

## Submission to the Inquiry into the 2019-20 Victorian fire season

by

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### Matters Addressed

This submission relates to the following terms of reference:

- Effectiveness of Victoria's operational response to the 2019-20 fire season, specifically:
  - availability and utilisation of private assets and resources (including plant equipment) to support emergency preparedness and response
  - planning and response mechanisms to protect biodiversity threatened by bushfire
  - effectiveness of the existing workforce model to support response, relief and recovery.
- In the context of bushfire preparedness, assess the readiness and responsibilities of statutory agencies, Local Government and State Government bodies.
- Review of all opportunities and approaches to bushfire preparedness, including different methods of fuel and land management (for example 'cool burning', mechanical slashing, integrated forest management, traditional fire approaches) to protect life and property as well as ecological and cultural values.

### Personal Expertise and Knowledge

By way of background I was the DSE Area Fire Manager for north east Victoria (now known as the Hume Region) from 2001 through to 2011, and Regional Director Hume Region from 2011 until retirement in 2014. During that time I lead the regional response to the 2003 Alpine Fire, 2006 Great Divide Fire, the 2009 Black Saturday Fire and the 2013 Harrietville Fire. I also lead and oversaw a significant increase in planned burning. Prior to my role in fire, I spent a number of years in catchment management, and before that 9 years in research covering both forest hydrology and productivity of pine plantations. As such I feel I can comment authoritatively on the following matters in relation DELWP's role and public land.

### Effectiveness of Victoria's operational response to the 2019-20 fire season

As I have been retired for a number of years I don't intend to comment on the operational detail, but rather on the policy settings, both current and in the future.

- *availability and utilisation of private assets and resources (including plant equipment) to support emergency preparedness and response*

The resources that are drawn upon for both preparedness and response on public land in the main come from DELWP, Parks Victoria and VicForests. The cessation of native timber harvesting by 2030 will have a significant impact on operational capability, both in terms of expertise and availability of equipment. VicForests provides staff to support preparedness, expertise in incident management and on-ground operations, and contractors who have machinery which is integral to forest fire fighting. A couple of examples.

Containing the Murrindindi fire from Black Saturday was critical in terms of protecting Melbourne's water catchments. At the time I tasked a highly experienced VicForests person to develop the containment strategy which was successful. VicForests staff have experience and skills in managing high intensity fire as a result of undertaking regeneration burns, a skill that does not exist with DELWP or Parks Victoria staff.

They also have intimate knowledge of the forests and terrain surrounding Melbourne's water catchments, which is invaluable. The bottom line is that they have forestry training, a skill that is rapidly diminishing in DELWP, and will largely disappear by 2030, leaving our catchments and forests even more exposed to the impacts of bushfires.

A lot of machinery now used to construct control lines is sourced from logging contractors, and the evolution of the use of excavators and harvesting machines has revolutionised the way it is done. Importantly this equipment can be used to remove dangerous trees and protect the safety of firefighters in what is a dangerous and sometimes unpredictable environment. When campaign fires occur, sourcing enough equipment is a real challenge and that will be further compromised in the future.

Another perverse outcome will be the loss of stores of seed, particularly Mountain Ash and Alpine Ash, which is crucial for regenerating areas impacted by too frequent fire. Following the 2013 Harrietville fire seed from VicForests was crucial in reseeding large areas of Alpine Ash which would have become wattle dominated scrub otherwise.

In summary, phasing out the native timber industry will result in a loss of critical skills, availability of equipment and resources to assist in recovery, which will put Melbourne's water catchments at greater risk in the future.

- *planning and response mechanisms to protect biodiversity threatened by bushfire*

This fire season has exposed a serious flaw in replacing the hectare-based target with a risk reduction target, which commenced 1 July 2016.

Following the 2003 Alpine Fires, the Environment and Natural Resources Committee of Cabinet (ENRC) conducted an inquiry and one of the recommendations was that 5% of Victoria's public land should be fuel reduced each year. This was picked up in the Black Saturday Royal Commission and was also one of its recommendations. Setting a 5% target was however a blunt instrument, particularly when there are forest types and ecosystems (such as the Mountain Ash and Alpine Ash forests, rainforests, Red Gum forests, and alpine high plains) which are simply not suited to broadscale burning.

The Bushfires Royal Commission Implementation Monitor concluded in 2013 that the target of burning 5% of public land to reduce bushfire risk was not achievable, affordable or sustainable. This was a reasonable conclusion given resource constraints, too frequently burning the same areas (to compensate for those areas not suited to burning), and pushback from the community regarding impacts of smoke on tourism, wine production and community health. Unfortunately what was not given proper consideration was setting a more appropriate hectare based target which excluded the areas not suited to burning, which I recall was around 260,000 ha. This more realistic target was and is achievable as evidenced by the planned burning targets achieved in the north east of the state prior to implementation of the bushfire risk target approach.

This fire season has shown there is a need for both a bushfire risk target (focus on protecting life and property) and a hectare based target (focus on protecting the ecological integrity and diversity of our public land). Put simply, both approaches are needed and should work in unison, otherwise the devastating impacts on our flora and fauna seen this fire season will become more frequent with the impacts of climate change.

- *effectiveness of the existing workforce model to support response, relief and recovery*

Around 2011 the then Secretary of DSE, Greg Wilson, established Regions recognising that programs are best integrated at the regional level. Under this model accountability for fire prevention, preparedness, response (first attack) and recovery sat with the Regional Director, who could direct and allocate all regional resources to plan and implement. This further enhanced changes that occurred as a result of the ENRC Inquiry, which saw devolution of planned burning approvals to the then Area Fire Managers. In my view the Regional Services model was highly effective, and by way of example the area of planned burning significantly increased whilst it was in place.

Unfortunately this model was dismantled in response to **one** escaped plan burn in Central Victoria, and was replaced with a centralised model that does not effectively integrate at the regional level. Centralised

models stifle agility and local decision making, and ultimately result in paralysis of action. The centralised part of the organisation also tends to be over resourced at the expense of the service delivery part of the organisation, and lacks people with operational service delivery experience.

Clearly there needs to be a chain of command from Incident Controller to Regional Controller to State Controller when it comes to response and preparedness when extreme fire weather is forecast, and I am not suggesting that this should change. The efficacy of this is however compromised with the current organisational arrangements in DELWP.

**In the context of bushfire preparedness, assess the readiness and responsibilities of statutory agencies, Local Government and State Government bodies.**

One of the challenges in managing fire in Victoria (and elsewhere in Australia and the world) is the ever increasing built assets at the interface between public and private land. This has been a major policy failure by state and local government in continuing to allow housing development and subdivisions adjoining the public land interface. This has posed an extraordinary burden on the fire agencies, and in my view has resulted in the current flawed approach to managing risk reduction.

One of the key changes following the Stretton Royal Commission was to move settlements out of the forest, but we have now gone full circle. The development of tools such as Bushfire Attack Level and associated building codes goes some way to managing risk, however it does not solve the key issue about on-going development in and against areas of high fire risk. The government has introduced planning controls in relation to sea level rises as a result of climate change – the same needs to be done to manage the increased risk and frequency of fire.

I am aware there has been a push by some to increase clearing around settlements, but this is not the answer, and in fact is a perverse outcome from an environmental perspective. Landholders must take accountability if they chose to live in these high risk environments, and government must take a lead and overhaul the planning provisions so that this problem does not continue to grow. Local government should also take a greater role in asset protection, as it is their decisions that allow assets to be put at risk.

**Review of all opportunities and approaches to bushfire preparedness, including different methods of fuel and land management (for example 'cool burning', mechanical slashing, integrated forest management, traditional fire approaches) to protect life and property as well as ecological and cultural values.**

Unfortunately there has been a view put forward during this 2019-20 fire season that planned burning has no impact when conditions are extreme. This can be farther from the truth. Evidence presented at the Black Saturday Royal Commission showed that the Beechworth fire was initially slowed due to running into an area that been planned burn and impacted by a previous bushfire. Had this not been the case the fire would most likely have impacted the entire Ovens Valley from Myrtleford to Bright, with significant loss of life. Ultimately this fire was stopped by a planned burn a couple of days later when it crossed the Kiewa Valley. Planned burns are unlikely to stop fires under extreme conditions but they can certainly reduce the potential impact.

In relation to protecting ecological values, my view is that there needs to be broad scale burning as previously discussed. Ecosystems which have fire intervals of sometimes multiple decades are at dire risk with climate change, along with the other values they produce such as high quality water. This has already started to play out in north east Victoria where some areas of Alpine Ash have been successively impacted by the 2003, 2006 and 2013 fires. Following the 2013 fires an extensive area was reseeded with the seed largely being sourced from VicForests. This is not a sustainable situation, and I understand seed stocks following this last fire season are at an all-time low.

Reducing fuel loads in fire tolerant ecosystems is the key to protecting the more vulnerable ecosystems, and one approach is to do this at the landscape level. In more recent times this was first trialled 8 or so years ago in the Upper Murray in the Dartmouth catchment, with a landscape burn unit of around 20,000 ha. The approach was to burn every one or two years with fire moving around based on ignition points and fuel loads (fire history), with a relatively small percentage ultimately being burnt (10-15%). The intent was to create a mosaic of fuel loads (fire history) over time at a landscape scale to better enable suppression,

and also importantly to minimise bushfire impacts on the vulnerable ecosystems contained within, such as Alpine Ash forests.

There are large tracts of public land in East Gippsland, much of the north east, Grampians, and the north-west, where this approach or variants of it could be applied. These planned burns generally do not require a lot of resources - a few people and a helicopter for ignition, and some resources to round up when and if fire starts to impact on the public/private land interface, though generally this should be minimal and will be staged. My view is that resource constraints should not be an issue with landscape burns, and therefore not an excuse to implement. On the other hand planned burns adjacent to developed areas generally demand large amounts of resources, both in planning and implementation. However there are efficiencies to be gained here, and I believe there should be a thorough review to ensure resources are used efficiently and strategically – this definitely was not the trend in the few years leading up to when I retired in 2014.

If the ecological integrity and diversity of our public land is to be protected then fuels need to be managed at a landscape level.

In closing I am aware that the government is committed to addressing climate change, and part of this commitment needs to focus on new ways and approaches to planned burning which should be based on targets which are both risk and hectare based.