

#### **Contents**

- 1								
	n	1	rr	$\sim$	ш	١ı	$\sim$	r
		L	ľ	u	u	LI	u	

Recommendation 1

,,,,,,,,,,,,,,,,,

Recommendation 2

Recommendation 3

Recommendation 4

Recommendation 5

Recommendation 6

Recommendation 7

Recommendation 8

Recommendation 9

Recommendation 10

**Recommendation 11** 

Recommendation 12

Recommendation 13

Appendix 1

Appendix 2



## INTRODUCTION

Welcome to the third update on the WA Government response to the AFAC Independent Operational Review of the Wooroloo Bushfire.

In May 2022, DFES established the Wooroloo Implementation Coordination Group (WICG) to oversee the WA Government response to the review. The WICG has developed these public-facing reporting documents in direct response to stakeholder feedback to keep agency staff, bushfire sector stakeholders and the WA community informed and updated on progress.

Since the August 2023 update, significant milestones have been achieved for numerous Wooroloo projects. The DFES Office of Bushfire Risk Management has developed new and improved Bushfire Risk Management Guidelines (Rec 3), a DFES business case has been approved for the development of statewide bushfire mitigation capability (Rec 4) and funding has been sourced to develop a training package for Traffic Access and Management Officers (Rec 7). In a significant recent development, DFES has awarded the contract for the development of the upgraded Emergency WA platform to local public safety technology provider Genvis (Rec 12).

In addition to the above achievements, a further 3 Wooroloo recommendations have been closed; WA emergency management agencies have met their commitments to effectively address Recommendations 6, 10 and 11, in addition to Recommendations 9 and 13 which were closed previously. Projects against Recommendations 3, 4, 5 and 7 are also making good progress and are likely to be completed during the first half of 2024.

At the request of Minister for Emergency Services Hon. Stephen Dawson, the State Bushfire Advisory Committee (SBAC) continues to play a key role in providing oversight of Governments response to the Wooroloo review. Progress updates are provided to SBAC at quarterly meetings so that members can provide feedback on work undertaken, while also endorsing all project closures once works have been completed.

In addition to the working being undertaken by the DFES Bushfire Mitigation Branch to develop a business case for statewide bushfire mitigation capability (Rec 4), DFES Regional teams across all of WA also deliver a range of bushfire mitigation programs to achieve various outcomes. We've provided a Case Study showing recent examples of this work in Appendix 1.

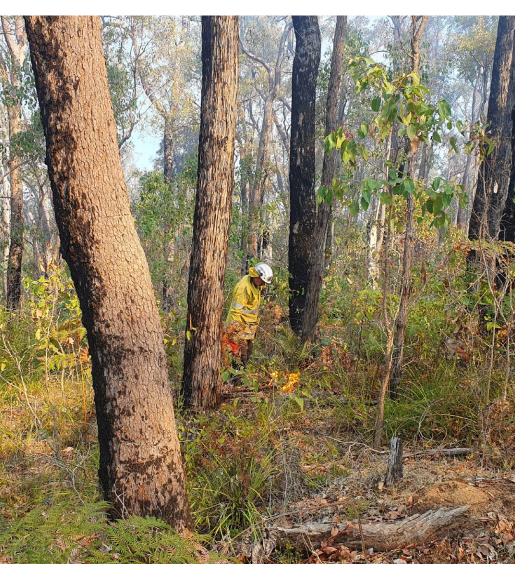
It was an early and busy start to the southern bushfire season in WA with major bushfires including the Serpentine and Mundaring complexes and the Wanneroo fire all igniting prior to December 2023. Over the next few months, DFES, DBCA and local governments will have significant response commitments for bushfires and the Northern Australian cyclone season.

#### **Murray Carter**

**Executive Director** 

**DFES Rural Fire Division** 





Volunteers igniting a planned burn in the DFES Lower South West Region. For further information, see Appendix 1-Case Study: Delivering bushfire mitigation programs in regional WA.

Photo: Tim Hutton, DFES Bushfire Risk Management Officer.

#### **Acronyms and abbreviations**

**DFES:** Department of Fire & Emergency Services **DPLH:** Department of Planning, Land & Heritage

**SBAC:** State Bushfire Advisory Council

**DBCA:** Department of Biodiversity, Conservation and Attractions

**FPAA:** Fire Protection Association of Australia

**IBOC:** Interagency Bushfire Operations Committee

ICC: Incident Control Centre

**DEMIRS:** Department of Energy, Mines, Industry Regulation and Safety

WaPol: WA Police

**ACEF:** Area of Community Engagement Focus

TM: Traffic Management

**SEMC:** State Emergency Management Committee

**BRMP:** Bushfire Risk Management Planning **TAMO:** Traffic Access & Management Officer **WALGA:** WA Local Government Association

**TWS:** Telephone Warning System

NHRP: Natural Hazards Resilience Program

**SPP:** State Planning Policy

**SES:** State Emergency Service

**RAP:** Restricted Access Permit

AFAC: Australasian Fire Authorities Council

IAP: Impact Assessment Process

**NEMA:** National Emergency Management Agency



**Project description** 

**Summary and next steps** 

#### **Project progress**

Scope ICC Stage 1 of Options Stage 2 of Options Present final Next steps TBC based Establish project requirements and Analysis to consider Analysis to consider Include ICC in DFES Options Analysis to on WA Government ICC configurations possible ICC locations WA Government working group analysis criteria Strategic Asset Plan feedback COMPLETE **COMPLETE** COMPLETE **COMPLETE IN PROGRESS** COMPLETE TBC Jul 2022 Sep 2022 Nov 2022 Mar 2023 Nov 2023 Mar 2024



**Project description** 

**Summary and next steps** 

#### **Project progress**

Determine project scope and commence planning

Review existing **ACEF Program** 

Stakeholder consultation for enhanced ACEF implementation plan

Develop DRAFT NHRP guidelines, templates and evaluation plan

Commence trial of program improvements

**COMPLETE** Jul 2022

Nov 2022

COMPLETE

COMPLETE Jul 2023

COMPLETE

Apr 2024

**IN PROGRESS** 

Aug 2023

**Project description** 





#### **Project progress**

Commence Monitor Recruit dedicated DFES implementation of performance; position to develop Develop updated BRMP guidelines with review and update Evaluate current **BRMP Guidelines** new BRMP guidelines **BRMP** guidelines local governments accordingly COMPLETE COMPLETE COMPLETE COMPLETE **IN PROGRESS** Jul 2022 Sep 2022 Aug 2023 Sep 2023 **Ongoing** 



**Project description** 

**Summary and next steps** 

#### **Project progress**

Establish project working group Scope and analyse mitigation team delivery models

Undertake cross agency consultation on delivery models

Complete Options
Analysis and present
to DFES Corporate
Executive

Develop DFES business case

Complete budget submission to WA Government Pending budget approval, establish bushfire mitigation team

COMPLETE

Jul 2022

Aug 2022

COMPLETE

COMPLETE
Sep 2022

COMPLETE
Mar 2023

COMPLETE
Dec 2023

IN PROGRESS
Jan 2024

Jul 2024 onwards



**Project description** 

**Summary and next steps** 

#### **Project progress**

**Evaluate** Develop high priority Develop secondary Improve engagement Deliver local effectiveness of Clarify DFES role in Support DPLH government workshops DFES land-use priority DFES land-use with planning measures decision makers revision of new SPP planning system and bushfire training planning guidance planning guidance undertaken COMPLETE **COMPLETE** COMPLETE **COMPLETE IN PROGRESS** Nov 2022 Dec 2022 ongoing Sep 2023 Mar 2024 Ongoing **Ongoing** Nov 2023



**Project description** 

**Summary and next steps** 

#### **Project progress**

Establish cross agency collaborative arrangements and resourcing

Develop discussion paper outlining options for improvements Seek feedback from the WA Government on discussion paper Develop and implement action plan for improvements to bushfire practitioner register

Evaluate implementation of action plan

**COMPLETE** 

COMPLETE

COMPLETE

COMPLETE

Oct 2022

Mar 2023

Sep 2023

Sep 2023

Ongoing

COMPLETE



**Project description** 

**Summary and next steps** 

#### **Project progress**

Undertake multi-agency workshop to scope improvements

Seek endorsement for priority improvements Deliver phase 1 of TAMO training

Develop guidance to improve TM contractor management

Deliver improvements to RAP arrangements

Develop Phase 2 of TAMO training

Develop communications package for Traffic Management

Update doctrine and procedures as required

**COMPLETE** 

Jun 2022

COMPLETE
Aug 2022

COMPLETE
Sep 2022

Dec 2022

COMPLETE

COMPLETE
Jan 2023

Apr 2024

**IN PROGRESS** 

IN PROGRESS

Apr 2024

May 2024



**Project description** 

**Summary and next steps** 

#### **Project progress**

Establish crossagency steering groups to scope approach

Identify and prioritise improvement opportunities

Establish cross-agency data sharing arrangements Develop communications strategy to guide Incident Management Teams

Establish common doctrine for tree risks and road inspections Identify heavy plant support options from industry and the private sector Develop Operating Principles document outlining road clearing standards

Update bushfire response and road clearing doctrine

**COMPLETE** 

Jul 2022

Sep 2022

**COMPLETE** 

COMPLETE

COMPLETE

COMPLETE
Nov 2023

Dec 2023

COMPLETE

IN PROGRESS

Dec 2023 Apr 2024

Dec 2022

Dec 2022



**Project description** 

**Summary and next steps** 

**Project progress** 

Establish cross-agency working group

Undertake environmental scanning including demonstrations on Arena HP

COMPLETE

Analyse suitability of product for multiagency needs in WA

Discuss findings and seek input from IBOC

Scope implementation options in conjunction with IBOC

COMPLETE

**COMPLETE** 

Jul 2022 Sep 2022

COMPLETE
Nov 2022

Dec 2022

Jun 2023 ongoing



**Project description** 

**Summary and next steps** 

### **Project progress**

Develop report on Collate and analyse Seek internal DFES Provide report to SEMC SEMC consider report Undertake existing impact stakeholder analysis stakeholder feedback assessment process feedback on report provided by DFES as process owner **COMPLETE** COMPLETE COMPLETE COMPLETE COMPLETE **IN PROGRESS** Jun 2022 Aug 2022 Oct 2022 Dec 2022 Sep 2023 **Ongoing** 

**Project description** 

**Summary and next steps** 

#### **Project progress**

Scan national telecommunications arrangements and fund sources Identify strategic linkages with communications investment projects Align opportunities to existing DFES resources and business programs Continue crossagency and national discussions on telecommunications resilience

COMPLETE

COMPLETE

COMPLETE

**IN PROGRESS** 

Sep 2022

Dec 2022

Mar 2023

**Ongoing** 



**Project description** 

**Summary and next steps** 

#### **Project progress**

Undertake needs Complete procurement Replace the Develop project plan analysis; sector Design new platform for new Emergency core Emergency Refine and improve Establish the and secure funding WA platform upgraded platform project team and community architecture WA platform **COMPLETE COMPLETE** COMPLETE COMPLETE **COMPLETE** Aug 2022 Sep 2022 Nov 2022 Dec 2022 Jun 2024 Ongoing to 2026 Jan 2024



**Project description** 

**Summary and next steps** 

#### **Project progress**

Review existing Consult with Improve TWS TWS procedures Update procedural Apply new TWS alignment with key emergency and arrangements documentation Emergency WA (Rec 12) operations roles arrangements COMPLETE COMPLETE COMPLETE COMPLETE **IN PROGRESS** Jul 2022 Aug 2022 Nov 2022 **Ongoing** Dec onwards



## **APPENDIX 1**

# Case Study: Delivering bushfire mitigation programs in regional WA

In addition to the work being undertaken by the DFES **Bushfire Mitigation Branch (see** Recommendation 4 update), DFES Regional teams across all of WA deliver a range of bushfire mitigation programs to achieve various outcomes. Mitigation programs are a core part of each region's preventative efforts to both reduce bushfire risk and actively involve the community in managing their risks. All DFES regions work around the year to deliver mitigation programs and a few recent examples are included on the following pages.



Volunteers from the DFES Midwest Gascoyne Region participate in mitigation deployments with DFES staff, local government and DBCA on a series of cross tenure burns in Kalbarri.

#### Part 1: Supporting volunteer involvement in regional mitigation programs

Facilitating volunteer involvement in delivering mitigation works is an important priority that reduces bushfire risk and builds volunteer capability. The DFES Lower South West and Midwest Gascoyne Regions have assembled volunteer teams capable of delivering bushfire mitigation activities through an Expression of Interest processes. These teams deliver planned burns and support other bushfire mitigation treatments both within their own regions, while also undertaking intrastate deployment to support other regions. The DFES Statewide Operational Support Fleet provide access to operational vehicles to enable the volunteers to undertake the work.

## **APPENDIX 1**

LSW Superintendent Phil Brandrett said "the volunteer mitigation deployments not only help deliver critical activities to reduce bushfire risk, but also build practical skills and understanding of fire behaviour which volunteers can apply when responding to bushfires."

Midwest Gascoyne Superintendent
Mark Bowen said that "in addition
to bushfire risk reduction, volunteer
involvement in planned burning
provides an excellent training
environment and an opportunity
for DFES, local government,
DBCA and community members
to work together."







Volunteers from the DFES Lower South West Region participating in mitigation deployments to reduce bushfire risk in Yanmah (top) and Derby (bottom left).

Volunteers work alongside DFES staff in the Midwest Gascoyne Region to reduce risk around the Badgingarra primary school (bottom right).

## **APPENDIX 1**

#### Part 2: The role of a planned burn at the Eaton (Bunbury) fire in December 2023.

In the DFES South West Region, a planned burn undertaken in Autumn 2023 by the Shire of Dardanup and local volunteer bushfire brigades played a critical role in minimising the impacts of the Eaton (Bunbury) bushfire in December 2023.

The Eaton fire posed a significant threat to the Forrest Highway (Australind Bypass) and adjacent houses and businesses. The lower fuels within the planned burn area significantly reduced the rate of spread, fire intensity and ember attack as the head fire reached the recently burnt area, while also creating a safe area for firefighters to work from.

This allowed both firefighters on the ground and water bombing aircraft to focus primarily on asset protection of the adjacent houses along Forrest Highway. This ensured no houses or built assets were lost and the fire was kept small, meaning community, infrastructure and environmental impacts were minimised.



The spread of the Eaton fire (left of the track) was stopped as it approached the recent planned burn (right of track).



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The planned burn (black) was critical in minimising the impacts of the Eaton fire (red) on the local community.

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## **APPENDIX 2**

## **Supplementary information for Recommendation 11**

The Wooroloo Review recommended that DFES and local government continue discussions with telecommunications providers to explore the adequacy of current arrangements for backup power at telecommunication towers in emergency incidents. DFES has been actively engaged in this work and has now built several initiatives and linkages into business as usual that enabled this recommendation to be closed, a summary of which is included below.

#### **Standing Committee on Communications and the Arts**

- DFES has been involved with a number of Commonwealth telecommunications initiatives including attending the Commonwealth House of Representatives Standing Communications and the Arts Committee, which covers a range of areas including Emergency Services.
- A broad range of stakeholder attended the Committee and DFES continues to liaise with these, and other stakeholders as needed.

#### Public Safety Mobile Broadband network (PSMB)

- The Commonwealth Public Safety Mobile Broadband network (PSMB) is specific to Emergency Management & Emergency Services (EMES).
- The Commonwealth announced at last budget they are now developing a formal agency called the National PSMB Entity (NPE) – States will opt in within 3 years maximum via an Inter-Governmental Agreement (IGA). Much of these details are yet to be developed and DFES is actively involved in this work.
- There is still much work to be done at the telco level and DFES
  continues to work with both Telco and power providers, in terms
  of technology, costs, and commercial considerations. There are
  associated Commonwealth programs being considered such as a
  separate global roaming program, that may enable better Public
  Safety general use conditions. A separate global roaming program is
  also being considered for non-Public Safety general use conditions.
- The PSMB is intended to be a nationally consistent scheme.



#### **DFES/DPIRD**

- DFES and the Department of Primary Industries and Regional Development (DPIRD) are collaborating with Telstra via a University of Melbourne study (DPIRD, DFES, Telstra, Western Power, UniMelb). This study intends to classify 500 Mobile Infrastructure sites in WA by typology, including telecommunications profile and energy profile. This study is not EMES specific, but regional and remote resilience during EMES incidents is a key focus area.
- DFES is also leading a separate NDRR funded project including DPIRD that will be looking at the EMES aspects of the entire WA picture, intended to work closely with the UniMelb team to develop synergies across these bodies of concurrent work.
- DFES continues to engage all levels of government in this area, including currently exploring the Commonwealth Telecommunications Disaster Resilience Innovation (TDRI) Program Grants collaboratively with DPIRD.
- DFES is also continuing to lead changes across Western
   Australia in the telecommunications and power resilience areas
   by convening and chairing the Telecommunications Resilience
   Improvement Working Group (TRIWG) that brings together
- WA representatives from DFES, DPIRD, WALGA, NBN, Telstra, Optus, Vodafone, Western Power, and Horizon Power.

#### **Next Steps - Technology and Investment**

- The WA project called the Emergency Services Radio Network (ESRN) has now split into two components, one continuing urgent radio upgrades, and another morphed into the Public Safety Network Strategy (PSNS), that is reviewing longer term technology options, specifically in the EMES contexts.
- The PSNS includes concepts being trialled by WA Police known as the Vehicle as a Node (VaaN) concept, whereby emergency services vehicles become multi-functional telecommunications units. DFES is similarly trialling this concept via Incident Control Vehicles (ICVs) using Starlink and other technologies. Amazon will soon be releasing similar capabilities.
- Current tech development via Apple iPhone14 already provides triple zero direct to satellite capability, and rapid microchip development means Direct Multi-Modal Satellite Devices are likely to be operational within a few years (i.e. the smart phone connects via 5g mobile tower or direct to Satellite as required).
- SpaceX and Optus have recently announced mobile device direct to satellite will be launched across the Australian mainland by 2024 for SMS, and 2025 for full data and voice capability. Once this technology is realised, the power resilience of land-based towers becomes a moot issue in many, if not most contexts.
- It will be important to invest wisely over the years ahead to optimise public safety, and simultaneously avoid wastage and sunk costs based on these rapidly evolving technologies.