



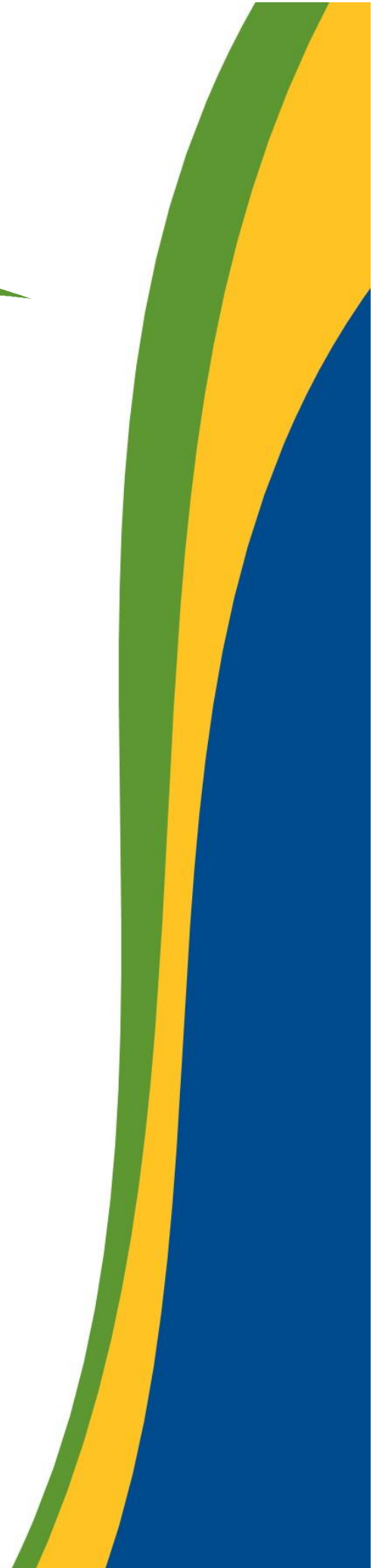
Shire of Northam
Heritage, Commerce and Lifestyle

Shire of Northam

Agenda

Bush Fire Advisory Committee

18 March 2025

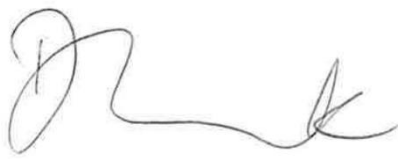


NOTICE PAPER
Bush Fire Advisory Committee
18 March 2025

Committee Members

I inform you that a Bush Fire Advisory Committee will be held in the Council Chambers, located at 395 Fitzgerald Street, Northam on 18 March 2025 at 5:30 pm.

Yours faithfully



Debbie Terelinck
Chief Executive Officer

DISCLAIMER

This agenda has yet to be dealt with by the committee. The Recommendations shown at the foot of each item have yet to be considered by the committee and are not to be interpreted as being the position of the committee. The minutes of the meeting held to discuss this agenda should be read to ascertain the decision of the Council.

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1 DECLARATION OF OPENING

2 ACKNOWLEDGEMENT OF COUNTRY

The Shire of Northam would like to acknowledge the Traditional Owners of the land on which we meet, the Ballardong and Whadjuk people of the Nyoongar nation and pay our respects to Elders, past present and emerging.

3 ATTENDANCE

3.1 ATTENDEES

Voting Committee:

Chief Bush Fire Control Officer
Deputy Bush Fire Control Officer
Deputy Bush Fire Control Officer
Councillor – Shire of Northam
Councillor – Shire of Northam
Bakers Hill Bush Fire Brigade
Clackline Muresk Bush Fire Brigade
Grass Valley Bush Fire Brigade
Inkpen Bush Fire Brigade
Irishtown Bush Fire Brigade
Jennapullin Bush Fire Brigade
Southern Brook Bush Fire Brigade
Northam Central Bush Fire Brigade
Wundowie Bush Fire Brigade
District Officer Northam - DFES

Chris Marris
Kris Brown
Blair Wilding
Maria Girak
Attila Mencshelyi
Carla Millar
Justin Fox
Bruce Devereaux
Nic Dewar
Rob Herzer
Aaron Smith
Paul Antonio
Jamie Wilkinson
Mathew Macqueen
Darrel Krammer

Non-Voting Committee:

Wundowie Volunteer Fire and Rescue Service
Northam Volunteer Fire and Rescue Service
Department of Parks and Wildlife (Wheatbelt)
Department of Biodiversity, Conservation and
Attractions (DBCA) (Perth Hills)

Jeffery Roberts
Greg Montgomery
Graeme Keals
Shaun Hodgson

Staff:

Chief Executive Officer
Executive Manager Development Services
Community Emergency Services Manager
Bushfire Risk Mitigation Coordinator
Governance Officer
Emergency Services Support Officer

Debbie Terelinck
Chadd Hunt
Alex Espey
Kayla James
Tamika Van Beek
Bobbi-Jo Wise

3.2 APOLOGIES

Nil.

3.3 APPROVED LEAVE OF ABSENCE

Nil.

3.4 ABSENT

Nil.

4 DISCLOSURE OF INTERESTS

Members should fill in Disclosure of Interest forms for items in which they have a financial, proximity or impartiality interest and forward these to the Presiding Member before the meeting commences.

As defined in section 5.60A of the Local Government Act 1995, a **financial interest** occurs where a Councillor / Committee Member, or a person with whom the Councillor / Committee Member is closely associated, has a direct or indirect financial interest in the matter. That is, the person stands to make a financial gain or loss from the decision, either now or at some time in the future.

As defined in section 5.61 of the Local Government Act 1995, an **indirect financial interest** includes a reference to a financial relationship between that person and another person who requires a Local Government decision in relation to the matter.

As defined in section 5.60B of the Local Government Act 1995, a person has a **proximity interest** in a matter if the matter concerns a proposed change to a planning scheme affecting land that adjoins the person's land; or a proposed change to the zoning or use of land that adjoins the person's land; or a proposed development (as defined in section 5.63(5)) of land that adjoins the person's land.

As defined in clause 22 of the Local Government (Model Code of Conduct) Regulations 2021, an **impartiality interest** means an interest that could, or could reasonably be perceived to, adversely affect the impartiality of the person having the interest and includes an interest arising from kinship, friendship or membership of an association.

Item Name	Item No.	Name	Type of Interest	Nature of Interest

5 CONFIRMATION OF MINUTES

5.1 CONFIRMATION OF MINUTES FROM THE BUSH FIRE ADVISORY COMMITTEE MEETING HELD 08 OCTOBER 2024

RECOMMENDATION

That the minutes of the Bush Fire Advisory Committee Meeting held on 08 October 2024 be CONFIRMED as a true and correct record of that meeting.

The minutes for the Bush Fire Advisory Committee Meeting can be found on the Shire of Northam website www.northam.wa.gov.au

6 OFFICER REPORTS

6.0 Chief Bush Fire Control Officer Report

File Reference:	5.1.3.1
Reporting Officer:	Chris Marris (Chief Bush Fire Control Officer)
Responsible Officer:	Chadd Hunt (Executive Manager Development & Community Services)
Officer Declaration of Interest:	Nil
Voting Requirement:	Simple Majority
Press release to be issued:	No

BRIEF

For the Committee to receive and note the update provided by the Chief Bush Fire Control Officer (CBFCO).

ATTACHMENTS

1. March 2025 CBFCO Report [**6.0.1** - 2 pages]

A. BACKGROUND / DETAILS

This report is to provide the Committee an update on the current issues and actions of the CBFCO (Attachment 6.0.1).

B. CONSIDERATIONS

B.1 Strategic Community / Corporate Business Plan

Performance Area: Planet.

Outcome 5: A resilient community.

Objective 5.1: Build community resilience to cope with natural disasters and emergencies, including pandemics, storms, flooding and fire.

Priority Action: Nil.

B.2 Financial / Resource Implications

Nil

B.3 Legislative Compliance

Nil

B.4 Policy Implications

Nil

B.5 Stakeholder Engagement / Consultation

Nil

B.6 Risk Implications

Refer to Risk Matrix [here](#).

Risk Category	Description	Rating (likelihood x consequence)	Mitigation Action
Financial	Nil		
Health & Safety	Nil		
Reputation	Nil		
Service Interruption	Nil		
Compliance	Nil		
Property	Nil		
Environment	Nil		

B.7 Natural Environment Considerations

Nil

C. OFFICER'S COMMENT

Nil

RECOMMENDATION

That the Committee NOTES the Chief Bush Fire Control Officer Report as provided in Attachment 6.0.1.

March 2025 CBFCO Report

The 2024/25 fire season was one of immense challenge, particularly throughout December and early January. Successive incidents, including multiple Level 2 and 4th alarm fires in or near the Shire, placed extraordinary pressure on our volunteer brigades. There were numerous occasions when new incidents ignited while crews were still patrolling or mopping up from previous large-scale operations.

Firefighting efforts over Christmas and New Year's Day exemplified the dedication and sacrifice of our volunteers. I want to extend my deepest gratitude to each and every one of you who gave up time with family to protect lives and property. As highlighted in the CESM's Christmas message, it is through your selfless commitment that many people were able to celebrate safely in their homes.

These events reinforce the importance of brigade depth to sustain extended operations. Moving forward, we must strengthen both recruitment and retention strategies to ensure we have the personnel necessary for second, third, and even tenth shifts when required. In particular, we need to balance policies that affect less-involved volunteers, ensuring flexibility and ongoing engagement. I strongly encourage the Shire to take a more active role in supporting recruitment initiatives to sustain the vital work of our brigades.

With current dry conditions persisting, BFCOs have recommended delaying the start of the restricted burning period from 1 March to 15 March. The Keetch-Byram Drought Index (KBDI) for Northam, York, Cunderdin, Goomalling, and Mundaring indicates above-average dryness, suggesting that once the restricted period begins, strong permit restrictions may be necessary.

On 16 February, I formally advised the Shire and Brigade Captains/BFCOs of my decision to step down as CBFCO after six fire seasons in the role. Succession planning has been a priority throughout my tenure, ensuring we have trained, capable, and willing leaders ready to step up. I am proud that our BFCO team has grown significantly in numbers, training, and incident management experience. It is now standard practice for BFCOs to take command of incidents while the leadership team provides support—a model that strengthens our service and prepares future leaders. I encourage the incoming CBFCO and the Shire to continue empowering and supporting our BFCOs.

Reflecting on my time as CBFCO, I take great pride in our collective achievements:

- **Safety First:** No serious physical injuries on the fireground.
- **PPE & Safety Culture:** Significant improvements in the adoption of PPE/PPC standards.
- **Training & Experience:** A substantial increase in training levels, supporting the significant experience of our volunteers.
- **Leadership Growth:** A growing and active BFCO list, with new leaders encouraged and developed.
- **Fire Response Success:** Despite multiple major fires, only one uninhabited home was lost within our area of responsibility.
- **Commitment & Teamwork:** The opportunity to work alongside courageous, committed, and highly skilled volunteers and staff.

The journey has not been without challenges. Navigating COVID-19 restrictions and the introduction of new WHS legislation has placed additional pressures on the service—some of which are still being felt. However, the resilience of our teams has been unwavering.

To all volunteers, staff, and my leadership team—thank you. Your support, dedication, and advice have been invaluable. To the incoming CBFCO, congratulations on stepping forward for this important role. I wish you every success and look forward to continuing to support you as a BFCO.

It has been an absolute privilege to serve as CBFCO, and I remain committed to protecting this incredible community alongside all of you.

With thanks.

Chris
Outgoing CBFCO

6.1 Community Emergency Services Manager Report

File Reference:	5.1.3.1
Reporting Officer:	Alex Espey (Community Emergency Services Manager)
Responsible Officer:	Chadd Hunt (Executive Manager Development & Community Services)
Officer Declaration of Interest:	Nil
Voting Requirement:	Simple Majority
Press release to be issued:	No

BRIEF

For the Committee to receive and note the update provided by the Community Emergency Services Manager.

ATTACHMENTS

Nil

A. BACKGROUND / DETAILS

This report is to provide the Committee an update on the current issues and actions of the CESM.

B. CONSIDERATIONS

B.1 Strategic Community / Corporate Business Plan

Performance Area: Planet.

Outcome 5: A resilient community.

Objective 5.1: Build community resilience to cope with natural disasters and emergencies, including pandemics, storms, flooding and fire.

Priority Action: Nil.

B.2 Financial / Resource Implications

Nil

B.3 Legislative Compliance

Nil

B.4 Policy Implications

Nil

B.5 Stakeholder Engagement / Consultation

Nil

B.6 Risk Implications

Refer to Risk Matrix [here](#).

Risk Category	Description	Rating (likelihood x consequence)	Mitigation Action
Financial	N/A	N/A	N/A
Health & Safety	N/A	N/A	N/A
Reputation	N/A	N/A	N/A
Service Interruption	N/A	N/A	N/A
Compliance	N/A	N/A	N/A
Property	N/A	N/A	N/A
Environment	N/A	N/A	N/A

B.7 Natural Environment Considerations

Nil

C. OFFICER'S COMMENT

Emergency Services Support Officer

The Community Emergency Services Manager (CESM) Alex Espey welcomes Emergency Services Support Officer (ESSO) Bobbi-Jo Wise.

Bobbi-Jo joins the team from within the Shire on a part time basis and is dedicated to working with Emergency Services.

Driver Training

The CESM acknowledges and thanks the brigades for the work they have undertaken in the driver training space.

It is expected that by the end of April we will have achieved 100% of nominated primary drivers having completed accredited driver training.

Recruitment

The CESM has been working with the Shire's Engagement and Communications team to ramp up recruitment throughout the Shire. A number of plans are in place, with further information to be rolled out soon.

A target has been set of 50 new volunteers identified and trained by the end of 2025. We are currently on track to achieve this. The recruitment and

training of new volunteers is a shared responsibility, not the exclusive responsibility of the Shire. The CESM, DFES, and the Shire of Northam are committed to assisting in this area in any viable way.

Brigade captains are encouraged to develop and execute recruitment strategies. The CESM and ESSO can work collaboratively with brigades to achieve these objectives.

Trainer and Assessor

The Shire currently has two volunteer trainer assessors who have consistently demonstrated high levels of commitment to this very labour-intensive undertaking. Brigade Captains are encouraged to identify suitable candidates willing and able to undertake the Trainer and Assessor training required to assist in this delivery.

The opportunity also exists for those who do not want to necessarily delivery training but assist in course facilitation.

Captains are encouraged to discuss this with the Chief, or CESM on how this can be achieved.

Springhill Estate

The CESM has written to the Department of Fire and Emergency Services (DFES) and the Department of Defence (DoD) in relation to Unexploded Ordinance (UXO) site N110/C-123 (1230 Spring Hill).

The following is the basis of the enquiry:

1. Has the area been incorrectly tagged in the mapping system as substantial vacant land?
2. If it is correctly labelled, for the Department of Defence to undertake a reassessment of the classification with a view of changing from Vacant to Developed.

2024/25 High Threat Period

The CESM on behalf of the Shire of Northam acknowledges and thanks all volunteers for their outstanding efforts during the high threat period so far, in particular during the month of December.

Chief Bush Fire Control Officer Chris Marris

The CESM would like to personally thank outgoing CBFCO Chris Marris for his support and engagement since coming into the role. A highly functional relationship must exist between CESM and CBFCO to achieve positive community outcomes and Chris has consistently demonstrated a

commitment to maintaining the highest levels interaction with the CESM.
Thank you, Chris.

Future Governance of the Bush Fire Advisory Committee

The State Government is reforming the *Local Government Act 1995* (the Act) in what are the most significant changes to the Act in 25 years. These reforms aim to ensure that local governments better serve their residents and ratepayers. The *Local Government Amendment Bill 2024* (the Bill) introduces modifications intended to enhance transparency and clarify the operation of council committees. A key amendment involves the appointment process for the presiding member and deputy presiding member, which will now be made by the Council rather than through a secret ballot by the committee. The Bush Fires Act 1954 (Section 67) provides the opportunity to establish a Bush Fire Advisory Committee.

The Bush Fire Advisory Committee (BFAC) is currently established as a formal committee of Council under the Local Government Act. This means that, in its present form, the presiding member and deputy presiding member must be appointed by the Council. However, local governments have the option to create working or advisory groups that are not classified as committees. These groups can engage with the community or develop ongoing networks. Officers propose changing the BFAC from a formal committee of Council to a Committee established under the *Bush Fires Act 1954*. This change would eliminate the need for Council to appoint the presiding and deputy presiding members and not require compliance with the meeting procedures outlined in the Standing Orders Amendment Local Law 2018. It is believed that this change would provide the BFAC with greater flexibility regarding its meeting procedures. The Committee can make recommendations to Council and the terms of reference will be updated to reflect how the Committee will operate. Other "non-formal" committees of Council include the Community Safety and Crime Prevention Committee, the Local Emergency Management Committee and the Noongar Cultural Advisory Group. Matters from BFAC meetings that require a Council decision will be presented as a separate report to Council. A number of other local governments, including the City of Wanneroo, City of Busselton, and City of Greater Geraldton have their BFAC's operating under this type of arrangement and continue to have the ability to present recommendations for Council consideration.

Officers will present a report to Council in April 2025 to determine the presiding and deputy presiding members for its Committees, and decide how the BFAC will be structured in the future to enable transition to the new legislative requirements that take effect from 1 July 2025. Depending on the outcome in relation to BFAC, any amended terms of reference will be considered at the next meeting.

RECOMMENDATION

That Council NOTES the Community Emergency Services Manager Report as provided.

6.2 Chief Bush Fire Control Officer Nominations

File Reference:	5.1.3.1
Reporting Officer:	Alex Espey (Community Emergency Services Manager)
Responsible Officer:	Chadd Hunt (Executive Manager Development & Community Services)
Officer Declaration of Interest:	Nil
Voting Requirement:	Simple Majority
Press release to be issued:	No

BRIEF

The *Bush Fires Act 1954* requires the Council to appoint a Chief Bush Fire Control Officer (CBFCO).

The current CBFCO, Chris Marris has advised of his intent to resign/retire from the position. A process will be undertaken for the appointment of a new CBFCO for the remainder of the existing term.

ATTACHMENTS

Nil

A. BACKGROUND / DETAILS

On Sunday 16 February 2025 CBFCO, Chris Marris advised the Shire Community Emergency Services Manager (CESM) of his intention to resign/retire as the current Chief.

This resignation/retirement triggers the legislative need to identify and appoint a new CBFCO.

Eligibility to be considered for appointment as the Chief Bush Fire Control Officer including pre-requisite criteria is prescribed within Part 5 of the Shire of Northam Bush Fire Manual.

Candidates must be drawn from currently endorsed Fire Control Officers who meet the prescribed criteria.

The term of this appointment will be for the balance of the existing term and expire at the next Fire Control Officer and Leadership elections due to be held mid 2026.

Nominations opened on 17 February and closed on 27 February 2025.

Brigades will have the period of 28 February to 18 March 2025 to consider their preferred candidate.

Nominations have been received from the following Fire Control Officers:

Senior FCO Justin Fox

Clackline-Muresk Volunteer Bush Fire Brigade

Justin meets all the pre-requisite criteria to be considered for appointment as Chief Bush Fire Control Officer.

Deputy Chief Bush Fire Control Officer Kristafer Brown

Bakers Hill Volunteer Bush Fire Brigade

Kris meets all the pre-requisite criteria to be considered for appointment as Chief Bush Fire Control Officer.

B. CONSIDERATIONS

B.1 Strategic Community / Corporate Business Plan

Performance Area: Planet.

Outcome 5: A resilient community.

Objective 5.1: Build community resilience to cope with natural disasters and emergencies, including pandemics, storms, flooding and fire.

Priority Action: Nil.

B.2 Financial / Resource Implications

The Chief Bush Fire Control Officer is paid an honorarium that is budgeted by the Shire.

B.3 Legislative Compliance

Section 38 (1) *Bush Fire Act 1954* which states as follows:

38. Local government may appoint Bush fire control officer (1) A local government may from time to time appoint such persons as it thinks necessary to be its bush fire control officers under and for the purposes of this Act, and of those officers shall subject to section 38A(2) appoint 2 as the Chief Bush fire Control Officer and the Deputy Chief Bush fire Control Officer and the Deputy Chief Bush fire Control Officer
Bush Fire Advisory Committee Minutes 4 June 2024 Page | 13 of 23 Officer who shall be first and second in seniority of those officers, and subject thereto may determine the respective seniority of the other Bush fire control officers appointed by it.

B.4 Policy Implications

The qualifications, criteria and experience requirements of Fire Control Officer and Leadership roles are governed by Part 5 of the Shire of Northam's Bush Fire Manual.

B.5 Stakeholder Engagement / Consultation

Nominations were sought and received from the current Council endorsed Fire Control Officers. The preferred candidate for Chief Bush Fire Control Officer will be considered through a general meeting of each brigade.

B.6 Risk Implications

Refer to Risk Matrix [here](#).

Risk Category	Description	Rating (likelihood x consequence)	Mitigation Action
Financial	Appointed persons may have unexpected financial costs.	Low (1) Low (1) Rare (1)	An honorarium is available for the Chief Bush Fire Control Officer and the 2 x Deputy Bush Fire Control Officer positions.
Health & Safety	The Health and Safety of the volunteer brigade members is an operational priority.	High Risk (10) Extreme (5) Unlikely (2)	Appointment of a Chief Bush Fire Control Officer as recommended.
Reputation	Council	N/A	There are endorsed minimum training standards and criteria for all positions within the Bush Fire Service including the Chief Bush Fire Control Officer.
Service Interruption	N/A	N/A	N/A
Compliance	Non-compliance with process for appointment of a Chief Bush Fire Control Officer.	Moderate (8) High (4) Unlikely (2)	Process is undertaken in accordance with Section 38 <i>Bushfires Act 1954</i> .

Property	N/A	N/A	N/A
Environment	N/A	N/A	N/A

B.7 Natural Environment Considerations

Nil

C. OFFICER'S COMMENT

CBFCO Chris Marris has served as Chief Bush Fire Control Officer since November 2019. Throughout his tenure, Chris has consistently demonstrated exceptional leadership, fostering high levels of engagement with a clear focus on enhancing the service delivery of the Bush Fire Service within the Shire of Northam.

Chris has dedicated himself to the continued development of his team of Fire Control Officers, ensuring a sustainable and effective succession plan.

On behalf of the Shire of Northam and our volunteers, heartfelt thanks are extended to Chris for his unwavering commitment and service.

BFAC is requested to consider the nominations for the position of CBFCO for the remainder of the existing term and made a recommendation for Council consideration.

RECOMMENDATION

That the Bush Fire Advisory Committee ENDORSES the following recommendation being presented to Council:

- 1. That Council acknowledges and thanks Mr Christopher Marris for his lengthy and consistent contribution to the Shire of Northam throughout his tenure as Chief Bush Fire Control Officer.**

RECOMMENDATION

That the Bush Fire Advisory Committee ENDORSES the following recommendation being presented to Council:

- 1. That Council APPOINTS _____ as the Chief Bush Fire Control Officer for the remainder of the 2024/25 and the 2025/26 fire seasons.**

6.3 Working Group Recommendations

File Reference:	5.1.3.1
Reporting Officer:	Alex Espey (Community Emergency Services Manager)
Responsible Officer:	Chadd Hunt (Executive Manager Development & Community Services)
Officer Declaration of Interest:	Nil
Voting Requirement:	Simple Majority
Press release to be issued:	No

BRIEF

For the Committee to receive and note the recommendations from the Working Groups for the Resources to Recovery (R2R), and Rules and Regulation.

ATTACHMENTS

1. Resource to Risk 2024 Report Final [**6.3.1** - 58 pages]
2. Shire Fire Break Amendments Feb 25 (1) [**6.3.2** - 11 pages]
3. Shire Fire Break Amendments Feb 25 with TRACKING [**6.3.3** - 6 pages]
4. Firebreak Notice 2425 APPROVED [**6.3.4** - 6 pages]
5. Rules and Regs Background [**6.3.5** - 1 page]

A. BACKGROUND / DETAILS

The Bush Fire Advisory Committee (BFAC) has three working groups, consisting of:

1. Resource to Risk Working Group (R2R)
2. Rules and Regulation Working Group
3. Training Needs Analysis Working Group.

This report is to provide BFAC with an update on the current issues and actions of the first two Working Groups.

B. CONSIDERATIONS

B.1 Strategic Community / Corporate Business Plan

Performance Area: Planet

Outcome 5: A resilient community.

Objective 5.1: Build community resilience to cope with natural disasters

and emergencies, including pandemics, storms, flooding and fire.
Priority Action: Nil.

B.2 Financial / Resource Implications

There are financial and resource implications associated with the recommendations of this Report that have not been specified.

B.3 Legislative Compliance

Nil.

B.4 Policy Implications

The proposed amendments to the fire break notice may have policy implications that will need consideration.

B.5 Stakeholder Engagement / Consultation

Further consultation is required on the majority of the recommendations prior to determination as identified in the Officer's Recommendation.

B.6 Risk Implications

Refer to Risk Matrix [here](#).

Risk Category	Description	Rating (likelihood x consequence)	Mitigation Action
Financial	Impact on Shire's budget and Long Term Financial Plan	Possible (3) x Major (4) = High (12)	Support Officer's recommendation for further investigation of financial implications.
Health & Safety	Potential impact on health and safety of staff and volunteers from proposed changes.	Possible (3) x Major (4) = High (12)	Support Officer's recommendation for further investigation of implications of proposed changes.
Reputation	Nil.		
Service Interruption	Nil.		
Compliance	Fire Break Notice changes may not comply with legislation.	Possible (3) x Minor (2) = Moderate (6)	Ensure proposed changes comply with <i>Bushfires Act 1954</i>
Property	Nil.		
Environment	Nil.		

B.7 Natural Environment Considerations

Nil.

C. OFFICER'S COMMENT

Officers would like to acknowledge the work of all of the BFAC Working Groups and note the findings and motions from the R2R and Rules and Regulation Working Groups.

As noted within the Report (Attachment 6.3.1) from the R2R Working Group, the findings and recommendations should be read in conjunction with the R2R document from 2018/19. It is noted that the R2R document generally has a lifespan of 10 years and will be reviewed in coming years.

The R2R Working Group has identified a number of recommendations for consideration by BFAC.

Background information on the motions is available in the attached Report as follows:

Motion 1 – page 21

Motion 2 – page 22

Motion 3 – page 23

Motion 4 – page 24

Motion 5 – page 25 & 26

Motion 6 – page 27-30

Motion 7 – page 30

Motion 8 – page 17-20

Motion 9 – relates to Attachments 6.3.2, 6.3.3 and 6.3.4.

The motions from the Resource to Risk Working Group require further detail to understand the feasibility of implementation, and the associated financial and resource requirements. Given this, it is recommended that BFAC recommend to Council that the Shire's Chief Executive Officer investigates the motions further and provides a detailed response at future BFAC and Council meetings. It is likely that some of the Working Group motions will inform the review of the Resources to Risk document that is anticipated to be undertaken in the next 2 to 3 years.

In relation to the motion from the Firebreak and Fuel Notice Working Group, this will inform a review of the Notice for the upcoming 2025/26 fire season.

RECOMMENDATION

That the Bush Fire Advisory Committee recommends that Council NOTES the following motions from the Resources to Risk Working Group and REQUESTS that the Chief Executive Officer report back to Bush Fire Advisory Committee and Council on the feasibility of the motions including the associated financial and resource implications:

1) Motion 1:

- a) (R9.1A) That the Shire of Northam ensures that all future FEL and graders purchased or contracted to the Shire of Northam are fitted with both Roll Over Protective Structure (ROPS) and Falling Object Protection System (FOPS).**
- b) (R9.1B) Should currently owned or contracted FEL or graders not have FOPS or ROPS installed, and are not due to be replaced within 24 months of this recommendation, that the Shire of Northam retrospectively fit ROPS and FOPS to these machines, or engages in alternative arrangements to ensure that equipment with ROPS and FOPS are readily available for firefighting activities within the Shire of Northam.**

2) Motion 2:

- a) (R9.2A) That the Shire of Northam establish supplier relationships with at least two local dozer contractors, to allow for the expedited hire of a dozer if required at a local incident and in the event that one cannot be sourced via Department of Fire and Emergency Services (DFES) or Department of Biodiversity, Conservation and Attractions (DBCA). These dozers should be fitted with ROPS/FOPS.**

3) Motion 3:

- a) (R9.3A) That the Shire of Northam obtain for ongoing use a Collar tank/s, along with associated equipment (tarps, pump, piping/hose, etc.), to be ready for the 2025/26 fire season.**
- b) (R9.3B) That the Shire of Northam subsequently provide training to the appropriate Shire of Northam staff (i.e. water cart drivers/operators), supporting services (i.e. SES) and Bush Fire Brigade (BFB) members on the use of Collar tanks.**
- c) (R9.3C) That the Shire of Northam introduce a procedure for the use of Collar Tanks at all incidents where a Shire, DFES or private contractor water tanker has been requested, subject to the approval of the Incident Controller.**
- d) (R9.3D) That the Shire of Northam develop a mobilisation plan for the Collar tanks in conjunction with the mobilisation of water tankers.**

4) Motion 4:

a) (R9.4A) That the Shire of Northam purchases, makes and/or gets ongoing access to a fire support trailer or vehicle (i.e. small truck) for use at bushfires. It is recommended that the facility has the following provisions:

- i) Spotlights for lighting around where it is set up**
- ii) Generator and associated fuel**
- iii) Portable pump, for use with Collar tanks and/or to assist with pump out of other water sources such as dams**
- iv) Incident control signage and possible basic emergency road signage**
- v) Safety equipment such as road cones, bunting etc.**
- vi) Storage of collar tank**
- vii) A diesel transfer tank, of at least 400ltr capacity**

b) (R9.4B) That the Shire of Northam develop a process internally and/or with a service such as the State Emergency Services (SES), to allow the timely deployment of the fire support trailer/vehicle to incidents within the Shire.

5) Motion 6:

a) (R9.6A) That a total of three Fire Support Vehicles (FSV) be in service for volunteer use in the medium term (within three years) within the Shire of Northam

- i) FSV1 – current, to remain primarily in the possession of the Chief or Deputy Chief Bushfire Control Officer/s to support incident controllers and would generally be used as the incident control point vehicle. This vehicle should continue to be the newest of the FSV's, as it would be the most frequently used vehicle and the least used 'off road'. As per current, this vehicle should have computer/printer support capabilities. It is understood that there is a provision currently within the Shire Budgets to replace this vehicle with a like-for-like, more modern version.**
- ii) FSV2 – it is recommended to be in place for the 2025/26 fire season. This would primarily be used as a Sector Commander vehicle and thus should be configured for off-road use. It is recommended that this be based with Northam Central BFB at the Northam Co-location Facility.**
- iii) FSV3 – it is recommended to be in place before the 2027/28 fire season, or ideally earlier. This would primarily be used as a Sector Commander vehicle and thus should be configured for off-road use. A location recommendation has not been made at this point and would be subject to the implementation of other recommendations within this report. Clackline Muresk BFB would be a consideration as a relatively central station with a spare bay.**

- b) (R9.6B) The specification of FSV2 and FSV3 should support their primary role as sector commander vehicles. It is recommended that they:**
- i) Are a dual cab 4x4 diesel utes with tray back**
 - ii) Have a firefighting unit of approximately 400ltr be mounted for the protection of the crew and to be used in very light opportunistic firefighting such as small hopovers. This vehicle should not be used for routine front-line firefighting.**
 - iii) This vehicle should be fitted with appropriate decals identifying it as a FIRE vehicle and a part of the Northam Shire Bushfire Service.**
 - iv) This vehicle should be designated an emergency vehicle and be fitted with appropriate emergency red and blue lighting and sirens. This ensures that it can efficiently get to fire grounds in the same way fire appliances, other FSVs, Community Emergency Services Manager (CESM) vehicles, and DFES employee vehicles can. It also will mean that when the vehicle is parked on the road, it will be much safer for its crews and the crews around it due to the law which requires motorists to drive at 40km/hr past emergency vehicles with emergency lighting activated. There is also an inherent level of understanding by the community of the authority associated with emergency vehicles as opposed to private vehicles conducting similar duties. With appropriately designated and marked FSVs, these vehicles will better meet community expectations.**
 - v) This vehicle should be fitted with two WAERN radios in the same way that the current FSV, the CESM vehicle and all fire appliances in the Shire are. This will best support the roles of ground controller and sector commander, as these roles require monitoring and use of both the sector (or aircraft) channel and incident command channel. If used in the role of incident control, the expectation is to monitor the incident command channel and state command channel (COMCEN).**
 - vi) Considering the available space on the tray area once fitted with a fire unit, it is suggested that a small toolbox be fitted to allow equipment such as spare PPC and PPE and a first aid kit to be carried along with a small refrigerator similar to the CESM vehicle, the current FSV and all local fire appliances.**

6) Motion 7:

- a) (R9.7A) That the Shire of Northam trials the provision of a chainsaw at Bakers Hill BFB and Grass Valley BFB, being the same type for each Brigade. These chainsaws should be 14" or smaller, with consideration of them being battery-operated for logistical purposes**

- b) (R9.7B) That the Shire of Northam organises appropriate training and safety equipment for members of Bakers Hill and Grass Valley BFBs.**

7) Motion 8:

- a) (R8.1A) That the Shire of Northam undertake a risk assessment for Spencers Brook Townsite.**
- b) (R8.2A) The Shire of Northam prepares a specific risk assessment and response plan for the Northam Army Training Facility, which reflects the actual expectations regarding responding to incidents in and impacting upon the Army Camp. The outcome of the risk assessment and response plan must be communicated actively with both Bush Fire Control Officers's (BFCOs) and BFB members across the Northam Shire.**
- c) (R8.2B) A specific risk assessment and response plan be prepared for the Yonga Hill Detention Facility, ensuring that it only relates to the Facility lands and outlines what Bushfire Brigades and other Fire Brigades can and cannot do.**
- d) (R8.2C) That the Shire of Northam coordinate a biannual tour of Northam Army Training Facility and Yonga Hill Detention Facility to ensure familiarity for BFB and BFCOs.**
- e) (R8.3A) That the Shire of Northam have a risk assessment prepared either outlining current risks or lack of risks for the Irishtown Brigade District.**
- f) (R8.4A) That the Shire of Northam include the lack of egress for Grass Valley residents towards the east, south and southeast of the town site in future risk assessments.**
- g) (R8.4B) That the Shire of Northam investigate the development of an official emergency egress route in Grass Valley either through to the east of the townsite, either onto the Great Eastern Highway or to Grass Valley South Road.**
- h) (R8.5A) That the Shire of Northam undertake a risk assessment for the Muluckine locality.**
- i) (R8.5B) That the Shire of Northam investigate the development of an emergency egress solution in Muluckine to allow residents to escape to the south and/or east.**
- j) (R8.6A) That the Shire of Northam undertakes a risk assessment for the Avon Industrial Complex, which includes current and future fire-related risks.**
- k) (R8.7A) That the Shire of Northam undertake a risk assessment on the Northam Solar Complex.**
- l) (R8.7B) That the Shire of Northam coordinate a biannual tour of the Northam Solar Complex to ensure familiarity for BFB and BFCOs.**
- m) (R8.7C) Risk assessments and further understanding to occur to appreciate the fire related risks posed by the development and operation of the proposed Hydrogen Plant. Changes to the Northam**

GFD should be considered and consulted on should the hydrogen plant project materialise.

- n) (R8.8A) That the Shire of Northam undertake a risk assessment to recognise the risks associated with the proposed Hydrogen Plant and provide realistic potential solutions, which are then communicated to Brigade members.
- o) (R8.8B) Create an understanding of current infrastructure and procedure capabilities in the case of a fire impacting the proposed Hydrogen Plant, and an understanding of any special requirements when defending or operating around the facility. This will need to be communicated with BFCOs and BFB members.
- p) (R8.8C) That the Shire of Northam coordinate a biannual tour of the proposed Hydrogen Plant if it progresses, to ensure familiarity for BFB and BFCOs.
- q) (R8.9A) That the Shire of Northam undertake a risk assessment regarding the fire risks associated with the transportation of Ammonium Nitrate within the Shire.
- r) (R8.9B) Training and information to be given to all Brigade members in the Shire around scene appreciation and initial steps in relation to an ammonium nitrate incident.
- s) (R8.10A) The Shire to develop location specific Bushfire Emergency Plans as recommended in R2R19 and engage with relevant Brigades, Fire Ready Groups and residents within the Shire.

RECOMMENDATION

That the Bush Fire Advisory Committee ENDORSES the following recommendation being presented to Council:

1. That Council **NOTES** the following motion from the Firebreak and Fuel Load Notice Working Group:
 - a. Motion 9: (this relates to Attachments 6.3.2, 6.3.3 and 6.3.4). They direct the appropriate personnel within the Shire review the proposed changes (noted in red), additions (noted in green) and feedback (noted in blue) to the Firebreak and Fuel Load Notice, as presented by the Rules and Regulation Working Group, to ensure legal compliance/wording while capturing the intent of the proposal. Post that process, that the revised Firebreak and Fuel Load Notice to be presented to the next Bush Fire Advisory Committee meeting for review.
2. That Council **REQUESTS** the Chief Executive Officer to consider amending the Shire of Northam's Firebreak and Fuel Load Notice based on the recommendations of the Working Group and presents the updated Notice to the Bush Fire Advisory Committee.



Shire of Northam
Resource to Risk BFAC Working Group 2023/24
Findings & Recommendations



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2.0 Background

The Shire of Northam last completed a Resource to Risk review in 2018, with the final report adopted in early 2019 (hereafter R2R19). This report considered the current risks present across the Shire, ways to mitigate these risks, and the current and future resourcing arrangements best suited to meet these risks.

Now, some five years since this review, and in the backdrop of key resourcing challenges and opportunities, a working group was established to build on this review, acknowledging that some recommendations from the original review were enacted, some were not enacted, while others were unsuccessful (largely additional appliances).

On 24 November 2023, the Chair of the Shire of Northam Bush Fire Advisory Committee (BFAC) advised of the establishment of a Resource to Risk (R2R) Working Group and called for nominations from all Bush Fire Brigades (BFBs) within the Shire of Northam.

The R2R Working Group had the following terms of reference:

Scope: Reviewing the Shire of Northam's Resource to Risk document and making recommendations to BFAC on current and future bush fire resourcing requirements within the Shire.

Composition: The working group is to be chaired by the CBFCO and have up to five members inclusive of the Chair including ideally at least one brigade representative each from the west and east of the Shire.

Consultation: The working group is to consult with all BFB Brigades within the Shire of Northam and any other appropriate parties as it sees fit.

Duration: The working group is to report their findings and recommendations to the March 2024 BFAC meeting.

3.0 Process

Nominations for the working group were called for on 24 November 2023 and closed on 4 December 2023. More nominations than seats on the Working Group (per the terms of reference) were received. The final members were selected considering the member mix between working groups currently operating and experience in Shire-wide bush firefighting.

The Working Group's approach was to build on the R2R19 rather than start from scratch. As such, this document should be read in conjunction with the R2R19.

4.0 Working Group Members

- Chris Marris – Chair
- Justin Fox
- Kris Brown
- Nic Dewar
- Joe Marasco

5.0 Consultation

The Working Group sent requests to the following Brigades for feedback and input.

- Grass Valley BFB
- Southern Brook BFB
- Irishtown BFB
- Northam Central BFB
- Clackline Muresk BFB
- Bakers Hill BFB
- Jennapullin BFB
- Wundowie BFB
- Inkpen BFB

Brigade Consultation Questions included:

1. *Since the last R2R review (2019):*
 - a. *Have any fire risks increased within your Brigade area (for example, new infrastructure – public or private, new developments, recreation areas etc)? If so, please detail.*
 - b. *Have any fire risks decreased within your Brigade area (for example, cement bridge replacing wooden bridge)? If so, please detail.*
 - c. *Has the capability of your Brigade changed? (Capability may include number of active members, number of truck drivers, speed of response, training, age, etc). If so, how?*
 - d. *Are there any new risks on the horizon within your Brigade area that you are aware of?*
2. *Are there any main fire risks within your Brigade area not included in the current R2R document or above? If so, please detail.*
3. *Are your Brigade's current appliance/s meeting the regular requirements of your brigade area? Please consider the types, size and number of incidents; brigade member roles and capabilities (i.e. licenses); terrain, access and water requirements; etc. If not, why?*
4. *On a scale of 1 to 10, where 1 is no difficulty and 10 is very difficult most incidents, how difficult does your Brigade find it to mobilise quickly to an incident? Does this change much by time of day and/or weekday/weekend?*
5. *If applicable, on a scale of 1 to 10, where 1 is no difficulty and 10 is difficult most incidents, how difficult is it for you to find suitable appliance drivers during a mobilisation? Does this change much by time of day and/or weekday/weekend?*
6. *At or around the same time as the last R2R process (2018/19), two new BFB brigades within the Shire were created being Northam Central and Wundowie BFB. How has the creation of these two Brigades impacted on your brigade/brigade's area either positively or negatively (i.e. quicker additional appliances to incidents in your district, co-membership, no impact, etc)? For Northam Central and Wundowie BFB, please comment on what impact you believe you have had on existing Brigades.*

7. *If you could have any appliance or combination of appliances for your Brigade to meet the current and future (next 5-10 years) requirements of your area, what would you like to see, and why?*
8. *If you received the above appliance or combination of appliances, would this present any challenges for the Brigade in terms of member capability (i.e. licences), terrain/access difficulties and facilities (i.e. station size)?*
9. *Thinking Shire-wide, are there any fire resourcing gaps or oversupply/underutilization that you believe are currently present? Please provide basis for your answer.*
10. *Outside of appliances, are there any other resources (i.e. Shire machinery, equipment, fire support vehicles, etc.) that you believe are needed within the Shire of Northam (may be new machinery or equipment, or different specification of existing machinery or equipment, for example)? Please detail what.*
11. *Would your brigade see issues with their being less Light Tankers and/or 1.4's within the Shire (i.e. if they were changed to higher water capacity appliances (i.e. access, incident and sector control abilities, etc)?)*
12. *Who contributed to the above feedback (i.e. Captain, Executive Committee, general membership, etc)?*
13. *Do you have any additional comments that you would like to add in relation to the R2R review?*

The Working Group also sent similar questions to all active Bush Fire Control Officers (BFCOs) within the Shire. These questions included:

1. *Since the last R2R review (2019):*
 - a. *Have any fire risks increased within the Shire that you are aware of? If so, please detail.*
 - b. *Have any fire risks decreased within the Shire that you are aware of (for example, cement bridge replacing wooden bridge)? If so, please detail.*
 - c. *Are there any new risks on the horizon within the Shire that you are aware of?*
2. *Have you run any incident where the current local appliances did not meet the immediate requirement of the incident (i.e. not sufficient water capacity, lack of smaller appliances for access or control purposes, delayed as coming from elsewhere in the Shire or further afield, etc)? If yes, please provide details.*
3. *Do you believe that there is the right mix of appliances within your local area (i.e. your brigade area and immediately surrounding brigade areas within the Shire) to manage most incidents? Why do you say that?*
4. *At or around the same time as the last R2R process (2018/19), two new BFB brigades within the Shire were created being Northam Central and Wundowie BFB. How has the creation of these two Brigades impacted on your ability to run incidents within the Shire?*

5. *If you could change one or more appliances in the Shire to a different appliance (i.e. bigger or smaller), what would you change and why?*
6. *If you had to move one appliance from one Brigade to another to try to improve the Shires overall response capability/effectiveness, which would you move and where would you move it? Why?*
7. *If the Shire could get one additional new appliance, what would you like to see and where would you recommend basing it?*
8. *Outside of appliances, are there any other resources (i.e. Shire machinery, equipment, fire support vehicles, etc.) that you believe are needed within the Shire of Northam (may be new machinery or equipment, or different specification of existing machinery or equipment, for example)? Please detail what.*
9. *Would you see issues with their being less Light Tankers and/or 1.4's within the Shire (i.e. if they were changed to higher water capacity appliances)?*
10. *As incident controllers, do you have difficulties in having sufficient vehicles for incident control and sector commanders? If yes, please provide examples if possible.*
11. *Do you have any additional comments that you would like to add in relation to the R2R review?*

In addition to Brigades and BFCOs, the Working Group also had several conversations with members, Department of Fire and Emergency Services (DFES) staff and Shire of Northam staff.

6.0 Key Basis for Decisions

The following were key approaches/foundations for the decision-making process of the Working Group:

- To grow the number of appliances in the long-term within the Shire of Northam, to meet the growing risks within the Shire, utilisation rates of existing appliances needed to be sufficient. That is, underutilised appliances within the Shire may hamper current and future requests for additional appliances.
- Consideration of additional appliances should be considered as part of this review; however, these should be measured given the lack of success in building the fleet from the last R2R19 review. That is, rather than ask for multiple appliances at once, we should focus on the greatest need and make a strong case for one or two appliances if appropriate.
- That DFES has shown a lack of support in housing the Wundowie BFB, particularly within the Wundowie Gazetted Fire District (GFD) and following on the public record comments by the State Government in November 2023 to the State Parliament, it does not appear that this position will change. It appears DFES believes strongly that the Wundowie BFB should not be located within the Wundowie GFD and support of the Brigade more generally will be limited while this is the case.

- That the Wundowie Volunteer Fire and Rescue (VFRS) Brigade has, and continues to provide, solid support to the Shire of Northam in attending bushfire incidents outside of the Wundowie GFD, particularly in areas geographically close to the Wundowie GFD.
- We understand an additional appliance for the Wundowie VFRS is currently being requested, which would have bushfire capabilities.
- Solutions to resourcing may include options beyond the configuration of and the traditional Brigade placement of appliances. This includes consideration of Brigade districts, both for BFBs as well as consideration of recommending changes to GFDs.
- When considering resourcing, resources beyond fire appliances should be considered.
- When considering the allocation of appliances to Brigades, priority should be given to the risk profile over whether the existing station infrastructure can accommodate the best appliance/s for the Brigade.
- The best long-term outcome of the entirety of the Shire of Northam and its residents is paramount over the interest of a particular Brigade, not discounting the enormous contributions, sacrifice and commitment shown by current and past volunteers of all BFB Brigades within the Shire of Northam.
- That the following appliances are on the schedule for replacement within the next five years and that an adjustment to their configuration is most likely possible during this changeover, then the 'swapping out' of existing appliances to a different configuration that is not at the end of life.
 - Bakers Hill LT (24/25) – like-for-like replacement already requested
 - Clackline Muresk 2.4R (22/23) – 4.4B Tatra replacement already requested and approved by DFES
 - Clackline Muresk LT (20/21) - like-for-like replacement already requested and approved by DFES
 - Grass Valley 1.4R (25/28) – due for replacement
 - Inkpen LT (25/28) – due for replacement
 - Irishtown 1.4R (25/28) – due for replacement
 - Southern Brook 1.4R (25/28) – due for replacement
- The focus of decisions has been to meet the immediate to medium-term requirements (one to eight years) and does not materially consider long-term requirements.

7.0 Summary of Recommendations

The below is a copy of all recommendations made within this report. Please refer to the respective sections for background information and rationale.

Recommendations

- (R8.1A) That the Shire of Northam undertake a risk assessment for Spencers Brook Townsite.
- (R8.2A) The Shire of Northam prepares a specific risk assessment and response plan for the Northam Army Training Facility, which reflects the actual expectations regarding responding to incidents in and impacting upon the Army Camp. The outcome of the risk assessment and response plan must be communicated actively with both BFCOs and BFB members across the Northam Shire.
- (R8.2B) A specific risk assessment and response plan needs to be prepared for the Yonga Hill Detention Facility, ensuring that it only relates to the Facility lands and outlines what Bushfire Brigades and other Fire Brigades can and cannot do.
- (R8.2C) That the Shire of Northam coordinate a biannual tour of these facility to ensure familiarity for BFB and BFCOs.
- (R8.3A) That the Shire of Northam have a risk assessment prepared either outlining current risks or lack of risks for the Irishtown Brigade District.
- (R8.4A) That the Shire of Northam include the lack of egress for Grass Valley residents towards the east, south and southeast of the town site in future risk assessments.
- (R8.4B) That the Shire of Northam investigate the development of an official emergency egress route either through to the east of the townsite, either onto the Great Eastern Highway or to Grass Valley South Road.
- (R8.5A) That the Shire of Northam undertake a risk assessment for the Muluckine locality.
- (R8.5B) That the Shire of Northam investigate the development of an emergency egress solution to allow residents to escape to the south and/or east.
- (R8.6A) That the Shire of Northam undertakes a risk assessment for the Avon Industrial Complex, which includes current and future fire-related risks.
- (R8.7A) That the Shire of Northam undertake a risk assessment on the Northam Solar Complex.
- (R8.7B) That the Shire of Northam coordinate a biannual tour of this facility to ensure familiarity for BFB and BFCOs.
- (R8.7C) Risk assessments and further understanding to occur to appreciate the fire related risks posed by the development and operation of the proposed Hydrogen Plant. Changes to the Northam GFD should be considered and consulted on should the hydrogen plant project materialise.

- (R8.8A) That the Shire of Northam undertake a risk assessment to recognise the risks associated with the facility and provide realistic potential solutions, which are then communicated to Brigade members.
- (R8.8B) Create an understanding of current infrastructure and procedure capabilities in the case of a fire impacting the facility, and an understanding of any special requirements when defending or operating around the facility. This will need to be communicated with BFCOs and BFB members.
- (R8.8C) That the Shire of Northam coordinate a biannual tour of this facility to ensure familiarity for BFB and BFCOs.
- (R8.9A) That the Shire of Northam undertake a risk assessment regarding the fire risks associated with the transportation of Ammonium Nitrate within the Shire.
- (R8.9B) Training and information to be given to all Brigade members in the Shire around scene appreciation and initial steps in relation to an ammonium nitrate incident.
- (R8.10A) The Shire to develop location specific Bushfire Emergency Plans as recommended in R2R19 and engage with relevant Brigades, Fire Ready Groups and residents within the Shire.
- (R9.1A) That the Shire of Northam ensures that all future FEL and graders purchased or contracted to the Shire of Northam are fitted with both ROPS and FOPS.
- (R9.1B) Should currently owned or contracted FEL or graders not have FOPS or ROPS installed, and are not due to be replaced within 24 months of this recommendation, that the Shire of Northam retrospectively fit ROPS and FOPS to these machines, or engages in alternative arrangements to ensure that equipment with ROPS and FOPS are readily available for firefighting activities within the Shire of Northam.
- (R9.2A) That the Shire of Northam establish supplier relationships with at least two local dozer contractors, to allow for the expedited hire of a dozer if required at a local incident and in the event that one can not be sourced via DFES or DBCA. These dozers should be fitted with ROPS/FOPS.
- (R9.3A) That the Shire of Northam obtain for ongoing use a Collar tank/s, along with associated equipment (tarps, pump, piping/hose, etc.), to be ready for the 2024/25 fire season.
- (R9.3B) That the Shire of Northam subsequently provide training to the appropriate Shire of Northam staff (i.e. water cart drivers/operators), supporting services (i.e. SES) and BFB members on the use of Collar tanks.
- (R9.3C) That the Shire of Northam introduce a procedure for the use of Collar Tanks at all incidents where a Shire, DFES or private contractor water tanker has been requested, subject to the approval of the Incident Controller.
- (R9.3D) That the Shire of Northam develop a mobilisation plan for the Collar tanks in conjunction with the mobilisation of water tankers.

- (R9.4A) That the Shire of Northam purchases, makes and/or gets ongoing access to a fire support trailer or vehicle (i.e. small truck) for use at bushfires. It is recommended that the facility has the following provisions:
 - Spotlights for lighting around where it is set up
 - Generator and associated fuel
 - Portable pump, for use with Collar tanks and/or to assist with pump out of other water sources such as dams
 - Incident control signage and possible basic emergency road signage
 - Safety equipment such as road cones, bunting etc.
 - Storage of collar tank
 - A diesel transfer tank, of at least 400ltr capacity
- (R9.4B) That the Shire of Northam develop a process internally and/or with a service such as the SES, to allow the timely deployment of the fire support trailer/vehicle to incidents within the Shire.
- (R9.5A) That the Shire of Northam purchases, makes and/or gets ongoing access to a welfare trailer for use at bushfires. It is recommended that the trailer has the following provisions:
 - Spotlights for lighting around where it is set up
 - Toilet facility
 - A small cool room or large portable fridges for the provision of, and keeping cool, drinks, along with long-life snacks (to fill the gap before catering can be organised by external providers) and personal cooling devices (i.e. cooling vest)
 - Handwashing/sanitising facilities
 - Basic seating provisions (for example, a dozen chairs) to assist with volunteer fatigue management
 - Pop-up marquee for the provision of shade to assist with volunteer fatigue management
 - Necessary facilities to power the trailer (i.e. silenced diesel generator and fuel).
- (R9.5B) That the Shire of Northam develop a process internally and/or with a service such as the SES, to allow the timely deployment of the Welfare trailer to incidents within the Shire.

- (R9.6A) It is recommended that a total of three Fire Support Vehicles be in service for volunteer use in the medium term (within three years) within the Shire of Northam
 - FSV1 – current, to remain primarily in the possession of the Chief or Deputy Chief Bushfire Control Officer/s to support incident controllers and would generally be used as the incident control point vehicle. This vehicle should continue to be the newest of the FSV's, as it would be the most frequently used vehicle and the least used 'off road'. As per current, this vehicle should have computer/printer support capabilities. It is understood that there is a provision currently within the Shire Budgets to replace this vehicle with a like-for-like, more modern version.
 - FSV2 – it is recommended to be in place for the 2024/25 fire season. This would primarily be used as a Sector Commander vehicle and thus should be configured for off-road use. It is recommended that this be based with Northam Central BFB at the Northam Co-location Facility.
 - FSV3 – it is recommended to be in place before the 2026/27 fire season, or ideally earlier. This would primarily be used as a Sector Commander vehicle and thus should be configured for off-road use. A location recommendation has not been made at this point and would be subject to the implementation of other recommendations within this report. Clackline Muresk BFB would be a consideration as a relatively central station with a spare bay.
- (R9.6B) The specification of FSV2 and FSV3 should support their primary role as sector commander vehicles. It is recommended that they:
 - Are a dual cab 4x4 diesel utes with tray back
 - Have a firefighting unit of approximately 400ltr be mounted for the protection of the crew and to be used in very light opportunistic firefighting such as small hopovers. This vehicle should not be used for routine front-line firefighting.
 - This vehicle should be fitted with appropriate decals identifying it as a FIRE vehicle and a part of the Northam Shire Bushfire Service.
 - This vehicle should be designated an emergency vehicle and be fitted with appropriate emergency red and blue lighting and sirens. This ensures that it can efficiently get to fire grounds in the same way fire appliances, other FSVs, CESM vehicles, and DFES employee vehicles can. It also will mean that when the vehicle is parked on the road, it will be much safer for its crews and the crews around it due to the law which requires motorists to drive at 40km/hr past emergency vehicles with emergency lighting activated. There is also an inherent level of understanding by the community of the authority associated with emergency vehicles as opposed to private vehicles conducting similar duties. With appropriately designated and marked FSVs, these vehicles will better meet community expectations.
 - This vehicle should be fitted with two WAERN radios in the same way that the current FSV, the CESM vehicle and all fire appliances in the Shire are. This will best support the roles of ground controller and sector commander, as these roles require monitoring and use of both the sector (or aircraft) channel and incident command channel. If used in the role of incident control, the expectation is to monitor the incident command channel and state command channel (COMCEN).
 - Considering the available space on the tray area once fitted with a fire unit, it is suggested that a small toolbox be fitted to allow equipment such as spare PPC and PPE and a first aid kit to be carried along with a small refrigerator similar to the CESM vehicle, the current FSV and all local fire appliances.

- (R9.7A) That the Shire of Northam trials the provision of a chainsaw at Bakers Hill BFB and Grass Valley BFB, being the same type for each Brigade. These chainsaws should be 14" or smaller, with consideration of them being battery-operated for logistical purposes
- (R9.7B) That the Shire of Northam organises appropriate training and safety equipment for members of Bakers Hill and Grass Valley BFBs.
- (R10.2A) [On the basis that the 'high use' recommendations are implemented] that the Shire of Northam, in conjunction with the BFB Leadership team and Brigades, conduct an annual review of the 'high use' program post-season to determine:
 - The effectiveness of the allocation to the various Brigades over the course of the year
 - The utilisation of the appliances
 - The appropriateness of the default Brigades.
- (R10.2B) [On the basis that the 'high use' recommendations are implemented] that the Shire trials the 'high use' concept for two-year, followed by a comprehensive review of the program.
- (R10.2C) [On the basis that the 'high use' recommendations are implemented] that the Shire of Northam consult with the local First Nations people about possible names for any 'high use' appliances.
- (R10.3A) That the Shire of Northam create a LT mobilisation strategy where, in an escalating incident, Brigades that have not been mobilised yet receive a request for Light Tankers to attend via the standard mobilisation channels (SMS and BART) so as to have at least two LT's during the high threat period.
- (R10.3B) That the Shire of Northam create procedures and an expectation that when a brigade is mobilised, if there are enough crew members to at least transport the LT to the control point, then this is done. For example, if a brigade has a crew of only 2-3 available, one member would drive the heavy and another the LT to the control point. From here a decision will be made as to the crew makeup and appliance use.
- (R10.3C) That the Shire of Northam includes LT specific mobilisation to the newly adopted CAD system (automatic turnout system).
- (R10.3D) As additional FSVs are added to the Shire's fleet, they are included in this enhanced LT mobilisation process.
- (R10.4A) That the Shire of Northam supports the replacement of Bakers Hill BFB LT with a modern LT as scheduled.
- (R10.4B) That Bakers Hill BFB station be the default home for a Shire of Northam 'high use' 1.4R appliance.
- (R10.5A) That the Shire of Northam continues to support the replacement of Clackline Muresk BFB 2.4R with the 4.4B Tatra Crew Cab as scheduled.
- (R10.5B) That the Shire of Northam continues to support the replacement of Clackline Muresk BFB LT with a modern LT as scheduled.

- (R10.6A) That the Shire of Northam supports Grass Valley's BFBs request to have the 1.4R upgraded to a 3.4.
- (R10.6B) That the Shire of Northam undertake further consultation with the Brigade regarding the appliance's configuration (crew cab or single cab) and confirm urban configuration or otherwise.
- (R10.6C) That Grass Valley BFB station to be the default home for a Shire of Northam 'high use' LT appliance.
- (R10.7A) That the Shire of Northam supports the replacement of Inkpen BFBs LT with a modern LT as scheduled.
- (R10.8A) That the Shire of Northam supports Irishtown BFBs request to have the 1.4R upgraded to a 3.4 crew cab. Such an upgrade should take priority over upgrading Grass Valley's 1.4R to a 3.4U due to Grass Valley already having a 4.4R.
- (R10.8B) That the Shire undertake further consultation with the Brigade regarding the configuration of the appliance (urban or rural).
- (R10.8C) There are no current recommendations for appliance changes other than those already due for renewal.
- (R10.10A) That the Shire of Northam supports Northam Central BFB to receive a like-for-like replacement of its 3.4U at the earliest opportunity.
- (R10.10B) It is recommended that the Shire of Northam makes a submission for an additional appliance into the Shire, being for a LT, to be based at Northam Central
- (R10.10C) It is recommended that the Shire of Northam makes a submission for an additional appliance into the Shire, being for 12.2 water tanker, to be based at Northam Central
- (R10.10D) As noted elsewhere, it is recommended that the FSV2 be located at Northam Central
- (R10.11A) That the Shire of Northam supports the Southern Brook BFB 1.4R to be replaced by a modern 1.4.
- (R10.11B) That the Southern Brook 1.4R become a 'high use' appliance for use within the Shire of Northam for an initial two-year trial period. The appliance is recommended to be stationed at Southern Brook from approximately mid-October through to approximately Christmas Eve each year to coincide with the harvest period, which is Southern Brook's high-threat period. At other times of the year, the 'high use' 1.4R be stationed by default at Bakers Hill BFB station.
- (R10.12A) That the Wundowie LT become a 'high use' appliance for use within the Shire of Northam for an initial two-year trial period. Note that this recommendation is contingent on the recommended change to the Wundowie gazetted fire district being endorsed by both the Shire of Northam and DFES and enacted.

- (R10.12B) That the 'high use' LT to be stationed by default at Grass Valley BFB station.
- (R11.2A) The Shire of Northam increases Clackline Muresk BFBs brigade district to the southwest of its current brigade district to encapsulate the farmland east of De Castilla Road/Leaver Road (including approximately 2km west of Leaver Road to adjoin newly recommended expansion on Inkpen BFB district), with Bakers Hill BFB to be the HTP backup.
- (R11.4A) On the basis that Wundowie BFB's brigade district is reallocated, the Shire of Northam increases Inkpen BFBs brigade district to the east to encapsulate the farmland east of Oyston Road, south of Boase Road and Oliver Road and approximately 2km west of Leaver Road, with Bakers Hill BFB to be the HTP backup.
- (R11.4B) That the Shire of Northam updates Inkpen BFBs Beat, so as to include the farmland located east of Inkpen Rd and north of Great Southern Highway as being Inkpen's brigades district, rather than DBCA. Bakers Hill BFB to be HTP backup for this area.
- (R11.7A) That the Shire of Northam creates a Northam Central BFB district to include the following areas:
 - The areas between the Great Eastern Highway bypass and the Northam gazetted fire district including some of Mount Ommaney, Mitchell Avenue
 - The Northam Army Camp and the Northam Speedway area off Fox Road
 - Northam Toodyay Road and Katrine Road, along with the areas immediately in their vicinity.
- (R11.7B) That current Brigades servicing the areas recommended to form the Northam Central BFB district, remain as automatic mobilisations to support Northam Central BFB given their high risk nature and local knowledge.
- (R11.9A) That the Shire of Northam requests DFES to include the Mauravillo Estate within the Wundowie gazetted fire district. The connection between the current Wundowie gazetted fire district and Mauravillo Estate is recommended to be via Golf Links Road. All areas outside of the specific residential area of the estate and beyond the road reserve are not included in this recommendation.
- (R11.9B) On the basis that:
 - DFES accept the inclusion the Mauravillo Estate within the Wundowie gazetted fire district;
 - The reallocation of the Wundowie BFB LT elsewhere within the Shire occurs; and
 - that Bakers Hill BFB becomes the default home for a Northam 'high use' appliance for the majority of the year,that the Shire of Northam reallocate the remaining Wundowie BFB district to Bakers Hill BFB.
- (R11.10A) That the Shire of Northam requests DFES to include the internal compound areas of the Yongah Hill Detention Centre Facility within the Northam gazetted fire district. This is to be either as a satellite gazetted fire district, or via a connection between the current Northam gazetted fire district and Yongah Hill Detention Centre Facility that is a straight line (i.e. 5m wide). This line would not follow any prominent feature such as a road. All areas outside of the internal compound of the Yongah Hill Detention Centre Facility and connecting line are not included in this recommendation.

- (R11.11A) That the Shire of Northam updates Bakers Hill BFB Beat, so as to have the eastern portion of their Brigade district supported during the high threat period (HTP) by Clackline Muresk BFB.

Some recommendations are contingent on other recommendations being adopted. Consideration for the timing and order of the recommendation implementation is paramount. Some timings have been specified while others should be considered as part of an implementation working group.

8.0 A Review of the R2R19

The Working Group undertook a review of Sections 3 and 4 of R2R19. These sections comprised specific locality risk assessments broken into Brigade areas of responsibility. Several areas were identified as needing further attention and updated risk assessments during this process.

8.1 Spencers Brook Townsite

- Although a section exists within R2R19, it is not relevant to Spencers Brook Townsite. The current risk assessment is an exact replication of the Clackline Townsite risk assessment which is not appropriate as the risks differ significantly.

Recommendation

- (R8.1A) That the Shire of Northam undertake a risk assessment for Spencers Brook Townsite.

8.2 Northam Army Training Facility

- The R2R19 combines the Northam Army Training Facility, commonly known as Northam Army Camp, with the Yonga Hill Detention Facility. These two areas are significantly different; they are managed by two different government organisations. The Army Camp is managed by Department of Defence and private contractors. The Detention Facility and surrounding land is managed by Border Force (Department of Home Affairs) and private contractors.
- Interaction and response requirements between these areas are different. Confusingly, there is a statement that reads, '*Bushfire Brigades will not be allowed access into camp for asset protection*'. It is assumed that this is referring to the Detention Centre, however, this is confusing as it uses the word "camp" commonly associated with the Army Training Facility (Northam Army Camp). As a result of these two locations being combined, this statement could cause unnecessary and dangerous misunderstandings. This also fails to acknowledge the legislative obligations on the Shire of Northam to manage fire outside of GFD's.
- Beyond the document, because of years of misinformation being disseminated amongst local Bushfire Brigade Members, there is a dangerous misconception that Bushfire fighters are not to fight fires in the Northam Army Facility, and because of this confusion, there is a significant danger to fire fighters and the Community.

Recommendations

- (R8.2A) The Shire of Northam prepares a specific risk assessment and response plan for the Northam Army Training Facility, which reflects the actual expectations regarding responding to incidents in and impacting upon the Army Camp. The outcome of the risk assessment and response plan must be communicated actively with both BFCOs and BFB members across the Northam Shire.
- (R8.2B) A specific risk assessment and response plan needs to be prepared for the Yonga Hill Detention Facility, ensuring that it only relates to the Facility lands and outlines what Bushfire Brigades and other Fire Brigades can and cannot do.
- (R8.2C) That the Shire of Northam coordinate a biannual tour of these facility to ensure familiarity for BFB and BFCOs.

8.3 Irishtown Brigade District

- There is no risk assessment in the current 2019 R2R document that details any areas within Irishtown BFB's District. It is unknown if this is an omission or if there were no significant risks identified in that area. Note that the Working Group acknowledges that several risk areas do exist within this Brigade District.

Recommendation

- (R8.3A) That the Shire of Northam have a risk assessment prepared either outlining current risks or lack of risks for the Irishtown Brigade District.

8.4 Grass Valley townsite

- In the R2R19, there is no mention that there is no official escape egress for residents of the Grass Valley Townsite to the east as all roads end and movement to the south and southeast is restricted by water pipe and railway line and embankment.

Recommendation

- (R8.4A) That the Shire of Northam include the lack of egress for Grass Valley residents towards the east, south and southeast of the town site in future risk assessments.
- (R8.4B) That the Shire of Northam investigate the development of an official emergency egress route either through to the east of the townsite, either onto the Great Eastern Highway or to Grass Valley South Road.

8.5 Muluckine locality

- No risk assessment has been prepared for this area in the R2R19.
- Escape for residents of properties along the York-Northam Road is significantly impeded towards the east and southeast of the locality due to the Mortlock River.

Recommendations

- (R8.5A) That the Shire of Northam undertake a risk assessment for the Muluckine locality.
- (R8.5B) That the Shire of Northam investigate the development of an emergency egress solution to allow residents to escape to the south and/or east.

8.6 Meenaar Industrial Complex

- The R2R19 does not include a risk assessment for the Avon Industrial Complex in Meenaar.
- New developments in this area include a significant CBH receival site, planned rail spur line, current and future industrial operations and associated complexities with these such as HAZMAT.

Recommendations

- (R8.6A) That the Shire of Northam undertakes a risk assessment for the Avon Industrial Complex, which includes current and future fire-related risks.

8.7 Northam Solar Complex and Planned Hydrogen Plant

- Since the preparation of R2R19, the construction and operation of the Northam Solar Complex has occurred. There has already been at least one fire at this facility during which there were complexities identified, such as potential HAZMAT, operating around photovoltaic cells, and access to the facility for firefighters, i.e. lacking obvious entry off York-Northam Road.
- The proposed expansion of the solar farm and the construction of a Hydrogen Plant (<https://www.wa.gov.au/government/media-statements/Cook-Labor-Government/%245-million-committed-for-green-hydrogen-project-in-Northam--20230718>) to be situated within or near the current solar complex will undoubtedly have fire risks associated with it. Being a part of the Grass Valley Brigade area, the roles of BFB and VFRS must be well identified.

Recommendation

- (R8.7A) That the Shire of Northam undertake a risk assessment on the Northam Solar Complex.
- (R8.7B) That the Shire of Northam coordinate a biannual tour of this facility to ensure familiarity for BFB and BFCOs.
- (R8.7C) Risk assessments and further understanding to occur to appreciate the fire related risks posed by the development and operation of the proposed Hydrogen Plant. Changes to the Northam GFD should be considered and consulted on should the hydrogen plant project materialise.

8.8 Chicken farm Muluckine/Muresk area (access York-Northam Road, O'Brian's)

- Since the R2R19 was created, a significant chicken farming operation has been constructed and operated in the Muluckine/Muresk area (Grass Valley & Clackline Muresk BFB districts). Therefore, there is no current Risk assessment within the R2R19.
- The facility does pose a significant animal welfare concern if impacted by fire or smoke from a bushfire.

Recommendation

- (R8.8A) That the Shire of Northam undertake a risk assessment to recognise the risks associated with the facility and provide realistic potential solutions, which are then communicated to Brigade members.
- (R8.8B) Create an understanding of current infrastructure and procedure capabilities in the case of a fire impacting the facility, and an understanding of any special requirements when defending or operating around the facility. This will need to be communicated with BFCOs and BFB members.
- (R8.8C) That the Shire of Northam coordinate a biannual tour of this facility to ensure familiarity for BFB and BFCOs.

8.9 Ammonium Nitrate incidents specifically on Great Eastern Highway

- The transportation of Ammonium Nitrate along Great Eastern Highway is not identified as a risk in the R2R19. This risk is shared by almost every Brigade area as the highway runs east to west for the entirety of the Shire.

Recommendation

- (R8.9A) That the Shire of Northam undertake a risk assessment regarding the fire risks associated with the transportation of Ammonium Nitrate within the Shire.
- (R8.9B) Training and information to be given to all Brigade members in the Shire around scene appreciation and initial steps in relation to an ammonium nitrate incident.

8.10 Location-specific Bushfire Emergency Plans

- Throughout the R2R19, multiple references exist to the development and distribution of location-specific Bushfire Emergency Plans. It is understood that these have not been developed.
- It was identified by many of the Brigades and Fire Control Officers surveyed during this R2R process that population increases have occurred in most localities within the shire, specifically in bushfire risk areas such as rural or semi-rural residential areas.

Recommendation

- (R8.10A) The Shire to develop location specific Bushfire Emergency Plans as recommended in R2R19 and engage with relevant Brigades, Fire Ready Groups and residents within the Shire.

9.0 Non-Appliance Based Recommendations

9.1 Shire of Northam earth-moving/construction equipment attending fires

Background

A key part of rural fire response is using equipment such as front-end loaders (FEL), graders, skid steers and dozers, particularly in bush areas where access and containing a fire are impacted by trees and scrub.

Most of this equipment for level 1 incidents is regularly supplied by the Local Government using their existing works department equipment.

A roll-over protective structure (ROPS) or falling-object protective structure (FOPS) is used to protect individuals travelling correctly (e.g. seatbelt fastened, doors closed) in the cabin of mobile equipment from the consequences of a roll-over or objects falling on the cabin. These structures are designed and destructively tested in accordance with International Standards ISO 3471 and ISO 3449 to provide full protection to the operator.

Reasoning

- The Shire of Northam FEL and graders that attend fires within the Shire currently do not have FOPS installed.
- These structure systems are safety aspects that protect the machine operator and, to an extent, the machine itself from serious injury/damage.
- The Northam Shire has many treed areas within it, and FELs are called upon frequently to assist with the felling and pushing up of trees as part of the Shire's firefighting efforts. Graders may also work in proximity to burning trees.
- The protection of the operators is paramount, and the risks are assessed to ensure their safety. Currently, this limits the ability of these operators and Incident Controllers to undertake tasks that would assist in the containment and control of bushfires, as it poses an unacceptable risk to machinery operators. This, however, puts firefighters and the broader community at greater risk, as well as increasing the duration of incidents.
- A major risk reduction would occur with the installation of FOPS (and ROPS if not already installed).

Recommendation

- (R9.1A) That the Shire of Northam ensures that all future FEL and graders purchased or contracted to the Shire of Northam are fitted with both ROPS and FOPS.
- (R9.1B) Should currently owned or contracted FEL or graders not have FOPS or ROPS installed, and are not due to be replaced within 24 months of this recommendation, that the Shire of Northam retrospectively fit ROPS and FOPS to these machines, or engages in alternative arrangements to ensure that equipment with ROPS and FOPS are readily available for firefighting activities within the Shire of Northam.

9.2 Dozer Access

Background

Dozers are an important machine in fire line construction. They are a heavy-duty resource for pushing and cutting fire breaks through all types of terrain. Additionally, they perform a crucial role in pushing over tall, burning, smouldering trees that pose a risk for reignition and hop-overs as well as to personnel and vehicles on the ground. While loaders and graders are vital on the fireground they lack the power to knock over large trees or perform some of the more arduous pushing tasks.

A burning tree can burn for several weeks if firefighters cannot reach the top of the tree with sufficient water, and if burning close to the fire's edge, may cause hop-overs when sparks get carried by the wind etc onto unburnt ground. With the tree pushed over, the burning material can be easily attended to and extinguished within a short space of time. It also immediately reduces the height of embers.

The Shire of Northam do not own or have a dozer available, and at a recent fire when a dozer had been requested, the resource sent was a loader which was unsuitable for the required task.

Reasoning

- It is understood that the cost of purchasing and maintaining a resource such as a dozer would be prohibitive for Shire, however this does not negate the need for its use on the fireground at times.
- DFES often make available a dozer during periods of elevated fire danger, but at other times, this is the responsibility of the local government.
- The lack of access to a dozer can dramatically extend the duration of an incident and increase the risk of the fire escaping containment lines.

Recommendation

- (R9.2A) That the Shire of Northam establish supplier relationships with at least two local dozer contractors, to allow for the expedited hire of a dozer if required at a local incident and in the event that one can not be sourced via DFES or DBCA. These dozers should be fitted with ROPS/FOPS.

Note

- It is not expected that the Shire of Northam pays to have these machines on 'stand-by', but simply having a supplier relationship so that they can easily be called upon if required.

9.3 Collar Tanks

Background

Within the Shire of Northam, the provision of water to refill fire appliances traditionally is:

- Hydrants or standpipes, particularly when they are near an incident.
- Directly via a Shire of Northam water tanker, with the water tanker refilling from the nearest (or near the nearest high flow) standpipe after each empty.
- Directly via a DFES water tanker, with the water tanker refilling from the nearest (or near the nearest high flow) standpipe after each empty.
- On occasion, directly via a contractor water tanker, with the water tanker refilling from the nearest (or near the nearest high flow) standpipe after each empty.
- A combination of the above.



Some Australian brigades and Shires utilise Collar tanks. The routine use of collar tanks within the Shire of Northam and surrounding areas is rare, although a number of members have had exposure to their use, particularly on deployments in areas such as the Goldfields.

Reasoning

- There are many locations within the Shire where water for firefighting is non-existent.
- Often water tankers, be it Shire or DFES (such as Toodyay 12.2), sit idle on the fireground while water is drawn down in 600-4,000ltrs increments, before leaving the fireground for extended periods, while they travel (can easily be 20km round trip) to refill from the most efficient nearest water point.
- While water tankers are refilling, firefighting appliances requiring refill must either also travel to the nearest water point (and be in competition with said water carter), or wait for the return of the water tanker, during which time they cannot contribute to active firefighting activities.
- Through the use of Collar tanks, water tankers can fill the Collar tank on arrival to an incident (post set-up of collar tank) without waiting to be drawn down by individual appliances. It can then leave the fire ground to initiate refilling while water is still available for drawing down on at the fire ground. Once back on the fire ground, the water tanker refills the Collar tank again, repeating the process. It thus reduces the time that there is no available water on the fireground.

Recommendation

- (R9.3A) That the Shire of Northam obtain for ongoing use a Collar tank/s, along with associated equipment (tarps, pump, piping/hose, etc.), to be ready for the 2024/25 fire season.
- (R9.3B) That the Shire of Northam subsequently provide training to the appropriate Shire of Northam staff (i.e. water cart drivers/operators), supporting services (i.e. SES) and BFB members on the use of Collar tanks.
- (R9.3C) That the Shire of Northam introduce a procedure for the use of Collar Tanks at all incidents where a Shire, DFES or private contractor water tanker has been requested, subject to the approval of the Incident Controller.
- (R9.3D) That the Shire of Northam develop a mobilisation plan for the Collar tanks in conjunction with the mobilisation of water tankers.

9.4 Fire Support Trailer

Background

Medium and larger scale incidents run by the Shire of Northam have numerous equipment requirements, which are currently dispersedly located and require coordination and multiple requests to organise. For example, a water pump is located at the Bakers Hill Station, fuel (if available) may be at the Shire works depot or elsewhere within the Shire, signage may be currently in use or located at the Shire depot, small generators are located at various fire stations, etc.

Often, during such incidents, personnel are already stretched, and the required logistics and coordination to procure these resources/equipment add to this pressure.

Reasoning

- Reasons for the Collar tank are contained within that recommendation. The transportation of the collar tank then needs to be considered, via the below recommendation and/or through the provision on the water tanker/s themselves.
- Provision of diesel transfer tank – new fire appliances have been designed so that the auxiliary diesel engines that drive the pump will stop working, without warning, when the fuel level of the appliance reaches ¼. This presents significant risks to firefighters, meaning that appliances must prioritise refilling their appliances early to avoid facing this scenario. This may result in an appliance being offline for an extended period while it travels to the nearest open fuel station. The provision of diesel at an incident can reduce this downtime, and/or allow replacement appliances to be sourced to fill this gap in resourcing while refuelling.
- WHS laws have increased the focus on ensuring private response personnel and vehicles meet basic training, PPC/PPE and vehicle requirements. To assist in this, more detailed and obvious signage is needed to communicate these expectations and requirements. Some of this can be contained within the existing CESM and Fire Support Vehicle. However, this is likely insufficient for geographically larger incidents and/or incidents with geographic barriers (i.e. major roadways, railways, rivers, etc.).

Recommendation

- (R9.4A) That the Shire of Northam purchases, makes and/or gets ongoing access to a fire support trailer or vehicle (i.e. small truck) for use at bushfires. It is recommended that the facility has the following provisions:
 - o Spotlights for lighting around where it is set up
 - o Generator and associated fuel
 - o Portable pump, for use with Collar tanks and/or to assist with pump out of other water sources such as dams
 - o Incident control signage and possible basic emergency road signage
 - o Safety equipment such as road cones, bunting etc.
 - o Storage of collar tank
 - o A diesel transfer tank, of at least 400ltr capacity

The below shows a sample trailer, primarily set up for a collar tank and associated equipment.



- (R9.4B) That the Shire of Northam develop a process internally and/or with a service such as the SES, to allow the timely deployment of the fire support trailer/vehicle to incidents within the Shire.

Note

- There may be the ability to work with adjoining Shires to develop a regional resource to reduce the cost to the Shire of Northam in providing this facility. That, however, comes with the risk of the trailer not being available in the event of multiple incidents at once. It may also present management challenges such as maintenance, re-stocking, etc.
- There is the potential for this trailer and the welfare trailer to be one. However, the management of the overall size/weight and the separation of food/drinks, toilets and operational equipment must be considered.

9.5 Welfare Trailer

Background

By the very nature of bushfires, they occur without notice at any time of the day and week, at locations across the Shire often with no facilities or provisions in proximity. These incidents can see the mobilisation of a significant number of volunteers in a short period of time, for extended durations, putting pressure on the Shire of Northam to meet a sudden surge in welfare requirements including drinks, food, seating, and toilet facilities.

Currently, the Shire relies on small-scale self-catering (small fridges on appliances and in support vehicles for drinks) along with local food providers. Often, toilet facilities are not currently available during incidents. Shire Rangers and SES currently provide some additional assistance with the provision/transport of welfare.

Reasoning

- The Bush Fire Service continues to evolve with a growing number of female firefighters across the service and a desire to continue to see this grow. While many volunteers acknowledge the current reality of bushfire incident facilities, others may choose not to volunteer given these circumstances. There is also an emerging expectation by volunteers, irrespective of gender, that basic facilities such as toilets are routinely available.
- Likewise, the need and expectation to provide timely welfare provisions such as drinks and food is growing. Local suppliers, like cafes and fast-food restaurants, provide the Shire with essential assistance in this regard, but the availability of this at scale at short notice and/or out of hours often delays the provision of basic welfare.
- Competition for a shrinking pool of volunteers is increasing, so initiatives that reduce some obstacles to volunteering may assist with recruiting and retaining members.

- The management of fatigue and meeting the requirements of WHS legislation, means that providing basic facilities such as seating and shade are more important than ever.
- As urbanisation within the Shire increases, the ability for volunteers to go to the toilet in the bush becomes more difficult, and often also would not meet the community's expectations for a professional emergency service.

Recommendation

- (R9.5A) That the Shire of Northam purchases, makes and/or gets ongoing access to a welfare trailer for use at bushfires. It is recommended that the trailer has the following provisions:
 - Spotlights for lighting around where it is set up
 - Toilet facility
 - A small cool room or large portable fridges for the provision of, and keeping cool, drinks, along with long-life snacks (to fill the gap before catering can be organised by external providers) and personal cooling devices (i.e. cooling vest)
 - Handwashing/sanitising facilities
 - Basic seating provisions (for example, a dozen chairs) to assist with volunteer fatigue management
 - Pop-up marquee for the provision of shade to assist with volunteer fatigue management
 - Necessary facilities to power the trailer (i.e. silenced diesel generator and fuel).
- (R9.5B) That the Shire of Northam develop a process internally and/or with a service such as the SES, to allow the timely deployment of the Welfare trailer to incidents within the Shire.

Note

- There may be the ability to work with adjoining Shires to develop a regional resource to reduce the cost to the Shire of Northam in providing this facility. That, however, comes with the risk of the trailer not being available in the event of multiple incidents at once. It may also present management challenges such as maintenance, re-stocking, etc.
- Alternatively, if needed, the Shire of Northam may wish to engage with local Brigades to see if such a facility could be financially contributed to by existing BFBs within the Shire.

9.6 Fire Support Vehicles

Background

Having appropriate command structures in place early in incidents is important, particularly for escalating incidents and/or incidents where multiple assets are or can potentially be at risk. Often, in the first instance, this means having an Incident Controller, along with two Sector Commanders.

This is becoming more prevalent with the increase in the rural-urban interface within the Shire of Northam. It is also becoming increasingly important to allow for closer attention to and supervision of private response personnel to ensure compliance with WHS requirements.

Considering this background, the Shire of Northam Chief Bush Fire Control Officer set the following expectations of BFCOs for the 2023/24 fire season and moving forward:

- *If an incident is going to have four official appliances and the job is escalating, then BFCOs should be sectorising. The sectorisation may include a Sector dedicated to private response to ensure strong support for this group of people.*

Traditionally the Northam Bush Fire Service, like most Bush Fire Services across the State, have relied on private vehicles for Incident Control or Sector Commander vehicles. However, in recent times, the following has occurred:

- With the uncoupling of the mid-band radio from the high-band radio network, less private vehicles can communicate with appliances on the fireground via the Western Australian Emergency Radio Network (WAERN),
- Volunteers increasingly do not expect to use their own vehicles, and risk damaging them and/or impacting their personal vehicle insurance, to manage official incidents, and
- The community's expectations have changed, with the community more likely to expect and want to see 'official' vehicles being used during incidents, including when used to block major roads and/or drive through roadblocks.

As a result, Incident Controllers are increasingly making use of 'official' vehicles.

The Shire of Northam's current Fire Support Vehicle (FSV), primarily driven by the CBFCO, is routinely used as the incident control vehicle for medium incidents and the initial incident control vehicle for large incidents until replaced by a DFES Incident Control Vehicle (ICV).

For sector commander vehicles, this often involves taking firefighting appliances off active firefighting duties, which in rural areas where the next available appliance is not as close as in metropolitan areas, can dramatically impact firefighting efforts. Given this compromise, sector commanders are often torn between their important management role and firefighting role (given their available water and crew), often resulting in a compromised outcome on both fronts.

The Shire of Northam also has a CESM vehicle, however, this cannot normally be used in the direct command structure as:

- It is in use by the CESM to support their role in supporting an incident (often logistics)
- It is not within the Shire due to being outside of the normal CESM working hours
- The CESM requires the ability to remain mobile due to other responsibilities (such as with DFES)
- It is generally not appropriate or preferable for the CESM to act as a sector commander
- As the CESM vehicle is integral to the role of the CESM, the vehicle is not commonly available to volunteer members for the FSV roles described in this recommendation.

Similarly to the CESM vehicle, the Fire Mitigation Officer's vehicle is not an appropriate vehicle to be seen as a FSV in the context of this recommendation.

- It is not within normal or generally desired operating procedures to utilise the Mitigation Officer within the incident management team in roles such as sector commanders or ground controllers during bushfires
- This vehicle is based in the metropolitan area outside of the Mitigation Officer's work hours and therefore unavailable outside of these hours
- The Mitigation Officer's role is spread across several shires and cannot be relied upon to be in the Northam Shire during a fire due to the sporadic nature of these incidents
- This vehicle is integral to the role of the Mitigation Officer, is often unable to be tied up for hours on end at a bushfire, and is generally not available for volunteer use.

Reasoning

- Heavy firefighting appliances are not appropriate command vehicles in a bushfire incident and significantly reduce the capability and effectiveness of the firefighting force.
- The use of light tankers as command vehicles loses a significant level of their effectiveness as firefighting appliances while reducing the nimbleness of the remaining available firefighting fleet.
- Sufficient Fire Support vehicles (FSVs) could assume the command roles, allowing fire appliances to work towards fighting the fire.
- Fire support vehicles allow for a professional appearance and work towards meeting the public expectations of a professional Bushfire Service.
- Fire support vehicles can be used in roles such as sector commanders and ground controllers, used in safer road closures, as incident control vehicles, moving people into, out of, and around fire grounds, collecting and distributing welfare and equipment, etc.
- The overreliance on privately owned vehicles to be used on firegrounds, specifically as command vehicles, does not reflect modern community expectations. Therefore, reducing this reliance whilst still allowing it will work towards better meeting those expectations.
 - It is important to recognise that a significant number of privately owned vehicles are used in fire fighting in the Northam Shire. Their contribution far exceeds the capability of Shire appliances alone including any new FSV. Therefore, FSVs will support private appliances as opposed to replacing them.
- There is an expectation that bushfire incidents be divided into sectors in the first instance when four or more appliances are in attendance and the incident is escalating. FSVs would assist in doing this while allowing all present fire appliances to continue to fight the fire actively.
- Having three FSVs will allow for an incident control vehicle, a sector commander Alpha vehicle, and a sector commander November vehicle. Further sectors would require other arrangements, but often occurs sometime after an incident has started, allowing for alternative arrangements to be made. In any case, two sectors is the most commonly used structure in the Shire of Northam.
- They would allow for a wider variety of members to act as sector commanders, incident controllers and ground controllers, as the FSVs will not be allocated to any one brigade or require the use of personal vehicles. Although the FSVs will be based at brigade stations, once on a fire ground, the vehicle can be allocated to any crew far easier than another member's private vehicle or a fire appliance as it would require very little in the manner of appliance/vehicle familiarisation.
- At times, the current FSV leaves this district supporting a Northam deployment to surrounding local government areas. The provision of additional FSVs that could act as Incident Control vehicles ensures that there are no gaps in service provision.

Recommendations

- (R9.6A) It is recommended that a total of three Fire Support Vehicles be in service for volunteer use in the medium term (within three years) within the Shire of Northam
 - FSV1 – current, to remain primarily in the possession of the Chief or Deputy Chief Bushfire Control Officer/s to support incident controllers and would generally be used as the incident control point vehicle. This vehicle should continue to be the newest of the FSV's, as it would be the most frequently used vehicle and the least used 'off road'. As per current, this vehicle should have computer/printer support capabilities. It is understood that there is a provision currently within the Shire Budgets to replace this vehicle with a like-for-like, more modern version.
 - FSV2 – it is recommended to be in place for the 2024/25 fire season. This would primarily be used as a Sector Commander vehicle and thus should be configured for off-road use. It is recommended that this be based with Northam Central BFB at the Northam Co-location Facility.
 - FSV3 – it is recommended to be in place before the 2026/27 fire season, or ideally earlier. This would primarily be used as a Sector Commander vehicle and thus should be configured for off-road use. A location recommendation has not been made at this point and would be subject to the implementation of other recommendations within this report. Clackline Muresk BFB would be a consideration as a relatively central station with a spare bay.
- (R9.6B) The specification of FSV2 and FSV3 should support their primary role as sector commander vehicles. It is recommended that they:
 - Are a dual cab 4x4 diesel utes with tray back
 - Have a firefighting unit of approximately 400ltr be mounted for the protection of the crew and to be used in very light opportunistic firefighting such as small hopovers. This vehicle should not be used for routine front-line firefighting.
 - This vehicle should be fitted with appropriate decals identifying it as a FIRE vehicle and a part of the Northam Shire Bushfire Service.
 - This vehicle should be designated an emergency vehicle and be fitted with appropriate emergency red and blue lighting and sirens. This ensures that it can efficiently get to fire grounds in the same way fire appliances, other FSVs, CESM vehicles, and DFES employee vehicles can. It also will mean that when the vehicle is parked on the road, it will be much safer for its crews and the crews around it due to the law which requires motorists to drive at 40km/hr past emergency vehicles with emergency lighting activated. There is also an inherent level of understanding by the community of the authority associated with emergency vehicles as opposed to private vehicles conducting similar duties. With appropriately designated and marked FSVs, these vehicles will better meet community expectations.
 - This vehicle should be fitted with two WAERN radios in the same way that the current FSV, the CESM vehicle and all fire appliances in the Shire are. This will best support the roles of ground controller and sector commander, as these roles require monitoring and use of both the sector (or aircraft) channel and incident command channel. If used in the role of incident control, the expectation is to monitor the incident command channel and state command channel (COMCEN).
 - Considering the available space on the tray area once fitted with a fire unit, it is suggested that a small toolbox be fitted to allow equipment such as spare PPC and PPE and a first aid kit to be carried along with a small refrigerator similar to the CESM vehicle, the current FSV and all local fire appliances.

Note

- The cost of retaining the current FSV and acquiring a new one is significantly cheaper and quicker than requesting or building further light tankers. These vehicles will support firefighting efforts that protect the lives, homes and livelihoods of members of our community conducted almost solely by unpaid volunteers.
- The third FSV could be partly funded by community donations or grants. This would reduce the upfront cost of the FSV for the Shire whilst allowing community members and local businesses the opportunity to help support the volunteer Bush Fire Service. This may result in requests for further stickering to advertise donors; however, this should only increase the importance of the vehicle in the community as it reflects the community's desire to support the Northam Shire Bush Fire Service.

9.7 Chainsaws

Background

Currently, BFB Brigades do not carry chainsaws on appliances within the Shire of Northam. Chainsaws can be a great resource at a Bush Fire for such activities as clearing fallen timber on a fire break or access track especially if the fallen tree/wood is blocking a safe route away from the fire. There have been instances of appliances having difficulty exiting an area of fire due to trees blocking the way out.

While it is possible to request a chainsaw crew from the Shire, there is often a significant delay for a task that is time-critical and/or would only take a couple of minutes to action. As such, firefighters currently have to resort to an axe and other hand tools, which could put extra strain on members and increase fatigue levels.

Reasoning

- The lack of ready access to chainsaws can cause safety risks when fire tracks are impeded by fallen trees.
- This can also delay firefighting efforts.
- The two identified Brigades were chosen on the basis that they are the two most mobilised Brigades in the East and West of the Shire, and are thus at least one is likely to be at the majority of incidents

Recommendation

- (R9.7A) That the Shire of Northam trials the provision of a chainsaw at Bakers Hill BFB and Grass Valley BFB, being the same type for each Brigade. These chainsaws should be 14" or smaller, with consideration of them being battery-operated for logistical purposes
- (R9.7B) That the Shire of Northam organises appropriate training and safety equipment for members of Bakers Hill and Grass Valley BFBs.

Note

- The provision of chainsaws should be used in small-scale tasks as detailed above and is not intended for use in, for example, the felling of trees, burning or otherwise. Policies and the specifications of the chainsaw itself should consider this fact.
- DFES have a course they run in utilising chainsaws for trim and cross-cutting, and at least one member from the above Brigades has already done this course.

10.0 Appliance Based Recommendations

10.1 IRS Data

Data: Three years from 01/01/2021-31/12/2023. The working group acknowledges that the data within IRS is only as good as the data captured. Additional data was requested, but at the time of finalising this report, it had not been received.

Brigade	Incidents	Unit Mobilisations	Total Appliance Mobilisations	% of Incidents Mobilised*
Bakers Hill BFB	120	LT = 66 3.4 = 96	162	100%
Clackline Muresk BFB	96	LT = 45 2.4 = 77	122	100%
Grass Valley BFB	84	1.4 = 51 4.4 = 76	127	100%
Inkpen BFB	69	LT = 23 3.4 = 48	71	100%
Irishtown BFB	44	1.4 = 44	44	100%
Jennapullin BFB	2*	N/A	N/A	100%
Northam Central BFB	94	3.4 = 93	93	98.9%
Southern Brook BFB	20	1.4 = 20	20	100%
Wundowie BFB	67	LT = 44	44	65.7%
Total				

Note: Jennapullin BFB is traditionally not mobilised via Comcen and thus does not show in statistics.

This data does not show when Brigade appliances go on standby for local incidents (often occurs when there is already an incident within the Shire). This is an essential risk management strategy.

*Data does not show when a Brigade has multiple appliances, how many incidents both, one or no appliances are mobilised. For all brigades including those with just one appliance, it does not capture where they may mobilise one or more appliances multiple times to a single incident (i.e. multi-day incident) and thus may overstate % of incidents mobilised to.

Most Utilised Appliances – in order of number of mobilisations

Brigade	Appliance	Unit Mobilisations
Bakers Hill BFB	3.4	96
Northam Central BFB	3.4	93
Clackline Muresk BFB	2.4	77
Grass Valley BFB	4.4	76
Bakers Hill BFB	LT	66
Grass Valley BFB	1.4	51
Inkpen BFB	3.4	48
Clackline Muresk BFB	LT	45
Irishtown BFB	1.4	44
Wundowie BFB	LT	44
Inkpen BFB	LT	23
Southern Brook BFB	1.4	20
Jennapullin BFB	N/A	

Brigades Total Appliance Mobilisations – ranked in order

Brigade	Brigade total appliance movements
Bakers Hill BFB	162
Grass Valley BFB	127
Clackline Muresk BFB	122
Northam Central BFB	93
Inkpen BFB	71
Irishtown BFB	44
Wundowie BFB	44
Southern Brook BFB	20
Jennapullin BFB	N/A

10.2 'High Use' Concept

Background

The recommendations below mention two current Shire of Northam appliances becoming 'high use' appliances. High season appliances are a widely known concept where DFES provide additional appliances to selected Brigades, particularly during the high threat period, on a temporary basis.

What is being proposed by the Working Group is similar to this, but with some key differences:

- These 'high use' appliances would be Shire of Northam appliances, only for allocation to Shire of Northam BFB's by the Shire of Northam (likely via the CBFCO)
- The 'high use' appliances would be allocated to Brigades throughout the year, not just during the high-threat period
- The allocation of a 'high use' to a Brigade could be on a short-term or medium-term basis, for example:
 - Allocated to a Brigade for a few days while they manage the mop-up and patrol of a large incident in their Brigade area
 - Allocated to a Brigade that has excess crew available for Shire-wide mobilisation
 - Allocated to a Brigade ahead of a forecast localised weather event (for example, if a lightning storm is expected to hit just the east of the Shire)
 - Allocated to a Brigade, in the instance of a light tanker, on a temporary basis, while their main truck drivers are on holidays or unavailable.
 - Allocated to a brigade during their localised high-threat period, such as harvest.

It is proposed that the CBFCO, in consultation with the Leadership Team and the CESM, determine where the 'high use' appliances are allocated on a day-to-day basis. It is proposed that each 'high use' appliance has a default home for when it isn't allocated elsewhere.

It is recommended that an annual review process is put in place post-season to determine:

- The effectiveness of the allocation to the various Brigades over the course of the year
- The utilisation of the appliances (the intent of these 'high use' appliances is that they would have dramatically increased mobilisations than these appliances currently do)
- The appropriateness of the default Brigades. That is, do the default Brigades make sufficient use of the appliances while they have access to them?

Initially, it is recommended that the 'high use' concept be trialled on a two-year basis. At which time the program should be reviewed to see if it has materially achieved its objective including reducing the overall fire risk within the Shire of Northam. Should the trial be unsuccessful, then appliances should be returned to their original locations and/or as determined by a review at that point in time.

The logistics of such a program will need to be ironed out to ensure efficient communication to Brigades/BFCO regarding the location of the 'high use' appliances and the effective mobilisation of said appliances. Handover and member familiarisation processes also need to be considered.

The Working Group strongly recommends that the 'high use' appliances are not called an existing Brigade name to reduce the thought process over time that these appliances belong to a particular Brigade. Caution should also be shown to names with the word Northam in given, multiple appliances with Northam VFRS and Northam Central containing this (don't want to add to the risk of confusion). To that end, the working group recommends that the Shire of Northam consult with the local First Nations people about possible names for these appliances, keeping in mind that the names need to be readily understood and transmitted over the radio. For example, Bilya Light Tanker.

Recommendation

On the basis that the 'high use' recommendations are implemented:

- (R10.2A) That the Shire of Northam, in conjunction with the BFB Leadership team and Brigades, conduct an annual review of the 'high use' program post-season to determine:
 - The effectiveness of the allocation to the various Brigades over the course of the year
 - The utilisation of the appliances
 - The appropriateness of the default Brigades.
- (R10.2B) That the Shire trials the 'high use' concept for two-year, followed by a comprehensive review of the program.
- (R10.2C) That the Shire of Northam consult with the local First Nations people about possible names for any 'high use' appliances.

10.3 LT mobilisation strategy

Background

- Currently, in the absence of additional Fire Support Vehicles, LTs are the best vehicles within the Northam Shire Bushfire Service's fleet to conduct roles such as sector commander, ground controller, or similar incident management team (IMT) roles.
- There are three common reasons why Light tankers end up not being present on a fire ground:
 - Firstly, if a brigade has not been mobilised to attend an incident.
 - Secondly, it is currently common practice that if a brigade only mobilises one appliance it will almost always be the brigade's Heavy.
 - Brigade's with multiple appliances often prefer leaving an appliance in area, when attending incidents outside of their Brigade district.

As a result, it is often difficult to find appropriate LT appliances to act as sector commanders.

- Heavy appliances are not suited to sector commander roles, as sector commanders need to be mobile and not allow themselves to develop "tunnel vision" which often occurs when a sector commander and their crew become static conducting firefighting activities in a small section of the sector. Or alternatively, a heavy fire appliance ends up remaining mobile and therefore reducing its effectiveness on the fireground.
- In addition to the roles of LTs in incident IMTs, they are also very nimble vehicles that are better suited to accessing areas of a fire ground that have challenging terrain.

Recommendation

- (R10.3A) That the Shire of Northam create a LT mobilisation strategy where, in an escalating incident, Brigades that have not been mobilised yet receive a request for Light Tankers to attend via the standard mobilisation channels (SMS and BART) so as to have at least two LT's during the high threat period.
- (R10.3B) That the Shire of Northam create procedures and an expectation that when a brigade is mobilised, if there are enough crew members to at least transport the LT to the control point, then this is done. For example, if a brigade has a crew of only 2-3 available, one member would drive the heavy and another the LT to the control point. From here a decision will be made as to the crew makeup and appliance use.
- (R10.3C) That the Shire of Northam includes LT specific mobilisation to the newly adopted CAD system (automatic turnout system).
- (R10.3D) As additional FSVs are added to the Shire's fleet, they are included in this enhanced LT mobilisation process.

10.4 Bakers Hill BFB

Observations

- Consistently the highest turnout Brigade within the Shire
- Consistent ability to turn out, including in most instances both appliances, locally and further afield
- A number of existing and growing high-risk areas
- Areas with enhanced Zone 3 mobilisations within the brigade area
- Modern station with an unused bay

Current Appliances

- Bakers Hill BFB 3.4U
- Bakers Hill BFB LT

Appliances due for Renewal

- Bakers Hill BFB LT

Recommendation for Appliances Due for Renewal

- (R10.4A) That the Shire of Northam supports the replacement of Bakers Hill BFB LT with a modern LT as scheduled.

Recommendations for Changes for Appliances for the Brigade

- (R10.4B) That Bakers Hill BFB station be the default home for a Shire of Northam 'high use' 1.4R appliance.

Rationale for Recommendations

- The Brigade has high and consistent utilisation of existing appliances, with a very strong mobilisation record
- Based on proposed changes to Bakers Hill brigade district in response to DFES's lack of support for the Wundowie BFB, the number of high-risk areas is due to increase
- Based on proposed changes to Wundowie BFB's appliances in response to DFES's lack of support for the Wundowie BFB, the number of BFB appliances otherwise located in the West of the Shire will reduce
- Based on the above points, and in light of Bakers Hill BFB stations proximity to the Great Eastern Highway and traditionally quick mobilisation, and thus its ability to quickly travel to the western edges of the Shire, it is felt that it is highly appropriate for the 'high use' 1.4R to have its default home at Bakers Hill BFB station. As noted below, travel times from Bakers Hill BFB station to key risk areas in the West are within approximately two minutes of the current.
 - Bakers Hill BFB Station to Bodegero Way – 12.7km/9min (approximately 2 minutes slower than from Wundowie BFB station)
 - Bakers Hill BFB Station to Coates Rd/Foundry Place – 6.4km/6min (approximately 2 minutes slower than from Wundowie BFB station)
- The current appliances are well suited to the terrain and risks encountered routinely by Bakers Hill BFB
- It is believed that the 1.4R (rather than requesting a change to say a 3.4) would provide a more rounded appliance dynamic both within Bakers Hill BFB as well in the western side of the Shire of Northam
- The 1.4R is well placed for machine supervision roles and provides better access to some of the smaller blocks/driveways in this part of the Shire than large appliance would

Points for further consideration

- It is recommended that Wundowie BFB members become co-registered with Bakers Hill BFB and develop a close working relationship to allow for the sharing of and cross crewing of appliances and facilities to best service the interest of the collective Brigade areas.

10.5 Clackline Muresk BFB

Observations

- Third highest turnout Brigade within the Shire
- Area with a number of distinct communities (Mokine, Clackline, Spencers Brook) along with Muresk and Bobakine
- Reduced active membership in recent years, however still consistently able to turn out at least one appliance quickly
- Responsible for a large geographic area, most of which is considered by either slight or substantial UXO adding to firefighting complexity
- Areas with enhanced Zone 3 mobilisations within the brigade area
- Recently upgraded station with an unused bay

Current Appliances

- Clackline Muresk BFB 2.4R
- Clackline Muresk BFB LT

Appliances due for Renewal

- Clackline Muresk BFB 2.4R
- Clackline Muresk BFB LT

Recommendation for Appliances Due for Renewal

- (R10.5A) That the Shire of Northam continues to support the replacement of Clackline Muresk BFB 2.4R with the 4.4B Tatra Crew Cab as scheduled.
- (R10.5B) That the Shire of Northam continues to support the replacement of Clackline Muresk BFB LT with a modern LT as scheduled.

Recommendations for Changes for Appliances for the Brigade

- There are no current recommendations for changes to appliance other than those already due for renewal and approved.

Rationale for Recommendations

- There has not been any significant new risks within the Brigade district since R2R19, with none identified to occur in the immediate future.
- Some of the brigades area of responsibility is proposed to be shifted to Northam Central, offsetting marginal risk increases in other areas.
- The Brigade has limited depth of membership currently to support additional appliance turnout.
- The addition of a 4.4 in the west of the Shire adds to the appliance composition in this part of the Shire, and recognises that there are areas within the Clackline Muresk Brigade district that has limited access to water.
- Terrain means that some areas of the Clackline Muresk brigade district can only be accessed by light tankers and/or smaller appliances, so it is important to keep a small appliance such as the Clackline Muresk BFB LT in this area.

Points for further consideration

- Potentially could house a 12.2 tanker in the third spare bay should space not be available at the Northam Co-Location facility. Consideration also for FSV3 should membership be able to support mobilisation.

10.6 Grass Valley BFB

Observations

- Consistently the second highest turnout Brigade within the Shire
- Area with a number of distinct communities (Grass Valley, Muluckine/Seabrook, Quellington) along with the Avon Industrial Park in Meenaar
- An area of significant new and emerging risks since the R2R19 including CBH Meenaar and the expansion/further planned expansion of the Avon Industrial Park, planned expansion of the solar farm and possible Hydrogen Plant, among others.
- The Brigade that services the largest geographic area by default both during the high threat period and throughout the year
- Large and stable active membership base
- Recently upgraded station

Current Appliances

- Grass Valley BFB 4.4R
- Grass Valley BFB 1.4R

Appliances due for Renewal

- Grass Valley BFB 1.4R

Recommendation for Appliances Due for Renewal

- (R10.6A) That the Shire of Northam supports Grass Valley's BFBs request to have the 1.4R upgraded to a 3.4.
- (R10.6B) That the Shire of Northam undertake further consultation with the Brigade regarding the appliance's configuration (crew cab or single cab) and confirm urban configuration or otherwise.

Recommendations for Changes for Appliances for the Brigade

- (R10.6C) That Grass Valley BFB station to be the default home for a Shire of Northam 'high use' LT appliance.

Rationale for Recommendations

- The working group recommends a 3.4U to provide varied response capability within the Brigade.
- There are significant new and emerging risks within the Brigade district.
- There are no LT's located east of the Clackline Muresk BFB station currently, providing a gap in the Shire's response capability in the east of the Shire. As the most active Brigade east of this current LT, it is a logical consideration.
- Other recommendations within this report will see appliances in the east of the Shire reduced at some times of the year.
- The Brigade has a strong proven record of mobilising multiple appliances consistently and quickly, as well as a willingness to support other Brigade areas and Shires.
- The Brigade already mobilises by default during the high threat period to its own area, plus Southern Brook BFB, Jennapullin BFB and Irishtown BFB, meaning that these areas would also be serviced by the 'high use' LT.
- The Brigade currently relies on a high number of private vehicle mobilisations demonstrating a need for such size appliances.

Points for further consideration

- It is believed that the 'high use' LT would fit within the current station, to be positioned in the drive-through bay behind/in front of the 4.4R.
- The upgrade of the 1.4R to a 3.4U may require changes to the station, particularly if a crew cab configuration is chosen. Given the station's design, it is anticipated that this would be a 'minor' upgrade.
- Such appliance allocations rely heavily on a single Brigade (not too dissimilar to what already occurs). With the LT being a 'high use' appliance, the appliance can be relocated to a new base home should the Brigade struggle to meet the requirements of mobilising three appliances in the future.
- Grass Valley BFB, Southern Brook BFB and Jennapullin BFB are encouraged to develop close working relationships, to allow for the sharing of and cross crewing of appliances to best service the interest of the collective Brigade areas.

10.7 Inkpen BFB

Observations

- Consistent and reliable Brigade mobilisation
- A brigade that provides strong support to surrounding Brigade areas that have high risks
- Stable active membership base
- Recently upgraded station

Current Appliances

- Inkpen BFB 3.4U
- Inkpen BFB LT

Appliances due for Renewal

- Inkpen BFB LT

Recommendation for Appliances Due for Renewal

- (R10.7A) That the Shire of Northam supports the replacement of Inkpen BFBs LT with a modern LT as scheduled.

Recommendations for Changes for Appliances for the Brigade

- There are no current recommendations for appliance changes other than those already due for renewal.

Rationale for Recommendations

- There have not been any significant new risks within the Brigade district, with none identified to occur in the immediate future.
- The Brigades area of responsibility is recommended to be increased in size, but is largely broadacre farmland and bushland in fitting with current areas serviced by the Brigade
- Bakers Hill BFB's closer proximity to Great Eastern Highway and thus the north west portion of the Shire, makes it a more logical choice for additional resources in the first instance.
- While the Brigades LT mobilisations is one of the lower used appliances in the Shire, it is often held back deliberately to maintain response capability within Inkpen/west of Shire while the 3.4U attends to other Brigades districts.

Points for further consideration

- While it is recommended that Wundowie BFB members become co-registered with Bakers Hill BFB and develop a close working relationship due to the additional 'high use' appliance, consideration should also be given to Inkpen BFB due to its proximity to Wundowie.

10.8 Irishtown BFB

Observations

- A brigade that has seen significant changes in appliances and membership in the past approximately six years
- A tight membership that has recently experienced a reduction in truck-driving members
- The Brigade is taking active steps to address reduced truck driving members through the recruitment of new members with truck driving licences and existing members looking to obtain the applicable licences
- A station in need of an upgrade.
- Geographically isolated station in relation to other Brigades, adding to the strategic importance of its placement
- Due to topography and road networks, access by Irishtown BFB to Katrine Rd, and in particular, Northam-Toodyay Road is restricted/delayed due to distance from the station

Current Appliances

- Irishtown BFB 1.4R

Appliances due for Renewal

- Irishtown BFB 1.4R

Recommendation for Appliances Due for Renewal

- (R10.8A) That the Shire of Northam supports Irishtown BFBs request to have the 1.4R upgraded to a 3.4 crew cab. Such an upgrade should take priority over upgrading Grass Valley's 1.4R to a 3.4U due to Grass Valley already having a 4.4R.
- (R10.8B) That the Shire undertake further consultation with the Brigade regarding the configuration of the appliance (urban or rural).

Recommendations for Changes for Appliances for the Brigade

- (R10.8C) There are no current recommendations for appliance changes other than those already due for renewal.

Rationale for Recommendations

- The working group acknowledges Irishtown's desire for an LT and agree that it would supplement its capability as a Brigade. However, it is believed that a 'high use' LT predominately for the east of the Shire, and likely to be based in Grass Valley, will meet some of this requirement without placing additional pressure on a small membership base. Should truck drivers become an issue again for this Brigade, then the 'high use' LT could provide a strong temporary solution.
- There have not been any significant new risks within the Brigade district (notwithstanding Buckland Estate has increased its activity), with none identified to occur in the immediate future.
- The Brigades area of responsibility recommended to be decreased in size, acknowledging the geographic (direct road access) advantage Northam Central now has to Northam Toodyay Road
- Additional water capacity within the Irishtown BFB Brigade area is fitting of a broadacre region with limited reliable water sources.
- Additional seating capacity will assist members ability to mobilise given only one appliance by default.

Points for further consideration

- Whilst it is being recommended that Northam Central be allocated the default Brigade area for Northam Toodyay Road and Katrine Road, it is recommended that Irishtown remain an automatic mobilisation to this area 365 days a year.

10.9 Jennapullin BFB

Observations

- This is a farmer response brigade that does not have an official appliance
- Its geographic area is supported predominately by Grass Valley BFB and Irishtown BFB, with Southern Brook BFB also providing support
- Brigade members have strong base training, with a desire to fill gaps
- Brigade members have requested a more active mobilisation process, not dissimilar to other Brigades within the Shire

Current Appliances

- Nil – farmer response only

Appliances due for Renewal

- N/A

Recommendation for Appliances Due for Renewal

- N/A

Recommendations for Changes for Appliances for the Brigade

- There are no current recommendations for changes to appliances.

Rationale for Recommendations

- There has not been any significant new risks within the Brigade district, with none identified to occur in the immediate future.
- Additional proposed water capacity within the Irishtown BFB Brigade and Grass Valley BFB, along with the increased support provided by Northam Central in recent years has proven sufficient in supporting farmer response in this area.

Points for further consideration

- Grass Valley BFB, Southern Brook BFB and Jennapullin BFB are encouraged to develop close working relationships, to allow for the sharing of and cross crewing of appliances to best service the interest of each Brigade area.
- It may be more appropriate for some Jennapullin BFB members to work closely with Irishtown BFB due to proximity.

10.10 Northam Central BFB

Observations

- Being a relatively newly established Brigade, the Brigade is the third most mobilised within the Shire
- A brigade with no defined Brigade area, although it is now mobilised by default to most areas surrounding the Northam gazetted fire district
- A strong core of consistent members
- Given the catchment area of a main townsite, members and prospective members are less likely to have truck driving licences and/or experience as compared to rural brigade districts within the Shire
- The brigade's original purpose was to be a support brigade to all BFBs within the Shire
- The Brigade provides significant out-of-area support to the region, a fact that we hope DFES acknowledges as part of the recommendations below

Current Appliances

- Northam Central BFB 3.4U*

* Note: Northam Central BFB 3.4U was involved in an accident in late 2023 and is no longer operational. A temporary high season 2.4 has been provided while a replacement is being sourced. This working group has worked on the assumption that the Brigade will return to having a 3.4U in due course.

Appliances due for Renewal

- See above.

Recommendation for Appliances Due for Renewal

- (R10.10A) That the Shire of Northam supports Northam Central BFB to receive a like-for-like replacement of its 3.4U at the earliest opportunity.

Recommendations for Changes for Appliances for the Brigade

- (R10.10B) It is recommended that the Shire of Northam makes a submission for an additional appliance into the Shire, being for a LT, to be based at Northam Central
- (R10.10C) It is recommended that the Shire of Northam makes a submission for an additional appliance into the Shire, being for 12.2 water tanker, to be based at Northam Central
- (R10.10D) As noted elsewhere, it is recommended that the FSV2 be located at Northam Central

Rationale for Recommendations

Light Tanker (LT)

- The Brigade has a proven track record of providing significant support to all surrounding Brigades, as well as DFES Northam ROC in requests to attend out-of-area incidents
- In line with the Brigade's original purpose, the Brigade would be able to support two incidents simultaneously, with one appliance, for example, heading to the east and another to the west.
- The Brigade is recommended to be allocated its own Brigade areas, meaning it will have local responsibilities, that may make it more difficult to travel to other shires without a local backup appliance; an LT would provide this immediate backup until other Brigades can arrive to provide support.

- As noted, it is recommended that the Brigade be allocated its own Brigade areas. This newly nominated area will be Northam Central BFBs responsibility and, therefore, will require Northam Central to conduct many more mop-up and patrols than they currently do. The proposed areas have a mixture of terrain types, some of which would require or better suit smaller vehicles for safe access. This includes steep, hilly and rocky country, areas within the Avon River and riparian zone, and areas of thick bush. In addition to this, a Light Tanker would allow for less reliance on truck-licensed members during these stages of a fire incident, especially in extended mop-up and patrol periods.
- The Brigade's current membership and prospective members have a high proportion of non-truck drivers, and thus a LT ensure a response capability despite these challenges.
- A centrally located light appliance assists with immediate quick support to surrounding areas.
- The Brigade, via its crew cab appliance, has a history of turning out with a full crew and subsequently providing crew to other appliances at an incident. Having an LT will mean that there is not as big of a delay in having an initial mobilisation (first two crew members), while still then being able to provide a full second crew that is able to support other Brigades.

12.2 Water Carter

- There is only one DFES-issued 12.2 water carter in our end of the Midlands Goldfields Region, being Toodyay 12.2
- Toodyay 12.2 is a brilliant resource, and often works in conjunction with East Gidgegannup 12.2, but can easily be 60 minutes away (assuming it is not already engaged in an incident) from an incident in the Shire of Northam, allowing for crewing time and travel, during which time, significant water could have been consumed.
- As a result, the Shire of Northam has traditionally first relied on Shire water carters, however:
 - The Shire now only has one owned water tanker, rather than the two it traditionally has had, and
 - As with all Shire equipment, these resources are actively used for non-firefighting purposes during the day, and thus may not be centrally located and/or full of water when an incident starts.
- The location of a 12.2 at Northam Central not only allows for quick mobilisation in all directions within the Shire of Northam, but it also brings a DFES water tanker closer to the Shires of York and Cunderdin (Northam acknowledges that a Northam 12.2 would also be considered a regional resource)
- This unit can be crewed by existing active brigade members or active auxiliary brigade members who want to contribute without being on the front line and who hold a Heavy Rigid (HR) license.
- A fit-for-purpose water carter may have the ability to carry a collar tank for deployment rather than having to have a standalone trailer.

Points for further consideration

- It is believed that a new LT would fit within the current station, although some discussions may need to take place with co-users of the facility.
- The Brigade should acknowledge that the provision of an additional LT, will come with the expectation that the 3.4U will continue to be called upon by the region via the Shire
- The Brigade should acknowledge that the provision of a 12.2 water cater will be considered a regional resource, and will come with the expectation that it be mobilised both within and external to the Shire of Northam.

10.11 Southern Brook BFB

Observations

- A small Brigade with limited local incidents
- Strong farmer response to local incidents, with some members more likely to attend in private vehicles rather than the official appliance
- Reliable mobilisation for local incidents, although sometimes delayed
- All incidents within the Brigade district are also supported by Grass Valley BFB
- Not unusual for the Brigade to attend incidents northwest of Meckering, in the Shire of Cunderdin

Current Appliances

- Southern Brook BFB 1.4R

Appliances due for Renewal

- Southern Brook BFB 1.4R

Recommendation for Appliances Due for Renewal

- (R10.11A) That the Shire of Northam supports the Southern Brook BFB 1.4R to be replaced by a modern 1.4.
- (R10.11B) That the Southern Brook 1.4R become a 'high use' appliance for use within the Shire of Northam for an initial two-year trial period. The appliance is recommended to be stationed at Southern Brook from approximately mid-October through to approximately Christmas Eve each year to coincide with the harvest period, which is Southern Brook's high-threat period. At other times of the year, the 'high use' 1.4R be stationed by default at Bakers Hill BFB station.

Recommendations for Changes for Appliances for the Brigade

- There are no current recommendations for changes to appliances other than those already noted above.

Rationale for Recommendations

- Southern Brooks 1.4R is the least mobilised appliance within the Shire and has been for some time. While the Brigade consistently mobilises to incidents locally when requested, the Brigade thankfully has a limited number of incidents within its area, particularly outside of the harvest period. The brigade has been mobilised 20 times in three years.
- 55% (11) of Southern Brooks incidents in the past three years have been in the period of mid-October to Christmas Eve. A further 10% (2) incidents occurred in the lower risk May-September period, meaning approximately two incidents occurred per year in the Christmas to April period.
- There have not been any significant new risks within the Brigade district, with none identified to occur in the immediate future.
- Additional water capacity within the Irishtown and Grass Valley BFB Brigade areas, along with a 'high use' LT to be default based in Grass Valley BFB Station, will mean that there is still official firefighting appliances close by throughout the year
- A requested additional appliance for Northam Central BFB, if successful, would also provided additional resourcing.

Points for further consideration

- Grass Valley BFB, Southern Brook BFB and Jennapullin BFB are encouraged to develop close working relationships, to allow for the sharing of and cross crewing of appliances to best service the interest of each Brigade area.

10.12 Wundowie BFB

Observations

- A small Brigade with limited local incidents (14 incidents in the last three years where the Brigade was the primary Brigade)
- Has a modern LT only, meaning only two seats available to members
- Does not have an official Station, with the Brigade currently using the old Shire works depot
- Has varying ability to mobilise, in part due to a high portion of members who are FIFO/DIDO and dual members who routinely mobilise with other Brigades such as the Wundowie VFRS instead
- A brigade that DFES has made clear they do not support, particularly while based within the Wundowie gazetted fire district

Current Appliances

- Wundowie BFB LT

Appliances due for Renewal

- N/A

Recommendation for Appliances Due for Renewal

- N/A

Recommendations for Changes for Appliances for the Brigade

- (R10.12A) That the Wundowie LT become a 'high use' appliance for use within the Shire of Northam for an initial two-year trial period. Note that this recommendation is contingent on the recommended change to the Wundowie gazetted fire district being endorsed by both the Shire of Northam and DFES and enacted.
- (R10.12B) That the 'high use' LT to be stationed by default at Grass Valley BFB station.

Rationale for Recommendations

- DFES and the State Government have made it clear that they do not support the Wundowie BFB, particularly while it is located within the Wundowie gazetted fire district. While this position is held, it will be difficult to sustain and/or overcome some of the challenges Wundowie BFB faces, such as a lack of a Station.
- Wundowie BFB's mobilisation consistency is the lowest of all Brigades within the Shire of Northam, meaning that additional Brigades are almost always mobilised to local incidents, including most commonly Bakers Hill BFB, Inkpen BFB and Wundowie VFRS. Wundowie BFB's mobilisation consistency is impacted by its FIFO/DIDO membership base and dual-brigade memberships (may mobilise with another Brigade in the first instance).
- The risks identified in the areas surrounding the Wundowie gazetted fire district in the R2R19 remain, and indeed have increased as urbanisation within this area continues, however, this risk may be able to be met by other means.

- As noted elsewhere it is recommended that Mauravillo estate become part of the Wundowie gazetted townsite. Other key risk areas within the current Wundowie BFB district can be serviced by Bakers Hill BFB within a couple of minutes of the current travel time from the current Wundowie BFB station.
- That the Wundowie VFRS has, and continues to provide, solid support to the Shire of Northam in attending bushfire incidents outside of the Wundowie gazetted fire district, particularly in areas geographically close to the Wundowie gazetted fire district.
- An additional appliance for the Wundowie VFRS is currently being requested, which would have bushfire capabilities.

Points for further consideration

- It is recommended that Wundowie BFB members become co-registered with Bakers Hill BFB and develop a close working relationship to allow for the sharing of and cross crewing of appliances and facilities to best service the interest of the collective Brigade areas. Members could also consider working with the Inkpen BFB given its proximity also.

It should be noted that any changes to a Brigade District or gazetted fire district should be reflected in the automatic mobilisations within CAD.

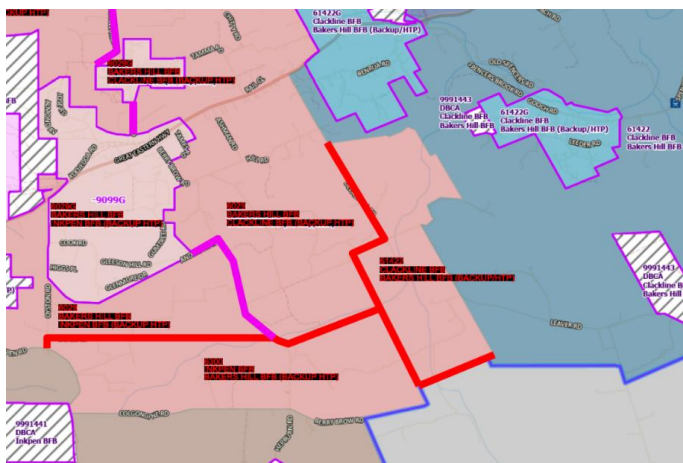
Significant changes are proposed to the Bakers Hill BFB district. These, however, are detailed within the Clackline Muresk BFB, Inkpen BFB and Wundowie BFB district recommendations below.

Clackline Muresk BFB district expansion

- (R11.2A) The Shire of Northam increases Clackline Muresk BFBs brigade district to the southwest of its current brigade district to encapsulate the farmland east of De Castilla Road/Leaver Road (including approximately 2km west of Leaver Road to adjoin newly recommended expansion on Inkpen BFB district), with Bakers Hill BFB to be the HTP backup.

- This area is traditionally serviced by Bakers Hill BFB, however, on the basis that they are to absorb a large portion of Wundowie BFBs current brigade district, this helps offset some of this increase.
- Immediately east of this area is already included within Clackline Muresk BFBs brigade district, meaning the Brigade is very familiar with this area. The terrain and vegetation also aligns with Clackline Muresk BFBs current brigade district.
- Some of Clackline Muresk BFBs high risk areas near Northam are recommended to be shifted to Northam Central, potentially freeing up capacity for this addition.

- The western portion of this changed brigade district to adjoin a recommended expansion of Inkpen BFBs brigade district.
Please refer to the maps identifying the change.



Clackline Muresk BFB district changes around Northam townsite

Noticeable changes are proposed to the north east portion of Clackline Muresk BFB district, with areas proposed to be shifted to Northam Central BFB district. These, however, are detailed within the Northam Central BFB, brigade district recommendations below.

11.3 Grass Valley BFB district

Materially unchanged, with current primary responsibility for an area within the Great Eastern Highway bypass shifting from Grass Valley BFB to Northam Central BFB.

11.4 Inkpen BFB district

Inkpen Brigade District Expansion

Recommendation

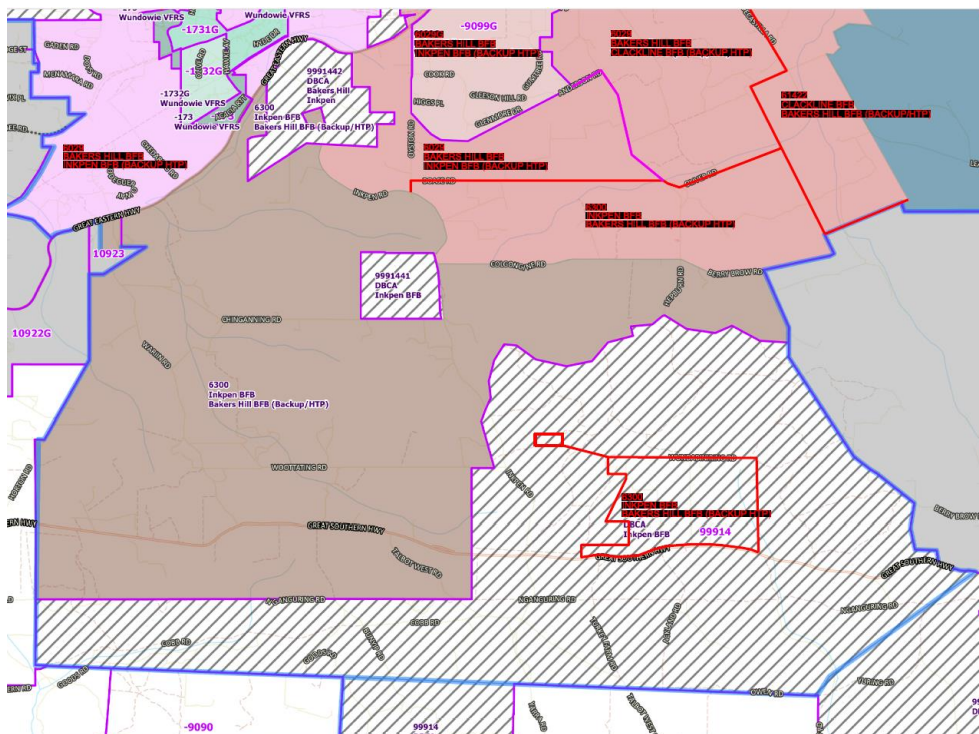
- (R11.4A) On the basis that Wundowie BFB's brigade district is reallocated, the Shire of Northam increases Inkpen BFBs brigade district to the east to encapsulate the farmland east of Oyston Road, south of Boase Road and Oliver Road and approximately 2km west of Leaver Road, with Bakers Hill BFB to be the HTP backup.

Rationale for Recommendations

- This area is traditionally serviced by Bakers Hill BFB, however, on the basis that they are to absorb a large portion of Wundowie BFBs current brigade district, this helps offset some of this increase.
- Immediately south of this area is already included within Inkpen BFBs brigade district, meaning the Brigade is very familiar with this area. The terrain and vegetation also aligns with Inkpen BFBs current brigade district.

Detail

- The eastern portion of this changed brigade district to adjoin a recommended expansion of Clackline Muresk BFBs brigade district.
Please refer to the maps identifying the change.



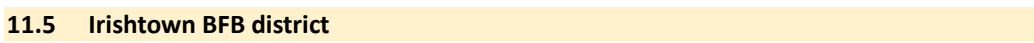
Recommendation

- (R11.4B) That the Shire of Northam updates Inkpen BFBs Beat, so as to include the farmland located east of Inkpen Rd and north of Great Southern Highway as being Inkpen's brigades district, rather than DBCA. Bakers Hill BFB to be HTP backup for this area.

- Currently the Beats identify private farmland as being a DBCA area, with Inkpen BFB as secondary Brigade mobilisation.
- This risks DBCA not mobilising/advising the Shire of an incident in this area and could slow the Shire of Northam's incident response. It is also meaning that a second BFB is not currently being mobilised by default during the HTP.

- The Inkpen BFB district is recommended to include the farm land located;
 - East of Inkpen Rd
 - North of Great Southern Highway
 - West of Berry Brow Road

Please refer to the maps identifying the change.



Noticeable changes are proposed to the southwest portion of Irishtown BFB district, with areas proposed to be shifted to Northam Central BFB district. These, however, are detailed within the Northam Central BFB, brigade district recommendations below.

11.6 Jennapullin BFB district

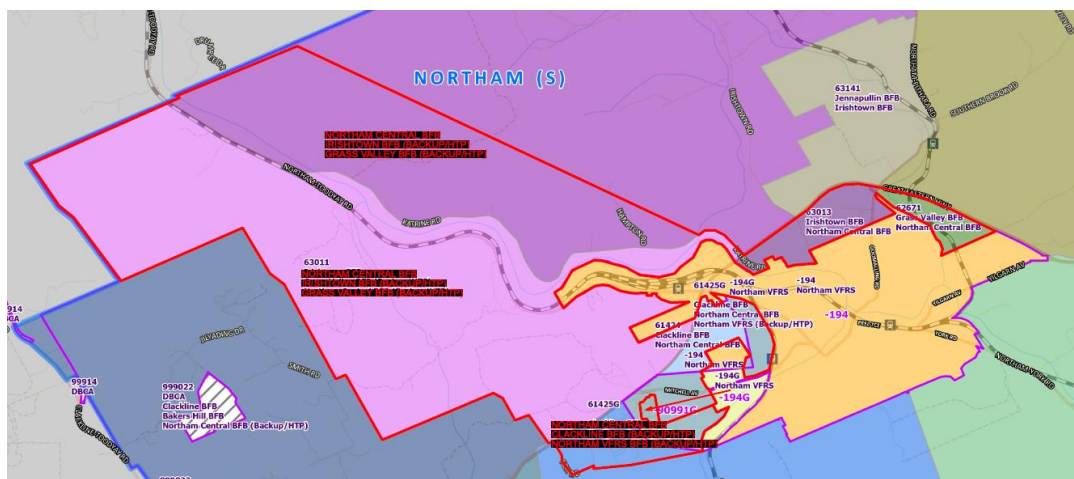
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Northam Central BFB recommended to have Brigade District

- (R11.7A) That the Shire of Northam creates a Northam Central BFB district to include the following areas:
 - The areas between the Great Eastern Highway bypass and the Northam gazetted fire district including some of Mount Ommaney, Mitchell Avenue
 - The Northam Army Camp and the Northam Speedway area off Fox Road
 - Northam Toodyay Road and Katrine Road, along with the areas immediately in their vicinity.
- (R11.7B) That current Brigades servicing the areas recommended to form the Northam Central BFB district, remain as automatic mobilisations to support Northam Central BFB given their high risk nature and local knowledge.

- The southwestern edge of the current Irishtown BFB district is difficult for Irishtown BFB to access quickly as there are no direct road connections between Northam Toodyay Road and Irishtown Road.
- It would allow for a better sharing of the responsibilities, such as mop-up and patrolling, between brigades.
- Many of these areas are more easily and quickly accessed by Northam Central in the initial stages of an incident.

Please refer to the maps identifying the change.



11.8 Southern Brook BFB district

Unchanged.

11.9 Wundowie BFB district

Inclusion of Mauravillo Estate within the Wundowie gazetted fire district

Recommendation

- (R11.9A) That the Shire of Northam requests DFES to include the Mauravillo Estate within the Wundowie gazetted fire district. The connection between the current Wundowie gazetted fire district and Mauravillo Estate is recommended to be via Golf Links Road. All areas outside of the specific residential area of the estate and beyond the road reserve are not included in this recommendation.

Rationale for Recommendations

- DFES and the State Government have made it clear that they do not support the Wundowie BFB, particularly while it is located within the Wundowie gazetted fire district. While this position is held, it will be difficult to sustain and/or overcome some of the challenges Wundowie BFB faces, such as a lack of a Station.
- Wundowie BFB's mobilisation consistency is the lowest of all Brigades within the Shire of Northam, meaning that additional Brigades are almost always mobilised to local incidents, including most commonly Bakers Hill BFB, Inkpen BFB and Wundowie VFRS. Wundowie BFB's mobilisation consistency is impacted by its FIFO/DIDO membership base and dual-brigade memberships (may mobilise with another Brigade in the first instance).
- The risks identified in the areas surrounding the Wundowie gazetted fire district in the R2R19 remain, and indeed have increased as urbanisation within this area continues, however, this risk may be able to be met by other means.
- Due to geography and access, the Mauravillo estate is the least easily serviced high risk area of the current Wundowie BFB district by any other existing Shire of Northam BFB's. The Wundowie VFRS has a strategic geographic advantage, which makes it well placed to service this area in the absence of a BFB appliance located within the Wundowie townsite. The working group considered the relocation of the Wundowie BFB LT to the Mauravillo Estate but felt this would:
 - Reduce the membership pool of this Brigade
 - Again present housing issues for the appliance
 - Reduce the ability of this appliance having quick access to other areas of the ShireAnd on that basis did not believe it was an appropriate option to explore.
- That the Wundowie VFRS has, and continues to provide, solid support to the Shire of Northam in attending bushfire incidents outside of the Wundowie gazetted fire district including this area.
- An additional appliance for the Wundowie VFRS is currently being requested, which would have bushfire capabilities, meaning Wundowie would be well placed with servicing all incidents within this Estate.
- A change in the gazetted fire district, rather than operating by gentlemen's agreement or an official memorandum of understanding means that the Wundowie VFRS will be operating within their existing legislation.

Detail

Please refer to the maps identifying the change.



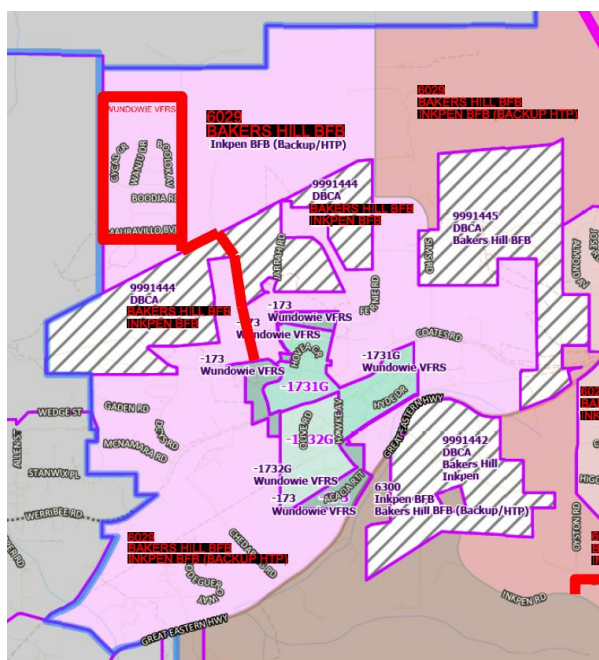
- (R11.9B) On the basis that:
 - DFES accept the inclusion the Mauravillo Estate within the Wundowie gazetted fire district;
 - The reallocation of the Wundowie BFB LT elsewhere within the Shire occurs; and
 - that Bakers Hill BFB becomes the default home for a Northam 'high use' appliance for the majority of the year,
 that the Shire of Northam reallocate the remaining Wundowie BFB district to Bakers Hill BFB.

- DFES and the State Government have made it clear that they do not support the Wundowie BFB, particularly while it is located within the Wundowie gazetted fire district. While this position is held, it will be difficult to sustain and/or overcome some of the challenges Wundowie BFB faces, such as a lack of a Station.

- Wundowie BFB's mobilisation consistency is the lowest of all Brigades within the Shire of Northam, meaning that additional Brigades are almost always mobilised to local incidents, including most commonly Bakers Hill BFB, Inkpen BFB and Wundowie VFRS. Wundowie BFB's mobilisation consistency is impacted by its FIFO/DIDO membership base and dual-brigade memberships (may mobilise with another Brigade in the first instance).
- The risks identified in the areas surrounding the Wundowie gazetted fire district in the R2R19 remain, and indeed have increased as urbanisation within this area continues, however, this risk may be able to be met by other means.
- On the basis that the Mauravillo estate is covered by an expanded Wundowie gazetted fire district, other key risk areas (i.e. Bodegero Way and Coates Road) within the current Wundowie brigade district can be reached within approximately two minutes extra travel time from Bakers Hill BFB station as they could from the current Wundowie BFB station due to the proximity of Bakers Hill BFB to Great Eastern Highway. Inkpen BFB, due to their proximity, is also well placed to provide support.
- On the basis that Bakers Hill BFB becomes the default home for a Northam 'high use' appliance for the majority of the year, Bakers Hill BFB will have a strong appliance profile to meet most of the needs of the current Wundowie BFB district
- That the Wundowie VFRS has, and continues to provide, solid support to the Shire of Northam in attending bushfire incidents outside of the Wundowie gazetted fire district. An additional appliance for the Wundowie VFRS that is currently being requested, which would have bushfire capabilities, may further assist in this regard.

Detail

- Inkpen BFB to be the supporting Brigade in the former Wundowie BFB district during the HTP.
 - Consultation should occur with the Wundowie VFRS as to their willingness to continue to provide support in the area surrounding Wundowie gazetted fire district including possible default mobilisations during the HTP in certain areas.
- Please refer to the maps identifying the change.



11.10 Northam Gazetted Fire District

Inclusion of Yongah Hill Detention Centre Facility within the Northam gazetted fire district

Recommendation

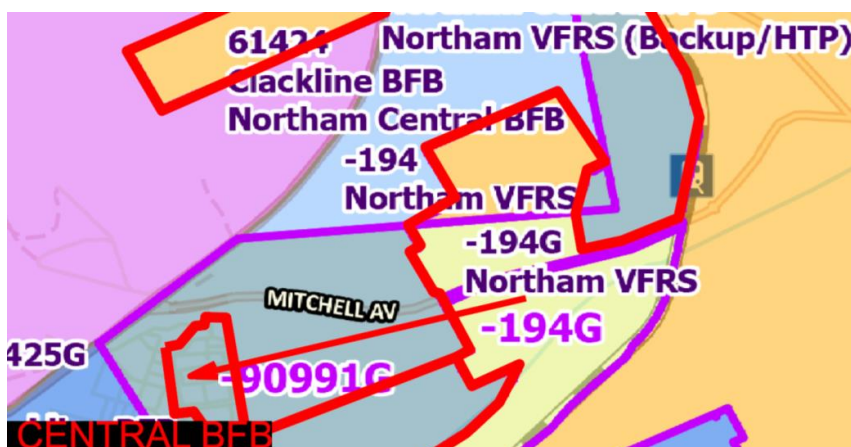
- (R11.10A) That the Shire of Northam requests DFES to include the internal compound areas of the Yongah Hill Detention Centre Facility within the Northam gazetted fire district. This is to be either as a satellite gazetted fire district, or via a connection between the current Northam gazetted fire district and Yongah Hill Detention Centre Facility that is a straight line (i.e. 5m wide). This line would not follow any prominent feature such as a road. All areas outside of the internal compound of the Yongah Hill Detention Centre Facility and connecting line are not included in this recommendation.

Rationale for Recommendations

- This recommendation formalises the current in practice operations around this facility, with the Northam VFRS and/or DFES managing incidents internal to the compound, while the Shire of Northam manage all incidents outside of the compound. The intention of this recommendation is to remove the need of a MoU and allow the Northam VFRS/DFES to act under their normal legislation. The facility currently falls within the Clackline Muresk BFB district.
- Northam Shire BFBs are not equipped or trained to undertake the required firefighting practices that would need to be undertaken within the Detention facility compound, whereas Northam VFRS are.
- It is not proposed to have the gazetted fire district follow Mitchell Avenue to the Facility, as it is believed that BFB's will continue to manage bush fire incidents on and around Mitchell Avenue (outside of the current gazetted fire district).
- This recommendation only covers the inclusion of the compound and does not include the surrounding bushland within the commonwealth land surrounding the facility. It is intended that this area outside of the compound will be included in the proposed Northam Central BFB district, or in the case that the before mentioned proposal does not go through, remain with the Clackline Muresk BFB district.

Detail

Please refer to the maps identifying the change.



Future consideration to Northam gazetted fire district expansion

The working group notes that should the construction of the proposed hydrogen plant on the east edge of the Northam townsite progress, then consideration should be given to the possible expansion of the Northam gazetted fire district to include this facility.

11.11 CAD Only Changes

Bakers Hill Beat adjustment to the eastern side to have Clackline Muresk BFB as the HTP Backup

Recommendation

- (R11.11A) That the Shire of Northam updates Bakers Hill BFB Beat, so as to have the eastern portion of their Brigade district supported during the high threat period (HTP) by Clackline Muresk BFB.

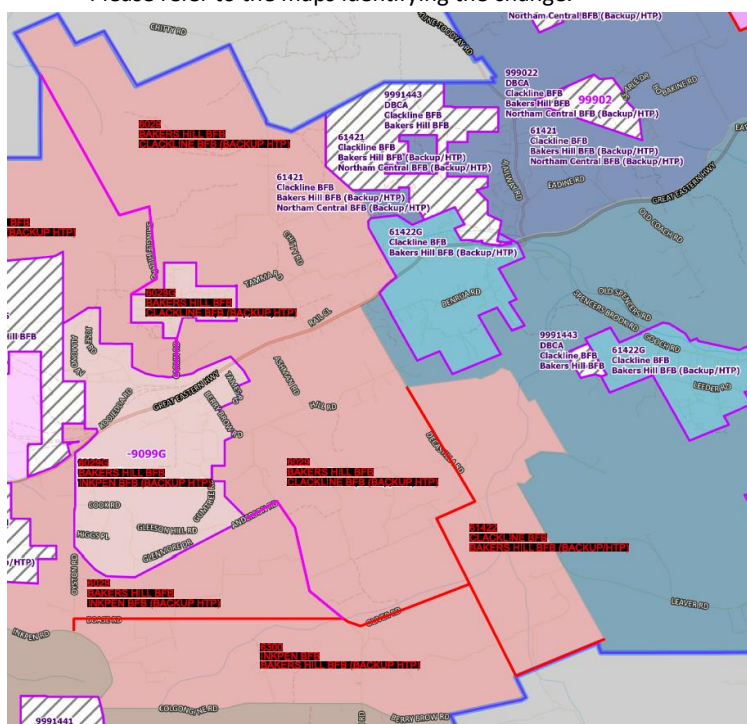
Rationale for Recommendations

- Currently, this area is identified as utilising Wundowie BFB as the HTP backup. Even if Wundowie BFB continues to maintain their brigade district, the Clackline Muresk BFB will have a quicker response time to the area, and any incident in this area has a high level of probability to impact the Clackline area.

Detail

- The HTP backup zone is recommended to be:
 - North of Great Eastern Highway - East of Carlin Road, including the Carlin Valley Estate, then North along Shingle Hill Road to the Toodyay Boundary.
 - South of Great Eastern Highway - East of Berry Brow Road to the Northern edge Inkpen BFB district, either the current Inkpen BFB district boundary, or if the relevant recommendation is accepted, the new resulting boundary.

Please refer to the maps identifying the change.



12.0 Identified Areas of Concern/Further Review Outside of the Scope

The following areas of concern were identified as part of the Working Groups review, but it was felt these fell outside the scope of the working group but warranted attention by BFAC, the Shire and/or future workings groups.

12.1 WAERN Communications in the west of the Shire

Gaps in the WAERN in the western portion of the Shire adds significant risk and challenges in the management of fire in these high risk areas. It is felt that the provision of portable communication trailers is not an adequate long term solution to this issue, as their provision at an incident is often delayed.

12.2 Water tank infrastructure

There are pockets within the Shire of Northam that have very limited access to emergency water sources, particularly in the event of a mains water failure, as often occurs in major incidents. It is felt that a strategic review of the Shire's emergency water infrastructure would help identify these pockets, and enable a strategy to be developed to address.

12.3 Unexploded Ordinates (UXO)

Large portions of the Shire of Northam are classified as being UXO areas including 'slight' and 'substantive' occurrences. Much of the 'slight' occurrences is on farmland along with open bushland. Given this categorisation of UXO, and DFES policies and procedures relating to UXO, firefighting efforts can be dramatically impacted adding greatly to the fire risk to the community – for example where a mineral earth break cannot be installed, or fire appliances are not allowed to access the fires edge due to a lack of an established track. The working group recognises this adds substantially to the fire risk in the Shire and believes that a more proactive approach to this issue is urgently needed within the Shire.

BUSH FIRES ACT 1954

Firebreak and Fuel Load Notice

Shire of Northam

Pursuant to the powers contained in Section 33 of the Bush Fires Act 1954 (as amended), notice is hereby given to all owners and occupiers of land within the Shire of Northam adopted the following requirements as a measure to assist in the control of bush fires, or preventing the spread or extension of a bush fire which may occur within the Shire.

All owners and/or occupiers of land within the Shire of Northam are required to carry out fire prevention work in accordance with this notice by 1 November each calendar year and maintained **until 31 March** the following calendar year, or within 14 days of becoming an owner or occupier of land if after that date, to comply with the requirements set out in this notice.

FAILURE TO COMPLY WITH THE REQUIREMENTS OF THIS ORDER MAY RESULT WITH THE ISSUE OF AN INFRINGEMENT

NOTICE PENALTY \$250.00 OR PROSECUTION IN A COURT OF LAW WITH A MAXIMUM PENALTY OF \$5,000 AND BE LIABLE

WHETHER PROSECUTED OR NOT TO PAY THE COSTS OF PERFORMING THE WORK DIRECTED BY THE NOTICE.

1. Building Protection Zone

The Building Protection Zone is an area of very low fuel levels and **managed vegetation 10 metres** out from habitable buildings (As defined in the Residential Design Codes of WA and in AS 3959) **and including moveable or semi-permanent dwellings such as Tiny Houses, Caravans and Recreational Vehicles etc** and must meet the following requirements,

Habitable building means a dwelling, workplace, place of gathering or assembly, a building used for the storage or display of goods or produce for sale by wholesale in accordance with classes 1-9 of the Building Code of Australia. The term habitable building includes attached and adjacent structures like garages, carports, verandas or similar roofed structures that are attached to, or within 6 metres of, the dwelling or primary building.

- Building Protection Zones for habitable buildings must extend a minimum of **10 metres** out from any external walls of the building, attached structures, or adjacent structures within 6 metres of the habitable building.

- On sloping ground the Building Protection Zone distance shall increase at least 1 metre for every degree in slope on the sides of the habitable building that are exposed to down slope natural vegetation.
- Building Protection Zones must consist of non-flammable managed vegetation, reticulated lawns and gardens and other non-flammable features.
- All grass in Building Protection Zones must be maintained to or under 5cm in height.
- Fuel loads within Building Protection Zones must be maintained at 2 tonnes per hectare or lower.
- The crowns of trees must be separated to create a clear separation distance between adjoining or nearby tree crowns. The separation distance between tree crowns is not required to exceed 10 metres.
- A small group of trees within close proximity to one another may be treated as one crown provided the combined crowns do not exceed the area of a large or mature crown size for that species.
- Trees are to be low pruned (or under pruned) to at least a height of 2 metres from ground.
- No tree, or shrub over 2 metres high are to be within 2 metres of a habitable building.
- Trees and shrubs over 2 metres high must not be planted in groups close to the habitable building and there must be a gap of at least 3 times the height (at maturity) of the shrub away from the habitable building.
- There must be no tree crowns or branches hanging over habitable buildings.
- Firewood and flammable materials must be stored 20m from habitable buildings
- Driveways and access ways are to be a minimum of (3) metres wide with a vertical clearance of (4)metres to allow for the safe passage of a fire appliance to all buildings and assets on the land
- Roof gutters should be free of leaves and other combustible material.

YOUR PROPERTY

2. Land with area less than 10,000m²(1 hectare)

- Maintain all grass on the land to a height no greater than 10cm all windrows or dead flammable material must be removed. **Or maintain grass to a height of 20cm in conjunction with a 2m fire break around the boundary.**
- Maintain fuel loadings in natural bush areas at less than 8 tonnes per hectare across the land

- Land with a habitable building on it must maintain a Building Protection Zone in line with the requirements of Section 1 of this notice.

3. Land with an area g 10,000m² (1 hectare) to 30,000m² (3 hectares)

Options (selected one out of the three options)

- a. Install bare earth firebreaks three (3) metres wide immediately inside within (10) metres of all boundaries in a continuous form. All overhanging branches, trees, limbs etc. to be trimmed back from over the firebreak area to a minimum height of four (4) metres to allow for the safe passage of a fire appliance or;
 - b. Maintain all grass on the land to a height no greater than 10cm all windrows and or dead flammable material must be removed. An access area within (10) metres of the boundary with a minimum width of (3) metres with a vertical clearance of (4) metres where all overhanging branches are trimmed back to allow for the safe passage of a fire appliance or;
 - c. A combination of the above two options for properties with natural bush sections and pastured land sections
- Land with a building on it must maintain a Building Protection Zone in line with the requirements of Section 1 of this notice.
 - On land for the use of tendering livestock a level of feed can be maintained to last the season. All grass a distance of 5m from any firebreak must be maintained to a height no greater than 40cm.
 - Maintain fuel loadings in natural bush areas at less than 8 tonnes per hectare across the land.

Firebreak

Means a strip or area of trafficable ground, which is at least three (3) metres wide for cropped/stubble areas, or Three (3) metres wide for bushland/remnant vegetation areas with a minimum height of four (4) metres, which is kept and maintained totally clear of all inflammable matter. Such firebreaks may be constructed by one or more of the following methods: PLOUGHING, CULTIVATING, SCARIFYING, RAKING, BURNING, CHEMICAL SPRAYING OR OTHER METHOD as approved by an Authorised Officer.

In agricultural areas it is considered acceptable if a vehicle can travel through crop area within 10m of the property boundary to traverse around low branches or limbs.

4. Land with an area g 30,000m² (3 hectare) to 100,000m² (10 hectares)

- a. Install bare earth firebreaks three (3) metres wide immediately inside within (10) metres of all boundaries in a continuous form. All overhanging branches, trees, limbs

etc. to be trimmed back from over the firebreak area to a minimum height of four (4) metres to allow for the safe passage of a fire appliance.

- On land for the use of tendering livestock a level of feed can be maintained to last the season. All grass a distance of 5m from any firebreak must be maintained to a height no greater than 40cm.

- Maintain fuel loadings in natural bush areas at less than 8 tonnes per hectare across the land.

5. Land with an area greater than 100,000m² (10 hectares)

1. Install bare earth firebreaks two (2) metres wide immediately inside within (10) metres of all boundaries in a continuous form, for all cropped/stubble and pasture areas, or three (3) metres wide for all natural bush/remnant vegetation areas on the property within ten (10) metres of the property boundary. All overhanging branches, trees, limbs etc. to be trimmed back from over the firebreak area to a minimum height of four (4) metres to allow for the safe passage of a fire appliance.

2. An access area within (10) metres of the boundary with a minimum width of (3) metres with a vertical clearance of (4) metres where all over hanging branches are trimmed back to allow for the safe passage of a fire appliance .

- On land for the use of tendering livestock a level of feed can be maintained to last the season. All grass a distance of 5m from any firebreak must be maintained to a height no greater than 40cm.

- Maintain fuel loadings in natural bush areas at less than 8 tonnes per hectare across the land.

Firebreak

Means a strip or area of trafficable ground, which is at least two (2) metres wide for cropped/stubble and pasture areas, or three (3) metres wide for bushland/remnant vegetation areas with a minimum height of four (4) metres, which is kept and maintained totally clear of all inflammable matter. Such firebreaks may be constructed by one or more of the following methods: PLOUGHING, CULTIVATING, SCARIFYING, RAKING, BURNING, CHEMICAL SPRAYING OR OTHER METHOD as approved by an Authorised Officer.

In agricultural areas it is considered acceptable if a vehicle can travel through crop area within 10m of the property boundary to traverse around low branches or limbs.

5. Fuel Depot and Storage Areas, Haysheds, Stockpiled Flammable Materials and Stationary Machinery.

- Remove all flammable matter within (10) metres of Fuel Depot and Storage Areas of where fuel drums whether containing fuel or not, fuel ramps or fuel dumps are located, Hay Shed, Stockpiled Flammable Materials, Stationary Machinery are stored.
- Install bare earth firebreaks three (3) metres wide immediately inside and along all boundaries of land in a continuous form with a vertical clearance of (4) metres where overhanging branches are trimmed back immediately adjacent to Stationary Motors, Haystacks, Stockpiled Flammable Materials and Stationary Machinery.

6. Bushfire or Emergency Management Plans

(Compliance is required throughout the year, every year)

Means a bushfire management plan, emergency management plan or an approved Bushfire attack level (BAL) assessment that has been developed and approved to reduce and mitigate fire hazards as part of a Town Planning Scheme, subdivision approval, development approval or a building permit

- All properties with a Bush Fire, Fire or Emergency Management Plan shall comply with the plan in its entirety.
- Any requirements identified in a Bush Fire, Fire or Emergency Management Plan are in addition to the requirements of this notice.

7. Application to vary the Firebreak Requirements with Alternative Arrangements

If it is considered impracticable for any reason whatsoever to implement any of the requirements of this Notice, you may apply in writing to the Shire of Northam by no later than the 1st October each year for permission to implement alternative measures under the following options,

- a) A temporary variation for extenuating circumstances only
- b) A permanent feature of the property requires a variation to his order, if approved the variation will apply until specifically rescinded or replaced with a new individual notice by the shire.

Take notice if permission is not granted in writing you must comply with the requirements of this notice.

8. The Burning of Garden Refuse

Pursuant to the powers contained in section 24G (2) of the Bush Fires Act 1954, the Shire of Northam prohibits the burning of all garden refuse within its district during the Prohibited Burning Times. This prohibition applies to all persons within the Shire's district.

- The burning of garden refuse or rubbish on the ground or in an incinerator that would otherwise be permitted under Section 24F is prohibited absolutely on all land within the district during the Prohibited Burning Period.
- The burning of garden refuse or rubbish on the ground or in an incinerator that would otherwise be permitted under Section 24F is prohibited on all land under 2000m² (square metres) in size during the Restricted Burning Time, without a Fire Permit issued under Regulation 15 of the Bush Fires Act 1954.
- The burning of garden refuse or rubbish on the ground or in an incinerator that would otherwise be permitted under Section 24F is prohibited absolutely on all land within the district during the Restricted Burning period between 1st Mar – 30 Apr each year.
- During the Restricted Burning period October 1st & Nov 30th each year, residents on land that is greater than 2,000m² in area it is permissible to undertake the burning of garden refuse (dry leaves, small branches, off cuts, etc.) in a single pile on the ground no larger than 1.0 m³ between the hours of 18:00 (6pm) and 23:00 (11pm) **burning 1 pile at a time** and by complying with all the conditions of section 24F (3) in the Bush Fires Act 1954 & Regulation 15B Bush Fires Regulations 1954.
- Reticulated water supply or min 500 litres of water must be available for immediate use at all times, the fire is to be completely extinguished with water prior to leaving area unattended.

9. Restricted and Prohibited Burning times

- The "Prohibited Burning Time" means the 1 December each calendar year through until 28th February the following calendar year (inclusive, and as varied pursuant to Sections 17 and 18 of the Bush Fires Act 1954).
- The "Restricted Burning Time" means the 1 October through until 30 November and the 1 March through until 30 April each calendar year (inclusive, and as varied pursuant to Sections 17 and 18 of the Bush Fires Act 1954).

During the restricted burning time 1st October to 30th April (inclusive of Prohibited time) while doing mechanical operations including but not limited to "Rock picking, stubble crunching, slashing of dry material cured more than 60% and verge management, these types of operations must have with them 500 litres fire unit at the ready or means of running water present (charged hose).

10. Cooking & Camping

Pursuant to the powers contained in section 25H (1) of the Bush Fires Act 1954, the Shire of Northam prohibits the lighting of a fire in the open air for the purpose of

camping or cooking during the prohibited period. This prohibition applies to all persons within the Shire's district.

For the purposes of this section (1aa) a gas appliance, comprising a fire the flame of which is encapsulated by the appliance and which does not consume solid fuel, shall not be taken to be a fire in the open air.

An appliance that burns a solid fuel, (BBQ, Pizza Oven, Meat Smoker etc.) cannot be operated on days of EXTREME, CATASTROPHIC. A special exemption permit may be obtained from CBFCO or delegate of, on a high or extreme FDR for commercial or community events.

- Any chimney on the appliance must be fitted with a suitable spark arrestor that is maintained in a clean, sound and efficient condition.
- If solid fuel is being consumed, then the burning fuel must be sealed from the open air by a secure, sealable door.
- Appliance must not be left unattended and a reticulated water supply must be available for immediate use.

Take notice a person/s who contravenes a of this section is guilty of an offence that carries a penalty of \$3,000.

11. Permits to burn

Means a "Permit to Burn the Bush" as issued by an Authorised Officer under section 18 of the Bush Fires Act 1954.

- Applications for Permits are available from the Shire of Northam at no cost.
- You must comply with all conditions imposed by the Shire or an Authorised Officer in respect of any Permit issued by the Shire.
- Permits will not be valid on days of "HIGH", "EXTREME" or "CATASTROPHIC" fire danger.
- Permits may also be revoked if in the opinion of an authorised officer the conditions are not deemed suitable for prescribed burns.

Take notice that the Shire of Northam prohibits the burning of any road verge within the entire district without a shire approved permit.

Take Notice that pursuant to Section 18 (11) of the Bush Fires Act 1954 - Where a person starts a fire on land, if the fire escapes from the land or if the fire is in the opinion of a Bush Fire Control Officer or an officer of a Bush Fire Brigade out of control on the land, the person shall be liable to pay to the local government on the request of and for

recoup to its bush fire brigade, any expenses up to a maximum amount of \$10 000 incurred by it in preventing the extension of or extinguishing the fire, and such expenses may be recovered in any court of competent jurisdiction.

A person who commits a breach of this section other than subsection (11) is guilty of an offence.

Penalty: For a first offence \$4 500.

For a second or subsequent offence \$10 000.

12. Harvest, Movement of Vehicles and Hot Works Bans

All persons within the Shire of Northam are required to comply with a direction declared under Reg 38A, 38B, 38C & 38D, Bush Fires Regulations 1954.

- A Harvest, Vehicle Movement & Hot Works **Ban (HVMBHW)** requires the cessation of all harvesting, vehicle movements and hot work operations **including 4WD driving, riding of motorbikes and ATV's** within the Shire of Northam.
- A Harvest, Vehicle Movement & Hot Works **Ban (HVMBHW)** prohibits the movement of vehicles on properties within the Shire of Northam except for the essential watering of stock, and the **feeding of commercial livestock in a diesel powered vehicle accompanied by a 500 litre fire unit with water at the ready.**

Where a bulk load of dry material (eg Lime Gypsum) is in transit when a HVMBHW is imposed then the one off load may be unloaded within 50m of a fire break and accompanied by a 500 litres fire unit at all times while truck is in the paddock.

- A Harvest, Vehicle Movement & Hot Works Ban (**HVMBHW**) prohibits the use of all welding, grinding and abrasive tools on properties within the Shire of Northam in the open air. Exemptions in accordance with Council Policy may be available. Further information is available by contacting Shire of Northam (08) 9622 6100.

Take notice a person/s who contravenes a declaration made under regulation 38A, 38B, 38C or 38D or who fails to carry out any direction given to him is guilty of an offence that carries a penalty of \$5,000.

A Harvest Vehicle Movement and Hot works Ban will be advertised on the Shire of Northam Website or Emergency Information Line on (08) 9621 1120. Where possible on ABC Radio 531AM, MMM 864 AM and Notification can be obtained via a free SMS service which is available upon request from the Shire of Northam (08) 9622 6100

All header drivers must be on the Shire SMS list as above for the expedient notification of HVMHWP when imposed.

13. Additional Works

In addition to the requirements noted above, regardless of land size and location, the Shire of Northam or its duly authorised officer may require you to undertake additional works on your property to improve access and or undertake further hazard removal and/or reduction works, where in the opinion of that authorised officer, it is to be necessary to prevent the outbreak and/or the spread of a bush fire.

Take notice that pursuant to Section 33(4) of the Bush Fires Act 1954, where the owner and/or occupier of land fails or neglects to comply with the requisitions of this Notice within the times specified, the Shire of Northam may by its officers and with such servants, workmen and contractors, vehicles and machinery as the officers deem fit, enter upon the land and carry out the requisitions of this Notice which have not been complied with and pursuant to Section 33(5) of the Bush Fires Act 1954, the amount of any costs and expenses incurred may be recovered from you as the owner and or occupier of the land.

If the requirements of this Notice are carried out by burning, such burning must be in accordance with the relevant provisions of the Bush Fires Regulations 1954.

The owner or occupier of land to whom a notice has been given under subsection (1) and who fails or neglects in any respect duly to comply with the requisitions of the notice is guilty of an offence, that offence carries a penalty of \$5,000, additionally a person in default is also liable whether prosecuted or not to pay the costs of performing the work directed by this notice if it is not carried out by the owner and/or occupier by the date required by this Notice.

14. Reserves vested with the Shire of Northam

The Shire of Northam reserves the right to conduct any mitigation works deemed necessary on any reserves vested with Shire of Northam for the purpose of reducing the risk of fire to the community. Each reserve will be assessed in accordance with ISO 31000:2018 and identified in the Bushfire Risk Management Plan.

Treatments implemented may include but are not limited to prescribed burns, slashing, mulching or any other means necessary as determined by the Shire of Northam to ensure the risk is reduced to a satisfactory level.

GENERAL ADVICE

This notice gives the minimum requirements for fire control within the Shire of Northam and all residents and ratepayers are encouraged to be prepared by undertaking additional fire protection measures. Creating a household "Bushfire Survival Plan" to

ensure the safety of property and life. Further additional information to that contained in this notice can be obtained from the 5min Fire Chat website www.dfes.wa.gov.au/firechat or from the Shire of Northam website www.northam.wa.gov.au

All previous versions of this notice are hereby cancelled.

By order of the Council,

DEFINITIONS

For the purpose of this Notice the following definitions apply:

Alternative Arrangements includes a variation as defined in Section 7 of this Notice to reduce and mitigate fire hazards within a particular subdivision, lot or other area of land anywhere in the district.

Authorised Officer means an employee of the Shire of Northam appointed as a Bush Fire Control Officer pursuant to the powers conferred in Section 38 of the Bush Fires Act 1954.

Firebreak means a strip or area of trafficable ground, which is at least two (2) metres wide for cropped/stubble areas, or Three (3) metres wide for bushland/remnant vegetation areas with a minimum height of four (4) metres, which is kept and maintained **materially** clear of all flammable material **and is trafficable**. Such firebreaks may be constructed by one or more of the following methods: PLOUGHING, CULTIVATING, SCARIFYING, RAKING, BURNING, CHEMICAL SPRAYING OR OTHER METHOD as approved by an Authorised Officer.

In agricultural areas it is considered acceptable if a vehicle can travel through crop area within 10m of the property boundary to traverse around low branches or limbs.

Flammable Material means any plant, tree, grass, substance, object, thing or material that may or is likely to catch fire and burn or any other thing deemed by an authorised officer to be capable of combustion.

Solid Fuel means any fuel other than gas for cooking/camping, such as, wood, coal, BBQ briquettes.

Fuel Depot / Fuel Storage Area means an area of land, a building or structure where fuel, ie (petrol, diesel, kerosene, liquid gas or any other fossil fuel) is kept in any container or manner.

Fuel Load is the leaf litter on the ground inclusive of leaves, twigs (up to 6mm in diameter) and bark. A litter depth of 5mm from the top of the layer to the mineral earth beneath is indicative of approximately 2.5 tonnes per hectare. A litter depth of 15mm

from the top of the layer to the mineral earth beneath is indicative of approximately 8 tonnes per hectare.

The Shire of Northam can provide advice on determining fuel load levels further information is available here

<https://www.dfes.wa.gov.au/safetyinformation/fire/bushfire/VisualFuelLoadsPublications/Visual%20Fuel%20Load%20Guide%20Swan%20Coastal.pdf>.

Habitable Buildings means a dwelling, workplace, place of gathering or assembly, a building used for the storage or display of goods or produce for sale by wholesale in accordance with classes 1-9 of the Building Code of Australia. The term habitable building includes attached and adjacent structures like garages, carports verandas or similar roofed structure(s) that are attached to, or within 6 metres of the dwelling or primary building.

Maintaining Fuel Loads relates to the management of leaf litter as described in this Notice. Reducing fuel load levels does not necessarily require the removal of existing natural vegetation. A combination of methods can be utilised inclusive of safe burning, raking, weed removal, pruning and/or the removal of dead plant material.

Managed Vegetation includes vegetation that is pruned away from buildings, under pruned to minimise contact with ground fuels and that is kept free of dead suspended matter such as twigs, leaves and bark.

Trafficable means to be able to travel from one point to another in a four-wheel drive fire appliance on a clear surface, unhindered without any obstruction that may endanger such fire appliances. A firebreak is not to terminate, or lead to a dead end, without provision for egress to a safe place or a cleared turn around area of not less than a 20 metre diameter.

Vertical Axis means a continuous vertical uninterrupted line at a right angle to the horizontal line of the firebreak to a minimum height of 4 metres from the ground

Other areas brought to notice.

Solar arrays –need 3m fire breaks and vegetation kept down to 10cm in height.

It is recommended that wider fire breaks around areas with substantial UXO be required.

Pictures and tables to be included in the Fire Break Notice where appropriate to show what is required and make the information easier to understand.

BUSH FIRES ACT 1954

Firebreak and Fuel Load Notice

Shire of Northam

Pursuant to the powers contained in Section 33 of the *Bush Fires Act 1954* (as amended), notice is hereby given to all owners and occupiers of land within the Shire of Northam adopted the following requirements as a measure to assist in the control of bush fires, or preventing the spread or extension of a bush fire which may occur within the Shire.

All owners and/or occupiers of land within the Shire of Northam are required to carry out fire prevention work in accordance with this notice by 1 November each calendar year and maintained until ~~30 April~~ **31 March** the following calendar year, or within 14 days of becoming an owner or occupier of land if after that date, to comply with the requirements set out in this notice.

FAILURE TO COMPLY WITH THE REQUIREMENTS OF THIS ORDER MAY RESULT WITH THE ISSUE OF AN INFRINGEMENT NOTICE PENALTY \$250.00 OR PROSECUTION IN A COURT OF LAW WITH A MAXIMUM PENALTY OF \$5,000 AND BE LIABLE WHETHER PROSECUTED OR NOT TO PAY THE COSTS OF PERFORMING THE WORK DIRECTED BY THE NOTICE.

1. Building Protection Zone

The Building Protection Zone is an area of very low fuel levels and managed vegetation ~~20-10~~ metres out from habitable buildings (As defined in the Residential Design Codes of WA and in AS 3959) and including moveable or semi-permanent dwellings, such as Tiny Houses, Caravans and Recreational Vehicles etc and must meet the following requirements,

Habitable building means a dwelling, workplace, place of gathering or assembly, a building used for the storage or display of goods or produce for sale by wholesale in accordance with classes 1-9 of the Building Code of Australia. The term habitable building includes attached and adjacent structures like garages, carports, verandas or similar roofed structures that are attached to, or within 6 metres of, the dwelling or primary building.

- Building Protection Zones for habitable buildings must extend a minimum of ~~20-10~~ metres out from any external walls of the building, attached structures, or adjacent structures within 6 metres of the habitable building.
- On sloping ground the Building Protection Zone distance shall increase at least 1 metre for every degree in slope on the sides of the habitable building that are exposed to down slope natural vegetation.
- Building Protection Zones must consist of non-flammable managed vegetation, reticulated lawns and gardens and other non-flammable features.
- All grass in Building Protection Zones must be maintained to or under 5cm in height.
- Fuel loads within Building Protection Zones must be maintained at 2 tonnes per hectare or lower.
- The crowns of trees must be separated to create a clear separation distance between adjoining or nearby tree crowns. The separation distance between tree crowns is not required to exceed 10 metres.
- A small group of trees within close proximity to one another may be treated as one crown provided the combined crowns do not exceed the area of a large or mature crown size for that species.
- Trees are to be low pruned (or under pruned) to at least a height of 2 metres from ground.
- No tree, or shrub over 2 metres high are to be within 2 metres of a habitable building.
- Trees and shrubs over 2 metres high must not be planted in groups close to the habitable building and there must be a gap of at least 3 times the height (at maturity) of the shrub away from the habitable building.
- There must be no tree crowns or branches hanging over habitable buildings.
- Firewood and flammable materials must be stored 20m from habitable buildings
- Driveways and access ways are to be a minimum of (3) metres wide with a vertical clearance of (4)metres to allow for the safe passage of a fire appliance to all buildings and assets on the land
- Roof gutters should be free of leaves and other combustible material.

YOUR PROPERTY

2. Land with area less than 10,000m²(1 hectare)

- Maintain all grass on the land to a height no greater than 10cm all windrows or dead flammable material must be removed. Or maintain grass to a height of 20cm in conjunction with a 2 metre fire break around the boundary.
- Maintain fuel loadings in natural bush areas at less than 8 tonnes per hectare across the land
- Land with a habitable building on it must maintain a Building Protection Zone in line with the requirements of Section 1 of this notice.

3. Land with an area g 10,000m² (1 hectare) to ~~10030,000m2~~ (10-3 hectares)

Options (selected one out of the three options)

1. Install bare earth firebreaks three (3) metres wide immediately inside within (10) metres of all boundaries in a continuous form. All overhanging branches, trees, limbs etc. to be trimmed back from over the firebreak area to a minimum height of four (4) metres to allow for the safe passage of a fire appliance or;

2. Maintain all grass on the land to a height no greater than 10cm all windrows and or dead flammable material must be removed. An access area within (10) metres of the boundary with a minimum width of (3) metres with a vertical clearance of (4) metres where all overhanging branches are trimmed back to allow for the safe passage of a fire appliance or;
 3. A combination of the above two options for properties with natural bush sections and pastured land sections
- Land with a building on it must maintain a Building Protection Zone in line with the requirements of Section 1 of this notice.
 - On land for the use of tendering livestock a level of feed can be maintained to last the season. All grass a distance of 5m from any firebreak must be maintained to a height no greater than ~~40~~40cm.
 - Maintain fuel loadings in natural bush areas at less than 8 tonnes per hectare across the land.

Firebreak

Means a strip or area of trafficable ground, which is at least three (3) metres wide for cropped/stubble areas, or Three (3) metres wide for bushland/remnant vegetation areas with a minimum height of four (4) metres, which is kept and maintained totally clear of all inflammable matter. Such firebreaks may be constructed by one or more of the following methods: PLOUGHING, CULTIVATING, SCARIFYING, RAKING, BURNING, CHEMICAL SPRAYING OR OTHER METHOD as approved by an Authorised Officer.

In agricultural areas it is considered acceptable if a vehicle can travel through crop area within 10m of the property boundary to traverse around low branches or limbs.

4. Land with an area g 30,000m² (3 hectare) to 100,000m² (10 hectares)

a. Install bare earth firebreaks three (3) metres wide immediately inside within (10) metres of all boundaries in a continuous form. All overhanging branches, trees, limbs etc. to be trimmed back from over the firebreak area to a minimum height of four (4) metres to allow for the safe passage of a fire appliance or;

- On land for the use of tendering livestock a level of feed can be maintained to last the season. All grass a distance of 5m from any firebreak must be maintained to a height no greater than 40cm.
- Maintain fuel loadings in natural bush areas at less than 8 tonnes per hectare across the land.

5. Land with an area greater than 100,000m² (10 hectares)

Options (selected one out of the three options)

1. Install bare earth firebreaks two (2) metres wide immediately inside within (10) metres of all boundaries in a continuous form, for all cropped/stubble and pasture areas, or three (3) metres wide for all natural bush/remnant vegetation areas on the property within ten (10) metres of the property boundary. All overhanging branches, trees, limbs etc. to be trimmed back from over the firebreak area to a minimum height of four (4) metres to allow for the safe passage of a fire appliance or;
2. Maintain all grass on the land to a height no greater than 10cm all windrows and or dead flammable material must be removed. An access area within (10) metres of the boundary with a minimum width of (3) metres with a vertical clearance of (4) metres where all overhanging branches are trimmed back to allow for the safe passage of a fire appliance or;

~~3. A combination of the above two options for properties with natural bush sections and pastured land sections~~

- On land for the use of tendering livestock a level of feed can be maintained to last the season. All grass a distance of 5m from any firebreak must be maintained to a height no greater than ~~40~~40cm.
- Maintain fuel loadings in natural bush areas at less than 8 tonnes per hectare across the land.

Firebreak

Means a strip or area of trafficable ground, which is at least two (2) metres wide for cropped/stubble and pasture areas, or Three (3) metres wide for bushland/remnant vegetation areas with a minimum height of four (4) metres, which is kept and maintained totally clear of all inflammable matter. Such firebreaks may be constructed by one or more of the following methods: PLOUGHING, CULTIVATING, SCARIFYING, RAKING, BURNING, CHEMICAL SPRAYING OR OTHER METHOD as approved by an Authorised Officer.

In agricultural areas it is considered acceptable if a vehicle can travel through crop area within 10m of the property boundary to traverse around low branches or limbs.

5. Fuel Depot and Storage Areas, Haysheds, Stockpiled Flammable Materials and Stationary Machinery.

- Remove all flammable matter within (10) metres of Fuel Depot and Storage Areas of where fuel drums whether containing fuel or not, fuel ramps or fuel dumps are located, Hay Shed, Stockpiled Flammable Materials, Stationary Machinery are stored.
- Install bare earth firebreaks three (3) metres wide immediately inside and along all boundaries of land in a continuous form with a vertical clearance of (4) metres where overhanging branches are trimmed back immediately adjacent to Stationary Motors, Haystacks, Stockpiled Flammable Materials and Stationary Machinery.

6. Bushfire or Emergency Management Plans

(Compliance is required throughout the year, every year)

Means a bushfire management plan, emergency management plan or an approved Bushfire attack level (BAL) assessment that has been developed and approved to reduce and mitigate fire hazards as part of a Town Planning Scheme, subdivision approval, development approval or a building permit

- All properties with a Bush Fire, Fire or Emergency Management Plan shall comply with the plan in its entirety.
- Any requirements identified in a Bush Fire, Fire or Emergency Management Plan are in addition to the requirements of this notice.

7. Application to vary the Firebreak Requirements with Alternative Arrangements

If it is considered impracticable for any reason whatsoever to implement any of the requirements of this Notice, you may apply in writing to the Shire of Northam by no later than the 1st October each year for permission to implement alternative measures under the following options,

- a) A temporary variation for extenuating circumstances only
- b) A permanent feature of the property requires a variation to his order, if approved the variation will apply until specifically rescinded or replaced with a new individual notice by the shire.

Take notice if permission is not granted in writing you must comply with the requirements of this notice.

8. The Burning of Garden Refuse

Pursuant to the powers contained in section 24G (2) of the *Bush Fires Act 1954*, the Shire of Northam prohibits the burning of all garden refuse within its district during the Prohibited Burning Times. This prohibition applies to all persons within the Shire's district.

- The burning of garden refuse or rubbish on the ground or in an incinerator that would otherwise be permitted under Section 24F is prohibited absolutely on all land within the district during the Prohibited Burning Period.
- The burning of garden refuse or rubbish on the ground or in an incinerator that would otherwise be permitted under Section 24F is prohibited on all land under 2000m² (square metres) in size during the Restricted Burning Time, without a Fire Permit issued under Regulation 15 of the *Bush Fires Act 1954*.
- The burning of garden refuse or rubbish on the ground or in an incinerator that would otherwise be permitted under Section 24F is prohibited absolutely on all land within the district during the Restricted Burning period between 1st Mar – 30 Apr each year.
- During the Restricted Burning period October 1st & Nov 30th each year, residents on land that is greater than 2,000m² in area it is permissible to undertake the burning of garden refuse (dry leaves, small branches, off cuts, etc.) in a single pile on the ground no larger than 1.0 m³ between the hours of 18:00 (6pm) and 23:00 (11pm) burning 1 pile at a time and by complying with all the conditions of section 24F (3) in the *Bush Fires Act 1954* & Regulation 15B Bush Fires Regulations 1954.
- Reticulated water supply or min 600Lts of water must be available for immediate use at all times, the fire is to be completely extinguished with water prior to leaving area unattended.
- It is recommended that residents undertake 1 m³ burns at a rate of no more than 1 pile at a time.

9. Restricted and Prohibited Burning times

- The "Prohibited Burning Time" means the 1 December each calendar year through until 28th February the following calendar year (inclusive, and as varied pursuant to Sections 17 and 18 of the *Bush Fires Act 1954*).
- The "Restricted Burning Time" means the 1 October through until 30 November and the 1 March through until 30 April each calendar year (inclusive, and as varied pursuant to Sections 17 and 18 of the *Bush Fires Act 1954*).

-During the restricted burning time 1st October to 30th April (inclusive of Prohibited time) while doing mechanical operations including but not limited to "Rock picking, stubble crunching, slashing of dry material cured more than 60% and verge management, these types of operations must have with them 500 litres fire unit at the ready or means of running water present (charged hose).

10. Cooking & Camping

Pursuant to the powers contained in section 25H (1) of the *Bush Fires Act 1954*, the Shire of Northam prohibits the lighting of a fire in the open air for the purpose of camping or cooking during the prohibited period. This prohibition applies to all persons within the Shire's district.

For the purposes of this section (1aa) a gas appliance, comprising a fire the flame of which is encapsulated by the appliance and which does not consume solid fuel, shall not be taken to be a fire in the open air.

An appliance that burns a solid fuel, (BBQ, Pizza Oven, Meat Smoker etc.) cannot be operated on days of ~~“HIGH”~~, “EXTREME” or “CATASTROPHIC” fire danger rating. A special exemption permit may be obtained from CBFCO or delegate of, on a high or extreme FDR for commercial or community events.

- Any chimney on the appliance must be fitted with a suitable spark arrestor that is maintained in a clean, sound and efficient condition.
- If solid fuel is being consumed, then the burning fuel must be sealed from the open air by a secure, sealable door.
- Appliance must not be left unattended and a reticulated water supply must be available for immediate use.

Take notice a person/s who contravenes a of this section is guilty of an offence that carries a penalty of \$3,000.

11. Permits to burn

Means a “Permit to Burn the Bush” as issued by an Authorised Officer under section 18 of the *Bush Fires Act 1954*.

- Applications for Permits are available from the Shire of Northam at no cost.
- You must comply with all conditions imposed by the Shire or an Authorised Officer in respect of any Permit issued by the Shire.
- Permits will not be valid on days of “HIGH”, “EXTREME” or “CATASTROPHIC” fire danger.
- Permits may also be revoked if in the opinion of an authorised officer the conditions are not deemed suitable for prescribed burns.

Take notice that the Shire of Northam prohibits the burning of any road verge within the entire district without a shire approved permit.

Take Notice that pursuant to *Section 18 (11) of the Bush Fires Act 1954* - Where a person starts a fire on land, if the fire escapes from the land or if the fire is in the opinion of a Bush Fire Control Officer or an officer of a Bush Fire Brigade out of control on the land, the person shall be liable to pay to the local government on the request of and for recoup to its bush fire brigade, any expenses up to a maximum amount of \$10 000 incurred by it in preventing the extension of or extinguishing the fire, and such expenses may be recovered in any court of competent jurisdiction.

A person who commits a breach of this section other than subsection (11) is guilty of an offence.

Penalty: For a first offence \$4 500.

For a second or subsequent offence \$10 000.

12. Harvest, Movement of Vehicles and Hot Works Bans

All persons within the Shire of Northam are required to comply with a direction declared under Reg 38A, 38B, 38C & 38D, Bush Fires Regulations 1954.

- A Harvest, Vehicle Movement & Hot Works Ban (HVMBHW) requires the cessation of all harvesting, vehicle movements and hot work operations including 4WD driving, riding of motorbikes and ATV's within the Shire of Northam.
- A Harvest, Vehicle Movement & Hot Works Ban (HVMBHW) prohibits the movement of vehicles on properties within the Shire of Northam except for the essential watering of stock, and the feeding of commercial livestock in a diesel powered vehicle accompanied by a 500 litre fire unit with water at the ready, in a diesel powered vehicle.
- Where a bulk load of dry material (eg Lime Gypsum) is in transit when a HVMBHW is imposed then the one off load may be unloaded within 50m of a fire break and accompanied by a 500 litre fire unit at all times while truck is in the paddock.
- A Harvest, Vehicle Movement & Hot Works Ban (HVMBHW) prohibits the use of all welding, grinding and abrasive tools on properties within the Shire of Northam in the open air. Exemptions in accordance with Council Policy may be available. Further information is available by contacting Shire of Northam (08) 9622 6100.

Take notice a person/s who contravenes a declaration made under regulation 38A, 38B, 38C or 38D or who fails to carry out any direction given to him is guilty of an offence that carries a penalty of \$5,000.

A Harvest Vehicle Movement and Hot works Ban will be advertised on the Shire of Northam Website, social media and where possible on ABC Radio 531AM, MMM 864 AM and.

Notification can be obtained via a free SMS service which is available upon request from the Shire of Northam (08) 9622 6100

Register for our free SMS notification service for Harvest Ban and other important information, directly to your phone. <https://www.northam.wa.gov.au/community/online-services/online-services.aspx>

All header drivers must be on the Shire SMS list as above for the expedient notification of HVMBHW when imposed.

13. Additional Works

In addition to the requirements noted above, regardless of land size and location, the Shire of Northam or its duly authorised officer may require you to undertake additional works on your property to improve access and or undertake further hazard removal and/or reduction works, where in the opinion of that authorised officer, it is to be necessary to prevent the outbreak and/or the spread of a bush fire.

Take notice that pursuant to Section 33(4) of the *Bush Fires Act 1954*, where the owner and/or occupier of land fails or neglects to comply with the requisitions of this Notice within the times specified, the Shire of Northam may by its officers and with such servants, workmen and contractors, vehicles and machinery as the officers deem fit, enter upon the land and carry out the requisitions of this Notice which have not been complied with and pursuant to Section 33(5) of the *Bush Fires Act 1954*, the amount of any costs and expenses incurred may be recovered from you as the owner and or occupier of the land.

If the requirements of this Notice are carried out by burning, such burning must be in accordance with the relevant provisions of the *Bush Fires Regulations 1954*.

The owner or occupier of land to whom a notice has been given under subsection (1) and who fails or neglects in any respect duly to comply with the requisitions of the notice is guilty of an offence, that offence carries a penalty of \$5,000, additionally a person in default is also liable whether prosecuted or not to pay the costs of performing the work directed by this notice if it is not carried out by the owner and/or occupier by the date required by this Notice.

14. Reserves vested with the Shire of Northam

The Shire of Northam reserves the right to conduct any mitigation works deemed necessary on any reserves vested with Shire of Northam for the purpose of reducing the risk of fire to the community. Each reserve will be assessed in accordance with ISO 31000:2018 and identified in the Bushfire Risk Management Plan.

Treatments implemented may include but are not limited to prescribed burns, slashing, mulching or any other means necessary as determined by the Shire of Northam to ensure the risk is reduced to a satisfactory level.

GENERAL ADVICE

This notice gives the minimum requirements for fire control within the Shire of Northam and all residents and ratepayers are encouraged to be prepared by undertaking additional fire protection measures. Creating a household "Bushfire Plan" to ensure the safety of property and life. Further additional information to that contained in this notice can be obtained from the 5min Fire Chat website www.dfes.wa.gov.au/bushfire/prepare or from the Shire of Northam website www.northam.wa.gov.au

All previous versions of this notice are hereby cancelled.

By order of the Council,

DEBBIE TERELINCK, Chief Executive Officer

DEFINITIONS

For the purpose of this Notice the following definitions apply:

Alternative Arrangements includes a variation as defined in Section 7 of this Notice to reduce and mitigate fire hazards within a particular subdivision, lot or other area of land anywhere in the district.

Authorised Officer means an employee of the Shire of Northam appointed as a Bush Fire Control Officer pursuant to the powers conferred in Section 38 of the Bush Fires Act 1954.

Firebreak means a strip or area of trafficable ground, which is at least two (2) metres wide for cropped/stubble areas, or Three (3) metres wide for bushland/remnant vegetation areas with a minimum height of four (4) metres, which is kept and maintained ~~materially~~^{totally} clear of all inflammable matter ~~and is trafficable~~. Such firebreaks may be constructed by one or more of the following methods: PLOUGHING, CULTIVATING, SCARIFYING, RAKING, BURNING, CHEMICAL SPRAYING OR OTHER METHOD as approved by an Authorised Officer.

In agricultural areas it is considered acceptable if a vehicle can travel through crop area within 10m of the property boundary to traverse around low branches or limbs.

Flammable Material means any plant, tree, grass, substance, object, thing or material that may or is likely to catch fire and burn or any other thing deemed by an authorised officer to be capable of combustion.

Solid Fuel means any fuel other than gas for cooking/camping, such as, wood, coal, BBQ briquettes

Fuel Depot / Fuel Storage Area means an area of land, a building or structure where fuel, ie (petrol, diesel, kerosene, liquid gas or any other fossil fuel) is kept in any container or manner.

Fuel Load is the leaf litter on the ground inclusive of leaves, twigs (up to 6mm in diameter) and bark. A litter depth of 5mm from the top of the layer to the mineral earth beneath is indicative of approximately 2.5 tonnes per hectare. A litter depth of 15mm from the top of the layer to the mineral earth beneath is indicative of approximately 8 tonnes per hectare.

The Shire of Northam can provide advice on determining fuel load levels further information is available [here](#)

<https://www.dfes.wa.gov.au/safetyinformation/fire/bushfire/VisualFuelLoadsPublications/Visual%20Fuel%20Load%20Guide%20Swan%20Coastal.pdf>.

Habitable Buildings means a dwelling, workplace, place of gathering or assembly, a building used for the storage or display of goods or produce for sale by wholesale in accordance with classes 1-9 of the Building Code of Australia. The term habitable building includes attached and adjacent structures like garages, carports verandas or similar roofed structure(s) that are attached to, or within 6 metres of the dwelling or primary building.

Maintaining Fuel Loads relates to the management of leaf litter as described in this Notice. Reducing fuel load levels does not necessarily require the removal of existing natural vegetation. A combination of methods can be utilised inclusive of safe burning, raking, weed removal, pruning and/or the removal of dead plant material.

Managed Vegetation includes vegetation that is pruned away from buildings, under pruned to minimise contact with ground fuels and that is kept free of dead suspended matter such as twigs, leaves and bark.

Trafficable means to be able to travel from one point to another in a four-wheel drive fire appliance on a clear surface, unhindered without any obstruction that may endanger such fire appliances. A firebreak is not to terminate, or lead to a dead end, without provision for egress to a safe place or a cleared turn around area of not less than a 20 metre diameter.

Vertical Axis means a continuous vertical uninterrupted line at a right angle to the horizontal line of the firebreak to a minimum height of 4 metres from the ground.

Other areas brought to notice

Solar arrays – need 3m fire breaks and vegetation kept down to 10cm in height.

It is recommended that wider fire breaks around areas with substantial UXO be required.

Pictures and tables to be included in the Fire Break Notice where appropriate to show what is required and make the information easier to understand.

BUSH FIRES ACT 1954

Firebreak and Fuel Load Notice

Shire of Northam

Pursuant to the powers contained in Section 33 of the *Bush Fires Act 1954* (as amended), notice is hereby given to all owners and occupiers of land within the Shire of Northam adopted the following requirements as a measure to assist in the control of bush fires, or preventing the spread or extension of a bush fire which may occur within the Shire.

All owners and/or occupiers of land within the Shire of Northam are required to carry out fire prevention work in accordance with this notice by 1 November each calendar year and maintained until 30 April the following calendar year, or within 14 days of becoming an owner or occupier of land if after that date, to comply with the requirements set out in this notice.

FAILURE TO COMPLY WITH THE REQUIREMENTS OF THIS ORDER MAY RESULT WITH THE ISSUE OF AN INFRINGEMENT NOTICE PENALTY \$250.00 OR PROSECUTION IN A COURT OF LAW WITH A MAXIMUM PENALTY OF \$5,000 AND BE LIABLE WHETHER PROSECUTED OR NOT TO PAY THE COSTS OF PERFORMING THE WORK DIRECTED BY THE NOTICE.

1. Building Protection Zone

The Building Protection Zone is an area of very low fuel levels and managed vegetation 20 metres out from habitable buildings (As defined in the Residential Design Codes of WA and in AS 3959) and must meet the following requirements,

Habitable building means a dwelling, workplace, place of gathering or assembly, a building used for the storage or display of goods or produce for sale by wholesale in accordance with classes 1-9 of the Building Code of Australia. The term habitable building includes attached and adjacent structures like garages, carports, verandas or similar roofed structures that are attached to, or within 6 metres of, the dwelling or primary building.

- Building Protection Zones for habitable buildings must extend a minimum of 20 metres out from any external walls of the building, attached structures, or adjacent structures within 6 metres of the habitable building.
- On sloping ground the Building Protection Zone distance shall increase at least 1 metre for every degree in slope on the sides of the habitable building that are exposed to down slope natural vegetation.
- Building Protection Zones must consist of non-flammable managed vegetation, reticulated lawns and gardens and other non-flammable features.
- All grass in Building Protection Zones must be maintained to or under 5cm in height.
- Fuel loads within Building Protection Zones must be maintained at 2 tonnes per hectare or lower.
- The crowns of trees must be separated to create a clear separation distance between adjoining or nearby tree crowns. The separation distance between tree crowns is not required to exceed 10 metres.
- A small group of trees within close proximity to one another may be treated as one crown provided the combined crowns do not exceed the area of a large or mature crown size for that species.
- Trees are to be low pruned (or under pruned) to at least a height of 2 metres from ground.
- No tree, or shrub over 2 metres high are to be within 2 metres of a habitable building.
- Trees and shrubs over 2 metres high must not be planted in groups close to the habitable building and there must be a gap of at least 3 times the height (at maturity) of the shrub away from the habitable building.
- There must be no tree crowns or branches hanging over habitable buildings.
- Firewood and flammable materials must be stored 20m from habitable buildings
- Driveways and access ways are to be a minimum of (3) metres wide with a vertical clearance of (4)metres to allow for the safe passage of a fire appliance to all buildings and assets on the land
- Roof gutters should be free of leaves and other combustible material.

YOUR PROPERTY

2. Land with area less than 10,000m²(1 hectare)

- Maintain all grass on the land to a height no greater than 10cm all windrows or dead flammable material must be removed.
- Maintain fuel loadings in natural bush areas at less than 8 tonnes per hectare across the land
- Land with a habitable building on it must maintain a Building Protection Zone in line with the requirements of Section 1 of this notice.

3. Land with an area g 10,000m² (1 hectare) to 100,000m² (10 hectares)

Options (selected one out of the three options)

1. Install bare earth firebreaks three (3) metres wide immediately inside within (10) metres of all boundaries in a continuous form. All overhanging branches, trees, limbs etc. to be trimmed back from over the firebreak area to a minimum height of four (4) metres to allow for the safe passage of a fire appliance or;
2. Maintain all grass on the land to a height no greater than 10cm all windrows and or dead flammable material must be removed. An access area within (10) metres of the boundary with a minimum width of (3) metres with a vertical clearance of (4) metres where all overhanging branches are trimmed back to allow for the safe passage of a fire appliance or;

3. A combination of the above two options for properties with natural bush sections and pastured land sections

- Land with a building on it must maintain a Building Protection Zone in line with the requirements of Section 1 of this notice.
- On land for the use of tendering livestock a level of feed can be maintained to last the season. All grass a distance of 5m from any firebreak must be maintained to a height no greater than 10cm.
- Maintain fuel loadings in natural bush areas at less than 8 tonnes per hectare across the land.

Firebreak

Means a strip or area of trafficable ground, which is at least three (3) metres wide for cropped/stubble areas, or Three (3) metres wide for bushland/remnant vegetation areas with a minimum height of four (4) metres, which is kept and maintained totally clear of all inflammable matter. Such firebreaks may be constructed by one or more of the following methods: PLOUGHING, CULTIVATING, SCARIFYING, RAKING, BURNING, CHEMICAL SPRAYING OR OTHER METHOD as approved by an Authorised Officer.

In agricultural areas it is considered acceptable if a vehicle can travel through crop area within 10m of the property boundary to traverse around low branches or limbs.

4. Land with an area greater than 100,000m² (10 hectares)

Options (selected one out of the three options)

1. Install bare earth firebreaks two (2) metres wide immediately inside within (10) metres of all boundaries in a continuous form, for all cropped/stubble areas, or three (3) metres wide for all natural bush/remnant vegetation areas on the property within ten (10) metres of the property boundary. All overhanging branches, trees, limbs etc. to be trimmed back from over the firebreak area to a minimum height of four (4) metres to allow for the safe passage of a fire appliance or;
 2. Maintain all grass on the land to a height no greater than 10cm all windrows and or dead flammable material must be removed. An access area within (10) metres of the boundary with a minimum width of (3) metres with a vertical clearance of (4) metres where all overhanging branches are trimmed back to allow for the safe passage of a fire appliance or;
 3. A combination of the above two options for properties with natural bush sections and pastured land sections
- On land for the use of tendering livestock a level of feed can be maintained to last the season. All grass a distance of 5m from any firebreak must be maintained to a height no greater than 10cm.
 - Maintain fuel loadings in natural bush areas at less than 8 tonnes per hectare across the land.

Firebreak

Means a strip or area of trafficable ground, which is at least two (2) metres wide for cropped/stubble and pasture areas, or Three (3) metres wide for bushland/remnant vegetation areas with a minimum height of four (4) metres, which is kept and maintained totally clear of all inflammable matter. Such firebreaks may be constructed by one or more of the following methods: PLOUGHING, CULTIVATING, SCARIFYING, RAKING, BURNING, CHEMICAL SPRAYING OR OTHER METHOD as approved by an Authorised Officer.

In agricultural areas it is considered acceptable if a vehicle can travel through crop area within 10m of the property boundary to traverse around low branches or limbs.

5. Fuel Depot and Storage Areas, Haysheds, Stockpiled Flammable Materials and Stationary Machinery.

- Remove all flammable matter within (10) metres of Fuel Depot and Storage Areas of where fuel drums whether containing fuel or not, fuel ramps or fuel dumps are located, Hay Shed, Stockpiled Flammable Materials, Stationary Machinery are stored.
- Install bare earth firebreaks three (3) metres wide immediately inside and along all boundaries of land in a continuous form with a vertical clearance of (4) metres where overhanging branches are trimmed back immediately adjacent to Stationary Motors, Haystacks, Stockpiled Flammable Materials and Stationary Machinery.

**6. Bushfire or Emergency Management Plans
(Compliance is required throughout the year, every year)**

Means a bushfire management plan, emergency management plan or an approved Bushfire attack level (BAL) assessment that has been developed and approved to reduce and mitigate fire hazards as part of a Town Planning Scheme, subdivision approval, development approval or a building permit

- All properties with a Bush Fire, Fire or Emergency Management Plan shall comply with the plan in its entirety.
- Any requirements identified in a Bush Fire, Fire or Emergency Management Plan are in addition to the requirements of this notice.

7. Application to vary the Firebreak Requirements with Alternative Arrangements

If it is considered impracticable for any reason whatsoever to implement any of the requirements of this Notice, you may apply in writing to the Shire of Northam by no later than the 1st October each year for permission to implement alternative measures under the following options,

- a) A temporary variation for extenuating circumstances only

- b) A permanent feature of the property requires a variation to his order, if approved the variation will apply until specifically rescinded or replaced with a new individual notice by the shire.

Take notice if permission is not granted in writing you must comply with the requirements of this notice.

8. The Burning of Garden Refuse

Pursuant to the powers contained in section 24G (2) of the *Bush Fires Act 1954*, the Shire of Northam prohibits the burning of all garden refuse within its district during the Prohibited Burning Times. This prohibition applies to all persons within the Shire's district.

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- The burning of garden refuse or rubbish on the ground or in an incinerator that would otherwise be permitted under Section 24F is prohibited on all land under 2000m² (square metres) in size during the Restricted Burning Time, without a Fire Permit issued under Regulation 15 of the *Bush Fires Act 1954*.
- The burning of garden refuse or rubbish on the ground or in an incinerator that would otherwise be permitted under Section 24F is prohibited absolutely on all land within the district during the Restricted Burning period between 1st Mar – 30 Apr each year.
- During the Restricted Burning period October 1st & Nov 30th each year, residents on land that is greater than 2,000m² in area it is permissible to undertake the burning of garden refuse (dry leaves, small branches, off cuts, etc.) in a single pile on the ground no larger than 1.0 m³ between the hours of 18:00 (6pm) and 23:00 (11pm) and by complying with all the conditions of section 24F (3) in the *Bush Fires Act 1954* & Regulation 15B Bush Fires Regulations 1954.
- Reticulated water supply or min 600lts of water must be available for immediate use at all times, the fire is to be completely extinguished with water prior to leaving area unattended.
- It is recommended that residents undertake 1 m³ burns at a rate of no more than 1 pile at a time.

9. Restricted and Prohibited Burning times

- The "Prohibited Burning Time" means the 1 December each calendar year through until 28th February the following calendar year (inclusive, and as varied pursuant to Sections 17 and 18 of the *Bush Fires Act 1954*).
- The "Restricted Burning Time" means the 1 October through until 30 November and the 1 March through until 30 April each calendar year (inclusive, and as varied pursuant to Sections 17 and 18 of the *Bush Fires Act 1954*).

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Pursuant to the powers contained in section 25H (1) of the *Bush Fires Act 1954*, the Shire of Northam prohibits the lighting of a fire in the open air for the purpose of camping or cooking during the prohibited period. This prohibition applies to all persons within the Shire's district.

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An appliance that burns a solid fuel, (BBQ, Pizza Oven, Meat Smoker etc.) cannot be operated on days of "HIGH", "EXTREME" or "CATASTROPHIC" fire danger rating.

- Any chimney on the appliance must be fitted with a suitable spark arrestor that is maintained in a clean, sound and efficient condition.
- If solid fuel is being consumed, then the burning fuel must be sealed from the open air by a secure, sealable door.
- Appliance must not be left unattended and a reticulated water supply must be available for immediate use.

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- Applications for Permits are available from the Shire of Northam at no cost.
 - You must comply with all conditions imposed by the Shire or an Authorised Officer in respect of any Permit issued by the Shire.
 - Permits will not be valid on days of "HIGH", "EXTREME" or "CATASTROPHIC" fire danger.
 - Permits may also be revoked if in the opinion of an authorised officer the conditions are not deemed suitable for prescribed burns.
- Take notice that the Shire of Northam prohibits the burning of any road verge within the entire district.

Take Notice that pursuant to *Section 18 (11) of the Bush Fires Act 1954* - Where a person starts a fire on land, if the fire escapes from the land or if the fire is in the opinion of a Bush Fire Control Officer or an officer of a Bush Fire Brigade out of control on the land, the person shall be liable to pay to the local government on the request of and for recoup to its bush fire brigade, any expenses up to a maximum amount of \$10 000 incurred by it in preventing the extension of or extinguishing the fire, and such expenses may be recovered in any court of competent jurisdiction.

A person who commits a breach of this section other than subsection (11) is guilty of an offence.

Penalty: For a first offence \$4 500.

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Take notice that pursuant to Section 33(4) of the *Bush Fires Act 1954*, where the owner and/or occupier of land fails or neglects to comply with the requisitions of this Notice within the times specified, the Shire of Northam may by its officers and with such servants, workmen and contractors, vehicles and machinery as the officers deem fit, enter upon the land and carry out the requisitions of this Notice which have not been complied with and pursuant to Section 33(5) of the *Bush Fires Act 1954*, the amount of any costs and expenses incurred may be recovered from you as the owner and or occupier of the land.

If the requirements of this Notice are carried out by burning, such burning must be in accordance with the relevant provisions of the *Bush Fires Regulations 1954*.

The owner or occupier of land to whom a notice has been given under subsection (1) and who fails or neglects in any respect duly to comply with the requisitions of the notice is guilty of an offence, that offence carries a penalty of \$5,000, additionally a person in default is also liable whether prosecuted or not to pay the costs of performing the work directed by this notice if it is not carried out by the owner and/or occupier by the date required by this Notice.

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The Shire of Northam reserves the right to conduct any mitigation works deemed necessary on any reserves vested with Shire of Northam for the purpose of reducing the risk of fire to the community. Each reserve will be assessed in accordance with ISO 31000:2018 and identified in the Bushfire Risk Management Plan.

Treatments implemented may include but are not limited to prescribed burns, slashing, mulching or any other means necessary as determined by the Shire of Northam to ensure the risk is reduced to a satisfactory level.

GENERAL ADVICE

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DEBBIE TERELINCK, Chief Executive Officer

DEFINITIONS

For the purpose of this Notice the following definitions apply:

Alternative Arrangements includes a variation as defined in Section 7 of this Notice to reduce and mitigate fire hazards within a particular subdivision, lot or other area of land anywhere in the district.

Authorised Officer means an employee of the Shire of Northam appointed as a Bush Fire Control Officer pursuant to the powers conferred in Section 38 of the Bush Fires Act 1954.

Firebreak means a strip or area of trafficable ground, which is at least two (2) metres wide for cropped/stubble areas, or Three (3) metres wide for bushland/remnant vegetation areas with a minimum height of four (4) metres, which is kept and maintained totally clear of all inflammable matter. Such firebreaks may be constructed by one or more of the following methods: PLOUGHING, CULTIVATING, SCARIFYING, RAKING, BURNING, CHEMICAL SPRAYING OR OTHER METHOD as approved by an Authorised Officer.

In agricultural areas it is considered acceptable if a vehicle can travel through crop area within 10m of the property boundary to traverse around low branches or limbs.

Flammable Material means any plant, tree, grass, substance, object, thing or material that may or is likely to catch fire and burn or any other thing deemed by an authorised officer to be capable of combustion.

Solid Fuel means any fuel other than gas for cooking/camping, such as, wood, coal, BBQ briquettes

Fuel Depot / Fuel Storage Area means an area of land, a building or structure where fuel, ie (petrol, diesel, kerosene, liquid gas or any other fossil fuel) is kept in any container or manner.

Fuel Load is the leaf litter on the ground inclusive of leaves, twigs (up to 6mm in diameter) and bark. A litter depth of 5mm from the top of the layer to the mineral earth beneath is indicative of approximately 2.5 tonnes per hectare. A litter depth of 15mm from the top of the layer to the mineral earth beneath is indicative of approximately 8 tonnes per hectare.

The Shire of Northam can provide advice on determining fuel load levels further information is available [here](#)

<https://www.dfes.wa.gov.au/safetyinformation/fire/bushfire/VisualFuelLoadsPublications/Visual%20Fuel%20Load%20Guide%20Swan%20Coastal.pdf>.

Habitable Buildings means a dwelling, workplace, place of gathering or assembly, a building used for the storage or display of goods or produce for sale by wholesale in accordance with classes 1-9 of the Building Code of Australia. The term habitable building includes attached and adjacent structures like garages, carports verandas or similar roofed structure(s) that are attached to, or within 6 metres of the dwelling or primary building.

Maintaining Fuel Loads relates to the management of leaf litter as described in this Notice. Reducing fuel load levels does not necessarily require the removal of existing natural vegetation. A combination of methods can be utilised inclusive of safe burning, raking, weed removal, pruning and/or the removal of dead plant material.

Managed Vegetation includes vegetation that is pruned away from buildings, under pruned to minimise contact with ground fuels and that is kept free of dead suspended matter such as twigs, leaves and bark.

Trafficable means to be able to travel from one point to another in a four-wheel drive fire appliance on a clear surface, unhindered without any obstruction that may endanger such fire appliances. A firebreak is not to terminate, or lead to a dead end, without provision for egress to a safe place or a cleared turn around area of not less than a 20 metre diameter.

Vertical Axis means a continuous vertical uninterrupted line at a right angle to the horizontal line of the firebreak to a minimum height of 4 metres from the ground.

Rules and Regulations Working Group

1. Background

A proposal was put forward to BFAC by the CBFCO Chris Marris to establish 3 working groups with a committee of 5 for each to look at areas influencing capabilities and safety of VBFB's and the community within the Shire of Northam.

For this group, that BFAC establishes a formal working group for the purpose of reviewing the Shire of Northam's firebreak and fuel load notices, local burning policies/ local laws such as in relation to the burning of garden refuse during the restricted period, along with the restricted and prohibited burning period dates.

The working group is to be chaired by Blair Wilding and have up to 5 members inclusive of the chair, including at least one brigade representative from each area east and west of the shire.

The working group is to consult with all Brigades within the shire of Northam including VFRS and report their findings and recommendations back to BFAC.

2. Process

Nominations were opened on the 24 November 23 and closed on the 4 December 23.

All nominations were considered , five were selected for knowledge of the workings of Northam BFB's and even distribution between the East and West sides of the Shire and the overflow were told of the selection outcomes and thanked for their nominations.

3. Working Group Members

Blair Wilding -Chair	Ian Mallee
Maria Weibel	Paul Reynolds
Aaron Smith	

4. Consultation

All brigades in the Northam Shire and the VFRS were sent the current Northam Shire firebreak and fuel load notice with the current rules and regulations surrounding bushfire prevention. Highlighted at the bottom of each were working group identified areas that might need some thought and changes.

The brigades were also asked to go through the notice and comment on any area's identified by them that may also be of concern.

6.4 BRIGADE REPORTS

File Reference:	5.1.3.1
Reporting Officer:	Alex Espey (Community Emergency Services Manager)
Responsible Officer:	Chadd Hunt (Executive Manager Development & Community Services)
Officer Declaration of Interest:	Nil
Voting Requirement:	Simple Majority
Press release to be issued:	No

BRIEF

For the Committee to receive and note any issues raised by the Brigades.

ATTACHMENTS

Nil

A. BACKGROUND / DETAILS

This report is to provide the Committee with an update on the current issues within the Brigades.

B. CONSIDERATIONS

B.1 Strategic Community / Corporate Business Plan

Performance Area: Planet.

Outcome 5: A resilient community.

Objective 5.1: Build community resilience to cope with natural disasters and emergencies, including pandemics, storms, flooding and fire.

Priority Action: Nil.

B.2 Financial / Resource Implications

Nil

B.3 Legislative Compliance

Nil

B.4 Policy Implications

Nil

B.5 Stakeholder Engagement / Consultation

All Shire of Northam Bush Fire Brigades.

B.6 Risk Implications

Refer to Risk Matrix [here](#).

Risk Category	Description	Rating (likelihood x consequence)	Mitigation Action
Financial	N/A	N/A	N/A
Health & Safety	N/A	N/A	N/A
Reputation	N/A	N/A	N/A
Service Interruption	N/A	N/A	N/A
Compliance	N/A	N/A	N/A
Property	N/A	N/A	N/A
Environment	N/A	N/A	N/A

B.7 Natural Environment Considerations

Nil.

C. OFFICER'S COMMENT

The following reports and associated recommendations if applicable have been received from the Brigades.

BAKERS HILL BFB

No Report

CLACKLINE-MURESK BFB

No Report

GRASS VALLEY BFB

No Report

IRISHTOWN BFB

The Irishtown BFB have tabled the following topics for BFAC consideration.

1. The Irishtown Shed

It is the considered opinion of the Brigade the current shed falls short of industry best practice for multiple reasons such as the absence of a shower, locker rooms, training room and kitchen to name a few.

Officer Comment

The Shire of Northam has submitted two Local Government Grant Scheme (LGGS) applications for an expansion/replacement of the existing shed. The Department of Fire and Emergency Services (DFES)

has cited land ownership issues as the reason for not supporting any further funding for this facility.

It is the view of the Brigade this is inconsistent with intelligence suggesting other brigades from other local governments in a similar situation have received funding support.

- a. The Brigade requests the Shire write to DFES requesting clarification on the funding inconsistency.
- b. The Brigade requests the Shire investigate Shire owned parcels of land within the Irishtown area of responsibility.

2. Irishtown 1:4 Replacement

The Brigade has requested their current 1:4 appliance be replaced with a larger type, minimum 3:4 appliance.

Officer Comment

The current appliance was manufactured in 2009. The current life span for this type of appliance ranges between 16 and 20 years and sits on the 2025/26 Replacement Program. Two requests have been made to upgrade this appliance to a larger type when due and continues to be supported.

INKPEN BFB

No Report

JENNAPULLEN BFB

No Report

NORTHAM CENTRAL BFB

No Report

SOUTHERN BROOK BFB

No Report

WUNDOWIE BFB

No Report

RECOMMENDATION

That the Bush Fire Advisory Committee ENDORSES the following recommendations being presented to Council:

- 1. That Council NOTES the Brigades Report as provided.**
- 2. That Council REQUESTS the Chief Executive Officer to write to the Department of Fire and Emergency Services in relation to funding inconsistencies in relation to the Irishtown Bush Fire Brigade facility being located on private land.**
- 3. That Council REQUESTS the Chief Executive Officer to investigate any available Shire owned parcels of land within the Irishtown Brigade area of responsibility for the potential location of a new fire station.**
- 4. That Council REQUESTS the Chief Executive Officer to apply to the Department of Fire and Emergency Services to replace the Irishtown 1:4 appliance with a 3.4-type appliance in the 2025/26 Local Government Grant Scheme Funding application.**

6.5 BRMC Report & BRMP Update

File Reference:	5.1.3.1
Reporting Officer:	Kayla James (Bushfire Risk Mitigation Coordinator)
Responsible Officer:	Chadd Hunt (Executive Manager Development & Community Services)
Officer Declaration of Interest:	Nil
Voting Requirement:	Simple Majority
Press release to be issued:	No

BRIEF

For the Committee to receive and note the update provided by the Bushfire Risk Mitigation Coordinator (BRMC).

ATTACHMENTS

1. DBCA Northam BFAC (1) [**6.5.1** - 2 pages]

A. BACKGROUND / DETAILS

The BRMC role is tasked with coordinating bushfire mitigation works on Shire land and reserves funded through the DFES's Mitigation Activity Fund.

B. CONSIDERATIONS

B.1 Strategic Community / Corporate Business Plan

Performance Area: Planet

Outcome 5: A resilient community.

Objective 5.1: Build community resilience to cope with natural disasters and emergencies, including pandemics, storms, flooding and fire.

Priority Action: Nil.

Priority Action 5.1.6: Review Bushfire Risk Management Plan.

B.2 Financial / Resource Implications

Works are being undertaken with funding from the Department of Fire and Emergency Services Mitigation Activity Funding (MAF). To be eligible for future funding rounds an updated BRMP is required.

B.3 Legislative Compliance

The State Hazard Plan Fire requires the Shire of Northam to prepare a BRMP which was endorsed by OBRM in February 2025.

B.4 Policy Implications

Compliance with the Bushfire Risk Management Plan aims to mitigate risks identified in the Bushfire Risk Mitigation System, which is reflected in ongoing treatments.

B.5 Stakeholder Engagement / Consultation

Community and landowner consultation will occur as part of the works associated with the MAF program.

Consultation with the Bushfire Risk Management Officer Goldfields Midlands is ongoing throughout the treatments.

B.6 Risk Implications

Refer to Risk Matrix [here](#).

Risk Category	Description	Rating (likelihood x consequence)	Mitigation Action
Financial	Value of works exceed funding	Insignificant (1) x Unlikely (2) = Low (2)	Contractor works are to be managed to ensure minimal variations
Health & Safety	Inadequate mitigation being undertaken on Shire managed land resulting in increased threat to life/property	Medium (3) x Possible(3) = Moderate (9)	Ensure Risk Assessments are undertaken in a timely manner and adequate resources are assigned to the MAF program
Reputation	N/A		
Service Interruption	N/A		
Compliance	Noncompliance with requirements of State Hazard Plan Fire by not having an up-to-date BRMP		Ensure BRMP is up to date and endorsed by BFAC, Council and OBRM
Property	Damage to adjoining private properties by contractor	Medium (3) x Possible(3) = Moderate (9)	Contractors are required to demonstrate experience in working in similar work as part of tender assessment

			process. Monitoring of work by staff.
Environment	Damage to natural environment by inappropriate treatments/methodology	Medium (3) x Possible(3) = Moderate (9)	All works are approved by staff after reviewing environmental factors. Contractors are required to conform with works specification in the contract.

B.7 Natural Environment Considerations

Impacts on the natural environment are considered as part of the application process to the MAF program.

Consultation is ongoing with the Shire's Environmental Sustainability Officer.

C. OFFICER'S COMMENT

The Shire of Northam's current MAF application for the mitigation works on Shire managed State-owned land was approved to the value \$124,460.

This funding is for 14 mitigation treatments throughout the Shire. The tender process has been completed and the contract awarded to Fire Mitigation Services (FMS) to start works with a priority to the higher risk assets.

Slashing projects not yet completed will commence in March, with planned burning to be completed by the end of June 2025.

Chemical works have not been completed and may still be completed by the end of the year.

Local Government	Treatment ID	Treatment Type	Asset Name	Treatment Objective	Due Date	Completion Date	Status of Treatment
Northam	5024	Planned Burning	1-9 Purkiss Dr, Northam	Reduce ground fuel loads by prescribed burning as appropriate to achieve a min of 2t/ha fuel load post treatment	24/10/2024		Not yet commenced (but expected to be delivered by due date)

				prior to the 25/26 fire season			
Northam	5050	Mechanical Works	330 Jennapullin Road, Grass Valley	Reestablish existing internal fire access tracks, to bare earth 4m wide and the removal of fallen trees to 6m wide to allow for the safe access and egress of fire appliances as well as increasing the separation distance between the vegetation and the residential property through mechanical works prior to the 25/26 fire season	01/10/2024	10/11/2024	Completed
Northam	5989	Planned Burning	6 Aphylla Road, Burlong	Hazard reduction burn to reduce the availability of flash fuels and dead timbers prior to the 25/26 fire season.	30/05/2025		Not yet commenced (but expected to be delivered by due date)

Northam	27764	Install Firebreaks	39, 41, 45, 47 & 51 Wilson Street, Grass Valley	Reestablish fire breaks to be free of combustible material and 4m wide to allow firefighting vehicles to traverse the area for fire fighting activities, as well as provide a low fuel zone between the fuel and the neighboring properties, prior to the 25/26 bushfire season.	30/03/2025	05/11/2024	Completed
Northam	27775	Install Firebreaks	78 Carter Street, Grass Valley	Reestablish fire breaks to be free of combustible material and 4m wide to allow firefighting vehicles to traverse the area for fire fighting activities, as well as provide a low fuel zone between the fuel and the neighboring properties, prior to the 25/26 bushfire season.	30/03/2025	05/11/2024	Completed

Northam	27792	Mechanical Works	1-17 Sims Rd, Wundowie	Create a 3m low fuel buffer either side of the existing road, through mulching, to create a safe means of egress for the properties north of Wundowie along Fernie Road by the 25/26 fire season	01/03/2025		Not yet commenced (but expected to be delivered by due date)
Northam	27950	Chemical Works	Fernie Road (1025), Wundowie	Chemical treatment post mulching to reduce regrowth and extend the bushfire protection zone of the low fuel area prior to the 25/26 Bushfire season, to maintain a secondary safe means of egress for residents of Maurivillo Estate, Wundowie Town site and Fernie Road.	01/06/2025		Not yet commenced (but expected to be delivered by due date)
Northam	28002	Mechanical Works	Waterfall Avenue (lot 1), Northam, Northam	Slashing of fine fuels to reduce fuel loading to below 2t/ha by the 24/25 fire season	30/10/2024	22/11/2024	Completed

Northam	28007	Mechanical Works	Hyde Drive, Wundowie	Create a 3m low fuel buffer either side of the existing road, through mulching, to create a safe means of egress for the properties along Dawson Road, due to their only being 1 means of egress from this subdivision, prior to the 25/26 fire season	31/03/2025		Not yet commenced (but expected to be delivered by due date)
Northam	28097	Chemical Works	Waterfall Avenue (lot 1), Northam	Follow up chemical treatment post slashing to maintain fuel loading below 2/t/ha prior to the 25/26 fire season	30/05/2025		Not yet commenced (but expected to be delivered by due date)
Northam	28167	Chemical Works	4943-5113 Great Eastern Hwy X Chitty Road - Bakers Hill	Chemical treatment area of previous mulching to prevent the return of invasive weeds and flash fuels prior to the 25/26 fire season	18/05/2025		Not yet commenced (but expected to be delivered by due date)

Northam	28171	Chemical Works	Old Quarry Rd Waste Management Facility	Chemical spray 3m both sides of new access track to provide fire fighters safety prior to the fire season. Spray a 10m wide break in the inaccessible area due to the steep incline, prior to the 25/26 fire season.	30/05/2025		Not yet commenced (but expected to be delivered by due date)
Northam	28173	Chemical Works	Old Quarry Rd Waste Management Facility	Chemical treatment of the weeds 3m both sides of the new access track to be installed for a low fuel buffer both sides of the access track to prevent weed infestation prior to the 25/26 fire season	30/05/2025		Not yet commenced (but expected to be delivered by due date)
Northam	28174	Chemical Works	56-58 Breen Rise, Clackline	Chemical spray 3m either side of the fire access track to reduce the availability of flash fuels which mainly consist of invasive weeds prior to the 25/26 fire season.	30/05/2025		Not yet commenced (but expected to be delivered by due date)

Additional mitigation works performed outside the MAF include:

- Mt Ommaney – Slashing at its base and establishing a buffer between the road and the flash fuels;
- Waterfall Ave, establishing a buffer between the road and the flash fuels, controlled burn on the southern side of Waterfall Ave;
- Burning around the West Northam Primary School;
- Slashing of Heaton Drive;
- Shire / State reserve within the townsite.

Department of Biodiversity, Conservation and Attractions Report

Attachment 6.5.1 is the report from Department of Biodiversity, Conservation and Attractions in regards to Spring 2024 Prescribed Burning, Bushfire Response and 2025 Burn Options Perth Hills.

RECOMMENDATION

That the Bush Fire Advisory Committee NOTES the Bushfire Risk Mitigation Coordinator Report as provided.

OFFICIAL



Department of Biodiversity,
Conservation and Attractions



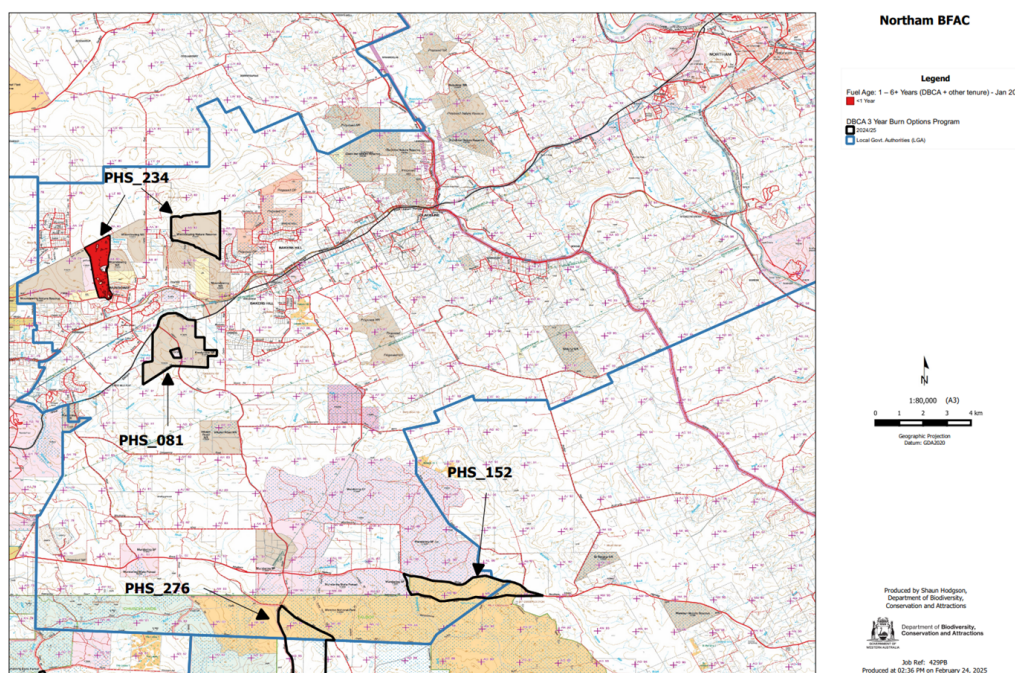
DBCA Perth Hills Report for Northam 18th March BFAC 2025

Spring 2024 Prescribed Burning

2024 Spring Prescribed Burning season completed for Perth Hills District.

Achieved a total of 36,244.59 hectares across the District.

DBCA undertook 1 burn in the Shire of Northam during last spring. That was PHS_234 which consisted of 160ha for the Woondowing NR townsite burn.



Bushfire Response

Perth Hills Fire Roster across all three work centres (Mundaring, Jarrahdale, Dwellingup) commenced on October the 10th 2024.

DBCA spotters are up and flying their regular circuit.

Tower roster – Walyunga and Bickley commenced 21st November 2024.

Seasonal crew members started in early November 2024.

Mundaring: 18 Crew members, 7 trucks, 1 Front End Loader, 1 Bulldozer.

Jarrahdale: 13 Crew members, 5 trucks, 1 Front End Loader, 1 contract Bulldozer

Dwellingup: 18 Crew members, 4 trucks, 1 Frond End Loader, 1 contract Bulldozer.

OFFICIAL



Department of **Biodiversity,
Conservation and Attractions**



DBCA have responded to a few fires in the Shire of Northam this bushfire season. Most recently the fires associated close to the Lakes Roadhouse on Great Eastern HWY and Great Southern HWY.

2025 burn options Perth Hills

We have 4 burns in the Shire of Northam which may be undertaken in Autumn or Spring, depending on weather availability and sensitivity issues with timing. These are PHS_081 Kwolyinine NR, PHS_152 Talbot, PHS_234 Woondowing NR, and PHS_276 Flynn. The Talbot burn intersects with the Shire of York, and Flynn intersects with the Shire of Mundaring.

Burn boundary preparation has started in the area for these burns. Upgrading existing internal tracks and sweeping boundaries adjacent to private property. With the hope of having the prep work completed prior to Autumn burning.

7 MOTIONS OF WHICH PREVIOUS NOTICE HAS BEEN GIVEN

Nil.

8 URGENT BUSINESS APPROVED BY DECISION

Nil.

9 GENERAL BUSINESS

Nil.

10 DATE OF NEXT MEETING

Upcoming meetings:

- Tuesday 3rd June 2025 – 5:30 pm
- Tuesday 7th October 2025 – 5:30 pm

11 DECLARATION OF CLOSURE