|  |
| --- |
| Insert Local Government Name |
| **BUSHFIRE RISK MANAGEMENT PLAN** |
| 20XX-20XX |

|  |
| --- |
| Go to insert > Pictures > Pictures from file to import Local Government logo |

v

The text included in this template is suggested for use and may be amended as required. Consideration should be given to the intended audience of the BRM Plan. Please remove ALL drafting notes (identified in red text or in blue italics) before submitting.

*Add review and endorsement dates to title page as known and appropriate, for example;*

*Office of Bushfire Risk Management Bushfire Risk Management (BRM Plan) reviewed XX Month 20XX*

*Local Government Council BRM Plan endorsement XX Month 20XX*

Contents

[1. Introduction 1](#_Toc50702006)

[1.1. Background 1](#_Toc50702007)

[1.2. Aim and Objectives 1](#_Toc50702008)

[1.3. Legislation, Policy and Standards 2](#_Toc50702009)

[2. The Risk Management Process 4](#_Toc50702012)

[2.1. Roles and Responsibilities 5](#_Toc50702014)

[2.2. Communication and Consultation 6](#_Toc50702016)

[3. Establishing the Context 7](#_Toc50702017)

[3.1. Description of the Local Government and Community Context 7](#_Toc50702018)

[3.2. Description of the Environment and Bushfire Context 11](#_Toc50702024)

[4. Asset Identification and Risk Assessment 17](#_Toc50702037)

[4.1. Planning Areas 17](#_Toc50702038)

[4.2. Asset Identification 17](#_Toc50702039)

[4.3. Assessment of Bushfire Risk 19](#_Toc50702041)

[5. Risk Evaluation 22](#_Toc50702048)

[5.1. Evaluating Bushfire Risk 22](#_Toc50702049)

[5.2. Risk Acceptability 22](#_Toc50702050)

[5.3. Treatment Priorities 25](#_Toc50702052)

[6. Risk Treatment 26](#_Toc50702054)

[6.1. Local Government Wide Controls 26](#_Toc50702055)

[6.2. Asset Specific Treatment Strategies 26](#_Toc50702056)

[6.3. Development of the Treatment Schedule 27](#_Toc50702057)

[7. Monitoring and Review 28](#_Toc50702058)

[7.1. Review 28](#_Toc50702059)

[7.2. Monitoring 28](#_Toc50702060)

[7.3. Reporting 28](#_Toc50702062)

[8. Glossary 29](#_Toc50702063)

[9. Common Abbreviations 32](#_Toc50702064)

[10. Appendices 33](#_Toc50702065)

|  |
| --- |
| Document Control |
| Document name |  | Current version | 1.1 |
| Document owner | CEO <Local Government> | Issue date | DD/MM/YYYY |
| Document location | <Add as required> | Next review date | DD/MM/YYYY |

Document Endorsements

The <Local Government> Council endorses that the Bushfire Risk Management Plan (BRM Plan) has been reviewed and assessed by the Office of Bushfire Risk Management as consistent with the standard for bushfire risk management planning in Western Australia, the Guidelines for Preparing a Bushfire Risk Management Plan. The <Local Government> is the owner of this document and has responsibility, as far as is reasonable, to manage the implementation of the BRM Plan and facilitate the implementation of bushfire risk management treatments by risk owners. The approval of the BRM Plan by <Local Government> Council satisfies their endorsement obligations under State Hazard Plan Fire.

|  |  |  |  |
| --- | --- | --- | --- |
| Local Government | Representative | Signature | Date |
| <Local Government Council> | <Name and title> |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Version  | Date | Author | Section |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Publication Information

Wherever a third party holds copyright in material presented in this publication, the copyright remains with that party. Their permission may be required to use the material.

This document contains Standards Australia Ltd and ISO copyrighted material that is distributed by SAI Global on Standards Australia Ltd and ISO’s behalf. Standards Australia Ltd and ISO’s material is not for resale, reproduction or distribution in whole or in part without written permission from SAI Global Ltd:
tel + 61 2 8206 6355 or copyright@saiglobal.com

<Add any further information as required>

#  Introduction

##  Background

Under the State Hazard Plan Fire an integrated Bushfire Risk Management (BRM) Plan is to be developed for local government areas with significant bushfire risk. This BRM Plan has been prepared for the <Insert Local Government Name> in accordance with the requirements of the Guidelines for Preparing a Bushfire Risk Management Plan (the Guidelines) from the Office of Bushfire Risk Management (OBRM) within the Department of Fire and Emergency Services (DFES). The risk management processes used to develop this BRM Plan are aligned to the key principles of AS/NZ ISO 31000:2009 Risk management –Principles and Guidelines and those described in the National Emergency Risk Assessment Guidelines. This approach is consistent with State Emergency Management (SEM) Policy and SEM Prevention and Mitigation Procedure 1.

This BRM Plan is a strategic document that facilitates a coordinated approach towards the identification, assessment and treatment of assets exposed to bushfire risk. The Treatment Schedule sets out a broad program of coordinated multi-agency treatments to address risks identified in the BRM Plan. Government agencies and other land managers responsible for implementing treatments participate in developing the BRM Plan and Treatment Schedule to ensure treatment strategies are collaborative and efficient, regardless of land tenure.

##  Aim and Objectives

The aim of a BRM Plan is to effectively manage bushfire risk in order to protect people, assets and other things of local value in <Insert Local Government Name>. The objectives of this BRM Plan are to:

guide and coordinate a tenure blind, multi-agency BRM program over a five-year period;

document the process used to identify, analyse and evaluate risk, determine priorities and develop a plan to systematically treat risk;

facilitate the effective use of the financial and physical resources available for BRM activities;

integrate BRM into the business processes of local government, land owners and other agencies;

ensure there is integration between land owners, BRM programs and activities; and

document processes used to monitor and review the implementation of treatment plans to ensure they are adaptable and that risk is managed at an acceptable level.

##  Legislation, Policy and Standards

The following legislation, policy and standards were considered to be applicable in the development and implementation of the BRM Plan.

### 1.3.1 Legislation and Policy

Aboriginal Heritage Act 1972

Biodiversity Conservation Act 2016

Building Act 2011

Bush Fires Act 1954

Conservation and Land Management Act 1984

Country Areas Water Supply Act 1947

Emergency Management Act 2005

Environmental Protection Act 1986

Environmental Protection and Biodiversity Conservation Act 1999 (Cth)

Fire Brigades Act 1942

Fire and Emergency Service Act 1998

Metropolitan Water Supply, Sewerage and Drainage Act 1909

Bush Fires Regulations 1954

Emergency Management Regulations 2006

Planning and Development (Local Planning Scheme) Regulations 2015

SEM Plan (State Emergency Management Committee (SEMC) 2019)

SEM Policy (SEMC 2019)

SEM Prevention and Mitigation Procedure 1 (SEMC 2019)

State Hazard Plan Fire (SEMC 2019)

State Planning Policy 3.4: Natural Hazards and Disasters (Western Australian Planning Commission (WAPC) 2006)

State Planning Policy 3.7: Planning in Bushfire Prone Areas (WAPC 2015, as amended)

<Insert additional relevant legislation here (ensure they are in alphabetical order)>

### 1.3.2 Other Related Documents

A Capability Roadmap: Enhancing Emergency Management in Australia 2016 (Australasian Fire and Emergency Services Authorities Council 2016)

A Guide to Constructing and Maintaining Fire-Breaks (DFES 2018)

AS 3959:2009 Construction of Buildings in Bushfire–Prone Areas (Standards Australia 2009)

AS/NZ ISO 31000:2009 Risk Management – Principles and Guidelines (Standards Australia 2009)

Australian Disaster Resilience Handbook 10: National Emergency Risk Assessment Guidelines (Australian Institute for Disaster Resilience 2015)

Guidelines for Preparing a Bushfire Risk Management Plan 2020 (DFES 2020)

Bushfire Risk Management Planning Handbook (DFES 2018)

Code of Practice for Timber Plantations in Western Australia (Forest Products Commission (FPC) 2006)

Guidelines for Planning in Bushfire Prone Areas (WAPC 2017)

Guidelines for Plantation Fire Protection (DFES 2011)

National Disaster Risk Reduction Framework (Department of Home Affairs 2018)

National Strategy for Disaster Resilience (Attorney-General’s Department 2011)

Public Service Circular No. 88 Use of Herbicides in Water Catchment Areas (Department of Health 2007)

Western Australian Emergency Risk Management Guide (SEMC 2015)

<Insert additional relevant policies, guidelines or standards here>

#  The Risk Management Process

The risk management processes used to identify and address risk in this BRM Plan are aligned with the international standard for risk management, *AS/NZ ISO 31000:2009 Risk Management – Principles and Guidelines*. This process is outlined in Figure 1.

Figure 1 – An overview of the risk management process1

 Adapted from: AS 3959:2009, with permission from SAI Global under licence number 1510-c081.

##  Roles and Responsibilities

The roles and responsibilities of the key stakeholders involved in the development of the BRM Plan are outlined in Table 1.

Table 1 – Roles and Responsibilities

| **Stakeholder Name\*** | **Roles and Responsibilities** |
| --- | --- |
| Local Government | * Custodian of the Bushfire Risk Management Plan (BRM Plan)
* Coordinate the development and ongoing review of the integrated BRM Plan.
* Negotiate a commitment from land owners to treat risks identified in the BRM Plan.
* Undertake treatments on lands owned or managed by them.
* Submit the draft BRM Plan to DFES’s Office of Bushfire Risk Management (OBRM) for review and endorsement.
* Submission of the OBRM endorsed BRM Plan to council for their approval and adoption.
 |
| Department of Fire and Emergency Services | * Participate in and contribute to the development and implementation of BRM Plans.
* Support to local government through expert knowledge and advice in relation to the identification, prevention and treatment of bushfire risk.
* Facilitate local government engagement with state and federal government agencies in the local planning process.
* Undertake treatments on Unmanaged Reserves and Unallocated Crown Land within gazetted town site boundaries.
* In accordance with Memorandums of Understanding and other agreements, implement treatment strategies for other land owners.
* Review BRM Plans for consistency with the Guidelines prior to final approval by council.
* Administer and coordinate the Mitigation Activity Fund Grants Program.
 |
| Department of Biodiversity, Conservation and Attractions | * Participate in and contribute to the development and implementation of BRM Plans.
* Provide advice for the identification of environmental assets that are vulnerable to fire and planning appropriate treatment strategies for their protection.
* Undertake treatments on department managed land, and Unmanaged Reserves and Unallocated Crown Land outside gazetted town site boundaries and land in which they have an agreement for.
 |
| Forest Products Commission | * Participate in and contribute to the development and implementation of BRM Plans.
* Provide information about their assets and current risk treatment programs.
* Undertake treatments on lands owned or managed by them.
 |
| Department of Planning, Lands and Heritage | * Provide advice for the identification of their assets and infrastructure, specifically Aboriginal and European heritage.
 |
| Other State and Federal Government Agencies and Public Utilities | * Provide information about their assets and current risk treatment programs.
* Participate in and contribute to the development and implementation of BRM Plans.
* Undertake treatments on lands they manage.
 |
| Corporations and Private Land Owners | * Provide information about their assets and current risk treatment programs.
 |
| Other (specify)\*\*Delete as appropriate |  |

##  Communication and Consultation

Communication and consultation throughout the risk management process is fundamental to the development, implementation and review of the BRM Plan. To ensure appropriate and effective communication occurred with relevant stakeholders at each stage of the BRM planning process, a *Communication Strategy* was prepared (Appendix<number>).

#  Establishing the Context

This section aims to describe the context in which the BRM Plan is being developed. The information in Chapter 3 should describe the local factors and conditions affecting bushfire risk and treatment. Furthermore, this context will also inform the Communications Strategy and the steps for achieving the outcomes of the BRM Plan. All information used to establish the context should be linked to how it influences BRM through the preparedness, prevention, response and recovery stages. This section should describe the risks that are unique in your local government, it is the story of BRM in your area and should help identify the unique elements of the local government that influence your risks and treatments.

##  Description of the Local Government and Community Context

### 3.1.1 Strategic and Corporate Framework

Briefly explain the relationships between BRM and existing local government corporate, strategic and planning frameworks. Points that should be covered are:

Explain how the local government previously and currently approaches BRM planning;

Which objective in the local government’s corporate/strategic plan relate to aspects of the BRM Plan and how does the BRM Plan support achieving these objectives;

Identify the roles and area(s) responsible for the BRM planning process within the local government (remember the Bushfire Risk Management Officer is a DFES employee and the Bushfire Risk Planning Coordinator may move on, which area or team in the local government will be responsible then);

Describe how outcomes of the BRM Plan will inform local government functions;

How will the BRM Plan and it’s outcomes be link to and/or used to inform, emergency management structures in the local government such as the Local Emergency Management Committee, Bush Fire Advisory Committee, local government mitigation programs and/or similar; and

What are the current perceptions of bushfire risk and the general attitudes of the community towards bushfire risk and preparedness.

Suggested sources of information include the Local Government’s corporate plans, strategic plans (refer to section 2.5.1 of the Guidelines).

### 3.1.2 Location, Boundaries and Tenure

Provide a brief description of the local government’s location and boundaries to identify the area covered by the BRM Plan. Points that should be covered are:

Provide a breakdown of the land tenure (approximate percentage), see Table 2 as an example. Other significant land managers/agencies should be added or removed from the list depending on whether or not they manage land within the local government;

Identifying the key land owner groups who’s land influences bushfire risk across the local government area; and

How does this make up of land tenures influence your BRM? Examples might be large areas of vegetated public land (including national parks, nature reserves) near townships means the community is at high risk of landscape scale bushfires. High percentages of private land may require many land owners to be engaged as stakeholders.

Suggested sources of information include Landgate, local government and other state agencies records (refer to section 2.5.1 of the Guidelines). A map may be provided in this section for ease of interpretation.

Table 2 – Overview of Land Tenure and Management within the <Local Government>

|  |  |
| --- | --- |
| **Land Manager/Agency** | **Percent of Local Government Area** |
| Local Government |  |
| Private |  |
| Department of Biodiversity, Conservation and Attractions |  |
| Department of Planning, Lands and Heritage |  |
| <Other> |  |
| Total |  |

Source: <Insert source>

### 3.1.3 Population and Demographics

Provide a brief description of the population and demographics of the local government area, including where and how people live, the location of communities in relation to areas of bushfire risk and general trends with implications for the BRM Plan. Points that should be covered are:

Specify any areas undergoing significant or rapid growth or that are planned for development within the five-year BRM Plan timeframe;

General population demographics:

* How many people are in the local government area;
* What is the age breakdown;
* What is the ethnic and linguistic diversity of the community; and
* Tourism numbers/temporary population.

From the population demographics, are there above average populations of any vulnerable groups? Describe what makes them vulnerable and what can be done to help them. Vulnerable groups may be:

* Elderly people;
* Young people under 18;
* New residents or Tourists; and
* People with no or limited English.

What activities are the local government doing to support community and vulnerable groups; and

Address the engagement of the community in bushfire preparedness, general perceptions of bushfire risk and the accuracy of these perceptions.

An example of the type of statement that might be used for vulnerable populations is:

*“The high portion of children under 18 is a unique consideration for the local government. This group are particularly vulnerable in bushfire events as they are reliant on adults for decision making, evaluation and care. This means that additional planning is required to ensure that they are planned for in pre-planning and recovery. The <local government> are doing* *<insert details> to help ensure that this group is well considered and supported before, during and after bushfire events.” Or*

*“The City has X% of the local population over 65 years of age which is Y% more than the Western Australian average. Generally, elderly community members are more fragile, more likely to have limited mobility, suffer from health conditions and/or require the care of others. The elderly population often have specific needs or requirements during evacuation to address these limitations. Elderly residents living independently may over estimate their abilities and/or have limited scope to undertake property preparations and responded to bushfires appropriately. The <local government> and the Local Emergency Management Committee (LEMC) work together to ensure that elderly people have been considered <insert details>.”*

Suggested sources of information include the Australian Bureau of Statistics (ABS), Local Emergency Management Arrangements, Population vulnerability indicators in *Demographics for Bushfire Risk Analysis Regional Victoria and Peri-urban Melbourne* (Department Land, Water and Planning) and local government records (refer to section 2.5.1 of the Guidelines).

### 3.1.4 Economic Activities and Industry

Provide an overview of any significant economic and industrial activities based within the local government area with implications for BRM. Particular attention should be given to those activities with regional or state significance. Points that should be covered are:

Overview of major industries including significant contributors to the local government’s economy;

Overview of significant businesses or sectors that employ the most people;

Which of the industries are at risk from bushfires or could be adversely impacted by bushfire mitigation activities? For example, mine sites or forestry that are vulnerable to bushfires; impact of smoke on wineries and grapes;

How might bushfires impact major industries, don’t forget flow-on impacts, for example loss of tourism could also lead to impacts on retail and accommodation or impacts on supporting industries if mining or forestry are impacted;

If major transport routes run through the local government area, what would the impact of their closure be; and

If tourism is a major industry, what would the impacts of bushfire be on a major event or attraction? For example, closure of major attraction during a bushfire is likely to result in more people on roads. Or initial impact of a bushfire event would not be significant, however the longer term impact would be substantial as a result of a drop in visitor numbers, loss of visual amenity and impacts on individual venues and industries.

Do not include the names of private companies or employers.

Suggested sources of information include the ABS and the Local Chamber of Commerce and Industry (refer to section 2.5.1 of the Guidelines).

##  Description of the Environment and Bushfire Context

### 3.2.1 Topography and Landscape Features

Provide an overview of the topography of the area, addressing any landscape features with the potential to significantly affect bushfire behaviour, increase bushfire risk or limit the capacity to implement effective treatments. Points that should be covered are:

What are the major landscape features and how do they influence fire behaviour;

Major landscape features and their bushfire impact mayinclude:

* Ranges and escarpments – slopes drive fast moving fires with ridgelines that generate high levels of spotting;
* Rivers and valley systems – limit access and ability to responded to and suppress fires as they form impassable features;
* Terrain driven localised wind patterns make bushfire harder to predict;
* Undulating hills – slope driving fast moving fires;
* Coastal plains – limited access, difficult for vehicles to move through;
* Wetland and peat soils– limited access, peat fires burn for very long periods and are extremely hard to suppress;
* Coastal features, dunes and stabilised dunes – limited access, difficult for vehicles to move through;
* Deserts – wind driven bushfires move quickly through landscape, hard to access and limited control line options;
* Rangelands – large areas, limited landscape features/point of control to suppress; and
* Rocky outcrops – create access issues often require aerial support to extinguish these areas.

Do any of these features occur close to locations/towns that make the risk high?

Suggested sources of information include DFES, Bushfire Risk Management System (BRMS), Western Australia (WA) Atlas (Landgate website) (refer to Section 2.5.2 of the Guidelines).

### 3.2.2 Climate and Bushfire Season

Provide an overview of the climate of the area. Points that should be covered are:

General seasonal conditions throughout the full year (all seasons) including:

* length and period of all seasons;
* annual temperature and rainfall patterns;
* prevailing conditions and weather patterns that affect the speed and direction of bushfires; and
* what do they mean for bushfire management, for example when do you get bad bushfire weather (including summer and winter bushfires).

Forest Fire Danger Index and Grassland Fire Danger Index and Fire Danger Ratings (FDR) commonly seen in the local government e.g. average days per year is the FDR above ‘Severe’; and

Any localised conditions that influence fire behavior (coastal breezes or winds off the scarp).

Suggested sources of information include the Bureau of Meteorology and Department of Primary Industries and Regional Development (refer to section 2.5.2 of the Guidelines).

### 3.2.3 Vegetation

Provide a broad overview of the vegetation categories relevant to the BRM Plan. Points that should be covered are:

Summary of the major vegetation types, their distribution, connectivity and proximity to townships and assets across the landscape (a map may help in this section);

Vegetation structure and distribution of fuels within vegetation types, including how this influences the expected fire behavior in these vegetation types;and

Typical plants in that vegetation type with relevance to floral species that can affect the speed of bushfire or the intensity of spotting behaviour.

An example of the type of statement that may explain vegetation type and fuel structure:

“These forests are made *up of a tall Eucalyptus species with a mid-story of acacia and banksia species as well as larger grass trees and an understory of native grasses and herbs including grevilleas, bracken and native orchids. These forests have high fine fuel loads with deep leaf litter and large amounts of dry dead fuels, which mean that fire will easily start and spread quickly in this vegetation. Fires in this vegetation will often quickly reach the canopy due to the horizontal distribution of fuels creating high intensity fires which are not suitable for direct attack. The trees in these forests have fine fibrous lose bark which easily ignites and can be blown by the winds to carry the fires forward. This spotting can occur of long distances and can start new fires ahead of the main fire front. Combined with the hilly topography on which it occurs these forest vegetation types create very intense and fast moving fires. Once going fires in this vegetation can be difficult to access and suppress and often will run for multiple days.”*

Note that it is not necessary to provide a list of vegetation categories in the appendix.

Suggested sources of information include local Department of Biodiversity, Conservation and Attractions (DBCA) officers (refer to section 2.5.2 of the Guidelines).

### 3.2.4 Threatened Species and Communities

Provide an overview of known Threatened Flora, Threatened Fauna and Threatened Ecological Communities (TECs) and how bushfires or BRM may impact them. Points that should be covered are:

An appendix with list of Threatened Species under both the state and federal legislation including their conservation status;

Identify any TECs or other ecological communities that are fire sensitive or are likely to be negatively impacted by fire;

What are the impacts of an inappropriate fire regime on these species/communities (for example loss of logs, changes in species composition);

Which of the Threatened Flora or Threatened Fauna are likely to be impacted by bushfire mitigation activities (for example, planned burning in spring impact on the breeding season of some small mammals);

Are there any highly restricted species, where do they occur (in general terms, do not include specific site locations), how are they considered in fire management;

What are the processes in place to identify the of impacts of mitigation activities on threatened species and communities; and

How are the environmental approval processes managed and recorded with in the local government.

Suggested sources of information include national Recovery Plans, DBCA and Department of Agriculture, Water and the Environment (refer to section 2.5.2 of the Guidelines).

### 3.2.5 Bushfire Frequency and Causes of Ignition

Provide an overview of the frequency of bushfires in the local government area. Points that should be covered are:

Fire history – what (if any) significant landscape fires have occurred? Discuss how they started, where the fire path was, what were the impacts and any other key information about the fire;

Areas of frequent ignition, known ignition sources or activities and map of ignitions. Discuss any patterns and how they are or can be managed (if possible);

Discuss ignition from natural events and how they have impact the local government area; and

Potential fire paths that are of concern in the landscape. What is the worst case scenario bushfire for this landscape?

Suggested sources of information include DFES, DBCA and local government (refer to section 2.5.2 of the Guidelines).

### 3.2.6 Current Bushfire Risk Management Activities

Focus on the work that are currently being undertaken in the local government area to address bushfire risk. Points that may be covered are (suggested under individual subheadings as shown):

**Map of Bushfire Prone Areas**

The intent of the WA Government’s Bushfire Prone Planning Policy is to implement effective risk based land use planning and development to preserve life and reduce the impact of bushfire on property and infrastructure. The *State Planning Policy 3.7 – Planning for Bushfire Prone Areas* ensures bushfire risk is given due consideration in all future planning and development decisions. This policy does not apply retrospectively, however the BRM Plan can help address this risk for existing development and establishing an effective treatment plan to manage the broader landscape and any unacceptable community risks. The <Insert Local Government Name> Bushfire Prone Area is shown in Figure <Insert Figure number>.

**Volunteer Fire Brigades**

* What volunteer brigades are operating in the local government area, including Volunteer Bush Fire Brigades and DFES Brigades; and
* Other response resources (DBCA, FPC, Career Fire Stations) that support bushfire response in the Local Government.

**Burning Restrictions**

* The local government’s Restricted Burning Times and Prohibited Burning Times.
* Any other localised fire restrictions (Harvesting Movement Bans).

***Bush Fires Act 1954* section 33 Fire Management Notices**

* How does the council apply their section 33 notices;
* Are they specific to higher bushfire risk areas;
* What do the section 33 notices aim to achieve?

**Community engagement activities**

* Any programs run in the local government area to support community awareness and resilience prior to bushfire events?

**Other Current Local Government Wide Controls**

Local Government Wide Controls are activities that reduce the overall bushfire risk within the <Insert Local Government Name>. These types of activities are not linked to specific assets, and are applied across all or part of the local government as part of normal business or due to legislative requirements. Some notable controls currently in place in <Insert Local Government Name> are:

* Describe any other Local Government Wide Controls currently in place. Consider other practices and programs undertaken by local government or state agencies that contribute to BRM within the local government area, including controls in place under state government policies, agreements or Memorandums of Understanding. For example:
	+ State-wide arson prevention programs developed in conjunction with WA Police and DFES; and
	+ <Insert any other Local Government Wide Controls> .

Further information about the Local Government Wide Controls and how they will support the treatment of bushfire risk can be found in section 6.1 Local Government Wide Controls.

#  Asset Identification and Risk Assessment

##  Planning Areas

The <Insert Local Government Name> has been divided into <No. of planning areas>. <Provide the names of the planning areas here>. Attached at Appendix <number> is a map showing the boundaries of the planning areas established within the <Insert Local Government Name>.

Or

The <Insert Local Government Name> has a single planning area based on the Electoral Ward boundaries.

If applicable, summarise the planning areas here, describe any differences in their bushfire risk profiles. This could include a summary of the differences in population density, asset distribution, land use, native plant communities, hazards or topography. The BRM Planning Handbook provides tools that can assist in summarising the planning areas and prioritising them for risk assessment.

## Asset Identification

Asset identification and risk assessment has been conducted at the local level using the methodology described in the Guidelines using BRMS. Identified assets are categorised into the following categories and subcategories provided in Table 3.

Table 3 – Asset Categories and Subcategories

| **Asset Category** | **Asset Subcategories** |
| --- | --- |
| Human Settlement | **Residential areas**Residential areas, including dwellings in rural areas and the rural-urban interface.**Places of temporary occupation**Commercial and industrial areas, mining sites or camps and other locations where people may work or gather.**Special risk and critical facilities**Locations and facilities where occupants may be especially vulnerable to bushfire for one or more of the following reasons:* Occupants may have limited knowledge about the impact of bushfires;
* Occupants may have a reduced capacity to evaluate risk and respond adequately to bushfire event;
* Occupants may be more vulnerable to stress and anxiety arising from a bushfire event or the effects of smoke;
* There may be significant communication barriers with occupants;
* Relocation and/or management of occupants may present unique challenges or difficulties, such as transportation, or providing alternative accommodation, healthcare or food supplies; or
* Facilities that are critical to the community during a bushfire emergency.
 |
| Economic | **Agricultural**Areas under production, such as pasture, livestock, crops, viticulture, horticulture and associated infrastructure.**Commercial and industrial**Major industry, waste treatment plants, mines (economic interest), mills, processing and manufacturing facilities and cottage industry.**Critical infrastructure**Power lines and substations, water pumping stations, tanks/bores and pipelines, gas pipelines, telecommunications infrastructure, railways, bridges, port facilities and waste water treatments plants.**Tourist and recreational**Tourist attractions, day-use areas and recreational sites that generate significant tourism and/or employment within the local area. These assets are different to tourist accommodation described as a Human Settlement Asset (see above).**Commercial forests and plantations**Plantations and production native forests.**Drinking water catchments**Land and infrastructure associated with drinking water catchments. |
| Environmental | **Protected**Flora, fauna and ecological communities that are listed as a: * Critically Endangered, Endangered or Vulnerable species under the Environmental Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act 1999) (including associated critical habitat);
* Critically Endangered, Endangered or Vulnerable species under the Biodiversity Conservation Act 2016;
* Critically Endangered, Endangered or Vulnerable ecological community under the EPBC Act 1999 (Cth);
* Critically Endangered, Endangered or Vulnerable Threatened Ecological Community (TEC) endorsed by the Minister for Environment (WA);
* Fauna protected under international conventions; and
* Ramsar wetlands of international importance.

**Priority**Flora, fauna and ecological communities that are a: * Priority species listed on the Priority Flora or Priority Fauna Lists held by DBCA (Priority 1-5).
* Priority Ecological Community (PEC) (Priority 1-5); and
* Wetlands of national or state importance.

**Locally important**Species, populations, ecological communities or habitats that the local community or independent scientific experts consider important for the area and for which there is some scientific evidence that protection would be beneficial. Wetlands of local importance. Sites being used for scientific research.  |
| Cultural | **Aboriginal heritage**Places of indigenous significance identified by the DPLH or the local community.**European heritage**Non-Indigenous heritage assets afforded legislative protection through identification by the National Trust, State Heritage List or Local Planning Scheme Heritage List.**Local heritage**Assets identified in a Municipal Heritage Inventory or by the local community as being significant to local heritage.**Other**Other assets of cultural value to the local community, for example community halls, churches, clubs and recreation facilities. |

##  Assessment of Bushfire Risk

Risk assessments have been undertaken for each asset or group of assets identified using the methodology described in the Guidelines*.* The *Asset Risk Register* at Appendix <number> shows the consequence and likelihood ratings assigned to each asset or group of assets identified and the subsequent risk rating.

Or

The *Asset Risk Register* will be maintained in BRMS, this information is not included in the plan because <insert rational>.

The percentage of assets within the local government in each asset category at the time of BRM Plan endorsement is shown in Table 4.

Table 4 – Asset Category Proportions

|  |  |
| --- | --- |
| **Asset category** | **Proportion of identified assets** |
| Human Settlement | What is the percentage or number of total assets at risk from bushfire in each asset category at the time the BRM Plan was endorsed? |
| Economic |  |
| Environmental |  |
| Cultural |  |

### 4.3.1 Consequence Assessment

Consequence is described as the outcome or impact of a bushfire event. The approach used to determine the consequence rating is different for each asset category: Human Settlement; Economic; Environmental; and Cultural.

The methodology used to determine the consequence rating for each asset category is based on the following:

Consequence Rating – Human Settlement, Economic and Cultural Assets

The outcome or impact of a bushfire event on the asset, or a group of assets, measured by the hazard posed by the classified vegetation and the vulnerability of the asset.

Consequence Rating – Environmental Assets

The outcome or impact of a bushfire event on the asset, or a group of assets, measured by the vulnerability of the asset and the potential impact of a bushfire or fire regime.

### 4.3.2 Likelihood Assessment

Likelihood is described as the potential of a bushfire igniting, spreading and impacting an asset. The approach used to determine the likelihood rating is the same for each asset category: Human Settlement; Economic; Environmental; and Cultural.

### 4.3.3 Assessment of Environmental Assets

Using available biological information and fire history data, environmental assets with a known minimum fire threshold were assessed to determine if they were at risk from bushfire, within the five-year life of the BRM Plan. Environmental assets that would not be adversely impacted by bushfire within the five-year period have not been included and assessed in the BRM Plan. The negative impact of a fire on these assets (within the period of this BRM Plan) was determined to be minimal, and may even be of benefit to the asset and surrounding habitat.

### 4.3.4 Local Government Asset Risk Summary

A risk profile for the local government is provided in Table 7. This table shows the proportion of assets at risk from bushfire in each risk category at the time the BRM Plan was endorsed.

Table 7 – Local Government Asset Risk Summary

|  |  |
| --- | --- |
| **Asset Category** | **Risk Rating** |
|  | Low | Medium | High | Very High | Extreme |
| **Human Settlement** |  |  | *11%* | *14%* | *17%* |
| **Economic** |  |  | *10%* | *10%* | *10%* |
| **Environmental** |  |  |  | *10%* | *8%* |
| **Cultural** |  |  | *5%* | *5%* |  |

*Note: replace these figures with Local Governments final percentages once asset register is locked in BRMS*

# Risk Evaluation

##  Evaluating Bushfire Risk

The risk rating for each asset has been assessed against the consequence and likelihood descriptions to ensure:

The rating for each asset reflects the relative seriousness of the bushfire risk to the asset;

Consequence and likelihood ratings assigned to each asset are appropriate; and

Local issues have been considered.

##  Risk Acceptability

It is not possible or practical to treat all bushfire risk. Some risk may be acceptable without the need for a specific treatment. Assets with a Low to Moderate risk rating are likely to be adequately managed through routine controls, so committing resources to further reduce the risk may not be justifiable. (Refer to section 4.2 of the Guidelines).

Risks below a certain level were not considered to require specific treatment during the life of this BRM Plan. They will be managed by routine local government wide controls and monitored for any significant change in risk.

In most circumstances risk acceptability and treatment will be determined by the land owner, in collaboration with local government and fire agencies. However, as a general rule, the following courses of action have been adopted for each risk rating.

Table 8 – Criteria for Acceptance of Risk and Course of Action

|  |  |  |
| --- | --- | --- |
| **Risk Rating** | **Criteria for Acceptance of Risk** | **Course of Action** |
| Extreme | <Document Local Government-specific risk acceptance criteria for assets with EXTREME risk rating>. For example, only acceptable with excellent controls. Urgent treatment action is required. | <Document Local Government specific course of action for assets with EXTREME risk rating here>*An example may be:*Routine controls are not enough to adequately manage the risk.Specific action is required in first <XXX> year of BRM Plan. *Make sure this is realistic for the local government’s resources.*Treatments will be approached by:* Priorities will be made for treatments that will have maximum benefit to multiple assets and critical infrastructure.
* Treatments that benefit vulnerable communities will be given priority.
* Identification of partnerships with other agencies for strategic mitigation.
* Communication with asset owners in this class will be priorities and focus on increasing understanding of the risk facing these assets (see Communications plan).

These assets and treatments are to be reviewed annually/bi-annually/prior to the start of each bushfire season for any significant changes. |
| Very High | <Document Local Government-specific risk acceptance criteria for assets with VERY HIGH risk rating>. For example, only acceptable with excellent controls. Treatment action is required.  | <Document Local Government specific course of action for assets with VERY HIGH risk rating>*An example may be:*Routine controls are not enough to adequately manage the risk.Specific action is required in first <XXX> year of BRM Plan *Make sure this is realistic for the local government’s resources.*Treatments will be approached by:* Priorities will be made for treatments that will have maximum benefit to multiple assets and critical infrastructure.
* Treatments that benefit vulnerable communities will be given priority.
* Identification of partnerships with other agencies for strategic mitigation.
* Communication with asset owners will be as per the Communications Plan and focus on increasing understanding of the risk facing these assets.

These assets and treatments are to be reviewed every 2 year/prior to the start of each bushfire season for any significant changes. |
| High | <Document Local Government-specific risk acceptance criteria for assets with HIGH risk rating>. For example, only acceptable with adequate controls. Treatment action required.  | <Document Local Government specific course of action for assets with HIGH risk rating>*An example may be:*Routine controls are not enough to adequately manage the risk.Specific action is required in the life of the BRM Plan. *Make sure this is realistic for the local government’s resources.*Treatments will be approached by:* Priorities will be made for treatments that will have maximum benefit to multiple assets and critical infrastructure.
* Treatments that benefit vulnerable communities will be given priority.
* Identification of partnerships with other agencies for strategic mitigation.
* Communication with asset owners will be as per the Communications Plan and focus on increasing understanding of the risk facing these assets.
 |
| Medium | <Document Local Government-specific risk acceptance criteria for assets with MEDIUM risk rating>. For example, acceptable with adequate controls. Treatment action is not required but risk must be monitored regularly.  | <Document Local Government specific course of action for assets with MEDIUM risk rating>*An example may be:*Specific actions are not be required. Risk may be managed with routine controls and monitored periodically throughout the life of the BRM Plan. |
| Low | <Document Local Government-specific risk acceptance criteria for assets with LOW risk rating>. For example, acceptable with adequate controls. Treatment action is not required but risk must be monitored.  | <Document Local Government-specific course of action for assets with LOW risk rating>*An example may be:*Specific actions are not required. Risk will be managed with routine controls and monitored as required. |

##  Treatment Priorities

The treatment priority for each asset has been automatically assigned by BRMS and recorded in the *Treatment Schedule*, based on the asset’s risk rating. Table 9 shows how consequence and likelihood combine to give the risk rating and subsequent treatment priority for an asset.

Table 9 – Treatment Priorities

|  |  |
| --- | --- |
| Likelihood | Consequence |
|  | **Minor** | **Moderate** | **Major** | **Catastrophic** |
| **Almost Certain** | 3D(High) | 2C(Very High) | 1C(Extreme) | 1A(Extreme) |
| **Likely** | 4C(Medium) | 3A(High) | 2A(Very High) | 1B(Extreme) |
| **Possible** | 5A(Low) | 4A(Medium) | 3B(High) | 2B(Very High) |
| **Unlikely** | 5C(Low) | 5B(Low) | 4B(Medium) | 3C(High) |

#  Risk Treatment

The purpose of risk treatment is to reduce the likelihood of a bushfire occurring and/or the potential impact of a bushfire on the community, economy and environment. This is achieved by implementing treatments that modify the characteristics of the hazard, the community or the environment. There are many strategies available to treat bushfire risk. The treatment strategy (or combination of treatment strategies) selected will depend on the level of risk and the type of asset being treated. Not all treatment strategies will be suitable in every circumstance.

## Local Government Wide Controls

Local government wide controls are activities that are non-asset specific, rather they reduce the overall bushfire risk within the local government.

A local government wide controls, multi-agency work plan has been developed (Appendix <number>). The plan details work to be undertaken as a part of normal business (see section 3.2.6 for detailed information on these), improvements to current controls and new controls to implemented to better manage bushfire risk across the local government area.

Where appropriate, detail any improvements to existing controls or new controls in the local government wide controls, multi-agency treatment work plan.

Note: the focus of this section is the improvements that will be made or considered as a result of the BRM planning process. For example, improved targeted monitoring of S.33 notices or new information booklets.

##  Asset Specific Treatment Strategies

Asset specific treatments are implemented to protect an individual asset or group of assets, identified and assessed in the BRM Plan as being at risk from bushfire. There are five asset specific treatment strategies:

Fuel management

Treatment reduces or modifies the bushfire fuel through manual, chemical and planned burning methods;

Ignition management

Treatment aims to reduce potential human and infrastructure sources of ignition in the landscape;

Preparedness

Treatments aim to improve access and water supply arrangements to assist firefighting operations;

Planning

Treatments focus on developing plans to improve the ability of firefighters and the community to respond to bushfire; and

Community Engagement

Treatments seek to build relationships, raise awareness and change the behaviour of people exposed to bushfire risk.

##  Development of the Treatment Schedule

The treatment schedule is a list of bushfire risk treatments recorded within BRMS. <Insert Local Government Name > will be focusing on developing a program of works that covers activities to be undertaken within the first year after the approval of the BRM Plan. The treatment schedule will evolve and develop throughout the life of the BRM Plan.

The treatment schedule was developed in broad consultation with land owners and other stakeholders including DFES and DBCA.

Land owners are ultimately responsible for treatments implemented on their own land. This includes any costs associated with the treatment and obtaining the relevant approvals, permits or licences to undertake an activity. Where agreed, another agency may manage a treatment on behalf of a land owner. However, the onus is still on the land owner to ensure treatments detailed in this BRM Plan’s *Treatment Schedule* are completed.

#  Monitoring and Review

Monitoring and review processes are in place to ensure that the BRM Plan remains current and valid. These processes are detailed below to ensure outcomes are achieved in accordance with the *Communication Strategy* and *Treatment Schedule*.

##  Review

A comprehensive review of this BRM Plan will be undertaken at least once every five years, from the date of council approval. Significant circumstances that may warrant an earlier review of the BRM Plan include:

Changes to organisational responsibilities or legislation;

Changes to the bushfire risk profile of the local government; or

Following a major fire event.

##  Monitoring

BRMS will be used to monitor the risk ratings for each asset identified in the BRM Plan and record the treatments implemented. Risk ratings are reviewed on a regular basis as described in Table X – Criteria for Acceptance of Risk and Course of Action. New assets will be added to the Asset Risk Register when they are identified.

## Reporting

Detail any local government-specific reporting requirements here. For example, reporting to the Local Government’s Council, the LEMC or Bush Fire Advisory Committee.

The <Insert Local Government name> will be requested to contribute information relating to their fuel management activities to assist in the annual OBRM *Fuel Management Activity Report*.

#  Glossary (review this list at the end of document writing and add or remove as required.)

|  |  |
| --- | --- |
| **Asset** | A term used to describe anything of value that may be adversely impacted by bushfire. This may include residential houses, infrastructure, commercial, agriculture, industry, environmental, cultural and heritage sites. |
| **Asset Category** | There are four categories that classify the type of asset – Human Settlement, Economic, Environmental and Cultural. |
| **Asset Owner** | The owner, occupier or custodian of the asset itself. Note: this may differ from the owner of the land the asset is located on, for example a communication tower located on leased land or private property. |
| **Asset Register** | A component within the Bushfire Risk Management System (BRMS) used to record the details of assets identified in the Bushfire Risk Management Plan (BRM Plan). |
| **Asset Risk Register**  | A report produced within the BRMS that details the consequence, likelihood, risk rating and treatment priority for each asset identified in the BRM Plan. |
| **Bushfire** | Unplanned vegetation fire. A generic term which includes grass fires, forest fires and scrub fires both with and without a suppression objective. |
| **Bushfire Hazard** | The hazard posed by the classified vegetation, based on the vegetation category, slope and separation distance. |
| **Bushfire Risk Management Plan** | A development related document that sets out short, medium and long term bushfire risk management strategies for the life of a development. |
| **Bushfire Risk** | The chance of a bushfire igniting, spreading and causing damage to the community or the assets they value. |
| **Bushfire Risk Management** | A systematic process to coordinate, direct and control activities relating to bushfire risk with the aim of limiting the adverse effects of bushfire on the community. |
| **Bushfire Risk** | The chance of a bushfire igniting, spreading and causing damage to the community or the assets they value. |
| **Consequence** | The outcome or impact of a bushfire event. |

|  |  |
| --- | --- |
| **Draft Bushfire Risk Management Plan** | The finalised draft BRM Plan is submitted to the Office of Bushfire Risk Management (OBRM) for review. Once the OBRM review is complete, the BRM Plan is called the ‘Final BRM Plan’ and can be progressed to local government council for approval. |
| **Geographic Information System (GIS)** | A data base technology, linking any aspect of land-related information to its precise geographic location. |
| **Land Owner** | The owner of the land, as listed on the Certificate of Title; or leaser under a registered lease agreement; or other entity that has a vested responsibility to manage the land. |
| **Likelihood** | The chance of something occurring. In this instance, it is the potential of a bushfire igniting, spreading and impacting on an asset. |
| **Locality** | The officially recognised boundaries of suburbs (in cities and larger towns) and localities (outside cities and larger towns). |
| **Map** | The mapping component of the BRMS. Assets, treatments and other associated information is spatially identified, displayed and recorded within the Map. |
| **Planning Area** | A geographic area determine by the local government which is used to provide a suitable scale for risk assessment and stakeholder engagement. |
| **Priority** | See Treatment Priority. |
| **Risk Acceptance** | The informed decision to accept a risk, based on the knowledge gained during the risk assessment process. |
| **Risk Analysis** | The application of consequence and likelihood to an event in order to determine the level of risk. |
| **Risk Assessment** | The systematic process of identifying, analysing and evaluating risk. |
| **Risk Evaluation** | The process of comparing the outcomes of risk analysis to the risk criteria in order to determine whether a risk is acceptable or tolerable. |
| **Risk Identification** | The process of recognising, identifying and describing risks. |
| **Risk Register** | A component within the BRMS used to record, review and monitor risk assessments and treatments associated with assets recorded in the BRM Plan. |
| **Risk treatment** | A process to select and implement appropriate measures undertaken to modify risk. |
| **Rural** | Any area where in residences and other developments are scattered and intermingled with forest, range, or farm land and native vegetation or cultivated crops. |
| **Rural Urban Interface** | The line or area where structures and other human development adjoin or overlap with undeveloped bushland. |
| **Slope** | The angle of the ground’s surface measured from the horizontal. |
| **Tenure Blind** | An approach where multiple land parcels are consider as a whole, regardless of individual ownership or management arrangements. |
| **Treatment** | An activity undertaken to modify risk, for example a planned burn. |
| **Treatment Objective** | The specific aim to be achieved or action to be undertaken, in order to complete the treatment. Treatment objectives should be specific and measurable. |
| **Treatment Manager** | The organisation, or individual, responsible for all aspects of a treatment listed in the *Treatment Schedule* of the BRM Plan, including coordinating or undertaking work, monitoring, reviewing and reporting. |
| **Treatment Planning Stage** | The status or stage of a treatment as it progresses from proposal to implementation. |
| **Treatment Priority** | The order, importance or urgency for allocation of funding, resources and opportunity to treatments associated with a particular asset. The treatment priority is based on an asset’s risk rating. |
| **Treatment Schedule**  | A report produced within the BRMS that details the treatment priority of each asset identified in the BRM Plan and the treatments scheduled. |
| **Treatment Strategy** | The broad approach that will be used to modify risk, for example fuel management. |
| **Treatment Type** | The specific treatment activity that will be implemented to modify risk, for example a planned burn.  |
| **Vulnerability** | The susceptibility of an asset to the impacts of bushfire. |

# Common Abbreviations (review this list at the end of document writing and add or remove as required.)

|  |  |
| --- | --- |
| **AFAC** | Australasian Fire and Emergency Services Authorities Council |
| **BFAC** | Bush Fire Advisory Committee |
| **BRM** | Bushfire Risk Management |
| **BRM Branch** | Bushfire Risk Management Branch (DFES) |
| **BRM Plan** | Bushfire Risk Management Plan |
| **BRMS** | Bushfire Risk Management System |
| **DBCA** | Department of Biodiversity, Conservation and Attractions  |
| **DFES** | Department of Fire and Emergency Services |
| **DPLH** | Department of Planning, Lands and Heritage |
| **EPBC Act** | Environmental Protection and Biodiversity Conservation Act |
| **FPC** | Forest Products Commission |
| **GIS** | Geographical Information System |
| **LEMC** | Local Emergency Management Committee  |
| **OBRM** | Office of Bushfire Risk Management (DFES) |
| **PEC** | Priority Ecological Community |
| **SEMC** | State Emergency Management Committee |
| **TEC** | Threatened Ecological Community |
| **UCL** | Unallocated Crown Land |
| **UMR** | Unmanaged Reserve |
| **WA** | Western Australia |
| **WAPC** | Western Australian Planning Commission |

# Appendices

|  |  |
| --- | --- |
| **Appendix A** | Communication Strategy |
| **Appendix B** | Planning Area Map (optional, remove if not providing) |
| **Appendix C** | Asset Risk Register (optional, remove if not providing) |
| **Appendix D** | Treatment Schedule (optional, remove if not providing) |
| **Appendix E** | Local Government Wide Controls Table |