



Fire Protection  
Association Australia  
Life. Property. Environment.

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Attention: Air Chief Marshal Mark Binskin AC (Retd)  
The Honourable Dr Annabelle Bennett AC SC  
Professor Andrew Macintosh

### **Submission to the Royal Commission into National Natural Disaster Arrangements.**

Fire Protection Association Australia (**FPA Australia**) is the national peak body for fire safety that provides information, services and education to the fire protection industry and the community. As an Industry Body, FPA Australia's primary focus is to lead the continual development of the bushfire protection industry and improve bushfire safety outcomes through education, advocacy and accreditation of personnel. Key to achieving our vision is to work collaboratively with government on achieving common interests in order to influence change and deliver improved fire safety outcomes for the community.

FPA Australia has played a pivotal role on the national scale and particularly in New South Wales, Victoria and Western Australia in regards to land use planning and construction measures to protect communities from bushfire.

The Association is an active committee member of two national building standards – Australian Standard AS3959 – Construction of buildings in bushfire-prone areas, and NASH Standard – Steel Framed construction in bushfire areas. The Association works closely with individual state Emergency Services, relevant Government planning and building agencies, other associations such as Housing Industry Association, tertiary education providers (University of Melbourne and Western Sydney University), research agencies such as CSIRO and other key stakeholders, to support the development and implementation of bushfire planning and building reforms, reduce risks for communities across Australia and enhance resilience to bushfire events.

FPA Australia has consistently provided our expertise and experience to help government and industry implement the reforms in an efficient and productive manner through the provision of education, support and guidance. The Association was instrumental in the development and implementation of bushfire planning guidelines in Western Australia and New South Wales; development of training course at the University of Melbourne in response to the Victorian Bushfires Royal Commission; developed and delivered a number of training courses and professional development seminars; and manages a national accreditation scheme, known as the Bushfire Planning and Design (**BPAD**) accreditation scheme for practitioners who work in the bushfire (land use) planning and construction field.

Activities mentioned above and the wider profile of activities undertaken by the Association, provides us with the unique opportunity of having a very broad understanding of the challenges affecting bushfire planning throughout Australia. This submission draws on our collective understanding to identify those areas which can benefit from improvement to better protect our communities from effects of bushfire.

We believe the recommendations provided by the Association in this submission will mitigate the impacts of future bushfire events, enhancing Australia's resilience through a consistent national land use planning framework, supported by nationally recognised qualifications and accreditation and recognition for professionals working in these fields.

### **Recommendation 1 – Development of a National Bushfire Land Use Planning Code**

As a national body, FPA Australia works across all states and territories. One of the key issues that is evident in relation to land use planning for bushfire protection is the absence of national consistency and a shared understanding of the first principles of bushfire planning. Moreover, there is minimal information sharing between jurisdictions. This results in each jurisdiction developing unique policies, guidelines and standards for bushfire protection, despite the same material circumstances being applicable to all jurisdictions.

From a fire behaviour and fire impact perspective, bushfires do not recognise jurisdictional boundaries, however from a policy and standards perspective, this is often the case. Generally, limited jurisdictional sharing of information occurs and more often jurisdictions cherry pick certain aspects of policy and standards from other jurisdictions, then blends these provisions with their own historical requirements to create a unique approach to respond to land use and bushfire construction arrangements. These arrangements are often not based on the latest bushfire science or in some instances clearly lack an evidence based approach with clearly articulated performance based objectives and outcomes.

The Association believes that there is a unique opportunity through the Royal Commission to establish a nationally consistent, evidence based approach to bushfire land use planning. We believe that this can best be approached through the creation of a National Bushfire Planning Code (**the Code**). The Code should be developed as a Commonwealth government led approach similar to the National Construction Code using the latest research in bushfire science and land use planning. A national Code could then be reference by state and territory regulation to give effect.

The Code should be developed through broad stakeholder engagement including but not limited to the planning departments, fire agencies, research bodies and industry bodies. It should have its foundation in performance-based principles and cover the full gamut of bushfire land use planning related matters from high level strategic bushfire protection through to micro level development. Similar to the NCC, the Code will be built around a hierarchy of Performance Requirements and Acceptable Solutions and cover bushfire policy and strategic planning, subdivision and urban design, infill development and ongoing mitigation measures.

The Performance Requirements should also be supported by General Requirements, which cover other aspects of applying the Framework including its interpretation, reference documents and the acceptance of design and solutions (including related evidence of suitability/documentation).

The key to the performance-based Framework is that there is no obligation to adopt any particular planning or design method. This provides for a choice of compliance pathways. The Performance Requirements can be met using either a Performance Solution or using a Deemed-to-Satisfy (DTS) or Acceptable Solution approach.

Currently each jurisdiction struggles with the development and evaluation of bushfire planning policy, particularly in areas such as biodiversity protection, tourism, strategic planning and managing legacy problems attributable to poor planning decision from the past. The Victorian Bushfire Royal Commission touched on some of these areas, however the opportunity to establish a nationally consistent code to address these and many other bushfire planning matters did not eventuate.

An evidence based national code could also address some of the more difficult bushfire planning issues including those related to climate change, fire spread through non homogenous fuel types, private and

community bushfire shelters, bushfire sprinkler systems, responding to the impact of consequential fires including house to house fire spread; the impact of enhanced warning and messaging; broader landscape assessment of bushfire risk and the capacity of road networks to manage large scale evacuations

## **Recommendation 2 – Require bushfire assessments related to land use planning to be undertaken by qualified individuals**

FPA Australia has recognised the need for a credentialing framework and, following consultation with industry, regulators, fire agencies and end-users, developed the Bushfire Planning and Design (BPAD) Accreditation Scheme.

The Scheme originated in New South Wales in 2006 in response to demands from the community, government and industry to establish a recognition program for bushfire planning and design consultants to assist the community undertaking development on land subject to bushfire impact. The Scheme was expanded to Victoria in 2012 and Western Australia in 2015. The Scheme is shaped and developed to suit requirements of each individual state.

Through the Accreditation Scheme, BPAD Accredited Practitioners are recognised by industry, regulators, fire agencies, end-users and the community as providers of professional bushfire planning, design and advice services.

The Scheme requires practitioners to demonstrate professionalism through the attainment of tertiary level academic qualifications or equivalent skills and knowledge through the recognition of prior learning in the field of bushfire planning and design. The Scheme provides an enhanced level of confidence for government and the community that practitioners providing bushfire planning and design services are accredited by a suitably robust scheme that is administered by the peak national body for fire safety.

In New South Wales, practitioners accredited under the Scheme are recognised in the planning provisions enabling local council to rely on reports produced by accredited consultants without requiring referral to the fire brigade. Similarly, the Scheme is recognised in Western Australia in the planning provisions and building system enabling local councils and building certifiers to rely on reports produced by accredited consultants.

In Victoria, the Scheme is voluntary and is closely aligned with the course delivered by the University of Melbourne. The development of this course was a direct response to the recommendations of the 2009 Victorian Bushfires Royal Commission. The Commission noted that the development of a Victorian based course was a necessary pre-cursor to the implementation of an accreditation scheme. Included in the final report of the Commission was a recommendation in relation to education and training (Section 6.15) which included commentary on the need for professional, qualified bushfire practitioners.

The expert panel commissioned by the VBRC to advise on bushfire building and planning matters acknowledged that the involvement of qualified experts should be strongly encouraged in undertaking site assessments for building and planning applications.

FPA Australia submits that it is counter intuitive that in some areas of Australia that experience the worst bushfire conditions a building and planning system allows unqualified and non-accredited individuals to

undertake bushfire risk assessments that are required to inform and direct planning and building approval applications.

The assessment of bushfire hazard and bushfire risk is a difficult and complex process that should be restricted to individuals who possess a detailed knowledge of amongst other things, vegetation structures, fire dynamics and the performance of building materials exposed to bushfire.

Traditionally the acknowledgement of bushfire professionals with appropriate academic qualifications has been virtually non-existent. This is despite the horrific impact that bushfires have on Australian communities on a regular basis.

The Association is acutely aware of numerous examples where the assessment of bushfire hazard has been inappropriately determined by untrained people resulting in the incorrect establishment of bushfire mitigation measures with the potential to put lives and property at a heightened level of exposure.

The complexity and variability of the factors that are used to determine bushfire risk requires a consultant to draw upon many years of experience and knowledge of fire behaviour and hazard identification and assessment. It is not something that can or should be allowed to be undertaken by untrained people using simplified assessment tools such as those found in Australian Standard AS3959. Doing so could be similar to allowing an untrained or unqualified person to undertake electrical work, simply because they have a copy of Australian Standard AS3000 (Australian wiring rules).

We realise that the accreditation and licencing regulations are administered by states and are likely outside of the scope of this inquiry. However, we recommend that to the extent possible, the Commission should:

1. Strongly recommend that all states and territories implement a system to recognise and require bushfire assessments and the development of bushfire planning responses to be undertaken by appropriately qualified individuals; and
2. Recommend that Commonwealth planning regulations formally require suitably qualified individuals to undertake bushfire assessments and develop bushfire planning and design responses for development undertaken on the Commonwealth Land where a bushfire risk exists.

### **Recommendation 3 – Establishment of Nationally Recognised Vocational Bushfire Protection Qualifications**

The absence of vocational education qualifications in the bushfire planning and construction fields is both a disincentive to the introduction of widespread recognition of practitioners as recommended above, and a barrier to individuals wishing to gain entry to the field.

Currently available courses do not adequately address the required skills and knowledge to competently assess bushfire risk and identify and develop appropriate bushfire protection measures. The available courses include several short courses (usually five day duration) and several post graduate qualifications. There is no specific vocationally based course that appropriately provides the foundation skills and knowledge to assess bushfire risk.

Additionally there a number of associated professionals who work indirectly in the bushfire planning area that would greatly benefit from a vocational qualification to help them better understand the application and implementation of bushfire planning requirements.

The Association considers that the development of a nationally recognised vocational qualification such as a Diploma or Advanced Diploma of Bushfire Protection should be recommended by the Commission and will greatly assist with the implementation of bushfire planning requirements throughout all jurisdictions.

Such a qualification could include the following competencies:

- Knowledge of the factors affecting bushfire behaviour and the models used to quantify bushfire behaviour
- Knowledge of vegetation and its influence on determining bushfire attack levels.
- The ability to conduct a site assessment and determine the Bushfire Attack Level
- Knowledge of the legislative and policy framework that governs development on land subject to bushfire impact.
- Knowledge of the mechanisms for bushfire attack and an understanding of the construction requirements that can be applied to a building appropriate to the BAL to mitigate bushfire attack.
- An understanding of the measures that can be used to support firefighting activities during bushfires when planning developments in the rural urban interface.
- Knowledge of conceptual planning issues and constraints for bushfire prone areas and the relevant legislative and policy framework upon which this is founded.
- Knowledge of the mechanisms for bushfire attack and the bushfire resistant construction provisions that can be applied to a building appropriate to the BAL
- Knowledge of the principles for siting and landscaping, recognising the potential impacts of a bushfire.
- The ability to select the most appropriate combination of solutions for building in a bushfire prone area.
- Design developments including subdivisions, new buildings or modifications to existing buildings in bushfire prone areas, aiming to minimise the risk to future developments and their occupants from bushfire and facilitate safe response to bushfires by emergency services.
- Prepare reports, plans and diagrams for subdivisions, new buildings or modifications to existing buildings in bushfire prone areas that respond to the bushfire risk and meet the jurisdictional land use planning and construction requirements related to bushfire.

#### **Recommendation 4 - Reconcile ongoing conflicts between biodiversity protection and bushfire safety outcomes**

Bushfire practitioners across the country regularly raise concerns associated with the application of biodiversity protection and bushfire safety outcomes. The main concern for the industry is reconciling conflicts between the two and the unintended outcome that often results in less safe buildings at the expense of biodiversity protections.

These matters were investigated by the Victorian Bushfires Royal Commission and were to an extent addressed through changes made to bushfire planning policy in Victoria.

The Association considers that a similar investigation and review is required to better understand and respond to conflicts between jurisdictional bushfire safety requirements and the Environment Protection and Biodiversity Conservation Act and Regulations and any other Commonwealth legislation that affects the implementation of bushfire protection measures.

## Conclusion

We want to thank the Morrison Government for the opportunity to provide a submission to the Royal Commission into National Natural Disaster Arrangements and we hope our comments and recommendations will help shape improvements to our preparedness and resilience to bushfire and improve bushfire safety for all people in Australia.

If you have any questions regarding this submission, please contact me by phone on [REDACTED] or [REDACTED] or by email: [REDACTED]

Yours sincerely

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**Chris Wyborn**

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FPA Australia