

NORTHERN TERRITORY RESPONSE INTO THE SENATE INQUIRY

Lessons learned in relation to the preparation and planning for, response to and recovery efforts following the 2019-20 Australian bushfire season

- a) **Advice provided to the Federal Government, prior to the bushfires, about the level of bushfire risk this fire season, how and why those risks differed from historical norms, and measures that should be taken to reduce that risk in the future.**

Bushfires NT, as a partner with the Bushfire and Natural Hazards Corporative Research Centre and other jurisdictional fire and emergency services agencies contributes to the development of the annual Australian Seasonal Bushfire Outlook. The outlook focusses on the bushfire potential across the landscape, which is defined as the chance of a fire or number of fires occurring of such size, complexity or other impact (such as biodiversity or global emissions) that requires resources (from both a pre-emptive management and suppression capability) beyond the area in which it or they originate. For the Northern Territory, the assessment made for the August 2019 outlook was that the late and weak monsoon activity for the 2018/19 wet season led to dryer than average conditions, with the Top End experiencing it's driest wet season since 1992. Similarly, large areas of central Australia had received below average rainfall in the preceding 12 months. This led to reduced growth of vegetation, but despite this, the whole of the Northern Territory was expected to observe a normal bushfire potential to continue for the remainder of the fire season, due to a shift in the timing of fire management activities. In the Top End, both mitigation activities and bushfires occurred two months earlier than normal, with large, long duration, early season bushfires that would normally be pulled up by temporary watercourses continued through these areas due to the drier conditions. With a late onset of the 2019/20 wet, the dry conditions were extended resulting in a prolonged fire season in the Top End.

Additional to the outlook, Bushfires NT annually engages in fire management planning with federal government agencies such as the Department of Defence and the Department of Agriculture, Water and the Environment in relation to their responsibilities under the *Bushfires Management Act* of the Northern Territory as an owner or occupier of land throughout the Territory.

In partnership with the Bureau of Meteorology, fuel state data is routinely assessed by Bushfires NT at various locations across the NT. This data provides updates to fuel conditions for each station listed in the Northern Territory Fire Weather Bulletin and Fire Weather Forecast Area. This partnership enables the Bureau of Meteorology's fire weather service to provide routine forecasts of fire danger and Fire Weather Warnings to the public; and provides fire authorities, police, civil defence and emergency service organisations with detailed routine forecasts, warnings, operational fire forecast and consultative meteorological advice.

- b) **The respective roles and responsibilities of different levels of government, and agencies within government, in relation to bushfire planning, mitigation, response, and recovery.**

Bushfire prevention and management in the Northern Territory is governed under two Acts: *the Fire and Emergency Act 1996* administered by the Northern Territory Fire

and Rescue Service in Police Fire and Emergency Services; and the *Bushfires Management Act 2016* administered by Bushfires NT within the Department of Environment and Natural Resources.

The Fire and Emergency Act 1996 establishes the emergency response requirements for the NT Fire and Rescue Service in declared Emergency Response Areas (ERAs) around towns and cities (less than 0.2% of NT land area). Within the ERA, NTFRS has a legislated responsibility to respond to all fires including bushfires. Response is immediate and wherever possible meets response time benchmarks, that in turn are used as a guide when establishing boundaries of an ERA.

The Bushfires Management Act covers 99.8% of the Northern Territory's land area and is somewhat unique in Australia in that it is the duty of the owner or occupier of the land, not a government agency, to take necessary actions to protect their property from fire and to prevent it spreading to other land. Bushfires NT provides advice and support to prepare, implement and review fire management practices with the purpose of building a proactive and resilient community.

For this land owner led model to work, a fire management community with clear roles and responsibilities, locally relevant fire management experience and high levels of collaboration are required. Below are three examples of this autonomous model at different scales: Volunteer Bushfire Brigades in the urban fringe; Aboriginal Rangers on the Indigenous estate; and protection of remotes communities.

Volunteer Bushfire Brigades (VBBs) are largely autonomous community groups in the more developed areas of the NT, but are supported by a small team of 34 staff in Bushfires NT, of which 17 are appointed as Fire Control Officers. Early in the dry season, VBBs lead planned burning operations in high risk areas in their community. As the season progresses and fire weather conditions become more severe, Bushfires NT support the VBBs with an Incident Management Team and in the Top End a contracted fleet of fixed and rotary wing fire-fighting aircraft.

Since the early 2000s Aboriginal rangers and scientists have collaborated to develop a sustainable, approach to managing fire on over 150,000 km² of Aboriginal land. Using indigenous fire management principles combined with modern technology, extensive, linked and planned burns are undertaken early in the Dry season. This has proven to reduce large, high impact, late Dry season fires and is the basis of the savanna burning projects supported through the Emissions Reduction Fund.

Outcomes of savanna burning projects include, employment for Aboriginal rangers in very remote areas of the Northern Territory, improved environment protection and a reduction in greenhouse gas emissions from late hot fires. Key to these projects are shared land use objectives, extensive collaboration between ranger groups and the community, a large and well trained workforce and a recurrent funding source.

Fire mitigation and protection of remote communities is less developed in the Northern Territory. Bushfires NT is undertaking a research project to audit remote community bushfire risk and capacity to assess and manage these risks.

- c) The adequacy of the Federal Government's existing measures and policies to reduce future bushfire risk, including in relation to assessing, mitigating and adapting to expected climate change impacts, land use planning and**

management, hazard reduction, Indigenous fire practices, support for firefighters and other disaster mitigation measures.

Indigenous fire practices is not a new concept for the Northern Territory with large tracts of Aboriginal land maintaining this practice.

As outlined above, the Emissions Reduction Fund has enabled land owners, particularly traditional landowners, to improve fire regimes across the northern savanna through emissions avoidance activities such as savanna burning, significantly reducing bushfire risk to remote communities, tourist facilities and government infrastructure. This work is often coupled with the Indigenous Protected Areas and Indigenous Ranger Programs with outcomes such as reduced fire frequency, intensity and extent, and the social co-benefits of employment for Aboriginal rangers. Continuing or embedding this funding, will have positive effects on reducing bushfire risk to NT communities. The groups that administer and operate these programs rely heavily on the Darwin Centre of Bushfire Research and their website North Australian Fire Information which has been subject to continuous short term funding by the Australian Government. Providing this platform with ongoing funding is crucial to enable land managers to better plan, prepare, mitigate and report on their fire prevention, and mitigation activities.

d) Best practice funding models and policy measures to reduce future bushfire risk, both within Australia and internationally.

Fire suppression, response and recovery cost significantly more than bushfire risk mitigation.

Measures to mitigate bushfire risk throughout the Territory work through a combination of enabling and empowering landowners to take actions necessary to mitigate, manage and suppress bushfires. This is achieved through enshrining in legislation that landowners or occupiers of land in the Northern Territory take all reasonable steps to protect their property from fire and prevent or inhibit fire spreading from their land to another. Bushfires NT's service model and its focus on land and fire management is unique in Australia and provides for a degree of autonomy in fire mitigation and management and is applied to more than 99.8% of the Northern Territory's land area.

Effective fire management undertaken by landowners results in a reduction of the annual average area burnt by wildfires. Through satellite monitoring, comparing the average area burnt across the tropical savannas over seven years from 2000 (2000–2006) compared to the last seven years (2013–2019) show that since 2013, active fire management has been much more extensive. This comparison reveals a reduction of late dry season wildfires over an area of 115,000 square kilometres and of all fires by 88,000 square kilometres.

In more populated peri urban areas of the Northern Territory, the operational ethos of urban fire services is based around fire exclusion, and mounting a rapid, direct attack on fires. This is sometimes at odds with the *Bushfires Management Act*, which allows the use of fire as a land management tool and focuses on mitigation and prevention of dangerous fires rather than fire exclusion. By comparison, Bushfires NT works extensively with landowners to plan mitigation activities and manage the use of fire.

Future federal funding models and policy should enable measures to be taken to mitigate and manage bushfire risk in the first instance. Policy should support the ability to engage resources, both human and equipment, to undertake mitigation programs taking advantage of seasonal conditions and optimum planned burning parameters.

e) Existing structures, measures and policies implemented by the Federal Government, charities and others to assist communities to recover from the 2019-20 bushfires, including the performance of the National Bushfire Recovery Agency.

Existing structures, measures and policies implemented by the Federal Government when applied to the Northern Territory context result in ineligibility of bushfires being declared a disaster. The necessary criteria for Disaster Recovery Funding Arrangements make it extremely unlikely that a single bushfire incident in the Northern Territory would be considered for recovery assistance measures, disaster relief or personal hardship and distress assistance.

An eligible disaster is described as a natural disaster or terrorist act that, requires a coordinated multi-agency response, and exceeds the small disaster criterion for loss of essential public assets, which is currently set at \$240,000. Territory Government expenditure on a single bushfire event that exceeds the small disaster criterion is rare. This is due to the nature of Bushfires NT's operating model, small human resource capital and limited aerial firefighting capacity through both NAFC arrangements and Territory Government procured local arrangements. Eligibility criteria should in turn focus on the actual personal hardship faced by impacted persons and business not a monetary spend criteria in combating the bushfire by government agencies.