

Safer together

A new approach to reducing the
risk of bushfire in Victoria

The Government response to the review
of performance targets for bushfire fuel
management on public land



Contents

Ministers' foreword	3
Why we need a new approach to bushfire risk.....	4
What is bushfire risk reduction?.....	4
Why is fuel management so important?.....	4
Why use a risk reduction target?.....	5
The Inspector-General for Emergency Management's review of performance targets for bushfire fuel management on public land.....	5
Safer together	6
Bushfire risk reduction.....	6
Delivering the new approach.....	6
Priority one: Community first.....	7
Local decision making, year round.....	7
Tailored risk reduction strategies for the local context.....	7
Tackling risk on private and public land.....	8
A range of actions to reduce risk.....	8
Year-round bushfire planning: how we all play a role.....	9
Priority two: Land and fire agencies working together.....	10
Delivering fuel management across land types.....	10
Coordinated planning with each community	10
Getting more out of Victoria's investment in bushfire management	11
Priority three: Measuring success	12
Risk reduction targets	13
What does risk look like?.....	13
Managing fuel loads in both remote places and close to towns.....	14
2015 risk levels across the state.....	14
Measuring effectiveness	15
Measuring impacts.....	15
Managing the impacts of fire on wildlife and rare species.....	15
Priority four: Better knowledge = better decisions.....	17
Better evidence.....	18
Fire and environment	18
Fire and smoke	18
A framework to assess our impact.....	18
Constantly looking to improve	18

Photographic Contribution

Paul Hitch

Paul is a Ranger with Parks Victoria in the Western Melbourne-Northern Plains Region and has a personal affinity for all themes of photography. Through his images, Paul captures moments in time by effectively drawing on the emotion through light, texture and perspective. This is particularly evident in his natural landscape images.

Salahuddin Ahmad

Salahuddin works for the Department of Environment, Land, Water and Planning's Monitoring, Evaluation and Research Unit as a spatial data analyst. He devotes much of his spare time to chasing the perfect landscape, nature and travel photograph. He leads the department's fortnightly photo-walks and photo-imaging nights, and contributes many of his works to the department's image library.

ISBN 978-1-74146-858-8 (Print)

ISBN 978-1-74146-859-5 (pdf)

"Walking Home" © Paul Hitch

Ministers' foreword

Bushfires are a part of life in Victoria – but together, we can reduce their impact and build safer communities, a thriving economy and a healthy environment.

Our changing climate – bringing more hot days and less rainfall – means our bushfire threat is constantly increasing. Almost a third of our 5.6 million-strong population live in regional Victoria, thousands more make a tree-change every year, and the number of visitors to our coasts and rural areas continues to grow – attracted by our majestic land and seascapes. So more people are being exposed to that bushfire threat.

Protecting people will always be our highest priority in managing bushfire risk, but it is not our only priority.

We need to work together to protect the things we care about most – such as our homes, businesses, and plants and animals – for current and future generations.

Reducing bushfire fuel, reducing risk

Since the 2009 Black Saturday bushfires, the Department of Environment, Land, Water and Planning (DELWP), with partner agencies such as Parks Victoria, has reduced bushfire fuel through planned burning more than ever before.

But we constantly strive to improve the way we manage bushfire risks. That is why we are adopting all recommendations from the Inspector-General for Emergency Management's *Review of Performance Targets for Fuel Management on Public Land* – including moving from a hectare-based performance target to a risk reduction target.

Under this new approach, we'll measure **how effective** our fuel management activities are, not just **how much** we have burned. This is now possible because we can apply the knowledge we have about fires and use sophisticated modelling to tell us exactly what action should be taken where for the most impact.

Collective action: land and fire agencies working as one with communities

Planned burning on public land has always been – and remains – a key way of managing fuel loads. But reducing bushfire risk involves more than just reducing fuel in our forests and parks. Our new approach extends beyond the Inspector-General's recommendations, and the findings of any individual investigation or review.

We will work with local communities to understand what this risk means for them, the things people value, and the actions that we can collectively take to create safer, more resilient communities and ecosystems.

We will combine the expertise of fire and land managers with local knowledge, underpinned by world-leading science and technology. It is, quite simply, a smarter approach to bushfire management. It is about doing more to reduce risk of bushfire, and being more effective in how we do it.

Local landscape, local decisions

Under the new approach, communities will get more of a say on how we reduce the risk of bushfire, including where and when planned burning should occur.

Each landscape and community is different. We will partner with locals to find the most effective mix of actions to reduce bushfire risks and impacts.

The reality is – as people who've lived in rural communities for generations know firsthand – fires will always be a risk when you live in the bush. And change won't happen overnight.

More than ever, we need to draw on local knowledge and experience when planning the most effective ways to reduce fire risk – and to protect what matters most.

Our work will be ongoing, and we will consult with communities all year round.

Together, we can reduce fire risk and make our communities, economy and environment safer and more resilient than ever.



The Hon Lisa Neville
Minister for Environment,
Climate Change and Water



The Hon Jane Garrett
Minister for Emergency Services



Why we need a new approach to bushfire risk

Our state is one of the most bushfire prone areas in the world. Bushfire risk is increasing as our population grows and climate change results in more frequent, more severe weather conditions.

While bushfires will always be a threat, together we can make our communities safer, our economy stronger and safeguard our environment.

Victoria's land and fire agencies lead the world in capability and expertise. This stands us in good stead for facing the challenges that bushfire and other emergencies pose. But our agencies cannot do it alone.

Our land and fire managers must work together, and in close partnership with Victorian communities, to minimise the risk of bushfire to people, property, businesses and the environment.

To get the best results for our communities and environment, we need a smarter approach to bushfire management, one based on ensuring our actions are effective at reducing risk.

What is bushfire risk reduction?

Bushfire risk is the likelihood of a fire starting, spreading and impacting on people, property and the environment - the things we care about most.

We reduce risk by taking actions to reduce the likelihood and lessen the impact if a fire starts, for example:

- preparing and practising a fire plan
- reducing bushfire fuels through planned burning, mowing and slashing
- identifying neighbourhood safer places
- bushfire response (with aircraft, machinery and firefighters)
- declaring Total Fire Bans on days of extreme fire weather
- warning communities.

Our new approach to bushfire management is about doing more to reduce risk of bushfire, and being more effective in how we do it.

Why is fuel management so important?

Managing bushfire fuels on public land is an important way we protect our communities and our natural environment.

By reducing the leaves, bark, twigs and shrubs that fuel bushfires, we can reduce their intensity and make it easier for our firefighters to bring them under control. Planned burning is the main way we do this on public land.

We need to manage each landscape differently, so that our actions meet the unique needs of local communities and ecosystems.

A hectare target has been used to drive how much is burned each year to reduce the amount of bushfire fuel in our forests and parks.

The hectare target, however, cannot tell us how effective these activities are in reducing the risk of bushfire to the things we care about.



"Our new approach is about doing more to reduce the risk of bushfire, and knowing what we do is more effective. We will involve local communities in decision making, taking into account what people value in their local area."

Hon Lisa Neville,
Minister for Environment, Climate Change and Water

Why use a risk reduction target?

In February 2015, the government asked the Inspector-General for Emergency Management (the Inspector-General) for an independent comparison of the existing hectare target approach to bushfire fuel management on public land with an alternative risk reduction target.

The Inspector-General recommended a risk reduction target.

Using a risk reduction target instead of a hectare target means that we can focus our bushfire management activities (like planned burning) to areas where we know (through fire modelling) that they will have the greatest impact.

The government accepts this recommendation by the Inspector-General and will adopt a risk reduction target to guide our fuel management on public land from 2016/17. And we will go beyond this to deliver better outcomes for Victorians.

The Inspector-General's report includes four recommendations for future fuel management:

✓ Recommendation 1:

The Inspector-General for Emergency Management recommends a risk reduction target as the most effective form of performance target for bushfire fuel management on public land to protect life and property and guide investments in fuel reduction burning.

✓ Recommendation 2:

In the event that government adopts a risk reduction target:

- The Department of Environment, Land, Water and Planning (DELWP) transitions to this target through a defined program of activities and milestones. Effective transitioning will require DELWP to enhance their capacity and capability to implement risk-based planning and needs to be supported by appropriate performance measures and dedicated monitoring, evaluation and review.
- Government supports DELWP in making this transition.

✓ Recommendation 3:

The Inspector-General for Emergency Management recommends that DELWP:

- continue to develop and employ its capability to predict the smoke effects of planned burning, ensuring its planned burning processes remain consistent with the State Smoke Plan.
- adopt performance measures to monitor the quality and effectiveness of community engagement activities.
- continue to develop the reliability of its estimates of unit risk reduction costs. The availability of such estimates will be required to enable comparison and prioritisation of options for bushfire risk-reduction across the areas of prevention, preparedness, response and recovery, and would involve contributions of other emergency management agencies.

✓ Recommendation 4:

The Inspector-General for Emergency Management recommends that:

- DELWP report clear, publicly accessible information on bushfire risk and ecosystem resilience, and report on the key activities required to achieve outcomes for the community in these areas.
- DELWP's transition to risk-based planning and performance measurement is supported by a program of internal and external reviews.

The Victorian Government accepts all recommendations of the Inspector-General's review.

Safer together

A bushfire management approach that is more effective in reducing bushfire risk and driven by local knowledge and expertise.



Joe Buffone
CFA Chief Officer



Alan Goodwin
Chief Fire Officer, DELWP



Craig Lapsley
Emergency Management Commissioner

“By working as one we will be more focussed and more effective at reducing risk, and keeping Victorians safer”

Craig Lapsley,
Emergency Management Commissioner





Priority one: Community first

Bushfires in Victoria pose a real threat to lives, homes, jobs and the environment. Managing bushfire risk is an ongoing and shared responsibility – partnerships in which everyone has a role.

Under our new approach, we will involve local communities in decision making about bushfire management all year round – this means understanding what they care about most and working with them to determine local solutions to reduce bushfire risk.

Fire agencies already work well with communities to understand and reduce bushfire risk. But we need to build stronger partnerships with tailored approaches that work for our different communities.

Our knowledge of bushfires, combined with communities' understanding of what is important to them and their insight and experience, will inform our actions.

Local decision making, year round

The impacts of bushfire are best managed when we are all part of the decision making process. We will invest in stronger relationships with communities in high bushfire risk areas. We will work with existing community networks to promote and support learning about fire and other hazards in the environment, **all year round**.

Tailored risk reduction strategies for the local context

Local communities understand their local environments. They have deeply held values and firm views on how to best protect what is important to them. The level of bushfire risk we collectively accept, and the actions we focus on, must be informed by an open and ongoing conversation between land and fire agencies and local communities.

The actions of land and fire managers must be tailored to local needs. This means reducing not only the impacts of bushfire on life and property, but on businesses, important infrastructure and cultural values. Our actions must also be appropriate for the local environment – building the resilience of our plants and animals and ecosystems.

It also means taking a range of different actions to reduce bushfire risk and protect the things our communities care about most.

What's next: Strategic Bushfire Management Plans

DELWP and Parks Victoria have released the first generation of strategic bushfire management plans – describing our approach to bushfire fuel management on public land in Victoria.

In 2016, we will commence the second generation plans, involving communities in developing strategies to manage bushfire fuels across public and private land – bringing together local knowledge and values with world-leading bushfire science and modelling capability.

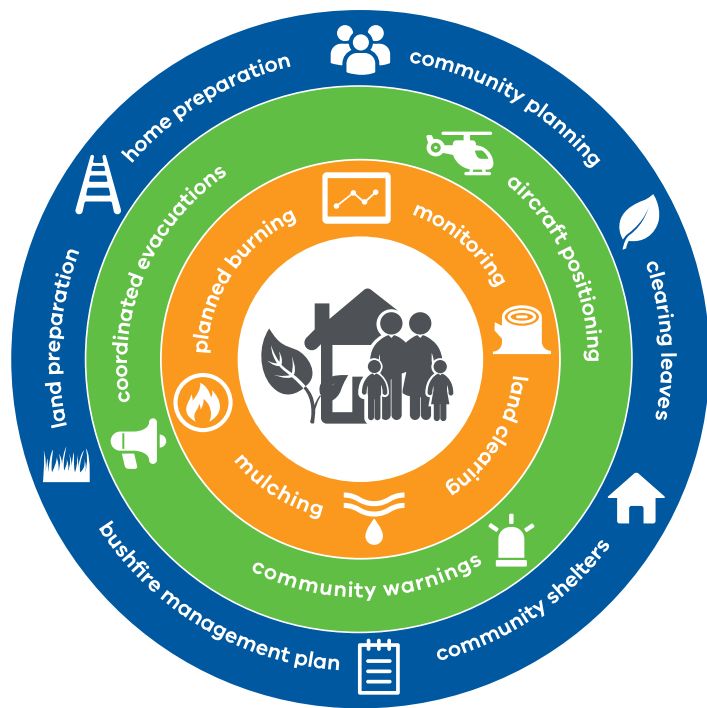
These new plans will be guided by a risk reduction target, and focus our efforts where they will be most effective – protecting what we care about most.

Tackling risk on private and public land

Risk modelling shows that fuel management around communities and in the bush is an important way to reduce risk. By knowing where fires are likely to start, we can reduce fuel loads to slow the spread of small fires and reduce the intensity of major bushfires. This gives our firefighters more opportunity to put fires out before they affect communities, industry and the environment.

Because bushfires burn on private and public land, land and fire agencies will work with local communities to deliver an integrated approach to fuel management.

A range of actions to reduce risk



We understand that no single strategy or action alone can manage bushfire risk. We must develop a multifaceted approach, using all the activities available to us.

Fuel management is just one strategy for reducing bushfire risk. Rapidly controlling bushfires, for instance, depends on appropriate fuel management to reduce fire intensity.

While planned burning may be the best strategy in some areas, in others, it may be less effective or lead to unacceptable impacts on people, businesses and ecosystems.

Beyond planned burning, we take many other actions to reduce bushfire risk – slashing, mowing, creating fuel breaks and maintaining infrastructure like water points and lookout towers in our forests and parks.

Other ways to reduce risk include positioning firefighters and aircraft across Victoria for rapid response to bushfires when they start, building standards for new housing, developing neighbourhood shelters, issuing community warnings and coordinating evacuations.

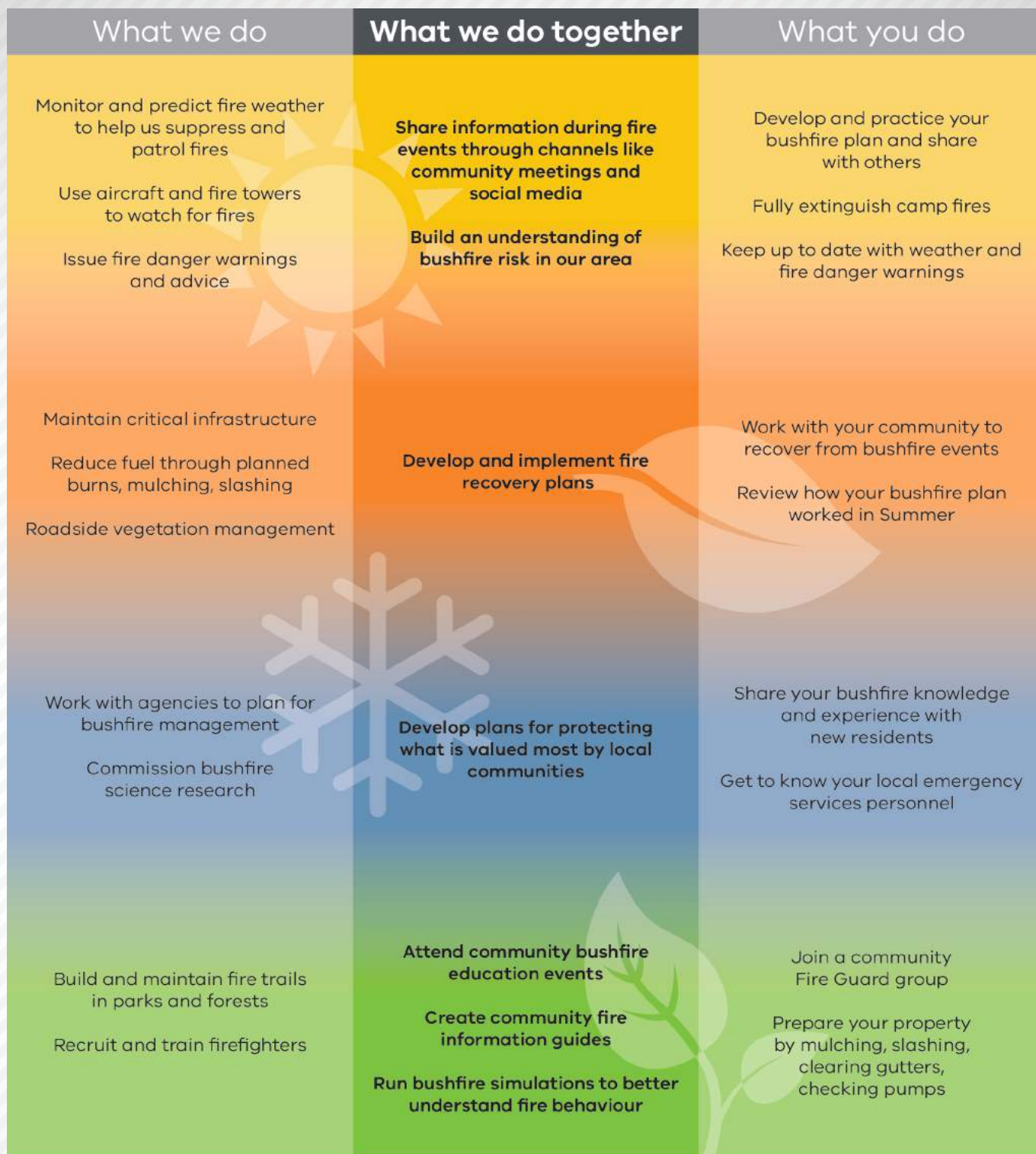
Our land and fire agencies will work in partnership with local communities through these initiatives – reducing the threat to lives, homes, jobs and the environment.

What we will do:

- Develop a whole-of-sector community resilience framework by 2017-18. This framework will be based on engaging with people living in high-risk communities to collectively plan for bushfire management.
- Involve local communities in decision making about bushfire management year-round, combining world leading science and technology with local knowledge and collective experience.
- Establish formal networks that connect land and fire agencies and communities in high risk areas, in ongoing planning for reducing bushfire risk.
- Develop ways to map and record community values and knowledge, and measure:
 - the quality and effectiveness of community engagement
 - community resilience for emergencies
 - emergency managers' contribution to community resilience.
- Share hazard data and risk modelling tools online and through partnerships so that communities can assess their own bushfire risk and develop strategies for action.

What you can do:

- All landowners and land managers have a responsibility to identify and control things that could cause or spread bushfire on their land.
- You can also help reduce risk by volunteering as a firefighter, manage your property's vegetation, clear leaves from gutters, and develop a fire plan for your home.
- Large private land owners can clear and undertake planned burning on their own land with support of land and fire agencies.
- You can take part in community education through your local CFA and DELWP contacts. Get informed about Neighbourhood Safer Places, fire shelters and tune into the warnings and advice about fires, particularly on high fire risk days.
- Bushfire management planning is undertaken all year round – you can take part in this discussion in your local area (see over page).



As part of our new approach land and fire agencies will plan together, identify ways to work together with communities and share what they hear from communities with each other. This will ensure that the work each agency does complements the work of other agencies and the community.

Lots of the risk reduction work will still need to be done, and you'll be able to get involved in bushfire risk reduction in your local area all year round. Your input will mean that what land and fire managers do, how they work together, and how they work with you makes us all safer.

You can do this by participating in things like:

- Community-based emergency management planning.
- Facilitated community capacity building processes.
- Workshops to run through bushfire scenarios that help communities to develop their own bushfire plans.
- Having input to plans that DELWP and CFA make about burns in a local area.
- Participating in council programs like Surf Coast's 'Weeds to Mulch'.
- Accessing available bushfire risk information for your area online to make your own bushfire safety plans.



“Bushfires don’t respect public and private land boundaries. Better links between agencies will boost our capacity to manage risk across both types of land, to keep communities safer. Our brigades will gain from additional knowledge and experience in dealing with bushfire risk.”

Joe Buffone, CFA Chief Officer

CFA and DELWP working in partnership

Priority two: Land and fire agencies working together

Victorian communities expect our land and fire managers to work together, and with the broader emergency management sector, to reduce risk and make people safer.

Under our new approach, we will plan and deliver bushfire management across public and private land. Risk reduction will drive all our activities from planned burning to fire response.

The creation of Emergency Management Victoria (EMV) has been a transformative step towards integrating the state’s emergency management sector to better serve the community.

It’s time to build on this for a more comprehensive approach to managing bushfire risk; one that takes into account all the strategies available to us and considers both private and public land together in future bushfire planning.

Delivering fuel management across land types

Managing bushfire fuels on public land is a key strategy for reducing risk. DELWP, Parks Victoria and CFA will work together to increase the participation of local brigades in planned burning and to share access to resources, vehicles and other equipment. They will work closely with other land managers, such as VicRoads and local councils.

This will mean greater CFA involvement in burns on public land. It will also create new opportunities to reduce bushfire fuels across the boundaries onto private land and roadsides.

Coordinated planning with each community

As managers of public land, DELWP and Parks Victoria play an important role in rapid response to bushfires with CFA, as well as maintaining roads and other crucial infrastructure to enable bushfire response and recovery activities.

Preventing bushfires from starting is essential. While we cannot prevent lightning strikes, we can use good planning to reduce the spread and intensity of resulting fires. We can work to stop fires caused by people, electricity lines and other infrastructure.



"We are now better informed to target high risk areas. With more science and rigour behind our decisions, combined with year round community input... we know where we need to undertake planned burns to protect lives."

Alan Goodwin, Chief Fire Officer, DELWP

There are many other strategies that work together to reduce bushfire risk, including:

- land use planning and controls
- measures to prevent fires igniting
- community education and preparedness
- fire response strategies
- availability of fire refuges
- robust evacuation procedures.

That is why land and fire agencies will work in partnership with communities, to decide on the right mix of risk management strategies for each landscape and community.

The government sees the adoption of a risk reduction target as a key step in building an integrated approach to managing bushfire risk, one that extends beyond planned burning on public land.

Getting more out of Victoria's investment in bushfire management

Ultimately, Victoria's range of bushfire management activities, not just planned burning on public land, will be evaluated using a risk reduction target.

Government will select, and invest in, the strategies that will deliver the best outcomes for Victorians.

This investment will be based on getting the right mix of strategies – from prevention, preparedness, response and recovery – to ensure the best results for community safety, local businesses and the environment.

To deliver this, EMV will lead development of a State Bushfire Management Strategy. This strategy will be the basis for the government's integrated investment in land and fire agencies.

To support implementation of the strategy, we will also improve how the costs and benefits of all risk reduction activities are measured, so that investment is targeted to the most effective solutions.

What we will do:

- During 2016, DELWP, Parks Victoria and CFA will work together to plan and deliver a fuel management program on public and private land.
- EMV will lead a State Bushfire Management Strategy to guide future investment in bushfire management across public and private land in Victoria. This strategy will consider the role of all public land managers, along with the role and contribution of private land managers.
- Establish an integrated planning framework for fire and other emergencies that incorporates mitigation, response and recovery activities.



From top L-R: Echidna © Paul Hitch; Vincent Street, Daylesford © DELWP

Priority three: Measuring success

Bushfire management must reduce bushfire risk to what we care about most. At the same time, we must avoid unacceptable impacts of our risk reduction work on communities and ecosystems.

Under our new approach, we will measure and report on our progress: where we have reduced risk and what the impacts are on people and the environment. We will measure how effective our partnerships are.

To be successful, we must reduce the risk of bushfire in a way that avoids unacceptable impacts.

To achieve this we need to measure the effectiveness of our actions to reduce bushfire risk, not simply the amount of activity undertaken.

We must also measure and understand the impacts of our activities on communities, businesses and ecosystems. Many people – including asthma sufferers, grape growers and bee keepers – and many native plants and animals can be affected by planned burning and it is important we understand these impacts.

What we will do:

- From July 2016, we will maintain bushfire risk at or below 70 per cent of its maximum, through fuel management on public land. Over time this target will apply to all activities we undertake to manage bushfire.
- Publish the activities on DELWP's website that we plan to undertake on public land to achieve the risk reduction target.
- Measure and report annually on a range of measures in the delivery of the fuel management program on public land:
 - performance against the risk reduction target
 - the activities undertaken to achieve the risk reduction target
 - hectares treated
 - costs and funding
 - smoke impacts
 - impacts on plants and animals
 - effect on the local environment's resilience
 - community engagement.
- Release an enhanced monitoring, evaluation and reporting framework that covers all aspects of bushfire on public land, by 2017.
- Set monitoring, evaluation and reporting objectives across whole of fire management sector by 2018.

Risk reduction targets

The first recommendation of the Inspector-General's review found a risk reduction target to be the most effective form of target for fuel management on public land to protect life and property. The government is adopting this recommendation.

From 1 July 2016, our fuel management program on public land will be driven by a state wide target to maintain bushfire risk at, or below, 70 per cent of Victoria's maximum bushfire risk. Based on the current assessment of risk, this will involve treating between 225,000 and 275,000 hectares in 2016-17.

What does 'keeping risk below 70 per cent' mean for fuel management?

In Victoria, there will always be a level of risk for bushfire. We talk about current levels of risk as being the percentage of risk 'left over' after fuel loads in the forest have been reduced – either through fuel management or bushfire. We call this 'residual risk'.

Maximum risk: if bushfire risk is 100 per cent this means there has been no fire in the landscape and no fuel reduced and we are at maximum risk where fires will spread and impact.

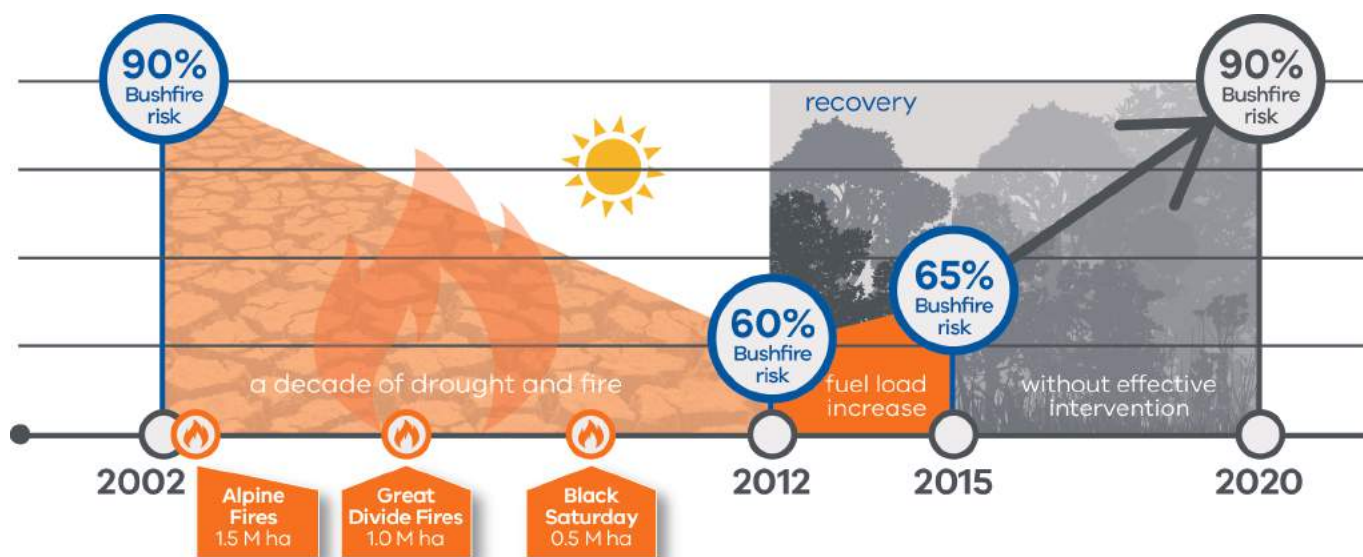
Target risk: if bushfire risk is at 70 per cent this means that bushfire fuels have been reduced to the point where impacts to life and property are reduced by about a third of the maximum risk.

Through years of research and modelling, experts and communities have told us that 70 per cent risk is the right level for our statewide landscape.

Using fuel management on public land alone to reduce bushfire risk further means we would need to burn to a level that could not be sustainable for our communities. There would be significant impacts on vulnerable people, businesses, plants and animals. Burning even more may not be achievable because of the weather conditions required for planned burning.

This is why, under our new approach, fuel management on public land is only one part of many integrated strategies that consider private and public land together with all bushfire risk reduction activities.

While our bushfire risk target will only apply to the delivery of the fuel management program on public land in the immediate term, we will build our systems and processes to enable a bushfire risk target to guide planning and investment across all bushfire risk reduction activities on public and private land in future.



What does risk look like?

In 2002, bushfire risk in Victoria was almost 90 percent. Following a decade of drought and fire which included the 1.5 million hectare Alpine fires in 2002-2003, the 1.0 million hectare Great Divide fires in 2006-07 and the 0.5 million hectare 2009 Black Saturday fires, bushfire risk fell to below 60 percent in 2010.

With the recovery of our forests and parks from the impacts of these fires, and as fuel loads increase, bushfire risk has risen. It is now at 65 percent. Without effective intervention, it is likely to return to 2002 levels (almost 90%) by 2020.



Parks Victoria and DELWP firefighters

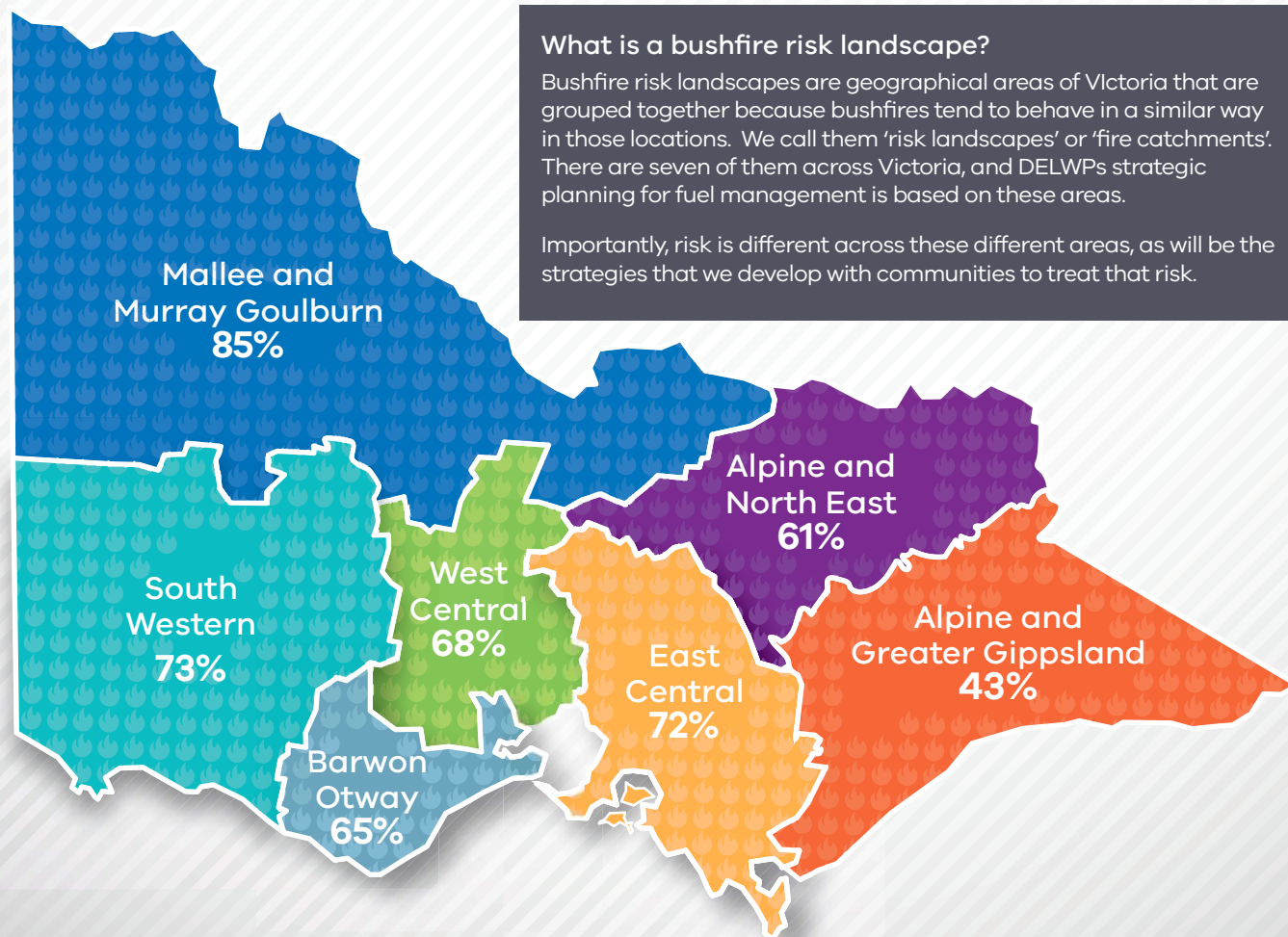
Managing fuel loads in both remote places and close to towns

Under our integrated, risk-based approach, fuel management such as planned burning will be conducted in all parts of the landscape – around towns and assets and in the back country.

Modelling shows that we can significantly reduce risk through fuel management in remote areas. Knowing where fires are likely to start means we can reduce fuel loads and stop small fires from building momentum and spreading.

This stops them from becoming major bushfires and gives our fire agencies greater opportunity to control these fires before they affect our communities.

2015 risk levels across the state





Measuring effectiveness

A risk based approach to bushfire management needs to be supported by appropriate performance measures alongside dedicated monitoring, evaluation and review.

Performance measures will enable us to understand the effectiveness and impacts of the activities that we undertake – to communities, to bushfire risk, to fuel loads, to ecosystems and to other things that we value.

Because Victoria is vast and varied, we will analyse **where** in the landscape our activities will have the greatest effect in reducing risk, including where fuel management can make our natural environments more resilient.

Monitoring and reporting are essential to meet community expectations that our land and fire agencies will be transparent and accountable for the actions taken to reduce bushfire risk.

Measuring impacts

The highest priority in managing bushfire is to reduce the threat to life and property. This priority remains. But the Inspector-General's review also found that we need to think about more than this.

We need to understand and manage the effects of bushfire and planned burning on Victoria's native plants and animals. We need to know about the effects of fire on air and water quality, including the impacts of smoke from planned burning.

We will implement a number of performance measures to monitor and evaluate the bushfire management program. We will report annually on our performance against these measures to provide confidence to Victorian communities. This will also drive continuous improvement in the effectiveness of our bushfire management program.



Managing the impacts of fire on wildlife and rare species

We work closely with the community and local environmental groups to gather information about local flora and fauna, particularly threatened or rare species.

In the case of the South-eastern Red-tailed Black Cockatoo, we are trialling different kinds of planned burns to manage fuel while preserving the bird's food source.

Planned burns and bushfires that scorch the crowns of the trees can reduce the amount of available seeds favoured by the cockatoos. We are investigating options for protecting the cockatoo by compiling data and conducting burning trials designed to reduce crown scorch. Our report on the results of these trials will inform bushfire risk management approaches in cockatoo habitats in the future.

Left: South-eastern Red-tailed Black Cockatoo © Nick Talbot, DELWP



Monitoring near Marysville



Hanging Rock Winery © Louise Scott

Priority four: Better knowledge = better decisions

Protecting people will always be our highest priority but we need to manage a healthy landscape for future generations.

Under our new approach, we will continue to invest in science and technology. We use this insight to target our actions where the risk is and ensure they are appropriate for the local environment.

We know we can make better decisions by combining local knowledge and expertise with world-leading science and technology. By continually learning and adjusting our actions, we will achieve better outcomes for the local community and the environment.

What we will do:

- Continue to invest in new science to address knowledge gaps and reduce uncertainties in our bushfire modelling.
- Improve how we measure the health of environments.
- Continue to develop smoke impact modelling and develop a more integrated approach across agencies to predict, communicate and reduce smoke impacts to communities.
- Develop a comprehensive framework for measuring the costs and benefits of bushfire management strategies, considering key community, environmental and economic values.
- Release an enhanced monitoring, evaluation and reporting framework that covers all aspects of bushfire.
- Invest in better ways to capture and share information with partners and communities, including capturing local knowledge and experience.



Ballyrogan © Salahuddin Ahmad

Better evidence

Risk is dynamic and constantly shifting, so we need to keep building on our evidence base. We will continue our investment in science, and in partnership with research institutions, to build knowledge of the relationship between fire and the environment and to better manage risk.

Fire and environment

Our first priority will be to better understand the relationship between fire and sensitive environments. We know that fire is an important part of how environments survive. We will improve our ability to measure and monitor to help us to effectively plan for the long term and across landscapes.

Fire and smoke

DELWP and the Environment Protection Authority (EPA) are also working with universities to improve forecasting of smoke behaviour – where it will go and how intense it will be – and understanding its impact on communities. We will build this knowledge into future planning so that we can work with communities and business to manage the impacts of smoke.

A framework to assess our impact

We will develop a way to assess the costs and the benefits of the range of bushfire risk reduction strategies and actions we take on the things we value – both how effective they are, and the impact. This include impacts on life, property, critical and community infrastructure, business, cultural heritage, ecological resilience, biodiversity including threatened species, and ecosystem services, such as water, landscape amenity, carbon and climate moderation including smoke.

Phoenix RapidFire, our advanced computer model, can predict how bushfires are likely to spread so we can see what the likely impacts might be.

It also tells us which activities could be undertaken in which places to reduce the potential damage of bushfire.

Constantly looking to improve

Continuously learning and adjusting our actions to reflect our changing environment, social trends, and the expectations of communities will build our knowledge and our capability to lessen bushfire damage.

We have a head start. Phoenix RapidFire, our computer modelling for risk reduction, is best practice and world leading. Through DELWP and Parks Victoria, our framework for monitoring, evaluation and reporting will now better measure the success of our risk reduction activities.

We will boost the capability of our models to look at all the different things we want to protect in our local areas, based on input from communities about what they value. And we will improve how we measure the impact our bushfire management activities have on strengthening our environment.

This evidence will be embedded in our future decisions and become part of our knowledge and capability for better bushfire management.

"Our new approach is about ensuring we have the best evidence-based approach to reducing the risk of bushfire and making Victoria a safer place for our communities."

The Hon Jane Garrett,
Minister for Emergency Services





© The State of Victoria Melbourne 2015

Authorised and published by the Victorian Government, 1 Treasury Place Melbourne.

This work is licensed under a Creative Commons Attribution 3.0 Australia licence. You are free to re-use the work under that licence, on the condition that you credit the State of Victoria as author. The licence does not apply to any images, photographs or branding, including the Victorian Coat of Arms and the Victorian Government logo. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/3.0/au/deed.en>

Printed by Impact Digital, Brunswick

ISBN 978-1-74146-858-8 (Print)
ISBN 978-1-74146-859-5 (pdf)

Accessibility

If you would like to receive this publication in an alternative format, please telephone DELWP Customer Service Centre 136 186, email customer.service@delwp.vic.gov.au, via the National Relay Service on 133 677 www.relayservice.com.au. This document is also available on the internet at www.delwp.vic.gov.au

Disclaimer

This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication.

www.vic.gov.au

