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The Secretary
Senate Select Committee on Agricultural and Related Industries
PO Box 6100
Parliament House
Canberra ACT 2600

Dear Ms Radcliffe

Submission to the Inquiry into the incidence and severity of bushfires across Australia

Thank you for the opportunity to make a submission to the Senate Select Committee on Agricultural and Related Industries' Inquiry into the incidence and severity of bushfires across Australia. The Planning Institute of Australia (PIA) welcomes the opportunity to provide comments in this regard.

PIA is the national peak body for people and organisations involved in spatial planning practice in Australia. The Institute represents and supports almost 5000 planning professionals, across Australia and overseas. The Institute brings together professionals and organisations with a shared interest in 'the community, and the education, research and practices relating to the planned use of land, its associated systems, and of the natural and built environmental, social and economic impacts and implications of the use of land'.

Terms of Reference of Inquiry

There are twelve Terms of Reference (ToR) set out for the Inquiry. PIA will give particular attention in this submission to ToR 'f', which examines "the appropriateness of planning and building codes with respect to land use in the bushfire prone regions". Furthermore, this submission will also give consideration to other ToRs which were noted in PIA's recent submission to the 2009 Victorian Bushfires Royal Commission, which is available online at www.planning.org.au/, including climate change,

biodiversity and the extent and effectiveness of bushfire mitigation strategies and practices and the impact of hazard reduction strategies.

This submission will also draw on PIA's National Position Statement 7 – 'Bushfire – Planning Response', which is appended to this submission.

Appropriateness of Planning and Land Use in Bushfire-Prone Regions

National Level

“Land use planning which takes account of natural hazard risks has been recognised as the single most important mitigation measure for preventing future losses from natural disasters.” This statement was a recommendation in relation to risk modification by the Council of Australian Governments (COAG) in its report and response to its Inquiry on Bushfire Mitigation and Management in January 2005.¹ The report also highlighted the need for implementation of recommendations which play a strategic role in a national approach to bushfire mitigation and management.

As noted by Senator Heffernan in his Senate Inquiry into Bushfires media release of 18 May 2009, “Australia has no national bushfire policy (and) the Commonwealth should take a leadership role in coordinating State and Territories to develop their policies based on national policy.” PIA, in its submission to the 2009 Victorian Bushfires Royal Commission, highlighted the need for a national framework that meaningfully integrates and applies existing knowledge on bushfire risk mitigation into the planning and development system. The submission made the following two recommendations in this regard:

1. Develop national risk management strategies addressing natural hazards, including bushfires, in particular to seek the agreement of the States and Territories to embed strategic planning for natural hazards at the state/territory, regional and local levels into their planning systems. Such systems should integrate land-use planning, social planning, and response planning.
2. Develop national guidelines for hazard and risk appraisal system development within which State/Territory-based systems can be developed.
 - a. That bushfire hazard assessment is based on the intrinsic potential of the ecological community to generate a fire hazard ('probable maximum event').
 - b. A national framework is established identifying 'parameters of bushfire risk' to guide land use planning and social planning schemes prepared at state, regional and local levels.
 - c. Establishment of a framework for shared information systems to better record bushfire planning and development decisions to facilitate future enforcement.

The submission also noted that consideration should be given to developing a national planning policy position regarding the location of new “vulnerable” land uses such as hospitals, aged care facilities, tourist facilities and schools, among others. That is, the establishment of these types of facilities should not be permitted within

¹ Council of Australian Governments (2005) *Report of the National Inquiry on Bushfire Mitigation and Management*. Available online at <http://www.coagbushfireenquiry.gov.au/findings.htm>. Accessed on 17 April 2009.

high or extreme bushfire prone areas, as evacuation of such facilities during a bushfire could prove difficult and dangerous.

State, Territory and Local Levels

Each State and Territory has its own bushfire guidelines and there are varying degrees of comprehensiveness in their respective approaches. As a minimum, however, each set of guidelines or regulations incorporates firebreak standards. PIA's submission to the 2009 Victorian Bushfires Royal Commission made the following two recommendations with regard to State, Territory and regional guidelines:

4. Adopt an approach to bushfire planning, including State-wide bushfire hazard mapping, that incorporates the following points:
 - a. The system clearly distinguishes between development assessment of existing urban areas and settlements and strategic planning for and development assessment of new development including urban development, peri-urban development and rural settlements.
 - b. Criteria are developed for assessing vulnerable communities based on risk management principles.
 - c. Vulnerable developments (e.g. schools, aged persons facilities and the like) are restricted from high hazard areas where evacuation would be problematic.
5. Implement a risk management approach to natural hazard management, including bushfires, to be implemented through planning legislation and policy guidance;
 - a. Encompassing a regional planning approach (in addition to state and local approaches) in recognition of the scale of natural hazards extending beyond municipal boundaries and affecting common regions (for example, the Dandenongs);
 - b. Promoting increased emphasis on strategic planning and development assessment in order to reduce the overall level of risk that needs to be addressed by ongoing management systems, including incident management.

The NSW publication *Planning for Bushfire Protection 2006*², supported by the Building Code of Australia (BCA) and Australian Standard 3959, may be regarded as the best approach to risk assessment and protection available. It is a complex document but it is supported by 'guides' for intending developers and is available online. While South Australia excels in publicly-available web-based hazard mapping, in outer metropolitan and regional areas in particular, this technique is limited and there are no ongoing funds available to undertake this work. Funding for the collection of data for geo-spatial mapping is critical in determining which areas are inappropriate for development.

At the local level, issues of enforcement and compliance can impact upon land use and management in bushfire-prone regions. This can include conditions on permits not being followed up or enforced by the relevant authority. For example, screens that assist in protecting against ember attack may be removed by some residents

² New South Wales Government – NSW Rural Fire Service (2006) *Planning for Bushfire Protection*. Available online at http://www.rfs.nsw.gov.au/dsp_content.cfm?CAT_ID=900. Accessed on 17 April 2009.

following receipt of their occupancy permit. There is a need to ensure compliance over the life of the development in order to maintain the level of protection anticipated by the bushfire development requirements. This, however, may not always be practicable due to individual resourcing limitations of the relevant authority.

There also needs to be a clear understanding of which agency has responsibility for enforcement and compliance with associated funding provided, including provision for training, particularly where development has been privately certified. Furthermore, in some instances, local governments may need assistance or guidelines on how to ensure that hazard-related requirements, particularly those newly-introduced, are not vulnerable to legal challenge. PIA's submission to the 2009 Victorian Bushfires Royal Commission made the following two recommendations in this regard:

8. Examine local government resourcing needs with regard to planning enforcement, compliance and management, particularly in identified high bushfire risk areas. This would include a study of whether resource allocation (or lack thereof) results in, among other things, ongoing fuel load reduction regimes and whether a 'permit to use' or 'certificate of occupancy' is a satisfactory mechanism regarding the fulfillment of conditions of development or subdivision approval and subsequent monitoring in this regard.
9. The importance of enforcement and compliance to be included in all community, local and fire authority education and awareness programs and the reinforcement of areas of responsibility in this regard.

Additional Planning Issues with Regard to Land Use in Bushfire-Prone Regions

At present, there is an increasing move by governments to exempt a range of developments from planning approvals, such as in the context of post-bushfire reconstruction. The effect of this approach is that the role of land use planning in providing input into the re-building process would be removed, generally resulting in little or no regard for critical and considerations including:

- the siting of a dwelling (of vital importance when one considers the impact of topography on fire behaviour);
- access for emergency vehicles; vegetation management; the need to critique existing subdivision layouts (including the need to plan road networks to better facilitate efficient evacuation of such communities);
- building styles and design; and
- water supply.

Naturally, many people who have lost their homes through bushfire want to re-build quickly. The speed of re-building, however, can hamper efforts for a strategic analysis, giving due consideration to 'lessons learnt' and the implementation of risk management practices. In this regard, PIA supports the need for re-building processes to be a State or Territory provided service, with skilled planners and designers working together using a 'model design code' to ensure sustainable outcomes that incorporate risk management measures into site and building design. Further, it is considered that the bushfire risk category should be based on the vegetation fuel loads before the respective bushfire event in order to ensure the areas are re-established at 'defendable' standards. In this regard PIA, in its submission to the 2009 Victorian Bushfires Royal Commission, recommended the following:

13. Preparation of a state and territory-level 'model design code' that gives examples of how to build in a sustainable manner in bushfire risk areas according to varying environmental and topographical features and incorporates building safety into design. This code should recognise that AS3959 is only part of the package.

With regard to the potential for retrofitting a building within a bushfire-prone area, there is considerable cost attached to this process and it may be seen as particularly onerous by the community. Minimum standards need to be developed to ensure consistency and minimise long term costs. Furthermore, people may feel they have been unfairly penalised in the absence of accepted retrofitting guidelines. In this regard, there is a basic need for all built-form to comply with the relevant provisions of AS 3959:2009. In this regard PIA, in its submission to the 2009 Victorian Bushfires Royal Commission, recommended the following:

15. The Commonwealth Government gives consideration to a retrofitting scheme, to operate in a similar manner to the current solar scheme, to assist households in high hazard areas to upgrade towards AS 3959 standards.

PIA recognises, however, that there is a need to look at human behaviour in the context of AS 3959:2009, which deals with construction of buildings in bushfire prone areas. There has been a general assumption that implementation of appropriate building controls is all that is required and that the construction of a new building in accordance with the standard may allow the encroachment of a new building closer to bushland areas. It is apparent, however, that when human behaviour is factored into the equation, the need still exists for clearing around dwellings to provide protection to residents and firefighters, which may in turn have implications for the biodiversity conservation values of surrounding areas.

Other Issues Raised in Terms of Reference

Climate Change and Biodiversity

With regard to the broader issues of climate change and biodiversity, PIA's National Position Statement 7, *Bushfire - Planning Response*, notes that there is a need to maintain a balance between the importance of bushfires for plant regeneration and the need to protect life and property. Further, the significance of this has been highlighted by the implications of climate change, with the University of NSW's Climate Change Research Centre predicting there will be a 100-200% increase in bushfire risk by 2100 if the current levels of high carbon emissions continue (refer Position Statement 7 for reference). PIA's submission to the 2009 Victorian Bushfires Royal Commission recommended, with regard to climate change, the following:

7. Acknowledge that climate change is likely to exacerbate the frequency and intensity of extreme fire events and adopt the precautionary principle with respect to climate change and bushfire policy.

As Climate change is likely to exacerbate the frequency and intensity of extreme fire events, planning for such events requires further evaluation of proposals such as fire refuge shelters (or bunkers) and the existence of safe evacuation points in and around towns identified as high-risk areas. In this regard, PIA has recommended the following:

16. A national standard be developed for fire refuges that cover issues including, but not limited to, the following:

- a. Appropriate siting of the shelter in close proximity to a dwelling (for ease of access during a bushfire event), but away from any large trees and fuel loads is paramount.
- b. Design standards with the appropriate fire ratings for walls and doors (including peep holes) should be established to ensure that the shelter can withstand the environmental conditions which prevail during an extreme bushfire event.
- c. Provision of life supporting amenities e.g. independent air supplies, battery powered internal lighting, water etc should be mandatory.
- d. Maintenance requirements for vegetation in close proximity to such shelters and amenities provided (e.g. the air supplies) should be the subject of regular inspection.
- e. Context in which fire refuges are appropriate – so that fire refuges are not seen as a mechanism to allow for further development in extreme bushfire

Extent and Effectiveness of Bushfire Mitigation Strategies and Practices and the Impact of Hazard Reduction Strategies

While planning tools exist to assess risks and mitigate against bushfire hazards, the effectiveness of such measures is limited by the enforcement, management and communication between various planning regimes, fire authorities and the community that will determine the effectiveness of these tools. From a planning perspective there is a perceivable lack of interaction, awareness, enforcement and management between various planning regimes which is threatening the efficient application of all existing planning tools regarding bushfires. Some planning issues that need to be addressed include, but are not limited to, the following:

- appropriate setbacks to buildings (particularly in high-risk bushfire areas);
- the existence (or lack thereof) of appropriately-zoned evacuation areas;
- change in land ownership of asset protection zones; and
- other bushfire mitigation requirements attached to buildings which, over time, can alter or inhibit management priorities.

These are of particular consequence as a considered approach to risk mitigation and management forms the basis of approvals permitting development of land in high-risk areas in the first instance. PIA believes that better planning for risk identification, risk management and mitigation of bushfires requires actions at all levels of government. Specifically, the key actions relate to governance; development assessment, approval and compliance processes for subdivision, site planning and building; community education and engagement and professional education and training for those involved in planning processes across a variety of agencies.

PIA believes there is a need for improvements to the following:

- hazard mitigation planning at a national level, including for bushfires;
- improved mapping for natural hazard management having regard to climate change modeling;
- better integration and collaboration between local and State/Territory governments, fire authorities and the community;

- better land use practices both for existing and proposed developments;
- awareness, implementation and enforcement of bushfire preparedness at the local level; and
- the need for more appropriate management of land (such as vegetation management).

Conclusion

This submission has identified key issues against the Senate Select Committee's Terms of Reference, with an emphasis on 'the appropriateness of planning and building codes with respect to land use in the bushfire-prone regions'.

In its submission to the 2009 Victorian Bushfires Royal Commission, PIA noted that the key elements requiring further consideration from a planning perspective are the steps that could be taken to better implement existing bushfire knowledge, especially but not limited to land use planning, including the identification of current impediments and strategies to remove these impediments.

The role of land use planning and management requires each aspect of the planning process – from initial strategic planning and policy, to its legislative bases including development assessment, subdivision and the zoning of land – to take account of potential hazards and plan accordingly. The additional role of planning in enforcement and broader management of land requires closer scrutiny in order to ensure adherence to bushfire-related planning mechanisms, noting that improving planning practice will not prevent extreme events, such as those experienced in Victoria, from occurring again.

PIA appreciates the opportunity to make this submission to the Inquiry and would be available to elaborate on any aspects raised.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Stephen Johnston', with a large, sweeping flourish extending from the bottom left.

Stephen Johnston
Chief Executive Officer
29 July 2009

Bushfire - Planning Response

Statement 7 | October 2007



PIA POSITION

Bushfires are a natural occurrence and cannot be prevented, particularly in Australia where we have a climate that is hot, dry and prone to drought, and vegetation and land forms which assist with the spread of fire. The Planning Institute of Australia recognises the need to maintain a balance between the importance of bushfires for plant regeneration and the need to protect life and property. The importance of this issue has been highlighted by the implications of climate change with University of NSW's Climate Change research centre, predicting there will be a 100 – 200% increase in bushfire risk by 2100 if the current levels of high carbon emissions continue. While in recent years there has been a concerted effort to establish and implement appropriate guidelines for new development in bushfire threatened land, measures to protect existing agricultural and urban properties are also urgently needed.

PIA requires the following action:

- **Legislative and administrative provisions should be integrated into mainstream "whole of government" planning procedures and decisions delegated to the lowest competent jurisdiction.**
- **There should be a consistent Government approach to the management of public lands, especially for the provision of asset protection.**
- **Consistent development plan requirements for homes in bushfire prone areas, regarding ready access to fire fighting water supplies.**
- **Increased community awareness of household and property bushfire hazards is required. Bushfire Hazards include, leaf litter, garden mulch, surrounding long dry grass and vegetation.**
- **Long term strategic planning and research is required, in particular to deal with the consequences of climate change.**
- **National bodies, Representative groups, researchers and land managers to work in partnership to provide and facilitate nationally consistent and accessible information and spatial data to inform local and regional planning about fire mitigation and management.**

POLICY PRINCIPLES

Guidelines for planning for bushfire protection should be based on the best scientific evidence and research available. Well informed strategic planning, building requirements, and building codes, should help to reduce risk to life and property.

A National bushfire mitigation framework would provide unity in approach, while accepting there may be location specific variations for those standards prepared on a State by State basis.

It is impossible to be prescriptive about the circumstances of every case as there are many types of landscapes and climates in Australia. Therefore flexibility needs to be introduced through the use of a performance based approach with objectives, intent, criteria, and acceptable solutions and/or deemed to satisfy requirements.

When determining planning applications and preparing statutory planning controls and plans, bushfire risk should be a leading consideration in the decision making process. New development in hazard areas should be avoided where possible, and only be permitted where the bushfire risk is reduced to acceptable levels and the risk to fire-fighters is not increased. Where fuel load management is required, the bushfire requirements of existing native vegetation should be respected as far as possible. Property owners should be accorded a reasonable degree of certainty about risks from bushfire, however, costs for ongoing maintenance and safety upgrades should, as a general principle, be paid for by those who benefit in proportion to their benefit. However the costs should be to avoid the real risks not merely to avoid responsibilities.


It is not possible to eliminate bushfire risk altogether but through integrating scientific data, local and regional knowledge, good information on bushfire history, and incorporating this into land use policy and mitigation measures, we can prevent the future loss of property and lives.

The "Natural Disasters in Australia" inquiry stated that "Land use planning which takes into account natural hazard risks has been identified as the single most important mitigation measure in preventing future disaster losses in areas of new development"².

PIA ACTION

PIA will support and lobby for planning initiatives of Government which seek to:

- Contribute to research into the characteristics of bushfires and the development of measures to best mitigate their adverse impacts, in particular a review of construction standards.
- Simplify legislative provisions and ensure that they are effectively integrated into all the other factors to be taken into account when assessing proposals or preparing statutory plans.

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- Ensure a balance between native vegetation retention and bushfire hazard mitigation.
 - Upgrade of construction standards for buildings as part of hazard mitigation, so that the reliance on clearing is minimised.
 - Provide for some flexibility in regulatory controls such that key performance outcomes can be determined on a merits basis.
 - Recognise the prime risk is to existing, not new property and promote community based self-help hazard reduction programmes accepting, as a general principle, that those who benefit should pay proportionally.
 - Provide a national approach to bushfire protection to ensure effective disaster responses and consistent protection measures such as in accordance with AS 3959, the Building Code of Australia and associated special State building provisions, and other statutory documents.

THIS POSITION STATEMENT DERIVES FROM

Bushfire Position Statement adopted by the New South Wales Division of the Institute.

RELATED REFERENCES

Planning for Bushfire Protection, NSW Rural Fire Service, 2001

¹SMH "Australia will burn unless emissions cut", Quote from Professor Andy Pitman, UNSW Climate Change Research Centre. May 2007.

²COAG High Level Group on the Review of Natural Disasters in Australia "Reforming mitigation, relief and recovery", 2004.