

Submission Number: NND.001.00880

Submission Of: Stephen Atkins

Your Details

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Preferred means of contact: Email

What is your submission based on? I am making this submission based on my professional knowledge, qualifications or experience or on behalf of a group or organisation

What is your area of professional expertise? joint submission from residents with different areas of expertise including environment, land use, wildlife conservation

If you are lodging your submission on behalf of a group or organisation, what is the name of the group or organisation? Maloneys Beach Residents Association

Your Submission

In your experience, what areas of the bushfire emergency response worked well?

- Initially, the rapid response to immediate danger was extremely swift, efficient and effective. In early December, an arson-lit fire, at very close proximity to our suburb/ hamlet, with an unfavourable wind, was extinguished by Victorian firetrucks, and airplane and helicopter water bombing, almost within an hour of being reported. This was because of easy access to a water supply and availability of resources at the time. The outcome may not have been as good later in the fires caused by extreme conditions, when all these resources were spread widely across many fronts. Other suburbs in Batemans Bay later reported during fires that there were no available fire appliances

- The courage of firefighters and the sacrifices they made, especially volunteers, were exemplary.

- If, and only if, you can access them, the information on Fires Near Me is becoming more and more up-to-date and reliable and the information on Live Traffic is also very reliable. The fire map showing areas burnt, burning and in danger of possible ember attack, is easily interpreted.

- The evacuations in the early days of the fires, and there were two or three in our area, were cautious and sensible considering the danger of the only road in and out to the main highway being cut.

- The post-fire trauma support was timely.

In your experience, what areas of the bushfire emergency response didn't work well?

- Lack of consistency in firefighting response. Later in the fires, there were communities in our area where interstate firefighters were there to save lives but did not assist in saving property. We were very glad that interstate firefighters had put out our earlier local fire to save property.

o There needs to be consistency when delivering firefighting services, all firefighters should be operating under the same protocols, for example, interstate firefighters should be providing the same level of response as local RFS.

o There needs to be better and consistent resourcing and consistent training of RFS, Fire and Rescue NSW and the Armed Forces so they are equally proficient and well-resourced when fighting bush fires. For example, the fire trucks belonging to the NSW Fire and Rescue vehicles were not appropriate for bushfire conditions amongst other problems, their hoses controlling the emergency brakes melted causing the brakes to lock on and endangering the lives of the crews who had to escape on foot.

o Should volunteer firefighters be paid when actively serving, or at least compensated for time off work, and have prescribed, ensured compensation for injury or death when engaged in their duties.

- Telecommunications infrastructure continues to fail our community completely. The fact telephone lines are now linked to the NBN means when one thing fails, everything fails. When the fires were at their worst, and we were in the most danger, with fire damage to infrastructure and power blackouts for repeated, long and extended time periods, the community was without any news, updates, or ability to find out about roads or local fires, making it impossible to make well-informed decisions about staying or leaving. Sometimes, smoke and the colour of the atmosphere, were the only indicators of the presence of fire and there was no way of finding out where the fire was, where it was heading, and if roads were safe to travel, or even already blocked. Local broadcasting came to an end when infrastructure was burnt. Many people have no coverage at all or very poor reception unless they walk some distance from their homes and others were unable to charge their mobile phones. Every household would need to have had access to a non-battery powered radio that did not require electricity, or a battery powered radio with a good supply of spare batteries, and access to a radio broadcast with up-to-date local information to be truly safe. The internet in these circumstances was of no use. Those who still had phone access to helplines found being redirected to internet sites very frustrating. Early leaving, having been prevented by the long term closure of the Kings Highway, and the frequent closure of the Princes Highway in both directions, meant many people had no choice but to stay in their homes or use the evacuation point between their homes and the water. There had been announcements that included advice to have an appropriate radio but that message did not reach everyone and batteries and radios sold out quickly, then shops were unavailable.

o There was no way of ensuring everyone had access to important information. While the authorities relied on the internet, we had to resort

to listening to the radio and text messages from friends outside the affected areas.

o Facebook is not an appropriate medium as there is as much misinformation as useful information and it is not accessible to many people.

o Our local radio was fire affected and stopped broadcasting.

o Consideration needs to be given to access to landlines if problems with alternatives cannot be resolved. (See attached letter)

- With no power, and road blockages, residents were either unable to get to shops, or there were no shops to go to. Even Coles and Woolworths were closed, panic buying, often by departing tourists, and food spoiled by black outs left no stock on shelves when they were open and no fuel, no gas, and no bottled water for locals. There was no ability to get cash from ATMs, they either didn't work during the blackouts or ran out of cash. Restaurants and food outlets were unable to open. When businesses and petrol stations were open they were 'cash only' so that those who could not access their cash or needed to use credit were unable to purchase. This went on for an extended period of time, for most of January. Food was destroyed in domestic freezers but replacement meat, and other frozen goods, were unavailable, as shops had to throw out all their spoiled refrigerated and frozen goods and supply lines were cut. A local couple waited in a three hour queue for fish and chips on one of the first days one business in the area was able to open because the shop had a generator and could get access to fuel. There were people who were unable to feed themselves and their families and were unable to go anywhere else.

In your experience, what needs to change to improve arrangements for preparation, mitigation, response and recovery coordination for national natural disaster arrangements in Australia?

- First and foremost, why are we experiencing unprecedented fire activity?

o The effects of climate change need to be identified and addressed.

o There needs to be greater resourcing to provide same levels of response to fire in worsening conditions and across wider areas.

o There needs to be a scientific and methodical response to long-term drought and its victims (farmers, wildlife, habitats), water supply and usage.

- There has been a serious lack of fire readiness and preparedness. In our local area, some citizens have battled for years, with no hope against bureaucracy, to have privately owned land near them reduced of obvious fire hazards in areas very susceptible to fueling a property damaging and life-threatening fire. Many of our local citizens are concerned by the obvious fire hazard that remains on the floor of a local managed forest, Benandarah State Forest, which was right in the path of one of the most serious fires ever experienced in our area. There are at least two incidents in southern NSW, one of property being saved and one of bushland being saved, because of the actions of local Indigenous people.

o The management of forests needs to be regulated and supervised.

o Scientific and sensitive hazard reduction over a widespread area should be mandatory practice in forests, National Parks and in private land with high fuel levels. There needs to be adequate information and funding to fire services and to National Parks to guarantee these practices, including alternatives and improvements to controlled burning. (See letter attached)

o With the impossibility of financing and resourcing of total hazard reduction by controlled burning, and potential dangers to species, human health and consequence of actually providing more fuel, caused by controlled burning as a means of hazard reduction, there needs to be a designated fire protection zone around assets, for a width, for example, of one kilometre where benefits of means of hazard reduction can be weighed against negative impacts. (See attached letter.)

o Indigenous, custodial land practices must be studied and incorporated into our hazard reduction practices.

o Guidelines need to be defined, and enforced, for prerequisites to build, or banning of future development in, and next to, bushland, National Parks and forests. For example, proposed development in identified dangerous conditions with only one access road in and out to should be banned. Development on the edge of escarpments, identified by firefighters as being difficult and/or impossible to defend, should be banned.

o There needs to be a reduction in bureaucracy to ensure expedient hazard reduction on private land, in forests and National Parks, especially when dangerous hazard levels are identified. One resident from our area has been forced to move from his home because his wife is physically impaired, and neglected private land near his property places his home and his wife in too vulnerable a position. He has been trying for years to have his problem addressed.

- Long term focus on town recovery. Our local city hub, suburbs and many small towns in our area have been economically devastated by fire damage, massive loss of homes, power shortages, lack of tourism during and after the fires, and now corona virus lockdown. Many businesses will never recover, several have already closed permanently, affecting the future quality of life of residents.

o Long term assistance is needed to stimulate local economies and ensure provision of services can continue.

- Our local wildlife has been decimated. Innumerable animals and vast areas of native habitat have been lost. Even our marine life was adversely affected by post-fire pollution, most probably from ash, smoke and fire retardant.

o Funding and resourcing to identify areas of endangered species and habitats and develop best strategies and implement them, are imperative, to ensure the survival of local plant, animal and insect species.

o Need to consult experts on Australian wildlife and conservation, who have demonstrated a commitment to preserving species, to establish whether there is a need to provide more protected land for the preservation, with priority given to the prevention of extinction, of species and to act on their findings by locating, acquiring, providing and protecting those identified areas.

o There should be a moratorium on forest logging in areas where ecosystems can be assisted to recover, and affected workers repurposed.

o Are wildlife organisations, engaged in saving injured animals and preserving their habitats, funded adequately.

- Because of the intensity of the fires and the duration, we are concerned about the potential ongoing health issues caused by exposure to smoke and stress for firefighters and residents who were present in fire and smoke affected areas. In our area, there was a very welcome, well advertised and resourced response in the short-term, immediately after the fires, to assist people with mental health issues related to their experiences. This is now being managed by normal mental health service provision.

o Long-term studies need to ascertain the effects on physical health of those exposed to smoke and embers from the fires. Strategies need to be identified and put in place to diagnose, treat and assist victims with damaged health as defined by those studies, and their families.

o Adequate funding for mental health service support for people with mental health issues related to, or exacerbated by, exposure to fire danger is required.

- Large numbers of people in this region lost everything to the fires. Their lives are in limbo and many of them will not receive the level of financial assistance necessary to rebuild the home that they had.

o What practices can facilitate the release of funding from government, non-government organisations and insurance companies more speedily.

o What can be done to ensure replacement value of lost property and timely release of funds.

- Power and telecommunications infrastructure was damaged and the services failed miserably. The bushfires showed us a new reality. We had become too reliant on an always connected society where smartphones and the internet delivered information, online shopping, and use of the internet was becoming the norm. Governments were even talking about cashless societies. The experience of our local government area demonstrates dramatically that we need to completely rethink this strategy.

o Our continued reliance on centralised power infrastructure, with long delivery pathways, and single points of failure must now come into question. We now need to have hardened and distributed power generation and storage close to where it is consumed. We need a mesh network, not a star network.

o Our continued reliance on above ground telecommunications infrastructure with critical nodes subject to fire damage or other extreme climate events must also now come into question. At the very least, backup non-terrestrial, e.g. microwave or satellite communications, must be in place with their own source of power. For example, a number of mobile units such as the one later used at the Batemans Bay emergency centre could be in place for rapid local deployment as, and where, needed.

o An enquiry into how to better guarantee provision of power, fuel, banking facilities, methods of payment, food supply in commercial centres needs to be undertaken, its findings published and acted upon. Without power there is no checkout terminal, there are no ATMs to source cash. Without power, there is no refrigeration, and food spoils, in household storage and in shops, without it even being sold to those who desperately need it.

o Our society has become used to ubiquitous power and access to the internet. In this new reality, there needs to be a major rethink in disaster planning. Without both power and internet access, parts of the Batemans Bay area verged on anarchy.

o There needs to be an obligation to provide adequate mobile phone coverage to all areas and eliminate black spots.

o There needs to be a way to ensure infrastructure can provide delivery of information via the internet in times of crisis. Where there is no internet, there needs to be an alternative. Phone help lines simply referring back to unavailable internet sites are of no use if access to those internet sites cannot be guaranteed.

o There needs to be improvements made to help better fireproof electricity supply infrastructure (our local lines laid underground were not the problem) but our power supply was interrupted before it reached those local lines for sustained periods of time and repeatedly.

o There needs to be incentives to encourage alternative distributed power generation and storage especially in small isolated communities where individuals, groups of houses, or even the whole community, are able to provide their own solar or wind power, with perhaps battery storage and generator backup. All disincentives and legal barriers to sharing infrastructure should be removed.

o Communities should be encouraged to have energy independence, for example, becoming engaged in initiatives such as Starfish Initiatives (starfish-initiatives.org) and Z-net (z-net.org.au). The government should facilitate, and remove any impediments to, community-based, rural and remote, independent sustainability of renewable energy generation and consumption.

- Public education needs to improve. People are ignorant of the best ways to protect themselves and their property. There is a lot of well-researched information but it has not been emphasised or circulated enough and there is still misinformation being widely spread as to causes of fires, prevention, whether to leave or stay to protect property and how to stay safe if caught in a fire.

o Public education programs with consistent and accurate messages on how to survive bushfire perhaps presented in the same way as Cardio-Pulmonary Resuscitation techniques are.

o Advice on cost effective ways to protect housing and fire ratings on available products should be easily accessible that are well

researched and regulated. For example, how to fit reflective shutters to windows during times of emergency.

Is there anything else you would like to tell the Royal Commission?

Two letters. One on public education and hazard reduction from Peter Coyne, one on telecommunications issues in our area from [REDACTED]

Letter One:

Thanks for the opportunity to make a submission to the bushfire enquiry.

As a forestry student in 1968 and 1969 I was taught fire behaviour and fire management by Alan McArthur, probably the world's leading bushfire expert at the time. Much of what he taught us then, remains valid. He developed the forest fire danger meter which is still widely used in Australia, including in NSW.

I have two main concerns about fire management and the associated risks. The first is education and the second is realistic goals for hazard reduction.

Public education

Many fatalities in bushfires could have been prevented by effective education of the exposed public. Fire survival often requires only protection from radiated heat until the fire front has passed, which can be a very brief period. Alan McArthur advocated seeking such protection wherever we could - in a building, in a car, or if necessary in a culvert or hollow log or wherever we could get temporary protection. Fire authorities have recently been advising the public to shelter in place. Much better education of the general public about how to successfully shelter from bushfire is essential.

A fire front often passes within a minute or two. We were taught to shelter in a house in a position protected from radiated heat until the house was on fire. Only then was it necessary to leave the building, preferably on the side from which the fire had come. A safe escape route from the sheltering position is clearly necessary and must be part of the decision of where in the building to shelter. Similarly, if caught in a car, protection from radiated heat while the fire front passes gives a reasonable chance of survival. It is necessary to get as low as possible below window height with any available covering above to protect from radiation. The car should be left once it is on fire, but not earlier.

Protection of buildings has been the subject of much thought and research. The public need much better information on design to minimise fire risk but, critically, how to minimise the fire risk of existing houses. I won't try to reproduce the current state of knowledge about protection of houses from ember attack and radiated heat. A news broadcast last summer showed a surviving house which the owner had clad with reflective metal foil as the fire approached, effectively protecting the house from radiant heat and also, to some extent, from embers. I suggest at the very least all houses exposed to possible bushfire should have reflective shutters on all windows when a fire approaches.

Fuel-reduction

The value of fuel-reduction burning is debated even among those with expertise in fire management. In the wider public the issue is badly misunderstood, especially by politicians. This is a complex issue with many competing considerations. I believe fuel-reduction burning has limited benefit and significant costs.

The bushland in south-eastern Australia was commonly described in the period from 1788 to the mid-1800s as being park-like, with widely spaced trees and few shrubs in the understorey. That was the outcome of tens of thousands of years of traditional Aboriginal fire management. From the perspective of current fire management and also for biodiversity, the fire management regime up to 1788 seems optimal. With realistic practical constraints it also seems unattainable.

If restoring pre-1788 fire management is impossible, we are left to seek the best compromise. The fuel layer which is the target of fuel-reduction burning changes with time since it was last burnt, but in ways the general public do not understand. [REDACTED] suggested that, in general, fuel accumulated for about ten years after a fire, after which decomposition of some of the older fuel matched accrual of new material. Thus fuel-reduction burning would require a maximum interval of ten years, so one-tenth of the managed area would need to be burnt each year. Even then, much of the area would still have a reduced fuel load which would sustain a serious fire in threatening weather. I have known a fire to burn through forest just a week after it had been burnt (presumably fuelled by fallen scorched leaves). The resources to burn one-tenth of the forest each year are not likely to ever be available.

Furthermore, opportunities to safely undertake fuel-reduction burning are diminishing as climate change reduces the suitable period. Serious consideration is needed of the effectiveness and efficiency of fuel-reduction burning, as well as its appropriateness in some areas. Fuel-reduction burning will not prevent bushfire. To a limited extent it could mitigate the intensity of a fire. Thus, given the unavoidable constraints on managers, I believe attempting fuel-reduction burning over the whole forest area is inappropriate.

A more effective approach might be to define an area around assets which would be a designated fire-protection zone subject to priority for fire protection. Such a zone (perhaps one kilometre wide around settlements) would be subject to frequent fuel-reduction burning, with the environmental costs accepted as necessary.

When considering fuel-reduction burning, the adverse impacts must be considered, and alternatives sought. Such burning will produce smoke which could affect fire crews but also the wider public. The smoke from this summer's bushfires apparently killed many more people than direct exposure to the fires. Burning large areas regularly will produce large amounts of carbon dioxide, aggravating climate change and consequent fire risk. Management burning will also significantly affect biodiversity. A fire interval of ten years would eliminate some plant species needing a longer period without fire to be able to reproduce. Well-known examples are the ash-type eucalypts, especially mountain ash (*Eucalyptus regnans*) and alpine ash (*E. delegatensis*). Fauna will also be sensitive to fire frequency.

[REDACTED]

Letter two:

To the Royal Commissioners

During the recent catastrophic bushfires along the South Coast of NSW, a long standing concern of many residents since connecting to the NBN was realised.

We were required to change from our ADSL service in 2017.

Our concern from the outset was that during power outages, NBN users also lose their landline telephone. Upon advising Telstra of our concern we were told that in such situations we would have to rely on mobile phone services. Mobile phone coverage at Maloneys Beach is very poor to non existent depending on where one lives within the village. In many cases there is no signal in the home and users have to walk to the end of the street towards the beach to get reception.

During the current bush fires, the community lost power for several days, as did many residents along the south coast. During this time mobile phones were also out of service for several reasons. When the mobile phone service was restored, it was limited in strength and residents and visitors at Maloneys Beach flocked to the beach to get a minimal signal (if they were lucky).

This situation prevailed for many days and was aggravated further by the loss of wi-fi to tablets and other devices because of the power outage and an inability to recharge devices.

People at Maloneys Beach were advised on two occasions to evacuate as the fires were threatening the area and the only road in/out would likely be closed. Many people departed to evacuation centres and other locations out of the area where they could. That option became less possible as major highways were closed due to fires north, south and west of Batemans Bay.

Of course, Maloneys Beach was not the only coastal village that became totally isolated as other villages such as South Durras, Pebbly Beach, Pretty Beach and many more lost their NBN landline and mobile phone services. Those who were not on the NBN still had their ADSL phone service.

My concern is that residents are put in a situation of having no communication services in many coastal villages as a consequence of the combination of loss of NBN services during power outages and poor to non existent mobile phone coverage. During Emergencies such as the present wildfires, the situation is intolerable and puts lives and property at risk especially if evacuation from a village due to limited access is not possible.

The NBN has negated a service that was previously provided with ADSL in that we still had landline telephones during power outages. I request your assistance to resolve these issues and would also appreciate your assistance in taking steps to improve the mobile phone service in our area, for example, supporting the installation of a fireproof transmitter tower providing services to our communities.

Your attention to this very serious and concerning problem is appreciated.

Regards

[Redacted signature block]

Do you agree to your submission being published? Yes I agree to my submission being published in my name

Supporting material provided:

Letter on public education & hazard reduction.docx

Letter on telecommunications issues.docx

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[REDACTED]
[REDACTED]
[REDACTED]

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