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Fogarty's Gap fire, 9/1/2026

SUBMISSION: Inquiry into the 2026 summer fires across Victoria

March 2026

To the Legislative Council Environment and Planning Committee,

Friends of the Earth Melbourne (FoEM) welcomes the opportunity to make a submission to the Inquiry into the 2026 summer bushfires.

FoEM is a membership-based, community-focused environmental justice organisation, which has been active in Victoria for more than 50 years. It is active across many topics relevant to this inquiry, including community resilience, climate change, land management, and fire.

A significant number of our staff and volunteers live in communities affected by the 2026 fires and are active in emergency organisations, such as the SES and CFA, as well as the recovery effort. Their experiences and perspectives from this summer's fires are reflected in our submission.

A statement on the Inquiry timeline and submission deadline March 15

While we appreciate the detailed scope of the Inquiry – and agree that inquiries into such significant events are important in order to integrate learnings and ensure preparedness in the future – we query the short timeline of this investigation and caution all parties about leveraging such serious events for political gain. While an inquiry presents an important opportunity, the impacts of the fires remain very raw for affected communities, where many people are still stabilising and remain focused on meeting their immediate needs and rebuilding their lives. Murrindindi Shire, for example, experienced almost half of the total statewide impact from the 2026 summer fires, with 193 homes destroyed and many residents, businesses and community groups still in the early stages of recovery. Respect for recovering communities' lived experience – and their essential contribution to an inquiry of this nature – may mean granting people from affected areas additional time to contribute to this process.

Summary of Recommendations

Climate change and fire

- Climate change/global heating is making fire seasons longer and more intense. This is having significant impacts on firefighters, resources like trucks and aircraft, the environment, and rural and regional communities. We must stop contributing to the problem. That means ensuring a rapid and complete transition away from our current reliance on fossil fuels to a mix of renewables, storage and energy efficiency, as rapidly as possible.

Emergency Services

- Our emergency services are incredibly professional organisations, which ensured Victoria was ready for this summer's fires. They prepared for extreme conditions and managed the fires effectively, responding quickly as fires started.

- There is a need for continued investment in secure, year-round jobs for FFMV firefighters and skill expansion within these roles. While FoE opposes the current broad-acre approach to planned burning, we support regional land management activity that

can help retain the employment of skilled firefighters. Outside of November to March, FFMV permanent staff could help manage visitation (including maintaining roads, walking tracks, campgrounds, picnic areas etc.) as well as conduct ecological monitoring, restoration and management works (this should include the expansion of field staff (AWU Band 3 roles and AWU Band 4 roles). Improved working conditions for seasonal firefighters (Seasonal Forest and Fire Operations Officers), as advocated for by the AWU, is also essential and will increase the state's ability to detect and suppress fires early.

- A review into whether additional rappel crews need to be established within FFMV would be beneficial ahead of future events. As an interim measure, we suggest that a third Hover Exit crew (5 crew members) could be established at Horsham in order to expand rapid remote area response capability in Western Victoria.

- The government must replace pumpers/tankers/appliances at a rate higher than the aging rate. The CFA and Fire Rescue Victoria (FRV) fleets are going backwards – and replacement levels are not allowing many older appliances to be replaced within the recommended timeframe.

- This summer saw the first ever deployment of a volunteer arduous/remote area firefighting team within the CFA. This is a welcome development. We must continue to expand the arduous/remote area firefighting capacity within CFA to explicitly recruit new members from urban areas that are outside CFA brigade catchment areas.

- The government must continue to invest in a more flexible fleet of fire fighting vehicles in the CFA, including ultra light tankers, which can be driven with a regular license, and safely crewed by 2 people.

- There should be a full assessment of the changing nature of the population in regional Victoria and the urban fringe and the resulting changes in fire profile. It may be necessary to change the makeup of appliance allocation to local brigades, with more use of new pumper/tankers in areas undergoing rapid urbanisation, more use of ultra heavy tankers in the west and north to battle fires in areas with dwindling water supplies, and better use of technology such as thermal imaging cameras mounted on tankers to ensure tankers can maximise the use of available water and so on.

- As fire seasons become longer, there is greater pressure on all firefighters, especially volunteers who need to take time off work to attend fires. The committee should consider possible additional support for people taking extended time away from work and family commitments to attend fires.

- As fire seasons get longer in both hemispheres, Australia is at risk of losing access to the Large Air Tankers (LATs) that we currently lease from North America. At present Australia only owns 1 LAT, which is owned by the NSW Rural Fire Service. Yet we require 6 or 7 LATs to be available each summer. The committee should consider whether

Victoria should also purchase its own LAT, which can then be leased to the northern hemisphere in our winter. It should also consider whether leasing arrangements for our large (type 1) helicopters are adequate given fire seasons are getting longer in both hemispheres.

Environment

- There should be *no* return to a hectare fuel-reduction burning target – this will increase ecological damage across the state, without significant benefits to human safety or protection of human assets. Funding place-specific research, so that our bushfire fire mitigation strategies can *work with* Victoria's landscapes and specific vegetation, would be far more effective than any blanket application. We note the growing research that demonstrates that fuel reduction burning is most effective when done within 3km of assets and hope that a thorough assessment of current burning operations will be recommended by the committee.

- The state invests enormous amounts of money into fuel reduction. For instance, $160 million was allocated in 2023-24 on 'fire risk reduction strategy'. Rather than funding more fuel reduction, Victoria should allocate funding to:
    - Carrying out an independent assessment of the ecological impacts of current fuel-reduction programs.
    - Protect and manage forests to build their fire resilience. Specifically, this means allowing forests to mature to a less flammable phase.
    - Allocate additional funds to expand the state firefighting workforce to aid the rapid detection and suppression of new fires in the landscape.

- It is essential that the Committee recommend that the government modify fuel reduction burning practices to ensure that, when they are employed (strategically and close to towns and homes – *not* at scale in forested reserves), that they do not cause ecological damage (for example, the loss of mature and large habitat trees). This should include:
    - Requiring Planned Burn Controllers to develop strategies to protect ecological assets, such as habitat trees and known areas containing threatened species or fire sensitive communities in their fire management plan for each burn.
    - The Australian Workers Union (AWU) suggests the addition of a further 2 Field Assessors per fire District (increasing from 16 to 48 state wide) which would facilitate the extra ecological assessment work prior to burns being undertaken.
    - The committee should be mindful of recent research that shows that the effectiveness of fuel reduction burning to protect human assets, like houses, declines beyond 3 km from the asset.

- We must require incident controllers managing fires on public land to include protection of ecological assets in their fire management plans.

- There is a view held by many that the damage of bushfires is compounded by over zealous 'clean up' of hazardous trees after the event. There needs to be clearer guidelines and more effective oversight to ensure that only trees that truly pose a safety risk to the public are removed in the clean up process – and that maximum habitat is retained, including along roadsides.

Recovery Efforts and Building Resilience

- In this Inquiry we believe it is essential that the members of the Committee engage deeply with Aboriginal organisations that have cultural burning programs to understand both their aspirations and funding needs.

- Secure, adequate, long-term funding for community emergency preparedness and proactive climate adaptation (for example, the VCCAF proposed during the Climate Resilience Inquiry) is an essential element of ensuring preparedness for future disasters.

- Wildlife carers are an essential component of emergency response operations, as well as recovery – their involvement must be *facilitated* by the authorities, not hindered, so that animals can be attended to in a timely manner.

- Value biodiversity and habitat during all aspects of the recovery process.

TERMS OF REFERENCE

(1) the preparation and planning by government, emergency services agencies and the community ahead of the fire season, including management of public and private land and roadsides;

Preparation

There was excellent preparation for high fire risk days (for instance, in the leadup to the fires of January 9) by the authorities. There were detailed and localised public warnings issued, as well as pre-deployment of appliances, crews, and aircraft. A good recent initiative by the CFA was the creation of bulk water points in areas where water availability was likely to be an issue (these water modules are large, rigid water tanks or containers that hold 16,000–26,000 L and can be deployed via a hook truck to enable the filling of appliances or aircraft. These enable firefighting resources to remain engaged at the fireground for longer periods).

Clearly there was good planning and communication between agencies, local governments, civil society groups and providers to ensure we were ready for catastrophic rated days like January 9. To take one example from the Harcourt fire: bulk water carriers (provided by the City of Greater Bendigo) were quickly made available in Harcourt once the mains system started to fail, in order to allow fire appliances to refill in town, rather than having to drive to a water supply like a dam.

The state was as prepared as it could have been for a day of catastrophic conditions. During the season, the daily livestreamed statewide reports from the State Control Centre provided the community with accessible information about what was happening and how people should respond. Regional reporting from local control centres was also excellent. Government agencies, including Emergency Victoria, the Department of Energy, Environment and Climate Action (DEECA), and Forest Fire Management Victoria (FFMV) also used social media effectively to keep the community updated on what was happening.

While there was substantial media coverage of safety issues in the state government's fleet of G Wagons and UniMogs, the fact is that firefighters need to be able to be out on fires in equipment that will protect them. Despite what can only be described as hysterical claims that Victoria would be 'undefended' due to these vehicles being taken offline for assessment and maintenance, there were not issues that emerged around there being too few vehicles available when needed. Contingency plans (for instance securing vehicles from interstate agencies and using spare appliances from within the CFA) helped ensure there were no significant gaps in FFMV capability on this summer's fires.

It was clear that learnings from Black Saturday had been well incorporated into emergency warnings and response, leading to much less loss of life in Murrindindi Shire compared to 2009. Warnings on the VicEmergency App that encouraged people to leave early absolutely contributed to this positive outcome. This may have been a result of the policy shift that emphasised leaving early during the 2009 Royal Commission. The faster, more consistent, and localised emergency warnings recommended during this time were effectively and impressively implemented in 2026. Emergency Services and the state should absolutely be commended for integrating these learnings – and saving lives as a result.

Anecdotal evidence (particularly from Alexandra and Yea and surrounds) did reflect that there may need to be an additional warning category added to the VicEmergency App, to act alongside the 'shelter in place' warning. This could have been helpful during the 24 hours after the 'peak' of the danger during the afternoon of January 9. This is because people started to distrust this advice in the hours afterward, due to the impracticality of being required to lie in their houses, covered with a fire blanket, for such extended periods of time. 'Shelter in place' warnings needed to be reserved for when a fire front, or dangerous levels of ember attack, were approaching the immediate area. A downgraded warning, which still requires people to stay in their immediate locations and remain vigilant, would be helpful during future events where fire is expected to persist in the landscape, but the immediate threat has subsided for a number of hours.

The ability of the CFA to defend Alexandra township is a good example of how well emergency services responded to the Jan 9 bushfires, despite the conditions they were working with. CFA community information sessions hosted before and after the event in surrounding areas, in order to prepare community members for the rest of the season and encourage proactive and appropriate planning, were also excellent and thorough.

There was anecdotal evidence, particularly in Strathbogie Shire, that medical support and proper meals for firefighters who were working for many hours on the frontline were insufficient. In some instances, ration packs, rather than meals, were all that was available for 12 hour shifts, while the community was unable to support these crews due to restricted access to the fire grounds. Firefighters should not be responsible for their own catering and need to be actively supported to meet their needs by additional capacity. Medical support (e.g. saline solution administered for firefighters whose eyes are affected by ash) was ad hoc, self administered and sometimes insufficient. Frontline medics to support crews may be a helpful intervention in the future.

It was clear that the need for 'shared responsibility' that was outlined in the 2009 inquiry was acted upon and integrated. Federally funded programs that allowed local councils including Murrindindi Shire, Strathbogie Shire and Mansfield Shire (some of the areas most affected by the Longwood fire) to host 72 hour Emergency Preparedness training in the year preceding this event were very effective in preparing the community to plan proactively and keep themselves safe, independently of emergency services. The LEAP into Resilience Planning, which was associated with this proactive initiative, involved designing community-led plans for specific geographical regions of large Shires like Murrindindi. This excellent educational effort reduced reliance on emergency services (who are rightly placed on the frontline attempting to control the fire as quickly as possible) and made a huge difference to the communities' ability to make smart and safe decisions.

Proactive measures to fund local organisations that can ensure better outcomes during future emergencies and disasters has also been demonstrated as a successful model following the Longwood fire. Foundation Murrindindi – formerly the Marysville and Triangle Community Foundation) – is a community foundation, which formed in 2012 as a direct result of the 2009 Black Saturday fires. The Foundation was originally funded by $1 million from the Victorian Bushfire Appeal Fund (VBAF). Now well-established, Foundation Murrindindi was instrumental in 2026, funnelling resources to where they were actually needed on the ground during the immediate aftermath of the Longwood fire. During the recovery from the 2026 bushfires, Foundation Murrindindi was able to bring together and draw on deep local knowledge and direct resources where they were needed most. Secure, ongoing state government funding for emergency preparedness training and proactive, place-based climate adaptation initiatives that can be distributed to local councils and community-level organisations (like Foundation Murrindindi) would continue to prepare the public to keep themselves and one another safe during future disasters. This would reduce loss of life and the mental health toll, as it has done in Murrindindi during the Longwood event (relative to Black Saturday in 2009).

Friends of the Earth's Act on Climate campaign has been advocating for a Victorian Communities Climate Adaptation Fund (VCCAF) since the Victorian government's Climate Resilience Inquiry. VCCAF is mentioned specifically in the Climate Resilience Inquiry Parliamentary Report as a key funding mechanism proposed by stakeholders that can "significantly strengthen Victoria's climate resilience." It adds that it "can address gaps in

existing funding frameworks, reduce the economic and social costs of climate impacts, and build long-term resilience across the state."

The National Climate Risk Assessment (NCRA) confirms the climate risks Victorians face now and in the future, as well as their cascading, compounding, and concurrent nature. It also confirms the need for funding to keep Victoria's economy safe. According to the NCRA, spending on disaster recovery could increase by 5 to 7.2 times, placing increasing fiscal pressure on governments. Climate change-related disasters will cost Australia $73 billion a year by 2060, even if action to curb emissions is taken now. The Australian Prudential Regulatory Authority has warned that Australia must spend $3.5 billion annually to limit damage from climate-related disasters. It says that waiting to repair the damage after the fact is likely to cost 11 times more. However, in the 2025/26 State Budget, only 21.1 million was invested in preparing for climate impacts, while 243.2 million was invested in responding to climate impacts.

Adequately funding adaptation now is a key preparedness measure that will reduce future costs of responding. A $1 investment in climate adaptation or disaster risk reduction has been estimated to save from $2 to $11 in post-disaster recovery and reconstruction costs (CSIRO 2020, Climate and Disaster Resilience). Simply responding to disasters is likely to cost 11 times more. In addition, a $1 investment in adaptation and resilience has been shown to generate more than $10 in benefits over 10 years.

The Inquiry into Climate Resilience found that "funding shortfalls represent a critical barrier to implementing climate resilience initiatives" and that "non-recurrent funding for resilience projects restricts long-term capacity building and strategic outcomes". 83.75% of submissions to the Victorian Government's Climate Resilience Inquiry noted more climate adaptation funding is needed. 49.58% of Resilience Inquiry submissions noted ongoing funding is needed.

Friends of the Earth proposes that secure, long-term, adequate emergency preparedness and proactive climate adaptation funding is essential investment for state governments. The Victorian Government's Forestry Transition Community Development Fund (and its place-based and strength-led design that is facilitating the distribution of funds over a 10-year period) and Rural & Regional Renewal's Disaster Resilient: Future Ready program are both good examples of how long-term, significant government funding can be distributed with efficiency and accountability to community-level organisations that are already familiar with their local context (for example, Foundation Murrindindi).

Management of public and private land, including roadsides

There have been attempts in the public sphere to suggest that roadside reserves were untended and that this made this summer's fires worse. We would argue that an impartial observer travelling through regional Victoria would know that roadside reserves did not present an unacceptable risk, compared to much of the surrounding farmland. Much of the private land in regional Victoria was heavy with tall and dried grasses this summer, so fires were able to move rapidly through the land. Given that roadside reserves exist next to roads, they usually offer an opportunity for firefighters to slow a fire, so overall, they help reduce the movement of

fires. They also often contain significant remnants of ecological diversity in otherwise cleared landscapes, so they must be managed for their conservation values and not just treated for 'fuel-reduction'.

Many of the larger fires this summer, including Harcourt, Longwood and Walwa/ Mt Lawson burnt predominantly through private farmland, rather than public bushland. This speaks to the need for holistic landscape planning, which may include collaboration between governments and landholders to enable planning on a landscape scale. This could include a variety of interventions, for example restoring wetlands in agricultural landscapes, alongside well-executed planned burning interventions (close to assets only) to protect lives and infrastructure. Some Catchment Management Authorities are already beginning to explore how restoring water to these agricultural landscapes (that were originally flood plains) could help reduce bushfire risk and provide co-benefits to farmers. We encourage governments to invest in these emerging solutions, as well as Cultural Flow programs developed by First Peoples.

Percentage targets will cause ecological damage with no certainty of reduced fire impact

We supported the Victorian government dropping the hectare target in 2015. Burning simply to meet a target is likely to push FFMV to continue burning large areas of public land (for instance the Little and Big Desert national parks) without benefit to private land or human assets.

The value of land area targets for fuel reduction burning was questioned by the Bushfires Royal Commission's implementation monitor Neil Comrie and a range of academics. Mr Comrie has expressed the view that he "is not convinced a proposed target of 5 per cent minimum of public land is achievable, affordable or sustainable."

Land managers must recognise that under global heating, the window of safe conditions to carry out fuel-reduction burning is becoming narrower. If the authorities are being pushed to meet targets there is a greater risk that fires will get away on crews and potentially damage public and private land, because they will need to carry out burns in less than optimal weather conditions.

There are also public health considerations to take into account. With the growth of many regional centres, smoke from fuel-reduction does cause public health concerns (especially with planned burning happening in autumn months, when smoke may not dissipate quickly). Again, pushing FFMV to meet targets may mean burns take place when it would be more strategic, advantageous and ethical to treat areas more holistically, through a combination of other targeted methods.

Rebuilding resilience in forests

We understand the value of small, targeted fuel-reduction (done strategically around human assets and towns and at appropriate scale to reduce the environmental impact of bushfires). However, we also understand the science that clearly demonstrates that prescribed ('fuel-

reduction') burning in public forests and bushland creates a much more flammable landscape in the long-term. Putting a controlled fire through a forest 'resets' the growth of coloniser species, which after a number of years are often more flammable than the forest was before burning. While current planned burning practice may reduce the short-term risk of bushfire (for the first 1-2 years), it also increases bushfire risk (for the next 37 to 49 years, depending on the type of vegetation being treated).

Research by Phil Zylstra from Curtin University demonstrates that flammability actually decreases as forests mature. Therefore, allowing significant areas of forest to age without intervention will allow forests to build their natural resistance to fire. This can be expected to slow wildfire as it moves through the landscape. For reference to Phil's work, please read this or this.

Mature, wet forests are natural fire buffers. They burn less often, less intensely and help slow fire spread. An example of this comes from the 2009 fires. As noted in the report by Chris Taylor Victorian February Fires of 2009, despite extreme fire weather conditions, the Kilmore East fire was slowed by older, wetter forests compared with drier areas.

'The fire progressed from Mount Disappointment State forest into the Wallaby Creek Water Catchment, part of the Kinglake National Park. The southern half of the Wallaby Creek catchment contained mature and old growth stands of Mountain Ash dating back to 1730. On 7 February, Mr Paul Jones, a fire spotter stationed at the fire tower on the summit of Mt St Leonards, observed the fire passing through the Mount Disappointment area. Jones states that the fire progressed more slowly over the summit of Mount Disappointment and through Wallaby Creek, than it had along the southern escarpment and surrounding private land.'

Compared with the summit of Mount Disappointment, the fire moved faster through the surrounding foothill forests and farmland to the south. Old growth forests act as a natural buffer that can slow the rate of spread of even high intensity fires through the landscape. Yet, these forests continue to be degraded by inappropriate fire regimes.

Firefighters can also plan to reinforce natural vegetation buffers (such as rainforest) to slow the movement of fire across the landscape, so detailed mapping of local forested landscapes to identify strongholds for firefighters would be beneficial.

Funding place-specific research, so that our bushfire fire mitigation strategies can work with Victoria's landscapes and specific vegetation would be more effective than any blanket application of fuel reduction. For instance, East Gippsland contains the highest concentration of rainforest communities and the largest remaining extent of wet forest Ecological Vegetation Classes in Victoria. Many areas in the Central Highlands also share these characteristics. These are ecosystems that retain moisture, reduce fire intensity, and act as natural buffers against bushfires. Fuel-reduction burning in these forests is likely to increase their flammability, unless they are burnt every few years, which would both be extremely expensive and cause unacceptable ecological damage in carbon-dense and habitat rich native forests.

The ecological impacts of current fuel reduction programs are unacceptable

Fire has been a constant presence in what is now the Victorian landscape for millions of years. Most ecosystems are adapted to (or even reliant on) regular burning, whether 'natural' or introduced by people. While fuel-reduction burning can reduce the intensity and spread of wildfire (extremely temporarily, as described above), it is also important to remember that 'fuel' is also 'habitat' and there are ecological considerations to be taken into account when considering the future use of fuel-reduction treatments.

Fuel-reduction burning, in its current form, faces a real risk of losing its social license to operate, unless proper checks and measures are put on burning practices to reduce ecological impacts. This has impacts on the sustainability of regional workforces – if land management jobs are once again driven to cause widespread ecological damage, like was the case nearing the end of the native forest logging industry, efforts and significant investment toward sustainable jobs and industries that can support regional communities into the long-term future will have been in vain.

Loss of Habitat trees

A major issue driving community concerns is that fuel-reduction burns reduce the presence of older trees. A 2016 Victorian government study found that 25% of hollow-bearing trees that the fire reached collapsed during planned burns. A further 27% were damaged. If a planned burn is conducted every 7 to 12 years, which is the government's ideal burn cycle, this can mean that most hollow-bearing trees could be lost from that forest within 25 years (see Lucas Bluff, 2016, *Reducing the effect of planned burns on hollow-bearing trees*).

One of the key issues around loss of trees is that the practice drives the loss: that is, FFMV is compelled to burn as much as it can with the resources it has. This pushes land managers to burn larger sections at a time, as going larger reduces the cost per-hectare to burn. However, the larger the area, the more likely it is that the fire will become hot and burn into the canopy, causing ecological damage and increasing the risk of fires escaping.

Reduce the size of burn areas & increase requirement to protect ecological assets

If the government is serious about reducing the loss of older and habitat trees, it needs to consider how fuel-reduction burning practices can be changed so that smaller areas are burnt, with greater oversight and willingness to protect old trees and other 'ecological assets', while allowing most forests to age into a less fire prone stage.

When a burn is planned, a Burn Operations Map will be produced, which will include data on known locations of significant animals and plants. These are complex documents with a lot of information about the site. A fire management plan will also be created, which specifies objectives for that burn. This will include details on planning, safety, emergency procedures, and staffing. It will also include a section on Key Messages relevant to how the burn will be

managed. It is essential that the relevant Planned Burn Management Team be directed to consider what the ecological assets within the burn area are – and how they will be protected during the burn operation. Unless this is specified, it cannot be assumed that these assets will be looked after in any way. The standard practice is to create control lines to 'box in' the burn. The edges need a suitable bare area (such as a road, track or bulldozed line) that is wide enough for firefighters to be able to stop the movement of the fire at that point. Then the fire will be lit from an agreed ignition point and fire introduced to the forest along identified lines. The intention is to burn the fire from edge to edge. This means that all large trees within the burn are likely to be impacted. Part of the pre-burn preparation should include a 'walk through' to identify key trees that may need protection. There will never be full 'treatment' (burning) of a burn site, and a good burn manager will look to reduce the spread of fire through areas that will be negatively impacted by a burn (for instance drainage lines with ferns and moisture dependent species). If it is required to include environmental protection in the fire management plan, then we can reduce the negative impacts of these burns through ensuring a greater number of trees are left intact.

Simple measures to reduce the loss of old/habitat trees:

- Never burn fire sensitive communities such as rainforest, including the ecotone areas on the fringes of these forests.

- Burn smaller areas at a time, so that fire intensity is more likely to stay low.

- Consider 'pre-treatment' of large trees before the burn where possible. That is, using rake hoes or blowers to move bark, small branches and leaf litter away from the base of large trees to reduce the likelihood of fire moving into the canopy. FFMV should consider more use of volunteers to assist in this pre-burn work.

- Exclude areas within the burn zone with high numbers of significant trees. This can be done by marking them with tape and excluding fire ignition from that area. In some instances a hand made mineral earth control line can be put in before the burn, and then raked back afterwards.

Additionally, FFMV should be required to meet with recognised stakeholder groups where they exist (such as local conservation, field naturalists or 'Friends of' groups such as Kinglake Friends of the Forest) to develop plans to manage ecological values within the burn. For instance, in 2020, FFMV collaborated with a local group called Friends of Kalimna Park in Central Victoria to ensure that a planned burn did not adversely impact on the habitat of the Eltham Copper Butterfly (ECB). Ecological surveys identified habitat and important trees. Mineral earth control lines were cut in a number of places to prevent the fire impacting on ECB habitat, and crews returned after the burn to cover up these breaks. This represents a Best Practise form of fuel reduction burning.

Above: mineral earth control lines cut by FFMV crews to prevent a fuel reduction burn from damaging significant trees, Central Victoria.

Above: volunteer firefighters removing litter build up around older trees prior to burning, north eastern Victoria.

Reverting to a Hectare Target for burning would make this sort of protection much harder to achieve, as it will pressure land managers to burn more and across larger areas of land.

Increase our ability to manage good fuel-reduction burning

If we are to have more detailed environmental assessments before conducting works such as planned burns, the workforce needs additional Band 4 Field Assessors. Assessments need to be worked through in advance of works/burns by planning and assessing roles, not just in the moment of the operation by incident controllers.

Currently, there is only one Field Assessor per fire district. There are only 16 fire districts in the entire state. Field Assessors may be assisted by Cultural Operations, of which there are also only 16 in the state (however Cultural Operations also have other responsibilities and an emphasis on cultural values – this will commonly cross over with environmental values but is still differentiated in their Position Descriptions. Both important undertakings should be sufficiently resourced).

The Australian Workers Union (AWU) suggests the addition of a further 2 Field Assessors per fire District (increasing from 16 to 48 state wide), which would facilitate the extra assessment

work prior to burns being undertaken. The union also suggests that there may also be value in creating additional Specialist Tactical Planning Officer roles. These are Victorian Public Service VPS3 positions rather than AWU so would need to be addressed under the VPS Enterprise Agreement rather than the AWU Field Staff Enterprise Agreement.

These roles cannot be performed by seasonal firefighters – Seasonal Forest and Fire Operations Officer or SFFOOs only have basic training on tree hazard awareness (allowing them to recognise, mark and avoid hazardous trees). Only more experienced staff receive Hazardous Tree Assessor qualifications, allowing them to evaluate, measure and report on hazardous trees post-fire. This is a valuable accreditation within the workforce, but does not include the skill set for identifying trees of environmental or cultural value, which requires further training.

Where should fuel-reduction burning be applied?

A very significant piece of work into the value of fuel reduction burning is the paper *The effectiveness of prescribed burning for protecting houses during wildfires in Australia*, published in Fire Ecology (2025). The authors are Philip Gibbons, Matthew G. Gale, Max A. Moritz and Geoffrey J. Cary.

While focused primarily on South Australia, it is relevant to the situation in Victoria. The research found that fuel reduction/prescribed burning:

- is generally conducted too far from houses to reduce losses, unless it effectively halts wildfires before they reach houses;
- could play a greater role in mitigating house losses during wildfires, but only if substantially more burning can be done within 3 km from houses (they suggest burns within 5 years and upwind of the houses); and
- is less effective than removing woody vegetation immediately adjacent to houses (i.e. establishing defensible space).

Overall, the authors found limited evidence that prescribed burning, as currently practised in Southern Australia, reduces house losses during wildfires.

Price and Bradstock (2010, cited in the study above) concluded that prescribed burning closer to assets such as houses was preferable because it increases the likelihood that wildfires encounter — and thus are influenced by — prescribed burns before reaching houses.

Gibbons, et al. also note that prescribed burning close to houses reduces embers. Most house losses during Australian wildfires are associated with impact from airborne embers.

A careful reading of this research suggests that fuel reduction burning should occur 3 kilometres or less from the houses/assets that are to be protected. Beyond this, the value of fuel-reduction burning in regard to protecting human assets declines. If this work is correct,

then broad-acre landscape scale burning is essentially ineffective, particularly if its stated purpose is to protect human assets.

Using the work of Gibbons, et al. (referenced above) suggests that fuel-reduction burning should occur within 3 kilometres of assets. Given extremely recent burning can slow the movement of a fire, it makes sense to also burn along roadways – if it is intended that the particular road will be used by firefighters as a control line for a fire. Tanker-based ground crews will not move too far into a heavily forested area when a fire is approaching, and so – as a general rule – it could be said that a safe operating distance from the road would be 150 metres or less from the fire fighting vehicle.

If we accept the findings of this research, we will need a fundamental re-think of how fuel-reduction burning is carried out in Victoria. This report seems especially relevant to trying to understand best fire management practices in the rural and urban interface.

Another important point to note is that the authors say 'Our results also indicated the severity of the weather has a greater effect on house losses than prescribed burning'. That is, the effects of climate change (more frequent extreme fire weather) will undermine the overall effectiveness of fuel-reduction burning. This implies that 'house hardening' to the impacts of fire is more important than a simple reliance on fuel-reduction to increase the chances of houses/infrastructure surviving a fire.

Cultural burning

While Cultural burning is NOT fuel reduction burning, we include it under this Term of Reference, as this practice is increasingly important for the management of both public and private land.

The current state government has been consistently supportive of the aspirations of many Traditional Owner groups with regards to supporting management of traditional country and cultural landscapes, including through cultural burning programs.

In this Inquiry we believe it is essential that the members of the Committee engage deeply with Aboriginal organisations that have cultural burning programs to understand both their aspirations and funding needs.

(2) the causes and circumstances of the bushfires, including climate change and the adequacy of the Government's climate policies and actions, forecasts, warnings and public education on bushfire threats;

It should be noted that the fires themselves; their timing, intensity and weather conditions, were not unusual for Victoria. Many of Victoria's major fires in the past happened in January although the trend last century and this has been for more intense fire weather in February. We know that Victoria is one of the most fire prone areas on the planet. However, climate change is

supercharging fire seasons, making them longer and more intense. This is manifesting in various ways:

Heatwaves

In January we experienced record-breaking heatwaves, where people sweltered through many consecutive days above 45°C. Heatwaves in Australia are more lethal than bushfires, cyclones, floods and storms combined. They also increase bushfire risks. Heatwaves already cost the economy $87m each year – and this is predicated to grow to $179m by 2030 (Infrastructure Victoria).

According to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), human-caused climate change has increased the frequency and intensity of heatwaves since the 1950s and additional warming will further increase their frequency and intensity.

The World Meteorological Organisation (WMO) notes that "with every additional increment of global warming, changes in extremes continue to become larger. For example, every additional 0.5°C of global warming causes clearly discernible increases in the intensity and frequency of temperature extremes, including heatwave intensity, frequency and duration". The WMO notes that "heatwaves amplify the impact of drought, and increase wildfire behaviour".

Hotter temperatures lead to drier landscapes. High temperatures lead to high rates of evaporation and loss of moisture from living and dead vegetation, so the regular bouts of high temperatures in Victoria over summer worsened the underlying drying from an extended dry period. This was very noticeable on farms and grasslands across the state.

Lightning

Climate change amplifies the risk of bushfire ignitions as lightning strikes (particularly dry lightning) become more frequent. This risk is compounded by extreme drought and weather conditions. This is a particular issue in Victoria given the scale of our public lands in mountainous and often remote areas, where detecting and responding to fires started by lightning may take time.

Fire plumes

When fires become large, they can generate their own weather systems, which can then dramatically alter the spread and intensity of the blaze. Large bushfires release enormous amounts of energy. This heats the air in the vicinity of the fire, causing it to rise rapidly in a powerful, buoyant, fire-driven updraft. One of the most striking examples of this phenomenon is the formation of pyrocumulonimbus clouds — towering storm clouds born from fire.

If the fire is large and intense enough, the plume can keep rising. As the cloud rises above altitudes of around 3–5 kilometres, temperatures can drop well below freezing. Water droplets

freeze into ice crystals, releasing another burst of latent heat that further energises the rising plume.

The rapidly rising plume now contains ice and supercooled water — a mixture that is key to thunderstorm-like processes. It is through this process that a fire-generated thunderstorm is born, a pyrocumulonimbus cloud.

Fire-generated thunderstorms were practically unheard of a few decades ago, but they appear to be becoming more common.

One notable example is the unprecedented number that occurred during the Black Summer of 2019–2020. Other outbreaks include around Melbourne in the Black Saturday fires of 2009 and the Canberra fires in 2003.

Fires are more uncontrollable

With drier landscapes, we are already more likely to have larger, fast moving and dangerous fires. Changes in atmospheric circulation patterns, influenced by global warming, are also producing more frequent and intense hot, dry winds that can transform moderate fires into uncontrollable infernos within hours. These winds also complicate firefighting efforts, often causing fire fighting aircraft to be grounded or crews to be pulled out of forested areas, and increase the range of ember spread.

There is evidence that in many fires, activity at night is now often as bad as during the day. Historically, fire activity has been observed to ease at night, allowing fire fighters to contain their spread, then rest and recover as the fire slows. As noted by David Bowman, from the University of Tasmania, “We’re going to have to be thinking about a 24/7 model of firefighting”. This has obvious implications for how we allocate fire fighting resources.

Fire seasons are longer

Since the 1970s, there has been an increase in extreme fire weather and a lengthening of the fire season across large parts of Australia, particularly in southern and eastern regions, due to increases in extreme hot days and drying.

The lengthening fire season means that opportunities for fuel-reduction burning are decreasing – and it is putting higher demand on our firefighting services.

According to work carried out by CFA and Bureau of Meteorology researchers, human-induced climate change is the most likely driver behind Australia’s earlier and longer fire seasons.

There is less water available in the landscape to fight fires

An emerging issue is the decline of available water in the landscape in order to fight fires. As ecosystems dry out, fire fighters often have to travel further to re-fuel their trucks. The government has responded to this through the creation of a program that delivers mobile bulk

water points in areas where water supply may be an issue. While local firefighters will always know the best available water source, and be able to direct crews from out of the area through fireground communications, the long term drying of landscapes does pose threats to our firefighting efforts.

Implications of longer fire seasons in both hemispheres

Fire seasons are getting longer and more intense around the world, causing concerns about an overlap between countries. As noted in the report Increasing Fire Weather Season Overlap Between North America and Australia Challenges Firefighting Cooperation**,** until recently, the fire seasons in the northern and southern hemispheres occurred at 'distinctly different' times of the year. This allows Australia to share resources (firefighters, incident managers, aircraft) with countries in the northern hemisphere, especially Canada and the USA. During our Black Summer, more than 1,000 people came from North America to assist with our firefighting efforts.

This sharing of resources, including aircraft, firefighters and specialists, is how we fight fires in the 21st century.

There are many lessons to be gained from this report. The authors note that 'international agreements on firefighting cooperation and national firefighting capacities (will) need to be reviewed. Both Australia and the US will need to strengthen their domestic firefighting capacities in order to reduce reliance on international cooperation'.

Of particular concern is the issue of where our largest firefighting aircraft will come from in future. Normally, Australia leases up to six Large Air Tankers (LATs) which are each allocated to a specific state or territory, but which are shared around the country according to greatest need. While we need up to 7 LATs in a bad fire season, we only own one (which is owned by the NSW Rural Fire Service) and we now lease one year-round.

The other LATs are leased in after their post season maintenance in the northern hemisphere. They all come from North America and arrive in the country during the traditional 'shoulder' season. As noted in this report, this shoulder is rapidly disappearing, as planes are needed for larger sections of the year in each hemisphere.

The Bushfire Royal Commission suggested Australia has become too reliant on firefighting aircraft leased from other countries – and warned longer seasons worldwide may make it harder to obtain aircraft in future.

As fire seasons extend in both hemispheres, we face the risk of being unable to secure leases for LATs in coming years. Committee should investigate whether:

- Victoria should invest in its own publicly owned LAT, and
- Whether leasing arrangements for our large (type 1) helicopters are adequate given fire seasons are getting longer in both hemispheres

The Royal Commission into Natural Disaster Arrangements, which was held to reflect on the lessons of the 2019-20 Black Summer fire season, recommended (Rec 8.1) that the federal government create 'an Australian-based and registered national aerial firefighting capability, to be tasked according to greatest national need'. In responding to the commission, the federal government of the day decided not pursue the possibility of Australia establishing its own fleet of LATs.

The commission also noted that "extreme weather has already become more frequent and intense because of climate change (and that) further global warming over the next 20 to 30 years is inevitable".

We must deal with the cause of the problem: global heating

We know that climate pollution from burning coal, oil and gas is steadily making fire seasons worse. We must urgently slash climate pollution to protect Australians from worsening heatwaves – and their deadly impacts. We note that the Victorian government has a comprehensive funded plan to transition the state away from its current reliance on fossil fuels. This sort of leadership and ongoing ambition is required from all political parties in a time of climate crisis.

In the short-term, there are lessons to be learned from this summer, which must be acted on. It is important to note that, if patterns from the last couple of decades persist, we will now enter into a dry pattern for a few years. As we have seen in Tasmania, WA and NSW, drying seems to happen faster in a warmer world, leading to more fire day ratings of Extreme or Catastrophic.

The AFAC has released its seasonal forecast for autumn 2026, showing above average fire risk for much of Victoria. It is highly likely if winter is dry that the 2026/27 fire season could be quite bad on the east coast. We have to accept that this is the 'new normal' now – and develop an integrated statewide response that brings together greenhouse gas mitigation strategies, enhanced ability to respond to ever more frequent natural disasters, and efforts to build community and ecological resilience. We cannot afford to lose time by allowing the important issues covered in the ToR of this Inquiry to become bogged down in pointless and divisive culture wars.

(3) funding, equipment and appliances for the Country Fire Authority (CFA), Fire Rescue Victoria and Forest Fire Management Victoria, and recruitment and retention of CFA volunteers;

How do we fund emergency services?

In Victoria the state government has created the Emergency Services and Volunteers Levy, which is intended to contribute funds for emergency services like the SES, CFA, Triple Zero Victoria, Emergency Management Victoria, Forest Fire Management Victoria, the State Control Centre and Emergency Recovery Victoria. It is an annual property levy collected via council

rates, which replaces the Fire Services Property Levy and funds a broader range of emergency services.

The levy stirred controversy after many farmers faced increases of tens of thousands of dollars a year in what they pay. In response, the government introduced a two-year rate freeze to the Levy for farmers. While we believe that all landowners benefit from emergency services and therefore should be expected to pay a fair contribution towards the Levy, we concede that, in its current form, it does represent an unfair burden on rural communities, especially farming communities.

As the state government considers its future options on what form the levy will take, we call for a federal disaster levy to be put on all fossil fuel exports from Australia. Such a levy could raise billions of dollars every year to pay for the costs of climate change, without raising prices in Australia. These funds could be allocated to states and territories to be used towards emergency services, community resilience, and disaster preparedness, response and recovery. This would greatly relieve the burden being carried by average Australians.

We believe that ratepayers shouldn't be expected to pay for the damage caused by coal, gas and oil companies. A levy would force them to contribute to the problems they are causing. Revenue raised through a levy on landowners could then be used to supplement the costs of preparation, response and recovery, rather than expecting farmers and communities on the frontlines of climate disaster to bear the entire burden of these events.

We must continue to invest in firefighting capacity

Apart from drying out landscapes, heatwaves and droughts have implications for the health of firefighters and other emergency crews. It is essential that regular funding allocations allow for the replacement of all older appliances without air conditioning.

The proposal to return to a hectare or percentage target cannot guarantee a reduction in fire risk. The state invests enormous amounts of money into fuel reduction. For instance, $160 million was allocated in 2023-24 on ‘fire risk reduction strategy’. Rather than funding more fuel reduction, Victoria should allocate:

- Carry out an independent assessment of the ecological impacts and economic efficacy of current fuel reduction programs, and
- allocate additional funds to expand its firefighting workforce to aid the rapid detection and suppression of new fires.

Elements of this approach would include:

Career and volunteer firefighters

- There needs to be a greater emphasis on ongoing year-round firefighter positions within FFMV (FFOOs), not just on fixed-term Seasonal FFOOs.

- Expansion of the number of FFMV seasonal crews (Project Firefighters or PFFs, now called Seasonal Forest and Fire Operations Officers, SFFOOs).

- A review of the very successful rappel crews that operate within FFMV. They are incredibly important in terms of stopping small fires in remote areas, before they turn into large blazes that will be very expensive to contain. There should be a review into whether we need to expand the number of rappel crews who are available (please see below for additional details on this). As an interim measure, a third Hover Exit crew (5 crew members each) could be established at Horsham to expand capability in Western Victoria.

- Maintaining funding for staffed fire lookouts.

- The expansion of the pilot arduous/remote area firefighting team within CFA. The creation of this program demonstrates that the CFA is willing to adapt to changing fire realities and is to be welcomed. It is essential that after its first summer of deployment, that this program be expanded to allow new people from urban areas to be able to join, rather than selecting only from within existing CFA volunteers. The pilot drew existing CFA volunteers, mostly from District 7. The scale of deployment of the crew over summer demonstrates the value of this team.

  The CFA Diversity and Inclusion strategy is very important. With the arduous firefighter program now established, we need a program that brings in new and diverse communities into volunteer firefighting. Therefore the program should be specifically expanded to allow people living in urban areas (where they cannot currently volunteer with a local CFA brigade) to be able to sign on. This program could: provide opportunities to people who previously volunteered (in CFA or RFS or been employed through FFMV) but who have moved to Melbourne because of work, life, or family commitments, as well as recruit new volunteers (who could be trained in arduous firefighting and be able to opt in for strike-team deployment, including pre-deployment, on high fire risk days or be allocated to large campaign fires). This represents a significant opportunity to expand the diversity and representation of diverse members of the community in volunteer firefighting efforts. Further details on our proposal can be found here. It is important to note that this team must be seen as a team designed to complement – not replace – existing or increased numbers of career firefighters within FFMV.

- The expansion of a seasonal firefighter program within the CFA (this is a new initiative within the CFA which should be encouraged).

- The recent options paper from CFA, the Contemporary Volunteer Membership Model (CVMM), has good proposals for creating new and flexible forms of volunteering in the organisation.

Rappel crews

Rappel crews are absolutely essential for rapid response to new start fires. If we can continue to invest in rapid response capacity like aircraft, arduous firefighters and rappel crews we have the greatest chance of keeping fires small and hence reduce the economic and ecological costs of wildfire, especially on public lands.

We note that this year a Treasury advance created 4 additional FFMV rappelers in Victoria, which allowed FFMV to augment their usual 2 crews per base (Heyfield and Ovens) into 3 thinned out crews where this was more appropriate. These thinned out crews could then be supplemented by ground crew transporting further plant and equipment by land. This should be celebrated as good progress.

There are however, various conversations to be had about the future of these crews: should a third base be set up in the West of the state which could be deployed to fires in areas like gariwerd/ Grampians and the Otways? Such a base could not justify permanent full-time staffing. This would then present the logistical and financial challenge of having to move plant, equipment and staff from Ovens and Heyfield to a third base on a repeated basis during a season to prepare for high fire danger and emergency response work. The alternative, training up local crews to be part-time rappelers and part-time ground crew, would also be a significant workforce, logistical and financial challenge. Such an idea would need detailed work done before options are explored.

Bacchus Marsh could be a possible location for an additional rappel base. Horsham could also be an option due to it currently operating two Hover Exit crews (descending from 1.3 metre ropes, as opposed to rappelers descending from up to 100 metres). In the interim, a third Hover Exit crew (5 crew members each) could be established at Horsham to expand capability in Western Victoria.

The AWU supports the creation of a third crew at each of the existing two rappel bases. However, there are workforce challenges that must be worked through in order to enable this, particularly relating to seasonal employment. Each rappel crew contains a number of different roles, some with greater experience and training than others. The creation of 2 additional crews in the state will mean that FFMV needs to attract, train and retain staff who are accredited as Advanced Fallers, Dispatchers and so on.

Rappel crews are primarily, but not exclusively, staffed by seasonal employees (who tend to be younger, with lower skills and experience than their ongoing counterparts, and do not usually spend an entire career with FFMV unless they successfully move into an ongoing role). This high turnover rate works against the skills and experience needed within each rappel crew. Seasonal

Forest and Fire Operations Officers (SFFOO) therefore cannot fill the skills gaps required in order to support even one full additional crew at each of the two rappel bases. Additional ongoing Field Staff roles would be required in order to create full additional rappel crews.

Expanding on ground firefighting capacity

There needs to be a greater emphasis on ongoing year-round FFOOs, not just on fixed-term Seasonal FFOOs. While we oppose the current broad-acre approach to planned burning, in order to plan works and burns to be more environmentally friendly (where they are deemed necessary) additional planning and preparation works will need to be undertaken outside the usual employment period of Seasonal firefighters, which generally runs from November until April. We also note that with Victorian government plans to continue to expand tourism on public lands, there will be a growing need to manage this visitation, including roads, walking tracks, campgrounds, picnic areas and other public infrastructure. Land management staff to conduct ecological monitoring, restoration and management is also a gap to be filled. DEECA should expand the number of AWU Band 3 roles (Field Team Leaders and Technical Specialists) and AWU Band 4 roles (Field Operations Supervisors, Field Assessors, Cultural Operations and Senior FFOO Trainer roles) to bring in the higher skills and experience needed for more precise, higher-skilled works.

Work can also be done to increase the skills and retention of Seasonal FFOOs. Seasonal FFOOs should be offered 5-year fixed term contracts upon the completion of two fire seasons – this often occurs, but is not guaranteed. Ongoing seasonal employment should also be offered upon the completion of 5-year fixed-term seasonal contracts. This will help seasonal employees apply for loans, feel secure in their jobs, and plan ahead with their managers to increase their skillset within the seasonal surge workforce. Currently no SFOO positions are ongoing.

Appliances and other equipment and technology

- Victoria should support the creation of a national, publicly owned fleet of Large Air Tankers.

- As climate change makes dry lightning more prevalent, there needs to be continued investment in ultra light tankers, with brigades receiving them in appropriate areas as a 2nd or 3rd appliance to supplement their existing tankers/pumpers. These can be driven by anyone with a regular license, which is important in terms of rapid response to incidents, and fighting fires in difficult terrain. Smaller brigades often struggle to meet their Standard Delivery Service targets (called SDS) because crews may need to wait for a driver with the appropriate license. Having more appliances that can be driven under a standard motor vehicle license will help with rapid response times.

As we note earlier in our submission, a good recent initiative by the CFA was the creation of bulk water points where water availability was likely to be an issue (these water modules are large, rigid water tanks or containers that hold 16,000–26,000 L and can be deployed via a hook

truck to enable the filling of appliances or aircraft. These enable firefighting resources to remain engaged at the fireground for longer periods). With less water becoming available in the landscape, we must continue to think creatively about the future fleet of firefighting appliances. Some ideas to consider include:

- More allocation of ultra heavy tankers to areas where the terrain is suitable (most likely south and north western Victoria and northern Victoria). A heavy tanker can hold 10,000 litres of water, considerably more than the standard Heavy Tankers which carry 4,000 litres of water. Greater use of these appliances will reduce the time crews need to take off the fireground to refill their truck. This can be especially important in the early stages of a fire where rapid and sustained attack may be able to stop a small fire from turning into an uncontrollable blaze. We note that the Victorian government has already invested significantly in the roll out of these tankers, with $12.835 million for the new vehicles.

- Given that finding easily accessible water in the landscape will become more difficult over time, it would also be worth investigating the use of roof mounted thermal imaging cameras, which can be directed like a spotlight from within the cab of a fire truck to identify hot spots that need to be treated with water and/or Class A foam, especially in mopping up operations. This would mean that crews working from the back of a truck could be more frugal with their water use, rather than just relying on the visual signs of a hot spot. These systems would be quite cheap to install – and many crews are already trained in the use of front mounted monitors, which are used to direct water onto fires from within the cab of the truck.

- As the population of many regional towns and centres continues to grow, the authorities should examine the changing fire risk profile (for instance, as some areas become more urbanised, or there is more housing being built within forested areas). There may be a need for a medium pumper/tanker in some areas that are facing greater risk of structural fire, but which remain primarily rural in nature. Well-funded, geographically specific and place-based preparedness, proactive adaptation, and holistic planning should be part of this effort.

- We must continue to invest in the use of Artificial Intelligence (AI) to assist with early fire detection. There are multiple trials of AI cameras for fire spotting already underway in Victoria, in the plantations of the south west and through FFMV. There is a summary of these programs available here.

In December 2023, Australian-founded company Pano AI installed two of its fire detecting cameras at the site of the Delburn windfarm in Gippsland to survey the surrounding landscape. The project was developed in collaboration with the Country Fire Authority (CFA), Forest Fire Management Victoria (FFMV), and HVP Plantations to improve early detection times. As

renewable technology continues to expand across the state, it is quite possible that wind farms will actually reduce fire risk because of the use of AI cameras to identify new start fires.

(4) the emergency responses to control and contain the fires, including adequacy of resources and communications;

Victoria has a very professional and well-organised system for responding to fires. Even on days like January 9, where the fire at Fogartys Gap almost immediately became (in the words of the Harcourt CFA captain) "uncontrollable from the start", careful and timely deployment of local and distant resources was exemplary.

Some aspects of the Victorian response that work really well:

- The pre-determined dispatch of aircraft works well at containing newly started fires and supporting ground crews to quickly control fires.
- Hot Day Response works, however it does place additional pressure on volunteer brigades to respond, which can be tiring during long summers.
- Use of urban fringe brigades to provide surge capacity is really important and it enables local brigades to have rest periods during long fire events.
- There is a growing willingness by FFMV to use CFA volunteers on the ground in large campaign fires (for instance as happened in the gariwerd/ Grampians fires of 2025 where CFA crews assisted with creating mineral earth control lines to protect Halls Gap).
- There is a strong sense among all emergency responders that 'we work as one team' during most incidents.
- Infrastructure support for crews (meals and accommodation) is usually of a good standard.

What was noticeable this year was solid allocation of resources to fires in remote areas, especially the Dargo Wonnangatta complex. During the fires of 2019/20, large fires in remote areas, especially the high country, were largely left to burn. While this was understandable, given the dramatic threats to places like Mallacoota, not acting to fight fires in our conservation estate means that the ecological damage is much worse than it could have been.

With vast areas of fire-damaged forests in recovery due to previous fires, this summer's fires have underscored some important points. With so much damage in recent decades, it is essential that the authorities:

- Address newly started fires as rapidly as possible.
- Escalate the availability of resources to contain the fire, rather than 'letting it burn'.
- Ensure that fire management plans highlight the need to exclude fire from fire sensitive or recovering areas, such as fire damaged snow gums or young alpine ash.

There are often criticisms made of Forest Fire Management Victoria (FFMV) incident controllers being too slow to respond to and contain fires in remote areas. According to figures released by the Victorian government, 83% of bushfires are contained on first attack by FFMV, and 92% of

bushfires are contained before they become bigger than 5 hectares. This is not a critique of workers – FFMV crews do excellent work in often very challenging conditions. The question here is whether resources (remote area or rappel crews and aircraft) are deployed quickly enough by incident controllers to limit the spread of fires where there is no threat to human assets.

The larger fires in the Victorian mountains last summer (2024/25) were in the Thompson catchment and around the Avon wilderness. Incident controllers in this latter fire prioritised protecting important 'ecological assets' as well as human assets. In this instance, this meant keeping fire off the Wellington Plains, where fire-damaged snow gum woodlands are facing ecological collapse if fire occurs again. There is a report on that fire available here. This is exactly the sort of fire management that is required in a time of global heating.

If we look at this season's fires in remote areas – and how incident controllers managed them – it generally seemed that:

- The authorities were quick to get onto fires and allocate specialist teams, such as rappel crews who can be inserted by helicopters, and there was sustained use of aircraft to contain the fires and stop any new outbreaks.

- It is not clear that environmental protection was prioritised in the largest fire (the Dargo/ Wonnangatta). Sections of snow gum forests were burnt along the Great Divide in the northern end of the fire and the Pinnacles area. Recent, repeated landscape-scale fires have burnt much of the subalpine forests dominated by snow gum (*Eucalyptus pauciflora*). Long-unburnt snow gum forests are important for ecosystem services, have socio-cultural benefits, and conservation values, but they are now exceedingly rare, comprising less than 1% of snow gum forests in the Victorian Alps. Protecting remaining unburnt forests like this must be a priority for Incident Controllers.

- Interstate crews were essential to increase local capacity in bad fire seasons. This was demonstrated this summer with Western Australia, South Australia sending crews who were deployed to the Dargo/Wonnangatta fire. As of Jan 28, 1,300 personnel from interstate, Canada and New Zealand had been deployed to support our response in Victoria, helping out at fire grounds and in Incident Control Centres.

(5) resilience of critical services and infrastructure such as electricity, water and telecommunications during and after the fires;

The federally funded and local council lead 'LEAP into Resilience' community planning process identified many relevant recommended infrastructure adaptation projects, such as "establishing a system for reliable emergency communication, including satellite phones at CFA stations and SES HQ," and " the installation of EV charging stations and generators to ensure continued operation of critical infrastructure" in their LEAP plan for the Triangle area of

Murrindindi Shire. This is a fantastic example of how well-funded, place-based planning can improve the resilience of infrastructure such as electricity, water and telecommunications in a time of increased climate related disasters. This work helped the community "advocate for backup power mobile networks towers", "consider the need for a multilingual approach to emergency preparation and signage", identify the need for infrastructure upgrades, "including more emergency signage, external power points, and reliable water supplies." These initiatives, as well as the social infrastructure promoted in the 'community connection section of the plan' are examples of the benefits of a permanent and adequate climate adaptation fund like a VCCAF. Localised projects, such as the community energy initiatives launched by North East community group Totally Renewable Yackandah, should also be funded and supported to aid regional resilience before, during and after disaster events.

(6) the impact on the community, business and agriculture and efforts to aid in recovery;

Innovative ways of managing livestock like the virtual fencing collars being trialled in NSW could reduce the enormous economic burden and incredibly intensive labour involved in removing and reinstating fences during disaster recovery. This may also have advantages in terms of improving animal welfare and preventing stock losses, due to the ability of farmers to redefine boundaries and move stock quickly and remotely based on fire behaviour. It could also benefit wildlife and holistic landscape planning by relying less on physical fencing.

(7) the impact on the environment, including native wildlife, and any measures to better protect native forests, including technology for early detection and firefighting in remote locations;

One of our core concerns regarding the impact of wildfire on the natural environment relates to the de-prioritisation of environmental assets in many large (campaign) fires. In the section above (4) we note that there are some promising developments regarding how large fires are managed in remote areas. What is especially important is that we take the opportunity of this inquiry to propose broadening the mission of fire fighting services like the CFA. Their primary mission is 'to protect lives and property'. Of course, we fully support this principle. Fire Rescue Victoria (FRV) , which was established in July 2020 as part of Victoria's Fire Services Reform, has the aim of 'protect(ing) life, property and the environment from the effects of fire'. Forest Fire Management Victoria has the aim of 'minimis(ing) the impact of major bushfires on human life, communities, essential and community infrastructure, industries, the economy and the environment. Human life will be afforded priority over all other considerations'.

We also think it is time to expand the stated mission of fire services to explicitly include 'protection of the environment' into the mission/objectives of these agencies in a way that will ensure that incident controllers are obligated to include environmental concerns in any fire management plan.

We believe that our arduous/RAFT proposal, which is outlined above under ToR (3), will build capacity for rapid response to newly started fires, especially on public land and in remote areas. Our proposal is to not only to encourage existing CFA members to join and be trained, but to

specifically allow urban-based people (who live outside the catchment of a CFA brigade) to volunteer. We feel that many of these people will be younger and more diverse than the membership of many existing rural and regional brigades and will increase the overall numbers of volunteer firefighters. In ToR (1) we suggested greater use of volunteers to assist in mitigation to protect forests from burning through manual work, such as protecting individual habitat trees. RAFT teams could also opt in to support these efforts.

We have noted several times in our submission the need to review our current reliance on Large Air Tankers which are leased in each year from North America. LATs can be very useful in slowing the movement of large fires in remote areas where there is limited access for ground crews or the landscape or vegetation makes fighting the fire too dangerous for ground crews.

Above: January 2020. This fire was threatening the village of Dinner Plain and was deemed to be too intense for ground crews to contain. A strike-team and local brigades were told to evacuate. A LAT was able to be secured and created a line of retardant, which stopped the forward movement of the fire. Ground crews were able to mop up the edges afterwards. Without the LAT, it is very likely that Dinner Plain would have been burnt.

There has been enormous loss of staff within DEECA in recent years. This has been especially problematic in terms of the management of land, because of the loss of so many staff with decades of knowledge and experience in biodiversity and landscape management. It is essential that there be no further cuts to DEECA – and the government must commit to rebuilding biodiversity knowledge within DEECA.

Wild fires can cause horrific impacts on wildlife. It is estimated that the Black Summer fires of 2019/20 killed '3 billion animals and trillions of invertebrates.' Once a fire has passed through an area, it is essential that wildlife carers be allowed onto fairgrounds as a matter of urgency. There are, of course, public safety issues before hazardous trees are trimmed or felled, but these risks should be managed in a way that is balanced with animal welfare and wildlife carers' willingness to train in order to equip themselves to navigate these environments. During this summer's fires there were (once again) multiple instances reported where wildlife carers were refused entry to fairgrounds for up to 2 weeks. There are even suggestions that locals in the footprint of the Ravenswood South — Fogartys Gap Road area were asked to 'report wildlife rescuers to the police'. This is not good enough and goes against community sentiment, which wants to see injured animals cared for. Wildlife carers are an essential component of the immediate emergency response, as well as recovery operations, and their involvement must be *facilitated* by the authorities, not hindered.

Climate impacts on wildlife needs to be a consideration of the committee, given that the adverse impact of the bushfires and heatwaves of January 2026 decimated many significant populations of native animals across Victoria and species flying foxes are repeatedly enduring losses like 80% of entire colonies perishing during recurrent bad seasons.

Clean up

Firefighter and community safety is always of utmost importance. After a fire passes through an area it must be made safe for the public. This involves clearing trees off of roads, removing downed power lines etc. A fundamental part of this process is the hazardous tree assessment process that has to occur before the public or regular firefighters are allowed in an area to start clean up.

Private arborists or specially trained crews are generally deployed from FFMV to assess and treat (remove) hazardous trees. This clean up often causes considerable trauma for local residents and often comes at significant ecological costs. In many farming areas, remnant trees along roadsides have incredible ecological importance as habitat trees for birds and mammals.

There is a huge volume of anecdotal evidence that these clean up crews are too zealous in the removal of trees, which causes needless visual damage, loss of canopy, and damage to habitat. Concern among communities after the Beyindeen fire in 2024 led to such an outcry over the loss of damaged trees that the local Council was forced to clarify its guidelines for tree removal so as to reduce the number of trees removed. Residents groups had threatened legal action to stop destruction of trees that were understood to have been habitat for owls and a number of mammal species.

There is a view held by many that damage of fires is compounded by over zealous 'clean up' after fires. There needs to be clearer guidelines and more effective oversight to ensure that only trees that truly pose a risk to the public or human assets are removed in the clean up process. Hazardous trees on fire grounds are routinely marked by tape to ensure that ground crews know to stay clear.

The Biodiversity Recovery Alliance has formed as a response to the Longwood fires and will be lobbying local, state and federal government to limit further damage through over-clearing. Local environmental organisations, like these experienced landcare networks, should be proactively consulted before arborists and tree crews are sent in after future events.

(8) the impacts of climate change on the natural environment, which has resulted in more frequent and intense bushfires occurring in Victoria;

We need to use this Inquiry to set a new benchmark for how we manage the environmental impacts of fires, especially larger blazes. At present, key priorities for Incident Controllers is to protect human life and human assets. While this should remain, we need an additional objective: to minimise the ecological impacts of fires, especially on fire sensitive animal species and plant communities, and forests which have been impacted by previous fires and which are in a stage of recovery.

Specifically, we need to ensure that Incident Controllers are required to include protection of ecological assets in their fire management plans. This must include fire sensitive vegetation communities, including warm and cool temperate rainforest, mature alpine ash, mountain ash and snow gums. It must also include fire sensitive vegetation communities (such as alpine ash) which are in the early stages of recovery and face ecological collapse should they be burnt again.

(9) the prevalence and impact of misinformation leading into and during the fire season;

Government must firmly counter misinformation

Disasters are breeding grounds for conspiracy theories and misinformation. Where there are gaps in information from official sources (especially where power goes down and broadcast media is impacted or disrupted) social media can quickly fill with rumours, misinformation, and politicisation from both bad faith actors and partisan activists. While different demographics tend to use different social media platforms, there is no doubt that Facebook is especially

useful during disasters because of the ability to easily create location specific groups and pages where locals can post observed updates in real time. The negative effects of misinformation must be proactively addressed here.

(10) the interjurisdictional support into and out of Victoria leading into and during the fire season, including interstate and international deployments, Commonwealth support and relief efforts; and

It is great that Victoria is now training CFA volunteers in arduous/ remote area firefighting – this makes our volunteers more eligible for interstate and international deployment.

Victoria must consider whether the current leasing arrangement for Large Air Tankers (LATs) is suitable in a world where fire seasons are getting longer in both hemispheres. Australia only owns one LAT (based in NSW). We lease an additional 5 or 6 LATs we need each summer from North America.

The Committee should investigate whether there was a review done of volunteer and career firefighter fatigue during the Black Summer fire given Victoria sent crews to Queensland and NSW well before our season started. Were recommendations made about how to sustain interstate deployments during long seasons across the eastern seaboard, WA and Tasmania?

(11) lessons from and progress on the implementation of recommendations from previous inquiries, reports and Royal Commissions

Lessons from previous investigations have been integrated well, as outlined during the rest of this submission, and evidenced by the reduced loss of life as compared to previous fire disasters, such as Black Saturday in 2009.