Submission to NSW Bushfire Inquiry

Submitted by:

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We are making this submission as: RFS Volunteers, Fire affected property

Consent to make submission public: Yes

Submitted to: NSW Independent Bushfire Inquiry inquiries@bushfireinquiry.nsw.gov.au

Introduction

We thank you for this opportunity to provide a submission to the Bushfire Inquiry. Input from members of the Rural Fire Service, those whose properties were threatened and/or burnt and community members is important; but even more important is acting on the findings. In the last 80 years there have been numerous bushfire inquiries, many of the critical findings have been common across these inquiries. Unfortunately, despite this, the accepted recommendations have frequently failed to be adequately implemented.

Memories are short, and often a severe bushfire season resulting from drought conditions, is followed by a wet period. By the time we returned to a drought period, many individuals and decision-makers have forgotten the recommendations, forgotten what was agreed, fail to resource implementation of these actions in either money or time. We soon find ourselves in the same situation as before the review.

Consequently, I ask that whatever comes from this enquiry, the findings be implemented. In particular, the findings that are common to all the inquiries that have gone before, the findings that can reduce the severity of our bushfires and their impact. Unless this happens, the resources invested in this enquiry are of no value; the answers to any of the questions asked by the enquiry are only secondary.

Our role

We are providing this submission in our capacity as Rural Fire Service volunteers and as property owners who stayed to successfully defend our home and farm. Our family has been on this property since 1961 and we have personally experienced the bushfires here in 1968 and 2007. The farm was also burnt in the 1952 fires during which we understand one child died. Our farm is completely surrounded by National Parks (formerly State Forest).

We lost boundary and some internal fences and relatively minor damage to other infrastructure. Had we not prepared, invested in fire pumps etc and stayed each time an evacuation was recommended, we would have lost farm sheds and contents and possibly our home. For us, there is only one issue, fuel load. Unless this is addressed, everything else is meaningless.

Preparation and planning

Fuel load

Fire is caused by three factors, fuel, oxygen, and heat. In working to minimise the likelihood of bushfires occurring and increasing the likelihood of being able to manage and defeat those that do occur, there is only one of these three factors that can be addressed; fuel load[1]. Therefore, it is critical that fuel load be managed on an ongoing basis.

In New South Wales, relevant agencies develop or review a Bush Fire Management Plan as required by Section 52 of the Rural Fires Act 1997 every five years. One of the objectives of this Management Plan is to "manage fuel to reduce the spread and intensity of bushfires while minimising environmental/ecological impact". In addition, the plan seeks "to reduce the community's vulnerability to bushfires by improving its preparedness and effectively contain fires with the potential to cause damage to life, property and the environment". We have been involved in this process for our local government areas during the last two iterations of this Plan.

The Plan is excellent and would make significant contributions, if not achieve its objective, if it were implemented. Unfortunately, implementation is a significant weakness. Much of the area through which the Badja Creek fire tore on New Year's Eve before destroying properties in Yowrie, Wandela, Verona, Quaama and Cobargo were classified in the Plan as a Strategic Fire Advantage Zone (SFAZ). This means they are to "provide strategic areas of fire protection advantage which will reduce the speed and intensity of bushfires and reduce the potential for spot fire development. They are to aid containment of wildfires to existing management boundaries". The Plan requires that an assessment of overall fuel hazard occurs once the vegetation communities reach the minimum fire thresholds. Management practices should "aim to achieve a mosaic fuel reduction pattern so that the majority of the SFAZ has an overall fuel hazard of less than high".

Unfortunately, the management practices implemented have not achieved this. There has been little attempt to reduce the fuel load across most of this area. Had this occurred, the intensity of the fire would have been significantly less. We note that CSIRO[2] identifies that once a fire produces more than 3,000kW energy per metre of fire front, it is too powerful to be suppressed. They identify that "Reducing fuel hazard through clearing and hazard reduction burns is one of the few things we can do before bushfire season to reduce the risk of bushfires starting and their intensity when they do, and improve the chances of firefighters getting them under control."[3] The fuel load through much of the area where the Badja Creek fire started was so great that given the temperatures, low humidity, wind velocity, and low fuel moisture, the energy produced by a fire in this area exceeded 100,000 kW. By failing to reduce the fuel load, an unmanageable situation had been created.

Around our property it was very clear that hazard reduction reduced the intensity of the fire.

- New Year's Eve, having demolished Wandella and much of Cobargo, the fire front stopped within 5km of our property. Over the following three weeks the fire travelled the remaining distance to arrive at the boundary of our farm from the west. During this time, the fire front reached an area in which the National Park had conducted hazard mitigation approximately two or three years ago. The intensity of the fire significantly reduced when it reached this area. At the time, you could see a slowing of the advance of the fire front and a reduction in the flame height. This is still clearly visible by the height of scorch marks on trees. In some areas, the fire

[1] This is also confirmed by CSIRO, for example https://blog.csiro.au/bushfire-basics/
[2] https://www.science.org.au/curious/earth-environment/how-we-fight-bushfires
[3] https://blog.csiro.au/bushfire-basics/

stopped completely, and the vegetation has remained unburnt unless it was deliberately lit as part of back burning operation.

- To our north, the fire travelled south at a very slow pace to reach our farm. Both the pace and the intensity of the fire were low because this area has been burnt regularly by NSW State Forestry.

We recognise that implementing hazard reduction does not prevent bushfires occurring. What it achieves is ensuring that the bushfire can be managed and contained quickly which limits the loss of life and property, and demand on community resources. This has been well recognised in numerous previous reviews. For example. the 2009 Victorian Bushfires Royal Commission (p278) stated that "*Properly carried out, prescribed burning reduces the spread and severity of bushfire. It makes a valuable contribution to reducing the risks to communities and firefighters by complementing effective suppression and is one of the essential protective strategies associated with making it safer for people to live and work in bushfire-prone areas in the state*."

This is nothing new. Almost every review, enquiry, Royal Commission since 1939 has identified the necessity to reduce fuel loads through effective forest management (refer Box 1 for a few examples). The problem is that this does not occur.

From our perspective the reasons there is inadequate fuel management are due to:

Box 1: Examples of previous recommendations/ positions on hazard reduction

The amount of (controlled) burning which was done was ridiculously inadequate. (1939 Royal Commission on Victorian Fires, p16)

Lack of fire prevention measures, …, significantly raised the fire risk level in some areas ... Current standards of mitigation and preparedness in Victoria are too low, thus reducing counter-disaster effectiveness. (p54) Fuel reduction by controlled burning is the only effective means of significantly reducing forest fire. (Report of the Bushfire Review Committee, 1983, p 56).

The main cause of the mega-fires is the high fuel loads that have accumulated (The People's Review of Bushfires 2002 – 2007 p 1)

The amount of prescribed burning occurring in Victoria has been insufficient to significantly reduce the risk of bushfires and the Commission is recommending that the State introduce a longterm, robust prescribed burning program. (2009 Victorian Bushfires Royal Commission - final report, p 278)

1. Community attitude. There is a perception amongst many in the community that hazard reduction or thinning forests through other means has negative environmental outcomes. It is seen by many as something that damages the forest. Unfortunately, nothing could be further from the truth. The high energy bushfires that ravage forests, scorching to an extent that vegetation does not grow back for many years, and moving at a pace that does not enable fauna to escape are far more damaging. In addition, the landscape we have at the time of white settlement was shaped by aboriginal land management practices. This involved frequent, low energy burning which produced grasslands or forested areas with relatively little undergrowth and widely spaced trees (Gammage, 2012). Since white settlement, the reduced use of fire has meant trees and shrubbery have invaded grasslands, and in our forests, trees and undergrowth have become far more dense. This situation exacerbates the likelihood of high energy, destructive fires.

   Hazard reduction operations also produce smoke. Many community members complained to relevant authorities about this smoke. This results in these agencies being less enthused about conducting such hazard reduction operations.

As RFS volunteers, we have been verbally abused by members of the community when conducting hazard reduction operations. This abuse is because of both the smoke produced and perceived damage such fires cause to the environment. This abuse does not make the volunteer job any easier

2. National Parks Service perspective. There seems to be an attitude among some in the National Park Service that National Parks should be set aside and left untouched. Visitors are not encouraged to use them and the concept of hazard reduction burns is almost an anathema to protection of these parks. For the reasons outlined above, this perspective is flawed and does not protect our natural environment.

3. Inadequate resources. Reduction of fuel loads requires funding. In southern New South Wales, the conversion of many State Forests to National Parks did not result in a significant increase in budget. Certainly, there has been an inadequate budget to enable the effective management of the fuel load. If we are to maintain and protect our natural environment, we must provide adequate funding to enable this to occur. If as a society, we are not willing to do this, we should not increase the area of land that is set aside and allowed to degrade due to inadequate management.

   We would also note that hazard reduction burns need people on the ground, it is not a function of how many airplanes or helicopters are available. The effectiveness of a hazard reduction burn is dependent upon the number of people working on the ground. This may be volunteers or paid members of National Parks Service, Council, or State Forest. But the critical issue is having adequate people to implement the burn over a period of time.

4. Inadequate accountability for implementation of the Bush Fire Risk Management Plan. We are not aware of any public reporting of what elements of the Plan were or were not implemented and the reasons for this. There is no evidence to suggest that any individual or position has accountability for ensuring the Plan is implemented. This does not support implementation of the Plan. This reflects the findings of the 2009 Royal Commission into the Victorian Fires (p279) "*Accountability for achieving publicly recognised targets and effective implementation of prescribed burning is not evident or supported by transparent resourcing*".

There are numerous ways in which fuel load reduction can occur. For example, it may be through hazard reduction burns, indigenous burning practices, controlled grazing or mechanical thinning of trees. We believe those accountable for reducing the fuel load should have flexibility to choose the appropriate strategy for a specific environment rather than enforcing a one size fits all approach.

However, to ignore the problem because it is difficult will ensure a repeat of the summer of 2019/2020 again. As the 2009 Victorian Bushfires Royal Commission (p278) stated "*the State has allowed the forests to continue accumulating excessive fuel loads. Not dealing with this problem on a long-term and programmed basis means that fuel levels continue to increase, adding to the intensity of bushfires that inevitably eventuate and placing firefighters and communities at greater future risk*."

We therefore seek the enquiry support to recommend measures that will ensure the implementation of hazard reduction strategies. This includes clarity in accountability, enforcing accountability, ensuring adequate allocation of budget for both implementation of hazard reduction measures and community education.

This is our primary concern, if you only achieved this, you would save huge numbers of lives, reduce loss of property, save public funds and reduce mental distress among large numbers of people.

Clearing around property

The 10/50 Vegetation Clearing Rule was introduced.in 2013 to allow people to:

- Clear trees on their property within 10 metres of a home, without seeking approval; and
- Clear underlying vegetation such as shrubs (but not trees) on their property within 50 metres of a home, without seeking approval.

However, we believe that these distances are inadequate.

Many of the homes that were not burnt had large distances between the house and bush. Considering homes in my immediate area, the two that were lost had trees to within 10 to 20 m of the home. In contrast, our home is over 200 m from the bush on the side from which the fire attacked most fiercely. We were easily able to protect it from this direction and it may well have survived without our presence. However, where our other buildings were within 30 m of trees (without shrubs underneath) and 60m of shrubs, they were only saved through our presence and the use of fire pumps, hoses and available water.

Landowners generally find it difficult to get permission from Councils to clear bush from around their home and buildings outside the 10/50 rule. As a minimum, it is essential to be able to remove trees within a distance that means they would land on your buildings if they were to fall. Without this, it is difficult, if not impossible, to realistically protect these properties in the event of bushfire. Councils must provide homeowners greater flexibility to remove trees and shrubs within a larger boundary to provide a clear asset protection zone for up to 100 m.

Insurance

The current structure of insurance premiums provides little motivation for the property owner to invest in property protection. For example, we have invested in sprinklers, fire pumps and hoses, and water tanks to ensure an adequate water supply. Without this investment, our home and associated buildings would have been lost on 23 January 2020. We know of three other homes that were only saved that day because they had sprinkler or misting systems to protect them. However, there is no reduction in premiums for this investment. We would encourage the enquiry to make recommendations to insurance companies that would encourage people to take a proactive approach to the protection of their property.

Warning systems

The use of text messages to provide an emergency warning to people is valuable. It is easy to look at the negatives and forget what a positive change this has made. We would like to commend all those involved in introducing this current system.

In some areas, often those most vulnerable to bushfires, mobile phone reception is either poor or non-existent. There is a need to improve mobile phone coverage in areas most at risk from bushfires. I note for example the problem that residents in Yowrie, Wandella and Dignams Creek (all badly impacted by the fire, with the first two being devastated before the fire was expected to reach the location) have repeatedly reported in writing over the last two years in regards quality of mobile reception and the failure of Telstra to address these issues. This will result in the loss of life, if it has not already.

In rural communities, such as Cobargo, manual alarm systems should be considered. These could be attached to local police stations, schools, or the RFS building. They could be automatically triggered in the event of an emergency to alert people in these communities. This is particularly important at

night when many people turn mobile phones off so that they will not be disturbed. Australia funds these early warning devices for communities across the Pacific. Similar devices could be used here

Roads

Strategic roads

The frequency with which major strategic roads were closed during the fires is of great concern. The Princes Highway is the only road to much of the Far South Coast. Much disruption to commercial activity and supply occurred due to the proximity of burning bush to the highway. We recommend that a clear zone, greater in width than the height of any tree that may fall in a fire, be established along the length of such strategic roads. This would also provide a suitable zone for back-burning and fire brigade mustering during fires. They should be kept clear by frequent burning or removal of trees by Forestry.

Forest roads

The National Parks Service has developed a culture of allowing fire trails and access tracks to disappear, both on the ground and from maps. Even the Essential Trail network recommended by local Bush Fire Risk Management Plans are often not maintained.Consequently, since so much of the State Forest area was converted to National Parks, the number of roads remaining in a passable state has declined. While local knowledge of firefighters can overcome this disadvantage to some degree, many roads remain lost.

At a minimum, this loss of roads reduces access for fire trucks, leading to the loss of crucial time in a fire emergency. To gain access during the recent fires a considerable number of days were spent by bulldozers clearing roads and trails through the forest that had been allowed to grow over or deliberately closed by National Park Service. Many areas were not accessible in time which enabled slow fires to cross them and proceed to places which the fires may otherwise not have reached. Out of necessity, new roads were created, often damaging environments that would not have needed to be touched had previous roads been maintained.

This situation is not positive in terms of fire management, protection of the environment, or public cost to reopen former trails or bulldoze new ones and then manage them where they are in sensitive areas. We must look at maintaining a better network or roads and trails in forested areas.

Given a change to the National Parks Service culture, the Service requires resourcing that enables them to keep forest roads clear. The maintenance of the Essential Trail network recommended by local fire management plans should be enforced.

Response to bushfires

Use of aerial support

We recognise the value of aerial support in fighting fires. However, in many situations, aerial support is not particularly effective without complimentary on the ground support by firefighters. For example, for over a week, helicopters, and in some places, aeroplanes, water- bombed the fire as it approached the western boundary of our property almost continually. This slowed the fire but did not quench it. The limited resources available meant that there were no on-ground crews working with these aerial water bombers. This limited the effectiveness of the aerial waterbombing. Because the fire was slowed but not quenched, when the weather conditions reached their worst, the fire erupted, hit our boundary, and leapt from one side of the farm to the other. Had the waterbombing not occurred the fire would have reached our boundary earlier. At this point, as it came out of the forest into cleared land, we would have been able to extinguish it relatively easily. Alternatively, had

there been on the ground support to the aerial bombing, they would have been able to better target the water drops and create a firebreak which may have extinguished the fire in this area earlier. Hindsight is a wonderful thing, no one is to blame, everybody made the best decisions they could based on the information that was available. But we would like to see greater consideration of where waterbombing is most effective in the long term and how its effectiveness can be improved. This is particularly important given the expense of the use of helicopters and planes.

Local RFS autonomy

Many of the captains in local fire RFS have years of experience in fighting fires, a depth of formal training through the RFS and know the area extremely well. They are the experts. However, a number of these leaders have noted that their ability to act in a timely manner so that they could make best use of prevailing conditions was constrained by the need to obtain approval to do anything beyond defending life and property. For example, they were not able to undertake back-burning actions without approval which often took too long to obtain and by then the conditions were no longer conducive to back burning.

Particularly when fires cover such a geographic scale as those experienced in January 2020, delegation mechanisms must be improved so that leaders on the ground are able to take advantage of situations where they arise in a timely manner.

Communications

People have now become conditioned to receiving information in an almost continual flow. Consequently, where landlines, mobile phones and Internet are no longer operational, the absence of information created significant levels of stress and anxiety amongst people. In many cases this was a consequence of lack of power and/or damaged infrastructure. In our small community ([redacted]) we were able to provide information to others who remained or evacuated because we were off-grid (so maintained our power), and had satellite Internet and a wireless home phone that used a different system. While not perfect, the feedback we have had was that this was a value and significantly reduced anxiety and stress levels.

More broadly, we would suggest that the review make recommendations about inclusion of satellite phones specifically for use in emergency, in each community at the local police station, Rural Fire Service or primary school. These could be powered through winding handle or a generator.

We would also recommend that mobile phone towers have independent power sources to ensure that they are able to continue operating, even if in a restricted form, when power supplies are lost. Many are hemmed in by bush; we recommend that significant Hazard Reduction Zones are cleared around these sites. We would also recommend that all future power supply lines be installed underground to reduce the likelihood of both them initiating a bushfire during storms and damage to the power lines during a bushfire.

Other matters

Federal State coordination

There is a lack of public clarity as to the different roles and responsibilities of Federal and State Governments (let alone Local governments), exacerbated by the media. This creates confusion among the public and led to a lack of confidence in the Government's ability to effectively lead and manage the emergency.

While the roles and responsibilities of each as legislated seem clear, this confusion encourages a 'blame game'. This does nothing to help address the emergency and provides a distraction from what should be the focus. We would encourage the Review to consider how clarity in roles and responsibilities of all levels of government could be enhanced.

There has been much comment on the need for establishment of a single Federal agency to respond to bushfires. To ensure that those with best knowledge of the facts (rather than those influenced only by media reports) determine the best way forward, we believe it should be at the senior leadership level from each State and Territory fire service who make the decision as to whether a single, Federal body/agency is required. Our comments in this regard are therefore for information only:

- Hitherto, even the worst fires have tended to be contained to one or two States, with the peak occurring during one or two significant days. In these situations, from our perspective, it makes most sense for management of bushfires to be the sole responsibility of State authorities.
- We find it difficult to see the benefit to be gained by management of fires and their aftermath by another layer of administration and believe that fires should be dealt with entirely by State Authorities. This is because the States run and finance the fire services and as such should carry the responsibility for their sound upkeep and effective operation – there should be no confusion of responsibility. If the Federal Government wishes to provide emergency funding in special circumstances, then we believe it should still be administered at State level. To do otherwise may create further opportunities for confusion and 'shifting of blame'.
- Where cross-border operations are required, we understand that the fire authorities already have well worked coordination mechanisms that generally work well.
- The four-state spread of the latest fires over a protracted period makes them different both in scope and in public perception. There may be need to have systems to establish a national, temporary group (as with Covid-19) in these situations. The role of any such group must be clear and clearly communicated to the public to avoid further confusion. However, it is only those in leadership during the fires who are in a position to make a robust assessment in this regard.
- Improved coordination mechanisms may be required rather than establishing a new, single Federal body.

If the decision is that such a body/agency is required, we would suggest that this should focus across all emergencies rather than being bushfire specific.

One area where improved coordination is required is in *Fires Near Me*. The fires in Victoria did not appear on this which is a problem if you are near the border. I am assuming that there were similar problems elsewhere. We would recommend that a single application be used by all States which ensures consolidation of this information.

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