



Bushfire Risk Management Plan

2025-2027



Photo Credit: Tracey Hockey

www.denmark.wa.gov.au

Contents

Document control	4
Document endorsements	4
Publication information	4
1. Executive Summary	5
2. Introduction	6
Overview	6
2.1. Background	6
2.2. Objectives	7
2.3. Legislation, policy and standards	8
3. The Risk Management Process	9
3.1. Bushfire Management cycle	9
3.2. The Bushfire Risk Management Planning (BRMP) process	10
2.3 Stakeholder Engagement	11
4. Establishing the Context	13
4.1 Local Government Plans and Strategies	13
4.1.1 BRMP Integration with Existing Emergency Management Arrangements.	14
4.2 Location, Land Use and Tenure	14
4.3 Community Demographics	16
4.4 Community values	18
4.5 Cultural Heritage	20
4.6 Economic Activities and Industry	21
4.7 Topography and Landscape Feature	22
4.8 Climate and Weather	22
4.9 Vegetation and Fuel	23
4.10 Historical Bushfire Occurrence	25
5. Current Bushfire Controls	26
5.1 Current bushfire risk controls	26
6. Asset Identification and Risk Assessment	28
6.1 Local Government Asset Risk Profile	28
6.2 Identifying and Assessing Cascading Risk	29
7. Risk Evaluation	30
7.1. Risk Acceptance Criteria	30
8. Risk Treatment	32
8.1 Treatment Strategy	32
8.2 Bushfire Treatments	33
8.3. Cascading Risk Treatment	35
9. Monitoring and Review	37
9.1. Monitoring and Review	37
8.2. Reporting, Privacy Issues and Release of Information	37

Appendix 1 – Communications Strategy	38
Appendix 2 – Stakeholders	39
Appendix 3 – Cascading Risks	41
Appendix 4 – Local Government-Wide Controls, Multi-Agency Treatment Work Plan	42
Appendix 5 – Additional Controls identified in the BRM planning process for follow-up	45

Document control

Document name	Bushfire Risk Management Plan	Current version	3.0
Document owner: CEO Shire of Denmark		Issue date	DD/MM/YYYY
		Next review date	DD/MM/YYYY

Document endorsements

This Bushfire Risk Management Plan has been endorsed by the Office of Bushfire Risk Management on DDMMYYYY as consistent with the standards detailed in the *Guidelines for Preparing a Bushfire Risk Management Plan 2024*.

The approval of the Bushfire Risk Management Plan by the Shire of Denmark 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 Denmark.

Department or Agency	Representative	Signature	Date
Shire of Denmark	CEO		
Shire of Denmark Council	Shire President		
Office of Bushfire Management			

Amendment List

Version	Date	Author	Section
1.0	June 2019	M Haymont	All
2.0	September 2019	M Haymont	All
3.0	June 2025	V Holloway	All

Publication information

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

1. Executive Summary

The Shire of Denmark's 2025–2027 Bushfire Risk Management Plan sets out a clear and practical strategy to reduce the impact of bushfires on our community, environment, and economy. With over 70% of the Shire covered in forest and heathland, and many residents living in high-risk areas, bushfire preparedness is essential. This plan identifies the asset groups most at risk—homes, businesses, cultural sites, and natural areas—and outlines how we may protect them. In addition to this plan, the Bushfire Risk Management System provides risk details on over 1000 assets across our Shire and how they will be managed.

This plan was shaped through strong community consultation, including surveys and workshops with residents, local brigades, and key agencies. It reflects what matters most to our community: safety, environmental protection, and resilience. Acceptable risk levels for asset areas were determined with community input, and any areas assessed as exceeding the acceptable risk will be considered for treatment.

The Shire uses a multi-faceted approach to managing bushfire risk. This includes funding mitigation works, enforcing property protection, supporting education and awareness programs, and working closely with local groups like Bushfire Ready. Prescribed burning is used cautiously, with careful consideration of environmental impacts, community health, and safety.

This plan also addresses cascading risks—such as housing shortages, service disruptions, and mental health impacts—that can follow a major fire. By planning and working together, the Shire of Denmark is committed to protecting what makes our community special: our people, our places, and our natural environment.

2. Introduction

Overview

The Bushfire Risk Management Plan (BRMP) is a strategic document developed by the Shire of Denmark to reduce the impact of severe bushfires on the community. The Bushfire Risk Management Plan and System helps the Shire understand where bushfires are most likely to happen and how bad they could be. It also takes into account what matters most to the community, so we can focus on reducing risk in the right places and decide what level of risk is okay to live with.

Denmark is significantly vulnerable to bushfires, with approximately 70% of the Shire of Denmark vegetated, including forest and heathland areas, which are largely inaccessible and difficult for bushfire suppression. The Shire of Denmark is committed to protecting both the vegetation and the community. The Shire recognises that consultation and communication with all major land and asset managers within the Shire, as well as the local community, is essential to the bushfire risk management process, to ensure we achieve an informed and collaborative approach to managing bushfire risks, and ongoing environmental sustainability of mitigation treatments.

This BRMP includes the local information informing all mitigation planning decisions, and outlines the Shire of Denmark's approach to managing bushfire risks, which includes (amongst other controls) funding mitigation treatments to directly decrease bushfire risk, enforcing personal asset protection, community education and awareness, knowledge sharing across agency tenures, and supporting local groups, including Bushfire Ready.

2.1. Background

The content of the BRMP is overseen by the Bushfire Risk Management Program of the Department of Fire and Emergency Services (DFES) Office of Bushfire Risk Management (OBRM). The Bushfire Risk Management Program was established to support local governments in mitigating the threat of bushfires. It provides managed guidelines, trains personnel, and offers support and funding through the Mitigation Activity Funds (MAF).

The BRMP 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.

The Shire of Denmark developed its first Bushfire Risk Management Plan in 2019 to address the area's high bushfire risk through a coordinated, risk-based approach. This updated plan builds on that foundation by placing greater emphasis on identifying, assessing, and treating complex, cascading risks within the community. It also provides more detailed treatment strategies to guide how the Shire manages the risks identified in the plan.

2.2. Objectives

The primary objective of the Shire of Denmark's BRMP is to reduce the threat of bushfire within the Shire by:

- **Guiding and coordinating a cross-tenure approach to bushfire risk management planning**
- **Making sure the resources available for bushfire risk management are used in the best way possible**
- **Monitoring how bushfire treatments are carried out, and re-assessing the risk at regular intervals, to ensure the risk stays at an acceptable level.**

DFES and OBRM contribute to the Shire's BRMP objectives by providing the following:

- Financial and physical support for a BRMC position and BRM activities, through the MAF program, both within the Shire and Statewide.
- Encouraging and offering guiding advice on coordinating a cross-tenure, multi-stakeholder approach to BRM planning, and formation of a Mitigation Working Group.
- Guidelines on documenting processes used to monitor and review the implementation of treatments to ensure risk is managed to an acceptable level.

The Shire of Denmark will contribute to achieving the objectives of the BRM program by:

- Financial and physical support, and role management, for a Bushfire Risk Management Coordinator position.
- Support and resources to operate a Mitigation Activity Fund program.
- Guiding and coordinating a cross-tenure, multi-stakeholder approach to BRM planning through the Mitigation Working Group and contributing to the relay of information through the MWG, LEMC and BFAC, as well as via email.
- Collaboration with neighbouring Shires.
- Encouraging and supporting stakeholder engagement from community members and local organisations
- Support and resources for Bushfire Brigades
- Support and resources for Bushfire Ready
- Bushfire Brigade fleet maintenance
- Issuing and enforcing the Firebreak and Property Management Notice to residents
- Providing a "Book a Ranger" program to help community better understand how to prepare their property for bushfire protection and compliance with season management notices.

- Support and resources for Shire rangers to respond to illegal campfires and anti-social behaviour.
- Where possible, create long-term, sustainable plans for Shire lands that encompass short-term mitigation treatments with long-term management.

2.3. Legislation, policy and standards

The BRMP has been prepared by the Shire of Denmark in accordance with the Guidelines for Preparing a Bushfire Risk Management Plan (the Guidelines) published by the Office of Bushfire Risk Management (OBRM). 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*.

3. The Risk Management Process

3.1. Bushfire Management cycle

Bushfire risk is managed through a cycle of assessing and treating risks. Each of these steps is informed by communication and consultation and supported by monitoring and review.

The Bushfire risk management cycle is completed with the following steps:

1. BRMP, reviewed biannually, collates all information to establish the individual context of the Shire of Denmark, including cascading risk, treatment strategy, controls and communications plan.
2. All buildings and priority sites within the Shire are mapped as assets within the BRMS program.
3. All assets are then individually risk-assessed within the BRMS program.
4. Risk assessments are evaluated in relation to susceptibility and vulnerability, and community context.
5. A treatment schedule is made of individual mitigation treatment plans prioritised based on the risk assessment evaluations.
6. Once treatments are completed, asset risk is re-assessed, and the program conducts ongoing monitoring and review.

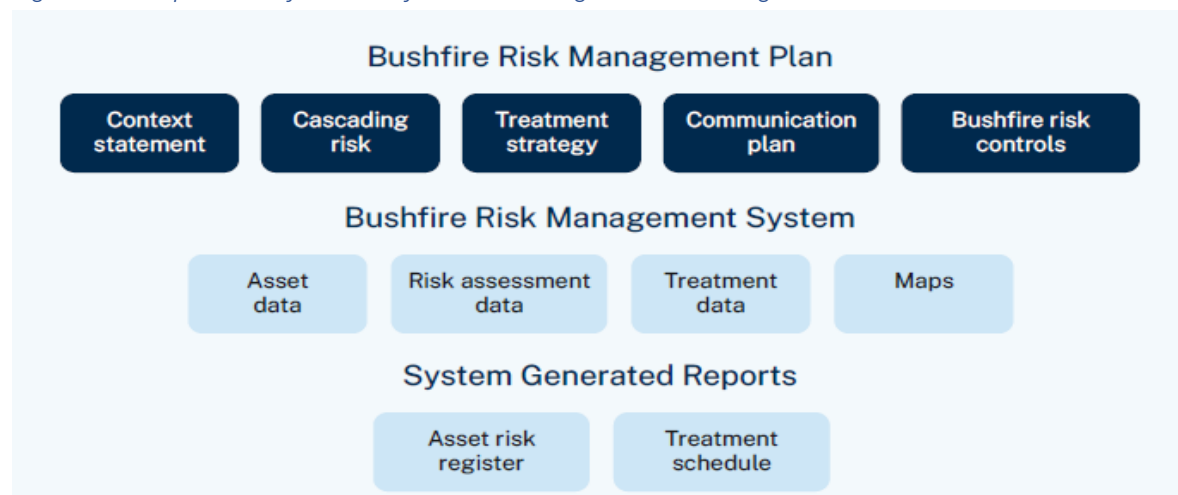
Outputs:

There are three primary outputs produced during the bushfire risk management process:

1. The Bushfire Risk Management Plan (this document),
2. Asset Risk Register - within the BRM System, and
3. Treatment Schedule

The Bushfire Risk Management System is an online application used to record and map assets, conduct risk assessments, and document treatments associated with each asset. The BRMS can generate reports and maps that provide a summary of the assets, their associated risks and treatments.

Figure 1. Components of the Bushfire Risk Management Planning Process



3.2. The Bushfire Risk Management Planning (BRMP) process

The purpose of the planning process is to reduce bushfire risk in the Shire of Denmark via a program of works informed by a thorough risk assessment. Involving major land managers as stakeholders in a shire-wide, tenure-blind, risk management plan is crucial for shared responsibility, access to local knowledge and expertise, and implementing mitigation measures.

The roles and responsibilities of key land managers involved in the BRMP development are outlined below.

Table 1: Roles and Responsibilities of major land managers in the Shire of Denmark

Land Managers	Roles and responsibilities
Local Government	BRMP Planning • Custodian of the BRMP • Coordinate the development and ongoing review of the BRM Plan • Undertake bushfire risk assessment of local government area (as per BRMS protocol) • Liaise with the community to ensure community values and understanding are current with the plan • Submit the draft BRM Plan to OBRM for review and endorsement BRMP treatments • Develop and implement a Treatment Schedule for local government-managed land, both within and outside of the MAF program • Encourage other land management owners, or risk owners, to treat identified risks • Communicate the plan to the community
Department of Fire and Emergency Services (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 consistent with the Guidelines, BRM Program and dynamic risk environment • Administer the Mitigation Activity Fund (MAF) Grants Program • Supporting Bushfire planning assistance, including group discussions and local group plans by the Community Preparedness advisor • Assisting in the management of the Bushfire Ready Program

Land Managers	Roles and responsibilities
Department of Biodiversity, Conservation and Attractions (DBCA)	• Contribute to the development of the BRM Plan • Implement a treatment program on DBCA-managed land • Provide advice on environmental assets and appropriate treatment strategies for their protection • Attend and participate in local emergency management committees, including Local Emergency Management Committee, Bushfire Advisory Committee and the Mitigation Working Group • Communicate and collaborate with the Shire and local community
Department of Planning, Lands and Heritage	• Identify DPLH-managed assets and significant sites through regularly updated GIS shapefiles and/or site visits • Provide advice on heritage sites, including Indigenous Heritage sites • Provide advice on management of any works near or adjacent to known Indigenous (Aboriginal) Cultural Heritage sites, and/or collaborate with local indigenous groups to provide advice In 2023, following DPLH consultation, Indigenous heritage surveying and advice for near or adjacent sites may be undertaken by Indigenous Rangers as previously approved by DPLH (see Cultural Heritage section 3.5)
Other Government agencies and public utilities	• Identify managed assets • Undertake treatments on lands they manage, where applicable • Provide advice on current risk treatment programs • Contribute to the development or review of Bushfire risk treatments, as requested
Corporations and private landowners	• Identify and provide information on owned or managed assets, as requested • Identify and undertake treatments on lands they manage or own

2.3 Stakeholder Engagement

Engagement with stakeholders beyond just land managers during the development, implementation and review of the BRM Plan ensures planning is based on local information and considers the values and objectives of the entire community.

Table 2: Stakeholders involved in the 2025 BRMP review.

Shire of Denmark Councillors
Shire of Denmark Rangers, CESM
Shire of Denmark Planning Department
Denmark Bushfire Ready

DBCA – Warren Region
DFES – Great Southern
Water Corporation
Main Roads
Forrest Products Commission – Great Southern
WA Country Health
Western Power
Telstra
Department of Environment
Bushfire Advisory Committee
Local Emergency Management Authority
Mitigation Working Group
Local Bushfire Brigades
St John Ambulance – Denmark Subcentre
Denmark Environment Centre
Denmark Weed Action Group
Wilson Inlet Catchment Committee
Denmark Chamber of Commerce
Denmark Community Resource Centre
Amaroo Village – Aged Care Provider

Appendix 2 provides more detailed information on the role of each stakeholder, including how the implementation of the BRMP will impact each stakeholder and what the appropriate level of engagement is necessary with each stakeholder.

4. Establishing the Context

This section details the characteristics of the Shire of Denmark and describes how they may influence bushfire risk and its management. An understanding of the local context is needed to undertake risk assessment, and includes various factors that will influence the amount and distribution of bushfire risk. The context guides planning for how bushfire risk is to be treated.

4.1 Local Government Plans and Strategies

Council Plan

The objectives of the Bushfire Risk Management Plan support the Shire of Denmark's overall vision and goals, as outlined in its key strategic document, *Our Future 2035*, the Council Plan. This plan focuses on protecting the natural environment and addressing climate change, improving community safety and resilience, building strong partnerships with local groups and agencies, ensuring transparent and responsible decision-making, and promoting sustainable development and infrastructure.

Local Planning Strategy

The Local Planning Strategy (LPS) is another key tool for the Shire of Denmark, guiding land use and development decisions to support safe, sustainable growth. It identifies bushfire-prone areas and applies planning controls to manage development in these zones, aligning closely with the Bushfire Risk Management Plan (BRMP). The BRMP provides risk data that informs zoning, subdivision, and infrastructure planning in the LPS. Both documents support vegetation protection and fuel management, emergency access standards, and climate-resilient planning. Together, they help the Shire make informed decisions that reduce bushfire risk and protect the community.

The Shire of Denmark supports a tenure-blind approach to bushfire risk management, meaning risks are assessed and treated regardless of land ownership or management. While this principle guides planning and collaboration, in practice, the Shire has limited resources and can only directly manage treatments on land under its control or where agreements are in place. The Bushfire Risk Management Plan helps deliver this approach by encouraging cooperation with asset owners, key stakeholders (see Appendix 3), and local emergency management groups to ensure bushfire risk is addressed across all land tenure.

Other relevant strategies and plans that can be located on the Shire of Denmark website that are relevant to the Bushfire Risk Management Plan include:

- Coastal Reserves Management Plan
- Mount Hallowell Reserve Management Plan
- Bushland Reserves Weeds Strategy and Action Plan
- Friends of Reserves Strategy
- Roadside Vegetation and Conservation Values
- Local Emergency Management Arrangements

The Shire of Denmark has several MOUs and service agreements with local “friends of” and environmental care groups to support reserve management and other works. These activities follow Shire strategies, reserve management orders, and annual activity plans developed with the community. They enable volunteer involvement on Shire land, and the BRMP recognises these contributions as important to the long-term sustainability of bushfire treatment areas.

4.1.1 BRMP Integration with Existing Emergency Management Arrangements.

LEMC: The Shire of Denmark values strong leadership and coordination in emergency management and works through its multi-agency Local Emergency Management Committee (LEMC). The LEMC plays a key role in shaping and supporting the Bushfire Risk Management Plan (BRMP), providing input and helping coordinate its implementation. The BRMP complements the Shire's Local Emergency Management Arrangements by strengthening mitigation, preparedness, and recovery planning. The LEMC also helped define acceptable and cascading risk levels for the BRMP.

BFAC: The Shire of Denmark Bushfire Advisory Committee (BFAC) also plays a role in the development of the BRMP, the identification of assets and existing controls, assessment of risk and the development of treatment options. Bushfire risk and mitigation developments are presented by the BRMC at regular BFAC and LEMC meetings, which allows these committees to continue to be involved in the implementation and review of the BRM Plan as part of the continuous feedback cycle.

MWG: The Bushfire Mitigation Working Group (MWG) includes representatives from community groups, local agencies, Shire staff and councillors, and fire brigades. It serves as the main forum for collaboration and approval of annual BRMP activities. Meeting 1–2 times a year, the group is coordinated by the Bushfire Risk Management Coordinator. Members are notified by email about major changes to the Mitigation Activity Fund (MAF) program and invited to review treatments, and provide feedback or approval.

4.2 Location, Land Use and Tenure

The purpose of reporting on land use and tenure as part of the BRMP is to understand who manages the most land within the Shire, and how land management influences bushfire risk. Land tenure refers to who owns or manages the land, including private landholders, local government, or state government agencies. Land use may be residential, agricultural, conservation, industrial or recreational.

The Shire of Denmark is located on the south coast of Western Australia, approximately 400 km south of Perth and has an area of 1,860 sq km (186,007 ha). Of the total Shire area, approximately 64% is comprised of land managed by the Department of Biodiversity, Conservation and Attractions (DBCA). Local Government manages 1.12% of land, which includes land eligible for the MAF program. Other Government departments including DFES, DPLH and Main Roads comprise roughly 5%. The remaining 30% of land in the Shire is freehold land, which contains large tracts of remnant vegetation as well as agricultural land.

Table 3: Denmark Land Tenure Statistics:

Shire of Denmark Land Tenure - Organisation	Percentage
DBCA - Outside Native Title	63.78%
Department Of Fire and Emergency Services (DFES)	0.04%
Department Of Planning, Lands and Heritage (DPLH)	1.40%
Department Of Water and Environmental Regulation	0.02%
Local Government	1.12%
Main Roads Western Australia	0.46%
Other State Government	0.35%

Shire of Denmark Land Tenure - Organisation	Percentage
Private and Other	29.02%
Water Corporation	0.32%

Source – OBRM 2025

The Shire of Denmark is recognised for its natural beauty and significant environmental values. This is reflected in the thirty-five protected areas located within the Shire, including six National Parks and 11 Nature Reserves. Figure 2 below shows that the northern part of the Shire is dominated by uncleared land, largely managed by DBCA (dark green), and the southern part of the Shire is dominated by predominantly agricultural and private land (light green).

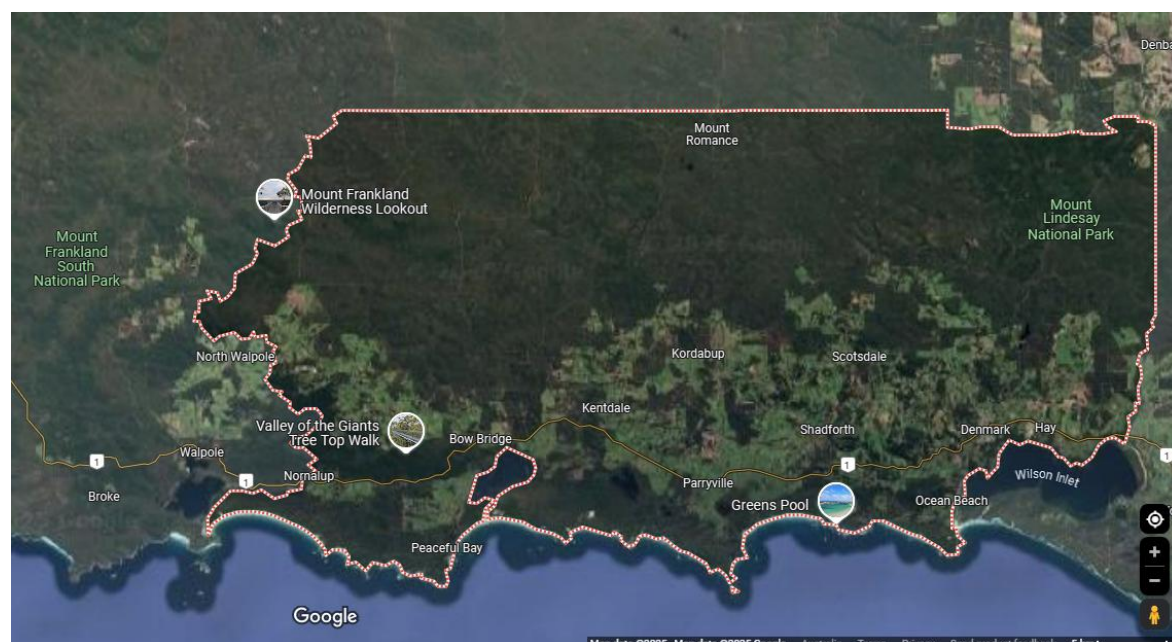


Figure 2. Shire of Denmark and surrounds.

Department of Biodiversity, Conservation and Attractions (DBCA)

DBCA manages approximately 63% of the total land area in the Shire of Denmark, which includes major environmental assets William Bay National Park, Mount Lindesay National Park and the Valley of the Giants. DBCA land is predominantly in the northern half of the Shire, and along the southern coastline, and comprises significant bushland. DBCA mitigation personnel work closely with the Shire mitigation team to ensure cross-department sharing of information. They have a representative on the LEMC, BFAC and MWG committees, as well as email correspondence and notifications of planned burns or major works. DBCA have a number of heavy and light fire brigade vehicles which can respond alongside the Shire volunteer fire brigade in fire events.

DBCA run a significant yearly mitigation program, which is updated annually and can be found at <https://www.dbca.wa.gov.au/management/fire/prescribed-burning/burn-options-program>. The DBCA burn options program is generally presented to the Shire at BFAC or MWG and is available for comment. Mitigation works are primarily large-scale prescribed burns to form a mosaic of differently aged bushland, with the long-term aim of reducing overall fuel loads across managed lands and being able to respond and stop large-scale fires. Management strategies employed by

DBCA for heavy fuel loads in old-growth areas, including aerial incendiary, are an ongoing source of tension between some members of the community, conservationists and DBCA. This is particularly apparent in the Nornalup community, which neighbours the old-growth Tingle forests of the Walpole-Nornalup National Park. Community concern for mitigation has resulted in delayed prescribed burning and has led to some of the fuel loads in this area being up to 80 years old, forming an extreme fire risk for residents.

Freehold landownership

Approximately 30% of the land in the Shire of Denmark is under freehold ownership, meaning it is privately owned by individuals or entities. This land is often used for residential living, small-scale agriculture, tourism ventures and lifestyle properties. The characteristics of freehold land – such as fragmented ownership, varied land management practices, and differing levels of bushfire preparedness – can influence bushfire risk. Unlike public land, where coordinated fuel management and emergency access planning are more easily enforced, freehold properties may lack consistent mitigation measures like firebreaks, vegetation control, or access routes. This variability can create challenges in implementing shire-wide bushfire risk treatments. Moreover, the proximity of freehold land to bushland or forested areas increases the potential for ember attack and fire spread. As a result, engaging private landowners in bushfire education, planning and compliance is essential to reducing overall risk and ensuring the effectiveness of the Shire's tenure-blind bushfire risk management strategy.

Local Government ownership

Only 1.12% of the land in the Shire of Denmark is managed by the local government, and it is scattered across the Shire in small parcels like reserves, road verges, and community spaces. This fragmented nature makes bushfire risk management more complex, as these sites can be harder to access and maintain. Despite their small size, they may still pose risks – especially when near homes or bushland. Effective mitigation relies on coordinated planning with neighbouring landholders to ensure treatments are consistent and contribute to the Shire's tenure-blind approach.

Bushfire Mitigation works on Local Government land are subject to extensive environmental regulations under the Environmental Protection Act 1986, with some exemptions available through the 2019 “A guide to the exemptions and regulations for the clearing of native vegetation”, and as per sections 33 and 36 of the 1954 Bush Fires Act. These exemptions may include activities such as maintaining asset protection zones, trafficable firebreaks, and low-fuel boundary areas. Additional exemptions apply to fence lines, crossovers, and works approved through development applications.

These overlapping responsibilities add complexity to land management and require careful planning and strict adherence to environmental legislation.

4.3 Community Demographics

Understanding community demographics is essential in bushfire risk management planning because it helps identify vulnerable populations, tailor preparedness strategies and ensure that risk communication and emergency response are inclusive and effective across the Shire.

The majority of Shire residents live in the Denmark townsite and nearby localities, including Hay, Ocean Beach, Scotsdale, and Shadforth. Smaller rural communities are located in Peaceful Bay and Nornalup. During the summer months, population numbers increase in these outlying areas due to the high number of holiday homes, nature-based camping sites, and other seasonal accommodation options.

Key Demographic Factors

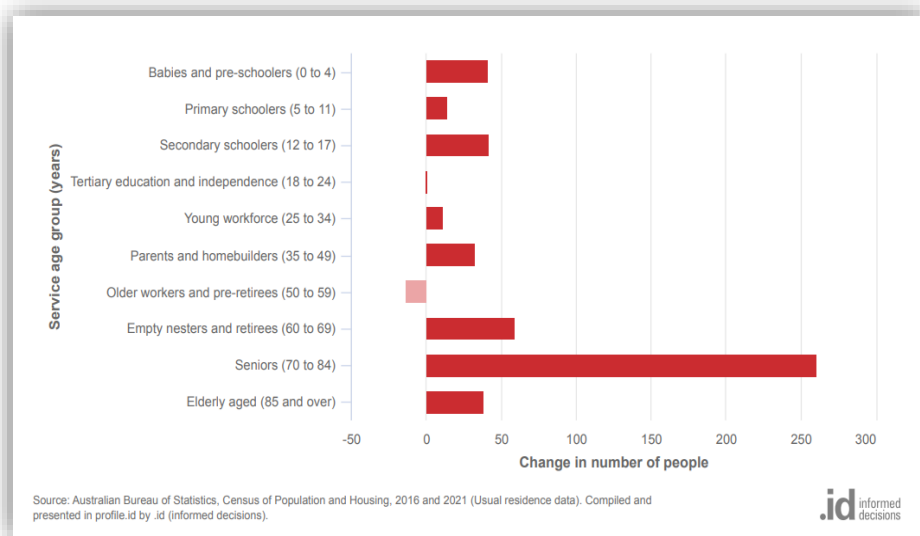
- 19% of residents are aged 70+, with many experiencing reduced mobility or health conditions.
- Over 26% of households are lone-person households, increasing vulnerability during emergencies.
- At least 4.7% of residents report needing assistance with core activities due to disability, with this figure rising sharply in older age groups.
- The Shire's Disability Access and Inclusion Plan notes that over 25% of residents live with disability, and more than 10% are carers.

The aging demographic in Denmark continues to rise (Figure 3), with the last 5 years seeing a dramatic increase in the 70+ age group (highlighted in Figure 4 below). The Shire recognises older and disabled residents may have a number of limitations across bushfire risk management, including the need for assistance with evacuation or longer lead times, the ability to complete prescribed mitigation works as per the Firebreak and Property Management Notice, limited technology interfaces (including limited access to social media and website information, and understanding of mobile phone apps), A comprehensive breakdown and information on the Shire's population and demographics can be found at <https://profile.id.com.au/denmark>



Figure 3. Age-sex pyramid 2021 - Shire of Denmark

Figure 4 – Total Persons:
Change in Age
Structure 2016 to
2021 – Shire of
Denmark



The Shire has a number of programs to meet these difficulties and challenges, including:

- Book a Ranger program for face-to-face explanation of the Firebreak and Property Management Notice, and advice on preparing properties ahead of the fire season
- Support and resources for Bushfire Ready Groups
- Community events, including Bushfire Ready Weekend
- Supporting bushfire planning assistance, including group discussions and local group plans by the Community Preparedness Advisor.
- In addition, information is provided by several sources, including websites, postal, email, newspapers, community radio, public flyers, community noticeboards, and in-person to relevant stakeholders or at the Shire front desk.

4.4 Community values

Community Perceptions of Bushfire Preparedness – Survey Comparison (2019 vs 2025)

The Denmark community participated in bushfire preparedness surveys in both 2019 and 2025. The results (Figure 5) show a clear increase in bushfire risk awareness and self-assessed readiness over the six-year period. In 2025, over 50% of respondents reported feeling extremely to very well prepared for bushfires, compared to just 27% in 2019.

This positive shift likely reflects the sustained efforts of Denmark's Bushfire Ready program, alongside the proactive engagement and mitigation work carried out by the Shire's team and local brigades. The heightened awareness may also have been influenced by the 2022 Bayview Rise Bushfire, which served as a powerful reminder of the importance of preparedness.

It's important to note that the number of respondents differed between the two surveys: 392 people participated in 2019, while 122 responded in 2025. All results are presented as percentages to allow for meaningful comparison.

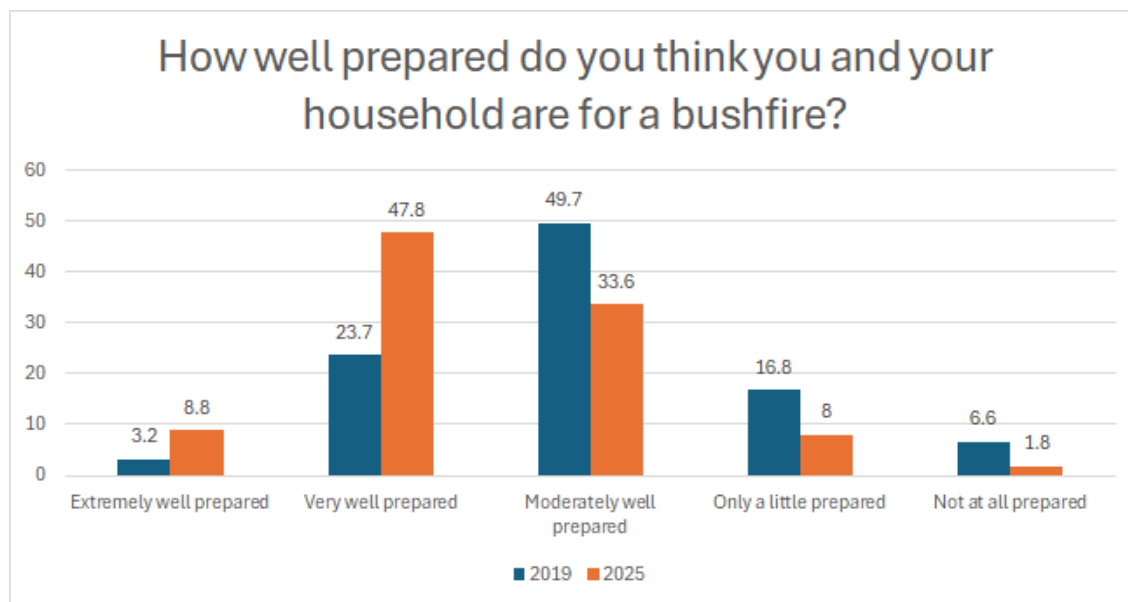


Figure 5. Percentage Scores: Survey Responses 2019 and 2025

Balancing Environmental Values and Bushfire Mitigation

Survey results from 2025 continue to highlight a divergence in community values around bushfire mitigation. An increasing percentage of respondents in 2025 prioritised the protection of native vegetation over the safety of human life and property (see Figure 6). The Shire continues to collaborate with local environmental groups in bushfire mitigation planning and review processes highlighting the importance of revisiting community values as circumstances evolve.

These findings are consistent with the Denmark community's strong environmental ethos, as outlined in the Shire's Council Plan –*Our Future 2035*, which commits to environmental stewardship and the protection of natural ecosystems.. However we also note that some of these perspectives may be shaped by limited direct experience with bushfire risk, and that the survey was not conducted using random sampling, which means the results may reflect the views of those more inclined to respond and may not represent the broader community.

The survey results highlight an ongoing need for community education, particularly around how mitigation works are designed to meet environmental standards and how consultation processes are conducted. While there may be some response bias toward those strongly opposed to mitigation, the results align with past findings and local experience: Denmark has a passionate, informed, and engaged community, with strong and diverse views on bushfire mitigation. The Shire remains committed to balancing these perspectives and strengthening education through initiatives like Bushfire Ready, Book a Ranger, and MAF discussions.

The graphs below (with two of the scenario questions) highlight the trend from the 2019 to 2025 survey results, showing respondents' preference for protecting native vegetation or conserving native wildlife over protecting human lives and homes.

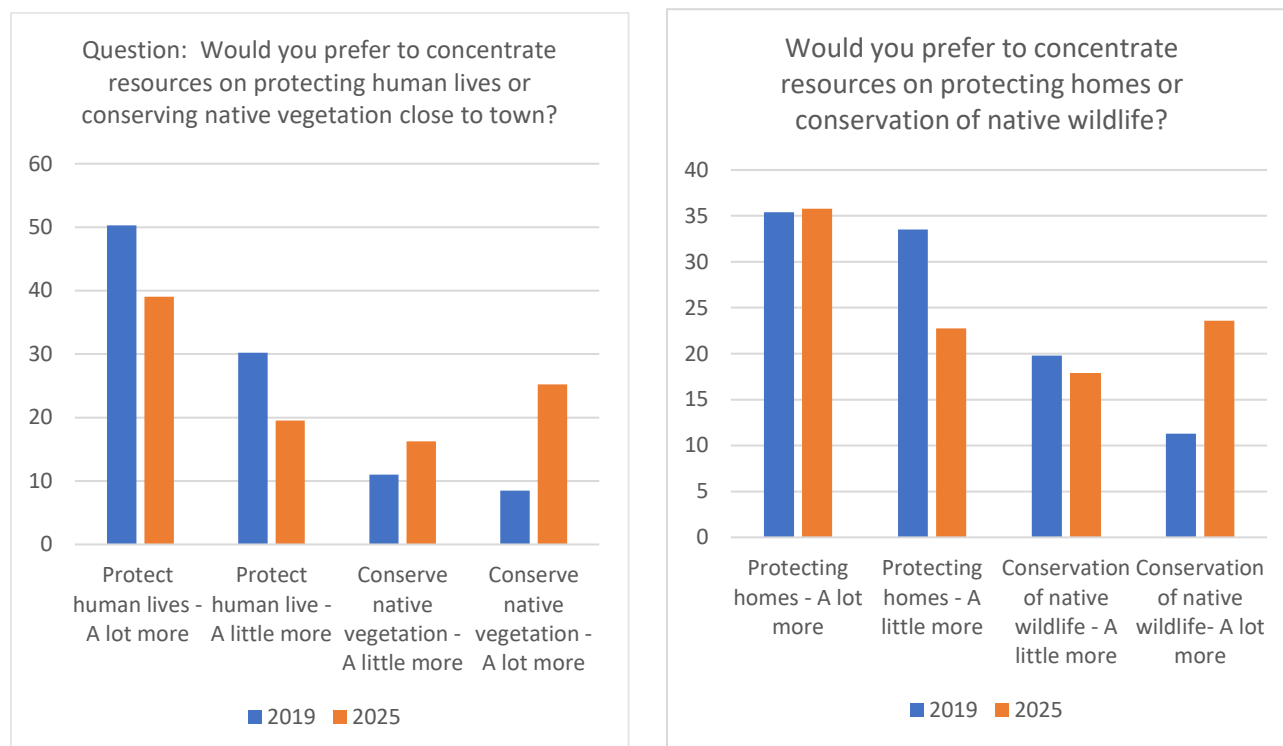


Figure 6. Selection of two survey question responses (percentages) 2019 and 2025

4.5 Cultural Heritage

Cultural heritage plays a vital role in bushfire risk management, ensuring that fire mitigation activities respect and protect sites of historical, spiritual, and cultural significance. This includes Aboriginal heritage places, historic buildings, and culturally valued landscapes. Incorporating cultural heritage into planning supports legal obligations, strengthens relationships with Traditional Owners, and promotes inclusive, informed land management. It also enables the integration of traditional ecological knowledge, such as cultural burning practices, which can enhance resilience and sustainability in bushfire-prone areas.

The Shire of Denmark lies within the Bibbulmun cultural area of Noongar Country, with overlapping connections to the Minang people, particularly west of the Hay River. There are 18 State Registered Aboriginal Heritage sites in the Shire, many linked to culturally significant river and estuarine systems such as the Denmark, Hay, Franklin Rivers, and the Nullaki estuary. These sites include fish traps, artefacts, grinding areas, and rock shelters. Due to their sensitivity, references in the BRM Plan will remain general to protect site integrity. Bushfire risk assessments have been conducted for these areas, some of which face added vulnerability due to flammable wetland vegetation and suppression challenges in acid sulphate soil zones.

Present-Day Cultural Site Management

The Shire of Denmark is committed to protecting culturally significant sites through its Mitigation Activity Fund (MAF) program. Works in mapped heritage areas are referred to the Department of Planning, Lands and Heritage (DPLH) for comment or inspection. In 2023, the Shire, with guidance from DPLH and the Wagyl Kaip Southern Noongar Aboriginal Corporation, developed

an informal plan under the advisory of DPLH to engage Indigenous Rangers as custodians of cultural knowledge and land, and to contact the Indigenous Rangers for mitigation advice and heritage approvals.

Currently, the Shire is working with Binalup Ranger group to ensure mitigation works are sensitive to Indigenous heritage areas and to collaborate on mitigation processes and works where appropriate. The Rangers are assessing cultural significance at proposed MAF sites and are supported to train with local brigades to conduct cultural burns on Shire land, in collaboration with DFES.

All Aboriginal and protected heritage sites require approval before mitigation works can be done in the vicinity. The Aboriginal Cultural Heritage Inquiry System (ACHIS) and Data WA catalogue are consulted to assess Indigenous heritage areas, prior to representatives from DPLH or Indigenous Rangers visiting on site and applying for formal approval.

European Heritage and Fire Risk

The Shire of Denmark maintains a municipal heritage register with 141 historically significant places, including three State Heritage-listed sites: the Peace Pine Tree, Denmark District Hospital, and the former Methodist Church (now the Red Cross Centre). These sites are assessed for bushfire vulnerability, and appropriate treatment strategies are applied where needed.

4.6 Economic Activities and Industry

Understanding the local economy and key industries is essential in bushfire risk management, as economic assets—such as agriculture, tourism, forestry, and small businesses—can be highly vulnerable to fire impacts. Identifying these sectors helps prioritise protection strategies, assess potential economic disruption, and guide recovery planning. It also ensures that mitigation efforts support business continuity, safeguard employment, and maintain the resilience of the local economy in the face of bushfire threats.

For more information on the economics of the local government, go to [Home | Shire of Denmark | Community profile](#)

Primary Industries and Bushfire Risk

Viticulture is a key industry in the Shire of Denmark, contributing to both primary production and tourism. However, smoke sensitivity during grape harvesting presents challenges for prescribed burning. Agriculture, particularly beef and dairy farming, also increases bushfire risk during late spring hay production, when dry vegetation and machinery heighten ignition potential. Volunteer availability may be reduced during this busy period. While forestry is declining, some plantations and limited harvesting remain. A severe bushfire could significantly disrupt these industries by damaging feed sources and transport routes essential for moving stock and produce.

Tourism:

Tourism is a key economic driver in the Shire of Denmark, with peak visitation occurring during the summer months—coinciding with the highest bushfire risk period. In 2024, the Shire recorded 715,000 visitor nights, marking a 24% increase since 2019. This seasonal overlap heightens the importance of effective bushfire preparedness and response to protect both residents and visitors. Bushfires can severely impact tourism by damaging natural attractions and infrastructure, reducing visitor numbers, and causing financial strain on local businesses, potentially leading to closures or job losses.

Tourists are considered highly vulnerable in bushfire risk planning, due to their limited familiarity with local geography, emergency procedures, and communication channels. Tourists may not be aware of local fire bans, evacuation routes, or how to respond during a bushfire emergency. This increases the risk of delayed evacuation or unsafe behaviour during high-risk periods.

To reduce this risk, the Shire of Denmark has implemented strict fire safety measures, including a prohibition on all campfires and cooking fires at short-stay accommodations such as Airbnb's and camping areas during the restricted and prohibited burning periods—typically from October to April, depending on seasonal conditions. These restrictions are clearly communicated through signage, visitor information centres, accommodation providers, and digital platforms. The Shire also encourages hosts and operators to share bushfire safety information with guests and to register for emergency alerts.

4.7 Topography and Landscape Feature

Understanding the physical landscape is essential in bushfire risk management, as terrain directly influences fire behaviour, emergency access, and evacuation planning. The Shire of Denmark features undulating terrain, dense wilderness, and narrow, water-crossed roads, all of which can restrict access for emergency responders and delay evacuations. Early intervention is critical, as limited access can allow fires to intensify rapidly, reducing suppression effectiveness.

All risk assessments for assets in the Shire are based on the mapped topography uploaded into the BRMS system, which includes slope, topography heights and vegetation. Given these constraints, appropriate land use planning is also vital to avoid intensifying development in high-risk areas, without addressing topographical challenges with evacuation, access and mitigation.

4.8 Climate and Weather

Understanding seasonal climate patterns and rainfall trends is essential for bushfire risk management, as they directly influence fuel loads, fire behaviour and the timing of mitigation activities.

The fire season in the Shire of Denmark typically runs from November to April. In the 2024–2025 season, the restricted burning period was from 1 November to 15 December, followed by a prohibited burning period from 16 December to 29 March. During the prohibited period, no outdoor fires—including BBQs and cooking fires—are permitted, and during the restricted period, fires are only allowed for camping and cooking, with a permit required for burning. These dates are reviewed annually by the Bushfire Advisory Committee (BFAC) based on weather conditions and fuel loads.

Denmark experiences a mild temperate climate, with cold winters and warm summers. For more information on weather conditions, see the Department of Primary Industries and Regional Development data from the Denmark weather station. [Weather](#)

The townsite has received in the range of 814–996 mm of rainfall annually over the last ten years, spread over 178–192 rain days, making it one of the wettest locations in Western Australia. Most rainfall occurs from April to November, followed by a short dry season in January and February. (see Figure 7 below) Despite the high rainfall, lightning from the west coast troughs is a common source of ignition. Additionally, the south-western Australian climate has been in a persistent drying phase since the mid-1970s, with rainfall declining by up to 20%, particularly in autumn and early winter. This trend has extended the high-risk fire period into April and May, reducing safe

windows for autumn prescribed burns and increasing the importance of adaptive fire management strategies. For more information, see: [Recent and historical rainfall maps, Australian Bureau of Meteorology](#)

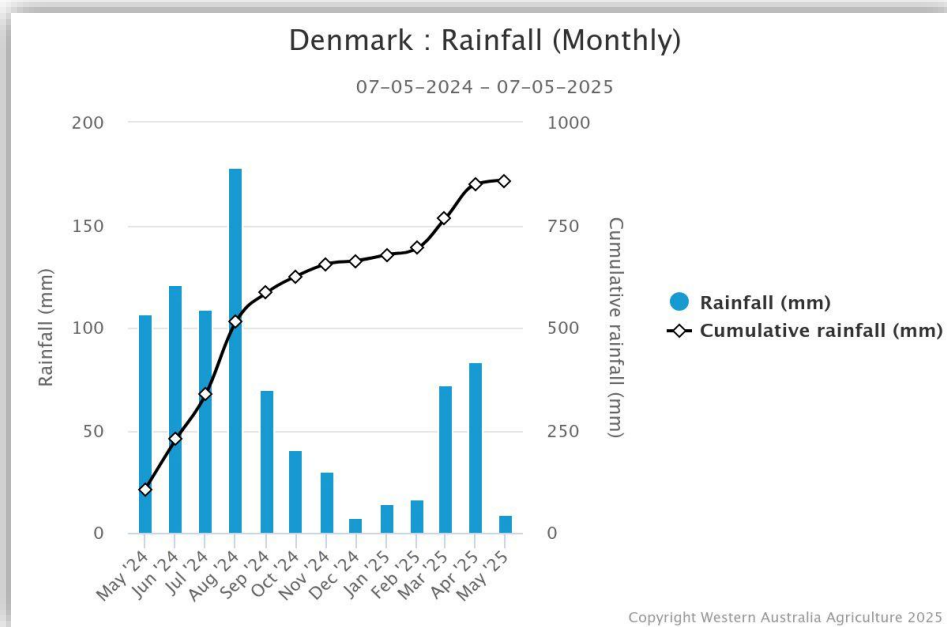


Figure 7. Annual and cumulative rainfall for 12 months (2024/25) – Shire of Denmark

4.9 Vegetation and Fuel

Over 70% of the Shire of Denmark remains uncleared, with heavy fuels in the forest and heathland areas, which are largely inaccessible and difficult for bushfire suppression. Together with dense agricultural pasture, this makes Denmark significantly vulnerable to bushfires.

The Denmark Shire covers two primary vegetation regions: Jarrah-Marri Forest on the laterite gravel in the northern half of the Shire, and the Warren Bioregion on the clay-rich soils of the southern region, which include the Karri and Tingle trees. Other vegetation types occur around the inlet and waterways, including shrublands and swamps.

Vegetation areas are significant to bushfire risk assessments due to the rate at which fuel accumulates. Fuels in Jarrah forests accumulate at approximately 1-2 tonnes/ha annually, reaching a maximum of about 20 tonnes/ha in 20 years. Whereas fuels in the Warren Bioregion Karri Forests are significantly higher, accumulating at 3-4 tonnes/ha annually, to reach a maximum of about 60 tonnes/ha in 20 Years.

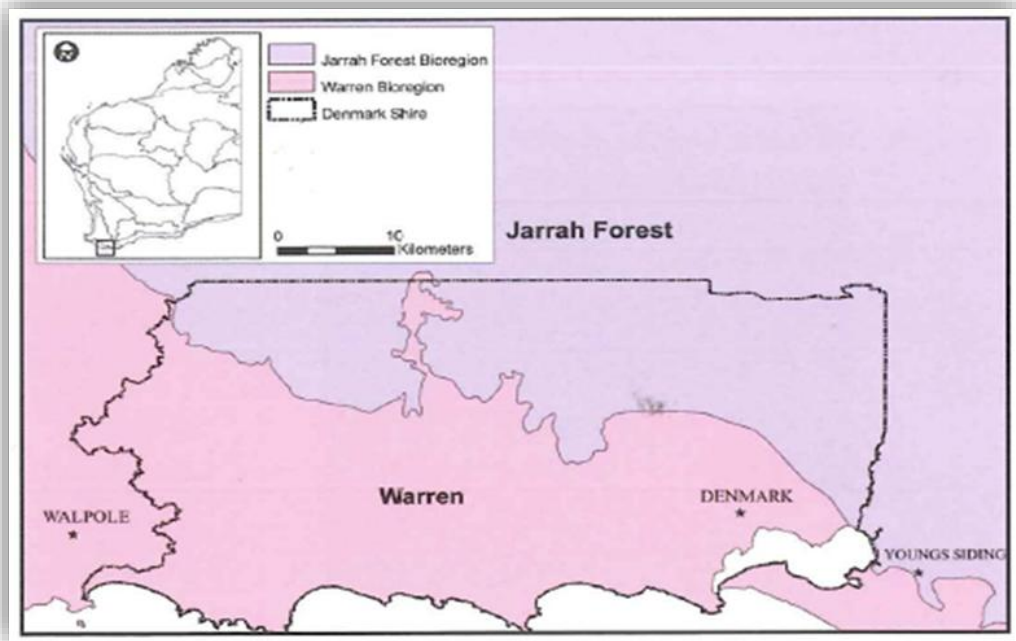


Figure 8. Vegetation regions in the Shire of Denmark ¹

Threatened Flora and Fauna

The South Coast Natural Resource Management Strategy provides the following description for the Denmark Shire: *‘the south coastal area is within one of the few global regions featuring exceptional concentrations of species and experiencing exceptional loss of habitat. The high level of biodiversity in the region is partially due to the biogeographic complexity of the region and the geological and climate history’*

Mitigation works within the Shire are managed to give all due care to the location and presence of significant environmental species. All MAF works are checked firstly against DBCA catalogues (Data WA) and then by local environmental groups through the MWG program. This ensures full environmental consultation and modification of treatments to meet an acceptable standard of care and risk management.

Flora and Fauna records are mapped and recorded by DBCA and are available at <https://catalogue.data.wa.gov.au/>. This includes Environmentally Sensitive Areas (ESA), Declared Rare Flora and Fauna (DRF), and Threatened Ecological Communities (TEC).

Bushfire mitigation strategies consider the potential for activities to contribute to the spread of weeds, invasive species, or diseases such as *Phytophthora Cinnamomi* (Dieback). Dieback has infected large areas of the Jarrah forest across WA. It is easily spread through soil movement from vehicles, people, animals and water. Other fungal-borne diseases can also be spread through these pathways. The Shire of Denmark encourages employees and contractors to have green card dieback training, available locally at <https://www.dwg.org.au/green-card-training/>. All MAF works in areas mapped for dieback have dieback status information for contractors, to

¹ Bradshaw, F.J., Collins, P.M. and McNamara, P.J. (1997). Forest mapping in the Southwest of Western Australia. Department of Conservation and Land Management, Perth.

ensure spread is limited. Mitigation works in significant environmental areas are additionally sent to DBCA for comment prior to commencing.

4.10 Historical Bushfire Occurrence

Human activities are the major cause of bushfire ignitions within the Shire of Denmark (table below), as is the case all over Western Australia. There were 75 bushfires recorded between 2020 and 2025; of these 22% were caused by burn-offs/Re-ignitions. The Shire has a permit system for all burn-offs in the restricted period and strongly encourages all burns at all times of year to be reported to EmergencyWA, through messaging at Bushfire Ready, BFAC, through the Firebreak and Property Management Notice and through the Shire's social media.

Table 4: The number of Bushfire incidents recorded in the Incident Reporting System within the Shire of Denmark. Source: OIS branch, DFES 2025

Year:	2020/21	2021/22	2022/23	2023/24	2024/25
No. of Bushfires of all sizes.	18	24	12	12	9
Unreported	5	7	4	3	6
Burn off fires	8	5	3	0	1
Suspicious/Deliberate	1	3	1	4	0
Campfires/bonfires/outdoor cooking	2	0	0	2	0
Vehicles (incl. Farming Equipment/Activities)	1	1	0	1	1
Other open flames or fire	0	2	1	0	1
Reignition of previous fire	0	3	1	0	0
Weather Conditions - Lightning	1	1	1	0	0
Weather Conditions (High winds, natural combustion, etc., Excludes Lightning)	0	1	0	0	0
Sleeping/Alcohol/Drugs/Physical-Mental impairment	0	1	0	0	0
Hot works (grinding, cutting, drilling etc..)	0	0	1	0	0
Cigarette	0	0	0	1	0
Power lines	0	0	0	1	0

Bay View Rise Bushfire

The Bay View Rise Bushfire occurred in early February 2022 near Shadforth in the Shire of Denmark, burning approximately 2,087 hectares, destroying four homes, and causing significant damage to property, fencing, and livestock. The fire escalated rapidly, reaching Level 3 incident status, and involved a large-scale emergency response with 816 personnel, 46 brigades, and 10 aircraft dropping 1.9 million litres of water. Over 200 residents were evacuated, with three evacuation centres activated. The incident highlighted challenges in communication, fatigue management, and community preparedness. Post-event evaluations and community debriefs informed key improvements to the Shire's Local Emergency Management Arrangements, with a strong focus on resilience, recovery planning, and inclusive community engagement.

5. Current Bushfire Controls

5.1 Current bushfire risk controls

Outlining current bushfire controls is essential to understanding the Shire's baseline level of preparedness and identifying gaps or areas for improvement. These controls—such as firebreak maintenance, fuel load reduction, community education, and emergency response protocols—form the foundation of local bushfire risk management. Documenting them ensures transparency, supports coordination across agencies and stakeholders, and helps evaluate the effectiveness of existing strategies. It also informs future planning by highlighting what is already working and where additional resources or adjustments may be needed.

The table below highlights several existing bushfire controls within the Shire area, the agency responsible for them and a description of the control.

Table 5: Current bushfire risk controls in the Shire of Denmark.

Control program	The agency or department responsible	Description
Firebreak and Property Management Notice	Shire of Denmark	Notice and enforcement from the <i>Bush Fires Act 1954</i> , Section 33, Fire Management Notices. Shire updates the notice annually in line with best practice and support from BFAC. Notice is sent by postal delivery as well as online, website, Facebook
Firebreak and Property Management compliance	Shire of Denmark	Funding for a Compliance Officer to check properties between November and April each year, with a strong fines policy for infringements
Book a Ranger program	Shire of Denmark - Rangers	Rangers and/or Compliance officers can visit properties to advise on aspects of the Fire management notice
Restricted Burning Times and Prohibited Burning	Shire of Denmark CEO, with BFAC and CESM	Dates for when burning (including camp and cooking fires) is acceptable within the Shire, enforced by fines. Subject to change based on seasonal weather.
Australian Fire Danger Rating System	Partnered by DFES and the Government of WA	Daily rating of fire risk levels See https://afdrs.com.au/
Australian Fire Danger Rating System Signage	Shire of Denmark, CESM	Signage at various major roads detailing the daily fire risk rating are currently being rolled out.
Bushfire Ready Program	DFES and Shire of Denmark – Communities	Community-led program encouraging bushfire planning and preparedness at the street and suburb level.
Bushfire Ready Weekend	Bushfire Ready with Shire support	A series of weekend activities in Denmark aims to engage the community in bushfire

Control program	The agency or department responsible	Description
		awareness ahead of the annual bushfire season.
Community Preparedness Advisor program	DFES – Albany office	Aims to support understanding of risk and addressing risk in the community, with engagement focused on highly vulnerable Community groups/services. May support additional funding for special needs in an emergency, e.g. Generators for medical equipment or wheeled beds/wheelchairs.
Disability Inclusive Emergency Management Program	DFES community preparedness advisor, Shire of Denmark Communities officer	EOI with funding from the University of Sydney, run in conjunction with the Community Preparedness Advisor program. Aims to train up NDIS and service personnel to help clients design bushfire/emergency plans.
Development approval	Shire of Denmark Planning	Management and monitoring of development advice and approval, including approval of BAL ratings, in bushfire-prone areas.
BFAC leadership and meetings	Shire of Denmark CESM	Leadership and connection of the volunteer bushfire brigades, including sharing of knowledge, resources and long-term plans
MAF program	DFES and Shire of Denmark	The program is funded through DFES and managed by the Shire of Denmark.
Mitigation Working Group	Shire of Denmark BRMC	Working group to discuss mitigation works and risk levels across Shire MAF eligible areas.
UCL (gazette townsite) mitigation program	DFES funded, CESM managed	Annual mitigation works for UCL areas within the gazetted townsite
Shire mitigation non MAF	Shire of Denmark CESM or BRMC	Annual budget funding to encompass mitigation works beyond the scope of MAF or other funding

6. Asset Identification and Risk Assessment

Assets at risk from bushfire in the Shire of Denmark are categorised into four key groups—human settlement, economic, environmental (climate), and cultural—and are assessed and recorded in the Bushfire Risk Management System (BRMS). This classification helps prioritise protection efforts and tailor mitigation strategies to the specific values at risk.

- **Human Settlement Assets** include residential areas, schools, aged care facilities, and critical infrastructure such as water treatment plants and communication towers. For example, densely populated areas like the Denmark townsite and Ocean Beach are prioritised for protection due to the concentration of people and structures.
- **Economic Assets** cover industries vital to the local economy, such as vineyards, dairy and beef farms, tourism accommodation, and transport routes. For instance, vineyards are sensitive to smoke taint, and hay production areas are vulnerable during harvesting periods due to ignition risks from machinery.
- **Environmental (Climate) Assets** refer to areas of ecological significance, including national parks, reserves, wetlands, and biodiversity corridors. These areas often contain high fuel loads and are sensitive to fire, requiring careful planning to balance ecological values with fire risk reduction.
- **Cultural Assets** include both Aboriginal and post-colonial heritage sites, such as registered Aboriginal sites along the Denmark and Hay Rivers, and historic buildings like the former Methodist Church. These sites are protected through consultation and careful planning to avoid disturbance during mitigation works.

By identifying and categorising these assets, the Shire can ensure that bushfire risk management efforts are targeted, effective, and aligned with community values and legal responsibilities. Each asset in the BRM System is assigned a bushfire risk rating between low and extreme based on the risk assessment methodology.

6.1 Local Government Asset Risk Profile

A summary of the risk ratings assigned for asset groupings in the Shire of Denmark is shown in Tables 6 and 7. These tables show the total assets in each risk category at the time the BRM Plan was endorsed. Each ‘asset’ may be a cluster of buildings and does not represent separate buildings or residences. These tables were 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 6: Local Government Asset Risk Ratings totals as per BRMS on 13 June 2025

Asset Category	Risk Rating – Number of Asset Counts					
		Low	Medium	High	Very High	Extreme
	Human Settlement	84	62	147	122	393
	Economic	12	18	18	33	36
	Environmental	0	1	2	64	10
	Cultural	6	5	7	4	11
	Total	102	86	174	223	450

Table 7: Local Government Asset Risk Ratings as a percentage as per BRMS on 13 June 2025

Asset Category	Risk Rating – Percentage of Assets					
		Low	Medium	High	Very High	Extreme
	Human Settlement	8%	6%	14%	12%	38%
	Economic	1%	2%	2%	3%	3%
	Environmental	0%	0%	0%	6%	1%
	Cultural	1%	0%	1%	0%	1%
	Totals	10%	8%	17%	22%	43%

Of the 1,035 assets listed in the Bushfire Risk Management System (BRMS) for the Shire of Denmark, 43% are rated as having an extreme bushfire risk. When combined with those rated as ‘very high’ risk, the total rises to 65% of all assets falling into the highest risk categories. This indicates that nearly two-thirds of identified assets are highly vulnerable to bushfire impacts, underscoring the urgent need for targeted mitigation strategies, prioritised treatment planning, and ongoing community engagement to reduce risk and enhance resilience.

6.2 Identifying and Assessing Cascading Risk

The purpose of identifying cascading risks in a Bushfire Risk Management Plan is to understand how a bushfire can trigger broader disruptions well beyond a bushfire’s immediate burn zone. Cascading risks following a bushfire, can affect the social fabric, local economy, essential services, and environmental health, often with long-term consequences for community recovery and resilience.

In the Shire of Denmark, cascading risks were identified through community consultation and refined using the NERAG ISO Standard Guidelines. Examples of cascading risk include:

- Loss of power or telecommunications, affecting emergency communication and access to information.
- Impact on short and long-term accommodation
- Disruption to transport routes, impacting evacuation, supply chains, and economic activity.
- Damage to water infrastructure, affecting firefighting capacity and community health.
- Impact on tourism, leading to reduced visitor numbers and financial strain on local businesses.
- Impacts on agriculture and viticulture
- Psychosocial stress, particularly in vulnerable populations, affecting long-term wellbeing and recovery.

Cascading risks were explored in workshops with Shire staff, LEMC members, and agencies such as DBCA, WA Health, WA Police and the Department of Communities. Participants reviewed cascading risk scenarios and contributed to risk statements and control strategies, which are detailed in Section 8.3, and Appendices 3 and 4

7. Risk Evaluation

7.1. Risk Acceptance Criteria

Determining acceptable levels of bushfire risk is not solely a technical exercise—it reflects community values, priorities, and lived experience. By involving the community in defining risk acceptance thresholds, the Shire of Denmark ensures that bushfire risk management aligns with what residents consider tolerable and appropriate for their local context. This participatory approach fosters transparency, strengthens trust, and empowers residents to take shared responsibility for bushfire resilience. It also ensures that risk decisions are informed by the unique characteristics of each area, including the strong emotional and cultural connection many residents have with the natural landscape.

The acceptable levels of bushfire risk for different asset categories have been determined through extensive community consultation. In March 2025, the Shire conducted a community-wide survey followed by a series of risk workshops. These workshops included participation from the Local Emergency Management Committee (LEMC), Shire Councillors and key agencies such as the Department of Fire and Emergency Services (DFES), Department of Biodiversity, Conservation and Attractions (DBCA), WA Health, and the Department of Communities. A full list of workshop attendees is provided in Appendix 4.

The Shire of Denmark recognises the deep connection residents have with the natural landscape, particularly in semi-rural areas such as Ocean Beach and Nornalup. In recognition of this, the Shire accepts higher bushfire risks in residential areas only where significant controls are in place to reduce vulnerability and susceptibility, and to improve emergency access.

The outcome of this consultation process is a set of risk acceptance thresholds that reflect community values and expectations. These thresholds are shown in Table 7.

Any bushfire risk assessed as exceeding these acceptable levels will be considered for treatment through appropriate mitigation strategies. Risks below the acceptable level do not require treatment during the life of this BRM Plan. They will be managed by routine bushfire risk controls and monitored to detect any increase in their risk rating.

Table 8: Acceptable Risk for the Shire of Denmark by Asset Category

Asset category	Acceptable risk levels	Comments
Human Settlement - Denmark town: central area	Medium	A medium level of risk is accepted due to the presence of vulnerable populations.
Human Settlement - All other residential, including rural residential	High	High and above high risk is accepted only where all efforts are made to reduce vulnerability through education and bushfire awareness, bushfire notice compliance is met, and there are multiple access ways. Additional controls for tourism are considered (Appendix 2).

Asset category	Acceptable risk levels	Comments
Economic Assets	Medium	A high risk may be accepted where there is low susceptibility of long-term or extended financial damage, and where compliance with the Firebreak and Property Management Notice has been met.
Environmental Assets	High	High risk is accepted due to the low susceptibility of these assets to long-term damage. Treatment focuses on maintaining ecological resilience and monitoring fire impacts.
Cultural assets	High	High or above risk is accepted for sites with low fire susceptibility. Treatment includes site-specific fire protection measures and cultural value preservation planning.

8. Risk Treatment

The purpose of risk treatment is to reduce the potential impact of bushfires 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.

The treatment strategy describes the overall approach to managing bushfire risk in the medium to long term in the Shire of Denmark. It is shaped by factors such as the distribution of risk across the landscape, the community's values and objectives, stakeholders' mitigation programs, and constraints on treatment options. The strategy helps guide the development of integrated annual treatment schedules.

Given that a large number of assets in the Shire are currently rated as being at very high or extreme bushfire risk, effective treatment requires more than agency-led mitigation—it depends on building a level of community self-help. Encouraging residents to take shared responsibility for preparedness, property maintenance, and local action is critical to reducing vulnerability and enhancing resilience. A well-informed and proactive community is better equipped to respond to bushfire threats and support long-term risk reduction efforts.

8.1 Treatment Strategy

The Shire of Denmark's approach to bushfire risk treatment is guided by a set of principles that reflect our commitment to community safety, environmental stewardship, and collaborative resilience

1. Integrated Risk Reduction

The Shire employs a multi-faceted approach to bushfire risk management, combining direct mitigation treatments, enforcement of personal asset protection, community education, and support for local preparedness initiatives. The Shire will continue to advocate for funding for the latest technologies, including rapid suppression and response technology.

2. Community Empowerment and Education

The Shire is committed to raising awareness and building capacity within the community through education, engagement, and support for grassroots programs such as Bushfire Ready.

3. Collaborative Knowledge Sharing

Effective bushfire management relies on strong partnerships and the sharing of expertise across agencies, including local brigades, DFES, DBCA, Water Corp., WA Health, and the Department of Communities.

4. Custodianship of the Natural Environment

The Shire recognises its responsibility to protect and preserve the natural environment for future generations, balancing ecological values with community safety.

5. Custodianship of Cultural Heritage

The Shire recognises Aboriginal people as the Traditional Owners of the land which they manage, and actively engages with Indigenous and heritage agencies including DPLH and local Indigenous Ranger groups.

6. **Protection of Community and Housing**

Housing is central to the social fabric of Denmark's vibrant and interconnected community. The Shire prioritises the protection of residential areas to prevent displacement and maintain community cohesion.

7. **Recognition of Local Risk Realities**

The Shire acknowledges that it is situated in a predominantly bushfire-prone landscape, with many residents living in areas of extreme risk. Local fire brigades and emergency planners have raised significant concerns about the challenges of protection and evacuation, which inform the Shire's strategic planning.

8. **Commitment to What Makes Denmark Special**

The Shire is dedicated to protecting both the lives and assets of its residents and the unique natural character that defines Denmark, ensuring that bushfire management reflects the values and identity of the community.

8.2 Bushfire Treatments

Within the Shire of Denmark, bushfire risk treatments are strongly scrutinised for environmental effects prior to commencing, including site visits, vegetation and vulnerable species registers (Data WA), and discussion with local experts including Shire employees, MWG members and DBCA, as appropriate.

Mechanical treatments

Treatments must also consider the long-term environmental effects of mitigation works, including the potential for clearing native vegetation and allowing weeds to propagate.

Where possible:

- fire breaks/slashing in native vegetation areas should be performed as to leave a low fuel native ground cover in-situ.
- Mulched material should be spread over the mulched ground as ground cover
- Limited use of tracked vehicles on sand dunes or easily eroded ground types.

The community of Denmark strongly values the environmental aesthetic, so areas of vegetation should be preserved where possible. Alternative treatments to vegetation eradication include removal of elevated fuels, mulching of understory and parkland clearing, limiting canopy connection and creation of bare earth paths (including vehicle or recreation tracks).

Residential properties typically contain homes, sheds, fences, and other infrastructure that are directly vulnerable to bushfire impacts. As a result, the fire mitigation requirements for residents—outlined in the Shire of Denmark's Firebreak and Fuel Management Notice—are designed to provide immediate protection to life and property. These requirements focus on:

- Creating clear firebreaks around buildings and boundaries.
- Reducing fuel loads near structures.
- Ensuring access for emergency services.

In contrast, local government-managed land often includes reserves, road verges, and natural areas where there are no buildings at risk. Treatments on these lands must balance bushfire risk reduction with long-term environmental sustainability, and must meet requirements of the Environmental Protection Act 1986. This includes preserving native vegetation, preventing erosion, and avoiding the spread of weeds. Therefore mitigation of Shire managed land is generally more ecologically sensitive and guided by more environmental legislation, then residential land mitigation which is primarily focused on asset protection.

The Role of Burning in Bushfire Risk Treatment

Prescribed burning is one of several tools used to manage bushfire risk in the Shire of Denmark, but it is not considered a first-line treatment. While it can be effective in reducing fuel loads and lowering the intensity of potential bushfires, its use is carefully weighed against a range of environmental and social factors. The Shire primarily uses low temperature (cool burns) which may have positive environmental benefits for re-seeding and re growth. However, there is also an inherent risk that a controlled burn may escape containment, especially under unpredictable weather conditions. We also acknowledge Greenhouse gas emissions from burning contribute to climate change and must be considered in the broader context of sustainability.

Community attitudes toward burning vary, and health impacts from smoke—particularly for vulnerable populations—are a significant concern. For these reasons, prescribed burns are only conducted in cool, stable environments and under strict operational controls to ensure safety and effectiveness. The Shire supports a balanced approach that integrates burning with other mitigation strategies, such as vegetation management, education, and community preparedness.

Community Awareness

Alternative strategies, including community education, are strongly supported within the Shire. The Shire supports the Bushfire Ready program and encourages preparedness on a localised street/ group/ housing estate level. High and above high bushfire risk is accepted in residential areas only where all efforts are made to reduce vulnerability, primarily through education and bushfire awareness, bushfire notice compliance is met, and there are multiple access ways. The creation of multiple access ways to all residential areas is an ongoing priority, with areas including Ocean Beach, Lapko Rd., and Weedon Hill having been recognised as having limited emergency access and a high priority for ongoing access creation.

Recording and Managing Treatments

Bushfire risk treatments on the Shire of Denmark managed lands are recorded in the BRMS software by the BRMC. Each treatment is developed by assessing the nearby asset risk assessments and developing suitable mitigation works in consultation with the Mitigation Working Group (MWG) and significant local stakeholders. The Shire of Denmark has a current risk schedule and funding for the next three years to 2028, which will be regularly updated throughout the life of the BRM Plan. Scope and instructions for conducting risk assessments and utilising BRMS are found in the documents tab, within the BRMS system.

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

behalf of an alternate land manager. Sharing of mitigation plans between agencies, including DMCA, Water Corp, Forestry companies and DFES, occurs through invited representatives at local MWG, BFAC and LEMC meetings.

8.3. Cascading Risk Treatment

Cascading risks are the risks to the community that occur after, or are triggered by, the original disaster; understanding these is essential for resilience and recovery planning. The Shire of Denmark identified cascading risks through the community feedback survey, and then a series of risk workshops with local emergency management (LEMC) and professional personnel.

The Shire identified the following cascading risks: changes to evacuation pathways, a lack of short-term and long-term accommodation, the need for family relocation, loss of community cohesion, and issues with medical and education agencies due to the loss of local personnel. A description of these cascading risks and major treatments is in the table below; full descriptions, including implementation registers, are in Appendix 3.

Table 9. Cascading risk table: (see Appendix 3 or details)

Identified Risks	Risk description	Treatments
Evacuation routes	Many residential areas in Denmark are one-way in and out. Residents are concerned that a fire may block access ways and severely limit the ability to evacuate a fire zone. Additional risks from traffic accidents, trees falling, and smoke on the road would compound this issue	Multiple access ways should be prioritised in BRMC planning. Ocean Beach Road should be upgraded to an additional shoulder/lane for emergency overtaking. Ocean Beach should be declared and signed as an “extreme risk area”
Short-term accommodation	Denmark experiences a large volume of tourists during summer and autumn, coinciding with the fire season. There are no additional (unbooked) short-stay accommodation or campsites available for residents evacuating. This also results in slower evacuation of vulnerable residents in yellow/orange warnings	Shire to consider opening additional camping areas if required. e.g. McLean Park. Residents encouraged to offer spare rooms in Bushfire plans. Social media encouragement for tourist accommodation to be used by displaced locals
Long-term accommodation	Currently, Denmark has zero houses advertised for rent, and none projected. Any loss of housing makes it very difficult to keep those residents in town.	Following an emergency Shire CEO can approve mobile homes/caravans on residential blocks for up to 2 years. Social media encouragement for tourist accommodation to be used by displaced locals

Identified Risks	Risk description	Treatments
Re-location	Denmark has a large intra-state migration population, with limited family support in town. Compounded with the lack of rentals, a large proportion of residents would need to relocate following house loss in a fire.	An online community forum for displaced locals. Residents are encouraged to 'adopt a displaced friend' to offer additional support if needed.
Community cohesion	Loss of residents due to initial housing loss, rental issues and lack of accommodation will affect the fabric of the society, resulting in social issues	Community meetings to include both directly and indirectly affected residents Community events to be a priority to bring everyone together Online community for displaced and non-mobile residents
Medical and education disruptions	Disruptions to medical and education services are recognised due to the loss of key staff affected by the initial fire risk, now relocated due to a lack of housing	As per long-term accommodation controls.

Cascading Risks – Bay View Rise 2022

The Bay View Rise Bushfire in February 2022 exposed a series of cascading risks that significantly challenged emergency response and community resilience in the Shire of Denmark. The fire, which rapidly escalated to a Level 3 incident, highlighted the vulnerability of communities located in bushfire-prone areas with limited evacuation routes. Communication breakdowns, particularly in areas with poor mobile reception, created delays in alerting residents and coordinating evacuations. The fire also disrupted essential services, including power and telecommunications, compounding the difficulty of managing the emergency. Health risks from smoke exposure, especially for vulnerable populations, were exacerbated by the prolonged nature of the event. The emotional and psychological toll on residents—many of whom were evacuated multiple times or lost homes—was profound. Additionally, the fire placed immense pressure on local volunteer brigades and emergency personnel, revealing the need for improved fatigue management and inter-agency coordination.

Several practical challenges emerged that required immediate attention. The use of fire retardant raised concerns about the contamination of clean water supplies for those with water tanks. Farmers faced urgent needs for stock feed and the replacement of fencing to secure livestock, displaced during the fire. There were also concerns about the potential tainting of grape crops, which could affect both quality and marketability. Additionally, managing injured stock and ensuring their welfare became a priority. These issues highlight the broad and interconnected impacts of bushfires on agricultural operations, animal welfare, and environmental health.

9. 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 Denmark's mitigation working group meets 1-2 times per year to monitor and review MAF treatments and discuss any feedback or concerns.

9.1. Monitoring and Review

Shire of Denmark continually monitors the BRM Plan and BRMS data to identify any need for change. Implementation and review of the BRM Plan will be monitored by the BRM Coordinator. Risk assessments for asset groups are updated as treatments are completed within the BRMS system, and comments are entered into the treatment section before the completed treatment is saved and finalised. At the end of each MAF funding round, all treatments are reviewed by the coordinator and then by the DFES MAF program team ahead of the acquittal.

Treatments of mitigation works beyond MAF are discussed and reviewed as necessary at regular BFAC, LEMC and MWG meetings.

The BRMP will be reviewed and updated every two years to ensure it continues to reflect the local context, assets at risk, level of risk and treatment priorities. Significant circumstances that may warrant an earlier review of the BRM Plan include:

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

8.2. Reporting, Privacy Issues and Release of Information

The Shire of Denmark is committed to maintaining transparency and accountability in its Bushfire Risk Management (BRM) activities. To retain endorsement from the Office of Bushfire Risk Management (OBRM), the Shire's Chief Executive Officer (CEO), or their delegate, will submit the outcomes of the biennial review of the BRM Plan to OBRM. Additionally, the Shire will contribute relevant data to OBRM's annual Fuel Management Activity Report, as requested.

Information recorded in the Bushfire Risk Management System (BRMS) includes sensitive details such as culturally and environmentally significant site locations, land ownership, and risk assessments. In consultation with the Denmark Shire Council, it has been determined that BRMS reports intended for public release must exclude any personal or sensitive information. Prior to the release of any data related to the BRM Plan or held within BRMS, the CEO must be consulted to ensure appropriate handling and confidentiality.

To support the implementation, monitoring, and review of bushfire risk treatments, the Shire will routinely provide tailored reports to key stakeholders. These reports will outline the specific assets and associated treatments for which each stakeholder—typically landowners—is responsible, fostering shared accountability and informed decision-making.

Appendix 1 – Communications Strategy

Introduction

This Communication Strategy accompanies the BRMP and documents the roles and responsibilities for communication, key stakeholders, and the Communication Plan for the implementation and review of the BRMP. Identified stakeholders and engagement strategies are listed in Appendix 2.

Communication Objectives

The communication objectives for the development, implementation and review of the BRMP are as follows:

- Key stakeholders are identified and engaged in a timely and effective manner
- Key stakeholders understand the purpose of the BRMP, and their role in the planning process involves collaboration and supplying information as requested.
- Key stakeholders engage in the review of the BRMP as per the schedule in place for the local government, and
- The community and other relevant stakeholders are kept informed and engage with the bushfire risk management planning process as requested, and they understand their responsibilities, including the ability to address bushfire risk on their own land.

Roles and Responsibilities

The Shire of Denmark is responsible for the development, implementation and review of the Communication Strategy, with input from key stakeholders as appropriate.

An overview of communication roles and responsibilities follows:

- CEO, Shire of Denmark, is responsible for requesting OBRM to endorse the BRM plan.
- CEO/Deputy CEO, Shire of Denmark, is responsible for external communication with the local government area
- Bushfire Risk Management Coordinator (BRMC) is responsible for identifying key stakeholders and ensuring relevant engagement, review and consultation of the BRMP.
- As approved by the CEO, the Bushfire Risk Management Coordinator (BRMC) is responsible for ensuring relevant information is available for the Shire's Communication and Engagement Officer to communicate with the community, including via letters, website, newspapers, flyers, and social media, as appropriate.
- Emergency management groups, including LEMC, BFAC and MWG, are responsible for inter-agency engagement and information transfer.

Appendix 2 – Stakeholders

The following table identifies key stakeholders in the bushfire risk management 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	Impact level	Engagement level
Who is the stakeholder? Consider government agencies, interest groups and service providers.	List the role or interest that makes them a stakeholder: identify the asset owner, landowner or manager, treatment manager or interested party.	Consider how the BRMP will impact each stakeholder; assign them a rating of High, Medium or Low.	What level of engagement is necessary for the stakeholder? Inform, consult, involve, collaborate or empower?
Shire of Denmark: Councillors Rangers CESM Fire Compliance Officer Planning department	Significant managers and interested parties, or those with a duty of care role.	High	Collaborate and involve: invited to the BRMP risk workshops and individual discussions on key points
Denmark Bushfire Ready group	Interested party with clear objectives	Medium	Consulted on scope and discussions and controls and engagement, empowered to inform and engage results with the community
DBCA, Warren Region	Asset owner	Medium	Informed of the BRM planning process, invited to the BRMP Risk workshop.
DFES, Great Southern	Manager of the BRMP program and Asset Owner	High	Consult, collaborate and involve at all levels.
Water Corporation	Asset owner	Medium	Involve and inform
Main Roads	Asset owner	Medium	Involve and inform
Forrest Products, Great Southern	Asset owner	Medium	Involve and inform
WA Country Health	Interested party and LEMC member	Medium	Involve, collaborate and inform. Contributed to Risk workshops
Western Power	Asset owner and LEMC contributor	Medium	Involve and inform
Telstra	Asset Owner	Low	Involve and inform
Department of Environmental Regulation	Interested party	Medium	Inform and collaborate, as needed, under the

Stakeholder	Role or Interest	Impact level	Engagement level
			<i>Environmental Protection Act 1986</i>
Bushfire Advisory Committee (BFAC)	Interested party	Medium	Consult, inform and collaborate.
Local Emergency Management Committee (LEMA)	Interested party	High	Involve, collaborate and inform. Contributed to Risk workshops
Mitigation Working Group (MWG)	Interested party	High	Consult, inform and collaborate.
Local Bushfire brigades	Interested party	Medium	Involve, collaborate and inform. Nominated members contributed to the Risk workshops
St John Ambulance, Denmark	Asset owner and LEMC contributor	Medium	Involve, collaborate and inform. Contributed to Risk workshops
Denmark Environment Centre	Interested party	Medium	Consult, inform and collaborate as a member of the MWG
Denmark Weed Action Group	Interested party	Medium	Consult, inform and collaborate as a member of the MWG
Willson Inlet Catchment Committee	Interested party	Medium	Consult, inform and collaborate, as needed.
Denmark Chamber of Commerce	Interested party	Low	Inform
Denmark Community Resource Centre (CRC)	Interested party	Low	Inform
Amaroo Village Aged Care Providers	Interested party	Medium	Inform. All residents were invited to meet with the BRMC to discuss community survey and bushfire risk.
Resident- general	Interested party	High	Inform and consult where appropriate. The survey was advertised and open to everyone for input into the BRMP

Appendix 3 – Cascading Risks

Trigger event: A Bushfire burns a number of residences and forces a large section of town to evacuate. The event takes place over multiple days.

Sequence of events	Risk criteria	Treatment	Stakeholders
Describe the subsequent impacts triggered by the initial Bushfire event.	Who or what will be affected, for how long and how severe will the impacts be?	What and where are the opportunities to intervene to stop the risk cascade or reduce the severity or longevity of impacts?	Who would need to be involved to implement the treatment? Identify treatment owners where possible.
Will impact long-term housing: Multiple families are displaced and seeking new housing, and extreme pressure is put on the rental market,	All families who lost their houses will be affected, as well as all community members currently renting. Extreme risk of people permanently relocating elsewhere	The CEO can authorise temporary accommodation on land sites for up to two years. Social encouragement to facilitate people residing on vacant land sites, or house share if possible Encouragement to convert short-term and holiday accommodation to long-term accommodation while families are rebuilding (up to 2 years)	CEO -Shire of Denmark. Local social networks (inc. Bushfire Ready), Shire Communications officer We need business owners to engage; could the Shire offer an incentive?
Will impact short-term housing: Resulting in short-term displacement due to evacuation or house damage	Limited (none) short-term accommodation in the bushfire season results in residents evacuating to Perth	Advertise the Disaster hotline number to ensure everyone receives payments Advertise local short-stay accommodation available, including private accommodation, through social networks	Communications officer- Shire of Denmark Local Community groups
Will impact LG: Local government has impacted the ability to maintain core services, as multiple employees have been directly affected by the bushfire. Additionally, many employees have worked overtime to support the control room, phone lines, and the works depot.	Short term- staff availabilities will be very low over the first few weeks, leading to a delay of some core business activities. Long-term planning and depot staff will have extra work in the recovery phase. May be increased staff turnover.	Staff assistance offered, including leave, counselling programs, and flexible work arrangements Work programs re-prioritised and deadlines extended. Depot-related work delays should be clearly advertised to the community.	Shire of Denmark Senior Management team
Will impact tourism	Tourists may not come following a bushfire due to disruptions in services	Short-term/tourist accommodation to be encouraged to house displaced local residents	Tourist groups, accommodation owners, Shire of Denmark
Will impact mental health of residents	Residents may feel ongoing anger, grief, and trauma due to evacuation, property loss, and health issues	Advertising of mental health services available. Inclusion of all residents in Community meetings Ensuring schools have mental health supports in place	Communications officer- Shire of Denmark Community Development Officer – Shire of Denmark Red Cross programs, Department of Communities
Will impact emergency service personnel impacting ability to maintain core services	EM staff will be working long hours during the bushfire event and assisting in the cleanup. High workloads resulting in burnout	EARLY- Enact plans early for other agencies to help Ensure EM staff are able to take leave (be covered by outside staff) Public education campaign to limit calls/strain on EM personnel. Shire of Denmark to field calls if necessary.	Volunteer fire brigades, St John Ambulance, Police, and SES Communications officer- Shire of Denmark Front desk staff- Shire of Denmark

Appendix 4 – Local Government-Wide Controls, Multi-Agency Treatment Work Plan

Local Government-Wide Controls

	Control	Action or Activity Description	Lead Agency	Other Stakeholder(s)	Notes and Comments
1	BRMP Risk Analysis	Maintain and refine BRM Plan	Shire of Denmark	Landowners, DFES, irrespective of tenure	Treatment identification and planning for all very high and extreme risk assets within the Shire.
2	Strategic Community Plan, Denmark 2033 & Corporate Plan 2017/18-2021/22	As per documented actions	Shire of Denmark	Community	As per section 3.1.1 of the Bushfire Risk Management Plan.
3	Shire of Denmark Bush Fire Notice and (<i>Bush Fires Act 1954</i>)	Review and publish the annual Firebreak and Property Management Notice Inspect Fire Access Tracks Inspect compliance with the Firebreak and Property Management Notice	Shire of Denmark	CBFCO, FCO, Captains and the public, Ranger	Published Annually. Inspect local properties. 'Fire Access Track' has the same meaning as 'Fire Break', in the <i>Bush Fires Act 1954</i> .
4	Shire Prohibited and Restricted burn times and issuing of permits. (<i>Bush Fires Act 1954</i>)	Restricted and Prohibited Burn Times set the requirement that 'a permit to set fire to the bush' must be obtained.	Shire of Denmark	CBFCO, Ranger, FCOs	Published Annually.
5	Harvest and Vehicle Movement Bans (<i>Bush Fires Act 1954 Section 38A, and or Section 24C</i>)	The Shire of Denmark will impose the ban when the Chief Bush Fire Control Officer and Community Emergency Services Manager are of the opinion that the use of engines, vehicles, plant or machinery during the prohibited burning times or the restricted burning times or both is likely to cause a fire or contribute to the spread of a bushfire	Shire of Denmark	CBFCO, FCO, Captains and the public	A Harvest and Vehicle Movement Ban may be imposed for any length of time but is generally imposed for the 'heat of the day' periods and may be extended or revoked by the local government should weather conditions change.
6	Local Emergency Management Arrangements	Emergency Management Plan (LEMA) Local Emergency Management Committee (LEMC)	Shire of Denmark	St John Ambulance, WAPOL DFES, SES, Dept of Communities Education Dept, CBFCO Great Southern DEMC OEM, Silver Chain, Dept Health Denmark Surf Lifesaving Club Sea Rescue Groups, DBCA, VFRS	Annual review of emergency plans and arrangements.
7	Local Planning Scheme No 5 (Including LPS1,2,3)	Requirement for new developments to complete a Fire Management Plan endorsed through the Dept of Fire and Emergency Services	Shire of Denmark	DFES	Where a Fire Management Plan has been endorsed by DFES and the Shire, the affected landowners will be responsible for the ongoing implementation of the "landowners' responsibilities" as specified in that Fire Management Plan.
8	Total Fire Bans	Restriction of activities that may cause or contribute to the spread of a bushfire	Department of Fire and Emergency Services	LG, CBFCO	A Total Fire Ban (TFB) is declared because of extreme weather conditions or when widespread fires are stretching firefighting resources. A TFB is declared by DFES following consultation with the LG.
9	State Planning Policy 3.7	Planning in Bushfire Prone Areas	Department of Planning	WA Planning Commission LG	Land developers are required to implement a Fire Management Plan to ensure risk is managed and other controls are implemented and monitored.
11	Bushfire Ready weekend	Public preparedness and education campaign	Bushfire Ready Community Group,	DFES, Shire of Denmark, Fire Brigades	During Bushfire Ready Weekend, Bushfire Ready and brigades hold a number of events to help you prepare your home and family ahead of the bushfire season. These events include workshops, demonstrations, fire truck inspections, games and a sundowner, where the community can speak to volunteer firefighters and Bushfire Ready groups about how to prepare for bushfires.

Multi-Agency Controls

	Control	Action or Activity Description	Lead Agency	Other Stakeholder(s)	Notes and Comments
1.	UCL / UMR Land Management	Preparedness, mitigation work conducted on lands owned by DoL and managed by DFES under an MOU	Shire CESM with Department of Fire and Emergency Services (DFES) Albany Regional	LG, P&W, Local Brigades	Shire CESM manages funding and works. Annual funding is allocated to UCL/UMR land within the gazetted boundary, with priorities identified in consultation with stakeholders.
2.	Water Corporation Bushfire Risk Management Plan	Great Southern Region Annual Works Plan. Water Corp assets are managed/maintained at the regional level. Each asset has a management plan referred to as an SAP. * Water Corp has an agreement with DPAW for undertaking mitigation and land management activities on their estate. Works include fuel load management on water reserves	Water Corporation	DFES, LG, DPAW	Treatments and risk assessments are available through the Water Corp BRM department. Some high-risk areas have been identified in the Shire to date. *The SAPs only address very basic maintenance (inc. Firebreaks are managed as per the Firebreak and Property Management Notice, but fuel load management is not. However, any treatments from BRMS would be processed through SAP to raise a works order.
3.	Western Power - annual asset inspection and vegetation management program	Western Power Bushfire Plan	Western Power	DFES, LG, DPAW	Annual vegetation management and asset inspections are completed to ensure risk is managed. Full asset inspections are completed every 4 years.
4.	Department of Biodiversity, Conservation and Attractions	DBCA have a 1 and 3-year burn options program that is published on their website.	Department of Biodiversity, Conservation and Attractions	LG, DFES, Local Brigades, the public	The plans can be accessed via their website, by sharing shape files (GIS) and are communicated at Local BFAC, ROAC and other various meetings. https://www.dbca.wa.gov.au/management/fire/prescribed-burning/burn-options-program
5.	Dept of Education Memorandum of Understanding	Coordination of bushfire risk management activities	Department of Fire and Emergency Services Department of Education	Denmark District High School Denmark Agricultural College	Denmark Senior High School and the agricultural college are listed on the State Bushfire Zone Register and have been assessed as 'high' risk. If hazards are identified prior to the inspection dates, these can be raised with the Department of Education Bushfire Risk Management Team for early attention.
6.	Denmark Senior High School, <i>Standalone Bushfire Plan 24-25</i>	A plan designed to assist staff in preparing for a total fire ban, catastrophic fire danger rating, or a bushfire.	Department of Education	DFES, LG. The plan was developed in conjunction with the Emergency and Critical Incident Management Policy and the Principal's Guide to Bushfire. Input from local emergency management agencies.	Detailed plan found: https://denmarkshs.wa.edu.au/about-dshs/school-policies-plans/ Evacuation- Move to the WA College of Agriculture, if suitable Shelter in place- Gymnasium is a safe on-site location.
7.	Denmark Primary School, <i>Standalone Bushfire Plan 24-25</i>	A plan designed to assist staff in preparing for a total fire ban, catastrophic fire danger rating, or a bushfire	Department of Education	DFES, LG. The plan was developed in conjunction with the Emergency and Critical Incident Management Policy and the Principal's Guide to Bushfire. Input from local emergency management agencies.	Detailed plan found: www.dps.wa.edu.au/uploads Evacuation- 1. Denmark Recreation Centre, or 2. Denmark Civic Centre Safer Building location- Pam Wells Assembly Hall
8.	Golden Hill Steiner School	Bushfire Plan	Golden Hill Steiner School		Detailed plan found: https://goldenhill.wa.edu.au/bushfire-procedure School to be closed if there is an FDI of 75+

	Control	Action or Activity Description	Lead Agency	Other Stakeholder(s)	Notes and Comments
					In the event of an evacuation, the school will use chartered buses to transport students to the Denmark Recreation Centre, if suitable. Parents to collect from there. Shelter in place- Shelter in place at the GHSS Admin building, fitted with roof sprinklers and water
9.	Kordabup Nature School, Bushfire plan	Bushfire plan designed in collaboration with the Shire (Shire buildings)		LG (Shire-owned land)	Pre-emptive evacuation is crucial because there are no suitable buildings on-site for shelter. Evacuation- by private vehicles to the Denmark Recreation Centre, for parents to collect Place of last resort- identified as the new eastern classroom adjacent to the school entrance on Inlet Drive.
10.	MRWA Bridge assessment & maintenance works plan	As per the MRWA Structures Inspection and Information Management Policy (2013) Ensure that all bridges, gantries, culverts and walls on the road network are kept in a safe condition with the most efficient use of resources.	Main Roads	LG	Bridges and culverts are critical assets in the road network and represent a major investment of community resources. Because of their strategic function, any failure or load capacity reduction may limit or severely restrict traffic over a large part of the road network, with consequent inconvenience and economic loss. Walls and gantries are minor structures that can also have an impact on the road network. It is therefore imperative that these assets are properly managed to ensure they are maintained in a safe and serviceable condition.

Appendix 5 – Additional Controls identified in the BRM planning process for follow-up

Control/ Treatment		Description	Level of impact of outcomes	Actions
Name of control/treatment	Who is it for, and how does it work		a rating of High, Medium or Low.	Who is tasked with follow- up
Funding for the evacuation needs of vulnerable people	e.g. Generators for Medical devices, wheeled beds/chairs		High	Mel Haymont – DFES Community Resource Officer and DIEM program
Safer places/ Places of last resort policy for extremely high-risk accepted areas	Safer places/Bushfire last resorts policies have been designed in other states, e.g. SA, to provide a central gathering point if your emergency plan has failed and all other options aren't available. Risk workshops identified the need in the Ocean Beach area- if the access route fails		High	BRMC- Shire of Denmark, to follow up with DFES
Signage for “extreme fire risk areas”	Extra signage for residential areas that include extreme fire risk. Signage to state “You are now entering an extreme fire risk area”. To be placed on the access to Ocean Beach Road areas, as well as other residential communities with a single access point, e.g., Lapko Road.		High	BRMC- to follow up with DFES, and Shire planning
Annual scenarios for Bushfire Plans	Each year, a scenario is given to the general public to check against their bushfire plans.		Medium	The scenario should be released at the Bushfire Ready weekend, with Shire staff (BRMC) available to assist. Reviewed after the weekend for feedback. Consider including a scenario with annual rate notices.
Incentives for short-term accommodation transferring to long-term accommodation after an emergency	Possible financial incentives offered to short stay accommodation that accommodates local residents long-term following an emergency		Medium	Shire of Denmark