



Guide for applying the Bush Fire Risk Treatment Standards

Residential and Public Buildings

December 2020



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These are voluntary Bushfire Risk Treatment Standards (Standards) as enacted under Section 35AB of the *Bush Fires Act 1954*. This publication is intended to be a guide only and readers should obtain their own independent advice and make their own necessary inquiries. It is important to note that the occurrence and impact of bushfire is difficult to predict due to the nature of bushfire behaviour and weather conditions. The implementation of risk treatments in accordance with these Standards does not guarantee that buildings or people will survive a bushfire event.

The information contained within this document is correct at the time of publication and will be reviewed as required to maintain its currency. The latest version is available at dfes.wa.gov.au/bushfire/prepare

Contents

What are the Bush Fire Risk Treatment Standards?	3
Where do the Standards apply?	3
Exclusions to the Standards	3
What is a Risk Treatment Area?	4
Can I apply the Standards?	5
Zones within a Risk Treatment Area	6
Activities permitted within each zone	7
Measuring zone distances	9
Guidance for clearing and pruning trees and vegetation	10
Managing soil erosion and landslip risk	11
Appendices	12
Appendix 1: Exclusions to the Standards	12
Appendix 2: Frequently Asked Questions	15
Appendix 3: Useful contacts	17
Appendix 4: Glossary	19



What are the Bush Fire Risk Treatment Standards?

We all share the responsibility for managing bushfire risk, and the Department of Fire and Emergency Services (DFES) encourages owners and occupiers of land to do their part by managing their vegetation. However, in some areas of the State this can be challenging, as the removal and modification of vegetation may require approvals under Commonwealth, State and local law.

Under the *Bush Fires Act 1954* (BF Act), the Fire and Emergency Services (FES) Commissioner may issue voluntary Bush Fire Risk Treatment Standards (Standards). By following these Standards, owners and occupiers of land within specified areas of the State may carry out bushfire risk treatments without breaching State or local law.

It is important to note that the Standards do not override Commonwealth law such as the *Environmental Protection and Biodiversity Conservation Act 1999*. Contact the Department of Agriculture, Water and Environment if you are concerned about breaching Commonwealth environmental law. Even when following the Standards, owners and occupiers of land must still obtain a permit under the BF Act for planned burning purposes.

We know from research that managing the vegetation around buildings is one of the most important activities that can be undertaken to help protect them from bushfire. This guide outlines where the Standards for residential and public buildings apply, and the types of vegetation management permitted.

Where do the Standards apply?

The Standards apply to land in areas of the State that are designated as bushfire prone under the *Fire and Emergency Services Act 1998*. A bushfire prone area is an area of land that has the potential to be impacted by bushfire. **The Map of Bush Fire Prone Areas** can be used to identify whether your land is designated as bushfire prone.

Exclusions to the Standards

In certain areas of the State, removing or modifying vegetation may conflict with significant environmental and heritage values. The Standards do not apply in these areas.

Owners and occupiers of land must refer to Appendix 1: Exclusions to the Standards on page 12 to determine whether an exclusion applies to their land before conducting any vegetation management under the Standards. The Appendix lists and describes each exclusion and provides contact details for more information.

What is a Risk Treatment Area?

In areas where the Standards apply, vegetation management can be undertaken within a Risk Treatment Area. A Risk Treatment area is land that is within 20 metres of a relevant building. A relevant building is classified under the Building Code as one of the following:

- A single dwelling such as a detached house, duplex, villa or townhouse (Class 1a);
- A small boarding house, guest house, hostel or four or more dwellings on one allotment used for short term holiday accommodation (Class 1b);
- Dwellings such as apartments and flats in a building containing two or more units (Class 2);
- Accommodation for unrelated people such as hotel, motel, residential part of a school, accommodation for the aged, children or people with disabilities (Class 3);
- A building of a public nature such as a health care building (9a), an assembly building such as a school (9b) or an aged care building (9c);
- Private bushfire shelters associated with a single dwelling (Class 10c); or
- A non-habitable building including sheds, carports and private garages (Class 10a) when within six metres of a class 1a, 1b, 2, 3 or 9 building;

AND

- Built under development approval obtained before 8 December 2015.

The Standards do not apply to developments approved from 8 December 2015. This is because since that date, developments are required to provide an acceptable separation from the bushfire prone vegetation in their siting and design.

Can I apply the Standards?

Owners and occupiers of land who wish to apply the Standards must ensure their land is:

1. Designated as bushfire prone
2. Does not include an exclusion to the Standards and
3. Is within a Risk Treatment Area where:
 - a. the building is a 'relevant building'
 - b. the land is within 20 metres of a 'relevant building'

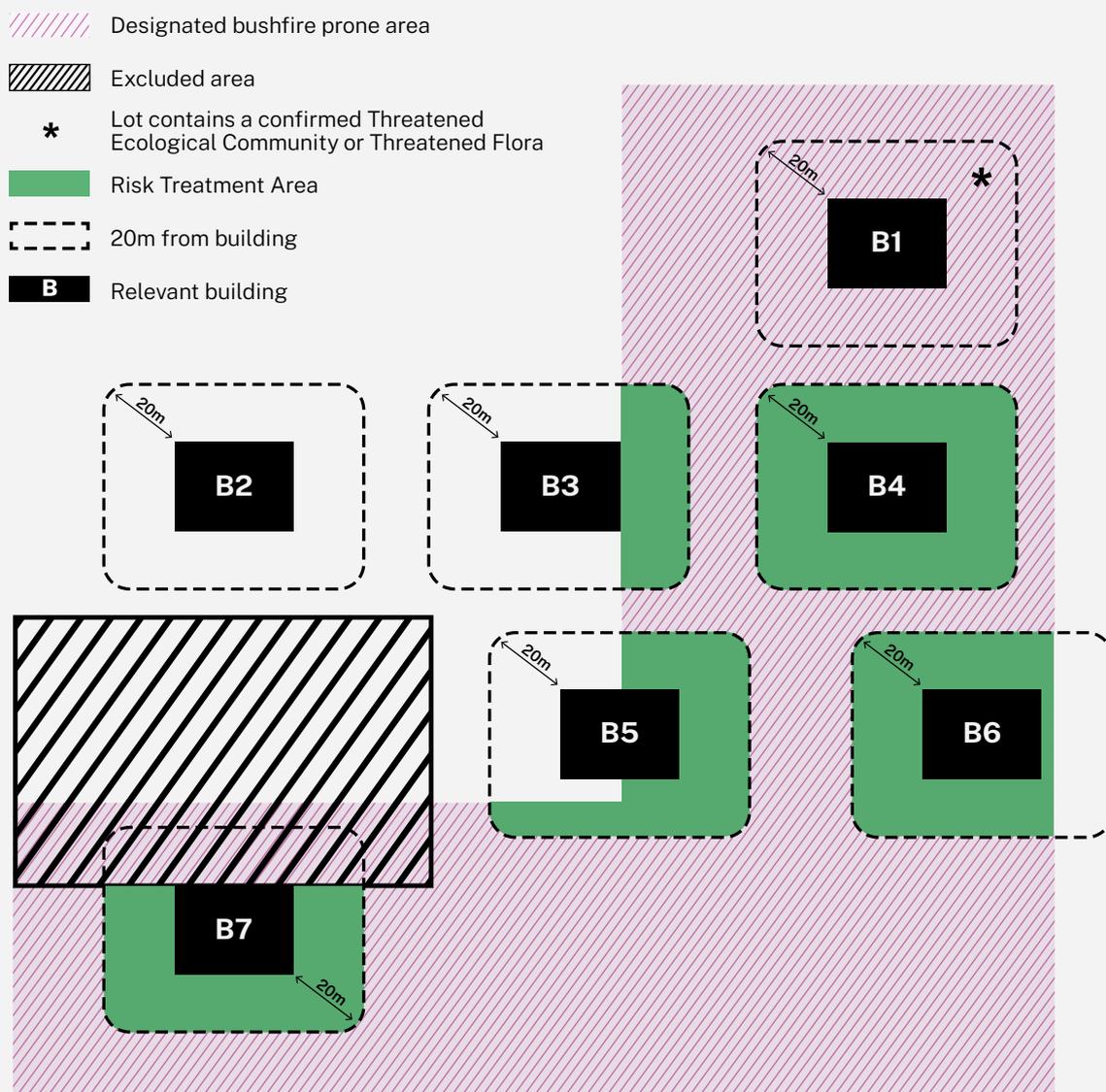


Figure 1: Examples of land where the Standards do and do not apply

Zones within a Risk Treatment Area

Under the Standards, a Risk Treatment Area has two zones – the Inner Zone and the Outer Zone.

The Inner Zone creates defensible space by providing separation between flammable vegetation and the building surface. Land is in the Inner Zone if it is within 10 metres of the relevant building.

The Outer Zone includes land that is between 10 and 20 metres of a relevant building. This zone is managed to reduce the impact of a bushfire by slowing its rate of spread and suppressing fire spread into the tree canopy.

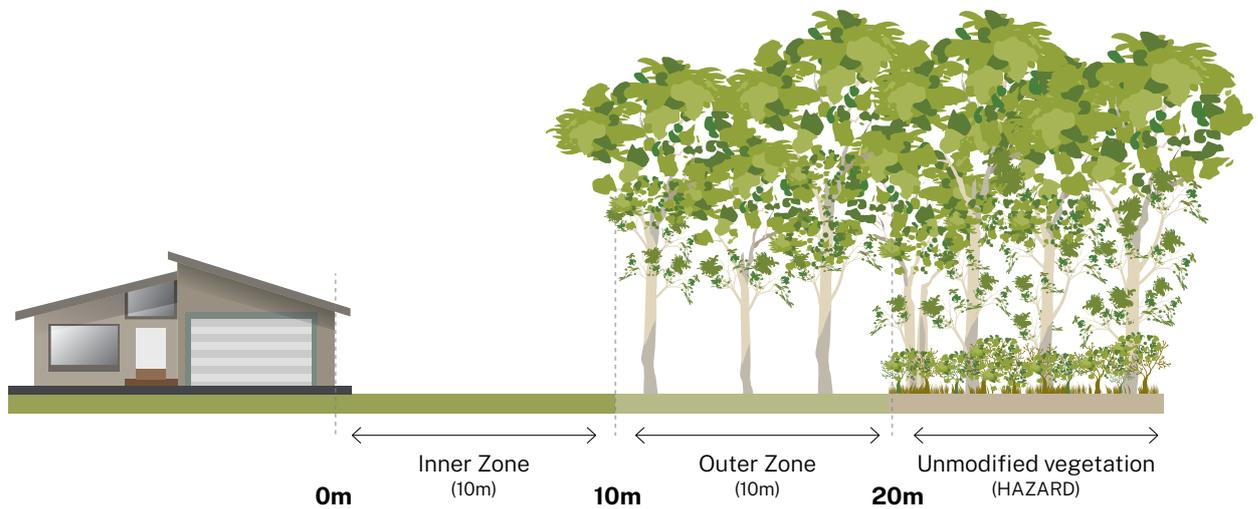


Figure 2: Inner and Outer Zones of a relevant building

Activities permitted within each zone

An owner or occupier of land where the Standards apply may undertake the following activities to manage underlying vegetation and trees within each zone, except where a tree is listed on a Significant Tree Register (refer to explanatory notes on page 9).

Inner Zone

- The removal of underlying vegetation and trees is permitted.
- If a tree is located across neighbouring properties, the tree may be removed if consent is provided from the owner of the neighbouring land.
- Any branch of a tree overhanging the Inner zone from the Outer Zone or a neighbouring property may be:
 - » pruned back to its collar if the tree is located on the owner or occupier's land or if consent is provided from the land owner (a) or
 - » pruned back to the boundary of the land (b) (Figure 3).

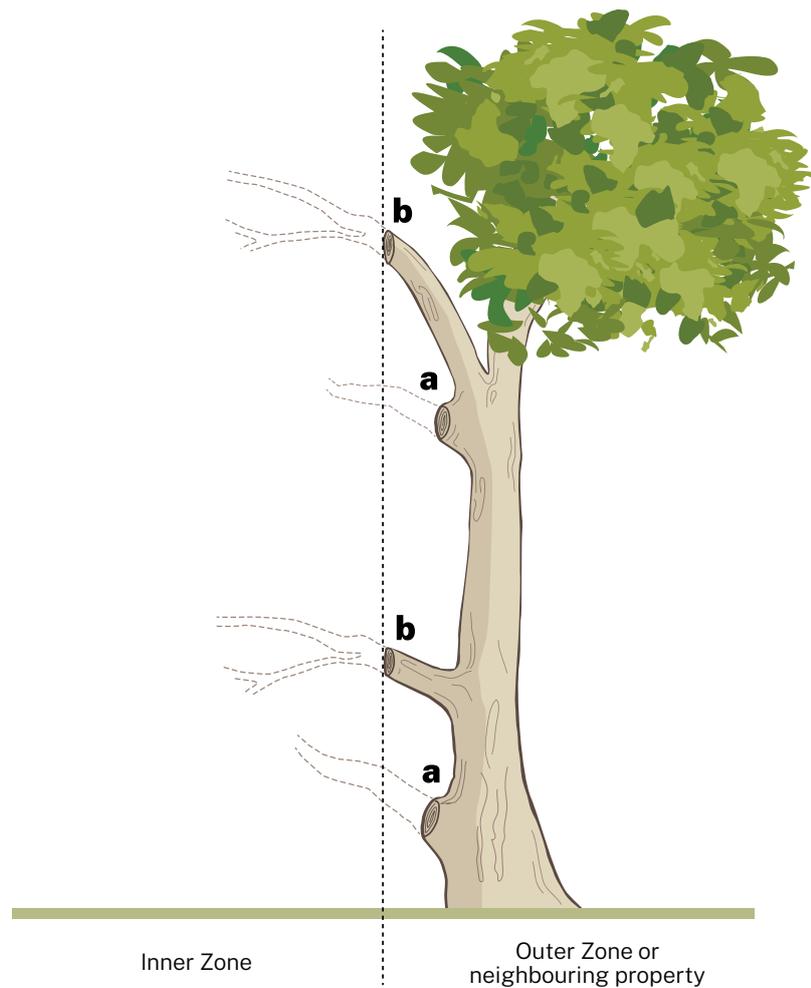


Figure 3: Pruning a branch that overhangs the Inner Zone from the Outer Zone or a neighbouring property

Outer Zone

- The removal or modification of vegetation is permitted (not including the removal of trees).
- Prune the branches of a tree where part of the branch is at a height of less than two metres above the land to:
 - » its collar, if the tree is located on the owner or occupier's land or if consent is obtained from the neighbouring land owner (a) or
 - » the boundary of the land (b) (Figure 4).

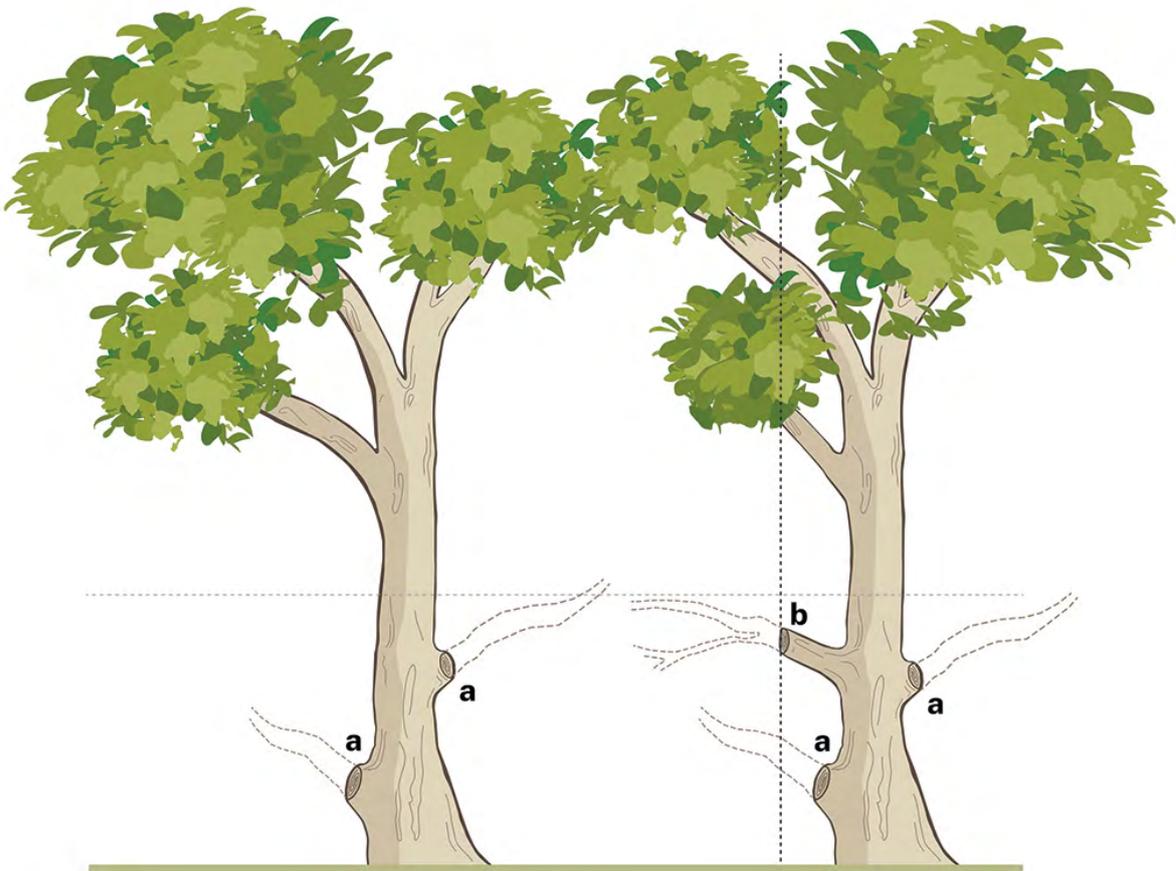


Figure 4: Pruning branches in the Outer Zone

Explanatory notes

- Vegetation includes grasses, herbs, shrubs and creepers.
- A tree is defined as a perennial plant with one or more woody, self-supporting trunks and standing at a height of at least five metres.
- A tree is located on specified land if any part of its trunk meets the ground on the land or is above the land at a height of less than two metres.
- The removal and or pruning of trees within the Risk Treatment Area is not applicable to a tree listed on a Significant Tree Register (See Appendix 3: Useful Contacts on page 17 if you need more information).
- Before removing or modifying vegetation (including trees) on strata titled, rented or leased property, owners and occupiers of land should first obtain consent from their strata and or property manager.

Measuring zone distances

The Inner and Outer Zones should be measured horizontally from the external wall of the building. When measured from a part of the building that does not have walls, for example a carport, veranda, balcony, patio, pergola or similar outdoor area that is contiguous to the building, the measurement should be taken from the supporting posts or columns.

When measuring the zone distance, do not include:

- Rainwater and domestic fuel tanks.
- Chimneys, pipes and cooling and heating appliances.
- Landings, terraces, steps and ramps less than one metre in height.



Figure 5: Measuring zones around a building

Guidance for clearing and pruning trees and vegetation

Tree pruning

It is important to prune trees in a way that does the least damage. Trees should be pruned so that their canopy is separated from the underlying vegetation. Nearby tree crowns should be separated by at least five metres, so they do not form a continuous canopy and branches should not touch or overhang buildings.

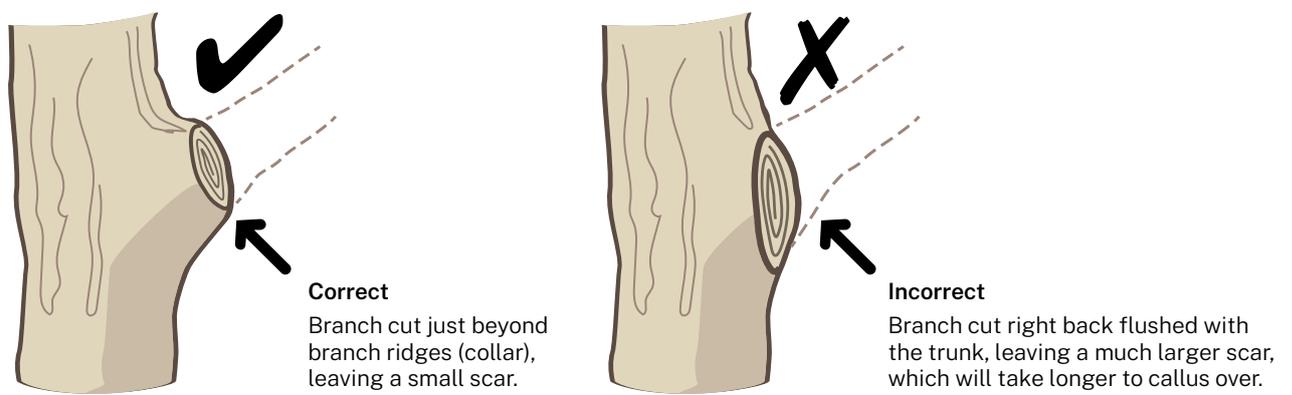


Figure 6: Recommended pruning technique

There are three common ways to prune trees:

1. Crown lifting (skirting)

Remove the lowest branches to two metres above the ground. Crown lifting may help prevent fire moving into the tree canopy from the underlying vegetation, and restrict fire spread within the tree canopy.

2. Crown thinning

Remove smaller branches while keeping the main structural branches of the tree. Crown thinning may reduce the intensity of a fire by reducing leaf litter on the ground and restricting fire spread in the tree canopy.



3. Selective pruning

Remove branches that create the greatest bushfire hazard such as those overhanging buildings or that create a continuous tree canopy. Selective pruning can be used to reduce direct flame contact between trees and buildings and fire spread in the tree canopy.

Tree pruning should follow these guidelines:

- Use sharp tools to enable clean cuts and minimise tree damage.
- Decide which branches to remove before starting. Make sure to maintain a balanced, natural distribution of foliage and branches.
- Remove only what is necessary.
- Cut branches just beyond the branch ridges (collar), leaving a smaller scar.
- Remove the smaller branches and parts of the tree or branch that are dead (deadwood) first.
- Pre-cut the branch by making an undercut beyond the bark ridges before making the final cut. This reduces the risk of the branch splitting or tearing.

See the **Australian Standard 4373 - 2007 Pruning of amenity trees** for more information on pruning trees.

Managing soil erosion and landslip risk

Owners and occupiers of land are responsible for managing soil erosion and landslip risks that can result from clearing vegetation and trees. If you clear vegetation and trees under the Standards, you are still legally responsible under the *Soil and Land Conservation Act 1945*.

To reduce the risk of soil erosion and landslip caused by clearing vegetation, owners and occupiers of land are encouraged to consider the following:

- Disturb the soil as little as possible.
- Do not remove vegetation from below the soil surface.
- Make sure all topsoil stays on the soil surface.
- Keep a protective ground cover on the soil surface.
- Do not use graders, ploughs, bulldozers and other types of heavy machinery that are designed to break the soil surface.

Additionally, it is recommended that owners and occupiers of land do not remove vegetation and trees from land with slopes greater than 18 degrees, unless following advice from a geotechnical engineer assessment report.

While guidance has been provided to manage vegetation and trees, owners and occupiers of land are legally responsible for any erosion and landslip that occurs. If there is any risk of erosion or landslip, seek expert advice before removing or modifying vegetation.

Appendices

Appendix 1: Exclusions to the Standards

Removing trees or vegetation in some areas could have a negative impact on Western Australia’s natural environment or heritage. For that reason, the Bush Fire Risk Treatment Standards do not apply to certain areas of the State. These areas are called ‘Exclusions to the Standards’, and have been excluded to make sure we strike a balance between improving community safety and preserving our environment. These areas were identified through considerable consultation between DFES and key stakeholders.

Exclusion	Description	Where to access further information
<p>On land that is subject to a conservation covenant or an agreement to reserve under the following legislation:</p> <ul style="list-style-type: none"> • <i>Soil and Land Conservation Act 1945</i> • <i>Transfer of Land Act 1893</i> (that has the effect of limiting the ability to clear vegetation or a tree) • <i>National Trust of Australia (WA) Act 1964</i> (that has the effect of limiting the ability to clear vegetation or a tree) • <i>Planning and Development Act 2005</i> • Biodiversity conservation covenant under the <i>Biodiversity Conservation Act 2016</i> 	<p>Conservation Covenants or Agreements are registered on the title of the land for the protection of the conservation values of the land.</p>	<p>Department of Primary Industries and Regional Development (08) 9368 3282 E: commsoil@dpird.wa.gov.au agric.wa.gov.au/land-use-planning/covenants-protect-native-vegetation-western-australia</p> <p>Landgate (08) 9273 7373 landgate.wa.gov.au</p> <p>The National Trust (WA) (08) 9321 6088 nationaltrust.org.au</p> <p>Department of Planning, Lands and Heritage (08) 6551 8002 dplh.wa.gov.au</p> <p>Department of Biodiversity, Conservation and Attractions (08) 9219 9000 dbca.wa.gov.au</p>

Exclusion	Description	Where to access further information
On land that is an Aboriginal site as defined in the <i>Aboriginal Heritage Act 1972</i>	Under section 17 of the <i>Aboriginal Heritage Act 1972</i> , a person who excavates, destroys, damages, conceals or in any way alters any Aboriginal site commits an offence, unless he or she acts with the authorisation of the Registrar of Aboriginal Sites under section 16 or the consent of the Minister of Aboriginal Affairs under section 18.	Department of Planning, Lands and Heritage (08) 6551 8002 dplh.wa.gov.au Mapping data available at: dplh.wa.gov.au/information-and-services/aboriginal-heritage/aboriginal-heritage-search
Within areas identified as Bush Forever sites	Bush Forever areas are defined as a classification of land in the Metropolitan Region scheme to protect and manage regionally significant bushland in accordance with the Metropolitan Region Scheme clause 28A (1) or any Redevelopment Scheme prepared and approved under the <i>Metropolitan Redevelopment Authority Act 2011</i> .	Department of Planning, Lands and Heritage (08) 6551 8002 dplh.wa.gov.au Mapping data available at: nationalmap.gov.au
Areas protected under the <i>Heritage Act 2018</i>	This includes: Registered land as defined in section 4; Land that is subject to a heritage agreement (defined in section 4) to which the Heritage Council of Western Australia established under section 1 (1); or An area where a protection order under Part 4 applies.	Department of Planning, Lands and Heritage (08) 6551 8002 dplh.wa.gov.au Mapping data available at: dplh.wa.gov.au/planwa inherit.stateheritage.wa.gov.au/Public
Crown land reserves	Under section 41 of the <i>Land Administration Act 1997</i> , the Minister may set aside Crown land as reserve for a purpose in the public interest. Every such reservation has a land description and designated purpose registered on a Crown Land Title.	Department of Planning, Lands and Heritage (08) 6551 8002 dplh.wa.gov.au
An area that is a nature strip as defined in the <i>Road Traffic Code 2000</i>	An area between a carriageway and the front boundary of adjacent land but does not include a path.	Contact your Local Government: walga.asn.au/About-Local-Government/Online-Local-Government-Directory.aspx

Exclusion	Description	Where to access further information
<p>Within 100 metres inland from the high water mark of the coastline of the State</p>	<p>(a) The coastline follows the shores of bays, inlets and other similar bodies of water that are connected to the sea (disregarding any temporary closure from the sea).</p> <p>(b) The high water mark is that at ordinary spring tides.</p> <p>(c) The high water mark of the coastline extends across the mouth of a river or riverine estuary from the last point on the high water mark of one of the banks of the mouth of the river or estuary at which a line extended at 90 degrees to the bank will reach the opposite bank to the other such point on the opposite bank.</p>	<p>Department of Planning, Lands and Heritage (08) 6551 8002 dplh.wa.gov.au</p> <p>Mapping data available at: nationalmap.gov.au</p>
<p>Within an area that is covered by the riparian vegetation of a wetland or watercourse</p>	<p>Riparian vegetation is the distinctive vegetation associated with a wetland or watercourse.</p> <p>A wetland is an area of seasonally, intermittently or permanently waterlogged or inundated land, whether natural or otherwise, and includes a lake, swamp, marsh, spring, damp land, tidal flat or estuary (Schedule 5 of the <i>Environmental Protection Act 1986</i>).</p>	<p>Department of Water and Environmental Regulation (08) 6364 7000 dwer.wa.gov.au</p> <p>Mapping data available at: nationalmap.gov.au</p>
<p>A lot that contains threatened flora or a threatened ecological community as defined in the <i>Biodiversity Conservation Act 2016</i>.</p>	<p>Under section 40 and 45 of the <i>Biodiversity Conservation Act 2016</i> (BC Act), significant penalties apply for anyone who takes or disturbs threatened flora, or modifies a threatened ecological community.</p> <p>Due to the uncertainty of the exact location and extent, if a lot contains any confirmed threatened flora or threatened ecological communities, clearing is not permitted anywhere within the lot without BC Act authorisation.</p>	<p>Department of Biodiversity, Conservation and Attractions (08) 9219 9000 dbca.wa.gov.au</p> <p>Where it appears that there is reasonable evidence that a threatened species or threatened ecological community is present on land, the Minister may give each owner and each occupier of the land a written notice.</p>



Appendix 2: Frequently Asked Questions

Am I obligated to comply with the Standards?

These are voluntary Standards. If owners or occupiers of land choose to comply with the Standards, they must adhere to all of its requirements to protect themselves from breaching State and local laws.

Do I still need to meet the requirements of my fire-break notice if I apply the Standards?

Yes. Applying the Standards does not remove the obligation for owners and occupiers of land to meet the requirements under their local government fire-break notice.

How do I know if my property is in a designated bushfire prone area?

You can find out if your property has been designated as a bushfire prone area by checking The Map of Bush Fire Prone Areas. You can view the map here: maps.slip.wa.gov.au/landgate/bushfireprone

Why do the Standards not apply to buildings approved from 8 December 2015?

Since the release of State Planning Policy 3.7 Planning in Bush Fire Prone Areas on 7 December 2015, development within bushfire prone areas of Western Australia should be appropriately sited and designed to reduce the impact of bushfire on property and infrastructure. Therefore, it is unnecessary for the Standards to be applied to these developments.

How can I check whether any of the exclusions apply to my property?

Appendix 1: Exclusions to the Standards on page 12 contains detailed information for each exclusion to the Standards, including contact details for further information.

Do the Standards override Commonwealth legislation?

No. The Standards do not override Commonwealth law such as the *Environment Protection and Biodiversity Conservation Act 1999*.

How do I find out if modifying or clearing trees or underlying vegetation around my property will impact on Commonwealth legislation?

Owners and occupiers of land should contact the Department of Agriculture, Water and Environment if they are concerned about impacting on any Commonwealth environmental law. You can access data sets showing areas of sensitivity that are protected by the Commonwealth here: nationalmap.gov.au

What vegetation characteristics affect how bushfires spread?

The amount, arrangement, condition (flammability) and location of vegetation affects how easily a bushfire will spread. Fine fuels like leaf litter and fibrous bark dry out and ignite easily and can be carried by wind as embers. Shrubs, vines and other elevated fuel can act as ladder fuels. Ladder fuels allow fire to climb into the canopies of trees and significantly increase bushfire behaviour.

Is there any ‘fireproof’ vegetation I can plant in my garden?

No. All plants can burn under the right conditions, typically in extreme bushfire weather following extended drought. Ensuring breaks in vegetation can limit the spread of fire.

Do the Standards cover dumping of vegetation waste?

No. Any activity not expressly addressed by the Standards, like the dumping of vegetative waste, is not covered under the Standards. Dumping of vegetation waste may be considered an offence under another Act or instrument and be subject to enforcement by the relevant authority. It is the responsibility of the owner or occupier of land to determine if such activities require approval under other laws.

What is meant by the modification of vegetation?

The modification of vegetation refers to activities that are done to reduce the effects of flame contact, radiant heat and embers associated with a bushfire. Examples of the modification of vegetation include pruning, slashing, mowing, ploughing and mulching.

Will the Standards result in the removal of verge street trees?

No. Verge street trees are managed by and located on land which belongs to the relevant local government. The Standards are not intended to be used for the removal of verge street trees, because appropriately designed and managed street trees do not increase bushfire risk. The street can also provide a defensible space for firefighting operations.

Do I require a permit to burn?

Yes. The Standards do not override the requirement for owners and occupiers of land to obtain a permit to burn under the *Bush Fires Act 1954* for planned burning.

Appendix 3: Useful contacts

Information Request	Agency	Contact Details
General information about bushfire risk management and applying the Standards in your area	DFES Regional Offices	Perth – North Coastal (Joondalup) (08) 9301 3900
		Perth - South Coastal (Kwinana) (08) 6595 2110
		Perth – North East (Belmont) (08) 9478 8300
		Perth – South East (Armadale) (08) 6424 1502
		Albany (08) 9845 5000
		Broome (08) 9158 3200
		Bunbury (08) 9780 1900
		Esperance (08) 6002 8002
		Geraldton (08) 9956 6000
		Kalgoorlie (08) 9026 4100
		Karratha (08) 9159 1400
		Kununurra (08) 9142 4010
		Manjimup (08) 9771 6800
		Narrogin (08) 6832 3110
Port Hedland (08) 9158 1300		

Information Request	Agency	Contact Details
Residential building codes	Department of Mines, Industry Regulations and Safety Building Commission	commerce.wa.gov.au/building-commission
Significant Tree Register Crown reserves	Local Government	Refer to your Local Government walga.asn.au/About-Local-Government/Online-Local-Government-Directory.aspx
Bush Forever sites Aboriginal Heritage Act 1972 Heritage Act 2010	Department of Planning, Lands and Heritage	planning.wa.gov.au daa.wa.gov.au/heritage/place-search dplh.wa.gov.au
Soil erosion and landslip risk Mapping for soil erosion hazard	Department of Primary Industries and Regional Development	(08) 9368 3282 dpiird.wa.gov.au agric.wa.gov.au/resource-assessment/nrinfo-natural-resource-information-western-australia
State listed threatened ecological communities and threatened flora	Department of Biodiversity, Conservation and Attractions	(08) 9219 9000 dbca.wa.gov.au
Nationally listed threatened species and ecological communities	Department of Agriculture, Water and Environment	(02) 6274 1111 environment.gov.au



Appendix 4: Glossary

Building Code	<i>The Building Code of Australia Volumes One and Two</i> , as amended from time to time, of the <i>National Construction Code</i> series published by, or on behalf of, the Australian Building Codes Board.
Bushfire	An unplanned vegetation fire, including grass fires, forest fires and scrub fires.
Bush Fire Risk Treatment Standards	Specific voluntary measures that allow the owner or occupier of land in specified areas of the State to carry out activities that are likely to reduce the outbreak, spread or extension of a bushfire, and reduce the effects of a bushfire on any property.
Collar	The base of a tree branch where it meets the trunk of a tree.
Defendable space	An area of land around a building within which firefighting operations can be undertaken to defend the structure. In defendable spaces, trees and underlying vegetation should be kept at an absolute minimum to reduce the effects of flame contact and radiant heat associated with a bushfire. It should also be free from combustible items and obstructions.
Designated bushfire prone area	An area that has been designated by the FES Commissioner under section 18P of the <i>Fire and Emergency Services Act 1998</i> (as amended) as an area that is subject, or likely to be subject, to bushfires.

Development approval

Approval under the *Planning and Development Act 2005* for the development of any land, or approval, authorisation, consent or permission under any other written law to do anything that would or might significantly affect the physical character of any land.

Inner Zone

Land within 10 metres of a relevant building.

Landowner

Owner of land means:

- In relation to land alienated from the Crown, the holder (at law or in equity) of an estate in fee simple in the land; and
 - In relation to land that the Crown has lawfully agreed to alienate, the person who is entitled to the benefit of the agreement; and
 - In relation to land held under a lease lawfully granted by the Crown, the lessee; and
 - In relation to any other land, the public authority that has the care, control or management of the land or, if there is no such public authority, the Crown; [Section 51A *Environmental Protection Act 1986*].
-

Outer Zone

Land that is between 10 and 20 metres of a relevant building.

Risk Treatment Area

Land where the Standards apply that is within 20 metres of a relevant building.



Relevant building

A building classified under the Building Code as:

- Class 1, 2, 3, 9 or 10c; or
- Class 10a, but only if part of the building is within six metres of a building classified under the Building Code as Class 1, 2, 3 or 9

AND

- Built under development approval obtained before 8 December 2015.
-

Tree

A perennial plant with one or more woody, self-supporting trunks, standing at a height of at least five metres.

Vegetation

For the purpose of these Standards, vegetation refers to plants other than trees.

Wetland

An area of seasonally, intermittently or permanently waterlogged or inundated land, whether natural or otherwise, and includes a lake, swamp, marsh, spring, dampland, tidal flat or estuary (Schedule 5 of the *Environmental Protection Act 1986*).



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