



SHIRE OF BRIDGETOWN-GREENBUSHES BUSHFIRE RISK MANAGEMENT PLAN 2025-2027

Endorsements and Approvals

Office of Bushfire Risk Management (OBRM):
Bushfire Risk Management (BRM) Plan endorsed
on 15 September 2025

Local Government Council: BRM Plan approved
on 27 August 2025



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Document Endorsements

This Bushfire Risk Management Plan has been endorsed by the Office of Bushfire Risk Management as consistent with the standards detailed in the *Guidelines for Preparing a Bushfire Risk Management Plan 2023*.

The approval of the Bushfire Risk Management Plan by Bridgetown Greenbushes 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 Shire of Bridgetown Greenbushes.

Local Government	Representative	Signature	Date
Shire of Bridgetown-Greenbushes	Garry Adams		27/08/2025

Publication information

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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 Shire of Bridgetown-Greenbushes, encompasses all land within the Shire of Bridgetown-Greenbushes 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. Objective of the Bushfire Risk Management Planning Program

The BRM planning program supports local governments to reduce the threat posed by bushfire. The Shire of Bridgetown Greenbushes 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 treatments to ensure risk is managed to an acceptable level.

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*.

Legislation, Policy, and Standards

The BRM Plan adheres to:

Legislation
Aboriginal Heritage Act 1972
Biodiversity Conservation Act 2016
Building Act 2011
Bush Fires Act 1954
Conservation and Land Management Act 1984
Country Areas Water Supply Act 1947
Emergency Management Act 2005
Environmental Protection Act 1986
Environmental Protection and Biodiversity Conservation Act 1999 (Cth)
Fire Brigades Act 1942
Fire and Emergency Services Act 1998

Regulations
Bush Fires Regulations 1954
Emergency Management Regulations 2006
Planning and Development (Local Planning Scheme Regulations 2015
State Policies, Plans and Procedures
State Emergency Management Policy
State Emergency Management Procedures
State Hazard Plan – Fire
State Planning Policy 3.7: Planning in Bushfire Prone Areas
Standards, Guidelines and Documents
AS ISO 2000:2018 Risk Management - Guidelines
Guidelines for Preparing a Bushfire Risk Management Plan
Bushfire Risk Management Template
Guidelines for Planning in Bushfire Prone Areas
National Emergency Risk Assessment Guidelines Handbook
Guide for Applying Bush Fire Risk Treatment Standards
A Guide to the Exemptions and regulations for Clearing Native Vegetation
A Guide to the Assessment of applications to Clear Native Vegetation
A Guide to Constructing and Maintaining Firebreaks
Guidelines for Plantation Fire Protection
A Guide to Preventing and Suppressing Bushfires on Organic and Acid Sulphate Soils
Managing Phytophthora Dieback in Bushland
National Strategy for Disaster Resilience
Western Australian Emergency Risk Management Guide

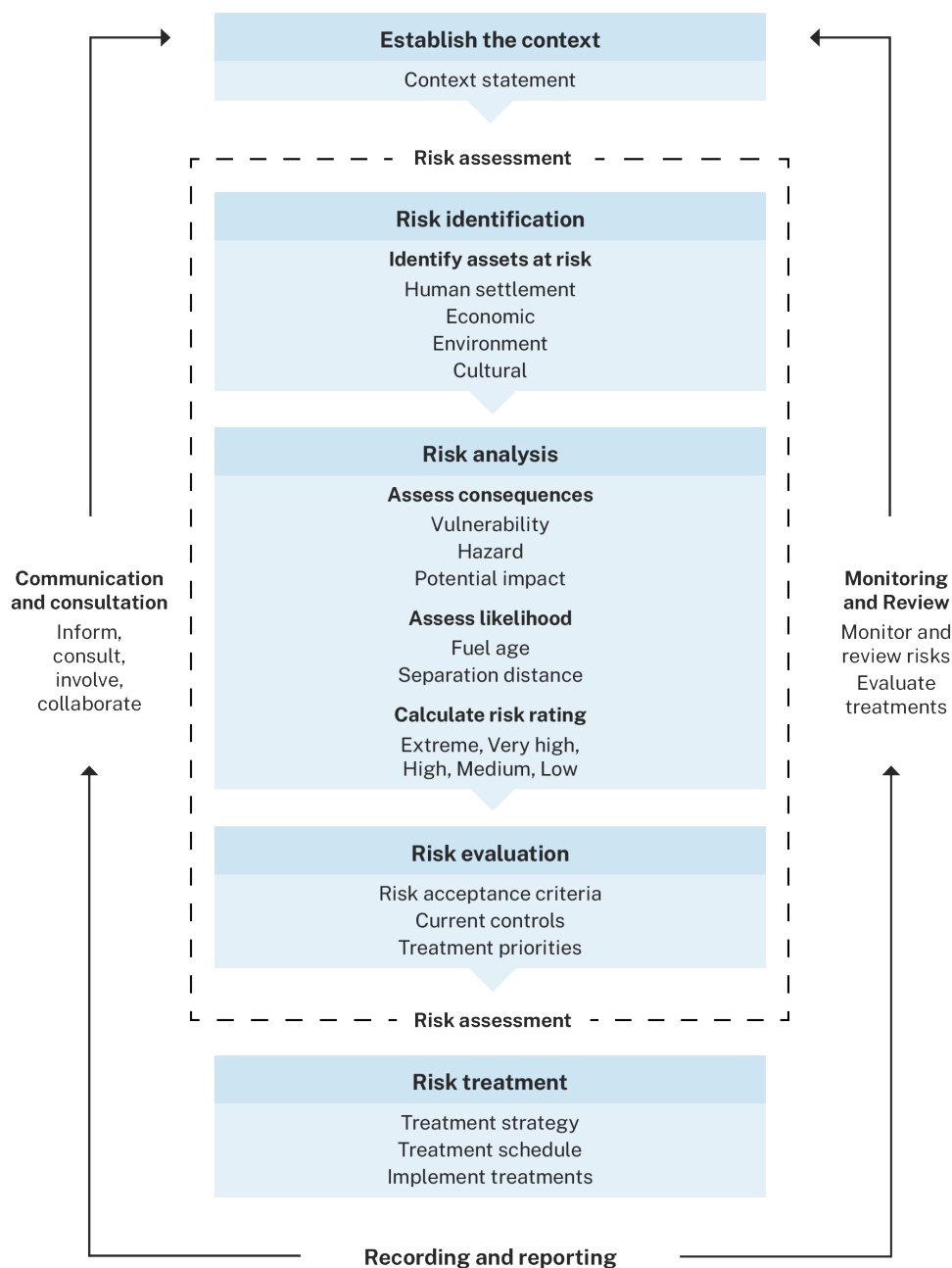
The documents outlined above are intended as a guide only. This may not be a complete list of all the relevant publications and is subject to change.

2. The Risk Management Process

The BRM planning process is a cycle of understanding the context and assessing and treating risks (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 (Figure 1).

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 outlined in Table 1.

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

Stakeholder*	Roles and responsibilities
Local government	• Custodian of the BRM Plan. • Coordinate the development and ongoing review of the BRM Plan. • Undertake bushfire risk assessment of local government area. • Submit the draft BRM Plan to OBRM for review and endorsement. • Develop and implement a Treatment Schedule for local government managed land. • Encourage risk owners to treat identified risks.
DFES	• Contribute to the development and implementation of the BRM Plan. • Facilitate involvement of state and federal government agencies in the BRM planning process. • Undertake treatments on Unmanaged Reserves and Unallocated Crown Land within gazetted town sites. • By agreement, implement treatment strategies for other land managers. • Endorse BRM Plans as consist with the Guidelines, BRM Program and dynamic risk environment. • Administer the Mitigation Activity Fund Grants Program.
Department of Biodiversity, Conservation and Attractions (DBCA)	• Contribute to the development of the BRM Plan. • Implement their treatment program on DBCA managed land. • Provide advice on environmental assets and appropriate treatment strategies for their protection.
Department of Planning, Lands and Heritage	• Identify managed assets. • Provide advice on management of Aboriginal Cultural Heritage.
Other State and Commonwealth Government agencies and public utilities	• Identify managed assets. • Provide advice on current risk treatment programs. • Contribute to the development of BRM Plans. • Undertake treatments on lands they manage.
Corporations and private landowners	• Identify managed assets. • Provide advice on current risk treatment programs. • Undertake treatments on lands they manage.

2.2. Communication and Consultation

Communication and consultation are fundamental to the development, implementation and review of the BRM Plan. A Communication Plan describing communication with relevant stakeholders at each stage of the BRM planning process is at Appendix C. A record of engagement with stakeholders is maintained.



Incident Control Centre 1

3. Establishing the context

Local Government and Community Context

The Shire of Bridgetown Greenbushes is a rural community situated in Western Australia, characterized by diverse landscapes and an economy that is heavily reliant on agriculture, tourism, mining, and the timber industry. Each of these sectors contributes to the Bridgetown Greenbushes Shire economic stability but is also particularly susceptible to bushfire risks.



Agriculture

The agricultural sector, including crop farming and livestock, is a primary economic driver. Farmlands are interspersed with bushland, creating a higher risk of bushfire spread, which could threaten agricultural productivity, assets, and infrastructure.

Tourism

The natural beauty of the Shire's forests and landscapes attracts visitors, particularly during the summer, which coincides with the bushfire season. Popular tourist activities, such as hiking and camping, increase the likelihood of accidental ignitions in remote or forested areas. The tourism industry faces potential disruptions due to fire-related road closures, smoke, or loss of natural scenery.

Mining and Timber Industries

The mining and timber sectors are significant to the local economy. However, these industries involve land clearing and operations in bushland areas, which can increase bushfire risks. Additionally, damage to these industries from bushfires could lead to long-term economic repercussions for the community.

Community Engagement and Preparedness

The Shire is proactive in bushfire risk management, with the Emergency Management Committee and the Bushfire Advisory Committee actively involved in planning and preparedness activities. Local volunteer brigades play a crucial role in bushfire response and risk mitigation, conducting controlled burns and promoting community awareness.

These community dynamics emphasize the importance of a well-coordinated bushfire risk management plan that considers the economic, social, and operational challenges unique to Bridgetown-Greenbushes.

Environment and Bushfire Context

The Bridgetown Greenbushes Shire environmental characteristics contribute significantly to the bushfire risk profile. Key factors include topography, climate, vegetation, and the location of vulnerable assets.

Topography

Bridgetown-Greenbushes is marked by a hilly landscape, particularly around the Blackwood River valley. The undulating terrain increases the difficulty of fire control, as fires tend to travel more rapidly uphill, pre-heating vegetation and intensifying fire spread. Access challenges in these areas can delay firefighting efforts, increasing the threat to nearby assets.

Climate

The Shire experiences a Mediterranean climate with hot, dry summers and mild, wet winters. This seasonal pattern leads to the accumulation of dry vegetation during summer, significantly increasing fuel loads. The bushfire season typically peaks from December to March, during which time the risk of fire ignition and spread is highest.

Vegetation and Fuel Loads

The Shire is home to extensive eucalypt forests, which are inherently fire-prone due to the high oil content in eucalyptus leaves that can ignite easily. Understory vegetation, leaf litter, and dry grass contribute to a high fuel load, making these forests particularly susceptible to intense fires. Additionally, invasive weeds, such as gorse and blackberry, contribute to fire risk by providing extra fuel.

Vulnerable Assets

Many residential areas, farms, and critical infrastructure, such as power lines and water supplies, are located near or within bushland areas. This proximity elevates the risk of property loss, economic disruption, and potential threats to life during a bushfire event.

The environmental and climatic context in Bridgetown-Greenbushes necessitates a focus on reducing fuel loads, improving access for firefighting, and educating residents and visitors about bushfire risk. By understanding and addressing these unique characteristics, the Bridgetown Greenbushes Shire can more effectively manage and mitigate bushfire risks, enhancing resilience across its landscapes and communities.

Strategic and corporate framework

The following section outlines the integration of Bushfire Risk Management (BRM) planning within the Shire of Bridgetown-Greenbushes' local government structures, ensuring a cohesive and strategic approach to addressing bushfire risks across the region. This framework describes how the BRM Plan aligns with the Bridgetown Greenbushes Shire corporate vision and strategic objectives, designates roles and responsibilities, and establishes linkages with existing emergency management structures.

Alignment with Corporate Vision and Strategic Objectives

The BRM Plan is directly aligned with the Shire of Bridgetown-Greenbushes' corporate vision to foster a safe, resilient, and sustainable community. The Plan emphasizes protecting lives, properties, and the environment from the adverse effects of bushfires, thereby contributing to the Shire of Bridgetown Greenbushes broader strategic goals in key areas. This can be viewed www.bridgetown.wa.gov.au/documents/759/corporate-business-plan-2024-2028

Sustainability and Resilience

By addressing bushfire risks, the BRM Plan supports sustainable land use and helps preserve the Shire's environmental assets. Reducing bushfire threats aligns with the Shire's commitment to maintaining its natural landscapes and biodiversity, which are integral to the community's way of life and ecological health.

Community Safety and Preparedness

The Plan empowers residents by providing resources, knowledge, and guidance to improve community preparedness for bushfire events. It outlines measures to enhance the community's ability to respond to and recover from bushfires, thereby building a culture of safety and resilience within the Shire.

Economic Stability

The BRM Plan contributes to the protection of critical industries within the Shire, such as agriculture, mining, and tourism, by mitigating risks to key economic assets. Safeguarding these sectors from bushfire impacts helps maintain the Shire's economic stability and growth, ensuring sustained prosperity for the region.

Through these strategic alignments, the BRM Plan becomes a foundational element in achieving the Shire's overarching vision of a resilient and thriving community.

Responsibilities and Accountabilities

Upon completion of the BRM Plan, the Shire of Bridgetown-Greenbushes will assume responsibility for its implementation, with designated roles to ensure accountability and effective management:

Shire Council

As the governing body, the Shire Council will provide final approval of the BRM Plan and oversee its implementation. The Council ensures that adequate resources are allocated and that policy support is maintained to meet the objectives of the Plan.

Chief Executive Officer

The Chief Executive Officer (CEO) holds the strategic responsibility for implementing the BRM Plan. This includes coordinating with various departments, stakeholders, and external agencies to ensure all aspects of the Plan are executed effectively and integrated into broader local government initiatives.

Bushfire Risk Mitigation Coordinator

A dedicated role within the Shire, the Bushfire Risk Management Coordinator is tasked with overseeing the operational execution of the BRM Plan. Responsibilities include managing the treatment schedule, maintaining up-to-date risk assessments, and liaising with landowners and community members to ensure compliance with mitigation measures.

Landowners and Community

Local landholders and community members play a crucial role in the successful implementation of the BRM Plan. Landowners are responsible for applying fire mitigation strategies on their properties, as specified in the Plan, to minimize risks on private land. The Shire will actively support landholders in fulfilling these responsibilities, ensuring compliance with fire prevention regulations through guidance, resources, and periodic inspections.

This clear delineation of roles and responsibilities fosters accountability, ensures effective collaboration among stakeholders, and enhances the Shire of Bridgetown Greenbushes capacity to address bushfire risks comprehensively.

Linkages and Interactions with Emergency Management Structures

The BRM Plan is designed to seamlessly integrate with the Bridgetown Greenbushes Shire's established emergency management frameworks, including the Local Emergency Management Committee (LEMC) and the Bush Fire Advisory Committee (BFAC), creating a unified approach to bushfire risk management.

Local Emergency Management Committee (LEMC)

The LEMC provides a governance framework for emergency preparedness, response, and recovery within Bridgetown Greenbushes Shire. The BRM Plan aligns with LEMC's responsibilities by addressing bushfire risk as a critical hazard. The LEMC will be responsible for reviewing bushfire risks annually and ensuring alignment with the overall emergency management strategy.

Bush Fire Advisory Committee (BFAC)

The BRM Plan strengthens the Shire's relationship with BFAC by incorporating recommendations on fire mitigation strategies and improving response coordination. BFAC members, including Volunteer Bush Fire Brigades, will play a crucial role in monitoring on-ground activities, reporting potential risks, and engaging with local communities to raise awareness about bushfire preparedness.

This integrated approach ensures that bushfire risk management within the Shire of Bridgetown-Greenbushes is coordinated across multiple levels of government and is deeply embedded in the community's strategic planning and emergency response mechanisms.

Land use and tenure

This section describes how land management within the Shire of Bridgetown-Greenbushes influences bushfire risk ownership. Diverse land tenure arrangements across the Shire shape responsibilities and capacities for managing and mitigating bushfire risks.

Summary of Land Tenure and Risk Ownership

Land tenure within the Shire of Bridgetown-Greenbushes includes public lands, privately owned properties, conservation areas, mining lands, and critical infrastructure. Each category has specific responsibilities for bushfire risk management. The table below outlines the main land management categories and their associated risk ownership:

Key Land Manager Groups Influencing Bushfire Risk

Several key land management groups have a significant influence on bushfire risk within the Shire based on their capacity and resources to manage and mitigate risk:

Shire of Bridgetown-Greenbushes:

As the local government authority, the Shire is responsible for bushfire risk management on public lands and reserves, including maintaining firebreaks, conducting fuel reduction activities, and enforcing compliance on private lands. The Shire works closely with local brigades and the community to address bushfire risks.

Private Landowners

Private landholders comprise a large portion of the Shire, including agricultural lands and rural residential areas. They are responsible for adhering to fire safety regulations, such as maintaining firebreaks and reducing fuel loads around their properties. The Shire monitors compliance through inspections and may enforce penalties for non-compliance.

Department of Biodiversity, Conservation and Attractions (DBCA)

DBCA oversees fire management in government-owned conservation areas, national parks, and state forests within the Shire. They conduct prescribed burns, manage ecosystems to reduce fire risks, and collaborate with the Shire and Department of Fire and Emergency Services (DFES) to align with regional fire management goals.

Mining Sector

Mining companies are responsible for managing bushfire risks on their lands, which may include fuel reduction around infrastructure and maintaining firebreaks. Mining operations generally have access to resources and trained personnel, increasing their capacity to manage fire risks independently.

Public Utilities (Western Power, Main Roads, ARC Infrastructure)

These entities are responsible for managing bushfire risks associated with critical infrastructure such as power lines, roadways, and railways. Their risk management efforts include vegetation management and ensuring clearances around infrastructure to prevent fire ignition and facilitate emergency access.

Communities, Facilities, and Structures Vulnerable to Bushfire

Several communities, facilities, and structures within the Shire are particularly exposed to bushfire risks due to their location, land use, and proximity to high-risk bushland areas:

Residential Communities

Rural residential communities in Bridgetown, Greenbushes, and surrounding areas are at high risk due to their proximity to forested areas and large tracts of undeveloped land. Dense vegetation near residential areas poses a significant threat during the fire season, necessitating targeted firebreaks and community preparedness initiatives.

Tourism and Agricultural Infrastructure

The Shire's agricultural areas, including farms, vineyards, and orchards, are particularly vulnerable during the fire season due to their open landscapes and location near bushland. Similarly, tourism facilities, including rural accommodations and caravan parks, face increased risks, particularly during peak visitor seasons, when human activities may increase ignition likelihood.

Mining Operations

Mining sites and their associated infrastructure, particularly those with heavy machinery, fuel storage facilities, and vegetation encroachment, are at heightened risk of fire outbreaks. Mining companies in the Shire have implemented fire safety protocols, including regular maintenance of firebreaks around operations.

Critical Infrastructure

Power lines, water supply systems, main roads, and railways are essential for the Shire’s economic functioning and emergency response capabilities. These assets are particularly vulnerable to bushfires, and disruptions to critical infrastructure during a bushfire event could hinder emergency response, evacuation, and recovery efforts.

By understanding the diverse land tenure arrangements and responsibilities, the Shire of Bridgetown-Greenbushes can ensure a coordinated approach to bushfire risk management across all sectors. Each land manager group plays a critical role in mitigating risks associated with bushfires, contributing to the overall safety and resilience of the Shire’s community, economy, and environment. Table 2 – Summary of land management responsibilities within the Shire of Bridgetown-Greenbushes

Land Manager	Local Government Area (%)
Local Government	1.50%
Private Landowners	47.21%
Department of Biodiversity, Conservation and Attractions	49.40%
Department of Planning, Lands and Heritage	0.62%
Other State Government Organisations	1.27%
Total	100.00%

Source: DFES, 2024

Community demographics and values

This section provides an overview of the demographic profile and values of the Shire of Bridgetown-Greenbushes community. Understanding the community's characteristics, its capacity for resilience, and attitudes towards bushfire risks is essential for effective bushfire risk management.

Population and Demographics

Population Size and Age: As of the 2021 Census, Bridgetown had a population of 3,168 people. The median age is 52, which is notably higher than both the Western Australia and national medians of 38. This older demographic may affect the community's resilience to bushfire due to mobility challenges and health concerns often associated with aging.

3.1. Vulnerable Groups

Older Population

With a median age of 52, a significant proportion of the community is older, with 33% of residents over the age of 60. This group may face challenges in evacuating or actively participating in fire response activities due to physical limitations.

Aboriginal and Torres Strait Islander Population

Indigenous Australians make up approximately 1.7% of the population. Culturally specific engagement and preparedness activities are essential to ensure this group’s unique needs and perspectives are respected.

Families with Young Children

Families constitute a significant part of the population, with an average of 1.8 children per family where children are present. Family households may have specific needs related to evacuation and preparedness.

Cultural and Linguistic Diversity

The community is predominantly English-speaking, with 89.2% of households using English as the primary language at home. Other languages, such as German and Dutch, are spoken but represent a very small portion of the population. This linguistic profile suggests that communication materials and engagement strategies can be primarily in English, with limited need for multilingual resources.

Temporary Populations

The area's natural attractions and wineries make it a popular destination for tourists, particularly in the summer, which coincides with the bushfire season. This temporary population increases the risk of accidental fire ignition and complicates evacuation planning, as visitors may be unfamiliar with local fire procedures.

3.2. Community's Understanding and Response to Bushfire Risk

Community Goals and Priorities

The community places high value on safety, sustainability, and resilience. Goals related to preserving natural landscapes, promoting local tourism, and supporting agricultural productivity are critical to Bridgetown-Greenbushes. Bushfire risk management directly supports these goals by protecting the environment, infrastructure, and tourism-dependent economic stability.

Commonly Held Values



Environmental Preservation

There is a strong local commitment to environmental preservation, including protecting forests and biodiversity. This influences the community's acceptance of controlled burns and other proactive fire mitigation measures.

Self-Reliance and Volunteerism

The community has a strong culture of volunteerism, with 25.1% of residents participating in volunteer work. Local volunteer fire brigades are an essential component of the Shire's fire response capacity, reflecting a community-driven approach to managing fire risks.

Economic Security

Many community members rely on agriculture, tourism, and local businesses. Fire management measures that protect these assets align with the community's economic interests, contributing to widespread support for risk mitigation activities.

Community Engagement and Preparedness

The Shire of Bridgetown-Greenbushes actively engages the community through public awareness campaigns, particularly in the lead-up to the fire season. Local volunteer brigades provide education on fire safety, while the Bridgetown Greenbushes Bushfire Advisory Committee organizes minimum requirement drills and training sessions to ensure readiness.

3.3. Steps Taken to Reduce Vulnerability and Increase Resilience

Bushfire Preparedness Programs

The Shire conducts regular community outreach programs, including fire safety workshops, to educate residents on best practices for bushfire preparedness. This is particularly important given the high percentage of older adults who may require additional support and education on evacuation protocols.

Firebreak Compliance and Inspections

To reduce fuel loads on private properties, the Shire of Bridgetown-Greenbushes enforces firebreak regulations by conducting annual inspections to ensure compliance. This is particularly important in rural and semi-rural areas where properties are located near bushland, increasing the risk of bushfires.

Volunteer Brigade Support

Volunteer bushfire brigades are equipped with essential firefighting equipment and training, enabling residents to respond swiftly to fire incidents. Community members' involvement in these brigades bolsters local resilience and provides a valuable, decentralized response capability.

Emergency Information and Alerts

The Shire has invested in improving communication channels for emergency alerts, including a well-publicized phone and text alert system to ensure that residents and visitors receive timely information during fire events.

This demographic and cultural profile highlights the community's strengths in resilience and engagement while underscoring specific vulnerabilities, particularly related to an aging population and seasonal tourist influx. Addressing these factors is essential to Bridgetown Greenbushes Shire bushfire risk management strategy, enabling a more responsive and inclusive approach to protecting the community and its values.



Cultural Heritage

This section identifies Aboriginal stakeholders and areas of cultural heritage significance within the Shire of Bridgetown-Greenbushes, focusing on aspects that influence bushfire risk management. It recognizes areas protected under the *Aboriginal Heritage Act 1972*, registered Aboriginal cultural sites, and the roles of Native Title Holders, Traditional Owners, and Aboriginal knowledge holders in contributing to fire and land management.

Areas Protected Under the Aboriginal Heritage Act 1972

The *Aboriginal Heritage Act 1972* protects sites of cultural, historical, and archaeological significance to Aboriginal communities within Western Australia. In the Shire of Bridgetown-Greenbushes, several locations are protected under this Act, encompassing sacred sites, significant natural features, and locations of historical gatherings. These sites are essential to the heritage and cultural identity of local Aboriginal communities, and any activities, including bushfire mitigation efforts, must be carried out in compliance with the protections outlined by the Act.

Registered Aboriginal Cultural Heritage Sites

The Shire of Bridgetown-Greenbushes includes multiple registered Aboriginal cultural heritage sites, each holding unique value to Aboriginal communities. These sites may include:

- **Ceremonial Sites and Sacred Places:** Areas used traditionally for ceremonies or considered sacred due to their spiritual or cultural significance, as well as areas with artifacts of historical value.
- **Natural Features with Spiritual Significance:** Rivers, hills, or forests that hold cultural significance within Aboriginal lore and spirituality.

These registered sites require specific consideration when planning and implementing bushfire risk management strategies to avoid any adverse impact on their cultural value.

Native Title Holders, Traditional Owners, and Aboriginal Knowledge Holders

Aboriginal communities and knowledge holders in the region are essential partners in managing and mitigating bushfire risk. The involvement of Native Title Holders, Traditional Owners, and other Indigenous stakeholders is critical for several reasons:

- **Traditional Ecological Knowledge (TEK):** Traditional Owners possess deep ecological knowledge, particularly around fire use for land management. Incorporating their practices, such as traditional controlled burning, can provide sustainable and culturally respectful approaches to reducing bushfire risks.
- **Native Title Rights:** Native Title Holders have recognized rights over land and may be directly involved in decisions concerning fire management practices on Native Title lands.

Engaging with these stakeholders ensures that bushfire management respects Aboriginal connections to the land while benefiting from traditional knowledge that has sustained these landscapes for thousands of years.

Engagement Processes and Existing Agreements

The Shire of Bridgetown-Greenbushes is committed to fostering respectful and collaborative relationships with Aboriginal communities and follows agreed-upon engagement processes to facilitate meaningful involvement in bushfire management planning. Key elements of these engagement processes include:

- **Consultation and Collaboration:** Consultation with Native Title Holders, Traditional Owners, and Aboriginal representatives ensures that fire management strategies align with cultural values. This includes discussing proposed treatments, such as prescribed burns, in culturally significant areas and adapting methods to minimize impact.
- **Existing Agreements and Memoranda of Understanding (MOUs):** The Shire may have or seek to establish formal agreements with Aboriginal communities to guide land and fire management practices. These agreements outline the roles and responsibilities of each party, ensuring that Aboriginal voices are integrated into decision-making processes and that cultural heritage sites are protected.

Summary

Recognizing and respecting Aboriginal cultural heritage is integral to bushfire risk management in the Shire of Bridgetown-Greenbushes. By integrating Aboriginal knowledge and prioritizing the protection of culturally significant areas, the Shire supports both effective risk mitigation and cultural preservation. Collaborative engagement ensures that bushfire management is inclusive and responsive to the needs of Aboriginal communities, fostering a balanced approach that honours cultural heritage while protecting lives and property.

Economic Vulnerability to Bushfire

This section describes the vulnerabilities of the Shire of Bridgetown-Greenbushes' economy to bushfire events, detailing how key industries may be affected, as well as measures in place to reduce associated risks. The Shire's economy is highly dependent on agriculture, forestry, tourism, and mining, all of which are susceptible to both immediate and prolonged impacts from bushfire disruptions.



Significant Economic and Industrial Activities Vulnerable to Bushfire

1. Agriculture:

- Farming is a major economic driver, with key sectors including livestock grazing, crop production, and vineyards. These agricultural activities are particularly vulnerable due to their exposure to dry vegetation, stockpiled materials like hay, and infrastructure (e.g., barns, fencing) that can be easily damaged by fire. The loss of crops and livestock, alongside infrastructure damage, can lead to substantial financial hardship for farmers and disrupt regional food supplies.

2. Forestry and Timber Industry:

- The forestry sector is crucial to the Shire's economy but is highly susceptible to fire due to the vast areas of combustible material. Large-scale fires can devastate standing timber, halt operations, and damage processing facilities, leading to economic losses and long-term recovery periods due to the slow regrowth of timber resources.

3. Tourism:

- Tourism in the Shire is centred around its natural landscapes, national parks, campgrounds, and heritage sites, all of which are vulnerable to bushfire. Fires can damage tourism infrastructure, such as accommodation facilities, and lead to reputational damage, reducing tourist numbers even after the fire season has passed.

4. Mining:

- The Greenbushes lithium mine, a significant local employer and economic contributor, faces bushfire risks that could disrupt operations, damage equipment, and endanger workers. Fires can also impact critical infrastructure, such as transport routes and energy supply lines essential for mining operations, leading to operational inefficiencies and delays in production and shipment.

Short-Term and Long-Term Effects of Disruption

- **Short-Term Effects:**
 - Agriculture: Immediate losses of crops and livestock can occur, and infrastructure damage may temporarily halt production, causing financial hardship and potential food supply issues.
 - Forestry: Operations may be halted due to safety concerns and active fires, leading to productivity loss and supply chain disruptions.
 - Tourism: Fires during peak season can result in financial losses and emergency evacuations, damaging the Shire's reputation as a safe tourist destination.
 - Mining: Fires can cause short-term shutdowns, delay production and disrupting supply chains.
- **Long-Term Effects:**
 - Agriculture: Recovery may take years as farmland is restored, crops are regrown, and livestock herds are replenished, leading to prolonged economic hardship.
 - Forestry: Replanting and regrowth of forests can take decades, impacting the supply chain, employment, and industry investment.
 - Tourism: Long-term reductions in tourist numbers may result from damaged natural attractions and loss of infrastructure, impacting local businesses reliant on tourism.
 - Mining: Extended damage to critical infrastructure can lead to inefficiencies and ongoing delays in mining operations, affecting economic stability.

3.4. Economic Activities That May Increase Bushfire Risk

Certain economic activities within the Shire contribute to elevated bushfire risk:

- Agriculture: Farming practices, including land clearing, dry grazing, and storage of flammable materials (e.g., hay), can increase fire risks. Unharvested fields or unmanaged vegetation add to the fuel load, particularly during drought conditions.
- Forestry: Logging activities often leave behind dry debris, such as branches and sawdust, which can act as fire fuel. Additionally, machinery used in forestry operations may inadvertently spark fires, especially in dry conditions.
- Mining Operations: Mining increases bushfire risk through the use of heavy machinery, blasting activities, and the storage of flammable materials such as fuel, which heightens the risk during peak fire seasons.
- Tourism: Tourist activities, particularly in campgrounds and parks, can increase fire risks due to improper campfire management, discarded cigarette butts, and the use of portable stoves in high-risk areas.

Measures Being Taken to Reduce Risk Associated with Economic Activities

To mitigate bushfire risks arising from economic activities, the Shire has implemented a range of preventive and responsive measures:

- Agriculture:
 - Firebreak Regulations: The Shire enforces strict firebreak requirements on agricultural properties, mandating landowners to create and maintain clear firebreaks around fields and infrastructure.
 - Fuel Reduction Programs: Prescribed burns and winter grazing are encouraged to reduce vegetation loads on farms, lowering potential fire hazards.
 - Fire Safety Protocols: Farmers are advised to implement fire prevention zones around buildings, store flammable materials safely, and ensure firefighting equipment is available on-site.
- Forestry:

- Post-Logging Cleanup: Forestry operators follow guidelines for clearing dry debris left from logging activities, reducing the fuel load in logged areas.
- Controlled Burns: Forestry companies collaborate with local fire management to conduct controlled burns to manage fuel loads in forests.
- Machinery Protocols: Strict protocols ensure that forestry equipment is maintained and operated safely during fire-prone seasons to prevent accidental ignitions.
- Mining:
 - Fire Suppression Systems: Mining companies maintain fire suppression systems and train personnel in emergency response protocols.
 - Firebreaks and Fuel Management: Mining infrastructure is surrounded by regularly maintained firebreaks, and flammable materials are stored in fire-safe conditions.
 - Collaboration with Emergency Services: Mining operations coordinate with local emergency services to establish rapid response plans in case of bushfire threats.
- Tourism:
 - Visitor Education: The Shire has launched visitor education programs to inform tourists of bushfire risks, including signage in high-risk areas and the distribution of fire safety pamphlets.
 - Campfire Management: Campgrounds display clear instructions for campfire management, and the use of portable stoves is restricted on high fire danger days.
 - Fire Bans and Alerts: During peak fire seasons, the Shire enforces fire bans, which are communicated to tourists via signage, local media, and online resources to ensure compliance.

These mitigation measures aim to reduce the risk of bushfire ignitions linked to economic activities, balancing the Shire's economic productivity with effective bushfire risk management. By implementing these strategies, the Shire of Bridgetown-Greenbushes promotes a safer environment for residents, businesses, and visitors, while protecting vital economic assets and industries.

3.5. Topography and Landscape Features

The topography and landscape features of the Shire of Bridgetown-Greenbushes play a significant role in influencing bushfire risk. These features affect fire behaviour, create challenges for response efforts, and increase vulnerability for certain assets. Understanding these geographic characteristics is essential for effective bushfire risk management and response planning.

Significant Landscape Features Influencing Fire Behaviour and Bushfire Risk

1. Hilly Terrain and Valleys:
 - The Shire's landscape is predominantly hilly, with steep slopes and deep valleys. Fire behaviour is greatly influenced by this topography, as fires tend to spread more quickly and intensely uphill. The combination of heat and rising flames on slopes accelerates fire spread, making areas with steep inclines particularly high-risk.
 - Certain parts of the Shire, such as those near the Blackwood Valley, are marked by undulating hills. Fires in these regions can become more intense and difficult to control, especially under strong wind conditions.
2. Dense Forests:
 - Large areas of eucalypt forests, particularly in the Greenbushes and Blackwood regions, pose a substantial bushfire risk. Eucalyptus trees contain oils that are highly flammable, making these forests prone to intense fires. Additionally, the structure of these forests promotes crown fires, where

flames spread across the treetops, resulting in fast-moving and dangerous fire behaviour that is challenging to suppress.

- High fuel loads in these forests, including underbrush and fallen leaves, contribute to the likelihood of severe bushfire events, especially in dry summer months.

3. Open Farmland and Grasslands:

- The Shire also includes extensive areas of open farmland and grassland. Grassfires, although typically less intense than forest fires, can spread rapidly across flat and open terrain, especially under strong wind conditions. These fires can threaten nearby properties, agricultural assets, and livestock.
- Farmland areas in the Blackwood Valley are particularly vulnerable to grassfires, which can travel swiftly across fields and threaten nearby agricultural infrastructure.

Significant Landscape Features That May Restrict Bushfire Response or Mitigation Activities

1. Rivers and Watercourses:

- The Blackwood River and its tributaries form natural barriers that can slow the spread of fire but also present challenges for firefighting crews. Limited crossings over these watercourses can delay response times, especially in rural and forested areas. Access to areas across the river may be restricted, complicating suppression efforts.

2. Narrow and Winding Roads:

- Many of the roads in the Shire, particularly those passing through forested or hilly areas, are narrow and winding. These conditions restrict access for firefighting vehicles, especially larger trucks, and can even become impassable during an active fire. Limited road access can hinder the ability of fire crews to protect assets and reach certain areas quickly.

3. Remote and Isolated Areas:

- Remote properties and isolated forest areas are common in the Shire, increasing the difficulty of timely access in bushfire events. Fire crews may experience delays reaching these locations, increasing the risk of widespread damage before suppression efforts can be implemented.

4. Elevated Areas and Ridges:

- Elevated ridges and steep inclines present challenges for firefighting, particularly for aerial operations. Fires in these elevated areas can be challenging to reach on foot or by vehicle, and aerial firefighting efforts may be limited by wind and visibility conditions, complicating suppression strategies.

Location of Landscape Features in Relation to Important Assets

1. Residential Areas:

- Many rural residential properties in Bridgetown, Greenbushes, and nearby regions are located near forested areas and steep hills, increasing their vulnerability to bushfires. The proximity of these homes to high-fuel areas like forests and grasslands amplifies the risk, especially for properties situated on slopes where fire behaviour can be more intense.

2. Agricultural Assets:

- The Shire's agricultural areas, particularly in the Blackwood Valley, face significant bushfire risks. Large expanses of open farmland are susceptible to rapid fire spread across grasslands, threatening

crops, livestock, and agricultural infrastructure. The expansive and open nature of these areas makes containment challenging once a fire has started.

3. Tourism Infrastructure:

- Key tourist attractions, including campgrounds, trails, and national parks, are located in forested and hilly areas within the Shire. The dense vegetation and complex terrain around these sites increase the potential for intense fires and make firefighting and evacuation efforts more challenging. Tourism assets are particularly vulnerable to the lasting impact of bushfires on natural landscapes, which are central to the appeal of the Shire as a tourist destination.

4. Critical Infrastructure:

- Major roads, such as the Southwestern Highway pass through forested and hilly areas, which increases the bushfire risk to essential transport routes. Fires along these routes can disrupt transport and emergency services, complicating evacuation plans and impacting the Shire's economic activity due to restricted access.

Conclusion

The geographic and topographic features of the Shire of Bridgetown-Greenbushes, including its hilly terrain, dense forests, and narrow roadways, significantly influence bushfire risk. These features not only increase the potential intensity and spread of bushfires but also present challenges for firefighting access and suppression efforts. For effective bushfire risk management, it is essential to account for these geographic factors by implementing targeted firebreaks, maintaining accessible emergency routes, and coordinating closely with firefighting teams to navigate and respond to the complexities posed by the Shire's landscape.

3.6. Climate and Weather

The climate and weather patterns in the Shire of Bridgetown-Greenbushes play a crucial role in determining bushfire risk, influencing both the likelihood and severity of fire events. Understanding these climatic factors is essential for planning fire mitigation strategies and timing-controlled burns to manage fuel loads effectively.



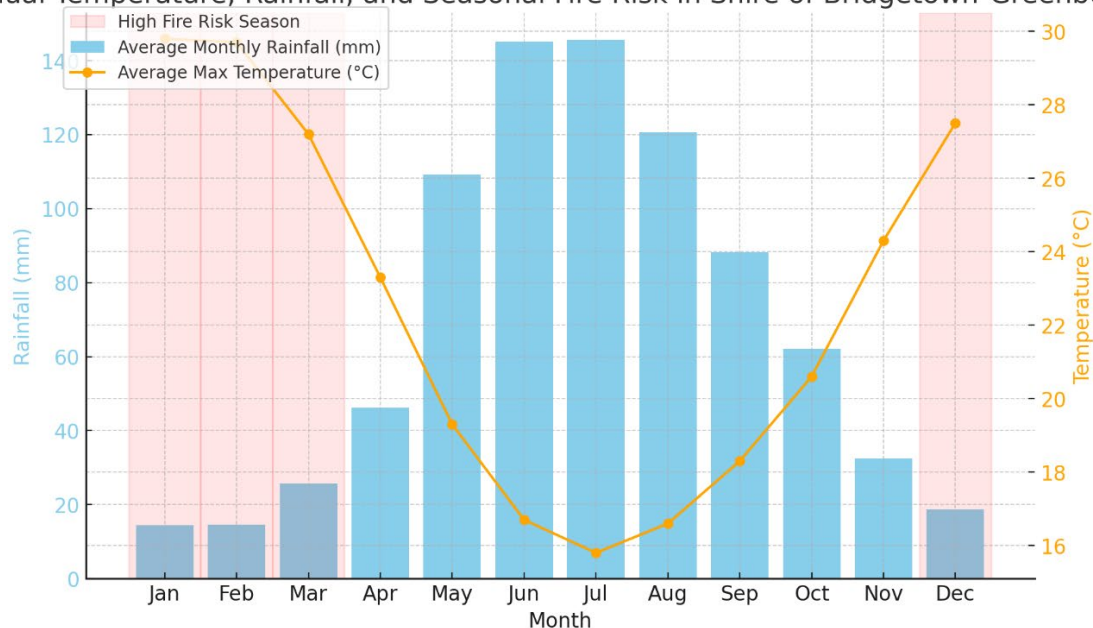
Annual Temperature and Rainfall Patterns

The Shire of Bridgetown-Greenbushes experiences a Mediterranean climate characterized by hot, dry summers and cool, wet winters.

- **Temperature Patterns:** Summer months (December to March) are typically the hottest, with average daytime temperatures often exceeding 30°C. This period coincides with the highest bushfire risk due to the combination of high temperatures and dry conditions. Winter months (June to August) are significantly cooler, with temperatures averaging around 10-15°C.
- **Rainfall Patterns:** Most of the annual rainfall occurs in the winter months, with an average of 800-900 mm per year in this region. The wet winter season allows vegetation to grow, which then dries out during the summer, creating substantial fuel loads that increase the risk of bushfires.

These seasonal temperature and rainfall patterns set the stage for a distinct bushfire season in the dry summer months, when fuel moisture content is low, and the landscape becomes highly flammable.

Annual Temperature, Rainfall, and Seasonal Fire Risk in Shire of Bridgetown-Greenbushes



Here is a chart illustrating the annual temperature, rainfall, and high fire risk season for the Shire of Bridgetown-Greenbushes. The key features include:

- Average Monthly Rainfall (in blue bars), showing peak rainfall in winter months (June to August) and low levels in summer (December to March).
- Average Monthly Max Temperature (orange line with dots), with the highest temperatures occurring in the summer.
- High Fire Risk Season highlighted in red for December to March, coinciding with the hottest and driest period, thus elevating the fire risk.

Timing of Planned Burning and Bushfire Seasons

- **Bushfire Season:** The primary bushfire season in the Shire typically extends from December to March, when temperatures peak and rainfall is minimal. This period represents the highest risk for bushfire outbreaks, and emergency services prepare for heightened alert and response levels during these months.
- **Planned Burning Season:** Controlled or planned burns are generally scheduled during the autumn and spring months (April-May and September-October). These periods offer milder weather conditions, with cooler temperatures and higher humidity that help to keep controlled burns manageable and reduce the risk of them spreading out of control.

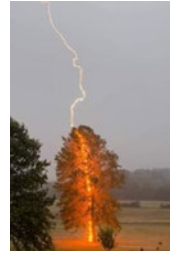
Planned burns conducted in these transitional seasons help to reduce fuel loads across the Shire, mitigating the risk of severe bushfires during the summer. This schedule is carefully managed to balance reducing fuel while protecting community assets and infrastructure.

Weather Conditions That Give Rise to the Most Severe Fire Scenarios

Certain weather conditions increase the risk and potential severity of bushfires in the Shire. Key contributing factors include:

- **High Temperatures:** Extended periods of hot weather, particularly days exceeding 35°C, dry out vegetation and reduce fuel moisture levels, creating highly flammable conditions.

- **Low Humidity:** Dry air accelerates the dehydration of vegetation, making it easier to ignite. Relative humidity below 30% is commonly associated with increased bushfire risk, as it intensifies the drying effect on fuels.
- **Strong Winds:** Wind is one of the most critical factors in fire spread. Strong winds (often exceeding 30 km/h) can drive fires at high speeds, spread embers over long distances, and make firefighting efforts difficult and hazardous. The westerly winds typical in summer can intensify fire spread towards the east, endangering assets downwind.
- **Dry Lightning:** Thunderstorms without accompanying rain, particularly during summer, can ignite fires in remote, dry areas. Dry lightning is a significant concern for bushfire risk as it can start multiple fires over large areas in a short period.



These conditions combined create the ideal scenario for severe fire events, where fires can rapidly spread and become difficult to control, especially in forested or steep areas.

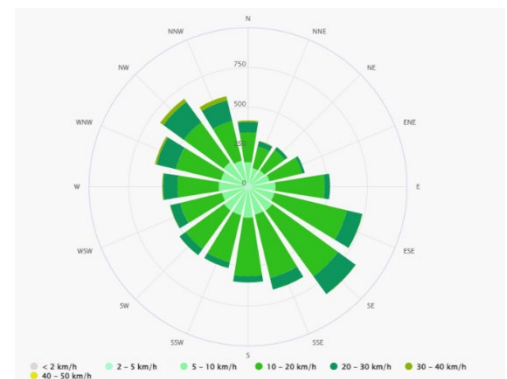
Influence of Climate and Weather on Asset Exposure and Mitigation Efforts

The Shire's climate and seasonal weather patterns have direct implications on the vulnerability of important assets and the feasibility of certain mitigation activities.

- **Asset Exposure:** High-risk assets, such as rural residential properties, agricultural lands, and critical infrastructure, are particularly exposed during the summer fire season. Properties located near forested areas or on slopes are especially vulnerable due to the intensified fire behaviour in these conditions. The proximity of assets to high-fuel areas means that any spark or ignition source could lead to rapid fire spread, endangering lives and properties.
- **Limitations on Mitigation Activities:** Climate and weather patterns also influence the timing and scope of fire mitigation activities. For example:
 - **Planned Burns:** Controlled burns are typically conducted during cooler, wetter seasons to minimise the risk of escape and to manage fuel loads effectively. However, unexpected weather changes can delay or restrict planned burn schedules, making it challenging to meet fuel reduction targets.
 - **Access Restrictions:** During extreme weather events, such as high-wind days or heatwaves, firefighting resources may have limited access to certain areas, especially in steep terrain or dense forests. High temperatures and dry conditions can make some mitigation activities, such as machinery operation in dry grass, hazardous, increasing the risk of accidental ignitions.
 - **Water Availability:** Extended dry periods during the summer can limit available water resources for firefighting. Rivers and watercourses may dry up or have reduced flow, impacting the supply for suppression efforts.

In summary, the climate and weather patterns in the Shire of Bridgetown-Greenbushes significantly impact bushfire risk, influencing both the likelihood of ignition and the intensity of fire behaviour. Seasonal temperature and rainfall patterns, combined with extreme weather events such as high winds and low humidity, create a challenging environment for bushfire management. Effective planning must consider these factors to optimize the timing of mitigation activities and prepare resources for the high-risk summer fire season.

The wind rose for Bridgetown shows how many hours per year the wind blows from the indicated direction.



3.7. Vegetation and Fuel

The vegetation and fuel characteristics in the Shire of Bridgetown-Greenbushes play a crucial role in determining the bushfire hazard, as they directly influence fire behaviour, intensity, and the ability to manage or contain fires. Understanding the types, structure, and distribution of vegetation in relation to key assets is essential for effective bushfire risk management.

Major Vegetation Types and Their Influence on Fire Behaviour

The Shire encompasses a diverse range of vegetation types, each with unique properties that affect bushfire risk and fire behaviour. Key vegetation types include:



1. Eucalypt Forests:

- **Structure and Fuel Characteristics:** The Shire is home to extensive eucalypt forests, dominated by species like jarrah and marri. These forests are characterized by tall trees with canopies that can create "crown fires" where flames spread across treetops. Eucalypt trees contain volatile oils in their leaves, which are highly flammable and contribute to intense, fast-spreading fires.
- **Fire Behaviour:** Eucalypt forests can support high-intensity fires, especially in dry conditions. Leaf litter, bark, and fallen branches on the forest floor add to the fuel load, enabling rapid fire to spread at both ground and canopy levels. Crown fires in eucalypt forests are particularly challenging to control, as they can quickly leap across the canopy and spread large distances.

2. Shrublands and Heath:

- **Structure and Fuel Characteristics:** Shrublands in the Shire consist of dense, low-lying vegetation that includes native shrubs, small trees, and groundcover plants. Heath vegetation, found in some parts of the Shire, typically includes dense and dry shrubs that create a continuous fuel layer.
- **Fire Behaviour:** Shrublands and heath vegetation support fast-moving fires due to the density and continuity of flammable materials close to the ground. Fire spread in these areas can be rapid, especially under windy conditions, posing a risk to nearby properties and infrastructure.

3. Grasslands:

- **Structure and Fuel Characteristics:** Grasslands, primarily found on agricultural lands and open areas, consist of fine fuels that dry out quickly and ignite easily. In late summer, when grass is cured and dry, it becomes highly flammable.
- **Fire Behaviour:** Grassfires can spread extremely quickly across open fields, especially in strong winds. Although generally less intense than forest fires, grassfires are dangerous due to their speed and ability to cover large areas in a short time. Grassfires threaten agricultural assets, rural properties, and adjacent vegetation.

4. Plantations (Pine and Blue Gum):

- **Structure and Fuel Characteristics:** The Shire contains some managed plantations of pine and blue gum trees. These plantations have high fuel loads, including both understory vegetation and flammable material in the canopy. Pine is highly flammable due to its resinous content.
- **Fire Behaviour:** Plantations are prone to intense fires, with potential for both surface and crown fires. The uniform structure and density of trees in plantations can create fire pathways that allow for rapid horizontal and vertical fire spread, making suppression efforts challenging.

Distribution of Vegetation in Relation to Important Assets

The distribution of vegetation in the Shire of Bridgetown-Greenbushes places certain assets at higher risk during bushfire events. The proximity of dense, flammable vegetation to residential areas, agricultural lands, and infrastructure intensifies the need for targeted bushfire management strategies.

1. Residential Areas:

- Many rural residential properties are located close to or within forested areas, particularly in the Bridgetown and Greenbushes regions. These properties are at heightened risk due to the surrounding eucalypt forests and shrublands, which can fuel high-intensity fires. Homes near slopes are particularly vulnerable, as fires tend to travel uphill more quickly.

2. Agricultural Lands:

- The Shire's agricultural lands, including grazing fields and farmlands, are primarily surrounded by grasslands and patches of shrubland. Grassfires can rapidly spread across open farmland, threatening crops, livestock, and farm infrastructure. The presence of grassland adjacent to wooded areas can also lead to an increased risk of fire spreading from one vegetation type to another, exacerbating the hazard.

3. Tourism and Recreational Areas:

- National parks, reserves, and trails within the Shire are situated in heavily forested and shrubland areas. Tourist sites, such as campgrounds and scenic trails, are surrounded by flammable vegetation, posing a risk to visitors—especially during the summer fire season. The dense vegetation in these areas complicates evacuation and fire suppression efforts during an active fire event.

4. Critical Infrastructure:

- Key transport routes, such as the Southwestern Highway and local railway lines, pass through forested and hilly areas with dense eucalypt and shrub vegetation. Fires along these routes can disrupt transportation and emergency response operations. Additionally, power lines and water supply systems running through forested areas are at risk from falling trees and intense fire behaviour, potentially leading to prolonged service disruptions.

The vegetation and fuel characteristics within the Shire of Bridgetown-Greenbushes contribute significantly to bushfire hazards, with various types of vegetation supporting different fire behaviours. Dense forests and plantations pose the risk of high-intensity crown fires, while grasslands and shrublands facilitate rapid fire spread. The proximity of these vegetation types to critical assets, such as residential areas, agricultural lands, tourism infrastructure, and essential services, highlights the need for strategic firebreaks, controlled burns, and community preparedness.



To effectively manage bushfire risk, it is essential to incorporate vegetation and fuel assessments into fire management planning, considering both the structure and location of different vegetation types. Utilizing controlled burns and maintaining firebreaks around high-risk areas will help reduce the fuel load and protect assets within the Shire.

3.8. Important Species and Communities

This section identifies the significant environmental assets within the Shire of Bridgetown-Greenbushes that may be impacted by bushfire, including protected species, fire-sensitive habitats, and appropriate fire regimes. A detailed understanding of these assets is essential for implementing fire management strategies that minimize ecological harm while protecting life and property.

Protected Species and Communities

The Shire of Bridgetown-Greenbushes is home to various species and communities protected under both state and Commonwealth legislation, including the *Biodiversity Conservation Act 2016* (Western Australia) and the *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth). These species and communities are vital to the local biodiversity and hold ecological, cultural, and community value.

1. Flora:

- Jarrah
- (Eucalyptus marginata) and Marri (Corymbia calophylla) trees dominate the local forests and are part of ecosystems that support various plant and animal species. Although not necessarily endangered, these species contribute to a complex ecosystem and provide habitat for other protected flora and fauna.
- Threatened Plant Species: The Shire includes a variety of endemic and rare plant species, such as *Banksia grandis* and *Dryandra sessilis*, which are sensitive to frequent fires. These species are vulnerable to changes in fire regimes, particularly in areas where natural fire cycles are disrupted by human activity.



2. Fauna:

- Western Ringtail Possum (*Pseudocheirus occidentalis*): This species is listed as critically endangered under the *EPBC Act*. It is highly vulnerable to habitat loss from bushfires, particularly in forested and woodland areas.
- Carnaby's Black-Cockatoo (*Calyptorhynchus latirostris*): This endangered species relies on mature eucalypts for nesting and is sensitive to habitat destruction by fire. It is a key species valued by both the local community and environmental groups.
- Numbat (*Myrmecobius fasciatus*): A vulnerable species and the faunal emblem of Western Australia, the numbat inhabits open eucalypt forests and is highly sensitive to habitat fragmentation and fire.



3. Threatened Ecological Communities:

- Certain ecological communities within the Shire are recognized for their conservation significance, including jarrah and marri woodlands that host a diversity of flora and fauna. These communities are susceptible to frequent or intense fires, which can alter the structure of the ecosystem and threaten its long-term viability.

A list of species protected under State and Commonwealth legislation, along with their conservation status, can be viewed at: [Threatened species and communities | Department of Biodiversity, Conservation and Attractions](#)

Fire-Sensitive Environmental Assets

There are several environmental assets within the Shire that are highly valued by the local community and sensitive to fire:

- Wetlands and Riparian Zones: Areas along rivers and wetlands provide critical habitat for native species and support a unique flora and fauna community. These habitats are particularly vulnerable to fire due to their role in preserving water quality and supporting biodiversity.

- **Old-Growth Forests:** The Shire contains old-growth forests that are ecologically significant, providing habitat for a range of species and acting as carbon storage areas. These forests are fire-sensitive, and frequent fires can damage mature trees and disrupt the ecological balance.
- **Recreational Trails and Scenic Areas:** Certain areas valued for their scenic beauty and recreational importance, such as hiking trails and lookouts, are also fire sensitive. Protecting these areas from bushfire is important to maintain the Shire's appeal as a tourist destination and preserve local recreational assets.

Appropriate Fire Regimes for Protected and Sensitive Areas

To maintain the health and diversity of ecosystems in the Shire, fire regimes must be carefully managed to align with the ecological needs of different species and habitats. The following are considered appropriate fire regimes:



- **Low-Intensity, Infrequent Burns:** For mature forests, such as jarrah and marri ecosystems, low-intensity burns at intervals of 10-15 years are generally suitable. This fire regime helps maintain ecosystem health without harming old-growth trees or destroying critical habitat for species like the Western Ringtail Possum and Carnaby's Black-Cockatoo.
- **Exclusion of Fire in Wetlands:** Wetlands and riparian zones should largely be protected from fire, as these areas rely on stable vegetation to prevent soil erosion, maintain water quality, and support a unique set of species. Fire should be avoided in these areas unless prescribed burns are specifically designed to protect surrounding habitats from bushfire encroachment.
- **Controlled Burns in Grasslands and Open Shrublands:** Grasslands and open shrublands can benefit from controlled burns at intervals of 5-7 years. This fire regime helps reduce fuel loads and prevent the spread of invasive species, while also promoting the growth of native grasses and shrubs suited to periodic fire.
- **No-Burn Zones for Endangered Species Habitats:** Areas known to support populations of critically endangered species, such as the Western Ringtail Possum, should be designated as no-burn zones to avoid loss of critical habitat.

Impacts of Mitigation Activities on Environmental Assets

While fire mitigation activities are essential for reducing bushfire risk, they can sometimes negatively impact environmental assets if not carefully managed. Key considerations include:

- **Timing and Intensity of Prescribed Burns:** Inappropriate timing or high-intensity burns can destroy sensitive habitats and threaten rare flora and fauna. Prescribed burns should be conducted outside of nesting seasons for bird species like Carnaby's Black-Cockatoo and during cooler months to minimize risks to fire-sensitive plants.
- **Physical Disturbance from Firebreaks:** The construction of firebreaks can lead to habitat fragmentation, soil erosion, and invasion by weeds, which disrupts natural ecosystems. Firebreaks near sensitive habitats, such as wetlands, should be minimized, and vegetation should be maintained in a way that reduces bushfire risk without compromising biodiversity.
- **Chemical Usage:** In some cases, chemicals may be used for weed control or fuel management, which could impact local flora and fauna. Careful selection of chemicals and application methods is necessary to avoid contamination of soil and water in ecologically sensitive areas.

- **Impact on Old-Growth Forests:** Intensive fire management practices in or around old-growth forests may disrupt the complex structure of these ecosystems and lead to loss of biodiversity. To preserve these areas, only essential fire management activities, such as creating buffer zones, should be undertaken.

Conclusion

The Shire of Bridgetown-Greenbushes is home to numerous significant environmental assets, including protected species, fire-sensitive habitats, and ecosystems that are highly valued by the community. Effective bushfire management in these areas requires carefully balanced fire regimes that reduce fuel loads without damaging sensitive ecosystems. Collaboration with environmental experts and the community will be essential to implement fire management strategies that protect both life and biodiversity.

A comprehensive list of species protected under State and Commonwealth legislation, along with their conservation status, can be viewed by web search or visiting www.dbca.wa.gov.au as a supplementary document to provide detailed reference for fire management planning.

3.9. Historical Bushfire Occurrence in the Shire of Bridgetown-Greenbushes

This section provides an overview of the common sources of ignition and areas prone to bushfires within the Shire of Bridgetown-Greenbushes, highlighting significant historical fires and the lessons learned from them to improve bushfire management strategies.

Common Causes and Locations of Bushfires

The Shire of Bridgetown-Greenbushes, situated in a fire-prone region of Western Australia, experiences bushfires caused by both natural and human factors. Key sources of ignition include:

1. Lightning Strikes:

- **Description:** Lightning is a leading natural cause of bushfires, particularly during dry summer storms. Lightning ignitions are challenging to prevent, and fires often occur in remote forested areas with high fuel loads, making access difficult.
- **Common Locations:** Lightning-ignited fires frequently start in the dense eucalypt forests of the Greenbushes and Blackwood regions, which accumulate significant fuel in the form of leaf litter, bark, and underbrush.

2. Human Activity:

- **Agricultural Practices:** Machinery and equipment can accidentally ignite fires, especially during harvesting or land clearing activities. Sparks from machinery in dry grass or crop fields can easily lead to fires in summer conditions.
- **Campfires and Barbecues:** In popular tourist and camping areas, improperly extinguished campfires or discarded cigarettes are common sources of accidental ignition.
- **Arson:** Deliberate fire-setting has occurred in isolated areas, often going undetected until fires have spread significantly.
- **Common Locations:** Human-caused ignitions are most frequent near roadsides, agricultural zones, and campsites on the outskirts of Bridgetown and Greenbushes.

3. Powerlines:

- **Description:** Powerlines can spark fires when they come into contact with vegetation during high winds or as a result of equipment failure.
- **Common Locations:** Rural and forested areas with powerlines running through dense vegetation are particularly vulnerable to fires started by powerline faults, especially in high-wind conditions.



Areas Prone to Bushfire

The topography, vegetation, and land use in certain areas of the Shire make them more susceptible to bushfires:

- **Forested Areas:** The extensive eucalypt and jarrah forests in the Greenbushes and Blackwood regions are high-risk zones for bushfires. These areas have accumulated fuel loads and difficult terrain, making suppression challenging when fires occur.
- **Rural Residential Zones:** Properties on the edges of forested areas in Bridgetown and Greenbushes are particularly vulnerable to bushfires due to proximity to high-fuel vegetation. High temperatures and winds during summer elevate the risk for these homes.
- **Agricultural Lands:** Open farmlands, especially in the Blackwood Valley, are fire-prone, particularly in dry seasons when grass and crops become highly flammable. Fires in these areas can spread rapidly due to flat, open terrain and strong winds.
- **Tourist and Camping Sites:** National parks and camping grounds located near forested areas are prone to bushfires, often ignited by human activity. The influx of visitors during summer increases the risk of accidental ignitions.

Historical Fires of Significance

Several major bushfire events in the Shire of Bridgetown-Greenbushes have had lasting impacts on fire management strategies:

1. 2009 Bridgetown Fire:

- **Overview:** This fire impacted areas around Bridgetown, destroying homes and damaging large sections of forested land. The fire was exacerbated by high temperatures, strong winds, and abundant fuel loads.
- **Lessons Learned:** The event highlighted the importance of firebreak maintenance around properties and the need for an improved early-warning system. Following this fire, the Shire implemented stricter firebreak regulations and invested in community education on bushfire preparedness.

2. 2014 Greenbushes Fire:

- **Overview:** Ignited by a lightning strike in a remote forest, this fire spread rapidly due to dry conditions, threatening nearby homes and infrastructure.
- **Lessons Learned:** The 2014 fire underscored the difficulty of firefighting in dense, rugged terrain, emphasizing the need for better access roads in remote areas. As a result, the Shire invested in improving firefighting infrastructure and road access in high-risk zones to facilitate faster response times.

3. Hester Brook Fire (February 2022):

- **Overview:** This significant fire burned approximately 800 hectares of bushland in Hester Brook, forcing evacuations and threatening properties and infrastructure. High temperatures and strong winds contributed to the rapid spread, and several homes were destroyed.
- **Lessons Learned:** The Hester Brook fire emphasized the importance of improved evacuation planning and communication, especially for residents in remote and rural areas. Post-fire analysis led to updates in community evacuation protocols and increased investment in local firefighting resources and equipment. The fire also highlighted the need for targeted fuel reduction in high-risk areas.

Lessons Learned and Improved Management Strategies

The historical bushfires in the Shire of Bridgetown-Greenbushes have provided valuable insights that have shaped current bushfire management strategies. Key lessons and improvements include:

1. Enhanced Early Warning Systems:

- The Shire has developed improved early warning systems, including SMS alerts and radio broadcasts, to ensure timely communication of fire risks, evacuation orders, and emergency instructions to residents.

2. Firebreak and Fuel Reduction Programs:

- Historical fires highlighted the critical role of firebreaks and fuel reduction in protecting properties. The Shire has since implemented regular inspections of firebreaks around properties and promotes fuel reduction through controlled burns and community participation in fire preparedness activities.

3. Improved Fire Access Infrastructure:

- Fires in remote forested areas demonstrated the need for better access roads for firefighting. The Shire has invested in upgrading roads in high-risk areas, allowing for faster deployment of firefighting resources to reduce response times and improve safety.

4. Community Engagement and Education:

- Recognizing the importance of community preparedness, the Shire conducts regular workshops and educational campaigns. Residents are encouraged to develop Bushfire Survival Plans, and information sessions cover topics such as fire-safe landscaping, property preparation, and evacuation planning.

5. Evacuation Planning and Communication:

- Lessons from the Hester Brook fire led to enhancements in evacuation planning and communication, particularly for vulnerable or remote communities. Updated evacuation protocols and designated safe zones have been established, and community awareness of these plans is regularly reinforced.



The Shire of Bridgetown-Greenbushes has faced numerous bushfires over the years, with natural and human-induced ignitions posing persistent risks, especially in forested, rural, and recreational areas. Historical fires such as the 2009 Bridgetown fire, the 2014 Greenbushes fire, and the Hester Brook fire in 2022 have provided essential lessons, leading to improvements in early warning systems, fuel reduction programs, access infrastructure, and community preparedness initiatives. By applying these lessons, the Shire continues to strengthen its bushfire management strategies to better protect residents, assets, and the environment from future bushfire threats.

3.10. Current Bushfire Risk Management Controls in the Shire of Bridgetown-Greenbushes

The Shire of Bridgetown-Greenbushes has implemented a comprehensive bushfire risk management strategy incorporating legislative tools, real-time weather monitoring, community engagement, and interagency collaboration to mitigate bushfire risks. This approach leverages local resources, policies, and technological advancements to protect residents, assets, and the environment.

Legislative Instruments to Reduce Risk

1. Bush Fires Act 1954 Section 33 – Fire Management Notices:

- Under Section 33 of the *Bush Fires Act 1954*, the Shire issues annual Fire Management Notices to landowners, mandating actions such as maintaining firebreaks, reducing fuel loads, and managing vegetation around properties before the fire season. Compliance is enforced through regular inspections, with penalties applied for non-adherence. These requirements are critical for minimizing fire spread in high-risk zones.
2. Restricted and Prohibited Burning Times:
- The Shire enforces Restricted Burning Times (typically in spring and autumn), where burning is permitted only with a permit, and Prohibited Burning Times (from November to April) when burning is banned due to high fire risk. These times are adjusted based on real-time weather data, including temperature, wind conditions, and fuel moisture levels, to minimize fire risk during peak fire danger periods.

Australian Fire Danger Rating System (AFDRS) and Automated Weather Stations (AWS)

1. AFDRS Ratings and Fire Restrictions:
- The Shire uses the AFDRS to trigger fire restrictions and communicate bushfire danger levels to the community. AFDRS ratings guide preparedness and response measures as follows:
 - Low-Moderate: Planned burns are permitted with precautions.
 - High to Very High: Fire restrictions apply, with vigilance required for all fire-related activities.
 - Severe, Extreme, and Catastrophic: Total fire bans are enforced, and residents are advised to activate their Bushfire Survival Plans.



2. Automated Weather Stations (AWS):
- AWS technology provides real-time data on temperature, humidity, wind speed, and rainfall, enhancing the Shire's capability to monitor fire danger and adjust AFDRS ratings based on localized conditions. AWS integration supports:
 - Triggering fire danger ratings in real-time based on current weather.
 - Improved decisions on fire restrictions, bans, and community alerts.
 - Enhanced support for firefighting strategies, including adjustments for changing weather patterns during active fires.

Local Government Policies for Development in Bushfire-Prone Areas

1. State Planning Policy 3.7 (SPP 3.7):
- The Shire implements SPP 3.7 for new developments in bushfire-prone areas, requiring Bushfire Attack Level (BAL) assessments to determine risk levels and construction standards.
 - Bushfire Management Plans (BMPs) are mandatory for developments in these areas, detailing fuel reduction, defensible spaces, and other fire management measures.
 - Building Standards: New constructions must adhere to BAL requirements, using fire-resistant materials and ensuring sufficient water access for firefighting.

Volunteer Fire Brigades and Bushfire Response Resources

1. Volunteer Fire Brigades:

- Several well-equipped volunteer brigades serve the Shire, including Kangaroo Gully, Greenbushes, and Hester Volunteer Bush Fire Brigades. Positioned strategically in high-risk zones, these brigades provide rapid response capabilities and are vital in both prevention and suppression activities.



2. Bushfire Response Resources:

- The Shire collaborates with the Department of Fire and Emergency Services (DFES), local brigades, and aerial firefighting units. Real-time AWS data supports efficient aerial waterbombing by providing accurate wind and weather forecasts, optimizing resource deployment during fire events.

Community Engagement Programs

1. Bushfire Ready Program:

- This community-driven program encourages residents to prepare their properties, develop Bushfire Survival Plans, and participate in Bushfire Ready Groups. These groups foster a collective approach to bushfire preparedness at the neighbourhood level.

2. Annual Fire Safety Workshops:

- In partnership with DFES, the Shire conducts workshops that educate residents on firebreak maintenance, fuel load reduction, and evacuation strategies, enhancing community resilience and preparedness.

3. Real-Time Alerts and Communication:

- Leveraging AWS and AFDRS integration, the Shire disseminates real-time alerts through SMS, local radio, and its website, keeping the community informed about fire danger ratings and required precautions.

Fuel Management Programs by Other Land Managers

1. Department of Biodiversity, Conservation and Attractions (DBCA):

- DBCA manages national parks and reserves within the Shire, conducting prescribed burns during favourable weather conditions to reduce fuel loads and protect ecologically sensitive areas from wildfire threats.

2. Private Landowners:

- Through Fire Management Notices, landowners are mandated to manage fuel loads on their properties. The Shire supports this effort through its Fuel Load Reduction Assistance Program, which provides resources and guidance for vegetation management.

Other Local Government-Wide Controls

1. Memoranda of Understanding (MOUs):

- The Shire maintains MOUs with neighbouring local governments, DFES, and private landholders to coordinate firefighting efforts and resource sharing during large-scale fires, ensuring a cohesive regional response.

2. Mitigation Activity Fund (MAF):

- The Shire receives financial support from the state's MAF, enabling fuel reduction activities and enhancements in firefighting infrastructure. This funding is critical for implementing large-scale mitigation measures, particularly in high-risk zones.

3. State Government Policies and Emergency Management Plans:

- The Shire participates in the State Hazard Plan for Bushfire, aligning its risk reduction strategies and response coordination with state policies. This plan provides a framework for multi-agency collaboration and resource mobilization in large-scale fire events.



Blackwood Valley Response Zone

The Shire of Bridgetown Greenbushes Contributes to and is equally afforded the protections of The Blackwood Valley Regional Inter-Agency Zone Response. The Blackwood Valley area within the Shire represents a high-risk bushfire zone due to its dense eucalypt and jarrah forests, combined with hilly terrain and critical assets like rural properties, farms, and tourism infrastructure.

1. **Fire Risk:** The steep slopes and high fuel loads in the Blackwood Valley contribute to rapid fire spread, especially in dry and windy conditions.
2. **Response Resources:** Local volunteer brigades and AWS data support firefighting in this challenging landscape.
3. **Mitigation Efforts:** Regular prescribed burns and strict enforcement of firebreak regulations help reduce fuel loads and mitigate bushfire risk in this high-priority area.

Conclusion

The Shire of Bridgetown-Greenbushes employs a robust approach to managing bushfire risk, incorporating legislative measures, community engagement, and advanced weather monitoring through AWS technology. The integration of AWS with the AFDRS ensures that fire danger ratings and restrictions accurately reflect localized weather conditions, enhancing both community safety and firefighting efficiency. Collaborations with state agencies, neighbouring local governments, and landholders further strengthen the Shire's ability to manage and mitigate bushfire risks effectively.

Appendix B: A comprehensive list of Local Government-Wide Controls for bushfire risk reduction in the Shire of Bridgetown-Greenbushes is provided, detailing additional practices and programs contributing to risk management.



4. Asset Identification and Risk Assessment

Assets at risk from bushfire in the Shire of Bridgetown-Greenbushes are recorded in the Asset Risk Register within the Bushfire Risk Management System (BRMS). These assets are grouped into four categories: human settlement, economic, environmental, and cultural. Each asset is assigned a bushfire risk rating—ranging from low to extreme—based on the risk assessment methodology outlined in the Guidelines for Preparing a Bushfire Risk Management Plan and the accompanying Handbook.

Systemic risk refers to the broader, interconnected impacts a bushfire can have on the systems and networks that support community functioning. A single bushfire event can trigger cascading effects that extend beyond the immediate area, potentially disrupting the social fabric, economy, and natural environment of the district. These impacts can persist long after the fire has been extinguished.

Systemic risks relevant to bushfire risk management in the Shire of Bridgetown-Greenbushes are detailed in Appendix A.

4.1. Identification of Systemic Risks

Systemic risks were identified through a collaborative process involving key stakeholders, including local government officials, emergency services, utility providers, community groups, and local businesses. The process involved:

- Reviewing historical bushfire events in the region to understand the broad impacts beyond the fire zone.
- Consulting with experts in areas such as infrastructure, health services, agriculture, and community resilience to identify potential chain reactions caused by bushfire events.
- Mapping critical infrastructure such as transport routes, power supply networks, water sources, and communication systems to determine their vulnerability to bushfire.
- Engaging community groups to assess potential social and economic disruptions caused by bushfire events.
- Systemic Risks Considered
- The systemic risks relevant to the Shire of Bridgetown-Greenbushes and considered in the Bushfire Risk Management (BRM) Plan include:

Critical Infrastructure Failures

Bushfires can damage power lines, water supply systems, and communication networks. Extended power outages and communication failures can disrupt emergency response efforts and essential services, impacting healthcare, food supply chains, and economic activities.

Economic Disruptions

The Shire relies heavily on agriculture, tourism, and mining. A bushfire event could disrupt these industries, leading to long-term economic challenges, including job losses, reduced income, and declines in agricultural productivity.

Environmental Degradation

Fire-sensitive ecosystems, such as riparian zones and old-growth forests, may suffer long-term damage from bushfires. This can affect biodiversity, water quality, and the overall environmental health of the region, impacting both tourism and agricultural productivity.

Social Dislocation

Communities affected by bushfire may experience long-term social impacts, including displacement of residents, mental health issues, and the breakdown of community networks. The loss of homes and community facilities can erode the social fabric and resilience of the area.

Outcomes of the Risk Assessment

The systemic risk assessment followed the process outlined in Section 6.4 of the BRM Guidelines. The assessment considered the likelihood and consequence of each risk, and the key outcomes were:

High-risk areas

Critical infrastructure such as powerlines, water supply systems, and major transport routes were identified as high-risk areas. The impact of damage to these systems would be significant, with a high likelihood of prolonged recovery times.

Moderate-risk areas

The tourism and agriculture sectors were assessed as moderately vulnerable, as both are highly dependent on seasonal factors and are closely tied to the region's natural environment, which could be compromised by bushfire damage.

Low-risk areas

Community health services and smaller, isolated systems (e.g., small water tanks, solar power installations) were identified as lower risk but still vulnerable to the cascading effects of systemic failures in larger networks.

The mitigation strategies recommended as a result of this assessment include

- Hardening critical infrastructure against fire impacts, such as creating firebreaks around key power and water facilities.
- Diversifying economic activities to build resilience in the face of prolonged disruptions in agriculture or tourism.
- Strengthening community engagement programs to foster social cohesion and ensure residents are prepared for and resilient to potential bushfire impacts.

4.2. Local government asset risk profile

A summary of the risks assessed in Bridgetown Greenbushes is shown in Table 3. This table shows the proportion of assets at risk from bushfire in each risk category at the time the BRM Plan was endorsed. This table was correct

at the time of publication but may become outdated as risks are treated, or additional risks are identified and assessed. A report may be generated from the BRMS to provide the most current risk profile.

Table 3 – Local Government Asset Risk Summary -As of August 2025

Asset Category	Exposure Count	Exposure % of Total	Financial Value	Financial % of Total	Population Count	Population % of Total	Fire Risk	Fire % of Total	Low Risk	Low % of Total	Total
Human Settlement	105	14.58%	48	6.67%	107	14.86%	111	15.42%	260	30.14%	588 81.67%
Economic	9	1.25%	18	2.50%	13	1.81%	14	1.94%	26	3.61%	80 11.11%
Environmental	0	0.00%	20	2.78%	8	1.11%	0	0.00%	2	0.28%	30 4.17%
Cultural	0	0.00%	1	0.14%	0	0.00%	6	0.83%	15	2.08%	22 3.06%
Total	114	15.83%	87	12.08	128	17.78%	131	18.19%	260	36.11%	720 100%



5. Risk evaluation

5.1. Risk acceptance criteria

The acceptable level of risk for each asset category is shown in Table 4. A risk that is assessed as exceeding these limits will be considered for treatment.

Table 4 – Risk acceptance criteria for bushfire risk in The Shire of Bridgetown Greenbushes.

	Asset category			
	Human settlement	Economic	Environmental	Cultural
Acceptable risk level	4C (Medium)	4C (Medium)	4C (Medium)	4C (Medium)

Risks below the acceptable level do not require treatment during the life of this BRM Plan. They will be managed by routine Local Government Wide Controls and monitored to detect any increase in their risk rating.

5.2. Treatment priorities

The treatment priority for each asset is automatically assigned by BRMS, based on the asset's risk rating. Table 5 shows how consequence and likelihood combine to give the risk rating and subsequent treatment priority for an asset. The treatment priority assigned in BRMS will help inform decision making for risk acceptability and development of the Treatment Strategy and schedule.

Table 5 – Treatment priorities

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

6. Risk treatment

The purpose of risk treatment is to reduce the potential impact of 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 to make bushfires less likely or less harmful.

6.1. Treatment Strategy

The Treatment Strategy describes the overall approach to managing bushfire risk in the medium to long term in Bridgetown Greenbushes. 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. The Treatment strategy helps guide the development of integrated annual treatment schedules.

Overall Approach to Managing Bushfire Risk in the Shire of Bridgetown-Greenbushes

The Shire of Bridgetown-Greenbushes employs a comprehensive and strategic approach to managing bushfire risk, integrating topography, land use, community objectives, and systemic risk into the planning and treatment process. The approach prioritizes reducing fire hazards while balancing environmental sustainability and community safety.

Distribution of Unacceptable Risks

The Shire's unacceptable risks are distributed across a variety of landscapes, with the highest-risk areas being:

Forested regions: High fuel loads and difficult terrain increase the likelihood and impact of bushfires, particularly in the Jarrah and Marri forests surrounding Greenbushes and Bridgetown.

Agricultural lands: Grassfires pose significant risks in open farmland areas, especially during dry seasons.

Tourist and residential zones: Areas close to dense vegetation, including rural residential communities and tourism facilities, face a high risk of fire due to their proximity to fuel sources.

Influences on treatment placement and selection

Key factors influencing the placement and selection of treatments include:

Topography: The Shire's hilly and forested areas, especially near Blackwood Valley, require contour-based treatments such as firebreaks along ridgelines to slow fire spread uphill.

Land Use Patterns: Agricultural zones require targeted fuel reduction through controlled burns or mechanical clearing to minimize grassfire risks, while residential areas demand a focus on defensible space and community firebreak maintenance.

Sensitive Industries: Tourism and agriculture, vital to the local economy, require specific attention to ensure fire protection measures don't disrupt these industries. Prescribed burns in surrounding areas are timed to avoid peak tourist and harvest seasons.

Vegetation and Climate: Dense eucalypt forests are prone to intense fires, necessitating strategic fuel reduction and careful consideration of fire regimes. The Shire's Mediterranean climate, characterized by dry summers, amplifies the need for early-season risk mitigation.

Types of Treatments Suited to Different Locations

Forested and Rugged Terrain:

- Prescribed burns during cooler months to reduce fuel loads.
- Firebreaks constructed along ridgelines and access roads.
- Aerial waterbombing capacity for remote or inaccessible areas.

Agricultural Lands:

- Mechanical fuel reduction (mowing or ploughing) in fields and pastures.
- Grazing management to control grass fuel loads.

Residential and Tourist Areas:

- Defensible space creation around properties and facilities.
- Community education and Bushfire Survival Plans to ensure preparedness.

Community Objectives and Preferences for Treatment Types

The community values safety, environmental sustainability, and economic stability. Preferences for bushfire risk management include:

Defensible space: Many residents support the creation of defensible space around their homes to protect against fire.

Controlled burns: Though effective, controlled burns must be carefully timed to avoid disrupting tourism and agriculture, which are critical to the Shire's economy.

Environmental protection: The community has expressed a preference for low-impact fuel management in environmentally sensitive areas, such as riparian zones and biodiversity hotspots.

Priority and Sequencing of Treatments

Given limited resources, treatments are prioritized based on the risk level and impact of bushfire on life, property, and the environment:

Immediate priority is given to high-risk areas, such as residential zones near dense vegetation and critical infrastructure, ensuring defensible space and fuel reduction.

Agricultural zones are treated next, focusing on mechanical clearing and controlled burns.

Environmental areas receive treatments suited to preserving biodiversity while reducing fire risk, such as mosaic burning and strategic firebreaks.

If resources are constrained, life and property protection will take precedence, with treatments implemented in stages, starting with areas of highest risk.

Treatments Beyond Physical Mitigation Measures

In addition to physical treatments, Bridgetown Greenbushes integrates several other strategies to reduce bushfire risk:

- **Community Engagement and Education:** The Bushfire Ready Program encourages residents to prepare properties, create Bushfire Survival Plans, and stay informed during the fire season.
- **Early Warning Systems:** Real-time weather data from Automated Weather Stations (AWS) and the Australian Fire Danger Rating System (AFDRS) trigger public warnings, allowing communities to take pre-emptive action.

- **Evacuation Planning:** Well-established evacuation routes and procedures are continually reviewed and tested to ensure they meet community needs in the event of a fire.

Managing Systemic Risk

To mitigate systemic risks, Bridgetown Greenbushes focuses on protecting critical infrastructure and limiting fire spread to key sectors:

- ***Critical Infrastructure Protection:*** Powerlines, water supplies, and communication networks are safeguarded with strategically placed firebreaks and regular fuel management to reduce the chance of service disruptions.
- ***Economic Resilience:*** Specific treatments are applied to areas supporting key industries (e.g., agriculture and tourism) to ensure rapid recovery and continuity of services after a bushfire.
- ***Long-term Environmental Recovery:*** Post-fire recovery efforts focus on restoring ecosystems and preventing long-term damage to sensitive environments through targeted rehabilitation.
- By addressing both direct and systemic risks, the Shire of Bridgetown-Greenbushes ensures a resilient, adaptable bushfire management strategy that balances community safety, environmental sustainability, and economic needs.

6.2. Treatment Schedule

The Treatment Schedule is a list of bushfire risk treatments recorded in the BRMS. It is developed regarding the outcome of the risk assessment process and Treatment Strategy and in consultation with stakeholders.

A treatment schedule for the Shire of Bridgetown Greenbushes covering from 2018 to 2028 has been entered to BRMS. This is a live document and will be regularly updated throughout the life of the BRM Plan.

Land managers are responsible for implementing agreed treatments on their own land. This includes any costs associated with the treatment and obtaining the relevant approvals, permits or licences to undertake an activity. Where agreed, another agency may manage a treatment on behalf of a land manager.

6.3. Systemic risk treatment

Systemic Risk Treatment

Systemic risk in the Shire of Bridgetown-Greenbushes refers to the cascading effects that a bushfire can have on interconnected systems, such as critical infrastructure, economic sectors, and community networks. Enhancing the resilience of these systems is key to minimizing the broader impact of bushfires. This section outlines how the Shire plans to treat systemic risks identified in Appendix A, focusing on intervention points, responsibilities, and stakeholder involvement.

Intervention Points for Reducing Systemic Risk

Several key points for intervention have been identified to prevent the transmission of systemic risk or reduce its impacts. These include:

- **Critical Infrastructure Protection:** Ensuring that key infrastructure, such as power lines, water supplies, and communication networks, is less vulnerable to bushfires by implementing strategic mitigation measures.
- **Economic Resilience:** Protecting key industries such as agriculture, tourism, and mining from disruptions caused by bushfire damage, with rapid recovery plans in place.

- Community Networks: Empowering the community through education and preparedness programs to improve individual and collective resilience, enabling faster recovery after bushfire events.
- Systemic Risk Treatment Strategies
- Critical Infrastructure Protection
- *Intervention: Implement firebreaks, clear vegetation around key assets (e.g., power lines, water treatment facilities), and improve access to critical infrastructure for firefighting efforts.*

Responsibility:

Shire of Bridgetown-Greenbushes: Ensures local infrastructure is maintained and protected.

Western Power: Responsible for managing fire risks around the power grid and ensuring that critical power supply lines are safeguarded.

Water Corporation: Ensures water infrastructure is protected and operational during fire events.

Stakeholders: Local government, utility providers, DFES, and private landowners.

Future Work: Continuous monitoring of critical infrastructure and fuel loads around these areas, with regular updates to firebreaks and access routes. Future investments in fire-resistant materials or technologies to improve infrastructure resilience.

Economic Resilience

Intervention: Create contingency plans for key industries (agriculture, tourism, mining) to ensure rapid recovery after a fire. This includes creating alternative routes for transportation of goods and services, emergency funds for business recovery, and pre-emptive fire risk management strategies (e.g., prescribed burns).

Responsibility:

Shire of Bridgetown-Greenbushes: Works with local businesses and industry groups to ensure business continuity and fire preparedness.

Agriculture and tourism operators: Implementing property-based fire risk reduction strategies and engaging with government resilience programs.

Stakeholders: Local government, Chamber of Commerce, industry groups, DFES.

Future Work: Develop partnerships with insurance providers and government funding bodies to ensure financial support for rapid recovery. Regular updates to business continuity plans and fire preparedness programs.

Community Networks and Empowerment

Intervention: Enhance community resilience through education programs such as Bushfire Ready and Bushfire Survival Plans, encouraging community participation in risk management and empowering individuals to act in preparing their properties and families.

Responsibility:

Shire of Bridgetown-Greenbushes: Leads community education programs and coordinates volunteer groups.

DFES: Provides fire safety resources and conducts awareness campaigns.

Stakeholders: Community groups, local fire brigades, DFES, and non-governmental organizations (NGOs).

Future Work: Expand community-based preparedness programs, with a focus on reaching vulnerable populations (e.g., elderly, non-English speakers). Develop a post-fire community recovery plan to ensure that social networks and support systems are rapidly restored after an event.

Maintaining and Improving Systemic Risk Controls

To ensure long-term success, the following ongoing actions will be undertaken to maintain or improve systemic risk controls:

Regular Risk Assessments: The Shire will continuously assess the vulnerability of critical infrastructure and update fire mitigation measures to reflect changing environmental conditions and fire patterns.

Stakeholder Engagement: Ongoing coordination between the Shire, utility providers, industry leaders, and community members will be essential to maintain preparedness and address any evolving risks.

Funding and Resource Allocation: Local government will work with state and federal governments to secure ongoing funding for systemic risk mitigation, including grants for infrastructure improvements and community resilience programs.

By addressing these systemic risks, the Shire of Bridgetown-Greenbushes aims to enhance the community's overall resilience to bushfire impacts and ensure rapid recovery from any future events.

7. Monitoring and review

Monitoring and review processes are in place to ensure that the BRM Plan remains current and considers the best available information.

The Shire of Bridgetown Greenbushes 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 they continue to reflect the local context, assets at risk, level of risk and treatment priorities.

7.1. Reporting

The Shire of Bridgetown Greenbushes 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 Shire of Bridgetown Greenbushes will contribute information about their BRM Program to the annual OBRM *Fuel Management Activity Report*.

8. Glossary

Asset	Something of value that may be adversely impacted by bushfire. This may include residential houses, infrastructure, commercial, agriculture, industry, environmental, cultural and heritage sites.
Asset category	There are four categories that classify the type of asset – Human Settlement, Economic, Environmental and Cultural.
Asset 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 risk management	A systematic process to coordinate, direct and control activities relating to bushfire risk with the aim of limiting the adverse effects of bushfire on the community.

Bushfire risk	The chance of a bushfire igniting, spreading and causing damage to the community or the assets they value.
Consequence	The outcome or impact of a bushfire event.
Landowner	The owner of the land, as listed on the Certificate of Title; or leaser under a registered lease agreement; or other entity that has a vested responsibility to manage the land.
Likelihood	The chance of something occurring. In this instance, it is the potential of a bushfire igniting, spreading and impacting on an asset.
Risk acceptance	The informed decision to accept a risk, based on the knowledge gained during the risk assessment process.
Risk analysis	The application of consequence and likelihood to an event to determine the level of risk.
Risk assessment	The systematic process of identifying, analysing and evaluating risk.
Risk evaluation	The process of comparing the outcomes of risk analysis to the risk criteria in order to determine whether a risk is acceptable or tolerable.
Risk identification	The process of recognising, identifying and describing risks.
Risk treatment	A process to select and implement appropriate measures undertaken to modify risk.
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 the community and its effects may be felt far from the direct impacts of the fire in both time and space.
Treatment objective	The aim to be achieved by the treatment. Treatment objectives should be specific and measurable.
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 general approach that will be taken to managing bushfire risk, in consideration of the local government context and objectives.
Treatment type	The specific treatment activity that will be implemented to modify risk, for example a planned burn.

9. Common abbreviations

AFAC	Australasian Fire and Emergency Services Authorities Council
BFAC	Bush Fire Advisory Committee
BRM	Bushfire Risk Management
BRM Branch	Bushfire Risk Management Branch (DFES)
BRM Plan	Bushfire Risk Management Plan
BRMS	Bushfire Risk Management System
DBCA	Department of Biodiversity, Conservation and Attractions
DFES	Department of Fire and Emergency Services
DPLH	Department of Planning, Lands and Heritage
LEMC	Local Emergency Management Committee
OBRM	Office of Bushfire Risk Management (DFES)
SEMC	State Emergency Management Committee
TEC	Threatened Ecological Community
UCL	Unallocated Crown Land
UMR	Unmanaged Reserve
WA	Western Australia

10. Appendices

Appendix A	Systemic risk
Appendix B	Local Government Wide Controls
Appendix C	Communication Plan
Appendix D	Annual Review Checklist



Appendix A – Systemic risk

Systemic risk		Risk rating	Control point	Treatment	Lead agency or stakeholder(s)	Notes and comments
1	Power outages caused by bushfires damaging power lines	High	Critical infrastructure (power lines, substations)	Vegetation clearance around power infrastructure	Western Power, Shire of Bridgetown-Greenbushes	Regular maintenance of power line corridors to reduce vegetation and fire hazards. This helps minimize disruptions to the power grid during bushfires. Annual reviews of vegetation management.
2	Disruption to water supply due to fire damage to water infrastructure	high	Water treatment facilities and pipelines	Firebreaks and protective barriers around water infrastructure	Water Corporation, DFES	Firebreaks and protective measures installed around key water facilities to ensure continuous water supply. Annual inspections to ensure effectiveness, with improvements implemented after the fire season.
3	Impact on local economy (tourism and agriculture)	Medium	Tourist hotspots, agricultural areas	Community engagement, fuel reduction in high-risk areas	Shire of Bridgetown-Greenbushes, DBCA	Educating local businesses on fire preparedness and supporting fuel reduction in tourism and agricultural areas. Strategic prescribed burns and community resilience programs to ensure quick recovery of tourism and agriculture post-fire.
4	Communication network failure	High	Communication towers and fibre-optic networks	Fire-resistant barriers and backup communication systems	DFES, Telecommunications Providers	Ensuring fire-resistant materials around communication infrastructure and developing backup communication systems in case of network failure during bushfires. Regular updates to technology and protocols.
5	Displacement of vulnerable communities due to bushfires	High	Evacuation routes and community centres	Establishment of evacuation centres and clear evacuation routes	Shire of Bridgetown-Greenbushes, DFES, Local NGOs	Ensuring that vulnerable populations (elderly, disabled) are informed and have access to evacuation routes. Evacuation drills conducted annually. Collaborative effort with NGOs to provide support services during evacuation.

6	Long-term environmental degradation (impacting biodiversity and agriculture)	Medium	Riparian zones, protected forests, farmland	Prescribed burns, restoration programs	DBCA, Private Landowners	Controlled burns to prevent large-scale fire damage, followed by environmental recovery programs to restore biodiversity and soil health. Long-term monitoring of ecosystem recovery and continued community education on best land management practices.
7	impact on transport routes (road closures, economic disruption)	Medium	Major transport routes (highways, railways)	Road clearance and alternative routes planning	Main Roads WA, DFES	Regular maintenance of firebreaks along major roads and planning for alternative routes in case of closures during bushfires. Focus on minimizing economic disruption by ensuring access routes for emergency and commercial transport.
8	Social cohesion and community displacement	Medium	Community support networks	Community resilience programs and post-fire recovery planning	Shire of Bridgetown-Greenbushes, Local NGOs	Community engagement and resilience programs to help recover from the social impacts of bushfires. Includes mental health support, rebuilding of local support networks, and financial assistance for displaced families.

Appendix B – Local government wide controls

Control		Action or activity description	Lead agency	Other stakeholder(s)	Notes and comments
1	Firebreak Maintenance	Annual firebreak inspection and compliance	Shire of Bridgetown Greenbushes	Private Landowners	Annual inspections of firebreaks are conducted on both private and public properties to ensure compliance, reduce fuel loads, and maintain fire access routes. The focus is on rural areas and the transition zone between rural and rural residential land.
2	Prescribed Burns	Controlled fuel reduction burns	DBCA	DFES, Private Landholders	Prescribed burns in forested and agricultural areas to reduce fuel loads. Conducted during cooler months to minimise risk. Key areas: National parks and reserves.
3	Community Education Program	Bushfire Ready Workshops	Shire of Bridgetown Greenbushes	DFES, Local Fire Brigades	Community workshops to educate residents on bushfire preparedness, firebreak maintenance and emergency planning. Focus on high-risk areas. Annually updated.

4	Early Warning Systems	Fire danger ratings and real-time alerts	DFES	Media Outlets	Automated Fire Danger Rating System (AFDRS) alerts and SMS notifications based on local weather conditions. Integrated with Automated Weather Stations (AWS)
5	Evacuation Planning	Community Evacuation Drills	Shire of Bridgetown Greenbushes	DFES, Local Police	Annual evacuation drills held in fire-prone communities. Focus on educating the public about evacuation routes and safety procedures. Collaborate with Local Schools.
6	Fuel Load Reduction Program	Mechanical clearing of vegetation and grazing	Private landowners	Shire of Bridgetown Greenbushes	Regular mechanical clearing slashing bailing and pasture freezing in high- fuel areas and the use of livestock grazing to reduce grassfire risk. Target areas: Farmland and rural residential zones.
7	Infrastructure Protection	Cleaning and clearing around critical infrastructure (power, water, communication and waste disposal)	Utility Providers and local government	Shire of Bridgetown Greenbushes	Regular clearing and cleaning of vegetation around power lines and water infrastructure to prevent fire spread. Critical areas include utility corridors and transport routes.
8	Volunteer Fire Brigades	Fire response and suppression efforts	Volunteer Fire Brigades	Shire of Bridgetown Greenbushes supported by DFES	Volunteer brigades provide rapid response and suppression services in rural areas. Regular training and equipment updates to ensure readiness during the fire season.
9	Hazard reduction assistance	Support for venerable residents	Shire of Bridgetown Greenbushes	Local non-government organizations (e.g. Silver Chain)	Program to assist elderly and vulnerable residents in reducing fuel loads and maintaining firebreaks on their properties. Focus on reducing personal fire risk.

Appendix C – Communication Plan

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

- Communication objectives.
- Roles and responsibilities.
- Key stakeholders 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.

Communication Objectives

The communication objectives for the development, implementation, and review of the Bushfire Risk Management (BRM) Plan for the Shire of Bridgetown-Greenbushes are as follows:

- Key stakeholders understand the purpose of the BRM Plan and their role in the BRM planning process.
- Ensure that all stakeholders, including local government, emergency services, landowners, and utility providers, are aware of their responsibilities in bushfire risk management and how they contribute to the overall BRM Plan.
- Stakeholders who are essential to the BRM planning process, or can supply required information, are identified and engaged in a timely and effective manner.
- Engage relevant stakeholders early in the planning process, including state agencies, local fire brigades, and community groups, to gather necessary data, insights, and support for the development of the plan.
- Relevant stakeholders are involved in decisions regarding risk acceptability and treatment.
- Ensure that key decision-makers, including local government officials, landowners, and environmental experts, are consulted on risk assessments and treatment strategies to align bushfire risk mitigation efforts with community and environmental priorities.
- Key stakeholders engage in the review of the BRM Plan as per the schedule in place for the local government.
- Facilitate regular engagement with stakeholders during the scheduled review of the BRM Plan to incorporate feedback, assess progress, and update risk management strategies as necessary.
- 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.
- Increase public awareness of bushfire risk through education campaigns, workshops, and community meetings, encouraging individuals and property owners to take responsibility for maintaining firebreaks, reducing fuel loads, and preparing for bushfire events.

These communication objectives ensure that the BRM Plan is developed with comprehensive input from all relevant stakeholders, is regularly reviewed and updated, and is effectively communicated to the broader community to improve bushfire preparedness and resilience.

Roles and responsibilities

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

- CEO Shire of Bridgetown Greenbushes is responsible for requesting OBRM endorse the BRM Plan.
- CESM The Community Emergency Services Manager Shire of Bridgetown Greenbushes is responsible for communication of the BRM Plan to the community.
- CESM The Community Emergency Services Manager Shire of Bridgetown Greenbushes is responsible for communication between the local government and the Department of Fire and Emergency Services.

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
Who is the stakeholder? Consider government agencies, interest groups and service providers.	What is their role or interest that makes them a stakeholder? Consider if they are an asset owner, landowner or manager, treatment manager or interested party.	Consider how the implementation of the BRM Plan impacts each stakeholder and then assign them a rating of High, Medium or Low.	What level of engagement is necessary for the stakeholder? Inform, consult, involve, collaborate or empower?
	Treatment manager, provides resources and guidance for fire risk management	High	Collaborate
Office of Bushfire Risk Management (OBRM)	Endorses BRM Plan, Oversees fire risk strategies	High	Consult
Private Landowners	Asset owners, responsible for implementing firebreaks and fuel reduction	High	Inform, Empower

Volunteer Bushfire Brigades	Direct involvement in fire prevention and suppression efforts	High	Collaborate
Tourism Operators	Businesses in fire-prone areas, impacted by fire risk and mitigation	Medium	Inform, Consult
Department of Biodiversity, Conservation, and Attractions (DBCA)	Manages national parks and reserves, responsible for prescribed burns	High	Collaborate
Utility Providers (Western Power, Water Corporation)	Owners of critical infrastructure vulnerable to fire damage	Medium	Consult, Involve
Local Residents and Communities	General public, responsible for property preparedness and evacuation	High	Inform, Empower
Agricultural Operators	Landowners, reliant on fire safety for crop and livestock protection	Medium	Inform, Consult
Environmental and Conservation Groups	Interested in protecting ecosystems during fire management	Medium	Consult, Involve

Communications log

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

Communication Roles and Responsibilities

Shire of Bridgetown-Greenbushes is responsible for the development, implementation, and review of the Communication Plan. Key stakeholders support the local government by participating in the Communication Plan as appropriate. An overview of communication roles and responsibilities follows:

CEO Shire of Bridgetown-Greenbushes: Responsible for requesting endorsement of the BRM Plan from the Office of Bushfire Risk Management (OBRM).

CESM Shire of Bridgetown-Greenbushes: Responsible for public communication of the BRM Plan, ensuring that the community is informed and engaged with bushfire risk management strategies.

CESM Shire of Bridgetown-Greenbushes: Acts as the primary point of contact between the local government and the Department of Fire and Emergency Services (DFES), facilitating effective communication and coordination.

Annual timing of communication	Stakeholders	Purpose	Summary	Communication method	Lesson Identified	Follow up
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Development of the BRM Plan

When did this communication occur?	Who was the stakeholder or target audience?	What was the purpose of the communication?	What topics were discussed?	What communication method did you use?	Were there any issues or lessons identified?	Was there any follow up required?
1 February	DFES	Discuss BRM Plan	Mitigation strategies	Meeting	Need for more data	Data sharing
10 February	Landowners	Educate preparedness	Firebreak compliance	Workshop	Low attendance rural	Direct mail follow-up
20 February	OBRM	Submit Plan	Risk assessments	Email	Clarification needed	Set review meeting
5 March	Fire Brigades	Response plans	Operational needs	Workshop	Equipment shortages	Request more resources
15 March	Utility Providers	Protect infrastructure	Mitigation strategies	Phone	Need clearer plans	Develop action plan
30 March	Communities	Inform on progress	Roles preparedness in	Presentation	Simpler communication	Simplify messaging
12 April	Tourism & Short-Term Accommodation	Fire impact	Visitor safety	Email	Concerns about safety	Evacuation plan

Development of the Treatment Schedule

1 May	DBCA	Coordinate burns	Burn schedules	Meeting	Environmental concerns	Modify burn plans
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10 May	Landowners	Discuss responsibilities	Fuel reduction	Workshop	High landowner interest	Ongoing workshops
15 May	Fire Brigades	Treatment activities	Firebreak schedules	Email	Confusion on timelines	Clarify schedules
1 May	DBCA	Coordinate burns	Burn schedules	Meeting	Environmental concerns	Modify burn plans

Review of the BRM Plan (if relevant)

1 May	DBCA	Coordinate burns	Burn schedules	Meeting	Environmental concerns	Modify burn plans
10 May	Landowners	Discuss responsibilities	Fuel reduction	Workshop	High landowner interest	Ongoing workshops
15 May	Fire Brigades	Treatment activities	Firebreak schedules	Email	Confusion on timelines	Clarify schedules
1 May	DBCA	Coordinate burns	Burn schedules	Meeting	Environmental concerns	Modify burn plans

Add rows as required

Communication Plan

This Communication Plan outlines the key communication initiatives that will be undertaken during the implementation of the BRM Plan.

Annual timing of communication	Stakeholders	Communication Objective(s)	Communication Method	Key Message or Purpose	Responsibility	Identified Risks to Communication	Strategy to Manage Risks	Monitoring and Evaluation Method
What is the timeframe or date for this communication?	Who is the stakeholder(s) or target audience?	Which communication objective(s) does this activity support or achieve?	How are you communicating (e.g. email, meetings) and how often? What resources are required?	What is the key message or purpose that needs to be understood?	Who is responsible for planning and undertaking the communication activity?	What could reduce the effectiveness of the communication?	What will be done to reduce the likelihood of this happening?	How will you know if your communication was successful?
April	Landowners	Inform firebreaks	Email, mail, workshop	Firebreak duties	Comms Team	Low rural engagement	Direct mail follow-up	Workshop attendance
May	DFES, Fire Brigades	Coordinate treatments	Meetings, workshops	Fire season plan	Bushfire Coordinator	Scheduling conflicts	Flexible planning	Post-season review
May	Communities	Raise awareness	Meetings, social media	Community roles	Media Team	Info inconsistency	Consistent messaging	Resident feedback
July	DBCA, Tourism Ops	Align burns with tourism	Email, meetings	Burn & safety plans	Bushfire Coordinator	Visitor safety concern	Adjust burn schedule	Stakeholder satisfaction
October	OBRM, DFES	Update progress	Email, reports	Mitigation progress	Bushfire Coordinator	Reporting delays	Set deadlines	OBRM, DFES feedback

Appendix D – Biennial review checklist

Correspondence

- ☐ Cover letter from local government Chief Executive Officer or delegate to Director OBRM with this form completed and attached.

Bushfire Risk Management Plan

Chapter 1	☐ BRM Plan objectives remain relevant.
Chapter 3	☐ Content of the context statement reflects current factors affecting bushfire hazard and bushfire risk to the community, economy and environment.
Chapter 4-7	☐ Figures and tables have been updated to reflect current data in Bushfire Risk Management System (BRMS).
Chapter 6	☐ Treatment Strategy remains reflective of community values and strategic priorities.
Appendix B	☐ Local government wide controls include current treatment programs in local government area.
Appendix C	☐ Communication Plan has been updated to include planned stakeholder engagement and communication activities for the next planning period.

Bushfire Risk Management System

- ☐ All assets identified in the Local Government area have been mapped and risk assessed in BRMS.
- ☐ All assets have had a risk reassessment completed in the last 2 years.
- ☐ The treatment schedule includes planned treatments for at least the next 12 months.