

APPENDICES

LOCAL EMERGENCY MANAGEMENT COMMITTEE MEETING

To Be Held

Wednesday, 9 November 2022 Commencing at 10.00am

At

Shire of Dardanup Administration Centre Eaton 1 Council Drive - EATON

> This document is available in alternative formats such as: ~ Large Print ~ Electronic Format [disk or emailed] Upon request.



LOCAL BUSHFIRE RESPONSE SUPPORT PLAN Local Emergency Management Arrangements

Adopted at the OCM held – ### [Resolution ###-##]



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Forward

The Shire of Dardanup is one of the fastest growing local governments in Australia. The Shire of Dardanup population for 2021 is 14,686, and is forecast to grow to 24,097 by 2041. The Shire forms part of the Greater Bunbury Region and is located in close proximity to Perth (less than a 2 hour drive) and the popular tourist destinations along the south west coast.

As a Shire with a rural history, located on a major river and close to the coast, the Shire of Dardanup has many attributes that make it an attractive place to live, work and invest providing all the essentials of life: residential, commercial, farming, industrial, rural lifestyle, waterways, State forests and recreation.

The geography and vegetation within the Shire provides a range of attractive landscapes with expansive views and numerous valleys that follow the major watercourses. It is a regionally significant landscape that has economic significance, particularly for the tourist industry and for people seeking a rural lifestyle environment. A number of tourist attractions have been established including Gnomesville, wineries, breweries, farm stays and the like.

A major fire consideration for the Shire of Dardanup Bushfire Response is the abundance of Coastal Wattle which is a recovery plant species and is prolific throughout the regions that were previously cleared. It creates highly volatile fire behaviour when impacted by severe fire.

SHIRE OF DARDANUP PROFILE

Zones, Reservations and Special Control Areas

The GBRS divides land in the region into zones, reservations and special control areas that are shown on the scheme map. Zones and reservations in the GBRS are broad categories. They are not precisely defined or limited. The following descriptions are a guide.

Zones

Urban: to provide for residential development and associated local employment, recreation and open space, shopping, schools and other community facilities.

Urban deferred: land suitable for future urban development. Various planning, servicing and environmental requirements need to be addressed before urban development can occur.

Regional centre: the Bunbury central business district where commercial, civic, cultural, residential, service and administration serving the region are located.

Industrial: this area provides for manufacturing industry, the storage and distribution of goods and associated uses.

Rural: for the sustainable use of land for agricultural purposes, to assist in the conservation and the wise use of natural resources including water, flora, fauna and minerals. These areas can also provide a distinctive rural landscape unique to the region and accommodate carefully planned rural living developments.

Reservations

Regional open space: to protect the natural environment, provide recreational opportunities and safeguard important landscapes to be enjoyed by the public.

Railway: to provide for the passage of trains, the marshalling, maintenance and storage of rolling stock, and the transport of the public and freight by rail.

State forests: to recognise state forests as an important part of the region.

Waterways: to recognise permanently inundated inland and coastal lands below the high water mark, and existing and proposed water canals.

Port installations: to provide for the current and future expansion needs of the Port of Bunbury.

Primary regional roads: to provide a regional road network to accommodate current and future transport needs on roads declared under the Main Roads Act 1930.

Other regional roads: to provide a regional road network to accommodate current and future transport needs on roads for which the planning responsibilities are shared between the WAPC and local government.

Public purposes: to provide for public purpose, such as airports, hospital, schools and public utilities.

Special control areas

Special control areas: to respond to issues such as the protection of public drinking water. Special scheme provisions apply to land within these areas. The GBRS has:

- SCA No 1 Water Catchments
- SCA No 2 Kemerton Industrial zone buffer area
- SCA No 3 Glen Iris service corridor buffer area
- SCA No 4 Wastewater Treatment Plant Buffer area

Region scheme maps at various scales are available as downloadable pdf files here

Population Growth and Development

Conservative estimates based on Census figures for the Shire of Dardanup suggest an annual growth rate of approximately 2%.

Areas of the Shire showing 2021 Census population figures by area are listed below for settlement population distribution:

Settlement	Population
Burekup	788
Crooked Brook	272
Dardanup	588
Dardanup West	669
Eaton	8,669
Ferguson	233
Henty	142
Millbridge	2,736
Paradise	141
Picton East	141
Waterloo	144
Wellington Forest	12
Wellington Mill	151
Total	14,686

PART 1: ADMINISTRATION

1.1 Endorsement of Local Bushfire Response Support Plan

The Local Bushfire Response Support Plan (LBFSP) has been developed in accordance with Section 41 of the Emergency Management Act 2005 (EM Act) and State Hazard Plan – Fire s 3.2.1 and forms part of the Local Emergency Management Arrangements for the Shire of Dardanup and as such should not be read in isolation.

The development, implementation and revision of this plan is the responsibility of the Shire of Dardanup in consultation with BFAC, LEMC and key stakeholders in accordance to the EM Act.

The LBFSP was supported by the Shire of Dardanup Bush Fire Advisory Committee (BFAC), Local Emergency Management Committee (LEMC) and endorsed by Council.

	Date:
Elected Member	
Shire of Dardanup	
Chair Bush Fire Advisory Committee	
	Date:
Shire President	
Shire of Dardanup	
Chair Local Emergency Management Committee	
	Date:

Chief Executive Officer Shire of Dardanup

Disclaimer: This Plan has been produced by the Shire of Dardanup in good faith and is derived from sources believed to be reliable and accurate at the time of publication. Nevertheless, the reliability and accuracy of the information cannot be guaranteed and the Shire of Dardanup expressly disclaims liability for any act or omission done or not done in reliance on the information and for any consequences, whether direct or indirect arising from such omission.

1.2 Distribution List

Shire of Dardanup
Chief Executive Officer
Deputy Chief Executive Officer
Director Infrastructure
Director Sustainable Development
Manager Development Services
Coordinator Emergency and Ranger Services
Senior Ranger
Emergency Management Officer
Communications Officer - Media
Committees
District Emergency Management Committee
Regional Operations Advisory Committee
Local Emergency Management Committee
Bush Fire Advisory Committee
Volunteer Bushfire Brigades (Fire Control Officers and Captains)
Chief Bush Fire Control Officer
Deputy Chief Bush Fire Control Officer - North
Deputy Chief Bush Fire Control Officer - South
Burekup
Dardanup Central
Dardanup West
Ferguson
Upper Ferguson
Joshua Crooked Brook
Waterloo
Wellington Mills

1.3 Document Availability

A restricted copy of this plan is available free of charge and can be found at:

Hardcopy	Online
Shire of Dardanup Administration Offices	Shire of Dardanup website
1 Council Drive, Eaton	www.dardanup.wa.gov.au
2 Little Street, Dardanup	
(during normal business hours)	

1.4 Amendment Record

Suggestions and comments from the community and stakeholders can help improve the Plan.

Feedback can include:

- What you do and don't like about the plan;
- Unclear or incorrect expression;
- Out of date information or practices;
- Inadequacies;
- Errors, omissions or suggested improvements.

To forward feedback, copy the relevant section, mark the proposed changes and forward it to:

Chief Executive Officer Shire of Dardanup PO Box 7016 Eaton WA 6232

Or; alternatively email to: records@dardanup.wa.gov.au

Any suggestions and/or comments will be referred to the responsible officer for consideration.

Amendments promulgated are to be certified in the following table when entered.

A	Amendment Date	Details	Amended by (Initials)
1	November 2013	Adopted by Council	
2	October 2014	Review	SoD/DFES
3	September 2020	Full Review and re-write	SoD
4	February 2021	Review	SoD/DFES
5	October 2022	Review	SoD/DFES

PART 2: INTRODUCTION

2.1 Aim and Objectives

The aim of the Local Bushfire Response Support Plan is to prescribe the management and coordination arrangements, responsibilities and procedures for the Volunteer Bush Fire Brigades (VBFB) under the control of the Shire of Dardanup (SoD) and related emergency management agencies involved in bushfire Prevention, Preparedness, Response and Recovery.

The objectives of this plan are:

- To promote a safer, sustainable community;
- To foster a sound working relationship between all parties and agencies contributing towards the effectiveness of this plan;
- To provide a bushfire management plan that is consistent with the overall State, agency and SoD objectives for fire suppression, coordination, control and command in the local government area;
- To identify key infrastructure and elements at risk to bushfire in the community;
- To provide a coordinated and effective communications strategy; and
- To provide procedures for the coordination of support functions and transition to recovery in the event of a bush fire impacting the Shire.

2.2 Scope

This plan covers all lands within the boundaries of the SoD located outside the Gazetted Fire District of Eaton-Australind as prescribed by the Fire Brigades Act 1942.

2.3 Hazard Definition

A bushfire is an unplanned or uncontrolled fire in the bush. Bush is defined in section 7 of the Bush Fires Act 1954.

2.4 Related Documents

To enable integrated and coordinated delivery of emergency management within the SoD, emergency management arrangements and support plans are to be read in conjunction with State Emergency Management Policies, State Emergency Management Plans and other relevant documents that impact on fire management processes such as but not limited to:

- Bush Fires Act 1954
- Fire Brigades Act 1942
- Conservation and Land Management Act 1984
- Fire and Emergency Services Act 1998
- Emergency Management Act 2005
- Emergency Management Regulations 2011

- Occupational Health and Safety Act 1984
- Biodiversity Conservation Act 2016
- Local Government Act 1995
- State EM Policy
- State Hazard Plan Fire
- Shire of Dardanup Fire Control Officers Directory
- Shire of Dardanup Local Emergency Management Arrangements
- Shire of Dardanup Local Emergency Risk Management Plan
- Shire of Dardanup Local Recovery Support Plan
- Shire of Dardanup Bushfire Risk Management Plan
- Shire of Dardanup Bush Fire Brigade Local Law
- Traffic Management During Emergencies Guideline

2.5 Authority to Plan

Local Government and DFES have the responsibility under the State Hazard Plan – Fire Section 3.2.1 to develop Brigade Area Response Plans for its district. Within this document, the SoD is identified as the Combat Agency for Bushfire in local government districts and has the responsibility to plan for the Bushfire hazard response outside the Gazetted fire district of Eaton-Australind and Department of Biodiversity Conservation & Attractions (DBCA) land.

2.6 Plan Responsibilities

The development, implementation and review of this plan is the responsibility of SoD in consultation with Department of Fire & Emergency Services (DFES), DBCA and the Local Emergency Management Committee (LEMC).

2.7 Exercise and Review Periods

2.7.1 Exercising

This plan will be subject to a biannual emergency exercise in line with the Western Australia Managing Exercises Guideline developed by the State Emergency Management Committee.

2.7.2 Review

This plan is to be reviewed annually and presented at the October Bush Fire Advisory Committee (BFAC) meeting, November Local Emergency Management Committee (LEMC) meeting and Council for endorsement. In addition, this plan will be reviewed on request by the CBFCO post any major incident impacting the Shire based on the recommendations of a Debrief or Post Incident Analysis (PIA).

2.8 Organisational Roles and Responsibilities

The SoD are a prescribed Combat Agency for the emergency management activity of fire suppression. They are also required to assist the Hazard Management Agency (HMA) by providing advice and resources to manage the emergency.

In accordance with the Emergency Management Act 2005, the SoD lead, manage and coordinate community recovery at a local-level and undertake these responsibilities in close cooperation with or directly supported by State Government Departments and supporting agencies.

2.8.1 Prevention

- Identify the sources of risk that may impact upon the district of the local government using the emergency risk-management process;
- Participate in the States Bushfire Mitigation Activity program to source funding for identified bushfire risks;
- The SoD will liaise with any relevant agencies that have responsibility for land management for the mitigation of bushfire on land under their control; and
- The SoD will issue and observe harvest and vehicle movement bans based on inclement weather patterns, typically a Fire Danger Index of 35 and above or these bans may be based on response capabilities (see 3.2.2).

2.8.2 Preparedness

- Administer legislative requirements under the Bush Fires Act and Regulations 1954 relating to the management of bushfire preparedness and response including: issuing fire break notices; fuel load management; issuing permits to burn the bush; declaration and review of restricted and prohibited burning times;.
- Administer and support the LEMC;
- Develop, maintain, review and test the Local Emergency Management Arrangements and support plans.
- Identify buildings owned and operated by the local government suitable for the purpose of community evacuation during an emergency event; and
- The SoD in conjunction with DFES promote community preparedness through community engagement and awareness programs.

2.8.3 Response

- As a Combat Agency for fire, carry out activities of fire suppression on lands vested in the local government.
- Provide assistance and support to the HMA, combat agencies and support organisations during the response phase of an emergency.
- Actively participate in ISG meetings and provide advice to the HMA and support organisations relating to the LEMA.

2.8.4 Recovery

- Accept and approve an Impact Statement for the emergency from the Controlling Agency, in conjunction with the State Recovery Coordinator;
- Nominate a local recovery coordinator, with more than one person appointed and trained;
- Lead and manage the community recovery process through the Local Recovery Coordination Group in concert with other agencies identified in the local recovery plan; and
- Develop an operational recovery plan, in conjunction with the Local Recovery Coordination Group.

It should be noted that all landowners have a statutory and common law obligations to prepare for, prevent and manage bushfires on their land.

PART 3: PREVENTION AND MITIGATION

3.1 Responsibility for Prevention and Mitigation

The Bush Fires Act 1954 is the predominate legislation to provide for the prevention and mitigation of bushfires in Western Australia. The FESA Act 1998, the Fire Brigades Act 1942, the Emergency Services Levy Act 2002, the Conservation and Land Management Act 1984, and the Emergency Management Act 2005 also contain relevant provisions to the administration of the Local Bushfire Response Support Plan and administration of Volunteer Bush Fire Brigades.

The SoD will adopt a risk management approach underpinned by ISO31000:2018 Risk Management Principles and Guidelines. The Local Emergency Risk Management Plan and Local Emergency Management Arrangements are a result of this process that determines the need for bushfire response planning.

A Bush Fire Advisory Committee (BFAC) is established under s67 of the Bush Fires Act 1954 as an advisory committee to Council on bushfire matters. In addition, the SoD participates in a Regional Operations Advisory Committee (ROAC) established to discuss operational matters at a regional level.

In accordance with the Emergency Management Act 2005, the SoD has established a LEMC and may participate in a District Emergency Management Committee (DEMC).

Bushfire prone areas have been identified by the Fire and Emergency Services Commissioner as being subject, or likely to be subject, to bushfire attack. A bushfire prone area is identified by the presence of and proximity to bush fire prone vegetation and includes both the area containing the bush fire prone vegetation and a 100 metre buffer zone immediately surrounding it. More information, including the detail of how bush fire prone vegetation is identified, is available in the <u>Bushfire Prone Areas</u> on the DFES website.

3.2 Prevention Strategies

On a risk management approach, the SoD takes the following actions:

- Requires the occupier of land to plough or clear fire break in accordance with the annual Fire Prevention Order in accordance with the Bush Fires Act 1954;
- Participates in the States Bushfire Mitigation Activity program;
- Integrated hazard reduction programs for fuel removal by manual and prescribed burning methods;
- In partnership with DFES conducts regular public education and awareness campaigns through direct mail, media campaigns, signage and enforcement; and
- In partnership with the Western Australian Police Force and local crime prevention committees' targets prevention of arson.

PART 4: PREPAREDNESS

4.1 Responsibility for Preparedness

The SoD is responsible for the following preparedness activities for land that falls under SoD responsibility.

- Pre-Incident planning to address response arrangements including;
 - Suitable access for suppression resources, through enforcement of the annual Fire Prevention Order.
 - \circ Communications, incident notification and dispatch through the communications plan (Appendix E).
 - $\,\circ\,$ Identify Emergency Coordination Centre.
- Training of Bush Fire Brigade volunteers and support personnel will be conducted in partnership with DFES and accordance with the firefighting training pathways.
- SoD support and promotion of community engagement programs such as Bush Fire Ready Action Groups, local media and emergency warning and information systems including public access to a local SMS alert system.

4.2 Preparedness Planning

This plan forms the district level bush fire response plan for the SoD local government area. In addition, all volunteer bush fire brigades are encouraged to develop localised response plans for their district with the support of the Local Government.

4.2.1 Fire Weather Forecasting

The CBFCO routinely monitors weather conditions and forecast Fire Danger Rating (FDR) that is calculated on the consideration of temperature, wind speed, relative humidity and curing. During significant events, the SoD with the assistance from DFES, can obtain specific area 'Incident Weather Forecasts' from the Bureau of Meteorology (BoM) to assist in incident management.

4.2.2 Harvest and Vehicle Movement Bans

Harvest and Vehicle Movement Bans (HVMB) are issued under the Bush Fires Regulations 1954 Section 24c when a Bush Fire Control Officers is satisfied that the use of any engine, vehicle, plant, equipment or machinery in the area during the period to be specified for the ban would be likely to cause a bush fire or contribute to the spread of a bush fire.

When the Fire Behaviour Index is at or exceeds 40 the Bush Fire Control Officer for the SoD must impose a HVMB. The Ban may be imposed for any length of time and is often imposed for the 'heat of the day' periods and may be extended or revoked at any time should weather conditions change.

A HVMB are issued under the Bush Fires Regulations 1954 Section 38A when a Bush Fire Control Officers is of the opinion that the use or operation of any engines, vehicles, plant or machinery during the prohibited burning times

or restricted burning times, or both, is likely to cause a bush fire, or would be conducive to the spread of a bush fire.

The SoD will communicate HVMB on ABC local radio and through the SoD Communications Officer - Media. The Public may also contact the SoD at any time during normal business hours to ascertain if a HVMB has been issued.

4.2.3 Resources and Personnel

The SoD, through the Emergency Services Levy, provides and maintains firefighting appliances and equipment for Bush Fire Brigades. The SoD is also responsible for the attraction, administration, support, retention and training of volunteers for bush fire brigades.

During a major bushfire incident, the SoD may call on members of the LEMC committee in an operational capacity to form a multiagency incident management team or provide operational support.

4.2.4 Facilities and Services for Incident Management and Support

The SoD has identified various locations as the primary Emergency Coordination Centre for incident management and support if necessary.

4.2.5 Critical Infrastructure

The Shire of Dardanup has several industrial areas and associated infrastructure that have potential risks associated with them. A <u>FES-ERG</u> is a fire and emergency services emergency response guide (formerly special risk plan). It is designed to provide essential information to the Department of Fire and Emergency Services (DFES) for use in an emergency at larger dangerous goods sites.

It includes site information on:

- the operator
- layout
- construction of any structures
- the dangerous goods present
- equipment and resources to detect or deal with a fire or other dangerous situation.

The guide is also used as an inspection tool by local DFES fire stations and regional offices for risk management purposes. A FES-ERG is required by dangerous goods sites (except petrol stations and mine sites) that store or handle more than ten times the manifest quantity of dangerous goods. Relevant information will be shared from the communications centre at the time of the '000' call.

4.2.6 Special Needs and at-Risk Groups

Special needs and at-Risk Groups will be identified in the Local Emergency Management Arrangements including contact details and any special considerations regarding these facilities.

4.2.7 Community Education

Each year the SoD will conduct community education to targeted audiences. This may include:

- Annual Fire Prevention Order awareness and compliance programs;
- DFES Community Preparedness Information;
- Bush Fire Brigade attendance at community events;
- Community Bushfire Ready program (DFES).

4.3 Evacuation Arrangements

The need and planning for evacuation of residents impacted by bushfires will be the responsibility of the Incident Controller in consultation with the Western Australia Police. The SoD has identified buildings suitable for use as welfare centres and information regarding these can be found in the SoD Local Emergency Management Arrangements and Support Plans. The Department of Communities (DoC) is the agency responsible for assisting the community under evacuation and any servicing requirements of the established welfare centres.

PART 5: RESPONSE

5.1 Response

SoD is responsible for developing and implementing rapid, effective and complimentary response for its area of responsibility as outlined in Item 1.8 of this plan.

SoD Bush Fire Brigade response arrangements are managed at the local level by the CBFCO & DCBFCOs and a network of Captains, and FCO's.

5.2 Notification

All fires reported by the public will be to the 000 Emergency number.

Any request for response by SoD Volunteer Bush Fire Brigades should come via DFES Communications Centre (ComCen). ComCen will in turn contact the CBFCO, who has primary responsibility for activating Bush Fire Brigades, for information and for activating Brigades.

In the event that an incident is reported by anyone other than DFES ComCen, the details of the call are to be communicated to DFES ComCen immediately.

5.2.1 Public Information and Media Management

During an emergency, the following procedures for the release of public information must be followed by EMAs, Controlling Agencies and public authorities:

- The Incident Controller (IC) is responsible for Media release and Public Information and warnings as outlined in the SoD Local Emergency Management & Recovery Arrangements;
- EMAs may continue to release information relating to their business as usual activities, such as delays in services.
- If approached by the media, EMAs, and public authorities should confirm they are assisting the IC and direct enquiries to the IC.
- EMAs involved in response activities must only release information in relation to their areas of expertise. This information must first go to the IC, who may include it in their public information, before individual agencies and organisations release it through their own channels.
- All agencies must seek approval for the release of their public information according to their own internal processes and procedures. Matters not falling within their direct responsibility should be referred to the appropriate agency/organisation for consideration.
- The SoD employs a Communications Officer Media that could assist with the above responsibilities.

Any local government prevention preparedness media campaigns are conducted in consultation with the SoD Communications Officer - Media.

5.3 Levels of Response

The SoD will adopt an incident level structure as detailed in State Hazard Plan – Fire Section 4.9 which details the levels of response. These are broadly defined as outlined below:

INCIDENT LEVEL DESCRIPTORS - Note: All fire incidents are regarded as Level 1 unless declared otherwise.

LEVEL 1	A Level 1 fire incident is characterised by being able to be controlled through local or initial response resources within a few hours of notification. Being relatively minor, all functions of incident management are generally undertaken by the first arriving crew/s.
LEVEL 2	A Level 2 fire incidents are more complex either in size, duration, resources, risk or community impact. They usually require delegation of a number of incident management functions and may require interagency response.
LEVEL 3	A Level 3 fire incidents are protracted, large and resource intensive. They may affect community assets and/or critical infrastructure and attract significant community, media and political interest. These incidents will usually involve delegation of all the Incident Management functions.

5.3.1 Appointment of Incident Controller

All fires requiring suppression will have an Incident Controller (IC). The CBFCO or delegated officer of the SoD shall be the initial IC of all fires requiring a coordinated response, where transfer of control has not taken place. The appointment will be immediately communicated to the relevant combat and support personnel involved.

The IC is responsible for the overall control of the incident within a defined incident area. The IC has the responsibility for the safety and welfare of all people and resources during the management of the incident. This task may be delegated to a Safety Officer to oversee the occupational health and safety considerations.

5.3.2 Higher Level Assistance

Under section 13 of the Bush Fires Act 1954 higher level assistance may be sought for DFES to assume control of a fire(s). The FES Commissioner may authorise a Bush Fire Liaison Officer (BFLO) or other person to take control of all operations in relation to that fire if a bushfire is burning in the district of the SoD on land other than conservation land, or on conservation lands;

- at the request of the SoD;
- if, because of the nature or extent of the bushfire, the FES Commissioner considers that it is appropriate to do so;
- In making such a decision, he may consider if:
 - A bushfire has assumed or is likely to assume such proportions as to be incapable of control or suppression by SoD;
 - DFES is of the view that a bushfire(s) is not being effectively controlled or suppressed by SoD.
- Where a bush fire(s) requires multiagency or multijurisdictional coordination of resources and public information above the level able to be provided by SoD.

SoD is to advise DFES Regional Duty Coordinator (RDC) who will advise DFES District Officer State Situation when it is considered that this situation may exist based on one or more of the following criteria;

- There is not a clear plan or objectives established within 4 hours and the fire is continuing to burn uncontrolled;
- An urban settlement is in the direct path of the fire;
- The IC believes that the fire is not likely to be contained using the existing available resources;
- The nature and extent of the bushfire requires state level coordination of resources or public information;
- The bushfire has been declared a Level 3.

DFES ComCen must be kept informed of all bush fire incidents and any developing situation where there is a potential for multi-agency involvement or impact on more than one agency area, lifeline infrastructure or on community safety.

5.4 Activation

The activation of this plan will be by the response to bushfire on land under the control of the SoD and any bushfire reported to the CBFCO, DCBFCO, or FCO of SoD.

5.5 Incident Management System

AIIMS is to be used by all parties to this plan.

5.6 Incident Coordination and Structure

SoD will base incident structure and arrangements on State EM Plan <u>Appendix D: State Emergency</u> <u>Management Response Framework</u>.

5.7 First Responder Maps

Operational maps are automatically produced for specific incident types and made available to First Responding Crews. These maps are produced when the incident is first reported to ComCen and are updated within the first two hours if:

- the incident location changes;
- the incident type changes; or
- spatial data is captured by Air Intelligence or in FESMaps for that incident.

Maps remain accessible for the duration of the incident; however, after two hours they will no longer be updated regardless of whether changes occur. Mapping beyond this two hour period is expected to be provided at the IMT.

To view First Responder Maps Click Here

5.8 Conducting Evacuations

The Controlling Agency (where authorised by the HMA) has overall responsibility for the management of evacuation during an incident and when an emergency response is implemented.

As per the <u>State EM Plan</u> S5.3.2, if there is a need for additional powers to direct the movement of persons, animals and vehicles around or out of an emergency area, the Controlling Agency can request the declaration of an emergency situation by the HMA. This will allow for the authorisation by the HMA of relevant persons to exercise the powers of HMOs.

Evacuation planning should include all five stages of an evacuation as per <u>State EM Policy</u> S5.7.

The Incident Controller will advise community members of the most suitable location that they should evacuate to, based on the prevailing situation.

The Controlling Agency is to provide clear instruction to persons conducting the evacuation with respect to what action should be taken where a person refuses to evacuate.

The Controlling Agency is to ensure, as far as practical, that those who refuse to evacuate understand the risks of staying and are capable of making an informed decision. Where practicable, procedures should be developed to track remaining residents' wellbeing.

5.9 Traffic Management

Traffic management will be conducted by the SoD in accordance with <u>State EM Plan</u> S5.3.3 and the <u>State EM</u> <u>Policy</u> 5.8 and SEMC's Traffic Management during Emergencies Guideline, for the conduct of immediate traffic management.

5.10 Functional Support Plans

The following plans provide support functions to this Bush Fire Response Plan.

- Local Emergency Management Arrangements;
- Local Recovery Support Plan;
- Local Emergency Welfare Plan;
- Local Emergency Risk Management Plan:
- Local Animal Welfare Support Plan.

5.11 Financial Arrangements for Response

The <u>State EM Plan</u> describes the financial responsibilities of Controlling Agencies during response to emergencies. Controlling Agencies are responsible for payment of all expenses related to their response to incidents. When an emergency involves a multi-agency response, costs associated with the emergency shall be met by each individual emergency management agency, provided such costs are related to the delivery of services or resources which form part of the agency's core functions.

The SoD will meet the financial obligations for response in accordance with the above until all opportunity to do so has been exhausted. DFES has identified and can implement arrangements for financial assistance with a number of its key stakeholders for Bushfire. In all circumstances, Incident Controllers should record the time and date of when supplementary funding arrangements commence for that incident.

To receive emergency incident financial assistance the SoD must make application (documented within a Personal Incident Diary (PID)/Incident Records) to a DFES Bushfire Liaison Officer (BFLO) or RDC. DFES Operations personnel assigned to AIIMS functional roles during emergency incident operations outside Gazetted fire districts exercising their powers under Section 13 of the Bush Fires Act 1954.

Information relating to funding for emergencies is available in the document, Criteria for meeting costs associated with emergencies under 'Other funding opportunities' on the SEMC website and at State EM Recovery Procedure 5.2.

PART 6: RECOVERY

6.1 Responsibility for Recovery

Recovery is the coordinated process of supporting emergency-affected communities in reconstruction of the physical infrastructure and restoration of emotional, social, economic and physical wellbeing.

HMAs have comprehensive plans for responding to an emergency and will assist in the commencement of the recovery process (for the specific hazards that are their responsibility). However, it is a function of the SoD to "manage recovery following an emergency affecting the community in its district" (s. 36 EM Act). The Shire has prepared a Local Recovery Support Plan and nominated a Local Recovery Coordinator (s. 41(4) EM Act).

The Local Recovery Support Plan has been developed to clearly identify recovery arrangements and operational considerations. It identifies any agreements that have been made between the SoD and/or emergency management agencies and refers to other appropriate documents where necessary.

6.2 Finance

There are a number of actions which the SoD should take to ensure they are financially prepared to undertake recovery activities, should the need arise. These actions include:

- Understanding and treating the risks to their community through an appropriate risk management process;
- Ensuring assets are adequately insured;
- Establishing a cash reserve for the purpose, where it is considered appropriate for the level of risk;
- Ensuring an understanding of the types of assistance that may be available under the <u>Disaster Recovery</u> <u>Funding Arrangements</u> – Western Australia (DRFAWA), and what may be required of local government in order to gain access to this potential assistance.

6.3 Recovery Management

The Controlling Agency is responsible for the preparation of the Impact Statement. The Incident Controller may assign the task to the Deputy Incident Controller (Recovery) who will work collaboratively with organisations and personnel to ensure accurate information is obtained in a timely manner.

An Impact Statement is to be completed by the Controlling Agency for all level 3 incidents and level 2 incidents where there are impacts requiring recovery activity. Where there are no recovery impacts identified by the Controlling Agency during a level 2 incident, the State Recovery Coordinator/Deputy State Recovery Coordinator will determine if an Impact Statement is required, partially required, or required in full. Consultation with the SoD will occur prior this determination, as necessary (<u>State EM Plan</u> section 6.4.1).

It is critical for the SoD to have information about impacts as early as possible, in order to start recovery planning and activities. The Impact Statement marks the transfer of responsibility to the SoD for management of the

recovery. The Impact Statement is designed to be a point in time description of known and emerging impacts. It is acknowledged that some information may not be available immediately, hence the need to identify emerging, anticipated and potential impacts. This will assist the SoD in ongoing assessment of impact and recovery work.

At the point where the Controlling Agency considers it appropriate to transfer responsibility for management of the recovery to the SoD, the Controlling Agency is to convene a meeting with the SoD and the State Recovery Coordinator. The Transfer of Responsibility meeting is a formality whereby the Impact Statement is reviewed and signed by the Incident Controller, SoD CEO (for each impacted local government) and the State Recovery Coordinator or their Deputy.

PART 7: ASSURANCE ACTIVITIES

Operational performance assurance activities identify and generate opportunities for improvement in operational performance to ensure incident management and response capabilities are continuously improved to provide the most effective service to the community.

7.1 Stand Down and Debriefs

The Incident Controller will determine when the bushfire has been declared safe so that stand down procedures may commence in accordance with DFES <u>SOP 3.2.3 – Making Safe/Rules for Departure</u>. Stand down of incident personnel should not occur until recovery arrangements are in place. Prior to stand down, the Incident Controller may conduct a 'hot debrief' of all the participating agencies and brigades to explain the situation, address outstanding issues, answer questions and handover recovery operations to the responsible agency.

7.2 Post Incident Analysis (PIA) and Review

Incidents requiring PIA are classed as significant. They tend to be larger and more complex than those only requiring a Debrief.

PIA are to be conducted under the following circumstances:

- The operation involves a multiple service response;
- Occurrences of deaths/ multiple casualties/near misses of DFES Operations or other response agency personnel;
- Incurred loss is of a significant dollar value;
- Significant damage to civil infrastructure;
- Significant social disruption (including any dislocation, evacuation etc.);
- Where a coronial inquiry will, or is likely to, occur.

PIA should be used to investigate and analyse current procedure in order to identify weaknesses and continually strengthen response operations.

NOTE: If the incident was significant and there is a possibility of either a PIA/MIR will occur, personnel should convene a debrief and provide that feedback for that higher level review process.

Following the PIA process the relevant plans including the Bush Fire Response Plan, Welfare Plan, and Recovery Plan should be reviewed accommodating recommendations of the PIA.

PART 8: APPENDICES

Appendix A – Glossary of Terms

TERM	DEFINITION	
AIIMS; Australasian Inter-service Incident Management System	The nationally recognized system of incident management for the nation's fire and emergency services agencies. Organisational principals and structure used to manage Bushfire and other large emergencies based on the principles of management objectives, functional management and span of control	
Bush Fire	A bushfire is an unplanned or uncontrolled fire in the bush. Bush is defined in section 7 of the Bush Fires Act 1954	
CBFCO; Chief Bush Fire Control Officer	The CBFCO is the most senior position in the Bush Fire service. This person is responsible for making decisions concerning the direction of Bush Fire Brigades. The CBFCO provides a link between SOD; DFES and Bush Fire Brigades	
SOD; Shire of Dardanup	The Local Government Authority responsible for the development and review of this plan	
Coordination	The bringing together of agencies and elements to ensure an effective response, primarily concerned with the systematic acquisition and application of resources (organisation, manpower and equipment) in accordance with the requirements imposed by the threat or impact of an emergency. Coordination relates primarily to resources, and operates, vertically, within an agency, as a function of the authority to command, and horizontally, across agencies, as a function of the authority to control	
Control	The overall direction of emergency management activities in an emergency situation. Authority for control is established in legislation or in an emergency plan, and carries with it the responsibility for tasking and coordinating other agencies in accordance with the needs of the situation. Control relates to situations and operates horizontally across agencies	
Critical infrastructure	A service, facility, or a group of services or facilities, the loss of which will have severe adverse effects on the physical, social, economic or environmental wellbeing or safety of the community.	
DCBFCO;	Deputy Chief Bush Fire Control Officer	
DBCA; Department of Biodiversity, Conservation and Attractions	The department has the lead responsibility for protecting and conserving the State's environment on behalf of the people of Western Australia. This includes managing the State's national parks, marine parks, conservation parks, State forests and timber reserves, nature reserves, marine nature reserves and marine management areas	

TERM	DEFINITION
DFES; Department of Fire & Emergency Services	As Western Australia's leading hazard management agency, the Department of Fire and Emergency Services (DFES) performs a critical role coordinating emergency services for a range of natural disasters and emergency incidents threatening life and property. DFES was established to improve the coordination and planning of emergency services in Western Australia.
FDI; Fire Danger Index	Measures the degree of Fire Danger combing elements of curing (dryness), temperature, Relative Humidity (RH) and wind speed. FDI ratings were developed by the CSIRO by scientist AG McArthur.
FES-ERG; Fire and Emergency Services Emergency Response Guide	Provides essential information to the Department of Fire and Emergency Services (DFES) for use in an emergency at larger dangerous goods sites.
Gazetted Fire District	Area gazetted by the Minister (as shown on Brigade map) for which DFES, Fire & Rescue Service is responsible for fire incidents under the Fire Brigades Act 1942 S2(a)
Harvest Vehicle Movement Ban	Based on FDI (usually >35) or may be based on response capabilities. Issued by FCO under Bushfires Act 1954 s38a &24c when a Bushfire Control Officer is of the opinion that the use of harvesting machinery is likely to cause a fire or contribute to the spread of a bushfire.
HMA; Hazard Management Agency	An agency prescribed due to its knowledge, expertise and resources responsible for emergency management for a prescribed hazard. At the local level HMA's are identified in the Local Emergency Management Arrangements
LEMC; Local Emergency Management Committee	The LEMC is established for SOD in accordance with Emergency Management Act 2005 (S38) in Local Government Districts to advise and assist the local government in ensuring that local emergency management arrangements are established for its district; to liaise with public authorities and other persons in the development, review and testing of local emergency management arrangements; and to carry out other emergency management arrangement activities as directed by the SEMC or prescribed by the regulations. Note: LEMCs are an emergency planning body and although they will often incorporate members from operational (HMA, combat and support) agencies their role is not operational or one of response
Multi agency	Involving more than one Government agency
PIA; Post Incident Analysis	The reconstruction of an incident to assess the chain of events that took place, the methods used to control the incident, and how the actions of emergency personnel contributed to the eventual outcome
SEMP; State Emergency Management Policy	State Emergency Management Policies and Procedures are prepared by the Policy and Coordination Division of the SEMC Secretariat to support the Emergency Management Act, 2005 (the Act). Policies are reviewed and approved by the SEMC. Emergency Management policies and procedures fall within the categories of: Administration; Training; and Operations.

TERM	DEFINITION
TFB; Total Fire Ban	TFB's are declared by the Minister for Emergency Services (DFES) – State Level based on weather forecasts when there is a potential of adverse fire weather or when widespread fires are seriously stretching resources. They are declared on days when fires are most likely to be difficult to control and should they occur they will threaten lives and property. They are declared for the whole day (24hours) and for the whole of local government, including town sites. When a total Fire Ban is declared it prohibits the lighting of any fires in the open air and other activities that may start a fire - including use of welders, grinders or gas cutting.
UCL; Unallocated Crown Land	Crown land (a) in which no interest is known to exist, but in which native title within the meaning of the Native Title Act 1993 of the Commonwealth may or may not exist; and (b) which is not reserved, declared or otherwise dedicated the Land Administration Act 1997 or any other written law;
UMR; Unmanaged Reserves	A reserve the care, control and management of which are not placed with a management body.
VCP; Vehicle Control Point (VCP)	A full or partial road closure through which all vehicle access is controlled. All VCPs are permanently staffed. Vehicles or persons (or classes of vehicles or persons) explicitly authorised by the Incident Controller may proceed after validation by the Traffic Controller. Persons requesting access permission who are not specifically authorised by the IC are held at the VCP pending permission / exclusion to enter the incident area.
Vehicle Movement Ban	Based on FDI (usually >60) or may be based on response capabilities. Issued by FCO under Bushfires Act 1954 s38a &24c this is a higher level of ban than a Harvest Ban and issued when Bushfire Control Officer is of the opinion that the use of engines, vehicles, plant or machinery including the operation of motorbikes is likely to cause a fire or contribute to the spread of a bushfire with the exception of the movement of vehicles and machinery on gazetted roads, laneways/roadways, and yards. Water carting for stock and domestic purposes is permitted provided it is accompanied by a mobile firefighting unit, or alternatively the water carting vehicle acts as the mobile firefighting unit and meets the minimum specifications (this also requires the retention of 400L of water at all times)

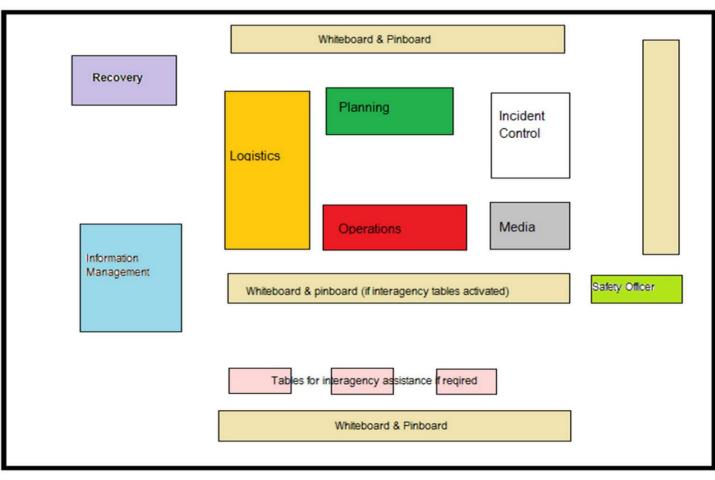
Appendix B – Key Contacts

A list of key contacts is provided for information below.

This plan is to be read in conjunction with the Shire of Dardanup Emergency Management – Contacts & Resource Directory. The Emergency Response & Deployment Plan provides the essential list of brigade personnel and emergency contact may be obtained from on request from the SoD for advice.

ORGANISATION	CONTACT	TELEPHONE
Alinta Gas	Faults & Emergencies	131352
Bureau of Meteorology	Perth Office	9263 2222
Shire of Dardanup	Coordinator Emergency & Ranger Services	0427 960 161 (Not for public)
Shire of Dardanup	Emergency Management Officer	0427 240 021 (Not for public)
Shire of Dardanup	Senior Ranger	0409 629 555 (Not for public)
Shire of Dardanup	Duty Ranger	0436 819 519 (Not for public)
Shire of Dardanup	CBFCO	0428 825 496
DFES	Regional Duty Coordinator (RDC)	1800 411 742
Department of Communities	Welfare Officer	0429 102 148 (Not for public)
DBCA	Duty Officer	9735 1988
Eaton Fire Station	Captain	0456 957 281
Main Roads WA	24hr call centre	138138
WA Police Force - Australind	General Enquiries	9797 0222
City of Bunbury	Administration CBFCO	9792 7000 0401 059 716
Shire of Capel	Administration CBFCO	9727 0222 0408 921 356
Shire of Collie	Administration CBFCO	9734 9000 0409 884 291
Shire of Donnybook	Administration CBFCO	9780 4200 0428 641 021
Shire of Harvey	Administration CBFCO	9729 0300 0439 922 606
Western Power	Faults & emergencies Field Supervisor	131351 0429 652 961

Appendix C – Emergency Control Centre Layout

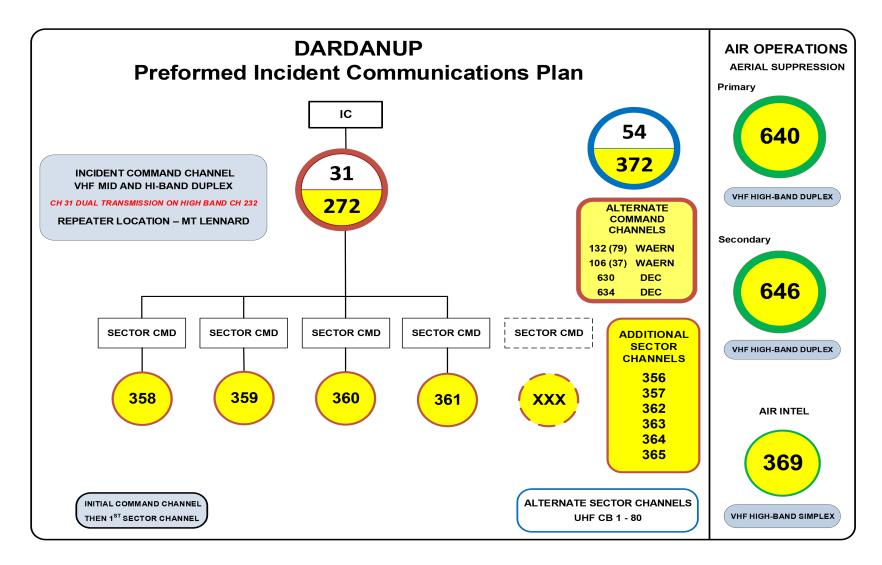


Suggested ECC layout for Level 1 or 2 incident

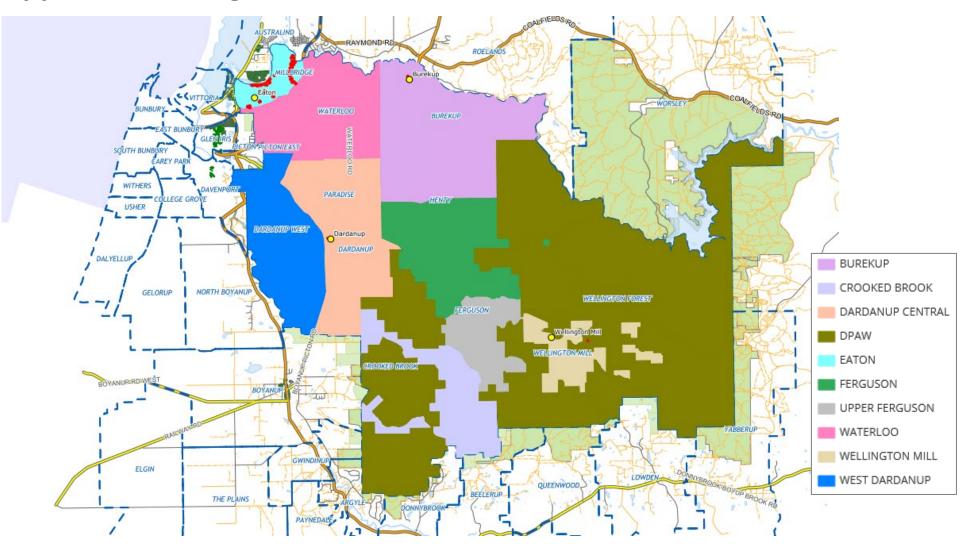
Appendix D – Appliances & Sell call

REGO	Vehicle / Role	BRIGADE	SELCALL
BUREKUP	1.4R	Burekup	283070
DA 196	2.4R	Dardanup Central	283062
1BYC 846	1.4R	Dardanup West	283040
DA 689	Light Tanker	Ferguson	280303
DA 8569	Light Tanker	Joshua/Crooked Brook	280352
DA 1684	2.4R	Upper Ferguson	283019
1WATERLOO	3.4U	Waterloo	280302
2WATERLOO	Light Tanker	Waterloo	280394
DA 8370	1.4R	Wellington Mills	280318
DA 8222	Mitsubishi 4x4	Shire of Dardanup - Ranger	
DA 9287	Mitsubishi 4x4	Shire of Dardanup - Ranger	
DA 873	Front End Loader	Shire of Dardanup	
DA 9774	Grader 670B	Shire of Dardanup	
DA 698	Grader 120H	Shire of Dardanup	
DA 9781	T5040 Tractor	Shire of Dardanup - Eaton	
DA 2833	Backhoe Loader	Shire of Dardanup - Dardanup	
DA 628	Tip Truck (Water Pod)	Shire of Dardanup	
DA 325	Tip Truck	Shire of Dardanup	
DA 987	Mini Excavator	Shire of Dardanup	
1QBN 640	Isuzu CP 16	Eaton-Australind Volunteer FRS	81453
1QBV 828	Toyota Light Tanker	Eaton-Australind Volunteer FRS	82241
DA 122	Holden Rodeo	Eaton-Australind Volunteer FRS	811086
	CBFCO	Shire of Dardanup – Private Vehicle	
	DCBFCO - North	Shire of Dardanup – Private Vehicle	
	DCBFCO - South	Shire of Dardanup – Private Vehicle	
	FCO - Burekup	Shire of Dardanup – Private Vehicle	
	FCO – D/Central	Shire of Dardanup – Private Vehicle	
	FCO – D/West	Shire of Dardanup – Private Vehicle	
	FCO – Ferguson	Shire of Dardanup – Private Vehicle	
	FCO – U/Ferguson	Shire of Dardanup – Private Vehicle	
	FCO – Joshua CB	Shire of Dardanup – Private Vehicle	
	FCO – Waterloo	Shire of Dardanup – Private Vehicle	
	FCO - Well/Mills	Shire of Dardanup – Private Vehicle	

Appendix E – Communications Plan



Appendix F – Brigade Area M



State Emergency Management Committee





(LEMC Appendix 8.2A)

Strategic Plan 2022-2025

(LEMC Appendix 8.2A) From the SEMC Chair



Dr. Ron F Edwards

Chair, State Emergency Management Committee In recent times, WA has faced several large-scale emergencies such as the COVID-19 pandemic, Wooroloo Bushfire and Tropical Cyclone Seroja and in February 2022 a severe fire weather event leading to an unprecedented four concurrent Level Three bushfires across the south west land division. This is a key climate change indicator. These events have tested the resolve and resilience of the community and emergency management agencies.

In responding to, and recovering from, these emergencies, the strengths and capability of the emergency management sector have been highlighted, along with areas for improvement.

Significant events on the East Coast, including the Black Summer Bushfires and significant floods and storms, have further reinforced the need to look to the future and continue to strengthen the resiliency of WA.

The 2022-25 Strategic Plan provides for a greater focus on community and individual level outcomes by focusing on prevention and preparedness while addressing the long-term challenges presented by climate change.

This Strategic Plan provides the foundations on which the emergency management sector can build a better prepared, more resilience and safer community for all West Australians.

Yours sincerely,

Pur F Enhan

Dr Ron F Edwards Chair, State Emergency Management Committee

Acknowledgment of Country

The State Emergency Management Committee (SEMC) acknowledges the traditional custodians throughout Western Australia (WA) and their continuing connection to the land, waters and community. We pay our respects to all members of the Aboriginal communities, their cultures and to Elders past, present and emerging.

Introduction

The SEMC is a standing committee that provides strategic advice to the Minister for Emergency Services and delivers oversight of emergency management arrangements and capability in Western Australia.

The Committee includes representatives of Government and independent members. The primary responsibilities of the SEMC are to:

- Advise the Minister on emergency management and the preparedness of the State to combat emergencies
- Guide and support public authorities, including industry, commerce and the community to plan and prepare for efficient emergency management
- Assist the Minister for Emergency Services in the administration of the *Emergency Management Act 2005*
- Provide a forum for community coordination to minimise the effects of emergencies
- Provide a forum to develop community-wide information systems to improve communications during emergencies
- Develop and coordinate risk management strategies to assess community vulnerability to emergencies
- Arrange for the preparation of State emergency management policies and plans.

After consideration of recent large-scale emergencies, the SEMC has prepared a three-year Strategic Plan. This Strategic Plan establishes priority outcomes and focus areas and is informed by ongoing change in the environment, community, workforce, technology, and in national arrangements for emergency management. The Strategic Plan is structured to address risks and opportunities that may arise from these changes.

The SEMC is committed to preparing the sector to adapt to a changing climate, which brings with it a forecast of emergencies that are more frequent, of higher intensity and threatening communities that have not previously been at risk.

The Strategic Plan will inform the agenda and strategic projects for the SEMC in the coming period. It is also used to establish work plans for the subcommittees and reference groups of SEMC, and the District and Local Emergency Management Committees.



(LEMC Appendix 8.2A) SEMC Strategic Plan 2022-2025

Collaborative Leadership	Effective Governance
Strong relationships enable informed decision-making amongst state district and local emergency management leaders	A coordinated and collaborative risk and evidence-based approach to emergency management that is trusted by the sector
Clear strategic direction is provided and communicated across the Emergency Management sector	A high standard of governance and reporting consistent with contemporary standards that promotes accountability
Responsible Ministers, public authorities, industry, commerce and the community remain briefed and informed	Subcommittees and Reference Groups are empowered to execute the strategic direction of the SEMC
The SEMC has the expertise and experience, along with the facilities and services, to undertake its functions	Risk, capability and preparedness are measured and reported across the state
The SEMC contributes to the national agenda through collaboration with Commonwealth, state, and territory governments	Public trust in the sector is maintained through social responsibility
Clear strategic direction is provided and communicated at district and local level, including to District and local Emergency Management Committees	

Our Vision

A better prepared, more resilient and safer State.

Our Mission

To reduce the impact of emergencies on the community through empowerment of decision makers to create a better prepared, more resilient and safer State.

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Capable Sector	Capable Community	Climate Change
The emergency management sector has accomplished and innovative organisations and is known for its high performance and improvement culture	Build safer and more resilient community through a local approach to emergency management	The sector is prepared, willing and responsive to the impacts of climate change on emergency management
Risks, emerging trends and vulnerabilities are identified and communicated across the sector	Community vulnerability is reduced through risk reduction and adaptation	Community vulnerability is reduced through risk reduction and adaptation
A streamlined and evidence- based Emergency Management Framework, policies and plans	More agencies and businesses have plans to maintain service delivery to the community	Communities, individuals, and government have an increased capacity to build resilience to address climate risk
Continuous improvement through effective lessons management, exercising and the consideration of review recommendations	Critical infrastructure is more resilient through risk reduction, mitigation and innovation	Local governments are supported in increasing preparedness due to increased risks associated with a changing climate
Public communications, technologies and data are optimised for risk and context	Community resilience is strengthened through self-reliance by supporting communities to connect people and create local networks	The Emergency Management Framework and the sector are prepared for, and adapting to, the
Philanthropic and Not for Profit organisations, as well as individuals and volunteers, are leveraged to the betterment of the community	Communities are empowered to use local knowledge to develop local solutions	impacts of climate change
Emergency management knowledge and networks are built across government, industry, and community		
Local governments are supported and enabled to build resilience within their community through state Emergency Management frameworks		

(LEMC Appendix 8.2A) Disclosures and Compliance

Regulatory Matters

Enabling Legislation

The SEMC is established by section 13 (1) of the Emergency Management Act 2005.

Responsible Minister

The Hon. Stephen Dawson MLC, Minister for Emergency Services; Racing and Gaming; Small Business; Volunteering.

Administered Legislation

The SEMC assists the Minister for Emergency Services in the administration of the *Emergency Management Act 2005.*

Shared Responsibilities with other Agencies

The SEMC relies on the work of multiple organisations to undertake its functions.

The SEMC is supported by a number of subcommittees and reference groups which comprise of organisational executives and senior personnel from a range of public sector agencies and private organisations. The ongoing collaboration and integration of all parties is critical to the success of the SEMC and the progression of emergency management arrangements across the State.

Service Level Agreement

The SEMC has a Service Level Agreement with DFES for the provision of staff and other resources to enable the SEMC to fulfill its duties.

Support from DFES under this agreement includes:

- Executive support
- Assurance
- Subject matter expertise
- · Emergency management legislation and policy expertise
- Communications and ICT support
- · Administrative support
- Projects and other key tasks.





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CONTACT INFORMATION

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semc.wa.gov.au



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Australian Fire Danger Rating System

Live as of 1 September 2022

South West ROAC



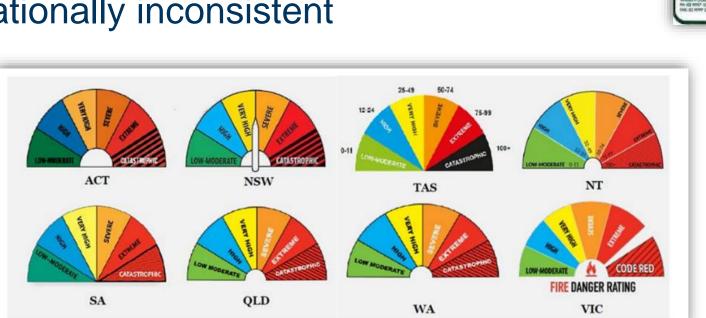


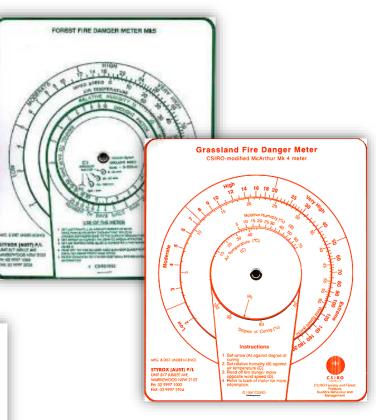
Bushfire Centre of Excellence



(LEMC Appendix 8.2B) Limitations of the Current FDR System

- Applies out of date models
- Not suited to all vegetation types
- Too complex for the community
- Unable to adjust to conditions
- Nationally inconsistent

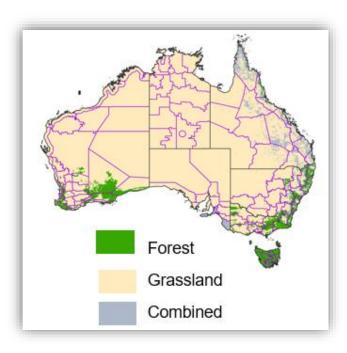


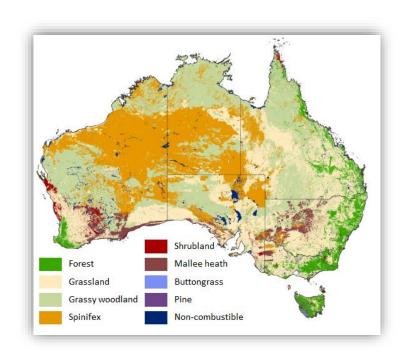




Benefits: Improved Science, Data and Tools

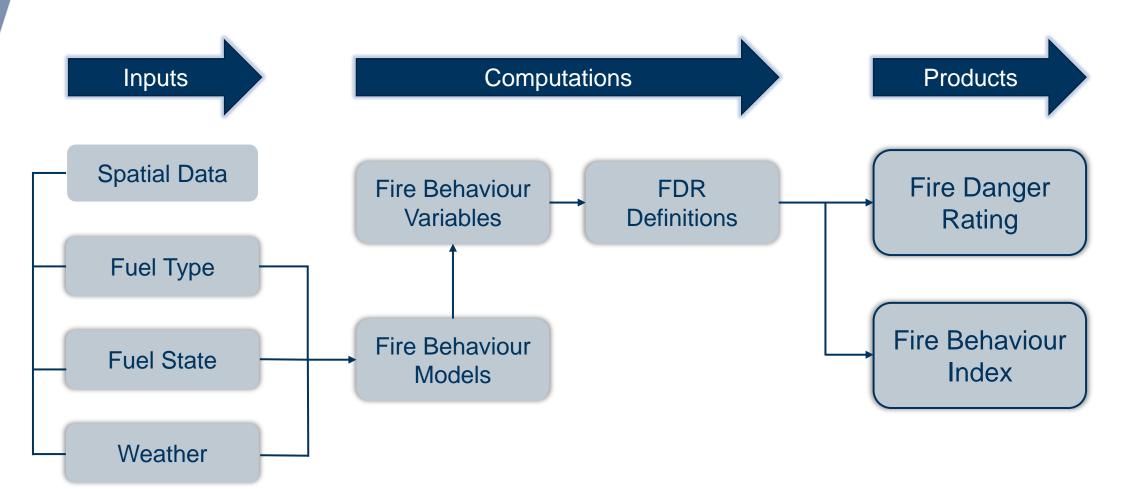
- Calculations from 2 fuel types to 8 types with 22 subsets
- 6km x 6km forecasting grids to 1.5km x 1.5km grids resulting in more accurate information







(LEMC Appendix 8.2B) Calculating Fire Danger Rating



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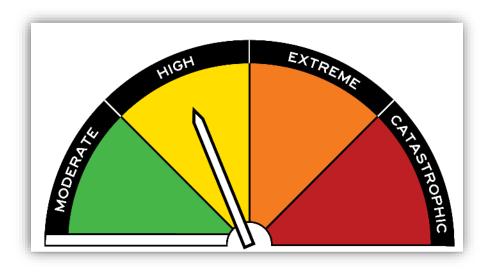
AFDRS: Two Elements

FDR for the Community

 Broad categories designed to communicate to the public expected level of danger

FBI for Decision-Making

 A scale of fire danger that produces outputs across fuel types



V'S





FDR and FBI Summary

FDR	FDR Message	FBI Range	Suppression Difficulty
Moderate	Moderate Plan and prepare 12-23		Most bushfires in this category. Fires typically suppressed with direct, parallel or indirect attack.
High	Be ready to act	24-49	Initial attack success critical to prevent large fire development. Defensive suppression strategies.
Extreme Take action now to protect life and property		50-99	Defensive suppression strategies. High levels of threat to life/property. Safety of firefighters and community paramount.
Catastrophic	For your survival, leave bushfire risk areas	100+	Unsafe for firefighters and community. Without initial attack success, likelihood of very large fire development is very high. High probability of loss of life and property.



Where are we now?



(LEMC Appendix 8.2B)

Legal & Legislation

Gazetted on 26 August and came into effect 1 September 2022

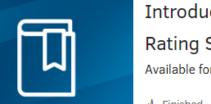
https://www.legislation.wa.gov.au/



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(LEMC Appendix 8.2B) **AFDRS Online Learning Modules**

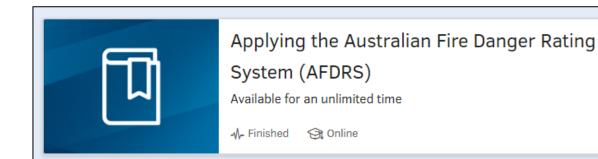
DFES eAcademy



Introduction to the Australian Fire Danger

Rating System (AFDRS) Available for an unlimited time

A- Finished 🔄 Online





External Access:

AFAC website: https://afdrstraining.afac.com.au/moodle

AFDRS

Home My courses

Available courses

¹⁰ Course 1: Introduction to the Australian Fire Danger Rating System





¹⁰ Course 2: Applying the Australian Fire Danger Rating System





Communicating the Changes

DFES Intranet / Volunteer Portal



DFES Website / My Bushfire Plan Page

Bushfire overview	Prepare for a bushfire	During a bushfire	Recovering from a bushfire	Bushfire Centre o	f Excellence	Bushfire prone areas	Total fire ban	Planned burning	Rural and farm fire	At Risk Communities Program
1	Eire danser rations	My Bushfire plan	Alerts and Warnings	Emergency Kit	Property	Vegetation	Asset protection	i zones Pets a	nd livestock Bu	ushfire ready
	ĸ	now your	Fire Danger I	Rating						
	act	ion to protect yourself unching on 1 Septembe	are issued daily and describ and others from the potentia r 2022, the Australian Fire D	Ity dangerous impac inger Rating System	ts of a bushfire	a. new, nationally consist	tent FDR system th			
			reflect fire danger conditions to take action to stay safe. Yo Moderate			what the FDR is for y		Catastrop	hie	
		Stay up to date	Dare be controlled. and be alert for fires in your biffire sign . If you do not have					EXTREME C	- ASTROPHIC	
							e current Fire Danj he science behind I	ger Ratings ()	2	

YOUR FIRE RISK TODAY IS VOUR FIRE RISK TODAY IS BE READY TO ACT UPDATED 13:00 BE READY TO ACT UPDATED SEPTEMBER 25

The Fire Danger Rating System

has changed

Concernantia No Racing

Know your Fire Danger Ratings

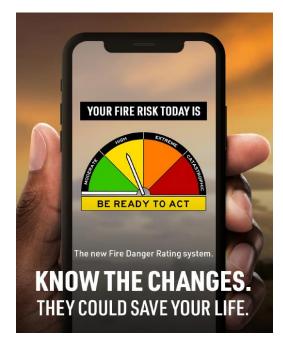
Plan and prepar

st fires can be controlled.

p to date and be alert for fires in your atea. your **bashfire plan**. If you do not have a plan, mak

Signage Updates

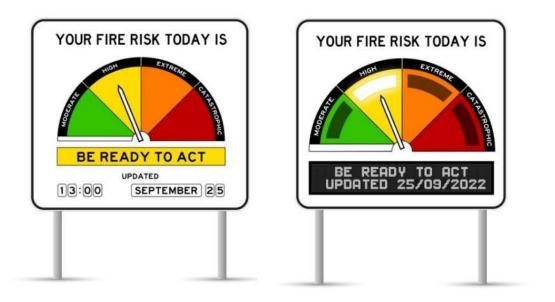
National Campaign



- Radio
- TVC
- Press
- Social Med
 - Digital Me



Roadside Signage



Analogue and Digital Sign Design: Nationally Consistent

Roadside Signage

- July Update to CEO's
 - Take down analogue
 - Cover digital signs
- Expecting to award tender early Sept 2022
- 148 Analogue / 40 Digital 69 LG's
- LG's can access the Tender prices for additional signs

Tools Supporting Decision Making



BoM Supporting Tools

IDW15100

Issued at 4:35 am WST on Friday 2 September 2022.

- Current BoM registered user page updates, including:
 - Fire Danger Ratings tables 7 days
 - Observation Forecasts
 - Incident Weather Forecasts (IWF)
- BoM Fire Weather Forecast & BoM Climate Outlooks

District	Friday	Saturday	Sunday	Monday
Mortlock	No Rating 9	No Rating 7	No Rating 6	No Rating 6
Karroun	High 32	Moderate 15	No Rating 9	No Rating 8
Avon	No Rating 11	No Rating 9	No Rating 8	No Rating 6
Lockwood	No Rating 10	No Rating 8	No Rating 7	No Rating 7
Arthur	Moderate 13	Moderate 12	No Rating 9	No Rating 6
Roe	No Rating 9	No Rating 8	No Rating 7	No Rating 6
Lakes	Moderate 12	Moderate 12	No Rating 9	No Rating 7
Stirling North	No Rating 10	No Rating 9	No Rating 8	No Rating 7
Stirling West	Moderate 13	Moderate 13	Moderate 12	No Rating 7
Stirling Coast	Moderate 13	Moderate 14	Moderate 12	No Rating 9
Fitzgerald Coast	No Rating 8	No Rating 9	No Rating 8	No Rating 6
Fitzgerald Inland	No Rating 11	Moderate 12	No Rating 10	No Rating 7
Esperance Coast	Moderate 16	Moderate 16	Moderate 14	No Rating 10
Esperance Inland	Moderate 13	Moderate 13	Moderate 12	No Rating 10

Fire Behaviour Calculator

Western Australian Fire Behaviour Calculator



The Fire Behaviour Calculator (FBC) is an online tool that calculates potential Rate of Spread, intensity, spotting and flame length using variables inputted into fire spread models for different vegetation types. The FBC ingests forecast weather from the Bureau of Meteorology into models for personalised locations and Fire Danger Rating (FDR) and Fire Behaviour Index (FBI) outputs relating to each fire behaviour model.

Thresholds in Western Australia:

 24 FBI across fuel types Revoke or Suspend Permits to Burn

- 40 FBI in cut/grazed Grassland only Harvest and Vehicle Movement Ban (HVMB)
- 50 FBI across >10% Fire Weather District Total Fire Ban

Access the FBC here: aurora.landgate.wa.gov.au/fbc

Note: For the FBC to work offline, initially you need internet connection to bookmark it to your smartphone device.

HVMB Calculation Table (CSIRO Grassland Fire Spread Model)

Input variables - cut/grazed fuel condition, 4.5 tonnes per hectare fuel load and slope averaged to 0 degrees.

		Relative Humidity (RH) %						
		10%	15%	20%	25%	30%	35%	40%
	20°C	26	28	30	33	36	39	42
ture	25°C	23	25	27	29	32	34	37
Temperature	30°C	20	22	24	26	28	30	33
Tem	35°C	20	20	21	23	25	27	29
	40°C	20	20	20	20	22	24	26
Wind Speed (km/h) at 2m height							put = 40	

The above table should be read starting at temperature, moving horizontally across to the wind speed input and vertically up to RH e.g. Temperature of 25° C + 27km/h Wind Speed + 20% RH = 40 FBI

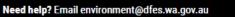
Fire Behaviour Index (Grassland)	Indicative Fire Behaviour and Fire Weather
0-5 MAX FLAME SPREAD HEIGHT 0-30 <1 m m/hr	NO RATING Fire difficult to ignite and sustain. Fires generally unlikely to spread and likely to self-extinguish.
6-11 <1.5 m	NO RATING Fire easily sustained. Typically wind driven fires that can spread quickly.
12-23 1.5-2.5 m 0.5-6 km/hr	MODERATE Typically wind driven and rapidly spreading fires with the potential to gain size quickly.
24-49 2-3 m 2.5-10 km/hr	HIGH Wind driven, rapidly spreading fires with potential for development into large fire area/size and with the potential for short distance spotting and long flame lengths.
50-99 2.5- 5-16	EXTREME Extremely rapid fire growth and increasing likelihood of large final fire area/size. Possibility for fire behaviour to become

EXTREME Extremely rapid fire growth and increasing likelihood of large final fire area/size. Possibility for fire behaviour to become erratic and plume driven. Strong convective column formation. Wind speed and direction likely to be erratic at times.

CATASTROPHIC Extremely rapid fire growth and increasing likelihood of large final fire area/size. Possibility for fire behaviour to become erratic and plume driven. Strong convective column formation. Wind speed and direction likely to be erratic at times.

The new Australian Fire Danger Rating System (AFDRS) levels are:





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open to all

Key Points

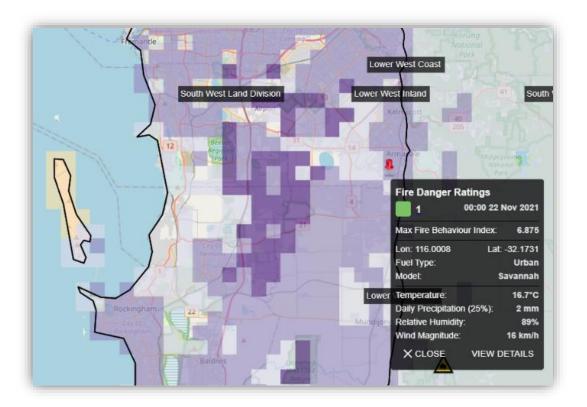
- available offline
- mobile friendly



Supporting Tools

Fire Danger Viewer – linked to Intermediate training module for access

Fuel State Editor – to be linked to observer network training





Thresholds and Triggers

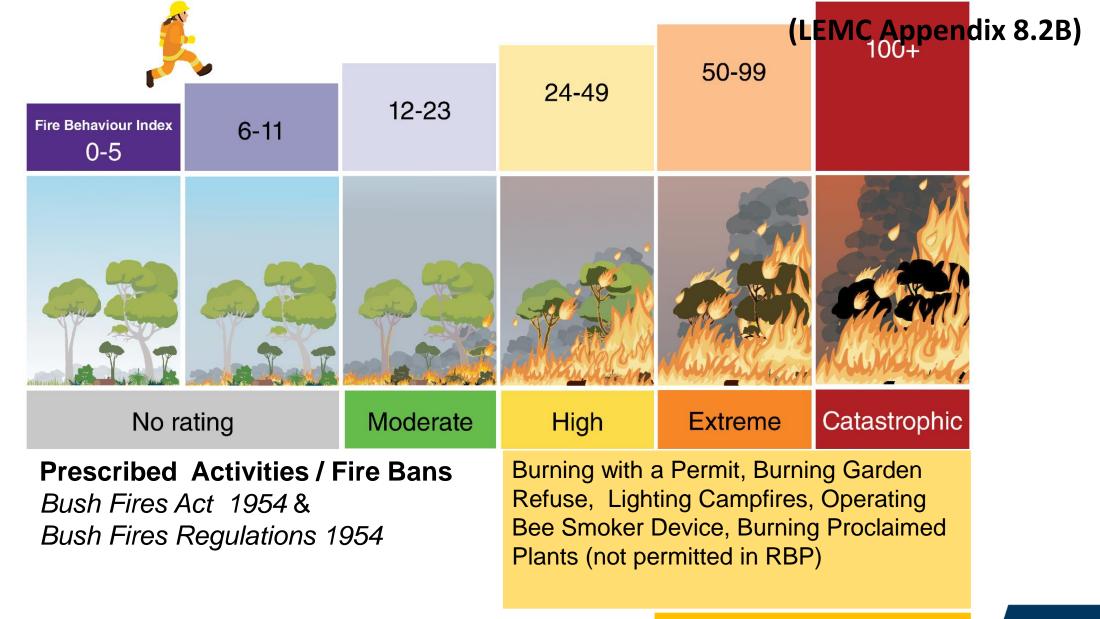
beendix 8.2B)

New Thresholds

- FBI 24+ Permits Suspended or Revoked
- FBI 40+ Harvest Vehicle Movement Bans grassland
- FBI 50+ Total Fire Ban

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Total Fire Ban Declarations



(FBI 40) HVMB During TFB

(LEMC Appendix 8.2B) Fire Weather Officers and Permits

Section 38 of proposed amended Bush Fires Act 1954

(17) A fire weather officer of an approved local government, or a deputy of that fire weather officer while acting in the place of that officer, may authorise a person who has received a permit under section 18(6)(a), to burn the bush in the district of the local government notwithstanding that for any day, or any period of a day, specified in the notice the fire danger forecast issued by the Bureau of Meteorology in Perth, in respect to the locality where the bush proposed to be burnt is situated, is "catastrophic", "extreme", "severe" or "high", and upon the authority being given the person, if he has otherwise complied with the conditions prescribed for the purposes of section 18, may burn the bush.

(18) Subsections (6) to (18) do not authorise the burning of bush —

(a) during the prohibited burning times; or

(b) during the period in which, and in the area of the State in respect of which,

a total fire ban is declared under section 22A to have effect.



Total Fire Bans

Total Fire Bans (TFBs) remain largely unchanged:

- DFES managed weather and/or resource related
- FBI 50+ <u>Statewide</u> No more TFB Zones
- Prescribed activities allowed unchanged

dfes.wa.gov.au/site/bushfire/totalfirebans.html

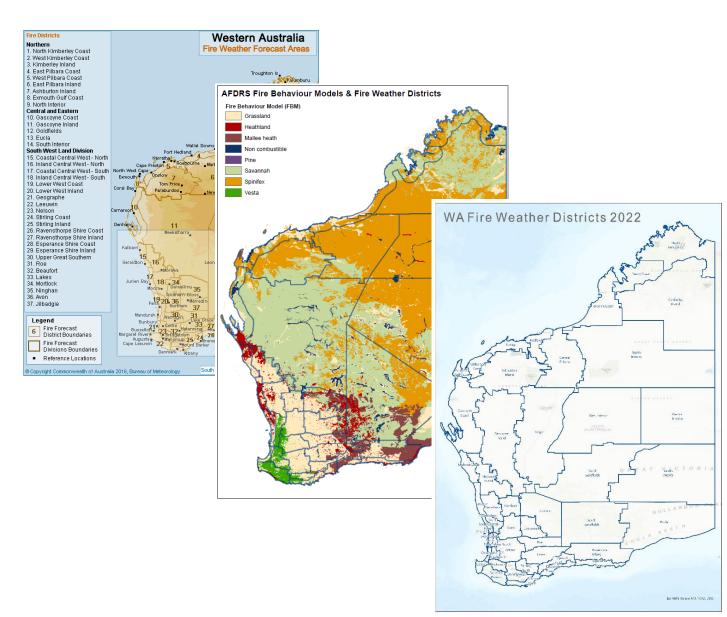
TFB Hotline - 1800 709 355





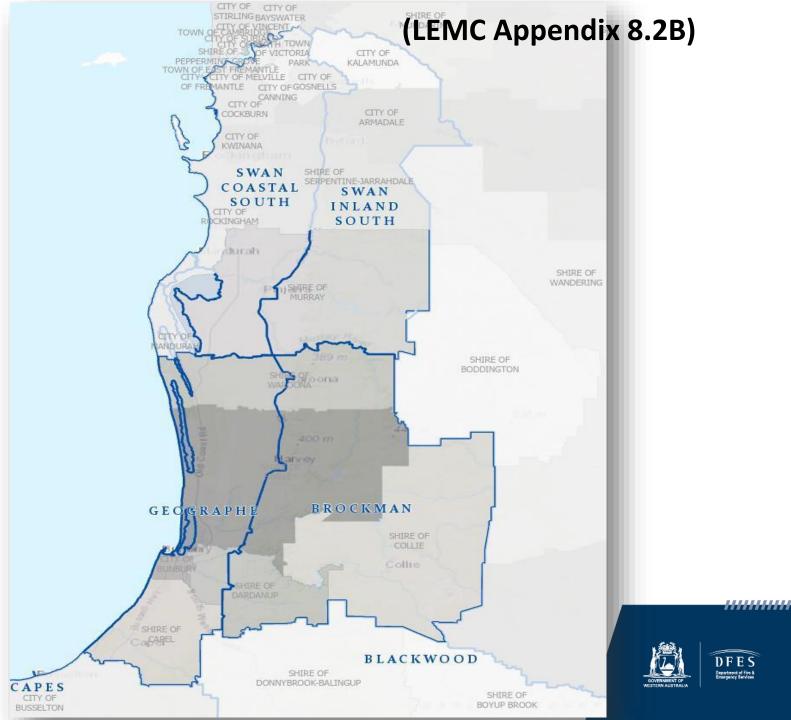
Fire Weather Districts Review

- Areas / boundaries used to communicate FDRs.
- Challenges with current FWDs:
 - Some very large
 - Alignment with other boundaries
 - Consider changes in fuel types, terrain or weather influence.
- Significant review period
- From 37 47 FWDs
- Active from 1 September 22



South West Changes

- Waroona included in Brockman and Geographe
- Geographe FWD southern boundary now aligns with Shire of Capel southern boundary.
- Nelson split at Dardanup/Collie and Donnybrook-Balingup/Boyup Brook LG boundaries. South West region component is now called Brockman, Lower South west component named Blackwood.



Questions?

Additional sources of information:

- DFES staff and volunteers: <u>DFES intranet</u> and <u>Volunteer Hub</u>
- National Information: <u>afac.com.au/initiative/afdrs</u>
- New WA Fire Weather Districts: Interactive map viewer

Additional support or information: <u>AFDRS@dfes.wa.gov.au</u>



iPhone - HVMB Calculator

(LEMC Appendix 8.2B)

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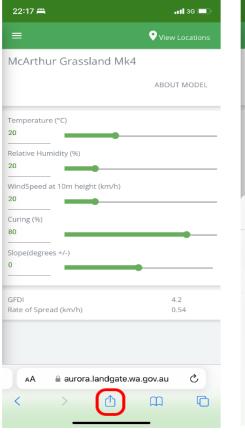
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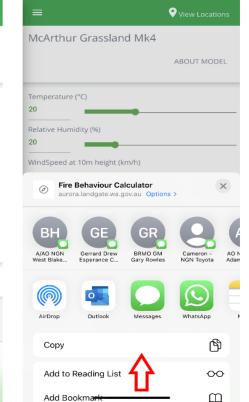
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Step 1



Open the below website in the Safari browser.

Step 2



Swipe up on the menu to reveal more options

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Click on the "Add to Home Screen" option.

You can change the name if you want, then click add at the top right.

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Step 4

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An icon will be added to your Home Screen so you can

https://aurora.landgate.wa.gov.au/fbc/...

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Cancel

Step 5



The website is now saved for offline use.

You can move the app icon to where it is easily located.

Click the square with the up arrow as indicated

