation loads along the access path.
- Mowing your grass regularly.
- Removing excess ground fuels and combustible material (long dry grass, dead leaves and branches).
- Clearing of leaves, twigs, bark and other debris from the roof and gutters.
- Purchasing and testing the effectiveness of gutter plugs.
- Trimming low-lying branches 2 metres from the ground surrounding your home.
- Enclosing open areas under your decks and floors.
- Installing fine steel wire mesh screens on all windows, doors, vents and weep holes.
- Pointing LPG cylinder relief valves away from the house.
- Conducting maintenance checks on pumps, generators and water systems.
- Checking that you have sufficient personal protective clothing and equipment.
- Relocating flammable items away from your home including woodpiles, paper, boxes, crates, hanging baskets and garden furniture.
- Sealing all gaps in external roof and wall cladding.
- Checking that the first aid kit is fully stocked.

## Bushfire Alerts

If you receive an emergency warning about a bushfire or other emergency, take notice as it could save your life.

There are three types of alert messages to help you make the right safety choices:

**Bushfire Advice Message** – a fire has started – general information to keep you up to date.

**Bushfire Watch and Act Message** – represents a heightened level of threat. Conditions are changing, a fire is approaching; lives may come under threat. Take appropriate action.

**Bushfire Emergency Warning** – is the highest level message advising of impending danger. It may be preceded with the Standard Emergency Warning Signal (SEWS).

An Emergency Warning  
means there is a threat  
to lives and protective  
action is required  
immediately.

## When a bushfire strikes

You have made your decision to **PREPARE.ACT.SURVIVE**. You have prepared your property before the fire season. You have made your Bushfire Survival Plan. You have practised your Bushfire Survival Plan.

A bushfire is threatening? What do you do?

- Know the FDR for any given day.
- Regularly check the FDR on the Rural Fire Services website at [www.ruralfire.qld.gov.au](http://www.ruralfire.qld.gov.au).
- Monitor your media outlets for warnings on bushfire activity.
- Seek out information if you have to, and do not assume that you will receive a warning.
- Leave early or stay according to your Bushfire Survival Plan.
- Act decisively in accordance with your Bushfire Survival Plan.
- Do not adopt the 'wait and see' option.

## Travelling in your vehicle near a bushfire

Sheltering inside a vehicle is a high-risk strategy that can result in death. Whilst sheltering inside a vehicle offers you a slightly higher chance of survival than being caught in the open, having a leave early or stay strategy is a much safer option.

You should never take a journey into areas where the fire danger is catastrophic or extreme. You should consider postponing or finding alternative routes if necessary. If you can smell or see smoke in the distance it is best to u-turn and drive away from the danger.

If you are caught in smoke or flames while on the road:

- Turn on the vehicle's headlights and hazard warning lights.
- If you need to shelter in your vehicle drive your car into a bare, clear area well away from surrounding trees, leaving lights on. Position vehicle to prevent side impact from advancing fire front.
- Close all windows and vents.
- Leave the engine running and turn off the air conditioning system.
- Cover your entire body with woollen or cotton blankets to protect from radiant heat.
- Take shelter below the window level.
- Drink water frequently and stay in the vehicle until the fire front has passed.
- Once the fire front has passed exit the vehicle to inspect the damage and ensure other passengers are safe.

## Neighbourhood Safer Places

A Neighbourhood Safer Place (NSP) is a place of last resort for people during a bushfire. An NSP may form part of a back-up plan when:

- Your Bushfire Survival Plan has failed.
- Your plan was to stay but the extent of the fire means that your home cannot withstand the impact of the fire and therefore your home is not a safe place to shelter.
- The fire has escalated to an extreme or catastrophic level and relocation is the safest option.

An NSP is an identified building or open space within the community that can provide a level of protection from the immediate life-threatening effects of a bushfire. NSPs still entail some risk, both in moving to them and while sheltering in them and cannot be considered completely safe.

They are a place of *last resort* in bushfire emergencies only. The following limitations of NSPs need to be considered within your Bushfire Survival Plan:

- NSPs do not cater for pets.
- Firefighters may not be present as they will be fighting the main fire front elsewhere.
- NSPs do not provide meals or amenities.
- They may not provide shelter from the elements, particularly flying embers.

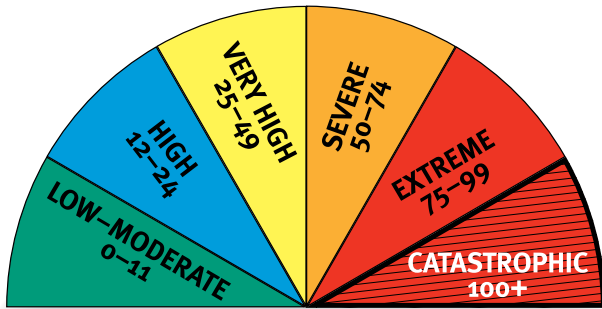
If you are a person with special needs you should give consideration to what assistance you may require at an NSP.

Although QFRS cannot guarantee an immediate presence during a bushfire, every effort will be made to provide support as soon as resources are available.

If an NSP is part of your contingency plan it should not require extended travel through fire-affected areas to get there.



# FIRE DANGER RATING



The Fire Danger Rating (FDR) is an early indicator of potential danger and should act as your first trigger for action. The higher the rating the greater the need for you to act.

The FDR is an assessment of the potential fire behaviour, the difficulty of suppressing a fire, and the potential impact on the community should a bushfire occur on a given day.

A Fire Danger Index (FDI) of 'low-moderate' means that fire will burn slowly and that it will be easily controlled, whereas a FDI in excess of 'catastrophic 100+' means that fire will burn so fast and so hot that it will be uncontrollable.

## CATASTROPHIC 100+

A fire with a rating of 'catastrophic' may be uncontrollable, unpredictable and fast moving. The flames will be higher than roof tops. Many people will be injured and many homes and businesses will be destroyed.

During a 'catastrophic' fire, well-prepared and constructed homes will not be safe. Leaving is the only option for your survival.

## EXTREME 75-99

A fire with an 'extreme' rating may be uncontrollable, unpredictable and fast moving. The flames will be higher than roof tops. During an 'extreme' fire, people will be injured and homes and businesses will be destroyed.

During an 'extreme' fire, well-prepared and well-constructed homes may not be safe. Leaving is the only option for your survival.

## SEVERE 50-74

A fire with a 'severe' rating may be uncontrollable and move quickly, with flames that may be higher than roof tops. A 'severe' fire may cause injuries and some homes or businesses will be destroyed.

During a fire with a 'severe' rating, leaving is the safest option for your survival. Use your home as a place of safety only if it is well-prepared and well-constructed.

## VERY HIGH 25-49

A fire with a 'very high' danger rating is a fire that can be difficult to control with flames that may burn into the tree tops. During a fire of this type some homes and businesses may be damaged or destroyed.

During a fire with a 'very high' danger rating, you should use your home as a place of safety only if it is well prepared and well-constructed.

## HIGH 12-24

A fire with a 'high' danger rating is a fire that can be controlled where loss of life is unlikely and damage to property will be limited.

During a fire with a 'high' danger rating, you should know where to get more information and monitor the situation for any changes.

## LOW-MODERATE 0-11

A fire with a 'low to moderate' rating can be easily controlled and pose little/or no risk to life or property.

During a fire with a 'low to moderate' rating, you should know where to get more information and monitor the situation for any changes.

# BUSHFIRE SURVIVAL PLAN

Complete your personalised Bushfire Survival Plan lift-out.

## Personal details:

Important phone numbers: **000** (Fire, Police and Ambulance)

Family: \_\_\_\_\_ Family: \_\_\_\_\_ Family: \_\_\_\_\_

Work: \_\_\_\_\_ Friends: \_\_\_\_\_ Friends: \_\_\_\_\_

School: \_\_\_\_\_

## Important contact details – name and phone number:

Insurer: \_\_\_\_\_ Policy Number: \_\_\_\_\_ Phone: \_\_\_\_\_

Electricity: \_\_\_\_\_ Phone: \_\_\_\_\_

Water: \_\_\_\_\_ Phone: \_\_\_\_\_

Gas: \_\_\_\_\_ Phone: \_\_\_\_\_

Phone Company: \_\_\_\_\_ Phone: \_\_\_\_\_

Council: \_\_\_\_\_ Phone: \_\_\_\_\_

## Leave early:

List all names and contact phone numbers of household members who have decided to leave early then complete Section 1.

Names: \_\_\_\_\_

Phone: \_\_\_\_\_

## Stay:

List all names and contact phone numbers of household members who have decided to stay, then complete Section 2.

Names: \_\_\_\_\_

Phone: \_\_\_\_\_

# Leave early – Section 1

Pull this Bushfire Survival Plan lift-out from this document and keep in a safe place.

Leaving early will always be the safest option for you and your family. It is extremely important for you to prepare a detailed leave early plan to ensure everyone understands what to do and when. Use the boxes below to list tasks to do.

**When to go** – Think of different triggers that will cause you and your family to leave early. Think about what you will do if you have sent the children to school that day. Think about whether or not you will have to travel from work into the fire zone.

**Where to go** – Identify one or more safer locations. Consider putting on personal protective clothing before you leave home.

**How to get there** – What roads will you take to your destination? Have an alternative route if your first choice is impassable.

**What to take** – Make a list of your most valuable items (e.g. insurance papers, electronic records, photo albums, passports, birth certificates and other important documents).



## Stay – Section 2

Anyone who is not going to leave early must be involved in completing this stay and defend plan to ensure they know what to do. Every stay plan will be different depending on your circumstances. Use the boxes below to list tasks to do.

**Before the fire approaches** – Start getting yourself and your property ready for a bushfire.

**As the fire approaches** – Prepare for ember attack on or near your home.  
Remember to put on personal protective clothing.

**As the fire front arrives** – Stay safe by monitoring the fire from inside your home.

**After the fire has passed** – Patrol your property and extinguish any spot fires or burning embers.  
You may need to keep this up for several hours.

## Everyone must have a contingency plan

**Have a contingency plan** – what will you do if you can't activate your Bushfire Survival Plan? Remember that leaving late can lead to loss of lives.

**Know where your nearest NSP is and how to get there.**

# ACTIVATING YOUR BUSHFIRE SURVIVAL PLAN

Once you have prepared your Bushfire Survival Plan and completed your preparations, it is absolutely essential that you regularly practise and review your plan. This will make sure you and your family are well organised in the event of a bushfire. If a bushfire threatens the health and safety of you, your family, home or property, you should follow these steps:

## Step 1 – Activate your Bushfire Survival Plan

Someone must take charge and lead other family members through this emotional experience by carefully communicating the various tasks set out in the plan. Know who is going to leave early and who is going to stay.

## Step 2 – Put on your personal protective clothing

Every member of the family must change into their personal protective clothing, including long pants, long-sleeve-shirt and closed-in shoes.

## Step 3A – Pack your vehicle and leave early

If your plan is to leave early, pack all valuables in your vehicle (see Relocation Kit) and relocate to your designated safer location. Give yourself enough time to get you and your family to safety. Don't return home until it is safe to do so.

OR

## Step 3B – Implement your strategy to stay and defend

If your plan is to stay ensure you have all the items in the Bushfire Survival Kit ready to go. This can be a dangerous option and you should be physically and mentally prepared.

## Step 4 – Keep informed of bushfire activity

Listen to the radio, television, internet, firefighters and/or police for information on the fire in your local area. Bushfire is dynamic and unpredictable so you need to be prepared for the unexpected. Warnings are not guaranteed so do whatever is necessary to ensure you remain safe.

# BUSHFIRE SURVIVAL KIT

You need to have a Bushfire Survival Kit stored in an area of the house that is safe and easy to access. It should contain:

- protective clothing
- mop
- gloves
- torch
- hoses
- shovel
- towels
- buckets
- safety goggles
- ladder
- medications
- bottled drinking water
- fire extinguishers
- battery operated radio
- spare batteries
- smoke mask
- woollen blankets
- first aid kit
- knapsack sprayer
- protective clothing for the whole family.





# RELOCATION KIT

Write a list of all items your family will need before, during and after your relocation. The list below shows items that you might like to put in your relocation kit.

- protective clothing for the whole family
- battery operated radio and spare batteries
- safety goggles
- mobile phone and battery charger
- medications
- wallet or purse and money
- clothing (two sets of clothes for each family member)
- identity information (passports, birth certificates)
- bottled water (enough for each relocated family member)
- family and friends' phone numbers
- items of high importance (e.g. family photos, valuables, important documents)
- blankets (natural fibres)
- children's toys



# BUSHFIRE RISK SELF-ASSESSMENT CHECKLIST



This basic self-assessment checklist is designed to give you a greater understanding of the bushfire risk level relevant to your property. Information provided in this assessment will assist you when completing your Bushfire Survival Plan.

Address:

Postcode:

Property Owner/Property Name:

## ACCESS/EGRESS

Road/Street/Driveway PLEASE ✓ APPROPRIATE BOX

Clear of overhanging vegetation	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Unrestricted gate access	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Clear of overhead power lines	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Able to reverse in	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Turning/passing areas	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Heavy vehicle access on cattle grid/bridge	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Alternative way out	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Two wheel drive access	Yes <input type="checkbox"/>	No <input type="checkbox"/>

## STRUCTURE/S

Exterior walls – non-combustible	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Roof ridge capping sealed	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Eaves enclosed	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Roofing gutters and valleys clear of leaf litter and fine fuels	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Underfloor enclosed	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Vents screened	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Windows – non-combustible finishing	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Deck/veranda non-combustible	Yes <input type="checkbox"/>	No <input type="checkbox"/>

## WATER SUPPLY

Reticulated water supply	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Tank supply with QFRS access – 50mm male camlock fitting so fire fighters can use water if needed	Yes <input type="checkbox"/>	No <input type="checkbox"/>
QFRS accessible external open water supply (dam/pool)	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Firefighting pump and hose connected to water supply	Yes <input type="checkbox"/>	No <input type="checkbox"/>

## Other considerations

There are a range of other things to be considered regardless of your decision to leave early or stay:

- Firefighting equipment such as pumps, hoses and sprinkler systems should be tested regularly and maintained in maximum operational working condition.
- Firefighters may need access to your property during a bushfire so it is in your best interests to allow enough space for fire trucks (4 metres wide by 4 metres high).
- Your pets, livestock and other animals require proper care and attention during fires. Consider food, medication, transportation and sleeping arrangements for your animals.

## Myths versus Reality

Myths	Reality
There will always be a fire truck available to fight a bushfire threatening my home.	Firefighters may be required to fight many fronts of a large fire. Fire trucks and firefighters are finite resources so it is important they are deployed in an appropriate manner to best manage the fire.
I know the back streets in town like the back of my hand so it is OK for me to leave at the last minute.	If your decision in your Bushfire Survival Plan is to leave early, then you should leave well before the fire front reaches your property. Irrespective of your local area knowledge you must stick to your plan and leave early. Leaving late can be fatal.
Someone from an emergency service will knock on my door when it is time to leave.	Emergency services personnel may not be available to alert the community by door-knocking and encouraging you to leave. You need to monitor the bushfire alerts by listening to the radio, watching TV or checking the rural fire website. You need to be ready to leave early if your life or the people in your care are at risk.
My house will not burn down because there is more than 50 metres between my home and nearby bushland.	Most houses which burn down during bushfires have been attacked by flying embers. Under certain conditions embers can cause ignitions up to 20kms in front of the main fire. A combination of your level of preparation and your home's construction will determine the survivability of your home.
I only have to clean my gutters and mow my lawns to prepare my property for bushfire.	Fire requires fuel, heat and oxygen to occur. This means that flames or embers do not necessarily rely solely on your gutters and lawns for fuel. They might utilise overhanging trees, woodpiles, old building materials under the deck or chemicals in the garden shed to sustain them. Take the time to properly prepare your whole property, which includes yourself, your house and your land.