Discussion Paper

Victorian Fire Management Strategy

This Discussion Paper will assist in developing a new Victorian Fire Management Strategy for a sustainable future for fire management in Victoria.
Foreword

Fire in the Victorian landscape has traditionally been dominated by bushfire. While there is good reason for that, it is time to develop a future-looking fire management strategy that encompasses all aspects of fire.

We need a sustainable and mature approach to fire across the landscape given Victoria’s changing population, the impacts of a changing climate, a move to more people living in urban and peri urban environments and a change in the use of the available land and the way in which communities live and interact.

Developing a holistic Victorian Fire Management Strategy that includes all environs of fire is important to Victoria’s future approach and must encompass the concept of shared responsibility.

This discussion paper aims to capture the key themes and strategic issues to assist the emergency management sector in scoping a forward-looking strategy. The paper puts forward some of the contemporary thinking about sustainable fire management to be considered as a first step in developing a new Victorian Fire Management Strategy.

This paper proposes that the development of the new fire management strategy be guided by the four themes of Connections and Networks, Incentives, Innovation and Investment.

The four areas have been identified in discussions with a range of emergency management organisations, local councils and key partners such as the Insurance Council of Australia, Regional Development Victoria, Environment Protection Authority and the Victorian Building Authority. However, all of us can be potentially affected by fire and this discussion paper is seeking feedback from individuals, community groups, business, industry, government, not for profit groups, academia and emergency management organisations.

This input is vital and I encourage your involvement. The Victorian Fire Management Strategy, as it is developed, must reflect the changes and address the future challenges for Victoria through to 2030. This discussion paper helps to shape our end result.

Your contribution is critical in helping us to build an innovative, collaborative and comprehensive approach towards achieving safer and more resilient communities through the way we manage fire.

Craig Lapsley PSM
Emergency Management Commissioner
Emergency Management Victoria
Then and now - the development of Southbank from 1985 to 2017
Introduction

Humans have always used fire: for warmth, for cooking, in agriculture, to manufacture and to manage the physical and natural environment. In Australia, our natural landscapes have evolved around fire; their ongoing health relies upon it.

Living with the prospect of fire across our landscapes in urban, peri urban, regional and rural communities is a reality but when uncontrolled it can cause death, injury and impact on property that leads to significant and broad reaching social, environmental and economic consequences.

We already work hard to reduce the number of fires and their impacts, through initiatives such as the Safer Together program which aims to bring land and fire managers and Victorian communities together to minimise the risk of bushfire. But to strive for greater prevention, while meeting emerging challenges to the sustainability of the current fire management system, will require holistic fire management across all environments. Preventing fires, and reducing the consequences when fires do occur has a flow on effect on the resourcing needed to manage the response to and recovery from fires.

While this makes sense, many of the current controls still focus on reducing the impacts of fires rather than fire prevention.

Emerging challenges mean Victoria needs to rethink the approach to fire management. Increased population densities, urban sprawl, an increasingly diverse and ageing population and climate change require adaptation to get the best outcomes for everyone.

A range of policy settings already exist across the landscape of fire. Victoria’s aim is to look at this holistically before, during and after fires.

The eventual end state will be a Victorian Fire Management Strategy that is a future-looking document encompassing fire in all environs including, for example, bushfire, building fires and hazardous material fires, whether the cause is accidental, deliberate or by natural events such as lightning.

Case studies used in this paper highlight the diversity of fire types that impact Victoria, the consequences of these fires and the need to plan for fire across all environments.

The impact and consequence of fire is significant in all aspects of Victorian life and Victoria needs to understand the future challenges fire will present to the community in metropolitan, regional and rural areas.

Have your say......

Visit engage.vic.gov.au/vfms to answer these questions

☐ What does fire management mean to you?
☐ What are your expectations of fire management now and into the future?
☐ Are we right to emphasise prevention? If not, why not?
The case for change

Emerging challenges

Victoria’s growing communities face many challenges, some of them unprecedented, which have the potential to put significant pressure on the sustainability of government services and infrastructure, including our fire management system.

Rapid population growth, high-rise development and medium to high density living, and changing demographics mean we are building and using land differently and therefore altering Victoria’s fire risk in distinct ways.

With more housing developments on the urban fringe, the risk to homes from bush and grass fires is increasing.

Climate change is leading to longer and hotter summer seasons and an increasing risk of fire in the landscape.

Other types of fires - such as tyre fires, and in landfill sites and coalmines - have had previously unforeseen impacts on communities.

These challenges are coming together to create situations where we are more dependent on each other both in the way we live and the way we respond to fire.

One option is to keep doing the things the same way, but as demand and interdependencies grow we need to rethink our approach and move towards a more sustainable system.

Emerging challenges - snapshots

From 1979 to 2013, the fire season has extended by almost 19%.

Victoria’s population will grow to over 10 million by 2051, with Greater Melbourne expected to grow to 8 million in that time.

Ageing Victorian population - the percentage of Victoria’s population over 65 is predicted to increase from 14% (0.8 million) in 2011 to 21.5% (2.2 million) in 2051.

Cost of fire events – Ash Wednesday 1983 economic cost (in 2009 AUSS) $578.73 million. Black Saturday 2009 cost $3.1 billion (tangible) and $3.9 billion (intangible).

The total annual economic cost of bushfires in Victoria is predicted to rise from an average of $172 million per year to $378 million per year by 2050.

Case Study: The Lacrosse High Rise Fire Docklands 2015

On 25 November 2014, an unextinguished cigarette on the balcony of an apartment caused a fire that spread from the 6th floor up to the top of the building on the 21st floor. Residents evacuated and while there were no deaths or injuries, there were damages of $2 million. An increasing number of people living in urban areas, particularly high-rises, makes incidents such as this an important consideration of the strategy.

Source: Investigation report on the Lacrosse Docklands Fire, MFB, 27 April 2015
The opportunity

The aim of the Victorian Fire Management Strategy is to provide the pathway to reduce the number and the consequences of harmful fires across Victoria for all types of fire, and for all communities through to 2030.

How we prepare for harmful fire will influence the safety and resilience of communities. Fire management is a shared responsibility, and together Victoria needs to prepare now for the challenges ahead.

The process of developing the Strategy will challenge the current approach taken before, during and after fires, and question if it will meet the challenges of the future.

However, the development of the Strategy will align with the "Strategic Emergency Management Priorities" which are:

- Protection and preservation of life is paramount.
  This includes:
  - safety of emergency services personnel
  - safety of community members including vulnerable community members and visitors/tourists located within the incident area;
- Issuing of community information and community warnings detailing incident information that is timely, relevant and tailored to assist community members make informed decisions about their safety;
- 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 stability;
- Protection of environmental and conservation assets that considers the cultural, biodiversity, and social values of the environment.

How we prepare for harmful fire will influence the safety and resilience of communities into the 21st century and beyond.

We need to prepare now for the challenges ahead.
A sustainable fire management system

This discussion paper, informed by a range of emergency management organisations, local government representatives and key partners such as the Insurance Council of Australia, Regional Development Victoria, Environment Protection Authority and the Victorian Building Authority, suggests that a sustainable fire management system is one of shared responsibility, in which we are guided by community values, are innovative and data driven. Eight overarching principles have driven this thinking.

A future focussed sustainable fire management system is one where:

- Communities influence and understand fire management
- We all work together and share the responsibility for fire management
- Innovation is encouraged
- Fire management approaches are continually challenged
- We’re guided by community values
- Resources are invested for the best public value
- The balance of fuel load management with the protection of biodiversity is maximised
- Decision-making and innovation is supported by shared data and research

Have your say......

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- Does this future fire management system meet our future needs?
- Are there any gaps in our thinking?
- Are we ready for the challenges of the future? Are the current systems enough?
At approximately 9am on 11 January 2016, the MFB was called to a property in Broadmeadows where they found a large fire in a pile of approximately 150,000 tyres, measuring 120 by 30 metres. The thick black smoke plume from the fire covered neighbouring suburbs, where residents were advised to stay inside and shut all doors and windows.

Tyre fires are generally very difficult to put out, and there were concerns that the fire may burn for days, however the fire was under control by the next morning. Concerns remained regarding the run-off of contaminated fire water into nearby waterways, however agencies worked together to resolve this and minimise the environmental impact. This incident highlights the variety of fires and their impacts that will be an important consideration of the strategy.

Source: More than 50 firefighters responding to Broadmeadows tyre fire MFB, 11 January 2016.
Reaching for the future

Achieving a sustainable and holistic future in fire management is going to require a change in thinking and a continuation of the transition from institutional approaches to a whole of system approach.

The Victorian Fire Management Strategy is not just about simply doing the same things better. It is about understanding what the future looks like and how Victoria can get the best outcomes for everyone.

Fire in Victoria is a complex issue. It is complex because of the convergence between where the bush meets the city; complex because of where our communities reside, work and recreate across the residential, natural and built environments. It is also complex because of Victoria’s diverse population; because of the many different kinds of fires and the different elements of fire management and organisations, agencies and government departments involved.

All options should be considered before deciding the best path to sustainable fire management in Victoria.

Your help is needed to work out what those options might be.

To begin the discussion, four areas are proposed as key to the future sustainability of Victoria’s fire management system. These are:

1. **Connections and networks**
   Strengthening and creating new connections between groups and within groups.

2. **Incentives**
   Motivating and supporting all of us to play our part in managing fire.

3. **Innovation**
   Continually challenging our approach to fire management.

4. **Investment**
   Investing resources for the best community value.

Each of these focus areas are expanded on further in the following pages. As you read them, please keep the following questions in mind:

- Is this the right approach? If not, why?
- Are there any other areas that should be investigated?
Case Study: The Hazelwood Mine Fire February 2014

The Hazelwood mine fire began on 9 February 2014 and was caused by embers spotting into the mine from nearby bushfires. It burned for 45 days and for much of that time sent smoke and ash over the town of Morwell and surrounding areas.

Significant impacts on the nearby community included adverse health effects, a downturn in business, medical costs and relocation from their homes.

While noting that it is impossible to quantify the cost of the Hazelwood mine fire, the Board of Inquiry into the mine fire estimated the total cost to the Victorian Government, the local community and the operator of the Hazelwood mine to be greater than $100 million.

The broad-reaching impacts of this event highlighted unforeseen consequences and will be an important consideration of the strategy.

Source: Hazelwood Mind Fire Inquiry Report 2014
Focus Area 1
Connections & networks

Understanding interdependencies, strengthening and creating new connections.

Fire management affects everyone. We all share the risk of fire and share the responsibility to manage that risk.

Current and future challenges have the real potential to put a lot of pressure on our fire management system and its sustainability.

These challenges can be met with a strong network of connections between and within government, industry, businesses, organisations and communities.

We need to value relationships and actively support their development and maintenance to do what we need to do effectively.

The Community Resilience Framework for Emergency Management highlights the importance of using community, social and business networks to “raise awareness, share responsibility and build self-reliance to strengthen resilience.”

Communities, and the diverse groups within them, working together to manage their fire risk is fundamental to the success of reducing the number of harmful fires and their consequences.

Agencies, organisations, business and industry connecting with communities, and with each other, provides opportunities for all of us to recognise the role we play before, during and after fires and how we can help each other.

Have your say……

Visit engage.vic.gov.au/vfms to answer these questions

☐ How important is this focus area “Connections and Networks” for you?
☐ How can we ensure a whole-of-community approach to fire management?
☐ What suggestions do you have for building stronger connections and networks?

“Working together as part of the community creates opportunities for people to learn from each other, while tapping into combined local knowledge, expertise and resources.”

Community Based Emergency Management Overview, EMV, May 2016
Focus Area 2
Incentives
Motivating and supporting all of us to play our part.

Strong networks and partnerships are essential to achieving communities that are safer from harmful fires and to minimising the impacts of fires, if they do occur. Everyone has a part to play, and we cannot strengthen or create networks without everyone playing their part.

Incentives help to create these networks by motivating individuals, communities, industry and organisations to get involved. Targeted incentives provide pathways for all of us to work together and help us to understand what our responsibilities in the overall picture are.

Incentives can support many different components of a more sustainable fire management system, such as innovation in fire management and technology, in building planning and design, and in land use planning.

They can help to build self-reliance among individuals and business. Insurance is available to protect ourselves from the consequences of fire, yet under-insurance is a major issue in Victoria. A recent study found that less than 50% of Victorians are adequately insured.

Incentives can take many forms and play a part in all aspects of fire management, some examples are:

- economic incentives (such as reduced insurance premiums for individuals and business who take action to reduce their fire risk, to encourage them to actively understand their risk, to reduce the risk, and build self reliance);
- knowledge (such as individuals, communities and businesses knowing and understanding their risk and what they can do, encouraging them to participate in reducing that risk and to work together);
- research (for example, evidence of the benefits of a certain technology or approach, encouraging organisations to use these to improve their systems and methods).

The current role of regulation and legislation in fire management as an incentive (and perhaps more importantly as a disincentive) should be explored further. Regulation and legislation provide important parameters within which we all operate, however the complexity of the current regulatory system may inhibit changes to support adaptability.

Have your say......
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☐ How important is this focus area ”Incentives” for you?
☐ What incentives do you think would help to motivate communities, individuals and businesses to get involved and why?
☐ Aside from incentives, how else can communities/individuals/business be motivated to get involved?
Having stronger networks and connections, and the right incentives in place, will help to work towards a future with fewer harmful fires. To keep up with the pace of change and challenges we need adaptability.

To keep challenging our approach to fire management, and embrace innovations in approaches, practices and technologies.

Innovation brings smarter ways of doing things and better systems.

Innovation is essential across all areas of before, during and after fires. There is the opportunity for innovation in all aspects of fire management, such as in building design and materials, community education and in ways to work together.

Connections and incentives provide the pathway to innovation. Research and technology provide the tools.

Learning and analysis is a core capability for fire management. Continuous improvement comes by learning from experience and research, reviewing the multiple causes and consequences of fires, sharing those lessons and using them to continuously challenge and adjust our approach. We must share the information, evidence and opportunities through our networks to benefit everyone.

Technology is already an integral part of everything we do before, during and after fires, but will play an even larger role in the future. Emerging technologies are being developed, such as in the combination of existing technologies to allow early detection and intervention of fires, and our constantly growing capability to connect with each other and share information. Technology has advanced rapidly over recent years, and the potential ways in which technology can help us achieve our goals are almost endless.
Focus Area 4
Investment

Investing resources for the best community value.

As urban areas grow, populations change and number of high fire danger days rise, maintaining the approach to fire management that we use today will mean investing more and more resources to maintain the current system. This runs the risk of becoming unsustainable.

There is a need to make sure Victoria is investing both government and non-government resources for the greatest benefit for everyone. This is about investment of time and effort, not just money. It’s about efficiency and effectiveness and is centred on what the community values.

To do this requires an understanding of the resources available, including people, equipment, systems, programs and other assets, and how they are being used. Currently, we don’t have the complete picture of those resources and the benefits.

External influences, such as climate change, will change the way we actively use fire as a tool. How we respond to the effects of climate change has the real potential to impact the landscape, making balancing fuel management with the positive benefits of fire and protection of biodiversity even more of a challenge. We must be open-minded about how we achieve that balance, and invest time and resources into research and work with traditional owners to gain the benefits of their indigenous knowledge of fire.

Individuals, agencies, organisations and government departments invest a lot of time in supporting the community and strengthening connections before and after fires. The value of the networks created by this work needs to be better understood, as does the skills of and time invested by volunteers. Recognising the resources we have, and how we can use these in a smarter, more efficient way to the greatest benefit for Victorian communities is a significant step towards a sustainable fire management system.

Have your say……
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☐ How important is this focus area “Investment“ for you?
☐ How can we complete the picture of how resources are currently being used and the benefits?
☐ Where do we invest resources to get the greatest benefit for everyone?
☐ What else can we do to get the greatest benefit from our resources?
Get involved!

Do you want to help shape the future of fire management in Victoria?

Your feedback will contribute to the development of a draft Victorian Fire Management Strategy prior to its finalisation.

Let us know your thoughts by submitting to

- engage.vic.gov.au/vfms
- VFMS.project@emv.vic.gov.au

Submissions are due by 15 December 2017.

If you have any questions, please email VFMS.project@emv.vic.gov.au
Victorian Fire Management Strategy
Project Control Board

A Project Control Board is in place to guide the development of the Victorian Fire Management Strategy. Members include:

- Country Fire Authority (CFA);
- Metropolitan Fire Brigade (MFB);
- Parks Victoria (Parks Vic);
- Department of Environment Land Water and Planning (DELWP);
- Emergency Management Victoria (EMV);
- Environment Protection Authority (EPA Victoria);
- Regional Development Victoria (RDV);
- Victorian Building Authority (VBA);
- Mount Alexander Shire Council;
- East Gippsland Shire Council; and
- Insurance Council of Australia (ICA).

A list of reference papers used to inform this discussion paper can be provided on request by emailing vfms.project@emv.vic.gov.au.

Linkages with emergency management reform

The Victorian Fire Management Strategy will draw upon the latest emergency management reform work, including the:

- Safer Together program;
- Victorian Community Resilience Framework for Emergency Management;
- Victorian Preparedness Framework;
- Critical Infrastructure Resilience Strategy; and
- development of the new Relief and Recovery model.
Case Study: Ship Fire at Portland Dockyards

On 3 November 2015, stock transport ship the Awassi Express docked at Portland, developed a fire in a 700 ton grain pellet silo within the ship used to feed the stock for export. Firefighting efforts concentrated on isolating the fire and slowly removing the stock feed while continuing to contain any fire or explosion risk.

There were no stock on board at the time, and there was no risk to the crew of approximately 50 personnel, however the fire did present some unusual complexities and there were a lot of learnings relating to the control of the incident.

This incident highlights the complex fires beyond bush or built environments that will be important considerations of the strategy.

Source: Review of the Port of Portland Emergency – Report Fire Services Commissioner, June 2012
Working in conjunction with Communities, Government, Agencies and Business

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www.emv.vic.gov.au