

City of Greater Bendigo Municipal Fire Management Plan

1. Acknowledgement of Country

The City of Greater Bendigo is on Dja Dja Wurrung and Taungurung Country. We acknowledge and extend our appreciation to the Dja Dja Wurrung and Taungurung People, the Traditional Owners of the land.

We pay our respects to leaders and Elders past, present and future for they hold the memories, the traditions, the culture and the hopes of all Dja Dja Wurrung and Taungurung Peoples.

We express our gratitude in the sharing of this land, our sorrow for the personal, spiritual and cultural costs of that sharing and our hope that we may walk forward together in harmony and in the spirit of healing.

2. Foreword

The City of Greater Bendigo is surrounded by land that is identified within a declared 'Bushfire Management Overlay' and 'Bushfire Prone Areas'.

The purpose of this plan is to build community resilience through the identification of risks and fostering strong partnerships with multiple agencies and community groups.

3. Version Control

Version No.	Date	Details of change
1.0	26 Sep 2012	Initial release – Endorsed by council
1.2	6 Sep 2016	Reviewed – endorsed by MFMPC
1.3	10 Jul 2018	Reviewed – endorsed by MFMPC
1.4	3 Jun 2019	Reviewed – administrative updates by the MFPO
1.5	May 2023	Reviewed – presented to the MFMPC for consultations
1.6	July 2023	Included feedback from MFMPC meeting held on the 23 May 2023: added Scope to make it clear the plan is for bushfire / grass fire risk; updated section 6.2.4 to include the development of an Annual Bushfire Management Action Plan
2.0	August 2023	Adopted by the IMEMPC and published

4. Overview and Scope of this plan

This plan has been developed in line with the Emergency Management Act 2013. The plan is a risk-based and requires an annual evaluation of the bushfire risk (section 6.2.3) and the undertaking of associated risk mitigation actions (section 6.2.4).

This plan is for the management of the bushfire and grass fires within the City of Greater Bendigo Region.

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5. Governance

The Municipal Fire Management Plan is presented to the Municipal Fire Management Planning Committee (MFMP) for review and endorsement. Approval of the Municipal Fire Management Plan is undertaken by the Integrated Municipal Emergency Management Planning Committee (IMEMPC)

MFMP – consists of subject matter experts from the City of Greater Bendigo and other agencies. The core purpose of the MFMP is to manage the fire danger risk to the community. The MFMP maintains a Terms of Reference and meets on a regular basis. The MFMP Terms of Reference can be updated separately to this plan, refer to *City of Greater Municipal Fire Management Planning Committee - Terms of Reference*

IMEMPC – consists of emergency management staff from the City of Greater Bendigo, four other councils and other agencies. The IMEMPC includes all hazards and risk to the community. I.e. Bushfire, Building Fires, Flash Flooding, Riverine Flooding, Criminal events and other critical infrastructure disruptions.

6. Risk Management

The Municipal Fire Management Plan has been developed following the standard for risk management ISO3100:2009.

6.1. Establishing Context

6.1.1. City of Greater Bendigo Profile

The City of Greater Bendigo is located in the geographic centre of Victoria, about a 90-minute drive north of Melbourne. With a population over 100,000 people, covering almost 3,000 square kilometres of the central Victorian landscape, including towns such as Heathcote, Axedale, Huntly, Marong, Elmore, Goornong and Redesdale, Raywood and Maiden Gully, and communities such as Sebastian, Mia Mia, Lockwood and Neilborough.

The environment includes box and ironbark forest and woodland, and broad acre cropping and grazing. Fuel levels of High, Very High or Extreme make up 32 per cent of the municipality and the average length fire season is 126 days.

As a major regional centre with the third largest urban area in Victoria, Bendigo is a vibrant and culturally enriched city renowned for the lifestyle and opportunities it provides for residents and visitors. Greater Bendigo has a rich and diverse heritage reflecting thousands of years of human occupation centred on the Loddon, Campaspe and Coliban River systems that flow into the Murray River Basin.

The traditional owners of the area are the Dja Dja Wurrung and Taungurung people of the Kulin nation.

The traditional owners have continuously retained their spiritual and custodial connection to their country. European pastoralists and squatters took up land in the region from 1835. Colonisation of the area resulted in devastating losses of Indigenous language, tradition and lives. But it was the discovery of gold in Golden Square in 1851 that fuelled a momentous world-wide influx of immigrants, particularly from Europe, the Americas and China and led to the founding and economic and cultural development of

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Bendigo and smaller gold mining towns of the region. The cultural traditions of the Indigenous people and the waves of European immigration, settlement and industry have left a rich legacy of places of cultural and natural heritage in the Bendigo region.

The Dja Dja Wurrung Clans Aboriginal Corporation and the Taungurung Land and Waters Council are the Registered Aboriginal Parties for land now within the City of Greater Bendigo. These organisations hold decision-making responsibilities under the Aboriginal Heritage Act 2006 for projecting Aboriginal cultural heritage in their areas.

Mining and the need to secure other valuable resources such as water, timber and stone led to the establishment of an extensive network of Crown Land Reserves. Bendigo became a city in a forest, built on a goldfield and within a mining landscape. The Box-Ironbark ecology on public and private land continues to make a significant contribution to the natural heritage of Greater Bendigo. There are areas of high natural value and few Australian cities have the opportunity to appreciate such significant forested areas. The Greater Bendigo, Heathcote-Graytown National Parks and other regional parks are located on protected public land and provide a natural urban growth boundary around Bendigo and Heathcote.

The City of Greater Bendigo has rich and diverse European heritage which is evident in its architecture. It continues to exert an influence on its settlement patterns, with residential development dating back to the gold rush era of the 1850's. Bendigo's urban structure is based on spines leading away from the centre of the city along creeks and streams, which are today important road and rail corridors.

The success of the early Victorian Land Acts in establishing small holdings enabled the emergence of substantial agriculture, viticulture, horticulture and associated food processing. There is also a broad collection of industrial heritage representing the needs of a great gold city associated with public utilities, mining, transport, agriculture, engineering and manufacturing activities.

The changing ecological consciousness of the community that first saw the transformation then reclamation of the natural landscape is critical to the uniqueness of Bendigo. The City of Greater Bendigo is experiencing substantial growth with the population currently increasing at 1.5 percent annually. Population at the 2021 census was 121, 470 and is expected to rise to over 155,000 by 2036 and potentially 200,000 by 2050. This predicted growth indicates that significant changes in the requirements for housing and supporting infrastructure will need to occur. It also emphasises the need for proper planning that is as visionary about the future as it is mindful of the past.

6.1.2. Fire History

The most recent significant fires occurred 7 February 2009 (Black Saturday). The first fire occurred at Redesdale and involved the Mt Alexander, Mitchell and City of Greater Bendigo municipalities, destroying 12 houses over an area of 9445 hectares. The Bracewell Street fire started later that afternoon with ignition at Bracewell Street Eaglehawk and spreading to within 1.2 km's of the Bendigo CBD near the corner of Eaglehawk and Marong Roads. It proceeded through the Long Gully, West Bendigo, Ironbark and California Gully areas covering 594 hectares, destroying 57 homes, numerous sheds and outbuildings and resulted in one civilian death. Prior to this, the Epsom fire of 1999 and the Kangaroo Flat fire in 1969 each resulted in a civilian death. Recorded significant fires since 1851:

- 1851 (6 February) - Black Thursday

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- 1961 (23 March) - Metcalfe/Redesdale 3237 hectares
- 1969 (8 January) - Maldon/Ravenswood/Kangaroo Flat – 1 civilian fatality
- 1975 (8 February) - Redesdale 648 hectares
- 1987 (16 January) - Colbinabbin/Redcastle 1400 hectares
- 1987 Killians Walk Fire (Structures severely damaged)
- 1997 (21 January) – Heathcote 220 hectares
- 1987 Heathcote-Costerfield 4100 hectares
- 2005 Kangaroo Flat Rocklea Spinning Mill
- 2005 Whipstick Forest North end
- 2008 Kangaroo Flat St Marys Church
- 2008 Bendigo St Aidens Orphanage
- 2009 (7 February) Black Saturday Redesdale–Coliban Park Road 9445 hectares
- 2009 (7 February) Black Saturday: Eaglehawk Bracewell Street 594 Hectares – 1 civilian fatality
- 2010 Goornong – large hayshed

6.2. Risk Assessment

Risk is defined as the effect of uncertainty on objectives and assessed using the parameters of the likelihood (Table1) of an event occurring and the consequence (Table2) should it happen. ie. Likelihood and Consequence = Risk (Table3)

Table 1: Likelihood assessment:

Rating	Description	State Description	Spread
A	Almost certain	Close to 100% annually	Always
B	Likely	33% - once in every 3 years	1 in 3 occasions
C	Possible	10% - once in every 10 years	1 in 10 occasions
D	Unlikely	3% - once in every 10 years	Hardly ever
E	Rare	1% - once in every 100 years	Rarely

Table 2: Consequence assessment (based on the State Bushfire Consequence Table)

Rating	5	4	3	2	1
Description	Catastrophic	Major	Moderate	Minor	Low
Human	>50 deaths >500 injured >1,000 homes destroyed >2,000 people displaced	10-50 deaths 300-1000 homes 500-2,000 people displaced	5-10 deaths 30-300 homes 200-500 people displaced	1-5 deaths <30 homes 50-200 people displaced	0 deaths Minor injuries <50 people displaced
Infrastructure	Loss of essential service for >24hours	Loss of essential service for 8-24hours	Loss of essential service for 2-8hours	Loss of essential service for 1-2hours	Loss of essential service for <1hour
Environment	Permanent loss of ecosystem/ critical habitat or nationally significant cultural asset	Partial loss of ecosystem/ critical habitat or nationally significant cultural asset	Long term impacts to ecosystem/ critical habitat or nationally significant cultural asset	Disturbance to ecosystem/ critical habitat	Minor disturbance to ecosystem/ critical habitat
Economy	>\$1Billion loss or 30% of state revenue	\$300M-\$1B	\$100M-\$300M	\$30M-\$100M	<\$30M
Social	Community wellbeing impacts for >	Community wellbeing impacts for	Community wellbeing impacts for 1month to	Community wellbeing impacts for 1	Community wellbeing impacts for <1

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	2years	1-2years	1year	week to 1month	week
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Table 3: Evaluation table

Likelihood (Table 1)	Consequence (table2)				
	1	2	3	4	5
A	Moderate	Moderate	High	Extreme	Extreme
B	Low	Moderate	High	High	Extreme
C	Low	Low	Moderate	High	High
D	Low	Low	Moderate	Moderate	High
E	Low	Low	Low	Moderate	Moderate

6.2.1. Identification

The risk of a bushfire igniting, spreading, and impacting upon human life, critical infrastructure, private properties and medium to long term social/economic impacts to the broader community.

6.2.2. Analysis

An assessment of likelihood against the range of consequences will be undertaken, the highest level of risk will be selected and presented to the MFMP for adoption. The assessment will be based on factors such as previous fire behaviour, forecasted weather conditions, and existing mitigations controls:

For example: In 2022/23 there was high spring rainfall with a forecasted La Nina weather conditions. Based on these factors the fire danger rating would have been assessed as:

- Rare(E) chance of a Catastrophic(5) consequence event = **Moderate Risk**
- Rare(E) chance of a Major(4) consequence event = **Moderate Risk**
- Unlikely(D) chance of a Moderate(3) consequence event = **Moderate Risk**
- Unlikely(D) chance of a Minor(2) consequence event = **Low Risk**
- Possible(C) chance of a Low(1) consequence event = **Low Risk**

Overall assessment: **Moderate Risk**

6.2.3. Evaluation

An assessment of the bushfire risks will be undertaken each year prior to the Summer Season (refer to 6.2.2). This will be presented to the MFMP for consideration and adoption.

6.2.4. Mitigation

Based on the risk profile undertaken each year (refer to 6.2.3) the MFPO will develop an annual Bushfire Management Action Plan (BMAP).

The BMAP will be presented to the MFMP for approval and be made available on the City of Greater Bendigo's website.

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A table of mitigation actions on the next page will be used as a guide in the development of the annual BMAP.

Table of mitigation actions

Low to Moderate Risk
<ol style="list-style-type: none"> 1. Maintain the City of greater Bendigo controls identified in the VFRR-B (risk register). These include vegetation management including fuel hazard reduction through planned burning, slashing/grooming on public land, roadside fuel management, fuel reduction on private land through education and compliance measures, community education and awareness, community resilience building, inspection programs and maintenance and protection of assets and critical infrastructure. 2. Review this MFMP every three years and maintain Municipal Fire Management Planning. 3. Review Bushfire Place of Last Resort (previously known as Neighbourhood Safer Place) before and once during the summer period. Refer to <i>City of Greater Bendigo's Bushfire Place of Last Resort Plan</i> for details of locations. 4. The CFA website has Community Information Guide's that include maps with the locations of the Bushfire Places of Last Resort. https://www.cfa.vic.gov.au/plan-prepare/your-local-area-info-and-advice/neighbourhood-safer-places 5. Maintain the Fire Prevention Program, including inspection, issuing of Fire Prevention Notices to reduce vegetations loads. 6. Maintain City of greater Bendigo electrical line clearance plan to identify hazardous trees, refer to Electricity Safety Act 1998, section 86B 7. Maintain Fire Access Tracks
High to Extreme Risk
<p>Undertake actions (1,2,4-7) listed in the above section <i>Low to Moderate</i>. With the addition of actions listed below (8-12)</p> <ol style="list-style-type: none"> 8. Increase community messaging and engagement on the seasonal bushfire risks. 9. Establish a council Emergency Management Team to be on standby on days where the Fire Danger Rating is declared Catastrophic. 10. Support bushfire control agencies with resources by request on days of TFB. 11. Review Emergency Relief Centres for functionality and compliance before and every month during the summer period. 12. Review Bushfire Places of Last Resort for compliance before and every month during the summer period. Refer to <i>City of Greater Bendigo's Bushfire Place of Last Resort Plan</i> for details of locations.

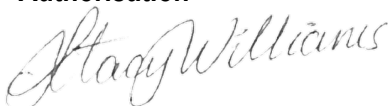
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Monitor & Review Period

The following table summarises the proposed implementation, reporting and review activities.

Item	Responsibility	Timing
Undertake a seasonal risk assessment of the bushfire / grass fire risk and develop a Bushfire Management Action Plan	MFPO	Annually before Summer.
Review and update the VFRR - B	All agencies	Annual update at MFMPC
Review and update the Bendigo Municipal Fire Management Plan	MFPO	Every three years
Undertake an assessment of Bushfire Places of Last Resort Safer Places	MFPO	Annually before Summer. Refer to treatment section 6.2.4 for frequency of inspections based on risk.
Undertake private property inspections and issue Fire Prevention Notices to properties that are not compliant	MFPO	October to April each year
Undertake works in line with the City's Electrical Line Clearance Plan	CoGB Ops	Annual Attestation
Inspect and repair Fire Access Tracks	MFPO	Annually in December each year

Authorisation



Stacy Williams

Chair, IMEMPC

Date: 18 August 2023