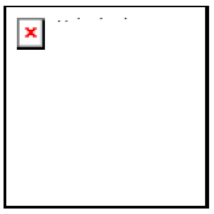

Title	Mr
First name	Justin
Last name	Williams
I am making this submission as	Emergency services
Submission type	Personal
Organisation making the submission (if applicable)	
Your position in the organisation (if applicable)	
Consent to make submission public	Public
Your story	My wife and I are both firefighters for the Forestry Corporation working on the Mid North Coast. This season we both worked on fires from October till Mid January on fires from the Queensland border to the Victorian border in a range of incident management teams and in field fire fighting roles. I worked primarily in the operations officer roles on the north coast as well as planning officer on the Dunns Rd fire in the Snowy Mountains. We were fortunate to have the support of family and friends to support our children and family during this extended campaign. I have 25 years experience in forest and fire management with a natural resources degree and have routinely deal with the improvement and implementation of environmental rules for both timber harvesting and activities including hazard reduction burning. It is clear from this season that significant improvements in fire preparedness and mitigation are made across the public and private forested foothills and ranges to reduce the risk of such as

	terrible season occurring again. This is equally important to protect communities, the timber industry and the environment.
1.1 Causes and contributing factors	The drought, the heat, the wind, the terribly low fuel moisture led to the fire season we had, all of which had greater likelihood due to climate change. Climate change means the risk of these 1:50-100 year conditions might now be 1:20 year events. Most significantly however, 30 years of inaction on fuel load management meant the landscape was covered in risk when the bad season arrived. Science suggests about half the forest should have fuel treatments less than 5 years old to effectively mitigate the risk. SW West Australia has proved this level is effective. Instead less than 10% of the forests (all tenure) in NSW had fuel treatment in the last 5 years. Most of the large, damaging fires started small in the ranges, were unable to be put out quickly and/or were let get bigger even though they started in relatively manageable conditions and then ran towards the coast on bad weather days (Bees Nest/Liberation Trail, Rumba Dump, Gospers Mountain, Currowan, Dunns Rd). The lack of human activity and fuel management in the ranges created the heightened risk that the inevitable bad conditions took advantage of.
1.2 Preparation and planning	Mitigation is a fundamental principle to reduce the size and impact of bushfires on both the community and the environment. The Bushfire Environmental Assessment Code has a table that prescribes minimum fire intervals that have the perverse effect of making it impossible to manage fuel risk. Much of the North Coast forests are Wet Sclerophyll forests. Research has shown fuel accumulation occurs in 5-10 years and hazard reduction burning has an effective life of ~5 years for fuel load and ~10 years for bark hazard & reducing spotting in these forests types. The science also shows that when fires burn in hot conditions, unburnt and low intensity habitat refuges are linked to areas treated for fuel reduction in the last 5 years. The code specifies minimum fire intervals of 15 years for grassy WSF and 30 years for shrubby WSF and low intensity burning only! This is basically impossible to achieve. The interval limits are clearly inconsistent with effective hazard reduction and must change for the RF Act (which the code sits under) to meet its objective. There is debate is to whether to focus on hazard reduction across the landscape or near communities/infrastructure. This debate is futile. It is imperative to do both. Focus on built asset protection, leaves enormous environmental risk in the very areas set aside to protect the environment. Resourcing for bushfire mitigation is much lower than resourcing for bushfire suppression and the balance needs to swing heavily towards mitigation. This means adequate resourcing for hazard reduction burning, fire trails and other mitigation activities across tenure. The NPWS received a significant increase in funding for hazard reduction burning and this led to significant increases in the area burnt. This funding needs to be provided to FCNSW, Lands, Water Catchments and the RFS to deliver adequate levels of fuel reduction across the landscape. There are numerous things that need to change to make additional funding effective, particularly having an increased number of professional land management fire practitioners implementing bushfire mitigation across the landscape and having systems and procedures to enable the work to occur at the scale and efficiency required. Effective mitigation will pay for itself in reduced fire suppression costs, let alone savings to the community and the environment.

	NSW should have a clear objective of how much mitigation it wants before the next serious fire season. Some suggested objectives are a) Maintain 40-50% (gross treated area) of the forest (all tenure) with fuel age 5 years or less. b) Plan and establish a comprehensive and effective fire break network (trails + fuel treatment + dangerous tree management). c) Establish a professional land management focused mitigation group to work across tenure (work with not replace agencies) to develop systems & standards, monitor progress and expenditure to ensure the State's mitigation objectives are being met.
1.3 Response to bushfires	Overall the response to such a long, difficult and damaging fire season is a credit to all agencies involved and the staff and volunteers who continued to put themselves in harms way to protect the community. No doubt there are improvements to systems and procedures, however a couple of positives to highlight are a) Public warnings, Fire Near Me, the commissioners and other public messaging were all huge improvements. If this season occurred 10 years ago there would have been many more deaths. b) Communication systems - the Forestry Corporation Map App was a huge improvement in communication and safety for our staff. The system allows for reliable mapping and seamless transfer of information around the fire ground as well as back to the incident management teams. A simple model of the MapApp that runs across agencies is crucial to develop ASAP to enable these benefits to be enjoyed by all agencies and fire fighters. On the downside, radio systems still do not work effectively across agencies and would make a substantial safety and management improvement if effective systems were available.
1.4 Any other matters	In terms of preparation and planning for future bushfire threats and risks - Set objectives around how much NSW wants to mitigate the risk, then plan and resource effectively to achieve that mitigation. We also should not miss the opportunity that reduced fuel loads from these fires give us. It is very hard to burn at low intensity in older fuels so we need to get back into burnt areas whilst fuels are still low and recommence hazard reduction. We also need to spend the next few years treating the unburnt forests to protect the important environmental assets they have. It would be negligent to let the other half of the forest get badly burnt in a decade because we chose to 'protect' the unburnt bits. It is time to learn from what works in Western Australia and what the indigenous people did for a very long time and start reducing risk via regular low intensity hazard reduction (cool burning). In terms of land use planning and management - We need standards and codes that are efficient and effective and encourage compliance. All land managers need access to an actual streamlined process that can be effective at mitigating both the bushfire risk but also their prosecution risk if they do so. Overall the state needs more professional land managers out there with the resources to reduce the risk. In terms of action to adapt to future bushfire risks to communities and ecosystems - We need to reduce the parts of the hazard we can - fuel loads and where communities build. For ecosystems, ask ourselves do we want a regular (5 year) low intensity fire regime with occasional bigger and hotter fires or do we want a regular (15 year) high intensity fire regime? It is inevitable that if we do not become successful at reducing the hazard in our forests then a regular high-intensity fire regime will result and that will devastate forest communities, especially arboreal mammals.

In terms of Emergency repose to bushfires including overall human capital and resourcing - We need to urgently shift from a fire suppression focus to mitigation. If we put more people into mitigation works they will be trained, prepared and available for suppression when needed. We need to look after the loggers. Most of the heavy plant on the fireline came from FCNSW logging contractors. These are safe and compliant plant with experienced operators. If we lose the loggers we will struggle to put the fires out in future.

In terms of safety of first responders - increasing the number and practical experience of professional and capable frontline fire managers (crew leaders, divisional commanders and incident management staff) is crucial. An organised fireground is a safer one. Giving them effective communication systems and maps reduces the safety risks. Having completed mitigation work before they get there would be a real safety game changer in the forest environment. Arriving at a containment line that has low fuels, limited ladder and bark fuels that cause spotovers and the worst dangerous trees already removed would make forest firefighting a much safer exercise.

Thank you for the opportunity to make a submission

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