

**Submission  
No 78**

**INQUIRY INTO PLANNING SYSTEM AND THE IMPACTS  
OF CLIMATE CHANGE ON THE ENVIRONMENT AND  
COMMUNITIES**

**Organisation:** Western Sydney University

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Secretary  
Portfolio #7 Committee  
Legislative Council (NSW Parliament)

Submission to the Portfolio Committee 7 Planning and Environment Committee's  
**Inquiry into the planning system and the impacts of climate change on the environment  
and communities.**

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**3 November 2023**

Please accept this submission to this Inquiry. In doing so I wanted to specifically refer to the issues around bushfire protection which is my speciality. In doing so, I might refer to parallels in other areas (especially flooding) although there has been a history of poor decision making in relation to natural hazards more broadly. The main purpose of this submission is to provide a means of improving the efficiency of the bushfire (and other natural hazards) planning system, whilst protecting life, property and environmental values.

In preparing this submission I have sought to address the Committee's Terms of Reference and in particular bushfire protection and land use assessment in the context of:

*"That Portfolio Committee 7 inquire into and report on how the planning system can best ensure that people and the natural and built environment are protected from climate change impacts and changing landscapes, and in particular: .....*

*(b) the adequacy of planning powers and planning bodies, particularly for local councils, to review, amend or revoke development approvals, and consider the costs, that are identified as placing people or the environment at risk as a consequence of:*

- (i) the cumulative impacts of development,*
- (ii) climate change and natural disasters,*
- (iii) biodiversity loss, and*
- (iii) rapidly changing social, economic and environmental circumstances..."*

In summary this can be achieved through:

1. Removing the current confusion in the community, local councils and planning professions in relation to pathways for approval associated with bushfire protection;
2. Focus planning reform to the common approach through utilising s.4.15 of the EP&A Act and amending the LEP for evaluating DAs;
3. Providing greater transparency and ensuring consideration of bushfire for State Significant Developments, formalising consultation under s4.13 of the EP&A Act;
4. Amend s4.14 of the Act to permit consultation on performance solutions for bushfire protection;

5. Enhance strategic planning to address climate change impacts on communities and the environment through the rezoning of land under Part 3 of the EP&A Act;
6. Enhance bushfire prone land mapping processes which gives greater certainty, whilst allowing for errors in the mapping process to be captured when required;
7. Enhancing accountability of professionals exercising advice for the public on bushfire matters;
8. Removing the unnecessary provisions which relate to the Rural Boundaries Codes and 10/50 Code.

## **Background**

This submission identifies a possible way forward for the implementation of these key recommendations of various Inquiries and to address the terms of reference of the current Portfolio 7 Inquiry.

In essence, the recommendations seek the Parliament to provide for an enhanced planning system, both in the short term and long term. It identifies the need for a strategic approach, as well as reforms to existing development approval arrangements. It accepts the current planning framework (with enhancements) through the EP&A Act and the RF Act.

In addition, the NSW Bushfire Inquiry (2020), additional recommendation and commentary of other bushfire inquiries have also been identified where they relate to the planning system and the issue of climate change for natural hazards. These are relevant to the current terms of reference.

Key aspects of these various inquiries identify the need for:

- A strategic planning approach which is more effective at addressing natural hazards;
- Changes to the development assessment legislation specifically for bushfire planning and implementing bushfire protection measures;
- A framework for the enforcement, compliance and education for ongoing maintenance of bushfire protection measures;
- A process for data collection for future bushfire protection and research;
- Identify subsidies for land owners and identify areas which should not be developed due to excessive bushfire risks;
- Review and clarify vegetation clearance rules for bushfire mitigation so that communities can better understand processes for bushfire mitigation.

An additional key aspect is to reduce planning referrals to the RFS, whilst ensuring enhanced mechanisms of bushfire safety and improved certification.

## **Historical Context and Public Inquiries.**

In addressing these issues, I would like to refer back to previous public inquiries or Parliamentary Committees to reflect the lack of progress in this space. One of the challenges is a failure to pass on corporate knowledge on the origins of many provisions and the need for reform at both the strategic planning and development assessment levels.

Bushfires have been a regular feature of the NSW landscape. The bushfires of January 1994 and then 1997 had already identified the need to address natural hazards and bushfire through the planning system. In the wake of Ash Wednesday in 1983, NSW moved towards addressing planning controls,

while in Victoria a major focus was on the building. The earliest draft of Planning for Bushfire Protection in 1991 began a tenuous history (along with Circular C10).

*Planning for Bushfire Protection* has had a poor history of adapting to the implication of climate change. In the wake of the 2001/02 Xmas Bushfires in NSW, the then Carr Government moved to introduce measures which sought to address 5 key issues:

- Streamlining of the approval process for hazard reduction activities required for protection of life, property and environment through a bushfire environmental assessment code;
- Introduce an overarching framework where a member of the public could report and/or complain about a perceived bushfire hazard, and have that addressed;
- Improve accountability of agencies and audit bushfire management committees to report on the implementation of bushfire risk management plans;
- Provide powers to the Commissioner of the RFS to undertake hazard reduction activities where a public authority or land holder/owner fails to implement hazard reduction and recover the cost; and
- Introduce planning controls around new developments (and rezoning) including referral of certain classes of development for RFS authority and the adoption of *Planning for Bushfire Protection* to guide and regulate planning decisions in bushfire prone areas.

It is this last area, to which I will devote most of my discussion, but in the context of historical findings in previous public inquiries. 2002 is really the commencement of serious attempts to address bushfire impacts on communities, property and the environment.

As will be discussed, this also opened up the streamlining of vegetation clearance, which has subsequently been abused through the Rural Boundaries Code and the 10/50 Code provisions within the Rural Fires Act.

It should be noted that delays in implementing changes can have serious implications in the future as any deficiencies unrectified will result in ongoing losses, due to those deficiencies. While land use planning is often touted as being the most effective mechanism for bushfire protection it is poorly implemented due to lack of skills in planners, poor policy and confusing arrangements in decision making.

Let us first consider the following history of Inquiries Findings and Recommendation.

#### **A. Report on the Joint Select Committee Inquiry into the 2001/2002 NSW Bushfires (2002).**

In the wake of the 2001/02 fires, a Joint NSW Parliamentary Inquiry considered amongst other matters the following planning and building recommendations:

##### Recommendations (Planning and Building)

*“4. That the Planning for Bushfire Protection Guidelines continue to be reviewed and updated as new research about fire impact on buildings come to hand, and reissued or affirmed at least every **two** years.”*

This document was published in 2001 (previously drafted in 1991) and first reviewed in 2006 but was not subsequently republished until 2019 (after a period of review for 10 years) in relation to the third edition. The process of review is probably too difficult to do biannually, however, the delay to the subsequent review after 2006 has to be understood in the context of the post 2009 Victorian Black Saturday bushfires. This is all the more serious in that the results of studies finalised in 2017,

sponsored by the RFS in relation to reviewing fire weather conditions in the face of climate change was never addressed.

Results of investigations by both the Bureau of Meteorology and within the RFS/Western Sydney University calculated the 1:50 year fire weather conditions. This showed that there are significant deficiencies in the level of protection in developing the design bushfire conditions. By way of example, there are design bushfire deficiencies in the majority of the Central West as well as the NSW North Coast.

A paper addressing existing and revised calculated values is provided as a supplement to this submission which illustrates that much of NSW is not even adapting to the current climatic conditions, let alone climate change. A paper on the implications of climate change is also provided.

*“7. That the NSW Rural Fire Service, together with local councils, develop strategies to encourage owners of properties in bushfire prone areas to upgrade and improve the bushfire preparedness of existing building.”*

This was not implemented directly; however, some effort was made to provide for property maintenance programs for elderly residents. This program, called AIDER was a significant success but only addressed property maintenance and didn't address preparedness of existing buildings. The RFS currently have crews which support preparation for hazard reduction but not overall property protection.

*8. That the Commissioner of the NSW Rural Fire Service undertake discussions with the Insurance industry regarding the introduction of a system of rebates in premiums, or similar incentives, for building insurance to reflect the degree of bushfire preparedness of individual dwellings, in the same way that premiums are adjusted when standard security measures are in place.*

This has not been successful and the issue of insurance is a recurring issue in subsequent inquiries. I will return to the issue of insurance, as the current arrangements do not give confidence to the insurance industry that bushfire protection is being adequately addressed.

The Parliamentary Inquiry (and Parliament) endorsed the then NSW Government's bushfire planning reforms in the light of these 2001/2 bushfires which included:

- The mapping of bushfire prone land (currently 10.3 of the EP&A Act) plus planning certificates to inform future purchasers;
- A general duty in the EP&A Act to consider certain types of developments in bushfire prone areas for conformity with Planning for Bush fire Protection and referral for advice those developments which do not comply (section 4.14 of the EP&A Act);
- A requirement for a bush fire safety authority in relation to subdivisions or vulnerable developments (called special fire protection purposes) in bushfire prone areas (s.100B of the Rural Fires Act).

More recently, complying development in bushfire prone areas has been adopted to development approvals where there is compliance with BAL 12.5, BAL 19 and BAL 29 (as certified by a bushfire consultant) and certain development standards.

I will revisit these issues again in more detail; however, it should be noted that this also created pathways for State Significant Development as well a general duty under section 4.15 of the EP&A Act.

This system has in effect created great confusion in the community, among land use planners, and even amongst those involved in providing a bushfire consultancy service to the community. There are now at least 5 pathways for development approval, some (4) based on bushfire prone land mapping, as well as a general provision under section 4.15.

#### **B. National Inquiry on Bushfire Mitigation and Management (2004)**

In the wake of the 2003 Canberra bushfires, in which 500 homes were lost and 4 people died, a national Inquiry was held on bushfire mitigation and management, which in relation to planning observed:

*"Finding 6.1: The Inquiry supports the view expressed in Natural Disasters in Australia that land use planning that takes into account natural hazard risks is the single most important mitigation measure for preventing future disaster losses (including from bushfires) in areas of new development. Planning and development controls must be effective, to ensure that inappropriate developments do not occur. ....*

*Recommendation 6.1: The Inquiry endorses the recommendations in the Natural Disasters in Australia report to disaster mitigation through land-use planning and development controls and recommends that the states and territories continue to make their advisory and statutory measures more effective."*

In the NSW context, this has been a significant failure, with the RFS unwilling to refuse many developments, even when non-complying with Planning for Bush Fire Protection or in the most dangerous of circumstances. This has led to the view by many Councils that bushfire is not a significant risk to the community or difficult to deal with.

As will be seen, if agencies, like the RFS are to address development assessment and strategic planning, then staff need to be skilled and competent in the area. This requires resources and incentives for staff to become competent. A situation which does not exist today.

*"Finding 6.2: Adequate resourcing of local government is essential for robust and competent bushfire planning and decision-making and for ensuring continuing maintenance of protection zones and adherence to development control. "*

There is little evidence since 2004, that resources have been available to local councils to support such decision making. The Ministerial directions have lacked any meaningful guidance but instead relies on the RFS to give sign off if planning proposals do not meet PBP. Local government however, are progressively training planning and building surveying staff through the Planning for Bushfire Course (5 days) at UTS.

#### **C. Royal Commission into Victorian Black Saturday Bushfires.**

One of the most important Inquires of recent times arose out of the Black Saturday fires of 2007 in which in excess of 2000 homes were lost and 173 people died in one day. 123 of those people died in or immediately near their homes. The Inquiry took some of the most extensive reviews of all aspects, including land use planning, of bushfire management and although was largely directed at Victoria, had significant implications for all jurisdictions, including NSW. An opportunity lost.

The following matters are simply listed as they are important in arriving at the State of the NSW system. In doing so, it needs to be recognised that Victoria, similar to the NSW LEP template, has a set of provisions within the standard Victorian Planning Provisions, in relation to bushfire protection and land use planning. The NSW LEP however does not really address bushfire controls, other than at clause 5.11 to facilitate hazard reduction. This is a major deficiency of the NSW planning system and reflects the ongoing culture of mitigation over resilience.

#### Bush fire prone land mapping.

*“The (Royal) Commission considers that centralised mapping and designation of BPAs for the purposes of planning and building controls would achieve more thorough and consistent outcomes, enable risk assessment beyond the individual site, and promote holistic management of bushfire risk.” p. 215, Vol 2, Ch 4*

In NSW we continue to require local government to revise the bushfire prone land mapping on a 5 yearly basis. This has not been successful in that many Councils have failed to review their maps, the RFS did many of the initial maps to support Councils, and there are significant delays that have occurred between local councils preparing maps, the RFS approving maps, and availability of maps at a central point. Even today, some councils continue to charge ratepayers for extracts of bushfire prone land maps, although the planning portal is improving. Examples such as Shoalhaven Councils map took 7 years to be finally approved by the RFS, Camden Council’s map has the GIS layers incorrectly layered, meaning a resident cannot find their property to determine if an area requires consideration of bushfire, and this same map requires areas already cleared of bushfire hazards to undertake assessments within urban release areas. Revegetation in Camden of creeklines have potentially increased risk.

There are significant inconsistencies in the mapping guidelines and the requirements for bushfire assessment in NSW. For example, mapping requires a 30 m buffer for grasslands and rainforests, yet the planning guidance and building solutions apply out to 50 metres. Category 2 vegetation only exists to support the requirements of the 10/50 Code, which has been a disaster from its inception, yet is not understood by Council planners and decision makers. In other words, instead of resolving issues of pre-existing developments and the nature of bushfire proneness, the mapping process has been changed to meet another purpose.

*“The distance of 100 metres appears to have been chosen initially as a convenient margin and was retained when a 1999 study by Ahern and Chladil found that 85 per cent of houses were destroyed within 100 metres of vegetation. It is not known whether any agency has ever considered whether 85 per cent is an acceptable level of risk. Analysis of more recent fires, including those on 7 February, shows that 85 per cent of houses are destroyed within 108 metres of bush and 90 per cent within 145 metres. These data, and the CFA’s practice in relation to ‘neighbourhood safer places’ (see Chapter 1), suggest that something beyond 100 metres would be a more conservative choice from the perspective of safety. The Commission supports the view that the 100-metre margin should be reviewed.” p. 223, Vol 2, Ch 4*

In Victoria, areas mapped as subject to the Bushfire Management Overlay (irrespective of distance) require a minimal BAL 12.5, and as will be discussed the current distance of 100 metres, should be revised to at least 150 metres to reflect climate change, and the nature of increased severity of bushfire events. An example is the Black Summer fires in 2019/20 in which many houses were simply not mapped as being bushfire but significantly impacted at 150 metres and more. This is also reflected under the Building Act.

### Refusing development approval - sometimes.

*“Planning can lead to increased safety of new buildings and developments in most areas of bushfire risk by setting conditions that substantially improve people’s safety. The expert panel put the view that in some areas the bushfire risk is so high that new development, including new subdivision of existing areas, should not be permitted. The panel proposed that the criteria for identifying where new development should not be permitted should include the physical characteristics of the area—the type, the density and extent of vegetation, the topography and the weather patterns for the area—as well as potential effects of climate change on the bushfire hazard in the area. The panel also proposed that a number of social framework criteria—such as the quality and availability of infrastructure, social and demographic considerations in the area, the changing nature of hazards, and the level of confidence that mitigation measures will remain in place over time—should also be taken into account.” p. 226, Vol 2, Ch 4.*

In the initial wake of the 2001/02 bushfires in NSW, the administration of bushfire assessment began the process of some refusals of DAs, however, this has significantly reduced, with the RFS’s tactics to either simply seek additional information to delay decision-making or to impose unreasonable conditions, in the hope that the DA may not proceed. As will be seen, there is also no effective way of ensuring conditions of consent are maintained into the future, undermining confidence in the decision-making process as well as the confidence of insurers that measures are effective and ensuring.

The challenge for any Government is that if, even a small number, of DAs are to be assumed undevelopable, then Government is expected to acquire these property interests. A good example is the ‘paper subdivision’ that exist in areas like Port Stephens, Mid Coast Council, near Jervis Bay (Heritage Estates) and in the Eurobodalla where areas are deferred in the planning instruments. Mechanisms for the resolution of these areas for acquisition, which are highly problematic from a bushfire perspective, lacks any funding arrangements.

By way of example, an older subdivision at Faulconbridge in the Blue Mountains, has some of the most serious bushfire hazards and steep slopes, which is recognised as unsuitable for development, however all Blue Mountains Council can do is advise future purchasers of the risks. If a person buys one of these blocks, they will almost certainly obtain an approval to build, as there are no mechanisms to buy out the original development, which is over 20 years old.

Another example is around Carrington, North Arm Cove and Tahlee (Mid Coast Council) near Karuah Nature Reserve, and near Port Stephens, where these areas contain Koala habitat, but there is no funding to acquire blocks progressively. In the absence of State Funds there is little that can be done to progress resolution of this problem.

### BAL-FZ and Performance Solutions.

*“The Commission notes that requiring an alternative solution for building in the Flame Zone is likely to cost more than a deemed-to-satisfy solution and could take longer to achieve. It will require specialist technical advice and possibly testing of specific building components and a higher construction cost. Since alternative solutions are not the norm for domestic building, consideration also needs to be given to ensuring that suitably qualified people are available to provide the necessary design services. But reducing the potential loss of life is the most important consideration, and in the Flame Zone this requires the development of performance-based building solutions for each particular site.” p.259, vol 2, Ch 4.*



This recommendation reflected a NSW position which still operates today, however, the administration of this is fraught with problems. The intention of this recommendation, arises from both the lack of evidence of performance of a building subject to flame contact, as well as additional protection measures were available for firefighter safety, as well as the opportunity to work outside of the deemed to satisfy provisions of AS3959. Since the release of this recommendation, the RFS provides no additional guidance on BAL Flame Zone and simply requires BAL-FZ development to comply with the relevant chapters of AS3959 and PBP. This simply adds to the administrative burden of the RFS and local councils with additional costs to owners. More significantly, the failure of the RFS to address residential subdivisions effectively, means that many more BAL-FZ homes are being approved due to property developer subdivision design, and the RFS failing to enforce appropriate standards on subdivisions.

#### Ongoing maintenance.

*“Because a house often changes hands a number of times during its life, the point of sale is a logical time to provide prospective purchasers with information about the bushfire safety of the site and building they propose to purchase.*

*The Commission proposes that s. 32 of Victoria’s Sale of Land Act 1962 be amended to require that, for land in a designated Bushfire-prone Area, a vendor’s statement under that section must contain a statement about the standard (if any) to which the dwelling was constructed and the assessment (if any) of the bushfire attack level at the time of construction. This would tell potential purchasers whether the house is in a Bushfire-prone Area and the risk level and standard for which the house was constructed (if these were a requirement at the time the house was built).*

*It is also proposed that the vendor be required to provide a current BAL assessment of the site and that that BAL rating be included on the vendor’s statement. If the house was built after AS 3959-2009 was introduced, a prospective buyer will be able to determine whether the expected level of bushfire attack had changed over time, for example, as a result of lack of maintenance. Any increase in risk is likely to have an adverse impact on price, thus providing an incentive for owners to maintain the original BAL for the site or to take steps to improve that level before selling. If the house was built after AS 3959-2009 was introduced, the current BAL assessment will provide an indication of the level of risk of the site and might encourage prospective buyers to undertake additional checks to determine how the property could be made safer.” P 266, Vol 2, Ch 4.*

This is a significant issue and in NSW, there is still no mechanism for ensuring that maintenance of measures such as APZs and landscaping are being implemented. I will return to this crucial issue below. A mechanism which addresses maintenance, possibly at the time of sale to a new owner, is warranted in the light of the ongoing problems with property maintenance. As discussed above, there is no mechanism or funding available to improve outcomes for at risk landholders.

Currently, the EP&A Act/Regulations make provision for the auditing of fire safety for Class 2-9 buildings, but no provision exists for bushfire affecting residential or other buildings (including residential homes). This is also impacting on insurance considerations.

There is a need for a mechanism, as part of the sale of a residential home, to have a check of properties, in bushfire prone areas, to ensure compliance with basic conditions associated with landscaping and/or asset protection zones, consistent with past development consents.

#### **D. Productivity Commission Inquiry Report on Barriers to Effective Climate Change Adaptation. (2012).**

This inquiry has significant implications for the Portfolio 7's terms of reference as discussed below.

##### Recommendation 9.1 (Land-Use Planning).

*“As a priority, state and territory governments should ensure that land-use planning systems are sufficiently flexible to enable a risk management approach to incorporating climate change risks into planning decisions at the state, territory, regional and local government levels. Consideration should be given to:*

- *transparent and rigorous community consultation processes that enable an understanding of the community's acceptable levels of risk for different types of land-use*
- *the timeframe of risks and expected lifetime of proposed land use*
- *the costs and benefits of land use.*

*State and territory governments should provide appropriate guidance to local governments to implement these provisions in local government schemes.”*

##### **And**

##### Recommendation 10.1 (Building Regulation).

*“The Council of Australian Governments' Building Ministers' Forum should provide formal direction to the Australian Building Codes Board to:*

- *monitor projections of climate change risks to buildings*
- *revise the standards in the National Construction Code to take into account these projections where this delivers a net benefit to the community.*

*This body of work should be transparently and formally incorporated in the Australian Building Codes Board's annual work program.”*

To date, there are no clear mechanisms for bring the bushfire land use planning system up to date, let alone address climate change. The current PBP document has included a section on strategic planning (this was removed in 2006 version but reinstated in 2019) however does not include climate change when reviewing master planning or DCP revisions for new residential subdivisions. The previous Government had been working on this issue as part of the implementation of Recommendation 27 to the NSW Bushfire Inquiry (2002). This will be discussed further below; however, it should simply be noted that the ABCB currently have a project started to look at this issue.

In the context of NSW however, there has been a lack of progress in updating the fire weather conditions in NSW to current fire weather conditions, which could be readily implemented, let alone addressing future impacts of climate change for building and planning controls.

#### **E. NSW Bushfire Inquiry.**

In the wake of the 2019/20 bushfires, the NSW Bushfire Inquiry was conducted which identified two key recommendations related to planning and building controls. These are Recommendations 27 and 28 (see 4.4.4: pp 186-196).

***“Recommendation 27***

*That Government commit to shifting to a strategic approach to planning for bush fire, and develop a new NSW Bush Fire Policy similar to the NSW Flood Prone Land Policy in order to accommodate changing climate conditions and the increasing likelihood of catastrophic bush fire conditions; to build greater resilience into both existing and future communities; and to decrease costs associated with recovery and rebuilding. To overcome this in the longer term, Government should move towards a model based on the Flood Prone Land Policy so that it can take a whole of Government strategic planning approach to transition those buildings and places at the greatest risk of an event to other more appropriate uses, including potential acquisition, and provide greater certainty when deciding where new development should be located.*

*In the shorter term, Government should take a range of measures to improve education, compliance, auditing, and enforcement in respect of bush fire standards for local developments and assets.”*

No real action has occurred to date. It is understood that the Department of Planning and Environment, prior to the last election had been considering an internal report, but stalled due to caretaker conventions. The current Government has not progressed this. It is important for the current Government to finalise its considerations, including climate change, and put the information out for public consultation. A working group, involving professional bodies such as Planning Institute of Aust (NSW), Aust. Institute of Building Surveyors (NSW), and Bushfire Protection Association, Government agencies (RFS, Planning), and key academics should be convened to consider the policy and implementation.

***“Recommendation 28***

*That Government, acknowledging that a strategic approach to planning for bush fire will take time, and in order to protect, prepare and build resilience into existing communities better, should immediately:*

- *prepare, in association with the insurance sector, a model framework and statutory basis for the establishment of an enforcement, compliance and education program which adopts a risk-based approach to routine inspection of local bush fire prone developments to ensure that every local development on bush fire prone land is prepared for future bush fire seasons in accordance with bush fire protection standards of the day, that account for worsening conditions*
- *ensure local government is resourced to enable effective audit, enforcement and compliance powers in respect of local developments and assets on bush fire land*
- *consider the introduction of subsidies for property owners to undertake site mitigation works to reduce bush fire risk and work with the Insurance Council of Australia to develop an agreed set of measures to insure against with a view to risk reductions resulting in lower insurance premiums*
- *review vegetation clearing policies to ensure that the processes are clear and easy to navigate for the community, and that they enable appropriate bush fire risk management by individual landowners without undue cost or complexity. “*

A review of the Bushfire Inquiry Implementation Report from the SEMC indicates little of this has really been implemented. This recommendation gave rise to the Rural Boundaries Code which is really unrelated to the above recommendation (dot 4).

### Issues:

The report of the NSW Bushfire Inquiry notes: “.... Government can make use of existing legislation to shift to a longer-term strategic approach to bush fire planning and introduce some shorter-term improvements to address some legacy issues....” This goes to the transition and development of alternate pathways to development control, as well as strategic planning. This submission will address these alternate pathways.

The Bushfire Inquiry report makes the following observations (in summary):

- Sufficient evidence and data sets are not available to enable an in depth analysis of the performance of PBP and bush fire construction standards.....
- Limitations:
  - No provisions to prohibit development in areas where bush fire risks are too great and cannot be mitigated...
  - The planning system needs to respond to accommodate changing climatic conditions....
  - There were 387 homes destroyed, as well as many other buildings damaged or destroyed, that were not located on designated bush fire prone land or within buffers prescribed (issue of efficacy of amending bushfire prone land maps and building susceptibility) ...
  - The cumulative impacts of State and locally approved developments across each LGA place pressure on regionally significant infrastructure (evacuation routes, water resources, etc.) during a catastrophic bush fire event ....
  - .... There is no legislative mechanism to require the upgrading of buildings to meet current bush fire protection standards or provide opportunity to relocate residents from inappropriate locations ....
  - (no) thorough understanding of infrastructure thresholds, emergency services, bushfire behaviour, environmental values and assets, and existing land uses management practices (at the landscape level) or consideration of the evacuation capacity of communities .....
  - Even the highest Bush Fire Attack Level (BAL) construction specifications (as specified in AS3959 and required by PBP) are not designed to withstand fires in catastrophic conditions ....
  - ... there is no centralised bush fire construction level database .... Six consequences:
    - ... it places responsibility on landowners to maintain (in perpetuity) bush fire protection measures .... Which is easy to lose sight of as time goes by
    - small scale alteration and modifications, landscaping and vegetation regrowth implemented by landholders are not formally monitored .....
    - ... new owners can be unaware of their obligations in an original development ....
    - ... no way to ensure consent incorporates improvements in bush fire protection methods
    - ... no capacity to pass on cumulative knowledge on the overall effect of climate changes and worsening bush fire seasons

- .... it (is) difficult to understand and review the performance of BALs and APZs associated with a development after a bush fire event.
  - .... Inference, leading to a false sense of security ..... it will be safe to live there
  - The system is not well equipped to identify and deal with unapproved developments ...
  - Designing, building and upgrading existing dwellings ..... is becoming more difficult (and costly) ....
  - Strategic planning is not given sufficient emphasis ..... does not require bush fire protection to be understood across a landscape and considered through Council led master planning and land use strategies.
- Concerns about the Biodiversity Offsets Scheme under the Biodiversity Conservation Act 2016 ... (and) ... it can be difficult and costly process to navigate if biodiversity assessments and offsets are required (and) .... new owners .... may not be readily able to find out what conditions apply and what they can and can't do. It should be much simpler for new purchasers of property to find out what the existing approvals allow.

#### **Suggested Changes by the Inquiry:**

- Adapt to new and increased risks caused by population growth ..... (particularly coastal regions) and ..... changing climate conditions
- Adopt **avoidance** as the first priority, and mitigation as a second
- Be upfront about the bush fire risk across a landscape ... taking into account the specific environmental conditions of that landscape....
- Deal with legacy bush fire issues arising from previous planning decisions....
- Build bush fire resilient communities .....
- Make operational planning, preparation, mitigation and eventual protection for bush fire easier..... reducing stress on resources and infrastructure and protecting fire fighters.
- Long-term strategic approach
  - Improve the strategic bush fire provisions of current planning and environmental legislation
    - Better bush fire mapping which better depicts the bush fire environment and takes risk into account when identifying the most appropriate places to build
    - Defendable spaces on edges of towns with perimeter roads (and best practice BPMs)
    - Urban planning policy and landscape design principles and practices that create buffers without compromising amenity and biodiversity
    - A strategic model for adaptation including relocation out of extreme areas
    - Proper consideration of new developments across different neighbouring LGAs
    - Funding for compliance, education and enforcement (ultimately self-funded and future proof)
    - Investment in research for innovative building design. Materials, protection including alternate construction options
    - More appropriate standards for constructing/upgrading all new and existing developments, to reflect worsening bush fire environment.

- Building sufficient bush fire fighting and evacuation capacity into new and existing towns
  - Ensuring that new development does not exceed the operational capacity of the NSW RFS
  - Strong community engagement processes
- Shorter term resilience measures
  - Increased consistency across legislation, and consequent certainty re APZs and vegetation clearance
  - Use new technology for enforcement and compliance re auditing of defensible spaces around towns
  - Increase enforcement, compliance and education training activities by councils to identify non-compliances (e.g., non approved dwellings)
  - Creating incentives for bush fire protection with consequent lower insurance
  - Developing a centralised BAL and APZ database for insurance companies, and current and future landholders.

The Committee should consider these previous public inquiries and consider the overall inertia to change. The reasons relate in part to the portfolio challenges (eg RFS and managing bushfire events), as well as perceived challenges that may impact on economic considerations (eg more costly housing).

In the light of the above, I would like to address the following additional key terms of reference of your committee for the future:

*“(c) short, medium and long term planning reforms that may be necessary to ensure that communities are able to mitigate and adapt to conditions caused by changing environmental and climatic conditions, as well as the community's expectation and need for homes, schools, hospitals and infrastructure*

*“(d) alternative regulatory options to increase residential dwelling capacity where anticipated growth areas are no longer deemed suitable, or where existing capacity has been diminished due to the effects of climate change.”*

### **1. Bushfire protection through the development application is in need of reform, is complex for the community, planners and the development industry.**

There are currently 5 pathways open for bushfire development assessment being:

- i. Section 4.14 which requires developments (other than subdivision and special fire protection purposes) to comply with specification and requirements of PBP. This may be certified by a ‘recognised’ consultant but can be submitted by anyone, and the RFS provides homeowners with a self-assessment kit. Councils will typically review these applications and have to do the assessment again, meaning assessors are taking on the role of designers.
- ii. Section 100B of the Rural Fires Act, which requires a bush fire safety authority (as integrated development) for subdivision and special fire protection purposes (more vulnerable developments). This requires a report which conforms to submission requirements within the regulations, to address ‘Standards’ within *Planning for Bush Fire Protection*;

- iii. State Significant development which in effect does not require a bush fire safety authority for SSD matters such as schools and hospitals, and are reliant on consultation under the relevant SEPPs (in this case Infrastructure & Transport SEPP);
- iv. Complying development certificate for various types of development, but requires a BAL certificate from a 'recognised consultant' which shows that the development is not BAL 40 or BAL – FZ, and that it complies with various development standards, which duplicate much of PBP. The BAL certificate must be done in accordance with the methodology in PBP.
- v. Section 4.15 Evaluation under the criteria for suitability of the site and/or the public interest. This can be used when a development is not mapped as being bushfire prone, however, if it is a special fire protection purpose or subdivision and not mapped, a bushfire safety authority is not required.

The rhetorical question is: why does all this matter? Where development assessments are inappropriately assessed, a latter assessment can lead to increased costs by the land holder (eg higher BAL costs more) or the loss of vegetation and associated biodiversity due to retrospective land clearance. We need to adapt to climate change. We currently have inertia.

**What can be done?**

In effect, there should be a common pathway through section 4.15 in which other issues can feed, the use of the LEP similar to that of flooding rather than the current cl 5.11, which is already set in legislation (see RF Act).

To do this, s4.15, s4.14, s4.13 and the LEP template needs to be amended. This can occur in line with the findings of the NSW Bushfire Inquiry through the following framework (noting that this would need to be checked by Parliamentary Counsel but give a good first idea):

**a) Amend section 4.15 Evaluation by inserting a new paragraph c1:**

*(1) Matters for consideration--general In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application-- .....*

*(c1) the risks to life, property, the natural and built environments, cultural values, and infrastructure associated with any natural hazard including bush fire, flooding, winds (including cyclonic winds), storms and storm surge, earthquake, landslip, snow falls, and coastal erosion, upon the development,*

This would effectively ensure that consent authorities will check for natural hazards issues and impacts on the environment and developments.

**b) Amend section 4.14**, so as to make the requirements specific to developing a planning performance solution for a residential building and not all developments, as part of a pre-DA process. This would be streamlined and tie into s4.15 above and the LEP process (see below):

***“4.14 Consultation and development consent—certain bush fire prone land (cf previous s 79BA)***

*(1) Development consent cannot be granted for the carrying out of **development for any residential building (other than a special fire protection purpose building)** on bush fire prone land (being land for the time being recorded as bush fire prone land on a relevant map certified under section 10.3(2)) unless the consent authority—*

*(a) is satisfied that the development conforms to the specifications and requirements of the version (as prescribed by the regulations) of the document entitled *Planning for Bush Fire Protection* prepared by the NSW Rural Fire Service in co-operation with the Department (or, if another document is*

prescribed by the regulations for the purposes of this paragraph, that document) that are relevant to the development (the relevant specifications and requirements), or

*(b) where the development does not conform with the relevant specifications and requirements, a bush fire development plan for the development has been prepared and the NSW Rural Fire Service has certified that the bush fire development plan provides a suitable performance solution for adoption by the development consent.*

*(2) In this section—*

*(a) A special fire protection purpose has the same meaning as it has in section 100B of the Rural Fires Act 1997.*

*(b) residential building is a building of Class 1, 2, 3, 4 part (and associated Class 10a or decks) or 10c under the Building Code of Australia or other purposes as are prescribed by the Rural Fire Regulations as being excluded as a special fire protection purpose.*

*(c) Relevant Specifications and Requirements, or Standards applies to the Specific Objectives and Acceptable Solutions of Planning for Bush Fire Protection prescribed in sub-section 1A.*

*(Note: s4.41 does not require a bush fire safety authority for State significant development)”*

**c) Amend section 4.13** to provide for an RFS review and consultation process for SFPP developments which are SSD, and will also tie into the s.4.15 and LEP process. Note this is solely about consultation but ensuring consultation and advice occurs. This could also be inserted into s4.14 as an alternative. Suggested wording is:

*“Section 4.13 Consultation and concurrence*

*(2B) Development consent in relation to State significant development (being special fire protection purpose) excluded under subsection 2A, on bush fire prone land, may only be carried out where the NSW Rural Fire Service has been consulted prior to the granting of consent and the Service:*

*(a) certifies that the development conforms to the relevant Standards that are relevant to the development, or*

*(b) advises that the development does not conform with the Standards, and*

*(i) the development has incorporated a bush fire development plan for the development and that the NSW Rural Fire Service has certified that the bush fire development plan provides a suitable performance solution for adoption within the development consent, or*

*(ii) the development is not suitable for development in relation to bush fire.*

*(??) In this section—*

*(d) A special fire protection purpose has the same meaning as it has in section 100B of the Rural Fires Act 1997.”*

#### **d) Amend LEP Template Provision replacing clause 5.11**

The following amended clause (28) extracted from Shoalhaven LEP 1985 should be included in the Standard Instrument and replace clause 5.11 (which can be a note as it is already addressed in the RF Act). Note that the clause requires all developments to be assessed, but provides considerations for development which have already been assessed at subdivision and have a s88B Conveyancing Act arrangement, and includes implications for environmental implications and climate change.

It also removes the current self-assessment arrangement, by requiring a relevant report, and addressing section 4.14 where relevant.



*“5.11 Bush fire protection measures*

*(1) The objectives of this clause are as follows—*

*(a) to minimise bush fire risk to life, property and the natural and built environment as well as cultural values associated with the use of land,*

*(b) to ensure adequate bush fire protection measures and long-term maintenance of development can be implemented, taking into account projected changes as a result of climate change,*

*(c) to ensure the protection and provision of adequate infrastructure for the local community and emergency services during a major bush fire event,*

*(d) to enable the safe occupation, shelter and efficient evacuation of people in the event of major bush fire.*

*(2) The Council must not grant consent to the carrying out of development (including subdivision) if it is of the opinion that—*

*(a) the development may have a significant adverse effect on the implementation of—*

*(i) any strategies for bush fire hazard reduction or risk management adopted by the Council, or*

*(ii) any strategies for the conservation of nature on public or private land: or*

*(iii) any relevant provisions of the Act or the Rural Fires Act 1997, and*

*(b) the development, including the arrangements for access to and from the development, may constitute a significant threat from bush fire to the lives of residents, visitors or emergency services personnel, and*

*(c) the development may give rise to an increased demand for emergency services during bush fire events that will result in a significant decrease in the ability of the emergency services to effectively control major bush fires.*

*(3) The Council must not grant consent to the carrying out of development unless it is satisfied that adequate measures are proposed to avoid or mitigate the threat from bush fire, having regard to—*

*(a) the siting of the development, and*

*(b) the design of, and the materials used in, any structures involved in the development, and*

*(c) the clearing of vegetation, and*

*(d) landscaping within the allotment, and*

*(e) provision of adequate water supplies, and*

*(f) access to and from the development including perimeter roads, and*

*(g) changes arising from climate change, and*

*(h) the requirements of section 4.14(1) of the Act, in relation to a residential building.*

*(4) Before deciding to grant consent to any development on bush fire prone land, the Council must—*

*(a) have received a bush fire assessment report in relation to the land, that addresses each of the matters referred to in subclause (2) and (3), and the Council is of the opinion that the development is feasible despite the land being bush fire prone, and*

*(b) be satisfied that these requirements will be met as far as is practicable in the circumstances, and*

*(c) be satisfied that the provision of asset protection zones and maintenance thereof can be contained within the development without imposing any burden upon adjoining land.*

*Note. Section 10.3(2) of the Act provides that bush fire prone land is land on a map certified by the Commissioner of the NSW Rural Fire Service as a bush fire prone land map for the area*

*of the Council. Council may also determine otherwise that development is bush fire prone for the purposes of section 4.15 of the Act. (to be changed if new s.10.3 adopted).*

*(5) Where applicable, the Council must not consent to the erection of any residential building other than within the setbacks identified by a restriction to title under section 88B of the Conveyancing Act and building footprints (or building lines) or other bush fire protection measures on a bush fire development plan that applies to that land.*

*(6) In this clause, a "residential building" has the same meaning as it has in section 4.14 of the Act.*

**e) Amend the provisions in relation to bushfire prone land mapping**, so that the map is incorporated into the LEP, is a function and requirement of the Commissioner of the RFS (rather than Council) so that it is an objective rather than subjective map (unlike say a zoning map) and which can be updated at a regular interval, and not be subject to the same processes as a planning proposal:

*"10.3 Bush fire prone land (cf previous s 146)*

*(1) The Commissioner of the NSW Rural Fire Service shall, if a bush fire risk management plan applies to land within the area of a council, designate land (if any) within the area that the Commissioner considers,*

*(a) to be bush fire prone land,*

*(b) must record any land so designated on a map,*

*(c) certify the map as a bush fire prone land map for the area of the council, and*

*(d) must provide a copy of the map to the council (including a digital map).*

*(2A) The Commissioner of the NSW Rural Fire Service may review the designation of land on a bush fire prone land map for an area at any time after the map is certified and revise the map accordingly. The Commissioner must revise the designation of land on a bush fire prone land map every 5 years after the date of the last certified map. The revised map--*

*(a) becomes the bush fire prone land map for the area on being certified by the Commissioner, and*

*(b) is to be provided to the council by the Commissioner (including a digital map).*

*(3) .....*

*(3A) A bush fire prone land map shall, for the purposes of this Act:*

*(a) be an adopted bush fire prone land map by a council. as part of a local environment plan for the area; and*

*(b) in relation to the adoption of the map, the provisions of Division 3.4 of this Act shall not apply.*

*(4) The bush fire prone land map for an area is to be available for public inspection during normal office hours for the council, and is to be provided to any person if requested at no cost.*

*(5) In this section--*

*"bush fire risk management plan" has the same meaning as it has in the Rural Fires Act 1997.*

Note : Division 8 of Part 4 of the [Rural Fires Act 1997](#) contains provisions relating to the [carrying out of development](#) and bush fire hazard reduction [work](#) on bush fire prone [land](#).”

An issue to follow up with the mapping guidelines is to address the 100 m buffer and extend to 140-150 metres in line with the Victorian Royal Commission and evidence that suggests 100 m distance is too small.

The above process will simplify the requirements through the use of section 4.15 of the EP&A Act for all natural hazards, continue to use s100B of the RF Act where a bush fire safety authority is needed, protects the state significant development approach but give consistent s4.15 consideration, allow for performance solutions to be developed for residential buildings as a pre-DA process, and make the process more efficient, open and transparent.

## **2. Rural Boundary Code and 10/50 Code provisions.**

In 2002, the RF Act was amended to include a requirement for a bush fire hazard reduction certificate, to be issued by a public land manager, a Council in regard to private landholders/owners and the RFS where they were seeking to implement essential hazard reduction activities. This certificate would be subject to assessment, and be subject to the operation of a Bush fire Environmental Assessment Code. RFS were trained in the Code and qualified staff still implement the Code but at a more centralised basis due to lower volumes of requests. This over-rides other environmental legislation, but does have restrictions in terms of the lands to which it applies, and includes assessments for threatened species, Aboriginal heritage, etc.

The implementation of these measures provided Councils, NPWS and other land managers, the opportunity to implement short term treatments, subject to biodiversity threshold where applicable, or for APZs on pre-existing development which were not subject to PBP and planning provisions. This was seen by Government, conservationists, community groups and local councils as being an appropriate framework to balance environmental considerations with protection of assets from the impacts of bushfire.

The introduction of the 10/50 provisions brought in a whole new set of arrangements. The 10/50 provisions originated in California USA (30ft/100ft) and was adopted in Victoria as a 10/30 for bushfire prone land, and 10/50 for the Bushfire Management Overlay, where existing development had not addressed APZs as part of previous approvals.

It's introduction in NSW extended the 10/50 provision to well outside areas mapped as bushfire prone, and also gave a *carte blanche* to clearance of all types without any assessment or reporting requirements. The major deficiencies still exist, however its use may have fallen, although this is not clear due to the lack of reporting requirements. Two key changes were the introduction of category 2 vegetation mapping within the bushfire prone land map, which excluded the operation of the 10/50 provisions, and the ability to use a development consent to turn off the operation of the 10/50 as part of a development consent for an APZ.

The 10/50 provisions are still an unacceptable response to a problem that doesn't exist and add to the confusion by the public of what requirements should be addressed with property preparation. (see recommendation 28 from the NSW Bushfire Inquiry).

Likewise, the Rural Boundary Code makes provision for the clearance of all vegetation to a width of 25 metres, within a rural zoned property. It is restricted to the property boundary (not the lot but the holding) however, requires no assessment, no reporting, can impact of critically endangered species or communities, and is ineffective in preventing a bushfire spreading. The limitations within

the Code are restricted to land uses that are unlikely to want to use the provisions, although it firmly only applies to rural zoned lands. Similar provisions are also available in the Local Land Services Regulations.

This is an ineffective mitigation measure and again flies in the face of prevention over mitigation for resilience in the face of climate change.

### **3. Changes in Bushfire Weather and addressing climate change.**

The current *Planning for Bush Fire Protection* (2019) provides three Forest Fire Danger Index (FFDI) conditions for different Fire Weather Districts across the State. Excluding 'alpine areas' which are given an FFDI 50, the remaining two regional FFDI settings are given as 100 for the Hunter, Sydney, Illawarra and Southern regions (including around Canberra). The Central West, Far West and Northern Coastal regions. For the purposes of determining the acceptable solutions (deemed to satisfy) approach, these should be updated to reflect a common FFDI of 100 (other than alpine).

For example, Coffs Harbour has dramatically changed from close to FFDI 80 to FFDI 100 at a recurrence of 1:50 years.

I have included two papers that relate to this issue. The RFS has been aware of this since 2017, but have not addressed the issue, and whilst it had the opportunity to deal with this in the 2019 version of PBP, have still to this day not addressed the issue.

If we are unable to adapt to changes that have occurred, it is difficult to conceive that we can deal with climate change. Is the RFS the right agency to manage these issues, or would the new Reconstruction Authority be better placed with its focus on all hazards, climate change and land use planning.

### **4. Role of professionals in bushfire.**

Bushfire practitioners are currently referred to as 'recognised by the RFS' in complying development (for a BAL certificate) and section 4.14 of the EP & Act (for a certificate of compliance with PBP). The latter is not compulsory for a DA, although the former is for CDC. At the moment, the RFS provides, and promotes, home owner self-assessment kits. It is well recognised that in the overwhelming majority of cases, that Council receives these and either undertake the assessment again themselves, or refer the Applicant to get a proper assessment report.

In NSW, most practitioners have had training and educational pathways, mostly through Western Sydney University Bushfire Protection programs. These are at Graduate Certificate, Graduate Diploma and Masters levels.

Over the last twenty plus years, the industry of bushfire consultants has grown from a handful to hundreds of practitioners. The current arrangements for recognition of consultants when we actually had no educational framework in place.

In addition, these professionals could be made available for point of sale assessments for compliance of past consent requirements. This would add to the confidence of the insurance industry, that protection measures are checked, at least at some time.

RFS staff are typically (but not wholly) unqualified to assess the work of these consultants, but offer advice or approvals, often contrary to PBP. (these could be explored at a hearing). There is little in the way of incentives for staff to do the necessary education, and those that get qualifications, will often work in the industry as a bushfire practitioner rather than stay with the RFS.

Many bushfire consultants are relying on their status as recognised consultants, rather than their qualifications and standing as professionals in the industry.

The current system should be overhauled and consultation with the Bushfire Protection Association of Australia should be consulted about representing bushfire practitioners.

The best outcomes for bushfire professionals is to fall within the ambit of other building design professionals including building surveyors, fire safety engineers and designers. Currently, swimming pool inspectors are regulated, but bushfire practitioners are not adequately regulated.

### **In Summary - Policy areas in NSW in need of revision.**

This submission is somewhat lengthy as it is, and in places goes to much detail. This is done to ensure the Portfolio #7 Committee is made aware of previous public inquiries, a history of sorts, of how we got to where we are today, and a framework for moving forward. The focus has been on bushfire, however, a similar approach could be taken with Coastal inundation, especially as it is easier to address climate change impacts.

Three years after handing down its report, the NSW Bushfire Inquiry's key recommendations 27 and 28 in relation to land use planning and climate change have still not been implemented. The reporting of the SEMC on these recommendations cover up, rather than reveals progress in this area. In the case of the Rural Boundaries Code, this has been implemented under the guise of the Inquiry's recommendations, but does not actually deal with the problems.

Poor policy, especially for bushfire protection, but also flooding and coastal inundation, can lead to poor performance outcomes, undermines the public's confidence in the system and jeopardises the essential role of the insurance industry which no longer has confidence in land use decision making in relation to natural hazards, and bushfire in particular.

There are a number of findings arising from this submission to your Inquiry.

1. There are significant areas in previous public inquiries in relation to natural hazards (especially bushfire) which have still not been addressed. Are we just re-inventing the wheel.
2. A need for natural hazards to be incorporated in all land use decisions (amend s.4.15 of the EP&A Act). Role of RFS in approval process for bushfire – need to better focus on strategic issues, State Significant Development and integrated approvals and less of day to day (eg dwelling) developments.
  - a. This requires a limit on s4.14 of the EP&A Act and review State significant development for more transparent consultation.
  - b. LEP provisions for all developments including infrastructure, etc and PBP compliance replacing clause 5.11 in the existing LEP template.
  - c. Refine complying development to reduce duplication and improve accountability
  - d. Consultation only on bushfire planning performance for residential buildings as a pre-DA process in s4.14.
3. Audit bush fire prone land mapping, centralise with RFS and amend guidelines (including to 150 m). This could also occur with flood mapping. This will be necessary if we need to address climate change.
4. Building upgrades – making it easier and getting a better outcome. Fixing some of the gaps, including FDIs and NSW Variation for NCC/AS3959. North coast and central west should be updated to FFDI 100.

5. Point of sale transfers for maintenance checks (as with swimming pools) and insurance incentives.
6. Repeal Rural Boundary Code and 10/50 Code provisions and focus on building renovation and limit land use to appropriate lands, improve uptake of avoidance over mitigation where appropriate. Use the Bush fire Environmental Assessment Code and Hazard Reduction Certificates as a means of supporting mitigation when necessary.
7. Improve the regulatory environment for bushfire practitioners through existing legislation which regulates building surveyors, fire safety engineers and building designers, and not through the RF Act.

I would be happy to expand on the detail associated with this report.



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(a) developments proposed or approved:

(i) in flood and fire prone areas or areas that have become more exposed to natural disasters as a result of climate change,

(ii) in areas that are vulnerable to rising sea levels, coastal erosion or drought conditions as a result of climate change, and

(iii) in areas that are threatened ecological communities or habitat for threatened species

(e) any other related matters

*(b) the adequacy of planning powers and planning bodies, particularly for local councils, to review, amend or revoke development approvals, and consider the costs, that are identified as placing people or the environment at risk as a consequence of:*

*(i) the cumulative impacts of development,*

*(ii) climate change and natural disasters,*

*(iii) biodiversity loss, and*

*(iii) rapidly changing social, economic and environmental circumstances*