



City of Bunbury

Bushfire Risk Management Plan

2025 - 2030

Office of Bushfire Risk Management Bushfire Risk
Management (BRM Plan) endorsed **XX Month 20XX**
Local Government Council BRM Plan approval **4th**
February 2025

Table of Contents

0	Document control	3
	Document endorsement	3
	Publication information	3
1	Introduction	4
1.1	Background	4
1.2	Objectives of the BRM planning program	4
1.3	Legislation, policy and standards	4
2	Risk management process	6
2.1	Roles and responsibilities	7
2.2	Communications and consultation	8
3	Establishing the Context	9
3.1	City of Bunbury community context	9
3.1.1	Strategic and corporate frameworks	9
3.2	Land use and tenure	11
3.3	Community demographics and values	13
3.4	Cultural heritage	14
3.5	Economic activity and industry	15
3.6	Environmental and bushfire context	17
3.6.1	Topography and landscape	17
3.6.2	Climate and the bushfire season	18
3.6.3	Vegetation and bushfire fuel	20
3.6.4	Maidens Reserve	21
3.6.5	Manea Park	22
3.6.6	Pocket parks	24
3.6.7	Threatened ecological communities	24
3.6.8	Bushfire frequency and causes of ignition	25
3.7	Current bushfire risk management controls	27
3.7.1	Map of bushfire prone areas	27
3.7.2	Fire services available	28
3.7.3	Current mitigation activity	29
3.7.4	Community engagement activity	29
4	Asset identification and risk assessments	30
4.1	Identifying and Assessing Systemic Risk	30
4.1.1	Assessment of Environmental Assets	30
4.1.2	City of Bunbury Asset Risk Summary	30
5	Risk evaluation	33
5.1	Risk acceptance criteria	33
5.2	Treatment priorities	34
6	Risk treatment	36
6.1	City-wide controls	36
6.2	Asset specific treatment strategies	37
6.3	Treatment schedule	38
7	Monitor and review	39
7.1	Review	39
7.2	Monitoring	39
7.3	Reporting	40
7.4	Privacy issues and the release of information	40
	Glossary	41
	Common abbreviations	44
	Appendices table	45

Chapter 0 Document control

Document name	Bushfire Risk Management Plan	Current version	2.0
Document owner	CEO – City of Bunbury	Issue date	20/01/2025
Document location	City of Bunbury Website	Next review date	20/01/2026

Document endorsements

This Bushfire Risk Management Plan has been assessed and endorsed by the Office of Bushfire Risk Management as consistent with the standards detailed within the *Guidelines for Preparing a Bushfire Risk Management Plan*.

The approval of the Bushfire Risk Management Plan by City of Bunbury Council signifies support of the plan's implementation and commitment to working with risk owners to manage bushfire risk. Approval does not signify acceptance of responsibility for risk treatments or outcomes on land that is not managed by the City of Bunbury.

Local Government	Representative	Signature	Date
City of Bunbury	Mr Alan FERRIS CEO – City of Bunbury		

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. It may be reproduced in accordance with the terms of SAI Global Ltd.'s Licence 1411-c083 to the Commonwealth of Australia ("the Licensee"). All licensed copies of this document must be obtained from the Licensee. 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: telephone + 61 2 8206 6355 or copyright@saiglobal.com.

Chapter 1 Introduction

1.1 Background

This Bushfire Risk Management (BRM) Plan provides contextual information to inform a structured approach to identifying, assessing, prioritising, monitoring and treating bushfire risk. The BRM Plan has been prepared by the City of Bunbury, encompasses all land within the City of Bunbury and has been written on behalf of all stakeholders within that area. The BRM Plan is informed by consultation and communication with land and asset managers that has occurred throughout its development to ensure an informed and collaborative approach to managing bushfire risk.

The BRM plan has been prepared with due consideration of the requirements stated in the Guidelines for Preparing a Bushfire Risk Management Plan (the Guidelines) published by the Office of Bushfire Risk Management (OBRM) including the principles described in ISO 31000:2018 Risk Management.

1.2 Objectives of the Bushfire Risk Management Planning Program

The BRM planning program supports local governments to reduce the threat posed by bushfire. The City of Bunbury BRM Plan will contribute to achieving the objective of the BRM program by:

- Guiding and coordinating a cross-tenure, multi-stakeholder approach to BRM planning.
- Facilitating the effective use of the financial and physical resources available for BRM activities.
- Supporting integration between risk owners, strategic objectives, and tactical outcomes.
- Documenting processes used to monitor and review the implementation of treatment plans to ensure they are adaptable, and that risk is managed to an acceptable level.
- Satisfy the requirements of *State Hazard Plan – Fire (2023)*.
- Satisfy the requirements of the Sustainability and Environmental Strategy 2023-2028

1.3 Legislation, Policy and Standards

Legislation, policy and standards that were applied in the development of this BRM Plan can be found in the *Bushfire Risk Management Planning Handbook – Appendix 1 – Summary of Related Legislation, Policy and Guidelines*.

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

Legislation

- *Bush Fires Act (1954)*,
- *Emergency Management Act (2005)*,
- *Fire Brigades Act (1942)*,
- *Fire and Emergency Service Act (1998)*,
- *Conservation and Land Management Act (1984)*,
- *Environmental Protection Act (1986)*,
- *Environmental Protection and Biodiversity Conservation Act (1999) (Commonwealth)*.

- *Wildlife Conservation Act (1950),*
- *Aboriginal Heritage Act (1972),*
- *Metropolitan Water Supply, Sewerage and Drainage Act (1909),*
- *Country Areas Water Supply Act (1947),*
- *Building Act (2011),*
- *Emergency Management Regulations (2006),*
- *Planning and Development (Local Planning Scheme) Regulations 2015.*

Policies, Guidelines and Standards

- National Emergency Risk Assessment Guidelines (NERAG) (Second Edition – updated in 2020),
- State Emergency Management Policy (s2.5) – Local Arrangements,
- State Emergency Management Policy (s3.2) – Emergency Risk Management Planning,
- State Emergency Management Preparedness Procedure (s3.7) – Local Emergency Management Committee (LEMC),
- State Emergency Management Procedure (s3.8) – Local Emergency Management Arrangements,
- State Hazard Plan - Fire (2023),
- State Planning Policy 3.7: Planning in Bushfire Prone Areas (WAPC),
- State Planning Policy 3.4: Natural Hazards and Disasters (WAPC),
- Guidelines for Planning in Bushfire Prone Areas (WAPC 2024),
- Western Australian Emergency Risk Management Guidelines (OEM 2015),
- Guidelines for Plantation Fire Protection (DFES 2011),
- Firebreak Location, Construction and Maintenance Guidelines (DFES),
- Bushfire Risk Management Planning – Guidelines for preparing a Bushfire Risk Management Plan (OBRM 2024),
- AS/NZS ISO 31000:2018 - Risk management – Principles and guidelines,
- AS 3959-2018 Construction of buildings in bushfire-prone areas,
- City of Bunbury Council Policy: Bushfire Inspection and Mitigation,
- City of Bunbury Corporate Guideline: Bushfire Inspection and Mitigation,
- Bushfire Threat Analysis Process – Part I¹
- Bushfire Threat Analysis Process – Part II – A Facilitator’s Guide¹
- Bushfire Threat Analysis Process – Part III – Developing a Risk Treatment Schedule¹

Other Related Documents

- National Strategy for Disaster Resilience,
- National Statement of Capability for Fire and Emergency Services (AFAC 2015),
- Public Service Circular No. 88 - Use of Herbicides in Water Catchment Areas,
- Code of Practice for Timber Plantations in Western Australia (Forest Products Commission Second Edition 2014),
- Bushfire Risk Management Planning Handbook (DFES),
- Bushfire Risk Management System (BRMS) User Guide (DFES),

Chapter 2 The Risk Management Process

The BRM planning process is a cycle of understanding the context and assessing and treating risks following the process shown within [Figure 1](#). Each of these steps is informed by communication and consultation and supported by monitoring and review. The three products produced during the BRM planning process are the BRM Plan, Asset Risk Register and Treatment Schedule.

Further details on the guiding principles and process for the development of this plan can be found in Chapter 2 of the Guidelines.

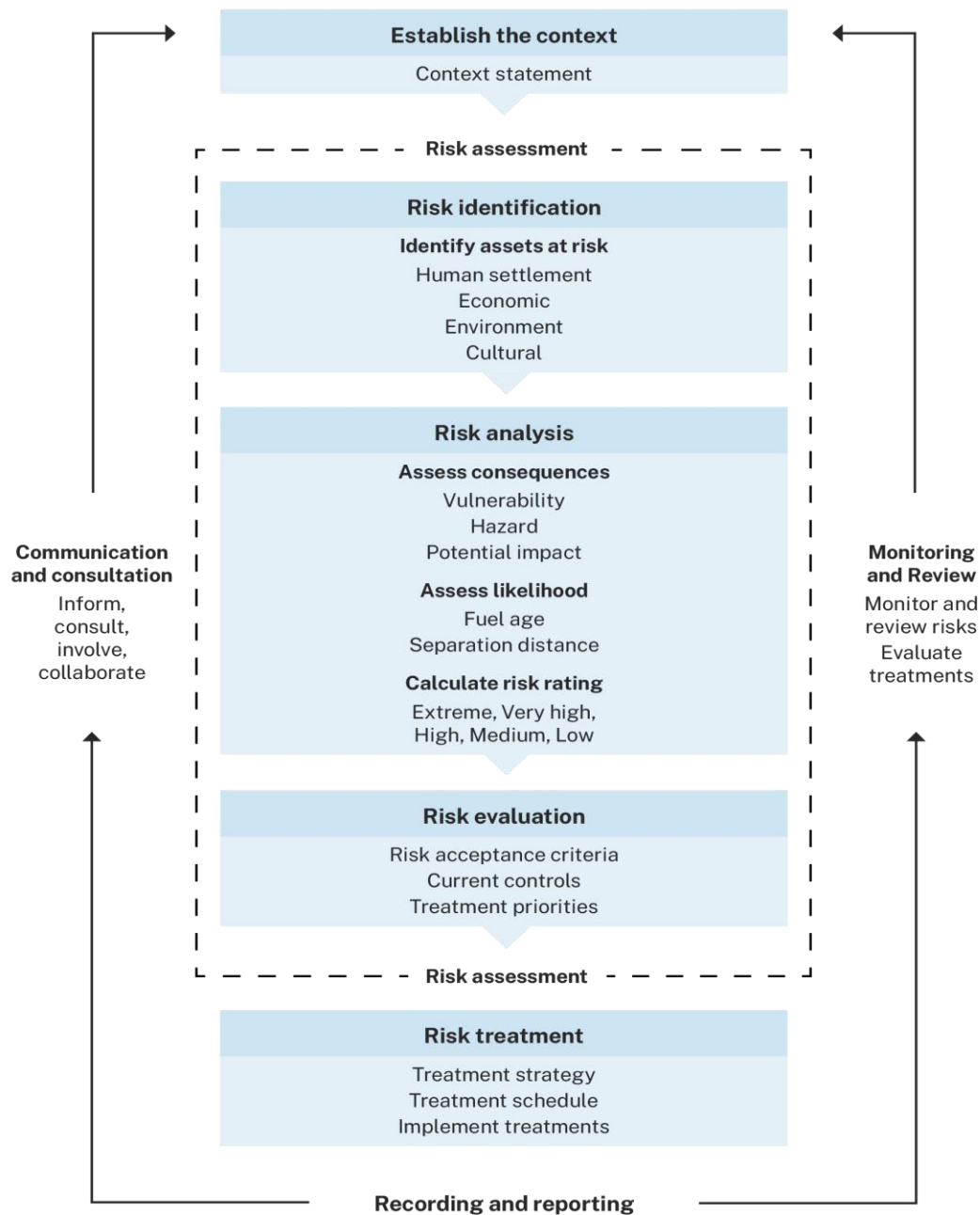


Figure 1 - The Bushfire Risk Management planning process

2.1 Roles and Responsibilities

The roles and responsibilities of the key stakeholders involved in the development of the BRM Plan, are summarised in [Table 1](#).

Stakeholder	Roles and responsibilities
City of Bunbury	<ul style="list-style-type: none"> • As custodian of the BRM Plan, coordinate the development and ongoing review of the BRM Plan and the associated Treatment Schedule. • Undertake bushfire risk assessment of local government area. • Submit the draft BRM Plan to OBRM for review and endorsement. • Develop, implement and manage the Treatment Schedule for local government managed land. • Communicate with and to the community, negotiating to encourage risk owners to treat identified risks.
DFES	<ul style="list-style-type: none"> • Contribute to the development and implementation of the BRM Plan, as the representative of the State's HMA for fire. • Support the City of Bunbury through the provision of expert knowledge and advice in relation to identification, prevention and treatment of bushfire risk. • Facilitate and support involvement of state and federal government agencies, in the City of Bunbury BRM planning process. • Undertake treatments on Unmanaged Reserves and Unallocated Crown Land within gazetted town sites. • By agreement and/or in accord with any existent Memoranda of Understanding, implement treatment strategies for other land managers. • Endorse BRM Plans as consistent with the Guidelines, BRM Program and dynamic risk environment. • Administer the Mitigation Activity Fund Grants Program.
Department of Biodiversity, Conservation and Attractions (DBCA)	<ul style="list-style-type: none"> • Consistent with the OBRM guidelines, ensure bushfire risk is managed in accordance with ISO 31,000 and report on the ongoing state of bushfire risk across WA. • Contribute to the development of the City of Bunbury BRM Plan. • As a treatment manager, implement their treatment program on DBCA managed land. • Provide advice on environmental assets that may be vulnerable and any appropriate treatment strategies, for their protection.
Department of Planning, Lands and Heritage	<ul style="list-style-type: none"> • Identify managed assets. • Provide advice on management of Aboriginal Cultural Heritage.

Other State and Commonwealth Government agencies and public utilities	<ul style="list-style-type: none"> • Identify managed assets. • Provide advice on current risk treatment programs. • Contribute to the development of BRM Plans. • Undertake treatments on lands they manage.
--	---

Stakeholder	Roles and responsibilities
Corporations and private landowners	<ul style="list-style-type: none"> • Identify managed assets. • Provide advice on current risk treatment programs. • Undertake treatments on lands they manage.
Office of Bushfire Risk Management (OBRM)	<ul style="list-style-type: none"> • Consistent with the OBRM guidelines, to ensure bushfire risk is managed in accordance with AS/NZS ISO 31000 and reporting on the state of bushfire risk across Western Australia. • Review BRM Plans for consistency with the Guidelines prior to final endorsement by council.
Conservation and Parks Commission	<ul style="list-style-type: none"> • Provide support to this Plan, in managing fire risk from lands that it has oversight for (Kalgulup Regional Park), as that evolves.
Other <ul style="list-style-type: none"> • Landcare • South-West Aboriginal Land and Sea Council • Friends of Big Swamp • Friends of Irwin Street Reserve • Friends of Katherine Chauhan Reserve • Friends of Manea Park 	Participation in and contribution to, the development and implementation of BRM Plans, <ul style="list-style-type: none"> • Providing advice for the identification of assets, that are vulnerable to fire, • Provide advice on appropriate treatment strategies, for asset protection, • Participate in agreed land care/risk reduction programs.

Table 1 – Roles and responsibilities in the Bushfire Risk Management (BRM) planning process

2.2 Communication and Consultation

Communication and consultation are fundamental to the development, implementation, and review of the BRM Plan. A Communication Plan to ensure appropriate and effective communication with relevant stakeholders at each stage of the BRM planning process, is at [Appendix C](#). An Engagement Log summarising important stakeholder interaction is also provided.

Chapter 3 Establishing the Context

3.1 City of Bunbury Community Context

3.1.1 Strategic and Corporate Framework

The vision for the City of Bunbury, as set out in its 10 Year Strategic Community Plan (2032), is:
“Bunbury: welcoming and full of opportunities.”

This BRM Plan aims to strengthen the City’s capacity to achieve its overall corporate vision and goals, by encouraging community organisations, businesses and local communities down to the individual level to work together to reduce bushfire risk. It aims to provide guidance on selecting treatment strategies for mitigation of bushfire-related risks. This approach allows the responsible land holders to allocate limited resources most effectively, in order to lower the inherent risk, to a more acceptable level.

The BRM Plan is a bushfire hazard specific plan, that aims to identify and treat significant bushfire risks within the City of Bunbury. It aims to integrate bushfire risk management programs and activities into the business processes of the City, other agencies and land owners. The outcomes of the BRM Plan will be used to inform the City, when preparing and then implementing, bushfire mitigation strategies for City managed land. This plan will also provide the rigour required to communicate risk levels to other landowners, to encourage mitigation to be undertaken to a level that would reduce risk levels to that which is considered to be acceptable against the acceptable risk score on the City’s Bushfire Risk Register.

The City’s 10 Year Strategic Community Plan (2032) is structured around five key aspirations, being:

Aspiration 1: People

- Desired Outcome: 1 - A safe community.

Aspiration 2: Planet

- Desired Outcome: 5 - A natural environment that is cared for and preserved.
6 - An aware and resilient community that is equipped to respond to natural disasters and emergencies.

Aspiration 3: Place

- Desired Outcome: 8 – A place with attractive and welcoming community spaces, where people want to live.
9 – A city that is easy to get around safely and sustainably.

Aspiration 4: Prosperity

- Desired Outcome: 12 – A unique and desirable destination within the South-West region.

Theme 5: Performance

- Desired Outcome: 14 – A well informed community that is deeply engaged in decision-making.

Of specific relevance to this BRM Plan, are the following Community objectives, with the associated actions to achieve its aspirations: ⁴

⁴ City of Bunbury Strategic Community Plan - 2023

Outcome 1 – A safe community:

Objective 1.2 Modify the physical environment to improve community safety.

Outcome 5 – A natural environment that is cared for and preserved:

Objective 5.1 Sustainably manage, conserve and enhance our natural habitats.

Objective 5.2 Encourage adoption of sustainable practices.

Outcome 6 – An aware and resilient community equipped to respond to natural disasters and emergencies:

Objective 6.1 Minimise risks and impacts from fires, floods, heat waves and other natural disasters.

Objective 12 – A unique and desirable destination within the South-West Region:

Objective 12.1 Develop and promote a competitive tourism offer to attract more visitors.

The City of Bunbury Local Planning Scheme No. 8 sets out the obligations for new land use and development across the City. Both the Local Planning Strategy and Town Planning Scheme, have regard to bush fire related initiatives, such as the identification of bush fire prone areas as identified by the Office of Bush Fire Management.

Ultimately, the City’s Chief Executive Officer (CEO) is responsible for the BRM Plan processes, sustainability and continuity, noting that the CEO is able to delegate all or some of these responsibilities. There are multiple stakeholders involved in the effective implementation of the BRM Plan, the City’s responsibility is to address the risks within its scope and facilitate the management of bushfire risk in the wider community. The City of Bunbury’s CEO shall delegate responsibility for the implementation and maintenance of this plan, while in place the Bushfire Risk Planning Coordinator role shall undertake this.

The following functions within the City of Bunbury administration team, have been identified as having specific roles and responsibilities in line with the successful implementation of the BRM Plan. These are outlined in [Table 2](#) (below).

Function	Roles and Responsibilities
<p>CoB Executive Leadership Team & Bushfire Risk Planning Coordinator</p>	<ul style="list-style-type: none"> • Oversight of the implementation, review and monitoring of the Bushfire Risk Management Plan, • Sourcing and approving funding and expenditure for local government managed / owned land. • Ensure implementation and regular review/currency of the Bushfire Risk Management Plan, • Monitoring the implementation of agreed treatments to City owned sources of risk, • Liaison with key stakeholders at the executive level, • Participation on Local Emergency Management Committee (LEMC),
<p>CoB Rangers & Emergency Management</p>	<ul style="list-style-type: none"> • Develop practices for fire management on City owned lands, • Support DFES with strategies for bushfire risk reduction on UCL and UMR land, • Planning annual schedule of works, • Work to improve knowledge and understanding of fire risk and fire management practices, within the community, through the Safer Community Network and other platforms,

	<ul style="list-style-type: none"> • Support and contribute to bushfire meetings and committees, • Oversee burning programs and support from local brigades, • Contributing to treatment planning, • Negotiating with stakeholders, as required, • Ensuring that planned works are undertaken, • Enforce Bush Fire Order and other statutory bushfire requirements, • Provide advice to asset owners on bushfire risk mitigation options, • Support ongoing bushfire response capability through LGGS funding applications, • Volunteer training and other means, as required.
Chief Bushfire Control Officer	<ul style="list-style-type: none"> • Oversee burning programs and support from local brigades, • Contributing to treatment planning, • Negotiating with stakeholders and brigade,
CoB Parks and Reserves Department	<ul style="list-style-type: none"> • Contributing to programmed treatment planning on public reserves, • Undertake planned works, according to program.
CoB Natural Environment and Sustainability Department	<ul style="list-style-type: none"> • Weed management and fuel reduction in City owned Natural Reserves, • Reserve boundary maintenance, includes vegetation management, • Natural reserve ecological assessments.
CoB Infrastructure Department	<ul style="list-style-type: none"> • Contribute to vacant land maintenance, • Undertake planned works in water drainage areas, • Programmed road reserve maintenance including vegetation management.
Sustainable Communities Directorate	<ul style="list-style-type: none"> • Ensure adherence to building codes, • Provide development advice for bushfire risk management, • Provide support and environmental advice the management of bushfire risk.
Finance	<ul style="list-style-type: none"> • Accessing grants and funding, acquitting same, • LGGS acquittals and governance.

Table 2 – Functions within the City of Bunbury with roles and responsibilities associated to the Bushfire Risk Management Plan

3.2 Land use and Tenure

Bunbury is the largest regional centre in Western Australia. It occupies a land area of 65.7 square kilometers.

Significant employment sectors include mining, administration, retail, manufacturing, construction, health, education and community services, other professional services, property and business advisory services. The region’s economic health is driven by the resource sector, traditionally mining, agriculture and forestry, along with the port export activity these sectors generate.

The City is serviced by the South West Highway, Forrest Highway and Bussell Highway. Bunbury is bounded by the Shires of Dardanup, Capel and Harvey.

The majority of the land within the City is privately owned.

There are a number of bushland reserves vested in Government departments, including Unallocated Crown Land (UCL), the remaining land is freehold. There are also many parcels of Crown Land, with Management Orders to the City of Bunbury, which leaves the responsibility for fire with the City.

Fire statistics show the main cause of fires is human/deliberately lit fires.

The City of Bunbury has several large reserve areas that could be considered to pose a significant fire risk to adjacent residential, commercial and public facilities.

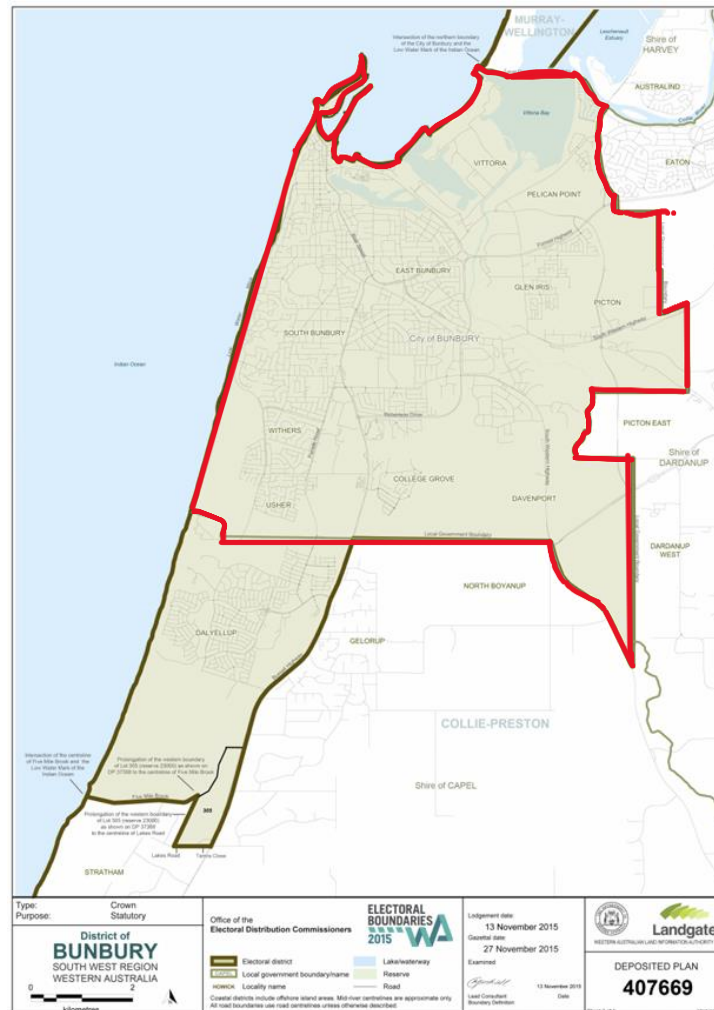


Figure 2 – Map of Bunbury City area (CoB Website)⁶

Land Manager/Agency	Area (ha)	% of Plan Area
Private bushland	2125.7	33.2
Crown	674.1	10.5
Local Government	326.3	5
Dept of Communities (Housing)	234	3.6
Combined 'others'	174.7	2.7
Main Roads (not road reserves)	135	2.11
LandCorp	118	1.8
Department of Planning, Lands and Heritage	12.4	0.2
DBCA	2.2	0.03
Total Bushland (not grassland)	3241.9	59.14
Total Land in LG Area	6409.4	100

Table 3 – Overview of Bushland Tenure and Management within the BRM Plan Area

Source: City of Bunbury website (www.bunbury.wa.gov.au); City of Bunbury

Note – With the formation of the Kalgulup Regional Park, land is in the process of being transferred to the Conservation and Parks Commission, whereby DBCA are likely to have a larger vested interest in the management of the lands on which the Kalgulup Regional Park is situated.

3.3 Community Demographics and Values

The City of Bunbury is home to 34,768 residents⁷, plus a large number of persons who work in Bunbury from outlying communities, during the day. The Greater Bunbury region includes the City of Bunbury and the Shire's of Capel, Dardanup and Harvey, and has a combined population of approximately 80,000 residents.

The City of Bunbury will continue to grow, develop and improve thanks to these qualities and the massive potential for investment and growth in our region. With population growth, consideration will need to be given to the potential for the increase in bushfire risk, due to increased population in interface areas and the limited understanding of bushfire of new local residents.

General Snapshot⁷

Special groups in the community and the characteristics that make them vulnerable to bushfire.

- Persons with a profound or severe core activity limitation: 1575 (5%)⁷
 - Persons with a profound or mild core activity limitation: 3604 (11.5%)⁷
 - Persons with disability aged 15 years and over, who need assistance or have difficulty with household chores, meal preparation, or property maintenance (accommodation support), 2 648 (10.4%)⁷
 - Persons with disability aged 16 years and over who need assistance or have difficulty with private transport: 1 436 (5.7%)⁷
- Summarised:** Persons who have need for assistance with core activities: 2220 (6.7%)⁷

⁶ **Source:** City of Bunbury website (www.bunbury.wa.gov.au); City of Bunbury IntraMaps tool

⁷ **Source:** AUSTRALIAN BUREAU OF STATISTICS Statistical Data. (2023). www.abs.gov.au

Ethnic Diversity:

- Total born overseas: 6491 (19.7%)⁸
- LOTE (at home) 2853 (8.6%)⁸

Table 4 – Vulnerability Identified Within Bunbury⁸

The age distribution of the population, according to the Australian Bureau of Statistics (2023 Census), closely resembles the State average for the younger age groups. The City of Bunbury statistics for the senior age group bracket is slightly (>1.3%) higher than the state average. Having a slightly higher elderly average can cause vulnerability for fire management. Some of the elderly may have reduced capacity to defend property or to protect themselves during a fire event and have additional needs should an evacuation be required. As a result, additional consideration for this group is essential to ensure that their needs are addressed in fire management planning, communications during events, community education and mitigation works. This has been taken into consideration within the LEMC when it comes to planning around prevention, preparedness, response and recovery.

Generally speaking, the Bunbury community consider themselves to be urban dwellers and their risk of bushfire is not considered by them to be high. Therefore, it is not easy to engage with the community to improve their bushfire resilience. Risky behaviours are likely to be more common by Bunbury residents, compared with more rural areas due to the perception of low risk.

Through the BRM Plan, the City will continue efforts to support and promote existing bushfire preparation programs, while educating and providing valuable information to the community. The City

is engaged in using modern communication methods, such as the City web-site and social media in sharing emergency prevention, preparation, response and recovery information. The City's 'Safer Community Network' has been an active platform used within community, to engage with elements of community on an all-hazards, whole of government environment. Bushfire risk is one of the main focuses of this network and street coordinators were identified as conduits into identified 'at risk' communities.

3.4 Cultural Heritage

The City employee 'First Nations Engagement Officer' will be consulted with any mitigation planning to ensure that aboriginal cultural heritage is preserved and kept from harm, consistent with the intentions of the *Aboriginal Heritage Act (1974)*. This officer will also be the point of contact, to ensure consultation and engagement of any traditional owner's interests. The relatively new corporation in Bunbury called Gnaala Karla Booja, is the peak body for consultation on Native Title Settlement matters and should be consulted in matters related to the administration of Native Title Settlement actions or queries. The Wardandi Noongar people are the traditional owners of the land that Bunbury is built upon.

[After assessment survey online via Department of Planning, Lands and Heritage "Aboriginal Cultural Heritage Inquiry System map viewer" \(ACHIS\) the below has been identified in Bunbury:](#)

DPLH website – Maps attached - Aboriginal Cultural Heritage

- Registered Aboriginal Sites = Preston River, Ferguson River.
- Lodged (Places with information being verified) = Large Areas in Davenport, Pelican Point, Picton, Bunbury, Ocean Drive.
- Lodged (Places with information being verified) = Small areas in Carey Park, Withers.
- Historic Records = large areas in Davenport, Glen Iris, Picton.

[After assessment survey online via Department of Fire and Emergency Services "Bushfire Risk Management System" \(BRMS\) for European Heritage the below has been identified in Bunbury:](#)

BRMS – European Heritage

- Numerous small pockets of areas under Heritage Agreements (through Heritage Council WA) in Bunbury north-eastern (between Blair St and Holman)
- One area with a Protection Order (through Heritage Council WA)
- Numerous areas with Heritage Assessments (Bunbury northern between Ocean Drive and Blair St, Eeelup)
- Small pockets of heritage areas through Bunbury northern between Ocean Drive and Blair St, Estuary Drive.

The European Heritage is primarily traced to James Stirling. His "land" started on "Stirling St".

Pioneer Park on Wellington St is the former burial ground for over 200 European Settlers.

The Bunbury Regional Art Gallery on Wittenoom St is housed in a former convent while the Bunbury Museum and Heritage Centre on Arthur St is located in the Paisley building which was built in 1886 as a school.

Kings Cottage on Forrest Ave was built in 1880 is one of the earliest local homesteads and WA's second oldest church St Mark's church on Flynn St is also heritage listed.

The Rose Hotel and Prince of Wales Hotel have been fixtures in Bunbury since the 1800s too and are both heritage listed.

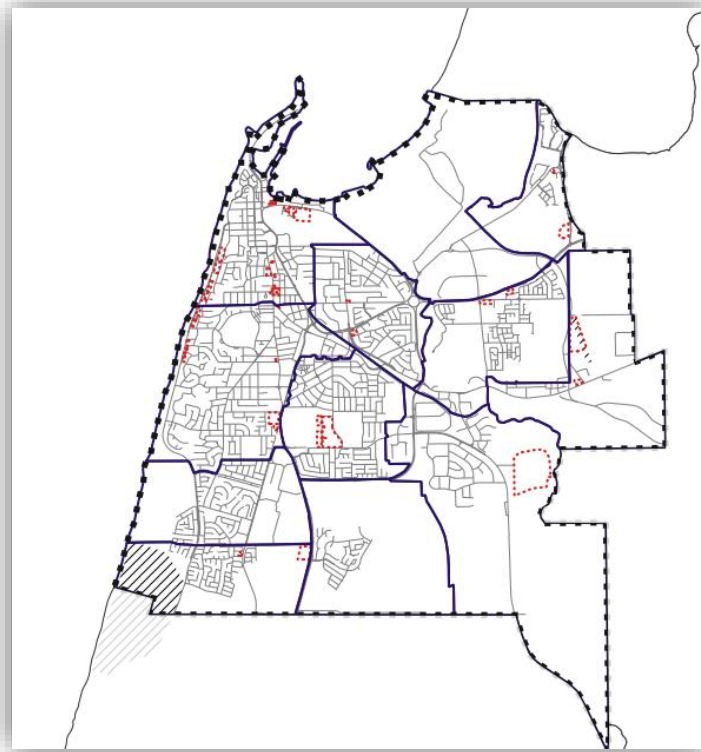


Figure 3 – A coarse image of Areas within Bunbury of Aboriginal Significance from Intramaps.

3.5 Economic Activities and Industry

Of the 14644 persons over 15 years of age that are employed, the top six industries that employ residents within the City of Bunbury, are health care and social assistance, retail trade, construction, education and accommodation and food services. [Table 5](#) (below) summarises the characteristics of employed persons in the City of Bunbury in 2021.⁹

⁸ **Source:** AUSTRALIAN BUREAU OF STATISTICS Statistical Data (2021)
[.www.abs.gov.au](http://www.abs.gov.au)

Industry	Proportion
Health care and social assistance	15.7%
Construction	10.7%
Retail trade	10.3%
Education and training	8.5%
Manufacturing	8.4%
Accommodation and food services	7.7%
Mining	6.2%
Professional, scientific & technical	4.9%
Other services	3.9%
Transport, postal, warehousing	4.0%
Unsure	3.7%
Not described	3.7%
Public administration and safety	3.6%
Administrative and support services	2.9%
Electricity, gas water and waste services	1.7%

Wholesale trade	1.8%
Financial, insurance services	1.4 %
Rental, real estate services	1.4%
Rental, hiring and real estate services	1.4%
Agriculture, forestry and fishing	1.3%
Arts and recreation services	1.0%
Information media and telecommunications	0.8%

Table 5 - Industry of Employment (Count of employed persons 15 years and older)¹⁰

In 2023, the City of Bunbury was estimated to have received 2,151,700 domestic and international visitors.¹¹ The peak season for visitors would be consistent with the summer months, specifically, the school holiday period. Though Bunbury hosts visitors throughout the year, in marginally less numbers than the summer. In 2016, it was estimated that the dollar value of visitors to the City, was approximately 266 million dollars per year. This translates to the employment of 1,182 people directly and a further 591 people indirectly.¹²

Tourists and people travelling through the City of Bunbury present a unique challenge in fire management as they have little knowledge of the local area, often do not understand fire risk and may not be linked with local communication to receive information. For example, it is likely that many are not aware of the Fire Danger Ratings and the implications of these in community warning messaging.

The implications of fire impacting Forrest Highway on the north-eastern boundary of Bunbury and the Bussell Highway on the southern boundary during a long weekend, will have a major impact to tourists and visitors due to road closures, these issues are addressed through the Local Emergency Management Arrangements.

A number of events are held each year in the City of Bunbury, with the two largest events occurring during the bushfire season Australia Day Fireworks, with approx. 40,000 visitors held in January, and “Groovin’ the Moo” music festival, with approx. 25,000 visitors held in late April/May. The City works directly with the event managers to ensure that bushfire safety is a consideration throughout the events ensuring that bans on campfires, evacuation plans and similar are in place.

Edith Cowan University has responsibility for nearly 40 hectares of bush, predominately woodland. This adjoins the proposed Kalgulup Regional Park, adjacent to the South-West Sports Centre, to the west. To the east, it adjoins Manea Park, which is approximately 550 hectares. Fires in these lands have threatened the two hospitals (including shutting down elective surgery), the University and Manea and South-West College operations. Major arterial roads (Bussell Highway and Robertson Road) have also been affected, as a result of fires in the past. Edith Cowan University have been proactive with engaging a contractor in 2015 to produce a bushfire risk management plan for the Bunbury campus. From that plan a range of mitigation works has been identified and conducted around the campus from mechanical works to mitigation burns.

Bunbury’s primary Industrial area is predominately situated at Halifax, in the City’s south-eastern quadrant. The industries are diverse, ranging from heavy industrial and general industries in mining and agricultural plus transport - logistical. The impact of fire upon this area is considered in the City’s bushfire mitigation planning, as well as through the application of the various planning regulations, as part of the development and building permit applications. Generally, most of the industrial land is within areas with

⁹ **Source:** AUSTRALIAN BUREAU OF STATISTICS Statistical Data- Employment. (2021).

¹⁰ **Source:** AUSTRALIAN BUREAU OF STATISTICS Statistical Data – Visitor Data. (2023).

¹¹ **Source:** Tourism Western Australia – Strategy and Research. City of Bunbury Visitor Factsheet

¹² **Source:** South-West Development Commission. SW Tourism Employment Fact Sheets

reasonable low fuel buffers, however, City messaging continues to include warnings about the potential for embers to cause damage.

Industries that are vital to the economic well-being of Greater Bunbury area include retail and service industries, building industry, timber production and tourism plus mining and mineral processing sector, which remains one of the main economic drivers for Bunbury (\$2 billion annual turnover). The mining and timber industries located within the industrial area of Bunbury are downstream processing plants or workshops. If the timber or mining sector within the Greater Bunbury Region are impacted by bushfire and production is affected or stopped, this will have a detrimental effect on the annual economic turnover for the City. The City of Bunbury has no direct control over mitigation works done to help stop the impact of bushfire on the timber and mining industries but through the Southwest Emergency Management Alliance, the City has input as to mitigation work that can be conducted to help reduce the risk of bushfire on these industries.

The Bunbury Port will continue to be the centre of economic activity for the Greater Bunbury region with the flow of goods through it. The proposed expansion of the port, as identified in the Bunbury Port Inner Harbour Structure Plan, will promote further economic growth for the region, and may in time be an economic stimulus for the corporate support and ancillary services associated with port-based industries locating to Bunbury city centre, further strengthening its role as a regional city¹⁴.

The Greater Bunbury region (which includes the shires of Harvey, Dardanup and Capel) has a diverse agricultural sector. The most important commodities in the region based on the gross value of agricultural production were milk (\$176 million), followed by vegetables (\$153 million) and avocados (\$115 million). These commodities together contributed 50 per cent of the total value of agricultural production in the region. In 2017–18 the most important vegetables in the region based on gross value of production were potatoes (\$39 million), followed by carrots (\$29 million) and onions (\$27 million).¹⁵

3.6 Environment and Bushfire Context

3.6.1 Topography and landscape features

Bunbury's predominate landforms include coastal dunes, low wetlands and plains, with an escarpment to the south-east, climbing into the College grove subdivision. The north and west is bounded by Koombana Bay and the Indian Ocean, respectively.

Five-Mile Brook meanders across and through the south of the urban areas and then flows into the Indian Ocean, from the northern beaches of South Bunbury. The Preston River flows from the south, along the eastern boundary of the City and then out through the Port Authority lowlands, into the southern end of the Leschenault Estuary. The Preston has remnant vegetation either side of the catchment and will be included into the Kalgulup Regional Park, once proclaimed. The Preston River and 5-Mile Brook both present access issues to responding fire brigade's, due limited access and steep slopes of up to 10° along the riverbank. Fires often spot across the watercourses where fire fighters cannot easily cross and may have to travel some distance to be able to get to the other side of the creek. This can often result in a minimum 15-minute delay in firefighting response allowing the fire to grow and develop in this time.

A range of sand dunes run along the coastal fringe, some reaching 40 metres in elevation, this provides severe limitations to vehicle access and will potentially hinder bushfire suppression activities due to these dunes. The undeveloped portions of this land are covered in coastal heath on the higher areas and a mix of Tuart and peppermint woodland species, in the valleys and depressions. Some of the lower areas in the dunal system are covered in coastal sword-edge communities, which are perennially green. Careful consideration is required when determining bushfire suppression strategies and bushfire mitigation works through-out these areas for both environmental factors (such as erosion, weed invasion, etc) and safety to emergency responders.

¹³ **Source:** *Tourism Western Australia – Insights & Planning. City of Bunbury Visitor Factsheet - May 2024*

Areas within the south, away from the dunal system, contain wetlands which are wet in winter and dry out to some extent, over summer. These areas extend to the base of the escarpment, at or about, the Bussell Highway area of College Grove. The predominant vegetation type then changes to banksia/peppermint/marri woodlands, as it climbs from the lowlands. Much of this land is acid-sulphate prone and that effects fire suppression options. Potential acid sulphate soils contain iron sulphides that have not been exposed to air.

These soils are relatively harmless when undisturbed but react when exposed to air, to form sulfuric acid.

When burnt this acidity releases elements such as metals and nutrients from the soil profile which can then be transported to waterways, wetlands and groundwater systems, often with harmful environmental and economic impacts. Areas less than 1 metre above the AHD, plus areas marked on the City's mapping as being ASP, need to be considered at risk. The riparian zones adjacent to rivers and wetlands have firefighting limitations due to the sensitivity of these environments and potential contamination of the waterways, firefighting foam application is prohibited in these areas.

The bulk of the built-up area sits on the relatively low-lying land, including the CBD. An exception is the already developed residential land on the dunal system, along the coast.

The area to the north-east of the City is made-up of low-lying grasslands that include a large expanse of open paddocks owned by the Southern Ports Authority. This area includes the Inner Harbour and the rail and storage infra-structure, to support the port operations. Fires in grasslands are potentially fast moving, as the open nature of the paddocks allow winds to move freely across the landscape, which results in fast moving fires and spreading of embers ahead of the main fire.

The Bunbury land area is primarily covered by residential dwellings and commercial premises, with areas of remnant vegetation and parkland cleared reserves. Residential areas adjoining coastal and Manea Park Reserves (i.e. College Grove) are at significant risk from fire. There is a 'special rural' subdivision, containing 2000m² blocks north of College Grove (College Grove Winthrop Zone 1 – subject to a 'Fire Management Plan', as a condition of the development) and some larger blocks in the Glen Iris area along Moorlands, Jeffery and Vittoria Roads. Bunbury's primary Industrial area is predominately situated at Halifax. This area is immediately adjacent to the north side of Manea Park and has at times, been at significant threat due to fires in this reserve.

3.6.2 Climate and Bushfire Season

The climate for the City of Bunbury, is described as a Mediterranean climate. Southwest Western Australia generally experiences a cool to mild growing season, in the months of August through to November of each year, followed by four months of summer drought conditions. This is when the potential for bushfire occurrence is at its peak. The Bureau of Meteorology (BoM) weather station used for the City of Bunbury (Station No. 9965) is located approximately 5km south of the city centre. The monthly mean climate statistics are show in [Table 4](#).

During the past 24 years there has been a decrease in the mean annual rainfall from 870mm to 712mm as shown in [Figure 4](#)¹⁶. This is considered to be consistent with climate change. The reduced rainfall results in an increase soil dryness which effects the fire intensity and spread of bushfires. For hazard management burning activities, this data is calculated into the burn prescription, using the (Keetch Byram Drought Index) KBDI. For permit issuing, officers consider risk and also the soil dryness and other weather factors, as part of the decision-making process. The drying climate has caused some practices to change, such as winter burning programs and more use of botanical or selected weed treatment.

¹⁴ [Source: Western Australian Planning Commission \(2011\). Draft Greater Bunbury Strategy \(section 4.6\).](#)

¹⁵ [Source: https://www.agriculture.gov.au/abares/research-topics/aboutmyregion/wa-bunbury#agriculturalsector](https://www.agriculture.gov.au/abares/research-topics/aboutmyregion/wa-bunbury#agriculturalsector)

The typical summer wind pattern is for east to south-easterly morning winds which swing to a typical afternoon south-westerly sea breeze, increasing in velocity. The sea-breeze may see gusts up to 50 km/h or greater, as shown in *Figure's 6 and 7* (below). Wind changes and gusts such as these during a bushfire can result in extremely hazardous conditions and very fast-moving fires for on ground fire fighters.

Annually, the Rangers and Emergency Management Team, in consultation with DFES, DBCA and the SW DEMC consider seasonal forecasts and prognoses as released from those agencies and the AFAC. These outlooks are then applied to the assumptions within the annual Risk Treatment Schedule, to ensure that treatments remain viable for and relevant to the forthcoming season.

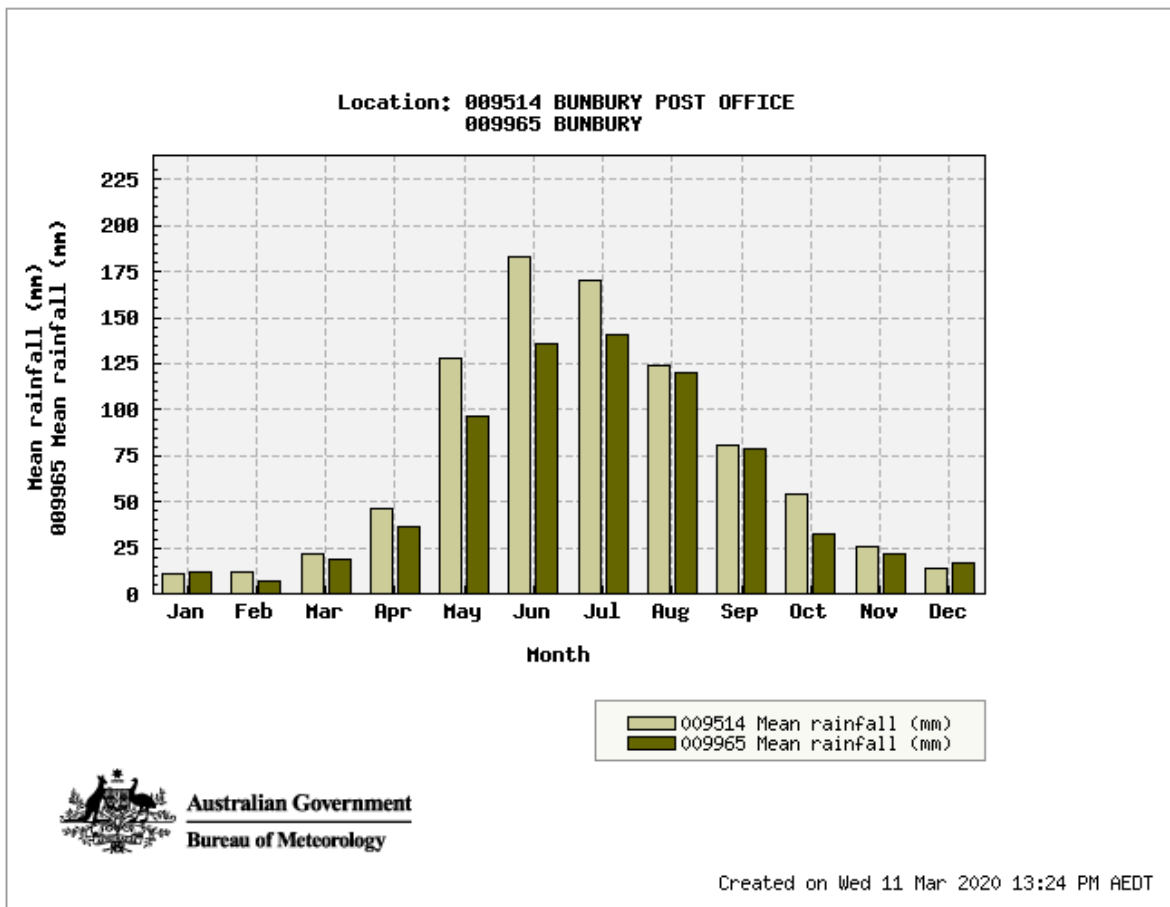


Figure 4 – Mean monthly rainfall chart – BoM¹⁶

Statistics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Years
Mean rainfall (mm) for years 1877 to 1985	11.1	11.8	21.9	46.4	128.1	182.9	170.6	123.6	80.4	54.1	26.2	13.7	870.7	108
Statistics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Years
Mean rainfall (mm) for years 1995 to 2020	11.7	7.2	19.0	36.5	96.2	136.2	140.5	120.2	79.1	33.1	21.9	17.0	712.1	24

Figure 5 – Mean rainfall decline – BoM¹⁶
¹⁶Source: Bureau of Meteorology website – www.bom.gov.au

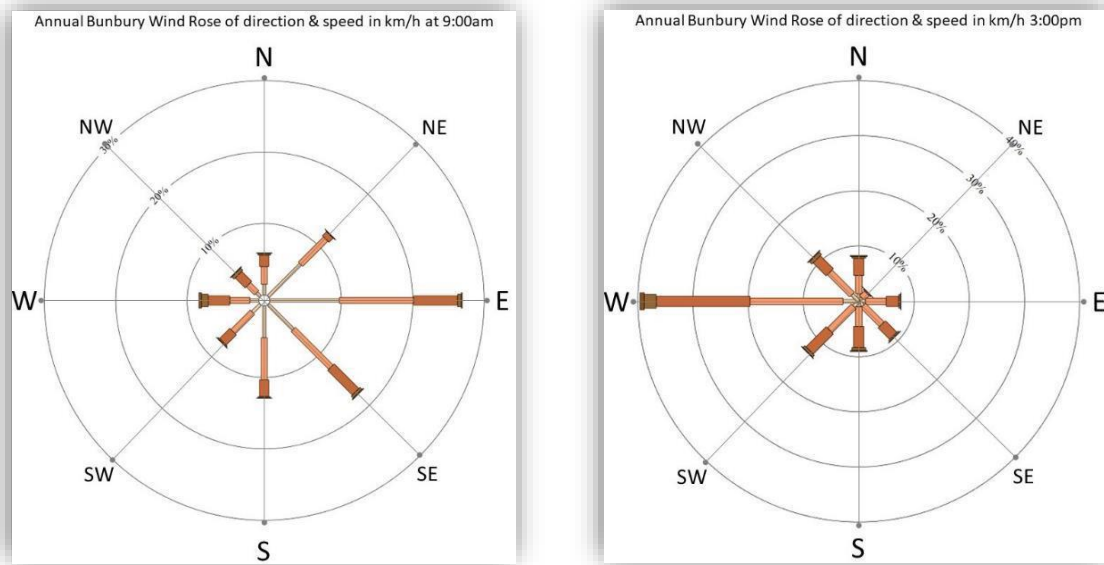


Figure 6 – Annual Bunbury Wind Rose of direction & speed in km/h at 9:00am

Figure 7 – Annual Bunbury Wind Rose of direction & speed in km/h at 3:00 pm

Climate data for Bunbury, Western Australia													
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Highest Daily Temp °C	40.8	40.0	39.5	33.4	29.2	24.2	22.4	24.6	30.4	32.9	36.0	39.2	40.8
Mean Max Temp °C	29.8	30.0	27.7	24.2	21.0	18.5	17.3	17.7	18.6	21.1	24.5	27.3	23.1
Mean 9am Humidity %	54	56	61	71	80	83	85	82	74	67	60	55	69
Mean 3pm Humidity %	44	43	46	55	59	64	65	66	64	58	52	48	55
Mean Rain mm	12.1	6.9	19.0	36.5	96.2	136.2	140.5	120.2	79.1	33.1	21.9	17.7	726.1
Mean Number Rain Days	2.5	2.1	4.0	8.6	13.0	17.2	19.2	18.9	16.4	10.0	6.1	4.0	122.0
Max Wind Gust Km/h	76	72	67	85	91	111	93	94	87	85	89	74	111
Mean Wind Km/h	15.0	14.4	12.5	9.9	9.2	9.9	10.5	10.8	12.3	12.4	13.8	14.2	12.1

Table 6 – Monthly climate data for Bunbury

3.6.3 Vegetation and Fuel

The vegetation within the City of Bunbury is a mix of tuart and mixed marri/jarraah forest, banksia and peppermint woodlands, coastal heath, grasslands and wetlands. The tuarts and the coastal heath are predominately on the western, coastal fringe, with the woodlands and wetlands spread throughout the remainder of the undeveloped areas of the City.

Predominate vegetation types provide the bushfire fuels and influence how fires behave. Understanding this, assists in the development of risk assessments through the evaluation of factors such as potential rates of spread, fire intensity and spotting potential. Understanding the vegetation types present, also allows for better assessment of the available mitigation strategies and their potential effectiveness. For example, in areas populated by Paper Bark and/or Tea Tree open woodland, fires are typically extremely fast-moving, wind driven fires. These fires can exhibit extreme intensity. The fire behaviour is typically described as ‘flashy’, due to its ephemeric behaviour. Broad vegetation types within the City of Bunbury are identified in [Table 7](#) (below).

There are a number of ‘pocket parks’ in amongst the suburban areas, but these are generally relatively small. Many, however, are contiguous with the wooded areas to the outside of the urban areas of the City, further increasing the RUI complexity and bushfire risk (see [Figure 11](#)). Generally, the major vegetation type with in these ‘pocket parks’ are Jarrah – Mari, plus areas of Paperbark – Tee Tree populations within the low-lying, wetter areas. Jarrah – Marri woodland, generally carry a fastmoving fire with moderate spotting. In extreme conditions, these fires can reach the canopy and become a crown fire, with enhanced spotting and faster rates of spread.

3.6.4 Maidens Reserve

The Maidens Reserve is located within the SW corner of the City of Bunbury. It is bounded by the ocean to the west and Ocean Drive in the east, with the Water Corporation and Department of Housing bush land in the south. It presents a direct urban interface to housing in the south and east. The area forms a large area of remnant vegetation, within an increasingly urbanised area. This reserve has a mixture of vegetation types, being coastal heath in the dunal areas near the coast ([Figure 8](#)), Tuart, Eucalypt and Banksia woodlands, in the eastern portion.



[Figure 8](#) – Shrublands – Coastal Heath (Maidens Reserve)

This area is of high conservation significance, in terms of its flora, as habitat for fauna, unusual landforms and cultural heritage significance. This reserve is habitat to several species that are on the critically endangered list, such as western ring-tailed possums, Carnaby’s Black cockatoo, phascogales and other native mammal species, along with an array of flora species. Fire can harm the nesting areas for these animals and exotic weeds may encroach into the landscape, after a fire.

Portions of this land have been purchased by the Conservation and Parks Commission, for eventual ceding to the Kalgulup Regional Park. Access in and through the area is provided by firebreaks of varying widths, being generally 3 metres, which are maintained as crushed limestone road base. These

are to improve trafficability, particularly on steep grades on dunal areas. Another function is to divide the reserve into several smaller, manageable compartments. Fires within Shrublands – Coastal Heath are often fast moving, wind driven fires. These fires are difficult to track and control with ground crews, due to the sandy conditions.

This reserve is an important coastal area with low coastal heath in the dunal areas near the coast and Tuart and Eucalypt Banksia woodlands, in the eastern portion. It is regularly used by bushwalkers and those gaining access through the Reserve to the beach. In addition, the Maidens along with Manea Park, Loughton Park, Hay Park, Tuart Brook Reserve and Shearwater Tuart Forest, will form part of the Kalgulup Regional Park, which covers 893ha of continuous public bushland reserve. This planned park is an initiative between the South-West Catchment Council and the City of Bunbury, with the aim to protect and enhance the environmental, cultural and social values of the area, by providing a continuous band of bushland around the City, with the provision of walk trails that allows interaction with the natural environment.

This reserve is an area of concern, as the fire risk to the private property west of Ocean Drive is significant, as is the likely impact of bushfires on the Reserve’s natural environment. Fires in the Maidens Reserve have been a consistent event over the past 10 years. Fire statistics indicate the main causes of fire to be from deliberate acts of arson. A Fire Management Plan is being developed by DBCA, as part of the Kalgulup Regional Park Reserve.

3.6.5 Manea Park

Manea Park reserve covers 206 hectares of natural bushland, situated on the southern boundary of the City, immediately south of the South West Institute of Technology (SWIT) (on Robertson Drive), Edith Cowan University (ECU) and the Health Campus, east of Bussell Highway, north of the Capel Shire boundary and west of South West Highway. Assets (other than those already mentioned) adjacent and within this reserve, include the College Grove subdivision, the Bunbury Regional Prison and the Regional Airstrip and associated infrastructure. The predominant vegetation is Jarrah, Marri and Banksia woodlands, see [Figure 9](#). Jarrah – Marri woodland, generally carry a fast-moving fire with moderate spotting. In extreme conditions, these fires can reach the canopy and become a crown fire.



Figure 9 – Manea Park Sample

A significant asset of the park is its species biodiversity, being a natural resource that provides a unique display of Western Australia’s natural heritage, within close proximity to an urban setting. This reserve is also habitat to several species that are on the critically endangered list, such as western ring-tailed possums, Carnaby’s Black cockatoo, phascogales and other native mammal species along with some

flora species. Fire can harm the nesting areas for these animals and weeds may encroach into the landscape after a fire. With the increasing pressure from urbanisation and other land uses along the Swan Coastal Plain, the importance of conserving of the natural resources within Manea Park, cannot be understated.

Dieback is prevalent throughout portions of the Park and active attempts to minimise the spread of this disease have been undertaken by DBCA and members of the 'Friends of Manea Park' group. To ensure that the soil-borne fungus is contained, vehicles and machinery must be free of soil before entering and again upon leaving these areas. Dieback hygiene procedures need to be followed in all works within these reserves. The use of fire-fighting foams (BFFF) and retardants should be avoided in and around water catchments, streams and wetlands, including the Hay Park Reserve off Bussell Highway. The Hay Park Reserve is a significant site for rare and endangered species, as is the Loughton Park Conservation Area. There are several areas of subterranean peat in the swamps, which pose significant challenges to fire fighters, in the suppression of fire. Re-ignition from subterranean fires re-emerging across fire lines has been a fire escape risk in previous events. The potential environmental risk of acid sulphate prone soils also exists. Within these low-lying areas of the reserve the vegetation is made up of paper bark - tea tree see [Figure 10](#).



[Figure 10](#) – Paper bark – Tea Tree & Heath Land

Manea Park has had significant multi-agency response fires, on an average of every 3 years. These fires pose a significant threat to several key institutions and residences, with evacuation being undertaken on at least one occasion. For the community of College Grove, the key source of risk is from ember attack, rather than from direct flame contact. The elements that have been identified as being at greatest risk appear on the City of Bunbury's risk register and treatments are planned to mitigate these. The park has an extensive firebreak network that divides the reserve into several compartments. These firebreaks are maintained on an annual basis along with planned construction and upgrades. Fire management guidance plans for the Kalgulup Regional Park will be developed by DBCA.

In addition, Manea Park, the Maidens, Loughton Park, Hay Park, Tuart Brook Reserve and along with Shearwater Tuart Forest, now form part of the Kalgulup Regional Park, which covers 893ha of continuous public bushland reserve. This park was an initiative between the South-West Catchment Council and the City of Bunbury, with the aim to protect and enhance the environmental, cultural and social values of the area, by providing a continuous band of bushland around the City, with the provision of walk trails that allows interaction with the natural environment.

3.6.6 Pocket Parks and Reserves

Throughout the urban area of Bunbury, there are a number of wooded parks. The specific fire implications are important to consider, as they greatly increase the rural-urban interface and therefore, the complexity of any firefighting activities. Many of these parks are contiguous with the new Kalgulup Regional Park, which essentially surrounds the City of Bunbury. This has profound implications for the management of any fire runs from any direction, but the north as it greatly increases the length of the rural-urban interface within the City.

Fifteen fragmented reserves that are managed by the City contain Threatened Ecological Communities (TECs) (see 3.6.7). These reserves were identified through Natural Area Initial Assessments in 2023/2024. Urban encroachment on these ecological communities creates multiple issues including increased fragmentation through clearing and development, increased bushfire risk, and breakdown of ecological linkages or corridors. These issues require ongoing management and maintenance to retain these important and threatened ecosystems.

Pocket parks provide valuable canopy coverage to meet the City's Greening Plan. The greening plan aims to reduce the Urban Island Heat Effect (UIHE), improve the natural aesthetic of the City landscape and benefits to community wellbeing. Although there is perceived risk in bushfire implications relating to pocket parks it is important to remember that living vegetation and canopy retention will assist reducing the severity of bushfire through mitigating the impact of climate change, reducing wind speeds and ambient temperature, and improving community wellbeing and mental health.

In addition, there are significant legacy housing developments that were developed and back directly into bushland. The added complexity would be their fencing, which would increase the difficulty of any offensive firefighting operations to protect those assets.

The parks that are not in a 'managed state' (parkland cleared, or fuel-load modified) and have assets around them that have been risk rated as high, very high, or extreme, will be singled out for treatment on the City's mitigation treatment schedule.

3.6.7 Threatened Ecological Communities

There are however, a couple of exceptions to the above strategy, such as Loughton Park (Melaleuca wetland) which is difficult to manage, due to a number of environmental constraints, as the area contains a number of Threatened Ecological Communities (TEC).

The City has responsibility for 18 wetlands, four TEC, four threatened flora species, and 18 fauna species that are rare, or considered likely to become extinct. These areas are part of the Southwest Eco-region, one of 34 global "hotspots" which are considered to be significant or highly threatened. This is Australia's only global biodiversity hotspot and is a significant part of the nation's and world's natural heritage. These reserves have a complex range of values. They are home to ecological and biodiversity values, are important for community aesthetics and sense of place, and also, containing important infrastructure. TECs require specific protection under federal law within the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).¹⁷

The City, through consultation with its Natural Environment groups, will develop reserve fire plans which will aim to balance the diverse values at these sites with their need for periodic fire (where relevant) to ensure that they are able to continue to support their diverse ecosystems and unique flora and fauna into the future.

¹⁷ [Source: Threatened Ecological Communities. Australian Government, DCCEEW, 2022](#)



Figure 11 – Areas surrounding the City as Kalgulup Regional Park

Vegetation Community ¹⁸	Area (ha)	% of Total CoB
Cleared	4639.8	70.6%
Bare areas or freshwater lakes	455.3	6.9%
Medium forest; Jarrah & Marri	278.0	4.2%
Medium woodland - Eucalyptus rudis & Melaleuca raphiophylla	87.4	1.3%
Medium woodland -Tuart	151.1	2.3%
Medium woodland - tuart & jarrah	282.7	4.3%
Mosaic - Medium forest - jarrah-marri / Low woodland; banksia/Low forest; Teatree (Melaleuca spp.)	624.3	9.5%
Shrublands; Teatree thicket & Coastal heath	51.5	0.8%
Total	6570	100%

Table 7 – Vegetation type coverage at Bunbury

¹⁸ **Source:** Vegetation of Western Australia Dataset provided by DFES. 2016

3.6.8 Bushfire Frequency and Causes of Ignition

The majority of ignitions would be due to human activity, unfortunately with arson figuring prominently see [Tables 8](#) and [9](#) below. Stolen cars being set alight has been a common source of fire ignitions in the past few years. To address this, the City has invested in fencing reserves to reduce access and encouraging active engagement of ‘friends of’ groups and the like in these areas, this has reduced the incidence of these fires.

A significant fire that threatened the South-West Sports Centre (January 2018) was caused by a discarded cigarette butt. Another significant fire in March of that year within the Shire of Dardanup (then crossing into the City of Bunbury), was also started by a discarded cigarette butt. This fire was fast moving as the area is predominantly open grasslands with strong to gusty south-east winds on the day. The fire burnt a total area of 247 ha and spread to the Vittoria Heights subdivision, threatening homes and causing damage to one house, due to ember attack on the evaporative air conditioning unit.

The large area of contiguous bushland to the south and east of the City, which is to be preserved as the Kalgulup Regional Park is a potential fire risk. Ensuring the management of fire breaks and access through the site will be important. The City will need to work with land managers to develop and maintain strategic fuel and fire break plan. This is especially important when you consider the complexities of the long and convoluted RUI along the periphery of these lands and the nearby, contiguous local parks.

Historical bushfire occurrence

Incidents within the City of Bunbury by Financial Year *current FY incomplete

Incident Type	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
Called Off - No Attendance	6	2	7	6	1
False Alarm - System Initiated	197	158	175	139	80
False Call - Good Intent	53	47	50	57	31
False Call - Malicious	4	1	1	1	0
Fire - Bushfire (lge)	2	3	1	9	0
Fire - Bushfire (sml)	30	21	43	60	19
Fire - Other/Rubbish/Vehicle	35	39	60	59	39
Fire - Structure	25	14	20	26	10
General Service Calls	1	0	3	2	0
Hazardous Situation	24	9	26	30	10
Natural Hazard	20	21	44	258	18
Not Reported	0	0	0	0	2
Rescue & Medical	43	49	44	63	25
Road Crash & Rescue	29	42	45	49	24
Search	6	2	2	3	3

Table 8 – Summary of Ignitions, 2021 to 2024 ²⁰

The above *Table 8* is drawn from the 'DFES Local Government Report Package', produced on the 4th of December 2024, so the statistics for the 2024/25 FY are not yet complete. It also shows responses to other DFES functions such as natural hazards (storms), searches, road crash rescues and structural fires, which are irrelevant to this Plan.

Table 9 (below) demonstrates the continuing trend of fire cause being deliberate (45%), underdetermined (12%) and the remainder a mix of infrastructure failures, cigarette butts (difficult to prove) and escapes from previous fires.

There have been numerous 'legacy' challenges with fire containment strategies in past years. Numerous mineral earth breaks have been installed to halt and contain fire, which have led to ongoing restoration and weed management issues. This work has been long-running and consultation and planning needs to include consideration of these challenges, to reduce its impact in further years, including during fire response activities.

Ignition Cause	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025
Animal	0	0	2	0	0
Burn off fires	1	0	0	1	1
Campfires/bonfires/outdoor cooking	0	1	1	0	4
Children misadventure	1	0	0	1	0
Cigarette	0	0	8	7	0
Electrical distribution (excl. power lines)	2	1	1	0	0
Equipment - Mechanical or electrical fault	0	2	1	1	0
Fireworks/flares	0	0	0	1	0
Hot works (grinding, cutting, drilling etc..)	1	0	1	0	0
Human Error (Left on, knock over, unattended etc.)	0	1	0	1	0
Improper Fuelling/Cleaning/Storage/Use of material ignited	0	0	0	1	0
Other open flames or fire	4	3	2	0	2
Power lines	1	0	2	7	3
Reignition of previous fire	2	3	1	7	1
Sleeping/Alcohol/Drugs/Physical-Mental impairment	0	0	1	0	0
Suspicious/Deliberate	17	12	18	31	6
Undetermined	2	1	1	8	2
Unreported	1	0	3	1	0
Vehicles (incl. Farming Equipment/Activities)	0	0	1	1	0
Weather Conditions - Lightning	0	0	0	1	0
Weather Conditions (High winds, natural combustion etc. Excludes Lightning)	0	0	1	0	0

Table 9 – Causes of bushfires - Season 2018-2019 ²⁰
²⁰ **Source:** Department of Fire and Emergency Services. Risk, Capability and Analysis.

3.7 Current Bushfire Risk Management Controls

Historically within the City of Bunbury, the majority of fuel management work has been undertaken by:

- The City on the City reserves,
- DFES on UMR/UCL,
- Local Brigades on private land and
- City Parks and Reserves staff and contractors on City reserves.
- Natural area management (NAM) contractors and volunteers in Natural reserves
- Arboguy Arborist Contractors
- Department of Biodiversity, Conservation and Attractions in areas of Kalgulup Region (extensive weed control for fuel reduction yearly)

This plan aims to integrate future fuel management activities. The Southern WA fire season is typically from November through to April, with the City of Bunbury gazetted Restricted Burning Period and Prohibited Burning Period are as follows:²¹

- 15th November to 29th December: Restricted Period (permits required),
- 30th December to 28th March: Prohibited Period,
- 29th March to 10th May: Restricted Period (permits required),
- 11th May to 14th November: Unrestricted Period.

The above dates can be adjusted by the City of Bunbury to reflect the seasonal weather conditions.

3.7.1 Map of Bushfire Prone Areas

The City provides input into the Map of Bushfire Prone Areas, annually. Much of the City is designated to be Bushfire Prone (see [Figure 12](#)). 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.²² The *State Planning Policy 3.7 – Planning for Bushfire Prone Areas*, ensures that bushfire risk is given due consideration in all future planning and development decisions. As these policies do not apply retrospectively, the BRM Plan focuses on identifying existing bushfire risk and establishing an effective treatment plan, to manage unacceptable community risks, irrespective of these factors. The City issues Planning and Building approvals, in accordance with standards as set out in *Planning Policy 3.7, Planning in Bushfire Prone Areas* and the Building Commission.

All built assets that are within the FES Commissioner’s ‘Bush Fire Risk Areas’ have been assessed and placed upon the City’s Bushfire Risk Register. This is revisited annually and forms an integral part of the annual community engagement strategy and bushfire risk compliance process. An existing benchmark of a risk score of 250 is the delineator for treatment, which is addressed within existing resources, annually. The Bushfire Risk Register is a tool that also able to ‘point backward’ to identify bush blocks, as sources of risk, therefore demonstrating the land that requires treatment, irrespective of tenure/ownership.



[Figure 12](#) – Bushfire Prone Zone (Pink Shading)

²¹ [Source](#): City of Bunbury. *First and Final Fire Notice 2024/25*.

²² [Source](#): *State Planning Policy 3.7 – Planning in Bushfire Prone Areas*

3.7.2 Fires Services

On the positive side, the City is ‘Gazetted’ (Fire Brigades Act (1942)) and therefore, well-resourced with two platoons of Career Fire and Rescue (FRS), plus a volunteer FRS Brigade, as well as the City’s Bush Fire Brigade. The urban nature of the City, coupled to the resources mentioned, means that observation and response times are reasonably quick. This also means that most fires are noted, reported and extinguished, before these fires develop into the ‘flaming stage’ and head-fires could reach their maximum rate of spread and intensity.

The City of Bunbury coordinates and manages one **Volunteer Bush Fire Brigade**, with approximately 40 registered volunteers. The brigade is equipped with:

- 1 x 3,000 litre 4-wheel drive (3.4) Fire appliance,
- 2 x 500 litre 4-wheel drive (LT) Light Tankers.

In addition, a **Volunteer Fire and Rescue Brigade** is located at Stokes way Davenport and is equipped with:

- 1 x 1,200 litre 2-wheel drive (CP) Country Pump appliance,
- 1 x 1,500 litre 4-wheel drive (HSR) Hazmat Structural Rescue fire appliance,
- 1 x 500 litre 4-wheel drive (LT) Light Tanker.

Bunbury also has 2 platoons of **career Fire and Rescue Service** firefighters, located at 262 Bussell Highway and is equipped with:

- 2 x 1,200 litre 2-wheel drive (UP) Urban Pumper fire appliances,
- 2 x 500 litre 4-wheel drive (LT) Light Tankers.

3.7.3 Current Mitigation Activities

DFES are also active within the City, delivering some mitigation focussed works across the land it has responsibility for (UCL/UMR) alongside its other bushfire responsibilities. DFES also has fuel age data for the land it treats, and this has been considered when preparing this BRM Plan. Local land-owners are subject to the relevant sections of the *Bush Fires Act (s33)* and compliance ensured through that legislation.

The City of Bunbury, under grant funding from Federal and State sources (specifically the Mitigation Activity Fund Grant Program “MAF GP” by DFES which the City has been historically awarded between \$170,000 to \$200,000 each year), have created a network of coastal reserve tracks with limestone in the Maidens. These have been maintained since, on an annual basis. Additionally, bush tracks in Manea Park have been built and maintained to offer better long-term access and safety for fire-fighters. The City of Bunbury is also working with other landholders including the Department of Housing, the WAPC and Water Corporation, to ensure that designated fire tracks remain accessible to fire-fighters.

3.7.4 Community Engagement Activities

The City of Bunbury has developed Emergency Management, Community Safety and Rangers webpages, which supports several local organisations, initiatives and projects <https://www.bunbury.wa.gov.au/live/community-safety-and-emergency-management> . The teams use Marketing and Communications to disseminate important fire information to the community (such as Facebook posts and media releases). The Emergency Management and Community Safety Team conduct programs, community engagement and public education (such as the Bushfire Ready programs, Monthly DFES Preparedness Topics, running programs about awareness in schools and at events, and visiting international students to the local stations) with local Career and Volunteer Fire Brigades. Seasonal campaigns are launched, and a Bushfire awareness and preparedness focus occurs throughout the summer months.

The City’s Rangers and Emergency Management section manages a fire compliance campaign leading up to and throughout summer, whereby rangers visit all properties that appear on the Fire Compliance Register as being at elevated risk and provide risk mitigation advice to the residents. This register is created from rates vacant properties and complaints also, refer to the ranger’s procedure. Specific flyers are also sent to each of these properties, which provide advice. This is supported by the annual mail-out of the City’s ‘Final Fire Notice’ which is also printed within the local press and posted on the City’s website.

Additionally, the City conducts public awareness campaigns supported by and in concert with the HMA messaging and includes signage around the City. A list of local government wide controls for reducing bushfire risk in the City of Bunbury is provided in [Appendix B](#).

Chapter 4 Asset Identification and Risk Assessment

Assets at risk from bushfire in City of Bunbury are recorded in the *Asset Risk Register* in the BRMS. Assets are divided into four categories: human settlement, economic, environment, and cultural. Each asset has been assigned a bushfire risk rating between low and extreme based on the risk assessment methodology described in the Guidelines and Handbook. Systemic risks are identified and assessed in this BRM Plan with treatments described for key risks.

4.1 Identifying and Assessing Systemic Risk

Systemic risk refers to the potential impacts of a bushfire on the interconnected systems and networks that sustain communities. Systemic risk recognises that a single bushfire event can set off a chain reaction, with impacts that extend beyond the fire's location. These may affect the social fabric, economy, and/or the environment of the district and can persist long after the fire has been extinguished.

Systemic risks considered relevant to BRM for the City of Bunbury, are provided in [Appendix A](#). These were developed through wide-ranging community consultation, to inform the latest version of the City of Bunbury's Local Emergency Management Arrangements (LEMA). This table is drawn from Annexure 2 (the Emergency Risk Management Study) of the LEMA. In this study, Bushfire was determined to be the third highest risk to the community of Bunbury. The analysis that was undertaken considered the systemic risk, including the domains of 'severity', 'extent' and 'duration', against community risk assumptions and tolerances. A 'Threat Plan' for the hazard of bushfire was subsequently developed and appears within Annexure 4 of the LEMA.

4.1.1 Assessment of Environmental Assets

Using available ecological information and fire history data, environmental assets were assessed to determine to what extent they would be at risk from bushfire. The outcomes from this analysis have been included within this BRM Plan. Environmental assets that would not be adversely impacted by bushfire have not been included and assessed in the BRM Plan.

Natural Area Initial Assessments (NAIA) conducted in 2023/2024 included desktop studies and field work to prioritise City of Bunbury Natural reserves on ecological value. 15 reserves have been identified as threatened ecological communities (TECs). Bushfire may have detrimental consequences on the ecological value of these fragmented reserves, therefore, these reserves have greater asset value and are prioritised higher for bushfire mitigation works.

Environmental assets that would not be adversely impacted by bushfire have not been included and assessed in the BRM Plan. However, further understanding of the links between environmental asset value and social asset value, needs to be undertaken to accurately assign asset value and subsequent risk.

4.1.2 City of Bunbury Asset Risk Summary

A risk profile for the local government is provided in the summary [Table 19](#) below. This table shows the proportion of assets at risk from bushfire in each risk category at the time the BRM Plan was endorsed.

		Risk Rating (%)				
Asset Category		Low	Medium	High	Very High	Extreme
	Human Settlement	3.1	28.8	8.2	5.9	30.1
	Economic	1.5	5.7	4.4	2.3	4.4
	Environmental	0.0	0.0	0.5	2.6	0.0
	Cultural	1.8	0.0	0.0	0.0	0.8

Table 19 – LG Asset Risk Summary

The Threat Plans (Bushfire) with the City’s LEMA, consider bushfire risk from a systemic perspective, in that the ‘tolerable consequence’ criteria consider the systemic community impacts to qualify risk assumptions.

Chapter 5 Risk Evaluation

5.1 Risk Acceptance Criteria

The acceptable level of risk for each asset category is shown in [Table 20](#). A risk that is assessed as exceeding these limits will be considered for treatment.

	Asset category			
	Human settlement	Economic	Environmental	Cultural
Acceptable risk level	<p>LOW</p> <p>Any risk associated with loss of human settlement that is considered low or medium is acceptable. Any risk that is high, very high or extreme is unacceptable)</p> <p>This is taking into consideration that the City and property owners, are to be complaint with bushfire compliance notices and requirements, each season (to reduce risk).</p> <p>Any risk to human life resulting from a bushfire, would be unacceptable.</p>	<p>MEDIUM</p> <p>Taking into consideration that DRFAWA has a minimum cost value of \$250,000, anything less than this would cost the city itself.</p> <p>Any economic loss of greater than \$75k, due to bushfire would be unacceptable.</p>	<p>HIGH</p> <p>Any locally permanent loss of species, nor TEC, resulting from Bushfire.</p> <p>Any loss of environmental amenity, that lasts longer than one season, is unacceptable.</p>	<p>MEDIUM</p> <p>Any loss of any Aboriginal artefacts, or sites, is unacceptable.</p> <p>Loss of any registered heritage asset is unacceptable.</p>

[Table 20](#) – Risk acceptance criteria for bushfire risk in the City of Bunbury.
Source – LEMA - ERM Study (2019)

City of Bunbury Policy calls for any risk that has been identified as reaching, or exceeding the threshold identified within the City’s Fire Order, to be visited by a Ranger and compliance ensured through the provisions of the Bush Fires Act and Regulations, annually. If the land identified as supplying the risk does not belong to the City (or under a management order from the State), this risk information is passed to the owner and the City works to ensure that the risk is reduced.

Risks below that threshold 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, (ie bushfire, or accumulation of fuel) at least annually.

In most circumstances, risk acceptability and treatment will be determined by the landowner, 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.

City Rangers visit all properties that have previously been infringed for non-compliance to the City’s Bushfire Order, as well as vacant land, to ensure compliance to the minimum standard of fire

preparation. Additionally, properties that are observed to be non-compliant will also be visited by the City Rangers and infringements issued to encourage compliance. In the event of non-compliance the City will take measures under *section 33* of the *Bush Fires Act and Regulations*. Additionally, advice will be given to owners/occupiers on methods to improve their resilience to bushfire.

Secondly, the owners of the bushland that provides the source of the risk will be provided with the risk assessment outcomes for all built elements that are effected by that risk. This will essentially transfer the risk to that party. The City will then work with that entity/owner to provide advice and assistance wherever possible. For City managed/owned land, resources will be prioritised, to ensure that the risk is mitigated, as far as reasonably possible with whatever resources may be available. These resources will be targeted at the areas that present the highest risk.

5.2 Treatment priorities

The treatment priority for each asset is automatically assigned by BRMS, based on the asset’s risk rating. *Table 21* shows how consequence and likelihood combine to give the risk rating and subsequent treatment priority for an asset. Treatment priority for systemic risk is calculated manually. The treatment priority assigned in BRMS will help inform decision making for risk acceptability and development of the Treatment Strategy and schedule.

		Consequence			
		Minor	Moderate	Major	Catastrophic
Likelihood	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)

Table 21 – Treatment Priority for risks to assets

Systemic Risk Rating	Treatment Priority
Extreme	1
Very High	2
High	3
Medium	4
Low	5

Table 22 – Treatment priority for systemic risks

Risk Rating	Criteria for Acceptance of Risk	Course of Action
<p>Extreme Priorities 1A, 1B, & 1C)</p>	<p>Only acceptable with excellent controls.</p> <p>Urgent treatment action is required.</p> <p>Treatment plans to be explored and implemented.</p> <p>Highest level of authority notified.</p>	<ul style="list-style-type: none"> • Routine controls are not enough to adequately manage the risk. • Specific action is required in first 2 years of BRM plan. • Priorities will be made for treatments that will have maximum benefit to multiple assets and critical infrastructure. • These assets will be to focus of strategic treatments at a landscape level. • Identification of partnerships with other agencies for strategic mitigations. • Communication with stakeholders will be a strong focus to managing extreme risks
<p>Very High (priorities 2A, 2B, & 2C)</p>	<p>Only acceptable with excellent controls.</p> <p>Treatment action is required.</p> <p>Senior City officers and Council notified.</p>	<ul style="list-style-type: none"> • Routine controls are not enough to adequately manage the risk. • Specific action is required in first 4 years of BRM plan. • Priorities will be made for treatments that will have maximum benefit to multiple assets and critical infrastructure • These assets will be to focus of strategic treatments at a landscape level • Identification of partnerships with other agencies for Strategic mitigations. • Communication with stakeholders will be a strong focus to managing risks
<p>High (priorities 3A, 3B, 3C)</p>	<p>Only acceptable with adequate controls.</p> <p>Treatment action may be required.</p>	<ul style="list-style-type: none"> • Specific action is required in the 5 year life of BRM plan. • Priorities will be made for treatments that will have maximum benefit to multiple assets and critical infrastructure • These assets will be to focus of strategic treatments at a landscape level • Identification of partnerships with other agencies for strategic mitigation.
<p>Medium (priorities 4A, 4B & 4C)</p>	<p>Acceptable with adequate controls.</p> <p>Treatment action is not required, but risk must be monitored regularly.</p>	<ul style="list-style-type: none"> • Specific action may not be required. • Risk may be managed with routine controls and monitored periodically throughout the life of the BRM Plan.
<p>Low</p>	<p>Risk acceptable with adequate controls, managed by routine procedures, or controls and subject to monitoring.</p> <p>Treatment is not required.</p>	<ul style="list-style-type: none"> • Need for specific action is unlikely. • Risk will be managed with routine controls and monitored as required.

Table 23 – Criteria for acceptance of Risk and Course of Action

Chapter 6 Risk Treatment

The purpose of any risk treatment is to reduce the likelihood of a bushfire occurring and/or the consequences of that fire. This would be aimed at reducing 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.

The City will address emerging risks, on a priority basis, this will generally mean that the highest risks will be treated first, as described in [Table 22](#). The City will also be involved in strategic projects and recurrent maintenance and on-going treatments.

6.1 City-Wide Controls

Local government-wide controls are activities that reduce the overall bushfire risk within the City of Bunbury. These types of treatments 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.

The following controls are currently in place across the City of Bunbury:

- *Bush Fires Act 1954* Section 33 notices (First and Final Fire Notice), including applicable fuel management requirements, firebreak standards and annual enforcement programs,
- Declaration and observation of Prohibited and Restricted Burning Times. Additionally, there are opportunities and requirements for Total Fire, Vehicle Movement and Harvest Bans, for the local government,
- Public education campaigns and the use of DBCA/P&W and DFES state-wide programs, tailored to suit local needs,
- State-wide arson prevention programs, developed in conjunction with WA Police and DFES,
- State planning framework and local planning schemes, implementation of appropriate land subdivision and building standards in line with DFES, Department of Planning and Building Commission policies and standards,
- Monitoring performance against the BRM Plan and reporting annually, to the local government council and OBRM.
- The Department of Fire and Emergency Services (DFES) is responsible for the management of fire prevention of Unallocated Crown Land (UCL) and Unmanaged Reserves (UMR) within gazetted town site boundaries under a memorandum of understanding with the Department of Planning, Lands and Heritage (DPLH),
- Department of Biodiversity, Conservation and Attractions Annual mitigation works programs (includes mechanical works and prescribed burns that may not directly influence level of risk to a specific asset or group of assets),
- Western Power Annual Vegetation Management and asset inspection activities in Extreme and High Bushfire Risk areas, completed by 30 November.
- All Fire Management Plans, including but not limited to, land developments and estates. Plans are available through the Planning department at the City,
- The City of Bunbury annual hazard reduction works program (includes, burning, spraying, slashing and pruning in and around, established Town sites and on strategic rural reserves),
- Priority is given to populated Town sites first (known works will be captured in the Bushfire Risk Management treatment schedule),

- Water Corporation Bushfire Risk Mitigation Program (Water Corporation sites due to be assessed within the City by Water Corp. staff. Only High to Extreme risk sites will be communicated to the BRM Plan/BRPC once completed), and:
- Community “Bushfire Ready” groups facilitated by local resident’s, in conjunction with DFES are being developed. Joint initiative: LG, DFES, and other community groups and associations. This includes the City’s Safer Community Network, which includes BRAG as one of its many community safety elements.

A multi-agency work plan has been developed which details work to be undertaken as a part of normal organisational business, to improve current controls, or to implement new controls to better manage bushfire risk, across the local government and all tenures.

Informal arrangements with these agencies have been in place for a number of years, but will be in place more formally, once tenure for the new Kalgulup Regional Park is formalised. With the transition of ownership of the Kalgulup Regional Park to the Conservation and Parks Commission some time into the future, much of the existing land treatments will be transferred to DBCA on their behalf.

6.2 Asset-Specific Treatment Strategies

The Treatment Strategy describes the overall approach to managing bushfire risk in the medium to long term in the City of Bunbury. The strategy is shaped by factors such as the distribution of risk in the landscape, the community's values and objectives, stakeholders' mitigation programs and constraints on treatment options. for bushfire risk management within the City of Bunbury.

The Treatment strategy helps guide the development of integrated annual treatment schedules.

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 six asset specific treatment strategies:

- **Fuel management** - Treatment that reduces or modifies the bushfire fuel through manual, chemical and prescribed burning methods,
- **Ignition management** – Treatment that aims to reduce potential human and infrastructure sources of ignition in the landscape,
- **Preparedness** - Treatments that aim to improve fire response capacity, such as access and water supply arrangements,
- **Planning** - Treatments that focus on developing plans that would improve the ability of firefighters and the community, to respond to bushfire,
- **Community Engagement** - Treatments that seek to build relationships, raise awareness and change the behaviour of people exposed to bushfire risk. Bushfire is a key focus of the City’s ‘Safer Community Network’ program. This includes Area and Street Representatives who work in an all-hazards environment, but include seasonally applicable campaigns, such as that for the bushfire season, and
- **Other** - Local government-wide controls, such as community education campaigns and planning policies, will be used to assist to manage the risk. Generally, asset-specific treatment is not required, or not possible in these circumstances.

The City of Bunbury occupies a relatively small geographic area and as such, has little by way of diversity to consider. However, there is a mix of the amount of bushland which may be adjacent to built assets. Additionally, there is a relatively large periphery of contiguous bushland abutting the community. This needs to be considered as offensive fire-fighting operations would be complex during a significant running fire event.

There is also (arguably) a common belief that the residents are ‘urban’ and the threat of bushfire is not relative to them. This complacency requires a concerted expectation management campaign to achieve ‘buy-in’ to the ‘shared responsibility notion’ that is required to assist in creating a safer community.

With the creation of the Kalgulup Regional Park, the desire to create ‘green’ landscapes and a focus on habitat, may lead to the diminishment of existing controls (strategic fire-breaks and the like), increasing the risk to community.

It is also important to synergise with City and other agency efforts, such as weed mitigation programs to reduce the threat of fire, which would ultimately reduce a reliance on mechanical fuel management options into the future.

6.3 Treatment Schedule

The Treatment Schedule is a list of bushfire risk treatments recorded within the DFES Bushfire Risk Management System (BRMS). The City of Bunbury will be focusing on developing a program of works that covers activities to be undertaken within the 2025-2030 period, after the approval of this BRM Plan. The Treatment Schedule will evolve and develop throughout the life of this BRM Plan.

The City of Bunbury Treatment Schedule is a live document managed on BRMS. It is developed with regard to the outcome of the risk assessment process and Treatment Strategy. The Treatment Schedule was developed in broad consultation with landowners and other stakeholders. This allows the City to apply for Mitigation Activity Fund (MAF) Grant Program. The City have been historically awarded between \$170,000 to \$200,000 a year for mitigation activities and treatments. The City will continue to apply for future rounds.

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

The Risk Treatment Schedule will be developed in broad consultation with impacted landowners and other stakeholders. Every effort will be made to finalise the Treatment Schedule within six months of this BRM Plan being endorsed by Council. It is expected that the Treatment Schedule will be a dynamic document and will be amended to account for changing circumstances, including changes to assets and/or risk ratings. The BRM Plan will be reviewed at least annually (September) and amended as required, to take into account differing risk elements, such as unforeseen fuel loadings, land development, etc.

Land-owners are ultimately responsible for treatments that may be required to be implemented on their own land. This includes any costs associated with the treatment and obtaining the relevant approvals, permits or licenses to undertake an activity. Where agreed, another agency may manage any treatment on behalf of a landowner. However, the expectation for action remains with the landowner to ensure that risk reduction treatments are undertaken.

It is important to note that some treatments, particularly those aimed at reducing the vegetation volatility, will be likely to require ongoing management and will likely need to be repeated periodically, in order to maintain the lower risk, post the initial treatment. This planned maintenance regime will be included in the Treatment Schedule, wherever possible.

Presentation of the risk score assessments and the elements that constitute that risk, will be provided to the tenure holder along with the owner of the at-risk asset, as a risk transfer exercise.

Chapter 7 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 the *Treatment Schedule*.

7.1 Review

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

- Changes to the BRM Plan area, organisational responsibilities, or legislation,
- Changes to the bushfire risk profile of the area, or
- Following a major fire event.

7.2 Monitoring

The City of Bunbury will monitor the BRM Plan and BRMS data, to identify any need for change. The Plan and BRMS data will be reviewed at least every two years, to ensure it continues to reflect the local context, assets at risk, level of risk and treatment priorities.

BRMS will be used to monitor the risk ratings for each asset identified in the BRM Plan and record the treatments that have been implemented. New assets will be added to the *Asset Risk Register*, when they are identified.

The City of Bunbury has determined that assets rated:

- **‘Extreme’** risk will be reassessed due to an unplanned fire event, biennially and at the completion of a treatment, as part of the post treatment evaluation,
- **‘Very High’** will be reassessed due to an unplanned fire event, biennially where possible and at the completion of a treatment, as part of the post treatment evaluation,
- **‘High’** will be reassessed due to an unplanned fire event, at least once during the life of the plan, or at the completion of a treatment, as part of the post treatment evaluation,
- **‘Low’** and **‘Medium’** risk should be reassessed during the development of any future plans.

The plan will be monitored by a member of the City’s Rangers and Emergency Management department, as designated by the Chief Executive Officer.

Post-treatment Risk Assessment, using the Bushfire Risk Management System, will involve a reassessment of that risk, at the completion of any scheduled treatment/s. This is to confirm that the treatment objectives have been achieved. This could include evaluation of the initial treatment, or ongoing treatments included in a treatment management plan, noting that treatments may need to be repeated periodically, in order to maintain risk reduction gains. The post-treatment risk assessment may identify that further treatments are required to reduce an asset’s risk rating to an acceptable level. The post-treatment assessment uses the same methodology as the original assessment. All inputs to the re-assessment should be reviewed and updated to reflect any change (e.g. changes to the asset or surrounding area).

Risk Re-assessment seeks to determine if any factors have changed (e.g. increases in fuel age, developments), that may impact upon the asset’s risk rating. Risk re-assessments may be undertaken at any time, using a ‘desk-top’ assessment to review data and spatial information using

the BRMS. Ideally, risk re-assessment for 'extreme' and 'very high' risk assets would include a site visit.

7.3 Reporting

The City of Bunbury CEO, or their delegate, will provide to OBRM the outcomes of biennial reviews of the BRM Plan. This is required to maintain OBRM endorsement of the Plan.

The City of Bunbury will contribute information about their BRM Program to the annual OBRM Fuel Management Activity Report.

The City of Bunbury will submit an annual report to OBRM, summarising progress made towards implementation of the BRM Plan, against the risk treatment schedule.

By the end of September each year, the risk scores for each assessed asset will be adjusted to take into account any treatment options executed in the preceding year. Additionally, accrued fuel ages will be recalculated, to adjust risk scores.

The Bushfire Risk Register will then be re-populated and any property or asset at risk score of 250 or greater, will be programmed for a visit from the City of Bunbury Rangers, where asset specific risk management advice will be provided to the resident/owner. Notices on treatment options will be posted to each absentee owner, in addition.

Owners of reserves which present risk, will also be advised of the risk that that land presents to community.

Consideration shall be given to publicly reporting the mitigation activities completed by the City via the City's website, newsletter or other appropriate means of communication. For example, this could be reporting on compliance to the City's annual indicative burn program.

7.4 Privacy Issues and Release of Information

Information captured through the Bushfire Risk Management System (BRMS) includes data considered 'personal' in nature including the names and addresses of landholders. There is therefore, the potential for the data collected through the BRMS to be used for purposes other than bushfire risk mitigation (i.e. Insurance companies using this information to set insurance premiums). It has been determined, in consultation with the Bunbury City Council, that BRMS reports produced for the public domain, are not to include information considered personal in nature.

The Chief Executive Officer is to be consulted, prior to any Bushfire Risk Management data being released to the public domain.

In order to actively encourage and support the implementation, monitoring and review of agreed actions, the City of Bunbury, as a matter of course, will provide reports to key stakeholders that detail the assets and treatments that the stakeholders (landowners) have responsibility for.

Glossary

Asset	A term used to describe anything of value that may be adversely impacted by bushfire. This may include residential, commercial, and industrial areas; agriculture and primary industry; areas of environmental significance and 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 used to record the details of assets identified in the Bushfire Risk Management Plan.
Asset Risk Register	A component within the Bushfire Risk Management System (BRMS) used to record 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 Management Plan	A document that sets out short, medium and long term bushfire risk management strategies for the life of a development.
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 Hazard	The hazard posed by the classified vegetation, based on the vegetation category, slope and separation distance.
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 Bushfire Risk Management Plan (BRM Plan) is submitted to the 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 endorsement.
Emergency Risk Management Plan	A document (developed under State Emergency Management Policy 2.9) that describes how an organisation(s) intends to undertake the activities of emergency risk management based on minimising risk. These plans help inform the on-going development of Local Emergency Management Arrangements (LEMA) and State Hazard Plans.
Geographic Information System (GIS)	A data base technology, linking any aspect of land-related information to its precise geographic location.
Geographic Information System (GIS) Map	The mapping component of the Bushfire Risk Management System. Assets, treatments and other associated information is spatially identified, displayed and recorded within the GIS Map.

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 probability 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).
Planning Area	A geographic area determined by the local government which is used to provide a suitable scale for risk assessment and stakeholder engagement.
Priority	See Treatment Priority
Recovery Cost	The capacity of an asset to recover from the impacts of a bushfire.
Responsible Person	The person responsible for planning, coordinating, implementing, evaluating and reporting on a risk treatment.
Risk acceptance	The informed decision to not reduce a risk, based on the knowledge gained during the risk assessment process.
Risk analysis	The application of consequence and likelihood to an event 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 to determine whether a risk is acceptable.
Risk identification	The process of recognising, identifying and describing risks.
Risk Manager	The organisation or individual responsible for managing a risk identified in the Bushfire Risk Management Plan; including review, monitoring and reporting.
Risk Register	A component within the Bushfire Risk Management System used to record, review and monitor risk assessments and treatments associated with assets recorded in the Bushfire Risk Management 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 (RUI)	The line or area where structures and other human development adjoin or overlap with undeveloped bush land.
Slope	The angle of the ground's surface measured from the horizontal.
Systemic risk	The impacts of bushfire on the interconnected systems and networks that support community function. It is a product of the disruption caused by fire to normal life and its effects may be felt far from the direct impacts of the fire in both time and space.
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 prescribed 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 Bushfire Risk Management Plan, including coordinating or undertaking work, monitoring, reviewing and reporting.
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 prescribed burn.
Vulnerability	The susceptibility of an asset to the impacts of bushfire.

Common abbreviations

APZ	Asset Protection Zone
BFAC	Bush Fire Advisory Committee (of Council) (not applicable in Bunbury)
BMB	Bushfire Management Branch (of DFES-OBRM)
BRM	Bushfire Risk Management
BRMP	Bushfire Risk Management Planning
BRM Plan	Bushfire Risk Management Plan
BRMS	Bushfire Risk Management System
CaLD	Culturally and linguistically diverse (community)
DBCA	Department of Biodiversity, Conservation and Attractions
DEMC	District Emergency Management Committee
DFES	Department of Fire and Emergency Services
DPLH	Department of Planning, Lands and Heritage
ERMP	Emergency Risk Management Plan
FFDI	Forest Fire Danger Index
FMP	Fire Management Plan (land development)
GFDI	Grassland Fire Danger Index
GIS	Geographic Information System/Service
HSZ	Hazard Separation Zone
JAFFA	Juvenile and Family Fire Awareness
LEMA	Local Emergency Management Arrangements
LEMC	Local Emergency Management Committee
LG	Local Government
LMZ	Land Management Zone
OBRM	Office of Bushfire Risk Management (DFES)
PWS	Parks and Wildlife Service (or DBCA)
SEMC	State Emergency Management Committee
SLIP	Shared Land Information Platform
WAPC	Western Australian Planning Commission

Appendices Table

Appendix A	Systemic risk Register
Appendix B	Local government wide controls
Appendix C	BRMP - Communication Plan
Appendix D	Annual review checklist
Appendix E	MAF Eligible Tenure Maps (City North & City South)
Appendix F	MAF Treatment Plans 2024/25 FY

Appendix A – Systemic Risk Considerations

The City of Bunbury understands that the inter-relationship between the arrival of a hazard and the impacts/consequences of that hazard's impact upon the community, will be very complex and almost impossible to forecast and prepare for. Additionally, the City considers an 'All Hazards' focus, tending to concentrate upon the management of the consequences to an event, rather than considering hazards in isolation.

Through the development of the City's Local Emergency Management Arrangements (LEMA), specifically the '*Threat Plans*' (*annexure 4* - including one specifically for bushfire) this analysis was done, considering the community vulnerabilities to that hazard and articulated the determined thresholds that were considered to be the 'tolerance' levels, of the general community to bushfire.

The City's Rangers and Emergency Management Department are across the BRMS and this BRMP, there are opportunities to ensure that the identified vulnerabilities are considered in the annual risk treatment plans. In addition, the quarterly meetings with City of Bunbury department heads, consider the forthcoming mitigation treatments to ensure synergies are maximized, but equally, any systemic risks are discussed and managed.

The table A1 (below) is drawn from the City's current *LEMA, Annexure 2 – Emergency Risk Management Study* where community consultation was taken to consider the systemic risk, acceptance tolerance thresholds and the established Risk Evaluation Criteria for consequences to fire and other hazards.

ERM Workshop Statements - Bushfire		Low	Med	High	V High	Ext
1	There is a risk that a bushfire will cause loss of life or serious injury.			4		
2	There is a risk that a bushfire will cause substantial property damage to 5 homes or more.		1	3		
3	There is a risk that a bushfire will cause possible evacuation at the Bunbury Health campus.	1	1	2		
4	There is a risk that a bushfire will cause property damage to infrastructure services, for periods greater than 24 hours.		2	2		
5	There is a risk that a bushfire will cause property damage to commercial industry, leading to closure of business (20%) for periods of 12 hours or greater.	1	2	1		
6	There is a risk that a bushfire will cause medium term (25 years), or permanent, effect on the environment.		3	1		
7	There is a risk that a bushfire will cause permanent property damage to community infrastructure and community lifestyles.	1	3			
Totals		3	12	13	0	0

Table A1 – Systemic Risk from Bushfire

The numerics in *Table A1* relate to the score ratings that was established during the consultation phase of the ERM Study. Each of the four workshops scores were tallied and entered into the table, demonstrating the group's considerations for each of the consequence criteria.

Source – City of Bunbury LEMA – Annex 2

Appendix B – Local government wide controls

The City of Bunbury has bushfire risk controls tailored to the specific property area and purpose. Properties of 2024m² are treated differently to smaller lots of land. Additionally, plantations have different requirements demanded by the City's annual '**Fire Control Notice**'. This permits the City to apply differing controls to manage specific risks.

There are also controls on burning, BBQs, pizza ovens and other activities that may present fire risk to the community.

The following table provides suggested considerations in the determination of the annual risk treatment program activities as a due diligence tool.

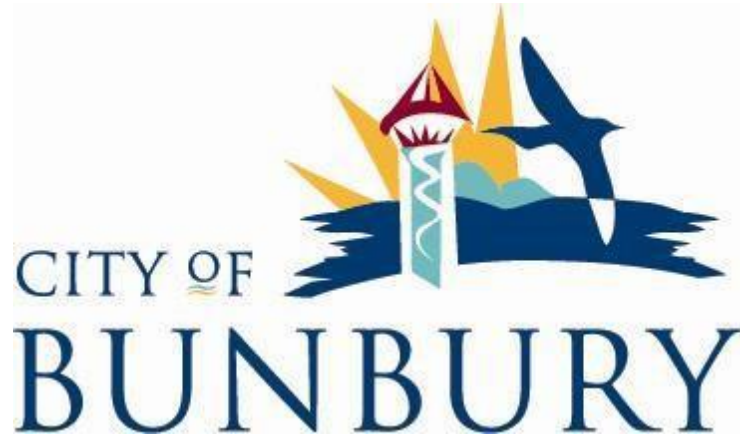
Local Government-Wide Controls, Multi-Agency Treatment Work Plan

	Control	Action or Activity Description	Lead Agency	Other Stakeholder(s)	Notes and Comments
01	City of Bunbury First and Final Fire Notice (<i>Bush Fires Act 1954</i>)	Annual Fire Prevention Order	Local Government	FCO's, brigades and land-owners/occupiers	1 - Firebreak Order reviewed annually and adopted by Council. Its purpose is to ensure land-owners understand and comply with firebreak specifications, as well as appropriately reducing fuel load and risk on their properties. Notice reviewed annually. Rangers inspect compliance to the notice conditions and fines apply if non-compliant. 2 - Bi-annual review of Council Policy and Corporate Guidelines for Bushfire Mitigation and Compliance.
02	City of Bunbury Prohibited and Restricted burning times (<i>Bush Fires Act 1954</i>)	Annual Fire Prevention Order	Local Government	Chief and Deputy FCO, Rangers and the public.	Prohibited and Restricted burn times are designed to reduce the risk of fires occurring during the high fire danger period. Extensions to R/PBT can be extended as required, on the advice of the Chief and Deputy FCO's.
03	City of Bunbury mitigation works	The City's Operations / Works / Parks & Environment team has annual works programs to reduce fuel load and remove hazards.	Local Government	Public (reporting hazards and concern of risk) City Parks and Gardens staff City Rangers	City Operations / Works / Parks & Environment teams target work on strategic risk areas, with particular attention paid to past fire incidents, or areas identified to be presenting a risk to community assets. Work includes, slashing, spraying, mulching, pruning and other mechanical treatments.

	Control	Action or Activity Description	Lead Agency	Other Stakeholder(s)	Notes and Comments
04	DFES UCL/UMR land management	Preparedness, mitigation work conducted on lands owned by DoL and managed by DFES, under a MOU	DFES (South West office)	DBCA, LG, Local brigades	Annual budgeting has been completed to include mitigating risk on UCL/UMR. South West BRMO's have these plans included in their scope of work.
05	City of Bunbury, Draft Burn Program (annual indicative plans)	Local Government is working on an annual burn plan for City-owned, or vested reserves.	Local Government	DFES, DBCA, Local brigades, Public	The City's Operations / Works / Parks & Environment teams are tasked with Bushfire Mitigation on City reserves. Annual burn plans are being produced. The BRM Plan will prioritise the reserves for hazard reduction burns and or other treatments. BRMS will be recording information.
06	Department of Biodiversity, Conservation and Attractions (DBCA) Master Burn Plans	DBCA have a 6 season burn program, that is published on their website. Yearly plans are available.	DBCA	Local brigades, DFES, LG	The plans can be accessed via the DBCA website, by sharing shape files (GIS) and are communicated at various BFAC, ROAC and other various meetings.
07	Department of Biodiversity, Conservation and Attractions mitigation works	DBCA conduct mulching and other mechanical treatments to reduce fuel load or provide fire access.	DBCA	DFES, LG	No formal plan exists, ?? however works are completed as required, upon request or when identified.
08	Water Corporation Bushfire Risk Management Program	Bushfire Risk Management Plan. A Bushfire Risk Management Project is under way for the Water Corp.	Water Corporation	DFES, LG	A plan is currently being developed. High risk areas are identified, and treatments planned then completed. Treatments and risk assessments are available through Water Corp BRM PLAN department. Some high-risk areas have been identified in the City to date.
09	Western Power annual asset inspection and vegetation management program	Western Power Bushfire Plan	Western Power	DFES, LG, DBCA	Annual vegetation management and asset inspections are completed to ensure risk is managed. Full asset inspections are completed every 4 years.

	Control	Action or Activity Description	Lead Agency	Other Stakeholder(s)	Notes and Comments
10	Land sub-division & building (WAPC)	Requirement for estate, sub-division, and other Fire Management Plans	Local Government	Local Brigades, contractors and FCO's	Land developers are required to develop and implement a Fire Management Plan, to ensure risk is managed and other controls implemented and monitored.
11	Planning in Bushfire Prone Areas	Planning in bushfire prone areas. E.g. State Planning Policy 3.7 and standards.	WAPC	LG, DFES, DBCA, land-owners	Foundation for land use planning. Directs how land use should address bushfire risk management in WA. It aims to preserve life and reduce impact on property and infrastructure. The City aligns its policy and standards with SPP 3.7. BAL assessments are required.
12	Pine Plantation Fire Management Plans	The Forest Product Commission (FPC) has implemented fire management plans for their plantations.	FPC	DBCA, LG, DFES	Minimum requirements and controls have been committed to within the Plan. These are communicated to/with LG and firebreak orders are complied with, for minimum standards of plantation design.
13	State-wide arson prevention programs	Education and awareness campaigns exist across the state for arson.	WA Police	DFES, LG	Participation as required. The City participates in campaigns for arson prevention and community support with arson reporting.
14	Bushfire Ready activities and street meets, as part of the City's Safer Community Network program.	Public preparedness and education campaign. Actively included within the City's Safer Community Network program	DFES	LG, local brigade, DFES	Bushfire ready facilitators are within the City. Working together with DFES and LG community engagement teams, to better prepare the community for bushfire and other community safety events. Street meets and phone trees have been implemented as a result, as well as safe winter burn demonstrations and workshops being actively supported.

	Control	Action or Activity Description	Lead Agency	Other Stakeholder(s)	Notes and Comments
15	Individual asset fire risk assessment program and resultant risk register	A 13 factor risk assessment tool has been developed and is used to determine a qualitative/quantitative risk score for individual assets within the City. This populates a bushfire risk register, whereby risk can be compared and rated for treatment priorities. A risk score of 250 is currently seen as being unreasonable and flagged for treatment.	City of Bunbury	Asset owner, City Rangers, Land-owners presenting risk	Owners who have a risk score of greater than 250 are visited and provided with the assessment details and suggestions to mitigate their risk exposure. Landowners presenting risk are advised of the risk presented and encouraged to mitigate.



The City of Bunbury
Bushfire Risk Management Planning

Communications Strategy

Appendix C – Communication Plan

This Communication Plan supports the development, implementation and review of the City of Bunbury Bushfire Risk Management (BRM) Plan. It should document the:

- Communication objectives.
- Roles and responsibilities.
- Key stakeholders are engaged in the development of the BRM Plan and Treatment Schedule.
- The implementation and review of the BRM Plan including: target audiences and key messages at each project stage; communication risks and strategies for their management; and communication monitoring and evaluation procedures.

C1 **Communication objectives**

The communication objectives for the development, implementation and review of the BRM Plan for the City of Bunbury are as follows:

- Key stakeholders understand the purpose of the BRM Plan and their role in the BRM planning process.
- Stakeholders who are essential to the BRM planning process, or can supply required information, are identified and engaged in a timely and effective manner.
- Relevant stakeholders are involved in decisions regarding risk acceptability and treatment.
- Key stakeholders engage in the review of the BRM Plan as per the schedule in place for the local government.
- The community and other stakeholders engage with the BRM planning process and as a result are better informed about bushfire risk and understand their responsibilities to address bushfire risk on their own land.

C2 **Roles and responsibilities**

The City of Bunbury is responsible for the development, implementation and review of the Communication Plan. Key stakeholders support the local government by participating in the Communication Planning as appropriate. An overview of communication roles and responsibilities follows:

- The City of Bunbury CEO is responsible for requesting OBRM endorse the BRM Plan.
- The City of Bunbury Corporate Communications Officer, is responsible for the communication of the BRM Plan to the community.
- The Team Leader Rangers and Emergency Services, for the City of Bunbury is responsible for communication between the City and the Department of Fire and Emergency Services.

C3 Key Stakeholders for Communication

The following table identifies key stakeholders in BRM planning process, its implementation and review. These are stakeholders that are identified as having a significant role or interest in the planning process or are likely to be significantly impacted by the outcomes.

Stakeholder	Role or interest	Level of impact of outcomes	Level of engagement
DBCA	Significant management responsibilities of the Kalgulup Regional Park (once transferred to Conservation Commission)	DBCA considerations included within the BRMP. Interim arrangements included pending land transfer.	Involve.
City of Bunbury	BRMP owner + management of lands under its jurisdiction + bushfire risk auditing and enforcement, with private land-owners.	Commitment and awareness, management of risk assessments and prioritization of mitigation against risk.	Involve
City of Bunbury – relevant department heads	To discuss the draft BRMP, looking to synergies and input to improve Plan efficacy. Quarterly, meet to consider forthcoming works, to manage any contingent, systemic risks.	Ensuring environmental, compliance, built and other City functions are considered in Plan and ultimately, in risk identification and treatment.	Involve, consult.

Table C1 – Stakeholder engagement program

C4 Engagement log

This Engagement log captures key interactions with stakeholders that occurred during the development of the BRM Plan and associated Treatment Schedule, or review of the BRM Plan. Record any significant conversations, community engagement events, emails, meetings, presentations, workshops and other communication initiatives.

C5 Communications Network

Stakeholder	Role or Interest	Level of Impact	Level of Engagement
City of Bunbury	Significant Role in plan development, implementation and review. Significant interest as a land manager	High	Inform, consult, involve, collaborate and empower.
	Meet quarterly, to consider systemic risks w/- forthcoming MAF works.	High	Regular engagement & consultation.
DFES	Significant Role in plan development, implementation and review. Support role in treatment Implementation.	High	Regular engagement & consultation.
	CFRS – Reserve Response Plan development & maintenance	High	Regular engagement, Consultation and kept informed.
	OBRM – Review & endorse Plan	High	Regular engagement, Consultation and kept informed.
DBCA	Treatment plans, Land Management, Asset & risk Identification	High	Regular engagement, Consultation and kept informed.
Local community and private landowners.	Role in plan development, implementation and review. Significant interest as a land manager.	High	Inform, consult & involve.
Chief Bush Fire Control Officer.	Role in plan development, implementation & review.	High	Inform, consult & involve.
Dept. Planning, Lands & Heritage.	Treatment plans, Land Management, Asset Identification.	High	Regular engagement, Consultation and kept informed.
Main Roads.	Treatment plans, Land Management, Asset Identification.	High	Regular engagement, Consultation and kept informed.
Dept of Environment, Water & Regulation.	Treatment plans, Land Management, Asset Identification.	High	Regular engagement, Consultation and kept informed.
Aqwest	Treatment plans, Land Management, Asset Identification.	High	Regular engagement, Consultation and kept informed.
Leschenault Catchment & Biosecurity Group.	Role in Plan development, implementation & review.	Medium	Inform, consult & involve.
Friends of groups: <ul style="list-style-type: none"> • Big Swamp, • Irwin St, 	Role in Plan development, implementation & review.	Medium	Inform, consult & involve.

<ul style="list-style-type: none"> • K/Chauhan, • Manea Park. 			
CoB LEMC	Role in Plan development, implementation & review.	Medium	Inform, consult & involve.
Bushfire Brigade & Emergency Service Volunteers	Role in Plan development, implementation & review.	Medium	Inform, consult & involve.
Traditional Owners	Role in Plan development, implementation & review.	Medium	Inform, consult, involve, collaborate & empower.

Table C2 – Responsible stakeholders

C6 Communications Timetable

Comms Timing	Stakeholders	Comms Objectives	Comms Method	Key Message, or Purpose	Responsibility	ID Risks to Communicate	RM Strategy	Monitor & Eval'n Method
Development of the BRMP & Treatment Schedule								
Life of Plan	CoB CEO, ELT & Staff	All (1-5)	eMails, Meetings, City Website	Informed, consulted, accountable or responsible. Review and input into Plan.	BRPC, or Team Leader Rangers & EM	Time constraints, No clear message, Incorrect audience.	Sub-delegate responsibility/s, Inject reporting rhythms within work plans.	Feedback positive, Plan milestone targets met, Mitigation effort meets expectation.
Quarterly	LEMC	1-3 + 5	eMails, F2F meetings, Presentation.	Confirm project objectives, Seek input into treatment plans/activities, Project updates provided & minuted.	Team Lead Ranger & EM	Lower LEMC delegate interest, Time constraints, Gaps in SME LEMC membership.	Ensure quarterly over-sight report into LEMC agenda.	Feedback from LEMC members & agencies.
Development of the BRMP Update								
Quarterly, + as required.	CBFCO, FCO's, BFB Capt, FRS	All (1-5)	Meetings attended with interested	Engagement & participation in BRMP activities,	BRPC, or BRMO.	Time constraints, No active plan,	Careful & collaborative planning,	Feedback received,

	platoons + VFRS Capt.		parties, as required.	ID & share information, Development of treatment options.		Weather & human resource constraints.	Encouragement to participation.	Support for BRMP initiatives.
Bi-annually	DBCA	1-3 + 5	eMails, F2F meetings, Site meetings, Telephone.	Confirmation of Environmental assets Identification of DBCA burn plans. Confirming project objectives, seeking input into treatment plans and providing project updates. Development of treatment options.	BRPC, or BRMO.	Resource constraints could limit their ability to participate. Willingness to release 'confidential' data re environmental assets.	Clarify misunderstandings & intentions of plan. Provide undertakings re the release of confidential data. Restrict release of information & document in plan.	Level of actual engagement, Success in protecting environmental assets.

Table C3 – Communications timetable

C7 Communications Activities Log

Activity Date	Stakeholder	Purpose of Engagement	Topics Discussed	Engagement Method	Lesson Learned, Issues Identified.	Follow-up
17 October '24	DBCA - Kalgulup RP Manager, Environmental Officer, Regional Fire Coordinator	Consultation, involvement in redevelopment of plan, proofing of assumptions.	BRMP and DBCA commitment, intelligence and improved understandings of synergies/collaboration.	Face-to-face meeting. Receipt of written feedback & comment.	Currency of details, including tenure transfer status.	

4 December '24	City of Bunbury	Seek SME input & commitment to draft renewal plan.		Face-to-face meeting. SME feedback to facilitator for inclusion in final draft.		

Table C4 – Communications activity log

Development of the Treatment Schedule

D1 Review of the BRM Plan

The City of Bunbury will review this BRMP annually, by May 30. As required by the office of Bushfire Risk Management (OBRM), a report of the Plan currency and progress of the treatment options will be prepared and submitted bi-annually, on every second May, beginning in 2026.

The report will focus on the following elements of the Plan:

A Correspondence

The City of Bunbury CEO will remain responsible to ensure that this requirement is met and will write a covering letter for each report.

B BRMP Report

- | | |
|------------------------------|---|
| Chapter 1 | That the BRMP objectives remain relevant, or alternatives are recommended, |
| Chapter 3 | That the content of the context statement/s, continues to reflect current factors effecting the bushfire hazard and risk to the community of the City, economy and its environment. |
| Chapters 4, 5 & 7 | That the figures and tables within the BRMP have been updated to accurately reflect current data with the Bushfire Risk Management System (BRMS). |
| Chapter 6 | That any articulated treatment strategies remain reflective of community values and strategic priorities. |
| Appendix B | That the stated local government-wide controls include current treatment programs with the City of Bunbury. |
| Appendix C | That the communications Plan has been updated to include planned stakeholder engagement and communication activities for the next planning and reporting period. |

C Bushfire Risk Management System (BRMS)

- | | |
|-----------|--|
| C1 | That all bushfire risk related assets identified within the City of Bunbury, have been mapped and a risk assessment is included for each, within the BRMS. |
| C2 | That all such assets have had a risk re-assessment completed within the past two years. |
| C3 | That the treatment schedule includes any planned treatments for at least, the next two years. |



BRMS LG Eligible MAF Parcels - City of Bunbury North



Figure E1 – MAF applicable lands City - North



BRMS LG Eligible MAF Parcels - City of Bunbury South

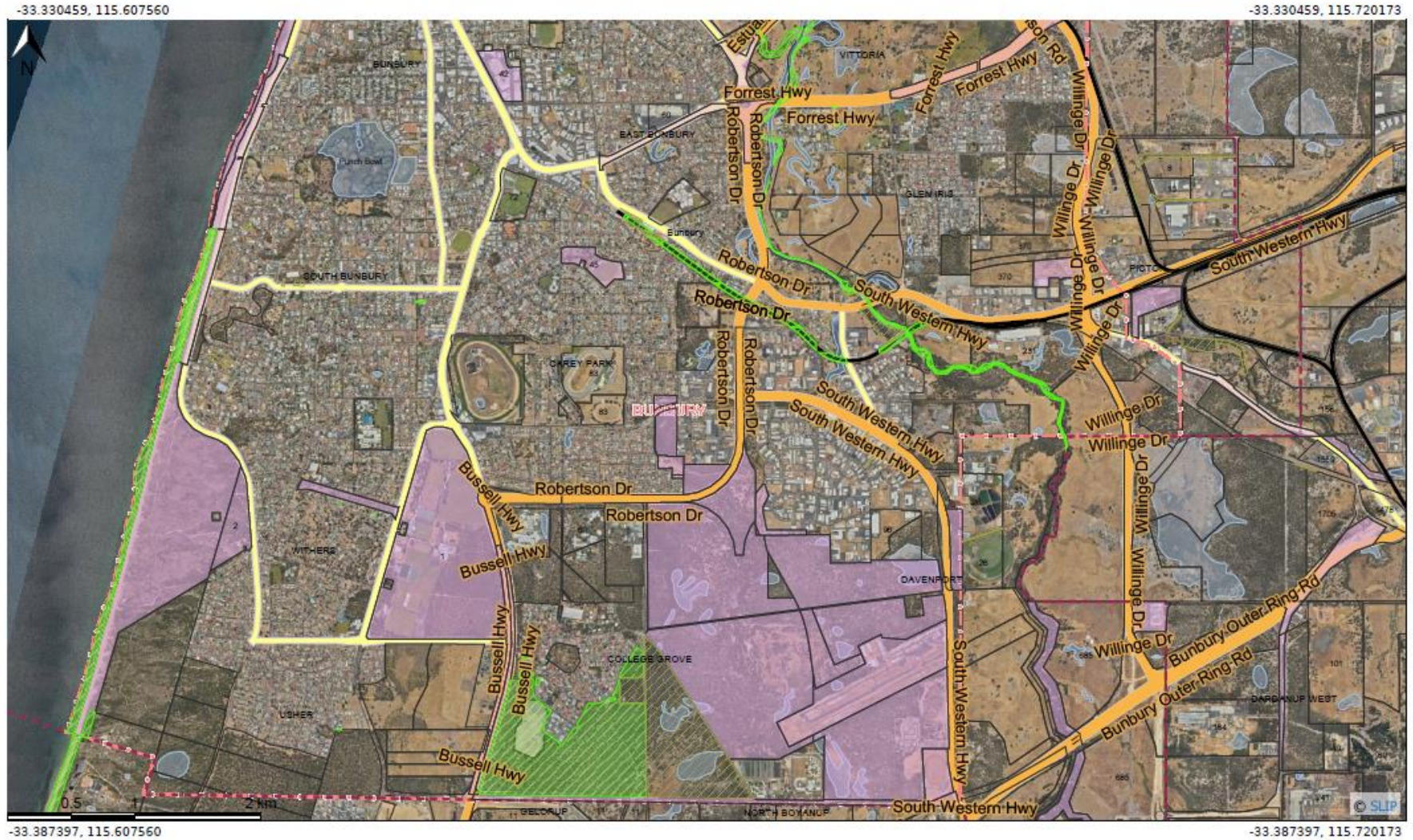


Figure E2 – MAF applicable lands City - South

**MITIGATION ACTIVITY FUND (MAF) GRANTS PROGRAM
GRANT AGREEMENT 2024/25 ROUND 1**

Treatment ID	Treatment Type	Treatment Objective	Primary Asset #	Primary Asset Name
28034	Chemical Works	Create an APZ by spraying invasive weed & woody weeds to help reduce fuel loading. Asset ID - BUNBRY284	BUNBRY0284	Ashford Place (17-29), South Bunbury
28088	Mechanical Works	Create an APZ by slashing, mulching and removal of grassy weeds & woody weeds to help reduce fuel loading. Asset ID - BUNBRY284	BUNBRY0284	Ashford Place (17-29), South Bunbury
28093	Chemical Works	Create an APZ by spraying invasive weed & woody weeds to help reduce fuel loading. Asset ID - BUNBRY284	BUNBRY0284	Ashford Place (17-29), South Bunbury
28094	Mechanical Works	Create an APZ by slashing, mulching and removal of grassy weeds & woody weeds to help reduce fuel loading. Asset ID - BUNBRY284	BUNBRY0284	Ashford Place (17-29), South Bunbury
28096	Mechanical Works	Create a Hazard Separation Zone by light pruning / slashing / mulching dead vegetation and weeds to reduce fuel loading. Asset ID - BUNBRY037	BUNBRY0037	Bunbury Hockey Stadium, Withers
28099	Fire Access Road / Track(s)	Create a Hazard Separation Zone by maintaining existing mineral earth fire access track / break to 4m wide & 4m high. Asset ID - BUNBRY146	BUNBRY0146	Jacksonia Street (2-14), Glen Iris
28100	Mechanical Works	Create a Hazard Separation Zone by light pruning / slashing / mulching dead vegetation and weeds to reduce fuel loading. Asset ID - BUNBRY146	BUNBRY0146	Jacksonia Street (2-14), Glen Iris
28101	Fire Access Road / Track(s)	Create an Asset Protection Zone by upgrading existing mineral earth fire access tracks 4m wide & 4m high, by minor pruning and removal of excess/dead fuels. Asset ID - BUNBRY228	BUNBRY0228	Mindalong Close(50-60), South Bunbury
28102	Chemical Works	Create a Hazard Separation Zone by spraying invasive weeds to help reduce fuel loading. Asset ID - BUNBRY238	BUNBRY0238	Elanora Retirement Community, South Bunbury

Treatment ID	Treatment Type	Treatment Objective	Primary Asset #	Primary Asset Name
28103	Mechanical Works	Create a Hazard Separation Zone by light pruning / slashing / mulching dead vegetation and weeds to reduce fuel loading. Asset ID - BUNBRY238	BUNBRY0238	Elanora Retirement Community, South Bunbury
28104	Chemical Works	Create an APZ by spraying invasive weed & woody weeds to help reduce fuel loading. Asset ID - BUNBRY237	BUNBRY0237	Kalari Rise (16-38), South Bunbury
28105	Mechanical Works	Create an APZ by slashing, mulching and removal of grassy weeds & woody weeds to help reduce fuel loading. Asset ID - BUNBRY237	BUNBRY0237	Kalari Rise (16-38), South Bunbury
28106	Chemical Works	Create an APZ by spraying invasive weed & woody weeds to help reduce fuel loading. Asset ID - BUNBRY241	BUNBRY0241	Yabini Court (3-9), South Bunbury
28107	Mechanical Works	Create an APZ by slashing, mulching and removal of grassy weeds & woody weeds to help reduce fuel loading. Asset ID - BUNBRY241	BUNBRY0241	Yabini Court (3-9), South Bunbury
28109	Mechanical Works	Create a Hazard Separation Zone by light pruning / slashing / mulching dead vegetation and weeds to reduce fuel loading. Asset ID - BUNBRY034	BUNBRY0034	Hay Park Community Hall, Withers
28110	Chemical Works	Create a Hazard Separation Zone by spraying invasive weeds to help reduce fuel loading. Asset ID - BUNBRY034	BUNBRY0034	Hay Park Community Hall, Withers
28112	Fire Access Road / Track(s)	Create an Asset Protection Zone by upgrading or repairing fire access track using limestone to 4m wide & 4m high. Asset ID - BUNBRY305	BUNBRY0305	Macnish Close (1-7), Bunbury
28113	Fire Access Road / Track(s)	Create a Asset Protection Zone by upgrading or repairing fire access track using limestone to 4m wide & 4m high. Asset ID - BUNBRY297	BUNBRY0297	Irwin Street Water Treatment Plant, Bunbury
28114	Mechanical Works	Create a Hazard Separation Zone by light pruning / slashing / mulching dead vegetation and weeds to reduce fuel loading. Asset ID - BUNBRY307	BUNBRY0307	Picton Crescent (38-40), Bunbury

Treatment ID	Treatment Type	Treatment Objective	Primary Asset #	Primary Asset Name
28116	Mechanical Works	Create an APZ by light pruning / slashing / mulching dead vegetation and weeds to reduce fuel loading. Asset ID - BUNBRY306	BUNBRY0306	Swansen Place (5-11), Bunbury
28117	Chemical Works	Create an APZ by spraying invasive weed & woody weeds to help reduce fuel loading. Asset ID - BUNBRY306	BUNBRY0306	Swansen Place (5-11), Bunbury
28118	Chemical Works	Create a Hazard Separation Zone by spraying invasive weeds to help reduce fuel loading. Asset ID - BUNBRY307	BUNBRY0307	Picton Crescent (38-40), Bunbury
28119	Mechanical Works	Create an APZ by light pruning / slashing / mulching dead vegetation and weeds to reduce fuel loading. Asset ID - BUNBRY302	BUNBRY0302	Wattle Hill Lodge Aged Care, Bunbury
28120	Chemical Works	Create an APZ by spraying invasive weed & woody weeds to help reduce fuel loading. Asset ID - BUNBRY302	BUNBRY0302	Wattle Hill Lodge Aged Care, Bunbury
28122	Mechanical Works	Create an APZ by light pruning / slashing / mulching dead vegetation and weeds to reduce fuel loading. Asset ID - BUNBRY305	BUNBRY0305	Macnish Close (1-7), Bunbury
28123	Chemical Works	Create an APZ by spraying invasive weed & woody weeds to help reduce fuel loading. Asset ID - BUNBRY305	BUNBRY0305	Macnish Close (1-7), Bunbury
28129	Fire Access Road / Track(s)	Create an APZ by light pruning / slashing / mulching dead vegetation and weeds along fire access track. Asset ID - BUNBRY033	BUNBRY0033	Westwood Street (59-120), Withers
28132	Mechanical Works	Create a Hazard Separation Zone by light pruning / slashing / mulching dead vegetation and weeds to reduce fuel loading. Asset ID - BUNBRY033	BUNBRY0033	Westwood Street (59-120), Withers
28133	Mechanical Works	Create a Hazard Separation Zone by light pruning / slashing / mulching dead vegetation and weeds to reduce fuel loading. Asset BUNBRY0196.	BUNBRY0196	Godwin Street (1-11), Carey Park
28134	Fire Access Road / Track(s)	Create an APZ by slashing of weeds to reduce fuel loading	BUNBRY0202	Palmer Crescent (8-22), Davenport

Treatment ID	Treatment Type	Treatment Objective	Primary Asset #	Primary Asset Name
		and weed control. Asset ID - BUNBRY202		
28135	Fire Access Road / Track(s)	Create an APZ by slashing weeds to reduce fuel loading and weed control. Asset ID - BUNBRY201	BUNBRY0201	Palmer Crescent (15-24), Davenport
28136	Mechanical Works	Create an APZ by light pruning / slashing / mulching dead vegetation and weeds to reduce fuel loading. Asset ID - BUNBRY273	BUNBRY0273	Gardner Place (1-4), South Bunbury
28139	Mechanical Works	Create / maintain an APZ by light pruning / slashing / mulching dead vegetation and weed species to reduce fuel loading. Asset ID - BUNBRY036	BUNBRY0036	South West Sports Centre, Withers
28140	Chemical Works	Create an APZ by spraying invasive weed & woody weeds to help reduce fuel loading. Asset ID - BUNBRY036	BUNBRY0036	South West Sports Centre, Withers
28141	Chemical Works	Create an APZ by spraying invasive weed & woody weeds to help reduce fuel loading. Asset ID - BUNBRY003	BUNBRY0003	Bunbury Regional Prison
28142	Mechanical Works	Create an APZ by slashing, mulching and removal of grassy weeds & woody weeds to help reduce fuel loading. Asset ID - BUNBRY003	BUNBRY0003	Bunbury Regional Prison
28143	Mechanical Works	Create an APZ by slashing, mulching and removal of invasive tree species and weeds to help reduce fuel loading. Asset ID - BUNBRY003	BUNBRY0003	Bunbury Regional Prison
28145	Mechanical Works	Create an APZ by light pruning / slashing / mulching dead vegetation and weeds to reduce fuel loading. Asset ID - BUNBRY208	BUNBRY0208	Doolan Street (18-34), Carey Park
28146	Mechanical Works	Create an APZ by light pruning / slashing / mulching dead vegetation and weeds to reduce fuel loading. Asset ID - BUNBRY206	BUNBRY0206	Milligan House Child Care Centre, Carey Park
28147	Mechanical Works	Create an APZ by light pruning / slashing / mulching dead vegetation and weeds to reduce	BUNBRY0210	Charterhouse Street (13-16), Carey Park

Treatment ID	Treatment Type	Treatment Objective	Primary Asset #	Primary Asset Name
		fuel loading. Asset ID - BUNBRY210		
28148	Mechanical Works	Create an APZ by light pruning / slashing / mulching dead vegetation and weeds to reduce fuel loading. Asset ID - BUNBRY0053	BUNBRY0053	6-8 Possum Way, College Grove
28157	Mechanical Works	Create a Hazard Separation Zone by slashing of grassy weeds and woody weeds to reduce fuel loading. Asset ID BUNBRY0287.	BUNBRY0287	Stanbury Crescent (24), South Bunbury
28160	Mechanical Works	Create an APZ by slashing, mulching and removal of grassy weeds & woody weeds to help reduce fuel loading. Asset ID BUNBRY0130	BUNBRY0130	South Western Highway (180-194), Glen Iris
28220	Mechanical Works	Create a Hazard Separation Zone by light pruning / slashing / mulching dead vegetation and weeds to reduce fuel loading. Asset ID BUNBRY0090	BUNBRY0090	Bunbury Regional Airport, Davenport

Local Government-Wide Controls, Multi-Agency Treatment Work Plan

	Control	Action or Activity Description	Lead Agency	Other Stakeholder(s)	Notes and Comments
01	City of Bunbury First and Final Fire Notice (<i>Bush Fires Act 1954</i>)	Annual Fire Prevention Order	Local Government	FCO's, brigades and land owners/occupiers	1 - Firebreak Order reviewed annually and adopted by Council. Its purpose is to ensure land owners understand and comply with firebreak specifications, as well as appropriately reducing fuel load and risk on their properties. Notice reviewed annually. Rangers inspect compliance to the notice conditions and fines apply if non-compliant. 2 - Bi-annual review of Council Policy and Corporate Guidelines for Bushfire Mitigation and Compliance.
02	City of Bunbury Prohibited and Restricted burning times (<i>Bush Fires Act 1954</i>)	Annual Fire Prevention Order	Local Government	Chief and Deputy FCO, Rangers and the public.	Prohibited and Restricted burn times are designed to reduce the risk of fires occurring during the high fire danger period. Extensions to R/PBT can be extended as required, on the advice of the Chief and Deputy FCO's.
03	City of Bunbury mitigation works	The City's Operations / Works / Parks & Environment team has annual works programs to reduce fuel load and remove hazards.	Local Government	Public (reporting hazards and concern of risk) City Parks and Gardens staff City Rangers	City Operations / Works / Parks & Environment teams target work on strategic risk areas, with particular attention paid to past fire incidents, or areas identified to be presenting a risk to community assets. Work includes, slashing, spraying, mulching, pruning and other mechanical treatments.
04	DFES UCL/UMR land management	Preparedness, mitigation work conducted on lands owned by DoL and managed by DFES under a MOU	DFES (South West office)	DBCA, LG, Local brigades	Annual budgeting has been completed to include mitigating risk on UCL/UMR. South West BRMO's have these plans included in their scope of work.
05	City of Bunbury, Draft Burn	Local Government is working on an annual burn	Local Government	DFES, DBCA, Local brigades, Public	The City's Operations / Works / Parks & Environment teams are tasked with Bushfire Mitigation on City reserves. Annual burn plans

	Control	Action or Activity Description	Lead Agency	Other Stakeholder(s)	Notes and Comments
	Program (annual indicative plans)	plan for City-owned, or vested reserves.			are being produced. The BRM Plan will prioritise the reserves for hazard reduction burns and or other treatments. BRMS will be recording information.
06	Department of Biodiversity, Conservation and Attractions (DBCA) Master Burn Plans	DBCA have a 6 season burn program, that is published on their website. Yearly plans are available.	DBCA	Local brigades, DFES, LG	The plans can be accessed via the DBCA website, by sharing shape files (GIS) and are communicated at various BFAC, ROAC and other various meetings.
07	Department of Biodiversity, Conservation and Attractions mitigation works	DBCA conduct mulching and other mechanical treatments to reduce fuel load or provide fire access.	DBCA	DFES, LG	No formal plan exists, ?? however works are completed as required, upon request or when identified.
08	Water Corporation Bushfire Risk Management Program	Bushfire Risk Management Plan. A Bushfire Risk Management Project is under way for the Water Corp.	Water Corporation	DFES, LG	A plan is currently being developed. High risk areas are identified, and treatments planned then completed. Treatments and risk assessments are available through Water Corp BRM PLAN department. Some high-risk areas have been identified in the City to date.
09	Western Power annual asset inspection and vegetation management program	Western Power Bushfire Plan	Western Power	DFES, LG, DBCA	Annual vegetation management and asset inspections are completed to ensure risk is managed. Full asset inspections are completed every 4 years.
10	Land sub-division & building (WAPC)	Requirement for estate, sub-division, and other Fire Management Plans	Local Government	Local Brigades, contractors and FCO's	Land developers are required to develop and implement a Fire Management Plan, to ensure risk is managed and other controls implemented and monitored.

	Control	Action or Activity Description	Lead Agency	Other Stakeholder(s)	Notes and Comments
11	Planning in Bushfire Prone Areas	Planning in bushfire prone areas. E.g. State Planning Policy 3.7 and standards.	WAPC	LG, DFES, DBCA, land owners	Foundation for land use planning. Directs how land use should address bushfire risk management in WA. It aims to preserve life and reduce impact on property and infrastructure. The City aligns its policy and standards with SPP 3.7. BAL assessments are required.
12	Pine Plantation Fire Management Plans	The Forest Product Commission (FPC) has implemented fire management plans for their plantations.	FPC	DBCA, LG, DFES	Minimum requirements and controls have been committed to within the Plan. These are communicated to/with LG and firebreak orders are complied with, for minimum standards of plantation design.
13	State-wide arson prevention programs	Education and awareness campaigns exist across the state for arson.	WA Police	DFES, LG	Participation as required. The City participates in campaigns for arson prevention and community support with arson reporting.
14	Bushfire Ready activities and street meets, as part of the City's Safer Community Network program.	Public preparedness and education campaign. Actively included within the City's Safer Community Network program	DFES	LG, local brigade, DFES	Bushfire ready facilitators are within the City. Working together with DFES and LG community engagement teams, to better prepare the community for bushfire and other community safety events. Street meets and phone trees have been implemented as a result, as well as safe winter burn demonstrations and workshops being actively supported.
15	Individual asset fire risk assessment program and resultant risk register	A 13 factor risk assessment toll has been developed and is used to determine a qualitative/quantitative risk score for individual assets within the City. This	City of Bunbury	Asset owner, City Rangers, Land owners presenting risk	Owners who have a risk score of greater than 250 are visited and provided with the assessment details and suggestions to mitigate their risk exposure. Landowners presenting risk are advised of the risk presented and encouraged to mitigate.

	Control	Action or Activity Description	Lead Agency	Other Stakeholder(s)	Notes and Comments
		populates a bushfire risk register, whereby risk can be compared and rated for treatment priorities. A risk score of 250 is currently seen as being unreasonable and flagged for treatment.			