Mount Alexander Shire Municipal Fire Management Plan

A sub-plan of the Municipal Emergency Management Plan

2012 – 2014

Document Version Control

Authorisation

This Plan has been adopted as the first iteration of the Mount Alexander Shire Municipal Fire Management Plan (MFMP).

This Plan was endorsed through a formal motion by the Mount Alexander Shire Municipal Fire Management Planning Committee (MFMPC) at their meeting on 29 February 2012, for which the Chair of the committee will sign for and on behalf of all members of the Mount Alexander Shire MFMPC.

All agencies will be accountable for their respective activities and responsibilities within the Plan.

Municipal Fire Management Planning Committee Endorsement

Signed: Date: **29 February 2012**

Alun Hughson
Chair
Mount Alexander Shire Municipal Fire Management Planning Committee

Municipal Emergency Management Planning Committee Endorsement

Signed: Date: 5 September ~~20 April~~ 2012

Johan Louw
Chair
Mount Alexander Shire Municipal Emergency Management Planning Committee

Mount Alexander Shire Council Adoption

Signed: Date: **11 September 2012**

Phil Rowland
Chief Executive Officer
Mount Alexander Shire Council

Document Information

File Name	MEMP Sub Plan - Municipal Fire Mgt Plan - DRAFT
Author(s)	Mount Alexander Shire Municipal Fire Management Planning Committee
File Number	DOC/12/85561
Folder Number	FOL/12/1180: EMERGENCY MANAGEMENT - Planning - Inputs & Reference Materials - Municipal Fire Management Plan

Version History

Version	Date	Description	Updated by
Draft 0.1	10/02/12	Initial draft. Distributed to MFMPC for review.	MASC Emergency Management Coordinator – Joanna Hambling
Draft 0.2	07/03/12	Updated to incorporate MFMPC feedback. Endorsed by MFMPC and distributed to MEMPC for review.	MASC Emergency Management Coordinator – Joanna Hambling
Draft 0.3	04/05/12	Updated to incorporate MEMPC feedback. Endorsed by MEMPC, distributed to RSFMPC for review and released for public comment.	MASC Emergency Management Coordinator – Joanna Hambling
Draft 0.4	18/07/2012	Updated to incorporate Community feedback as result of the Consultation sessions held at various locations throughout the Shire.	MASC Deputy Municipal Fire Prevention Officer – Luke Ryan

Acronyms

Acronym	Definition
CFA	Country Fire Authority
CHIRP	Castlemaine District Community Health
DSE	Department of Sustainability and Environment
EMMV	Emergency Management Manual Victoria
IAP2	International Association for Public Participation
IFMP	Integrated Fire Management Planning
MASC	Mount Alexander Shire Council
MEMP	Municipal Emergency Management Plan
MFMP	Municipal Fire Management Plan
MFMPC	Municipal Fire Management Planning Committee
RSFMPC	Regional Strategic Fire Management Planning Committee
SFMPC	State Fire Management Planning Committee
VBRC	2009 Victorian Bushfires Royal Commission
VFRR	Victorian Fire Risk Register
VicPol	Victoria Police

Contents

Foreword

Welcome to the first edition of the draft Mount Alexander Shire Municipal Fire Management Plan.

This Plan has been prepared under the guidance of the Shire's Municipal Fire Management Planning Committee and addresses the overall risk of bushfire in the long term. In this first draft, risks in relation to structural fires and hazardous materials incidents have not been included; however these will be addressed in future versions.

The Plan has been developed in consultation with a range of stakeholders through an integrated and holistic process encompassing the whole spectrum of emergency management: prevention, preparedness, response, and recovery. It feeds into regional and state-wide planning, allowing for the strategic alignment of risk mitigation efforts with our municipal neighbours.

It is the intention that this Plan will encourage and facilitate improved community safety outcomes. For this purpose we rely on the active engagement and assistance of our stakeholders and appreciate all contributions to date. The successful implementation of this Plan will be reliant on the continued commitment to and strengthening of this collaborative, multi-agency, partnership approach.

Alun Hughson
Chair
Mount Alexander Shire Municipal Fire Management Planning Committee

Introduction

Purpose & Scope

This draft Mount Alexander Shire Municipal Fire Management Plan (the Plan) has been prepared by the Mount Alexander Shire Municipal Fire Management Planning Committee (MFMPC, the Committee), in line with part 6A of the Emergency Management Manual Victoria (EMMV)[1] and the Integrated Fire Management Planning Guide[2]. A draft of the Plan had been prepared for comment by the community and interested parties to further assist the Committee in the development of this Plan.

The Plan will be the mechanism to identify strategies to fill the gap between potential impacts of bushfires and the desired level of resilience of the community, economy, and environment in our municipality.

The Committee has worked in a collaborative manner to bring together information to allow it to understand the characteristics of the Mount Alexander Shire and its future direction, and analyse the associated risks using the integrated fire management planning cycle.

This planning process replaces the fire *prevention* planning process, and incorporates the new requirements for municipal fire planning under the *Country Fire Authority Act* 1958. The Plan is a three-year rolling plan that will be continuously reviewed and improved.

Please note that currently the Plan is primarily focused on bushfire, but will subsequently be expanded to better incorporate consideration of structure fires and hazardous materials incidents

Background & Methodology Overview

In response to the challenges that have emerged in fire management over the last decade, the Victorian Government established a state-wide Integrated Fire Management Planning (IFMP) framework. This framework provides structures, policies and procedures to help build on the existing spirit of cooperation and networks in fire management.

Implementation of this framework is overseen by the MFMPC at the local level, which is a sub-committee of the Municipal Emergency Management Planning Committee.

As part of implementing the IFMP framework, the MFMPC is required to prepare and implement a three year Municipal Fire Management Plan. This Plan provides input to, and is developed with reference to the Loddon Mallee Regional Fire Management Plan. It is an operational plan that will be reviewed and updated annually to ensure it meets municipal needs and incorporate any new strategies, programs and tools developed by the State Fire Management Planning Committee (SFMPC) and the Loddon Mallee Regional Strategic Fire Management Planning Committee (RSFMPC).

The plan has been developed using the seven-stage IFMP planning process, as in *Figure 1* overleaf.

---

[1] Emergency Management Manual Victoria, Office of the Emergency Services Commissioner, December 2011
[2] Integrated Fire Management Planning Guide, State Fire Management Planning Committee, 2010
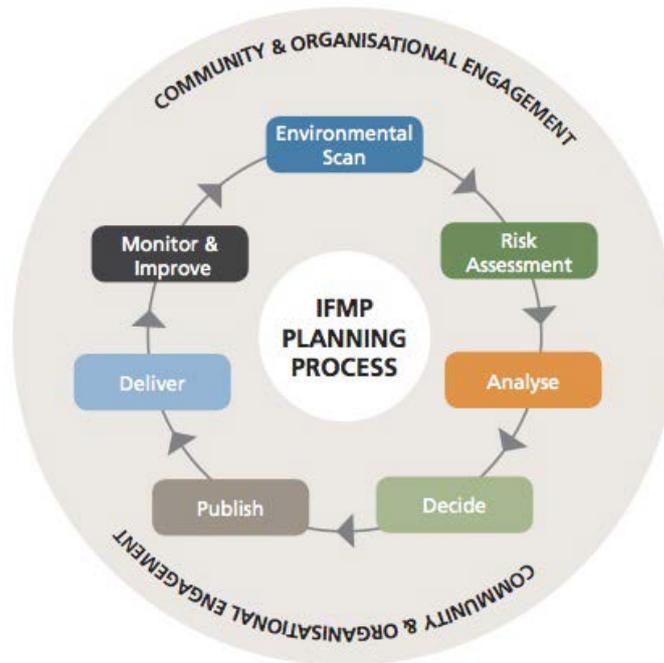
Figure 1: IFMP Planning Process[3]

This Plan seeks to achieve consistent and effective fire management planning within our municipality through commitment to cooperation, sharing and building of collective knowledge and experience at municipal and regional levels. Critical to its success is the ongoing building and maintaining of relationships across government, the public and private sectors, and the broader community.

Stakeholders

Membership of the Mount Alexander Shire Municipal Fire Management Planning Committee (MFMPC) is made up of core committee members and associate members.

Core members of the MFMPC, as appointed by the MEMPC, compromises of members from the following key agencies and organisations:

- Mount Alexander Shire Council
- CFA
- Department of Sustainability and Environment
- Victoria Police
- State Fire Management Planning Support

Mount Alexander Shire MFMPC will continue to engage with other multi agencies during the life cycle of this plan including but not limited to: SP Ausnet, Powercor, Telstra, Optus, DHS, DEECD, V/Line, Vic Track, Parks Victoria, Department of Justice, Vic Roads, Coliban Water and other community groups and organisations.

Related Documents

This Plan is a sub-plan of, and should be read in conjunction with, the *Municipal Emergency Management Plan* (MEMP). Other related documents include:

- Bushfire Safety Policy Framework[4];

---

[3] State Fire Management Strategy 2009, State Fire Management Planning Committee, 2009
[4] Bushfire Safety Policy Framework, Fire Services Commissioner, September 2011

- EMMV;
- *Country Fire Authority Act 1958*;
- *Electricity Safety Act 1998*;
- Loddon Mallee Regional Strategic Fire Management Plan[5];
- Mount Alexander Shire Council Plan 2009-2013;
- Mount Alexander Shire Community Emergency Risk Plan Management Plan 2010;
- Mount Alexander Shire Health & Wellbeing Plan 2010-2013;
- Mount Alexander Shire State of the Environment Report 2010;
- Victorian Fire Risk Register; and
- Fire related plans of MFMPC member organisations.

---

[5] Loddon Mallee Regional Strategic Fire Management Plan, Loddon Mallee Regional Strategic Fire Management Planning Committee, August 2011

Engagement & Communications

The International Association for Public Participation (IAP2) framework has been adopted by the SFMPC to guide engagement with stakeholders in fire management planning. Please note that 'public' in this context includes organisations, agencies, authorities, businesses, and the general public.

The framework provides a hierarchy of engagement that is valuable in making clear the engagement commitment of the Committee in the development of this Plan.

Hierarchy Level	Public Participation Goal
Inform	To provide the public balanced and objective information to assist them in understanding the problems, alternatives, opportunities and / or solutions
Consult	To obtain public feedback on analysis, alternatives and / or decisions
Involve	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered
Collaborate	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution
Empower	To place final decision-making in the hands of the public

Table 1: Extract from the IAP2 Public Participation Spectrum[6]
Source: International Association of Public Participation, 2011

Figure 2 overleaf outlines the key engagement activities and timeframes in the development of the Mount Alexander Shire Municipal Fire Management Plan, applying the IAP2 engagement framework..

[6] IAP2 Public Participation Spectrum, International Association for Public Participation, 2004

Note: This page is formatted as A3 in size.

Municipal Fire Management Planning
Project Milestones & Stakeholder Engagement Phases

Stage	Activity	Municipal Fire Mgt Planning Committee	Municipal Emergency Mgt Planning Committee	LM Regional Strategic Fire Mgt Planning Committee	State Fire Mgt Planning Committee	Other Areas of Council	Land Mgt Org's	Electicity Org's	Transport Org's	Water Org's	Major Industries / Employers	Community Facilities & Org's	General Public	Other Committees	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12 onwards
Environmental Scan	Assess Environment	Empowered	Informed			Involved	Involved	Involved	Involved	Involved	Involved	Consulted	Consulted		█	█	█									
	Determine Objectives	Empowered															█									
Risk Assessment	Identify & Register Risks	Empowered				Involved	Involved	Involved	Involved	Involved	Involved	Consulted	Consulted				█									
	Assess Risks	Empowered																█	█	█						
Analyse	Evaluate Current Risk Treatments	Empowered				Collaborative	Collaborative	Collaborative	Collaborative	Collaborative	Collaborative	Collaborative						█	█	█						
	Develop Risk Treatment Recommendations	Empowered				Collaborative	Collaborative	Collaborative	Collaborative	Collaborative	Consulted	Consulted								█						
Decide	Agree Risk Treatments	Empowered				Collaborative	Collaborative	Collaborative	Collaborative	Collaborative	Consulted	Consulted								█						
	Draft Municipal Fire Management Plan (Plan)	Empowered																	█	█	█					
	Endorse Draft Plan (MFMPC)	Empowered	Empowered			Empowered																█				
	Endorse Draft Plan (MEMPC)	Empowered	Empowered			Empowered																	█			
Publish	Determine Community Consultation Mechanism	Empowered																				█				
	Distribute Plan for Comment	Empowered	Consulted	Consulted	Consulted	Consulted	Consulted	Consulted	Consulted	Consulted	Consulted	Consulted	Consulted	Consulted									█			
	Finalise Plan	Empowered																						█	█	
Deliver	Determine Implementation & Reporting Process	Empowered																				█	█			
	Undertake Actions	Empowered				Collaborative	Collaborative	Collaborative	Collaborative	Collaborative															█	█
Monitor & Improve	Monitor & Evaluate Performance	Empowered				Collaborative	Collaborative	Collaborative	Collaborative	Collaborative																█
	Report Outcomes	Empowered	Informed	Informed	Informed								Informed													█

Figure 2: Project Milestones & Stakeholder Engagement Phases

To commence community engagement and provide input to the Environment Scan and Risk Assessment stages of the project, a community questionnaire in relation to fire risks was undertaken in October 2011.

Of the responses received:

- None were from people aged 25 or under despite targeted promotion to this group.
- Fire related concerns were found to vary, however the main issues were fuel loads, information and warnings, and community knowledge.
- The majority of responders already have fire plans in place (which may be reflective of the fact that those responding to the survey have an active interest in fire planning rather than the community at large), although only the minority have practiced them.
- Protecting life and improving knowledge were considered to be the most important with regards to fire management, with minimising damage to the environment rating slightly higher than minimising fuel load.

The findings suggest that there is a need to address community perceptions regarding fire risks and the prioritisation of fuel reduction treatments.

A Community Consultation Planning Workshop was run for the MFMPC 26 April, 2012 with the aims to determine what the latter part of the community consultation is to achieve; and, how the community consultation should be conducted.

The engagement objectives determined for the final phase of the MFMP development process were:

- Increased community awareness and appreciation of:
  - o The bushfire risks within the municipality
  - o The complexity of fire management planning
  - o The need for integrated planning and collaboration between agencies
- The collation, consideration, and application of community feedback on the draft MFMP
- Community buy in to the fire management planning process recognition of community responsibilities.

The engagement scope determined was thus:
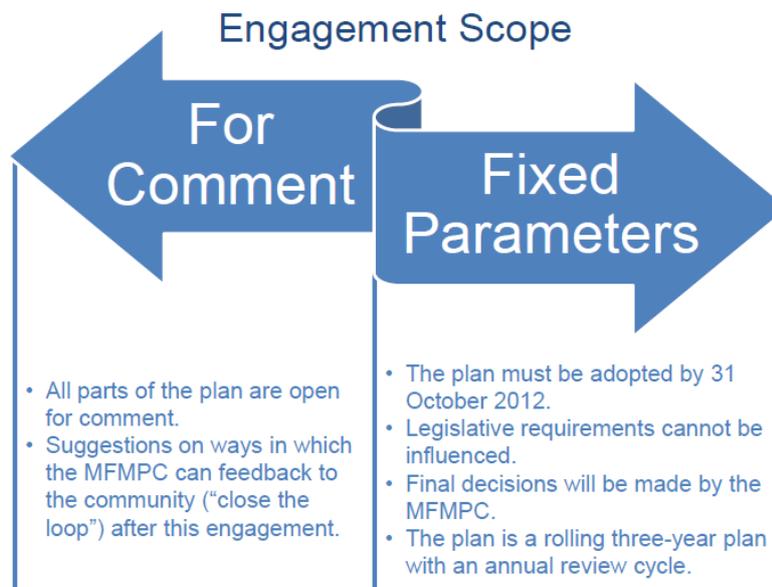
An engagement action plan was developed with key activities identified and programmed:

- Public Display / Exhibit of the plan for one month over June
- Five open house sessions at accessible locations distributed around MT Alexander
- A concluding workshop compiling and discussing feedback with the public and committee members.
- Website listing of the draft plan with feedback forms.

An extensive schedule outlining promotion and supporting materials was developed:

- Media releases x 2
- Advertising in local newspapers x 2
- Social media web links
- Distribution of postcards informing community of engagement process and methods of participation and opportunities to review the plan and provide feedback.

A detailed summary of the community planning workshop can be found in *appendix F.*

All engagement activities occurred with strong support from the MFMP member agencies during June 2012.

SUMMARY OF PUBLIC FEEDBACK

Open House Sessions were held in three locations a total of five times, three sessions in Castlemaine and one each in Maldon and Harcourt. These were followed by a one-hour feedback workshop at the end of June. Total attendance at these sessions for the Shire was 20 persons. Community members were encouraged to ask questions about the plan, give suggestions and to take away feedback forms and a summary of the plan so that they could provide more detailed feedback after consideration of the plan.

A total of five responses were received on the feedback forms for this round of consultations.

Four of the responses were mainly operations focused; with concerns that can be addressed through agencies for the areas of concern i.e. the Oak Forest and the Chewton Pine Plantation or through the actions of the Municipal Fire Management Planning Committee in assisting with a more holistic targeting of problem areas.

Three of the responses were concerned with specifics about particular areas which have been included in the MFMP. Statements regarding the wording of sentences and descriptions of our area were also included and will be considered for inclusion in the plan.

One of the responses took great care to detail community education responses; citing other studies and recent experiences of people who have been caught in bushfires. Whilst this information was well presented and researched its impact on the content of the MFMP is minimal, with the plan being concerned by the macro, not the micro. The CFA have in place a number of programs that are trying to address community complacency and levels of education about fires, all fires, not just bushfires. This plan cannot take away the individual responsibility that each community member has to set themselves up in such a way as to reduce their risk of fire, in all situations, and continued education campaigns may meet some of the needs that were expressed in this submission.

Responses have been sent to those people who submitted and indicated that they would like to hear back regarding their concerns. Some of the topics raised will be useful to include in the forthcoming community update and newsletter, to be posted on the MASC website and all responders will receive acknowledgement of their submission.

Environment Scan

The environmental scan below has been developed utilising the following resources:

- Mount Alexander Shire Council Plan 2009-2013;
- Mount Alexander Shire Community Emergency Risk Management Plan 2010;
- Mount Alexander Shire Health & Wellbeing Plan 2010-2013;
- Mount Alexander Shire State of the Environment Report 2010;
- Australian Bureau of Statistics National Regional Profile: Mount Alexander;
- Community Indicators Victoria Mount Alexander Wellbeing Report;
- Department of Sustainability & Environment (DSE) Overall Fuel Hazard Assessment Guide (4th Edition, July 2010);
- Loddon Mallee Regional Strategic Fire Management Plan August 2011;
- Profile ID Mount Alexander Shire Community Profile;
- Regional Development Victoria Loddon Mallee South Regional Strategic Plan September 2010; and
- Victorian Fire Risk Register.

About the Shire

Mount Alexander Shire (the Shire) forms part of the Loddon Mallee Region (the Region), which encompasses ten municipalities and covers nearly 59,000km^2, or approximately 26 per cent of the land area of the State of Victoria.

The Shire is approximately 1,530km^2 in size and comprises several small towns and communities of national historic and environmental significance. The preliminary Estimated Resident Population of the municipality for 2010 was 18,421[7]. The population of the Shire is quite centralised, with approximately two thirds of the population living in the greater Castlemaine area, including the townships of Chewton, Campbells Creek and Barkers Creek. Other primary townships in the Shire include Newstead, Maldon and Taradale.

---

[7] Estimated Resident Population – Mount Alexander Shire, Australian Bureau of Statistics, March 2011
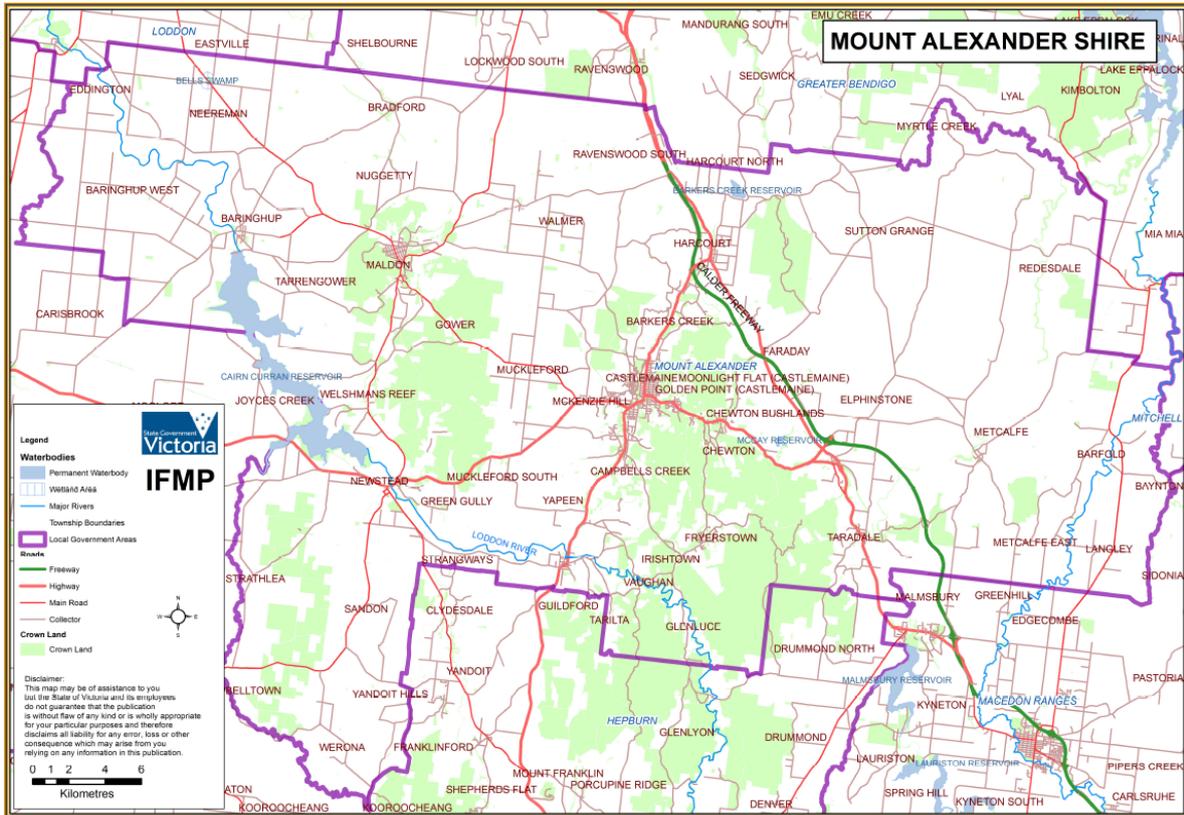
Figure 3: Map of Mount Alexander Shire

Demographics

Within the Shire there are more couples without children than the average for regional Victoria, and more single parent families. There is also a higher proportion of our community that live alone than in other parts of regional Victoria. Research shows that the Shire's community is ageing, with a higher proportion aged over 60 years and fewer people in their twenties and thirties than other communities in Victoria.

With a rating of 980.8, the Shire sits just below the mean on the Index of Relative Socio-Economic Disadvantage, with neighbouring municipalities at both ends of the spectrum. This index is derived from attributes such as low income, low educational attainment, high unemployment, jobs in relatively unskilled occupations and variables that reflect disadvantage rather than measure specific aspects of disadvantage (e.g., Indigenous and Separated/Divorced).

The age profile of Mount Alexander residents is depicted in the table below.

Age Group	Shire Volume	Shire %	Regional Victoria %
Infants 0 to 4 years	904	5.3	6.1
Children 5 to 17 years	3,003	17.6	18.9
Adults 18 to 64 years	9,941	58.2	59.1
Mature adults 65 to 84 years	2,737	16.0	14.0
Senior citizens 85 years and over	482	2.8	1.9
Total persons	17,067	100.0	100.0

Table 2: Mount Alexander Shire Age Structure
Source: Australian Bureau of Statistics, Mount Alexander Shire Summary Profile, 2006

The Shire has a low rating for community vulnerability in the Region, and is ranked fourth lowest for barriers to capability and second only to Buloke in social connectivity.

Employment & Income

There are over 6,000 jobs in the Shire with approximately 4,360 residents living and working in Mount Alexander. There are higher proportions of the Shire's workforce involved in manufacturing, health care and social assistance than other regional communities. Local workforce opportunities are concentrated across six main providers: George Weston Foods; Mount Alexander Hospital; Mount Alexander Shire Council; Flowserve; Victoria Carpet Company; and the Department of Justice. There are fewer people involved in agriculture and construction than other regions. Overall, 93.3% of the Shire's labour force is employed (49.3% of the population aged 15+), and 6.7% unemployed (3.5% of the population aged 15+), compared with 94.4% and 5.6% respectively for Regional Victoria. Mount Alexander Shire's labour force in 2006 was 7,075, of which 2,629 were employed part-time (37.2%) and 3,806 were full time workers (53.8%).

Analysis of household income levels in Mount Alexander in 2006 compared to regional Victoria shows that there were a smaller proportion of high-income households (earning $1,700 per week or more) and a larger proportion of low-income households (earning less than $500 per week). This may reflect the higher number of single person households and the ageing population in the Shire.

Mount Alexander Shire is located in a major corridor from Melbourne, which influences why people move here, the services they expect and the way in which the Shire will develop and change into the future. Proximity to major centres such as Melbourne, Ballarat and Bendigo means that many people who move here often expect to commute some distance to work.

The economies of municipalities to the north of the Shire are mainly driven by agriculture both in terms of production from agriculture and the associated materials processing and servicing of agricultural industries. Municipalities to the south are progressively moving away from agriculture to other service activities and manufacturing. Changes in the way in which agriculture and farming are being managed will have significant impacts for the Shire's economy.

Water in the Shire is provided by Coliban Water and is sourced from the Loddon and Campaspe river systems, which have relatively small storages with large demands. Water security will have a major impact on development and the capacity to meet current and future needs of the Shire's residents and businesses.

Bushfire Risk

In developing the Loddon Mallee Regional Strategic Fire Management Plan, an assessment was undertaken to identify the ranking of each municipality against certain likelihood, vulnerability, and consequence criteria. The matrix below highlights the rankings for our municipaility in relation to other municipalities in the Region.

Category	Ranking (out of 10 municipalities)	Description
Likelihood of grass fire	Sixth (6th)	Based on the history of ignition, number of days of Grass Fire Danger Rating greater than Very High, and the percentage of fuel hazard that is High, Very High or Extreme in the municipality
Likelihood of forest fire	Seventh (7th)	Based on the history of ignition, number of days of Forest Fire Danger Rating greater than Very High, and the percentage of fuel hazard that is High, Very High or Extreme in the municipality
Human vulnerability	Eighth (8th)	Based on the barriers to capability building and levels of social connectedness across the prevention, preparedness, response and recovery spectrum
Human settlement exposure	Third (3rd)	The extent and number of human settlements and places that house vulnerable community members rated Extreme or Very High that have been identified by the Victorian Fire Risk Register assessment process

Category	Ranking (out of 10 municipalities)	Description
Business and asset exposure	Third (3rd)	The extent of business and infrastructure assets rated Extreme or Very High that have been identified by the Victorian Fire Risk Register assessment process
Biodiversity risk	Eighth (8th)	The extent of endangered and vulnerable Ecological Vegetation Classes in the municipality identified in the Office of the Emergency Services Commissioner's Consequence of Loss project
Aboriginal heritage risk	Eighth (8th)	The extent of fire sensitive aboriginal sites in the municipality identified in the Office of the Emergency Services Commissioner's Consequence of Loss project
Non-aboriginal heritage risk	First (1st)	The extent of heritage listed sites on the Victorian Heritage Register in the municipality identified in the Office of the Emergency Services Commissioner's Consequence of Loss project

Table 3: Mount Alexander Shire Bushfire Likelihood, Vulnerability & Consequence Rankings
Source: Loddon Mallee Regional Strategic Fire Management Plan, August 2011

Risk Categories and "risk contributors" will be monitored through this plan and changed where appropriate. Loss of Human life is a key risk category and will continue to be a focus. A key consideration of developing this plan is to address human vulnerabilities with respect to fire. As such, the committee has successfully included a community planner on its membership as a conduit to the community and human vulnerabilities focus. All workshops and risk identification process has attempted to address vulnerabilities across the shire and will continue to build their understanding to alleviate the risks to life.

Mount Alexander has four key bushfire landscapes. Each landscape has unique characteristics which when combined with weather conditions of the day will determine how fire behaves.

Landscape	Fuel Hazard Level	Topography	Primary Driver	Spotting / Ember Potential
Grass, Crop & Stubble	Low to Moderate	Flat to Undulating	Wind	Low
Box & Ironbark Forest & Woodland	High to Extreme	Undulating	Fuel / Topography	Moderate / High
Transitional Mixed Species	High to Extreme	Undulating	Fuel / Topography / Plume	High
Pine Plantation	High	Undulating	Fuel / Topography	Low
Urban	Low to High	Flat to Undulating	Wind / Fuel	Low

Table 4: Mount Alexander Shire Bushfire Landscape
Source: Loddon Mallee Regional Strategic Fire Management Plan, August 2011

Mount Alexander has below average rankings for grass and forest fire likelihood within the Region. This reflects shorter fire season and the relatively low number of days with Fire Danger Indices greater than 25. Fuel hazard greater than High, accounts for nearly 30% of the municipality. Historical ignition levels are below average in the Region, with an average of 53 ignitions per year. On average, only six of these are naturally occurring.

The dispersed nature and density of occupation, along with the arrangement of the hazard across the municipality means 13 communities and 31 special fire protection sites are rated Extreme or Very High by the Victorian Fire Risk Register (most of which are in the Extreme category). The VFRR ranking for economic exposure is average and mainly reflects the light industry and commercial assets that are distributed through the municipality. The Shire is rated low for the Region in the amount of Vulnerable or Endangered Ecological Vegetation Classes and the number of fire sensitive aboriginal artefact areas. The goldfields heritage of the area and its gold era towns are of international standing and hence the municipality has the highest number of Heritage Register records in the Region.

Assumptions and Implications about the future

Situated on the Calder Growth corridor the Mt Alexander region is considered to have a moderate annual increase in population and is expected to reach 22,756 by 2026 up from 18,283 in 2009 according to the Bureau of Statistics. The increase in human settlement will see a greater human interface into higher fire risk areas onto small to moderate parcels of land. This will require due diligence under planning and building regulations in minimising risk of fire in the future. There will continue to be a transient population throughout the year due to tourism, events and festivals. The identification of growing Culturally and Linguistically Diverse (CALD) communities (e.g. Sudanese) has also been identified, and addressed during the life cycle of this plan.

The Bushfire Management Overlay (BMO) has also been introduced by the State Government into Municipal Planning Schemes across the state. Areas in the BMO are areas that have the highest fire risk and are likely to be particularly exposed to the impact of bushfire. The suitability of new development (including subdivision) in these areas must be fully considered before it proceeds. Where development does occur in these areas appropriate bushfire protection measures will be required, under planning and building regulations.

The development of Township Protection Plans by CFA will continue to outline important direction and information for communities to assist with planning before, during and after a fire. These plans include information on Neighbourhood Safer Places – Place of last resort (if available in the area), where people can shelter from fire as a last resort, and fire safety information for members of the local community.

Mt Alexander Shire is within the top 12 municipalities within the state with a high number of registered mental health clients per thousand head of population in Victoria. These clients may be more vulnerable than others in fire situations and need to be catered for in the future.

Loddon-Mallee region is experiencing a reduction of volunteer numbers which is evident in Mt Alexander. Having observed a drop off in younger volunteers with the emergency response and recovery agencies this will need to be addressed by tapping in to the new residents into the area.

The recommendations of the Bushfire Royal Commission will continue to be implemented throughout the Region.

Municipal Fire Management Objectives

Aim & Objectives

The primary aim of the integrated fire management planning process in Mount Alexander Shire is for **agencies and the community to work together to mitigate the risks and impacts of fire, and protect and preserve the things we value.**

The objectives to be achieved by the Mount Alexander Shire MFMP are:

- A confident community that fully understands the fire risks in their local environment and how to manage them.
- Active community participation in prevention, preparedness, response, and recovery to develop self-reliant communities.
- The management of fuel to reduce the intensity of fire, while minimising environmental / ecological impacts.
- To protect our significant cultural and environmental assets.
- To minimise the risk of fire on the economy.
- To plan for the protection of essential infrastructure that supports life.

The aim and objectives were determined by the Committee taking into account community input, local knowledge, experience and expertise.

Alignment to Regional & State Objectives

In developing this plan the MFMPC also considered the State and regional priorities, which are:

- Protection and preservation of life.
- Educated and informed communities.
- Protection of critical infrastructure and community assets that support community resilience.
- Protection of residential property as a place of primary residence.
- Protection of assets supporting individual livelihoods and economic production that supports individual and community financial sustainability.
- Protection of environmental and conservation values that consider the cultural, biodiversity and social values of the environment.

The content of this Plan is designed to align with these regional and state-level priorities.

Fire Management Risk Strategies

Risk management underpins the integrated fire management planning process. Addressing fire risks includes prevention and preparedness activities as well as the provision of response and recovery should a fire occur.

The International Risk Management Standard ISO 31000:2009 was utilised to produce a municipal fire risk profile that identifies and rates fire related risks. In doing so, the following measures of likelihood and consequence were applied to determine a rating for each risk. These measures have been intentionally kept free of quantitative parameters that may restrict their application to risks of a non-technical nature, and were applied through collective discussion and practitioner agreement.

Likelihood

Likelihood is used as a qualitative description of probability or frequency. It can be categorised as:

Level	Category	Description
1	Rare	May only occur in exceptional circumstances
2	Unlikely	Could occur very infrequently
3	Possible	May occur at some time
4	Likely	Will probably occur in most circumstances
5	Almost Certain	Is expected to occur in most instances

Table 5: Likelihood Measures

Consequence

Consequence considers the outcome of an event expressed qualitatively or quantitatively, being a loss, injury, disadvantage or gain. It can be categorised as:

Level	Category	Description
1	Insignificant	Minimal short-term impact to social, natural, built or environmental environment
2	Minor	Some short-term impact to social, natural, built or environmental environment
3	Moderate	Some medium- to long-term impact to social, natural, built or environmental environment
4	Major	High medium- to long-term impact to social, natural, built or environmental environment
5	Catastrophic	Extensive medium- to long-term impact to social, natural, built or environmental environment

Table 6: Consequence Measures

Risk Scoring Matrix

The risk scoring matrix combines the likelihood and consequence scores to determine a risk rating as follows:

Likelihood	Consequence				
	1 (Insignificant)	2 (Minor)	3 (Moderate)	4 (Major)	5 (Catastrophic)
5 (Almost certain)	5	10	15	20	25
4 (Likely)	4	8	12	16	20
3 (Possible)	3	6	9	12	15
2 (Unlikely)	2	4	6	8	10
1 (Rare)	1	2	3	4	5

	Extreme Risk; immediate action required	Risk level ≥15
	High Risk; senior management attendance needed	Risk level 10 - 14
	Moderate Risk; management responsibility must be specified	Risk level 7 – 9
	Low Risk; manage by routine procedures	Risk level ≤ 6

Figure 4: Risk Scoring Matrix

The risk rating aids in the development and prioritisation of treatment actions, with those rated 'Extreme' deemed highest priority.

Risk Register Summary

The information below provides an overview of the information contained in the Risk Register and Work Plan. Please refer to <u>Appendix A</u> for more detail.

Mount Alexander Shire - Municipal Fire Management Plan - Risk Register							
Risk Details		**Inherent Risk Assessment (Pre-Treatment)**			**Anticipated Residual Risk Assessment (Post-Treatment)**		
Risk ID	**Risk Description**	**Risk Likelihood**	**Risk Consequence**	**Pre-Mitigation Risk Rating**	**Risk Likelihood**	**Risk Consequence**	**Post-Mitigation Risk Rating**
R01	Loss of human life	3 (Possible)	5 (Catastrophic)	Extreme	3 (Possible)	5 (Catastrophic)	Extreme
R02	Loss of or damage to property	4 (Likely)	3 (Moderate)	High	4 (Likely)	3 (Moderate)	High
R03	Loss of or damage to transport infrastructure	3 (Possible)	4 (Major)	High	3 (Possible)	4 (Major)	High
R04	Loss of or damage to communications infrastructure	3 (Possible)	4 (Major)	High	3 (Possible)	4 (Major)	High
R05	Loss of or damage to electricity infrastructure and supply	4 (Likely)	4 (Major)	Extreme	4 (Likely)	4 (Major)	Extreme
R06	Loss of or damage to water infrastructure and supply	3 (Possible)	4 (Major)	High	3 (Possible)	4 (Major)	High
R07	Damage to flora or fauna	5 (Almost certain)	2 (Minor)	High	5 (Almost certain)	2 (Minor)	High
R08	Lack of awareness or understanding of fire risks and associated responsibilities	5 (Almost certain)	3 (Moderate)	Extreme	4 (Likely)	3 (Moderate)	High
R09	Hyper-awareness of fire risks	4 (Likely)	3 (Moderate)	High	3 (Possible)	3 (Moderate)	Moderate
R10	Unscrupulous parties taking advantage of the vulnerable pre- or post-fire	4 (Likely)	2 (Minor)	Moderate	3 (Possible)	2 (Minor)	Low
R11	Lack of suitable access to and egress from areas of high fire danger	4 (Likely)	4 (Major)	Extreme	3 (Possible)	4 (Major)	High
R12	Loss of community infrastructure that supports social connectedness	3 (Possible)	4 (Major)	High	3 (Possible)	4 (Major)	High
R13	Loss of agricultural, forestry and horticultural infrastructure, productivity and viability	4 (Likely)	3 (Moderate)	High	4 (Likely)	3 (Moderate)	High
R14	Reduced economic viability and long-term sustainability	3 (Possible)	4 (Major)	High	3 (Possible)	4 (Major)	High
R15	Duplication of effort and economic resources in preparedness	5 (Almost certain)	2 (Minor)	High	4 (Likely)	2 (Minor)	Moderate
R16	Loss of significant cultural, social and natural assets	3 (Possible)	4 (Major)	High	3 (Possible)	4 (Major)	High

Figure 5: Risk Register Summary

Risk Descriptions

The risks described below are the strategic risks identified by the MFMPC. Treatment of these risks, to minimise the likelihood of them occurring or reducing their impact, is a shared responsibility between emergency agencies, state and local government, landowners, businesses and the general public.

R01   *Loss of human life*

The protection of human life is paramount. Avoiding any loss of human life, either directly or indirectly as a result of fire, is of the upmost priority and the primary driver of all prevention, preparedness, response and recovery works.

R02   *Loss of or damage to property*

The destruction of homes, businesses and other assets can cause significant emotional harm and damage to livelihoods.

It is a reality that fire usually results in at least some damage to property. Whilst emergency services will make all efforts to protect property, it is unfeasible to protect all assets in the path of a fire.

R03   *Loss of or damage to transport infrastructure*

Transport infrastructure includes the physical structures (roads, bridges, rail tracks, signals, stations etc.) and associated operating systems (e.g. signal communications) for road and rail transport.

As a rural shire, Mount Alexander is dependant on road and rail accessibility for economic prosperity and social connectedness. Roads also provide the primary means of access and egress for relocation and fire fighting purposes.

R04   *Loss of or damage to communications infrastructure*

Within Mount Alexander Shire there is a significant collection of communications infrastructure that serves our community and that of our neighbours. Communications infrastructure refers to the major equipment required to provide fixed and mobile phone lines, radio, internet and television communications. These services underpin the social and economic connectivity required in everyday life.

From an emergency perspective, these services provide the primary source of information to the general public and are depended upon by emergency services and recovery agencies for the coordination of response and recovery activities. Any interruptions to these services, particularly during the fire danger period, would have major consequences.

R05   *Loss of or damage to electricity infrastructure and supply*

Key electricity infrastructure within Mount Alexander Shire includes distribution lines, transmission lines, and substations. Individuals and businesses alike rely heavily on electricity to meet daily needs, and in an emergency context electricity provides the power to communicate and operate vital equipment such as water pumps.

Short-term electricity outages should be anticipated and prepared for, particularly during the fire danger period. However, continued attention is required to minimise the potential for medium- to long-term outages that could significantly hamper emergency response or recovery efforts.

R06   *Loss of or damage to water infrastructure and supply*

The provision of fresh drinking water and effective sanitation of wastewater is fundamental to public health and wellbeing.

Water infrastructure includes tanks, pipelines, basins, pumping stations, treatment plants and reclamation plants. Minimising the threat of fire and its associated direct and indirect impact to these facilities is imperative to ensure continuity of an uncontaminated water supply.

R07   *Damage to flora or fauna*

Mount Alexander Shire is home to a significant array for rare, endangered, vulnerable or threatened flora and fauna species.

Whilst damage to flora and fauna cannot be entirely eliminated, conventional fire management practices (such as fuel reduction burning) must be conducted in a manner considerate of the environment to minimise or, where possible, avoid harm.

R08   Lack of awareness or understanding of fire risks and associated responsibilities

State Government research has found that 75% of people living in the most fire prone areas do not believe they need a fire plan[8]. There is also inconsistent understanding of the factors taken into consideration when determining the location and timing of fuel reduction burns, the purpose of Neighbourhood Safer Places, the distinction between fire danger ratings and days of total fire ban etc.

Bushfire safety is a shared responsibility between government and a range of stakeholders. However, individuals are ultimately responsible for making their own decisions about how to respond to bushfire risk. Efforts must therefore be made through the integrated fire management planning process to increase the level of public understanding of bushfire risk and the ability of people to make informed decisions to protect lives and property.

R09   Hyper-awareness of fire risks

Whilst the current research suggests a lack of awareness and understanding of fire risks, there is also the threat of hyper-awareness.

Hyper-awareness can be as damaging to community resilience and long-term preparedness as complacency, and must be avoided. The work undertaken by agencies to raise public awareness must be considerate of this and careful not cause unnecessary anxiety or undue alarm amongst the community.

R10   Unscrupulous parties taking advantage of the vulnerable pre- or post-fire

It is an unfortunate fact that in today's society there continues to be a minority of people willing to behave in a dishonest, deceitful, or unethical way. The threat of emergencies such as bushfires can generate fear or anxiety amongst community members, which such unscrupulous parties may prey upon.

Laws and regulations are purposefully designed to govern and minimise the potential for fraudulent or unethical activities, or the provision of sub-standard products. However, it pays to be vigilant at all times and particularly to minimise the potential for exploitation in relation to emergency prevention, preparedness, response or recovery.

R11   Lack of suitable access to and egress from areas of high fire danger

Mount Alexander Shire is home to vast tracts of box ironbark and mixed species forest with many communities and critical infrastructure situated in remote or difficult to access locations surrounded by forest, in steep valleys or down heavily foliaged tracks

One of the most common challenges in fire fighting is obtaining safe access to a fire. The identification and maintenance of multiple suitable access and egress routes that allow the safe passage of fire fighting vehicles and crew without the potential to become ensnared is essential.

R12   Loss of community infrastructure that supports social connectedness

In many of our communities there is a 'hub' that acts as the centre for societal activity and connectedness. 'Hubs' take many shapes and forms, ranging from town halls and community centres, to schools, pubs, and village greens.

The loss of any such community infrastructure can have protracted consequences that inhibit community recovery from emergencies.

R13   Loss of agricultural, forestry and horticultural infrastructure, productivity and viability

---

[8] Minister for Bushfire Response, Peter Ryan, ABC News, 14 November 2011.

Within the Shire around 80,000 hectares is devoted to agricultural, forestry and horticultural activity, accounting for nearly 10% of employment. From soil fertility to crops, livestock and fences, agriculture and horticulture have an immense reliance on the land and are particularly susceptible to the devastating impacts of fire.

Many such businesses were impacted by the 2009 Barfold – Redesdale fires, and have demonstrated enormous resilience and determination to reinstate operations and return to a proper level of functioning. However, where possible it is far preferable to minimise and avoid the loss of agricultural, forestry and horticultural infrastructure to retain productivity and viability.

R14   *Reduced economic viability and long-term sustainability*

Mount Alexander Shire's economic portfolio is diverse, with the arts, tourism, manufacturing, and retail industries thriving, in addition to the above-mentioned agriculture, forestry and horticulture. The long-term economic prosperity and diversity of the Shire rests on the continued attraction of investment and business growth.

The threat of fire alone, as a result of being located in one of the most bushfire prone areas of the world, can be enough to deter large investment and business opportunities. Authorities and the community must work together to mitigate the associated threat to economic viability and long-term sustainability.

R15   *Duplication of effort and economic resources in preparedness*

Given the volume and diversity of parties involved, the effectiveness of emergency prevention and preparedness activities is not always maximised.

In an environment characterised by competing priorities and limited resources, it makes sense to avoid duplication of effort wherever possible. Aside from achieving economies of scale in the utilisation of resources, working to minimise duplication also strengthens collaboration and consistency of approach; elements critical to building disaster resilient communities.

R16   *Loss of significant cultural, social and natural assets*

The heritage and history of Mount Alexander Shire is captured in a rich tapestry of cultural, social and natural assets including scarred trees, stone circles, scatters, middens, water-courses, rock art, historical streetscapes, and heritage parks. These assets are irreplaceable and their value cannot be underestimated; their loss must be avoided.

Work Plan Summary (Risk Treatment Strategies)

The Loddon Mallee Regional Strategic Fire Management Planning Committee has identified the need to improve and sustain our communities, economy, and the environment over the next 10 years by:

- Building resilience;
- Learning and improvement;
- Enhanced partnerships; and
- Management and treatment of risk.

The treatments contained herein (and the relationships necessary to collaboratively identify, design, and implement them) align with these principles and fall into the categories of:

- Community education treatments;
- Environmental management treatments;
- Hazard reduction treatments;
- Ignition management treatments;
- Preparedness treatments; and
- Regulatory treatments.

Current Treatments

There are a number of existing treatments in place to manage or mitigate the identified fire risks. These are summarised in the table below. Each treatment has a designated owner that is responsible for leading, monitoring, and reporting upon the effectiveness of that treatment.

Please refer to Appendix A for more detail on the treatments currently in place and the risks they intend address.

Category	Current / Existing Treatments
Community Education	Bushfire Planning Workshops 'Can I or Can't I?' Publication CFA Can Help Brochures & Posters Community Fireguard Program Fire Ready Kit Fire Ready Rural Women Fire Ready Smartphone App Fire Ready Victoria Meetings Fire Safe Kids Guide to Retrofit your Home for Better Protection from a Bushfire Home Bushfire Advice Service House Bushfire Self Assessment Tool Isolated Elderly Program Media Promotion On the Land Publication Township Protection Plans Development & Implementation
Environmental Management	Biodiversity / Species Action Plans / Statements Implementation Works on Waterways Permits

Category	Current / Existing Treatments
Hazard Reduction	Fire Prevention Inspections Plantation Design Planning Roadside Vegetation Planning Strategic Fire Breaks Maintenance Vegetation Clearance Permits Vegetation Management & Asset Maintenance Water Infrastructure Protection
Ignition Management	Disconnection of Automatic Circuit Re-closers on SWER Lines Fire Danger Period / Bushfire Operations Plans Implementation Fire Patrols
Preparedness	At-Risk Schools & Children's Facilities Identification & Code Red Closure Contingency Water Supply Evacuation Planning Fire Access Track Maintenance Fire Planning Fire Plug Maintenance Neighbourhood Safer Places Assessments & Maintenance Vulnerable Persons Identification
Regulatory	Building Regulations Planning Regulations Product Safety & Advertising Laws / Regulations

Table 7: Current Treatments

Please also refer to the following associated appendices:

- <u>Appendix B</u>: Hazard Trees Identification & Notification Procedure
- <u>Appendix C</u>: Township Protection Plans
- <u>Appendix D</u>: Neighbourhood Safer Places – Places of Last Resort
- <u>Appendix E</u>: Maps.

New or Enhanced Treatment Opportunities

Through the collaborative nature and risk-based approach of the integrated fire management planning process, opportunities to enhance existing treatments, or implement new treatments, should continually be identified, assessed and, where appropriate, adopted.

A number of such opportunities have already been identified and earmarked for further exploration to determine their feasibility, composition, and demonstrable benefits in the treatment of identified risks. These are summarised below.

Municipality-wide Opportunities

- Greater collaboration between stakeholders with shared interests or co-located assets to ensure that treatments are complementary and their effectiveness is maximised. For example, all parties involved with the management rail infrastructure working collaboratively with the Country Fire Authority (CFA) and DSE to identify locations for mineral earth breaks and fuel reduction burns could significantly enhance the effectiveness of their existing slashing and spraying works.

- The Mount Alexander Shire in consultation with the Country Fire Authority conducted a survey of the shire residents in order to determine what the inhibitors are with residents developing their own Emergency Management Plans (whether for fire or flood). It is hoped the results from this survey will assist both the Mount Alexander Shire and the CFA to develop and implement targeted education programs to better assist residents.

- Incentives to reduce the risk of private property ignitions.

- Enhanced consideration of fire risk when designing roadside planting schemes.
- Targeted fire awareness raising mechanisms for:
  - Event organisers
  - Tourists and other visitors
  - New home owners
  - Residents living in isolated areas
  - Business owners
  - Disaffected teenagers
- Mechanisms by which to address rogue traders and improve understanding of product compliance regulations etc.
- More detailed consideration of agricultural and horticultural harvests that may be adversely affected by planned burns (to avoid smoke taint etc.).
- Better integration between fuel load reduction and weed management practices, particularly in relation to gorse, broom, and blackberry weeds.
- Better ongoing engagement with communities and focus groups.
- Improved and sustainable procedures for fire-plug maintenance.
- Township level planning considerate to the protection of significant cultural, social and natural assets.
- Increased knowledge and awareness across agencies responsible for implementing treatments of scarred trees, stone circles, scatters and middens, and other items of cultural significance.

Locality Specific Opportunities

Castlemaine

The northern, north-western, and western fringes of Castlemaine are considered to be major risk areas, where high fuel loads and other concerns are present. In particular:

- Access and egress along Odgers Road and to Castlemaine Hospital is limited.
- The majority of houses located on the west side of town (Richards Road through to Gingell Street) are made from timber and in close proximity. Properties of this nature in this location could be vulnerable to ember attack.
- Barkers Creek and Forest Creek house a fair proportion of flammable vegetation such as scrub, fallen timbers, gorse and other flammable weeds, which could provide a fast-moving avenue for fire when dry.

Potential treatments could include:

- Targeted engagement with land owners to the west and north-west of the township to increase participation in the creation and maintenance of internal boundary fire breaks (by either slashing or creating mineral earth breaks), which can reduce the vulnerability to the township and help land owners protect their own assets by keeping fire away from fence lines.
- Targeted engagement with residents living in the western residential area of Castlemaine, to better inform residents about the importance of keeping their properties fire safe and how this can be achieved.
- Mineral earth breaks being established for the interface between residential areas and the western perimeter of Kalima park.
- Planned burning to reduce the fuel load in the proximity of Castlemaine Hospital, establishment of mineral earth breaks, and maintenance of fire access tracks in the bush land surrounding the hospital.
- Regular maintenance and clean out program for Barkers Creek and Forest Creek.
- Enhanced vegetation management along rail lines.

Campbells Creek

- Targeted engagement with residents living the western residential area of Campbells Creek to reassert the importance of keeping their properties fire safe.
- Regular maintenance and clean out program for the creek itself.
- Enhanced vegetation management along the disused rail line.

Chewton, Chewton Bushlands & Golden Point

- Targeted engagement to better inform residents about the importance of keeping their properties fire safe and how this can be achieved.
- Removal of gorse and other vegetation within the creek and thinning of pine trees located in close proximity to the centre of Chewton (within the boundary of the Castlemaine Diggings National Heritage Park).
- Explore options to replace trees at the plantation by Adelaide Street (near to the swimming pool) with species more appropriate in areas of high fire risk.
- Alignment of DSE planned burns with the designated asset protections zones to be reviewed.

Fryerstown & Fryers Village

- Targeted engagement to better inform residents about the importance of developing a plan to leave early and how to reduce fire risk to properties.

Maldon

- Planned burning to reduce the fuel load in the proximity of Maldon Hospital.
- Explore options to address Derby Hill, which presents a high risk to the town should a south-west wind change occur during a fire.
- Additional maintenance on the track west of Lawrence Street (down to and including rear of caravan park) to reduce volume of gorse.

Taradale

- Concentrated campaign to address fuel load in the area to the west and north-west of Taradale, between Cypress Drive and Millers Road, which presents the risk of ember attack on the township.
- Establishment of linear breaks along the rail line (either side of wooden bridge).

Vaughan

- Targeted engagement to better inform residents about the importance of developing a plan to leave early and how to reduce fire risk to properties.

The municipality-wide and location specific treatment opportunities identified above are by no means exhaustive. Risk analysis and treatment identification is an on-going process that should be continually reviewed. Therefore further analysis will continue to be undertaken by the MFMPC, and consideration given to 'sectorising' larger townships in order to advance more in-depth exploration.

Supporting this process, DSE has collated data from various agencies to produce comprehensive maps fire risks and associated treatments. This visual information provides an invaluable tool by which to evaluate the strategic alignment of treatments and identify gaps. To support on-going improvement and further analysis, it is essential that all involved agencies maintain geospatial data that can be provided to the Committee for this purpose.

Note: Additional treatment opportunities will also be identified through the Community Emergency Preparedness Enhancement Project, which is a collaborative initiative between Mount Alexander Shire Council (MASC), CFA, and Castlemaine District Community Health (CHIRP) funded through the State Government's Fire Ready Communities program.

Good Practice Principles

Going forward, in identifying new treatments, or evaluating existing treatments, the following principles should be applied:

- Treatments should be strategically aligned; they should be complementary and considerate of the long-term fire risk environment.
- Treatments should be designed in consideration of multiple objectives and perspectives, mindful of the social, natural, economic, and built environments.

- Treatments should have demonstrable benefits that sufficiently reduce the level of residual risk when considered against the social, environmental and economic cost of that treatment.

Reporting & Review Process

The integrated fire management planning process is a continuous cycle of analysis, review and improvement, which operates within a complex and challenging environment.

Within this complex environment there are limited and competing resources to achieve the desired outcome of acceptable levels of residual risk to the community. Therefore, fundamental to its success is the establishment and preservation of healthy stakeholder partnerships that allow for continued transparent and robust dialogue in the interest of achieving the Plan's objectives in the long-term. It is the role of the MFMPC to spearhead relationship management for this purpose.

In addition to monitoring the 'health' of the process, implementation of the plan itself must be monitored and reported upon to enable continuous improvement. The table below summarises the proposed implementation, reporting and review activities:

Frequency	Task / Action	Responsible Party
Ongoing	Implement treatments, as per agreed Work Plan	All treatment owners
	Further explore identified opportunities for new or enhanced treatments with relevant stakeholders, and agree course of action	MFMPC
Biannually (every 6 months)	Report to MFMPC on the progress of treatment implementation, including an evaluation of treatment appropriateness, impact, effectiveness, efficiency, and legacy	All treatment owners
	Update Risk Register & Work Plan to reflect treatment status, as reported by treatment owner	MFMPC
Annually (every 12 months)	Conduct strategic review of risks and associated treatment program, asking: • Are the identified risks still valid? • Do their pre-treatment and residual risk ratings still hold true? • Are there new risks that need to be added to the register and managed? • Do the treatments currently in place adequately address the identified risks? • Are there any new or enhanced treatments required?	MFMPC
	Review and update Plan content and mapping to ensure validity	MFMPC
	Provide overarching progress report to Municipal Emergency Management Planning Committee, focusing on the collective effectiveness of treatments in the management of risks and progress towards the achievement of objectives	MFMPC
Triennially (every 3 years)	Conduct end-to-end review of Plan, with particular focus on the environment scan and objectives	MFMPC

Table 8: Monitoring, Reporting & Review Actions

Appendices

Note: The appendices listed below are stored as separate documents.

Appendix A: Risk Register & Work Plan (Treatments)

File number DOC/12/25859

Appendix B: Hazard Trees Identification & Notification Procedure

File number DOC/12/25860

Appendix C: Township Protection Plans

File numbers

- DOC/12/25861 (Castlemaine)
- DOC/12/25862 (Chewton)
- DOC/12/28795 (Fryerstown)

Appendix D: Neighbourhood Safer Places – Places of Last Resort

File number DOC/12/28797

Appendix E: Maps

File numbers:

- DOC/12/63768 (2011 Fuel Load & Fire History)
- DOC/12/63769 (Treatments)
- DOC/12/63770 (Severe Day Fire Intensity & VFRR)

Appendix F: Community Consultation Planning Output Summary

File numbers:

- DOC/12/75792

Note: Additional maps and mapping tools have been utilised by the Committee in the development of this plan. Those contained within Appendix E provide a sample only for public reference.