



# Mapping Standard for Bush Fire Prone Areas 2025

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**Currency of the Standard**

The Department of Fire and Emergency Services (DFES) Mapping Standard for Bush fire Prone Areas (the Standard) was approved by the Director Office of Bush fire Risk Management (OBRM) in December 2025. This is the eighth revision of the Standard that was first published in May 2014.

The current version of the Standard is available at <https://www.dfes.wa.gov.au/hazard-information/bushfire/bushfire-prone-areas>.

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# Definitions

The following definitions apply to terms used in the Standard.

<b>Bush fire</b>	An unplanned fire burning in vegetation. 'Bushfire' and 'bush fire' should be taken to have the same meaning, with the latter used in this document to align with the <i>Fire and Emergency Services Act 1998</i> .
<b>Bush fire prone area</b>	An area that has been designated by the Fire and Emergency Services (FES) Commissioner under section 18P of the <i>Fire and Emergency Services Act 1998</i> as an area that is subject, or likely to be subject, to bush fires.
<b>Bush fire prone buffer</b>	An area 100 metres wide that surrounds bush fire prone vegetation.
<b>Bush fire prone vegetation</b>	Vegetation classified as bush fire prone in accordance with the criteria and vegetation key specified in this Standard.
<b>Map of Bush Fire Prone Areas</b>	An online map identifying areas of WA that are designated as bush fire prone, produced in line with the requirements of this Standard.

# 1. Introduction

The identification of bush fire prone areas (BPAs) is fundamental to controls for bushfire risk to be implemented through the planning and building system. The Map of Bush Fire Prone Areas (Map) shows areas of Western Australia (WA) designated by the Fire and Emergency Services Commissioner as likely to be subject to bush fire attack. DFES works with local government and partner agencies to maintain the Map.

The Mapping Standard for Bush Fire Prone Areas (Standard) defines the methodology applied to identify bush fire prone areas and develop the Map.

## 1.1 Definition of a bush fire prone area

A BPA is an area that is likely to be subject to bush fire attack<sup>1</sup>. Research has shown about 85 per cent of houses destroyed in bushfires were within 100 metres of bushland, with ember attack being a significant cause of property ignition<sup>2</sup>. As such, a BPA is defined as any area within 100 metres of bush fire prone vegetation (BPV).

Under Section 18P of the *Fire and Emergency Services Act 1998* the Fire and Emergency Services Commissioner can, by order published in the Gazette, designate areas of Western Australia as bush fire prone if satisfied that the area is likely to be subject to bush fires.

## 1.2 Purpose of the Map of Bush Fire Prone Areas

Development and building proposals in locations designated as BPA must meet additional planning and construction requirements. These requirements are set out in *State Planning Policy 3.7 Bushfire* and the *National Construction Code*. Further information on the bushfire planning policy and regulatory framework is available at [Bushfire planning - Department of Planning, Lands and Heritage](#).

## 1.3 Area 1 and Area 2 on the Map of Bush Fire Prone Areas

The 2025 version of the Map includes two categories of bushfire risk. Area 1 comprises suburbs located on the Swan Coastal Plain within the Perth, Peel and Greater Bunbury Region Schemes. The intensity of development and fragmented nature of vegetation in Area 1 reduces the risk of landscape scale bushfire. Area 2 comprises the remainder of the State. All BPA within suburbs identified as Area 1 are labelled as BPA 1. All other BPA is labelled as BPA 2.

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<sup>1</sup> Standards Australia 2019, *Australian Standard Construction of buildings in bushfire-prone areas AS 3959:2018*, Fourth Edition incorporating Amendment No. 1, Standards Australia, Sydney, Australia p. 8.

<sup>2</sup> K. Chen & J. McAneney 2010, *Bushfire Penetration into Urban Areas in Australia: A Spatial Analysis*, Risk Frontiers Macquarie University for Bushfire CRC, p. 16.

## 2. Identifying bush fire prone areas

### 2.1 Vegetation data

The most current and accurate data available to DFES was used to identify vegetation extent and type. High-resolution imagery of the Perth, Peel and Greater Bunbury Region Scheme areas sourced from *WA Now* was used to improve the precision of the available data.

### 2.2 Classification of bush fire prone vegetation

BPV may consist of any of the seven vegetation classifications described in *Australian Standard 3959-2018 Construction of Buildings in Bushfire Prone Areas* as shown in Table 1. Appendix 1, *Vegetation Classification Summary*, provides a visual guide to assist with classifying vegetation. Managed grassland and low threat vegetation, as described in clause 2.2.3.2. (e) and (f) of AS 3959-2018, are not bush fire prone.

Table 1: Vegetation classifications that can comprise bush fire prone vegetation<sup>3</sup>.

Vegetation Classification <sup>4</sup>	Vegetation Type	Description
<b>A Forest</b>	Tall open forest Tall woodland	Trees over 30 m high with 30-70% foliage cover (may include understorey of low trees and tall shrubs). Found in areas of high reliable rainfall.
	Open forest Low open forest	Trees up to 30 m high; 30-70% foliage cover (may include understorey of low trees or shrubs). Includes eucalypt plantations.
	Pine plantations	Trees 30 m in height at maturity, comprising softwood species, planted as a single species for the production of timber.
<b>B Woodland</b>	Woodland Low woodland	Trees up to 30 m high; 10%–30% foliage cover. May contain isolated shrubs.
<b>C Shrubland</b>	Closed (low) heath Open heath	Found in wet areas and/or affected by poor soil fertility or shallow soils. Shrubs 1m–2 m high. Wet heaths occur in sands adjoining dunes of the littoral (shore) zone. Montane heaths occur on shallow or water-logged soils.
	Low shrubland	Shrubs <2 m high; greater than 30% foliage cover. Understoreys may contain grasses.
<b>D Scrub</b>	Closed scrub (Tall heaths)	Found in wet areas and areas affected by poor soil fertility or shallow soils; >30% foliage cover. Dry heaths occur in rocky areas. Shrubs >2 m high. Typical of coastal areas and tall heaths up to 6 metres in height.
	Open scrub	Shrubs greater than 2 m high, 10%–30% foliage cover with a mixed species composition.
<b>E Mallee/ Mulga</b>	Tall shrubland	Vegetation dominated by low trees or tall shrubs some with a multi-stemmed habit (mallee); usually greater than 2 m in height; <30% foliage cover. Understorey of widespread dense low shrubs or sparse grasses and generally found in the arid and semi-arid zones, but not within the rangelands.
<b>F Rainforest</b>	Tall closed forest Closed forest Low closed forest	Trees >90% foliage cover; understorey may contain a large number of species with a variety of heights. Not dominated by eucalypt species.
<b>G Grasslands</b>	Hummock grassland Closed tussock grassland Tussock grassland Open tussock Sparse open tussock Dense sown pasture Sown pasture Open herbfield Sparse open herbfield	All forms (except tussock moorlands), including situations with shrubs and trees, if the overstorey foliage cover is less than 10%. Includes pasture and cropland.

<sup>3</sup> Source: AS 3959-2018: Table 2.3 © Standards Australia. Reproduced with permission under Standards Australia licence number CL0821dfe.

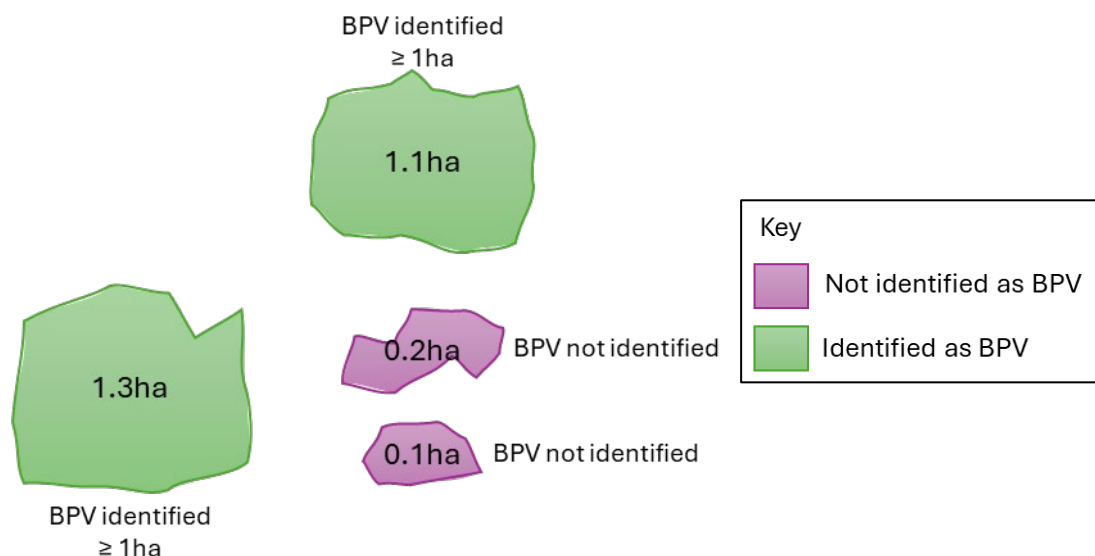
<sup>4</sup> Vegetation Classification relates to those shown in Appendix 1 – Classification of Vegetation Summary.

## 2.3 Spatial definition of bush fire prone vegetation

An area of vegetation is identified as BPV if it meets the prerequisite and any of the three criteria below at the time the assessment is undertaken. Changes in vegetation are identified via regular reviews of the Map.

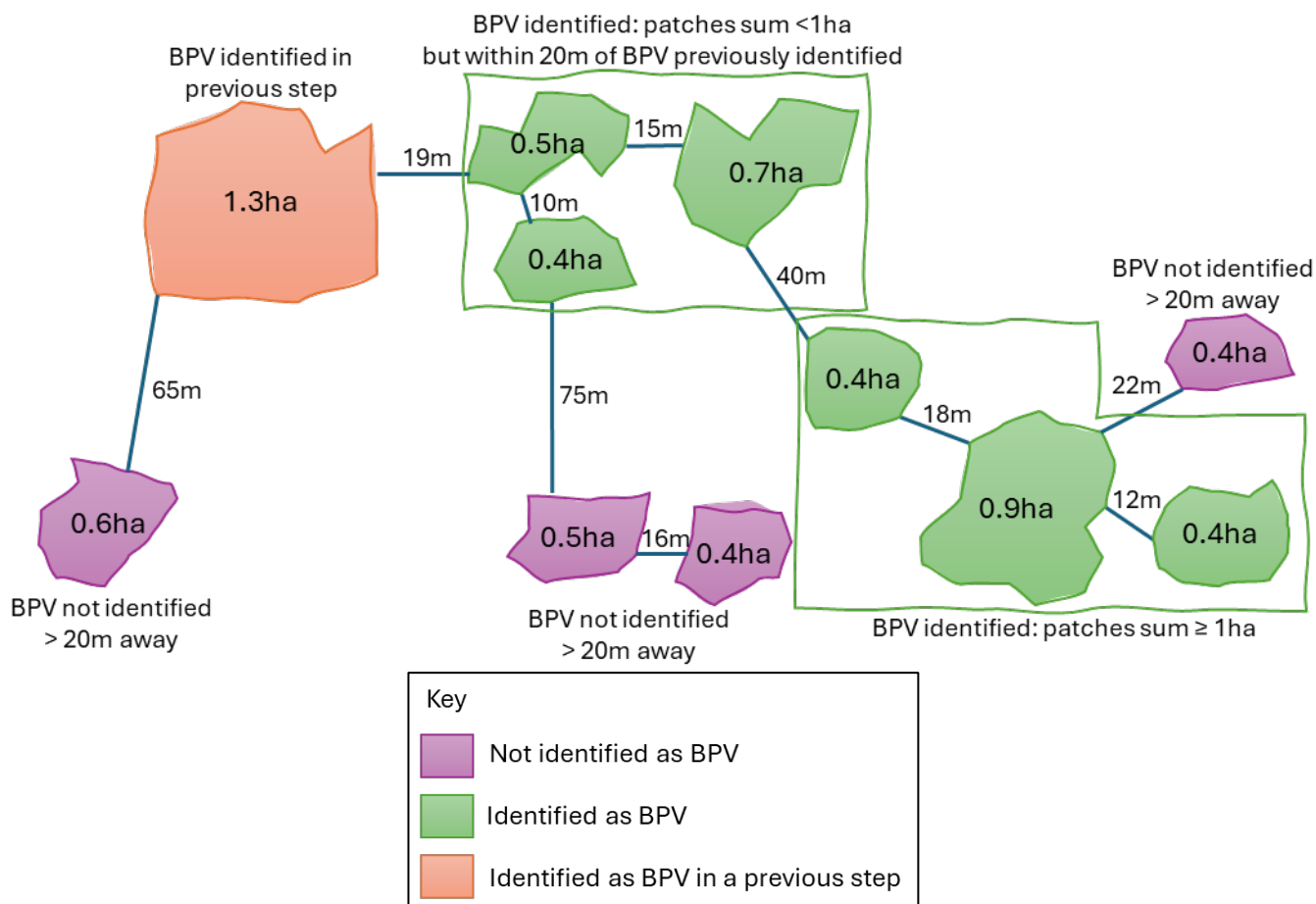
**This prerequisite applies to all Criterion:** Patches of vegetation must be equal or greater than 20 metres in width.

**Criterion 1.** Single patches of vegetation equal or greater than 1 hectare in area.



**Figure 1 – Depiction of Criterion 1 for defining bush fire prone vegetation.**

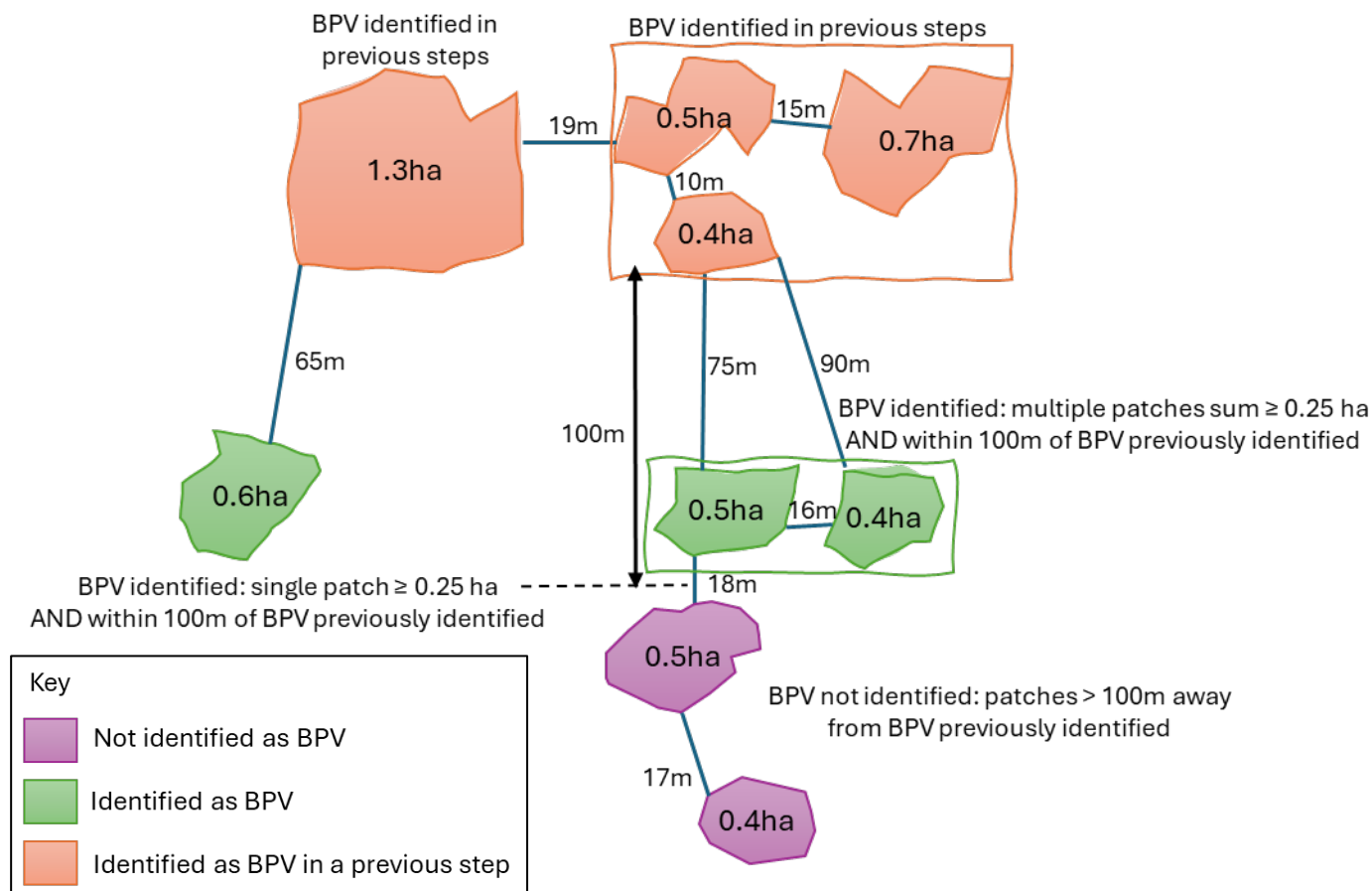
**Criterion 2.** Multiple patches of vegetation within 20 metres of one another that sum to one hectare or greater.



**Figure 2 – Depiction of Criterion 2 for defining bush fire prone vegetation.**

**Criterion 3.** Vegetation that is within 100 metres of BPV identified in Criterion 1 or Criterion 2 AND is a single patch of vegetation of at least 0.25 hectares OR in multiple patches of vegetation within 20 metres of one another that sum to equal or greater than 0.25 hectares.

There is no iteration beyond 100 metres of BPV identified in Criteria 1 and 2, i.e. a patch of vegetation is not BPV if it is near BPV identified in Criterion 3 but greater than 100 metres from BPV identified in Criteria 1 and 2.



**Figure 3 – Depiction of Criterion 3 for defining bush fire prone vegetation.**

## 2.4 Exceptions for the Perth Central Planning Sub-region

Within the Perth Central Planning Sub-region<sup>5</sup> patches of vegetation less than four hectares in area are not identified as BPV. This is in recognition of the reduced bushfire risk associated with this highly urbanised area. Additional field validation has also been undertaken in the Perth Central Planning Sub-region to identify areas of managed vegetation and exclude them as BPV.

## 2.5 The precautionary principle

DFES takes a precautionary approach to defining identifying BPV. Unless an area of vegetation clearly does not meet the prerequisite and Criteria 1, 2 or 3, it is identified as bush fire prone. DFES may undertake additional assessments to determine the characteristics of vegetation.

## 2.6 Defining the Bush Fire Prone Area

The BPA is defined by applying a 100-metre buffer to the periphery of all BPV. The BPA comprises the totality of the BPV and the area encompassed by the 100-metre buffer.

<sup>5</sup> City of Stirling, City of Bayswater, Town of Bassendean, Town of Cambridge, City of Vincent, City of Nedlands, City of Subiaco, City of Perth, City of Belmont, Town of Claremont, City of South Perth, Town of Victoria Park, Town of Cottesloe, Shire of Peppermint Grove, Town of Mosman Park, City of Fremantle, Town of East Fremantle, City of Melville and City of Canning.



### 3. Identifying Bush Fire Prone Areas 1 and 2

Area 1 comprises suburbs located on the Swan Coastal Plain within the Perth, Peel and Greater Bunbury Region Schemes where urban density, topography and the absence of contiguous vegetation reduces the risk of landscape scale bushfires. The criteria for identifying Area 1 were applied via analysis of imagery and cadastral data and on-ground vegetation assessment.

The suburbs investigated for suitability for inclusion in Area 1 were as follows:

- All suburbs within the Perth Metropolitan Region Scheme (MRS) except for the following locations:
  - East of Tonkin Hwy (north) from intersection with Reid Hwy until end of MRS boundary.
  - North and East of Reid Hwy between intersection with Roe Hwy and Tonkin Hwy (north).
  - East of Roe Hwy between Tonkin Hwy intersection and Reid Hwy intersection.
  - East of Tonkin Hwy between intersection with Roe Hwy and Albany Hwy.
  - East of Albany Hwy between the intersection with Tonkin Hwy and the South West Highway.
  - East of South West Hwy from intersection with Albany Hwy to end of MRS boundary.
- The City of Mandurah (Peel Region Scheme).
- The City of Bunbury and Shire of Dardanup (Greater Bunbury Region Scheme).

These suburbs were subject to field assessment for suitability for inclusion in Area 1 if:

- at least 50% of their total area is developed;
- at least 25% of the area within the suburb's BPA is developed; or
- the suburb is surrounded by suburbs identified for further assessment as Area 1.

Land is considered to be developed if it is:

- Zoned urban or urban deferred under the region scheme and has a building or structure in place or is subdivided to a size consistent with an urban form (equivalent to an R-Code of R10 or greater).
- In the central city area zone or regional centre, industrial zone or public purpose zone under the region scheme and local planning scheme and has been built on.
- A road.

Suburbs that met the criteria above were subject to field assessment to better characterise their bushfire risk profile. This included on ground vegetation classification and fuel assessment and consideration of vegetation connection and distribution. Table 2 shows the criteria applied to determine whether a suburb was included in Area 1.

Table 2: Field assessment characteristics used to identify Area 1 suburbs.

Desirable characteristics	Undesirable characteristics
Minimal BPV	Significant extent of BPV
Vegetation distributed in isolated remnants	Significant extent of BPV in adjacent suburb(s)
Significant areas of primary dune vegetation	Contiguous vegetation
Significant areas of manageable grassland	Undeveloped areas with development potential
Extensive residential areas	Fewer roads
Extensive Industrial areas	
Significant road network	

All parts of the State not included in Area 1 are Area 2.

## 4. Technical Specifications of the Map of Bush Fire Prone Areas

### 4.1 Map and Data Accessibility

The Map can be viewed online through the [DFES website](#) utilising the Shared Location Information Platform (SLIP) administered by Landgate. The dataset depicting designated BPA is available from the WA open data website, [www.data.wa.gov.au](http://www.data.wa.gov.au).

### 4.2 Map depiction of Bush Fire Prone Areas

For the first four months following designation, new BPA will be identified separately on the Map.

Following the end of the four-month transition period, all designated BPA will be depicted as BPA 1 or BPA 2 as appropriate.

# 5. Reviews of the Map of Bush Fire Prone Areas

## 5.1 Review of Bush Fire Prone Mapping

DFES' Office of Bushfire Risk Management (OBRM) undertakes regular updates to the Map and consults local governments on BPAs in their district as part of each Map review. Relevant state government agencies will be provided with the opportunity to contribute to the review of the Map as appropriate. Local governments and state agencies that manage land should monitor BPAs identified within their administrative areas and report any need for change to OBRM. Any feedback on the Map from members of the public or industry groups should be provided to the relevant local government to be considered for inclusion in OBRM's consultation process.

Reviews of the Map follow the following procedure:

- OBRM undertakes analysis to identify areas suitable to include in Area 1.
- OBRM writes to local governments and relevant state government agencies to invite their contribution to the review of the Map.
  - Local governments and state government agencies are given about three months to review<sup>6</sup> the mapping for their administrative areas.
  - Some assistance may be provided by OBRM if required.
- Local governments and state government agencies provide requests for amendments to OBRM or advise if no changes are required.
- OBRM reviews all proposed amendments.
  - Any amendments must comply with the Standard to be accepted.
  - OBRM may liaise with relevant parties or conduct desktop or field-based reviews to validate proposed amendments.
  - Should a difference of opinion not be resolved, the issue will be escalated to the Director OBRM for a final decision.
- OBRM will use all accepted amendments to update the BPV data.

## 5.2 Finalisation of the Bush Fire Prone Areas dataset

- OBRM will use the accepted BPV data to prepare the BPA dataset and Map.
- OBRM will review the BPA dataset and Map and provide to the FES Commissioner for approval.

## 5.3 Publication of the Map of Bush Fire Prone Areas

- The FES Commissioner designates the BPAs by an order published in the Government Gazette.
- DFES stores the designated BPA dataset and makes it publicly accessible through Landgate:
  - to view as the Map on the DFES website;
  - to view and download through [www.data.wa.gov.au](http://www.data.wa.gov.au)<sup>7</sup>; and
  - as a field in relevant Landgate Property Interest Reports.
- OBRM will inform local governments of the publication of a new version of Map by email and through the Western Australian Local Government Association's networks and newsletters.

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<sup>6</sup> In most cases, a desktop assessment and application of local knowledge is an adequate process for verifying the bush fire prone vegetation data. A field assessment is appropriate where data or local knowledge is not sufficient to make a determination.

<sup>7</sup> Previously designated bush fire prone area data will continue to be publicly available in the Map of Bush Fire Prone Areas and [www.data.wa.gov.au](http://www.data.wa.gov.au), and will be identified by its designation date.

## 6. Monitoring and Review

The Standard is subject to regular review to maintain its currency and improve the accuracy of the resulting Map. Review is undertaken concurrently with consultation on revised versions of the Map. Local governments, state government agencies, industry groups and members of the public are invited to provide feedback during the consultation processes.

# Appendix 1 - Classification of Vegetation - Summary

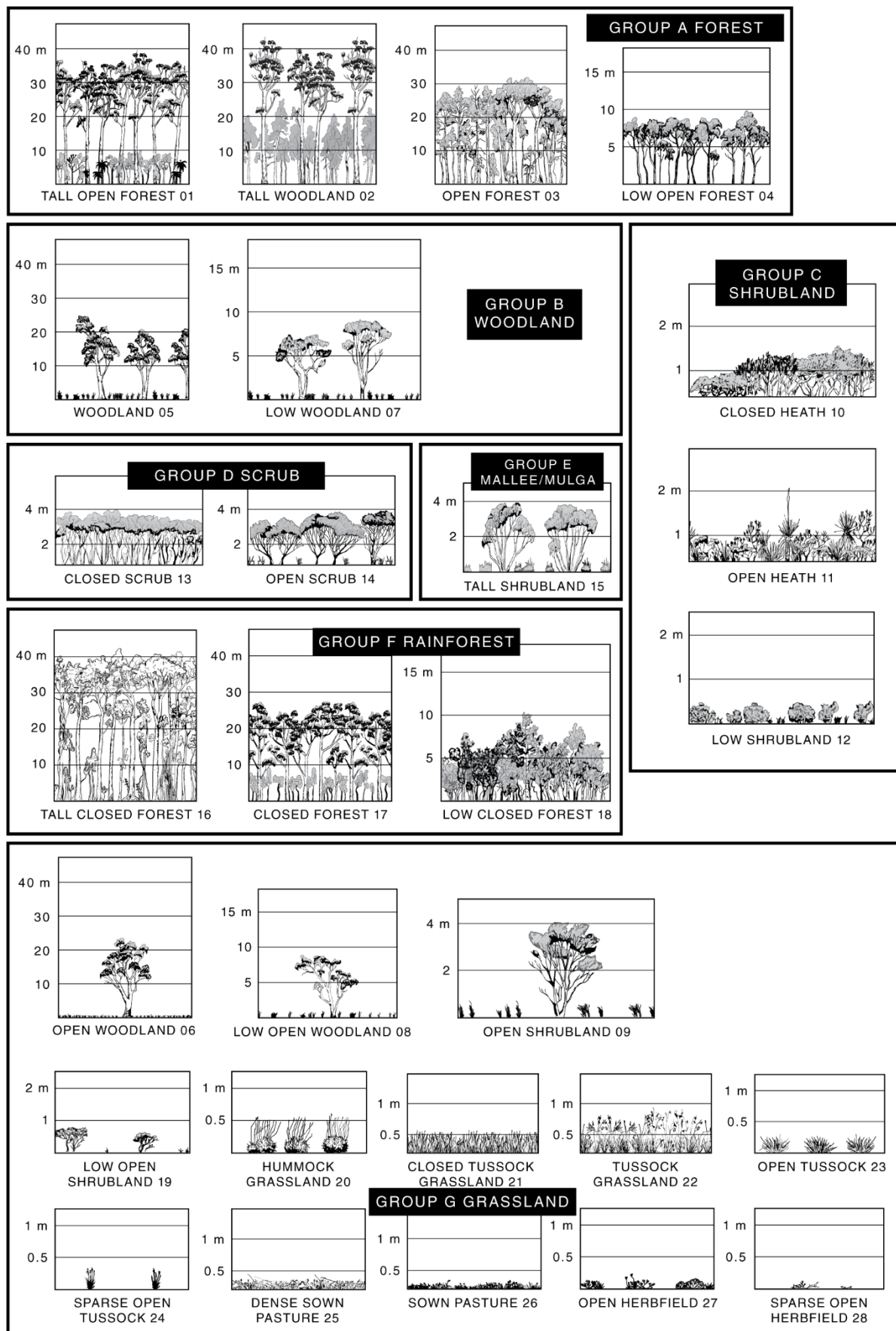


Figure 4 – Classification of vegetation – summary<sup>8</sup>

<sup>8</sup> Source: AS 3959-2018: Figure 2.4a © Standards Australia. Reproduced with permission under Standards Australia licence number CL0821dfe.