Senate Standing Committee on Environment and Communications

Inquiry into recent trends in and preparedness for extreme weather events

Submission by the Australasian Fire and Emergency Service Authorities Council (AFAC)

Introduction

The following submission is based on consultation among the AFAC membership as well as our broader understanding of the context of the inquiry. We would ask the Committee to note that necessarily, our submission is an aggregate of points of view and should not be taken as the position of any single AFAC member. Also, some of our members will have contributed to the inquiry through jurisdictional submissions, and nothing in this letter should be taken as implying that our members do not fully support their jurisdictional submissions where made.

While our submission is made in the context of the inquiry terms of reference, rather than attempting to discuss individual issues in turn, we have addressed our comments to the two main themes of the inquiry: recent trends in extreme weather events, and preparedness for extreme weather events. We invite consideration of our comments under inquiry term of reference (h) 'any related matter' if they do not fall under any of the other terms of reference.

About AFAC

The Australasian Fire and Emergency Service Authorities Council (AFAC) is the peak industry body for government fire, land management and emergency service authorities in Australia and New Zealand. AFAC has 34 members (a list can be found at our website www.afac.com.au). There are also a small number of associate members, some from overseas.

AFAC is a not for profit company limited by guarantee. It is registered in Victoria and funded primarily by its members. Our vision is *"Fire and Emergency Services strengthened through sharing, collaboration and innovation."*

Within Australia, the responsibility for the delivery of fire and emergency services rests with the states and territories. Within this responsibility, there are numerous matters that are of common interest to agencies and increasingly, matters that benefit from a national perspective.

The purpose of AFAC is for its members to share information and resources to enable efficiencies and learnings and to collaborate on issues where a collective effort will achieve a better outcome. AFAC supports a trans-Tasman network of practitioners and technical experts who collaborate on

common standards, the operationalisation of policy and identification of good practice in incident management. We are able through our networks to provide a unique practitioner perspective on issues facing the emergency management sector.

AFAC has no direct role in the delivery of services to the community e.g. the implementation of education programs or giving advice. It also has no role in representing its members in industrial matters.

1. AFAC comment on trends in extreme weather events

In September 2009, AFAC published a Position and accompanying Discussion Paper on Climate Change and the Fire and Emergency Services Sector. These documents reviewed the available scientific evidence on climate change and identified the likely relevance for fire and emergency services in Australia and New Zealand in the event that predicted results of climate change came to pass.

Significant among these predicted results were:

- Greater frequency of bushfires
- Higher average intensity of bushfires
- More storms and higher winds
- More extreme precipitation events leading to increased flooding

The Position and Discussion Paper can be read in full on the AFAC Knowledge Web, an online resource for fire and emergency sector participants.[1] Although not specifically referenced in the Position, increased intensity of fires, storms and flooding also means that incidents would be of longer duration – for each event that occurs, if it is of higher intensity than has been the case in the past, it will require more resources, for a longer time, to manage.

In the period of just over three years since September 2009, Australasian fire and emergency services have been involved in responding to the realisation of that prediction, with a number of emergencies and disasters linked to extreme weather events. Examples include:

- Bushfires in Western Australia, notably at Toodyay, Roleystone/Kelmscott and Margaret River, occurring in the context of prolonged dry and warm weather conditions
- The Queensland Floods and Cyclone Yasi of 2010-2011
- The Victorian floods of 2011
- The Tasmanian and New South Wales bushfires in early 2013, which were associated with record high average maximum temperatures in Australia.

AFAC is not in a position to say with any certainty that there is a causal link between any one of these events and climate change, and we would defer to the opinions of experts in the field in that regard. Nonetheless, increasing numbers of events of this kind are what was anticipated in our climate change position.

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1 http://knowledgeweb.afac.com.au/positions/documents/Climate_Change_Fire_Emergency_Services_Sector_Position_2009-09-00_v1.0.pdf

From the point of view of practitioners in the emergency management field, there is a significant point to be made about trends, not just in the number and scale of extreme weather events objectively measured, but also in the subjective impact on society that these events have. This relates in part to the changing demographic in Australasia and differences in the way people cope with natural disasters. For example, the 'tree-change' phenomenon may lead to more people living in bushfire-prone environments who are unable to draw on experience of coping with fire in their environment.

There is, however, also a distinct change in the way that disasters impact on society arising from the way in which information is received and disseminated through communities. The social media environment has given extreme weather events an immediacy for people that they may not have had in the past, and has had the potential to make more people feel more 'involved' (even if not directly physically affected) than may have been the case in the past. The experience in Queensland in 2010-2011 has shown how ready people are to take to social media platforms to discuss and share information about disasters that are impacting on them – and there is already evidence from the United States of the deliberate spreading of untrue and alarming information about the consequences of severe weather events.

The increased appetite for information has also led to increased demands on fire and emergency services agencies in recent years, as expectations on them have changed to include a far greater emphasis on 'warning and informing' in addition to more traditional emergency response tasks associated with incidents. Communities now expect to receive a level of information about emergency events that would have been impossible even a decade ago, before recent advances in the reach and capability of information technology. This has led to significant changes in how AFAC member agencies do business, with expanded information and warning capability and substantial investment in technology, infrastructure and training to allow for the better dissemination of information.

Any increase in frequency, severity, duration or consequence of extreme weather events has resource implications for AFAC member agencies. These implications may be realised in one of two ways. Firstly, a sustained increase in the number of events or the burden that individual events have on fire and emergency services (for example an increased requirement for information operations) will increase the base workload for agencies. This would necessitate an increase in the standing capacity of agencies both to prepare for and to respond to emergencies (and later in this submission we discuss the existing capacity that AFAC members maintain). This has implications both for funding staff and infrastructure, but also for maintaining the very large volunteer engagement that supports fire and emergency response in Australia.

Secondly, a trend towards much larger emergency events – on the scale of the Black Saturday bushfires in Victoria, the Queensland floods and Cyclone Yasi in Queensland, or the January 2013 national heatwave impacting much of Australia – will require more extensive arrangements for surge capacity to be in place. It is simply uneconomic for any state or territory to maintain full-time fire and emergency services that are capable of combatting all conceivable incidents, however large; and for that reason a surge capacity has to be provided both within the state or territory, in the form of volunteer capability, and by way of interstate mutual aid agreements, where the fire and emergency

services of jurisdictions that are not directly affected by a disaster can be deployed to assist elsewhere in the country.

Again there are resource implications associated with maintaining a properly trained and equipped surge capacity workforce: and in relation to the provision of interstate mutual aid, it is critical that national common standards of training, equipment and incident management are promoted to facilitate the transfer of resources across jurisdictional boundaries where appropriate.

2. Preparedness for extreme weather events

In discussing the question of preparedness for extreme weather events in the emergency management context, we are not seeking to comment on the actual level of preparedness of any individual jurisdiction or agency. Our comments are intended to be applicable to anyone who is in the business of managing the emergency response aspect of extreme weather events.

Preparedness for extreme weather events requires an understanding of the likelihood and consequence of those events, and how they will affect the community, that is based on robust evidence, data and research. Since 2003 the Bushfire Cooperative Research Centre has undertaken extensive research into bushfire-related issues, including the relationship between weather and bushfire behaviour, the value of which has been recognised by inquiries such as the Senate Inquiry into Bushfires in Australia 2010, the Victorian Bushfires Royal Commission, and the COAG 2004 Bushfire Inquiry. Other non-fire natural hazard research bodies (particularly the Bureau of Meteorology, CSIRO and Geoscience Australia) are investing considerable resources into aspects of flood, cyclone and related natural hazards research. AFAC recognises the need for good policy and procedures in the preparedness field to be underpinned by sound research, and strongly supports the continued resourcing of research programs to fill this need.

2.1 Successes

The scale of extreme weather events in recent years has increasingly called for co-operation between agencies and jurisdictions to provide adequate resources to combat them. Although we recognise the challenges and costs in moving personnel and equipment interstate – and it may be impractical to deploy resources from east coast states to locations such as north-west Western Australia or the outback Northern Territory – the human and material resources available to fire and emergency managers across Australia can be viewed as a national asset, not just a collection of state and territory assets.

In the most recent period for which data is available, the Productivity Commission's Report on Government Services (RoGS) showed a national annual expenditure on Fire and State/Territory Emergency Services of $3282 million. In 2010-11 17,545 full-time equivalent personnel were employed by fire services in Australia and an additional 219,765 volunteers participated in the delivery of fire services in that year. In the same period, State/Territory Emergency Services had 27,926 volunteers participating in the delivery of emergency services.

These figures demonstrate the substantial size of the fire and emergency services sector in Australia, the financial commitment involved on the part of governments in maintaining this capability, and the valuable contribution made by both career and volunteer staff in providing capacity to respond to incidents. The size of the volunteer establishment gives some indication as to the additional

resources available to combat very large incidents resulting from extreme weather events, but also suggests the challenges involved in maintaining that capability.

The sharing of resources between emergency service organisations across state and territory boundaries is a well-practised element of Australian emergency management arrangements. Many jurisdictions have local agreements to cross state borders routinely, to ensure that the closest available resources respond to an incident. At the scale of natural disasters, bilateral resource sharing agreements exist to allow personnel and equipment to be deployed to neighbouring states and beyond, to reinforce their ability to cope with the largest emergencies.

To underpin that ability, State and Territory Emergency Services have developed a memorandum of understanding on interstate resource sharing. AFAC has also published a guideline on resource sharing (A Guide to Resource Sharing (Mutual Aid) 2011) that all agencies can incorporate into their business as appropriate.

Recent examples of substantial interstate sharing of resources can be seen in the context of the Victorian Black Saturday bushfires, and the Queensland floods/Cyclone Yasi of 2010-11. It can be expected that similar events occurring in the future will also give rise to interstate movement of resources. It should however be noted that there is a significant cost involved in moving personnel, who may include paid staff and volunteers, interstate and making provision for their accommodation needs and consumables in the host state. Current payments under the joint Commonwealth-State Natural Disaster Relief and Recovery Arrangements (NDRRA) are made to the jurisdiction in which the event occurred, which can lead to double-handling and delay when a state that provided assistance is attempting to recoup its expenditure from the requesting state. There may be scope to revisit these arrangements to provide direct assistance to agencies and jurisdictions that send resources interstate to assist in times of disaster.

A note of caution may also be appropriate here – if a trend towards increased frequency and intensity of extreme weather events leads to large scale emergencies occurring simultaneously in adjoining states (as has been seen in early 2013 with significant bushfires in Tasmania, Victoria and New South Wales, the capacity of jurisdictions to send assistance across state borders may be compromised as they deal with events within their own borders. It follows that in planning for provision of surge capacity, governments should consider a worst case scenario in which neighbouring states are unable to assist.

There is a national approach to the provision of aviation resources for firefighting, through the National Aerial Firefighting Centre (NAFC), funded by the Australian and State and Territory Governments. NAFC was formed by the Australian States and Territories in July 2003 to provide a cooperative national arrangement for combating bushfires. It achieves this by facilitating the coordination and procurement of a fleet of highly specialised firefighting aircraft that are readily available for use by State and Territory emergency service and land management agencies across Australia.

This national aircraft fleet complements aerial firefighting resources that are arranged directly by the States and Territories. There are challenges involved in diverting aerial firefighting resources to combat other hazards, as they tend to be specifically configured for firefighting, and are often only available during the fire season which may not coincide with the occurrence of other natural

disasters. There may, however, be scope to expand the NAFC model to address these issues and to encompass aviation response to other incidents such as flood and cyclone.

The role that the Australian Defence Force has played in providing aviation resources for the Queensland floods/Cyclone Yasi in support of response/relief arrangements should also be recognised. The ADF has also provided support in other circumstances, notably after the Victorian bushfires of 2009. This is a vital surge capacity for emergency services, particularly in relation to aviation resources over and above those reasonably anticipated to meet normal operational response needs, which it would not be practicable for civilian emergency response agencies to maintain.

Another vital resource for emergency managers dealing with extreme weather events is the Bureau of Meteorology. The Bureau provides weather forecasting services in relation to fire weather, flooding and cyclone that are critical to the facilitation of response agency readiness and the issue of warnings to the public about anticipated emergencies caused by extreme weather. A comprehensive review of the Bureau's capacity to respond to future extreme weather and natural disaster events and to provide seasonal forecasting services was commissioned by the Department of Sustainability, Environment, Water, Population and Communities in 2011 and Ms Chloe Munro reported in December 2011[2]. Many of the detailed conclusions of that review are outside the scope of this submission: but AFAC supports any measures that can be taken to enhance the weather prediction and warning systems managed by the Bureau, for example its role in flash flood warnings.

The interstate deployment of resources is dependent on there being common standards of training and incident management, and these are both core business for AFAC. AFAC has a lead role in the development of training materials in the national Public Safety Training Package for Fire and Emergency Services. There are currently 147 units of competency that have been developed through collaboration between AFAC members and which provide a consistent framework for training fire and emergency service workers across Australia.

Although inevitably the local context of training will differ, the principles on which training is delivered are the same for firefighters and emergency workers in all states and territories. This substantially facilitates the interstate movement of emergency workers when required. The amount of training required to become competent as an emergency responder should not be underestimated: the entry-level Certificate 2 requires a minimum of 293 hours of training (this can be up to 660 hours depending on the specialised competencies selected) together with associated skills maintenance. Although the willingness of communities to volunteer spontaneously in the aftermath of disasters has been an encouraging feature of recent disasters, health and safety legislation and the skills required to respond to emergency incidents safely mandate that front line emergency responders must be trained to an appropriately high standard and the Public Safety Training Package is an important facilitator of that.

[2] Review of the Bureau of Meteorology's capacity to respond to future extreme weather and natural disaster events and to provide seasonal forecasting services, December 2011, http://www.environment.gov.au/about/bom/pubs/bom-review.pdf

A common incident management system for Australia is fundamental to our ability to deploy personnel to other jurisdictions and still have them operate safely and effectively. Conditions at an emergency incident are often fast-moving, uncertain and challenging, and it is critical to the safety of responders and the success of the mission that there should be a common approach to the way in which the incident response is organised and managed. In the late 1980's, borrowing from the National Interagency Incident Management System of the U.S.A., AFAC members agreed to adopt the equivalent Australasian Inter-service Incident Management System™, AIIMS, as the common incident management doctrine for fire services in Australia. AIIMS is now in its third edition (revised in 2011), and work is in progress to produce an all-new fourth edition in 2013.

Since State and Territory Emergency Services agreed to adopt AIIMS in 2005, AIIMS has been the incident management system in use by all fire and emergency services in Australia. Additionally, many state and federal government authorities, private industrial corporations, and some police forces have adopted AIIMS as their incident management doctrine. The revision of AIIMS in 2011 captured the findings of a number of post-event inquiries on incident management and the current review will ensure that AIIMS continues to reflect best practice in incident management.

AFAC member agencies have also given consideration to the question of how incident controllers for the most serious and challenging incidents that agencies may face are selected. This is particularly relevant in the context of interstate deployments of personnel. Incident controllers capable of managing the largest incidents require very significant experience and training to do so, and consequently it can be challenging for smaller agencies in particular to maintain a cadre of senior incident controllers large enough to manage incidents that stretch over several days or even weeks. It is likely that requests may be made to neighbouring agencies for assistance: but of course at this level it is critical that anyone being deployed to manage an incident of this size is competent to do so.

AFAC members have agreed a four-point framework for the endorsement of these senior, what is termed as 'level 3' incident controllers. It is based on the concept of a rigorously documented selection, training and skills maintenance process. This may be the first step towards national training provision for senior incident managers, although the logistics and funding issues involved mean that that is still an aspirational outcome.

Overall, the past few years have seen fire and emergency service organisations rise to the challenges of more complex and larger-scale incidents through collaboration and sharing of knowledge. Flexibility has been an important part of this development: in Queensland, the Fire and Rescue Service has responded to the threat from flash flooding events to develop an advanced swift-water rescue capacity, which at times has eclipsed the provision of traditional firefighting services in terms of community demand. The purpose of AFAC is to allow agencies to share developments like this, as well as to continue to refine best practice, and constantly seek to improve preparedness for future emergency and disaster situations.

This flexibility is also evident within jurisdictions where agencies are increasingly adopting an 'all-hazards' approach – so that State Emergency Services may be involved in aspects of managing fire incidents, and fire services may deploy personnel to combat floods. As a body that counts all State and Territory Emergency Services, as well as all government fire services, among its membership, AFAC is well-placed to facilitate this trend: and the common use of AIIMS by fire services, land

management agencies and State Emergency Services allows for integration of command and control of different agencies at major incidents.

2.2 Some challenges

Accompanying the positive themes discussed above, AFAC member agencies have had to deal with a number of developing challenges over the past several years. If large-scale natural disasters continue to occur with the frequency and at the size experienced recently, these challenges will be prominent in the strategic thinking both of AFAC members and, we hope, their jurisdictional governments.

The traditional model for fire and emergency service agencies was that they provided a reactive response to emergencies as they happened, and often engaged with the communities they served on specific aspects of their role such as education about home fire safety, inspection of premises and similar functions. In relation to the more complex natural disasters that we have seen in recent times, this traditional role has become blurred as additional responsibilities to warn communities, disseminate information and even take highly significant decisions such as whether to evacuate a locality have been added to their remit.

Although the involvement of hazard-management experts in these activities is unavoidable, there remains a responsibility on jurisdictional governments to maintain societal security at a broader level, and to take important governance decisions. There is a danger that in large-scale hazards, the natural tendency to want 'experts' to have control of operational matters may lead to responsibilities that properly belong with executive government falling on emergency responders. It is important that executive government is clear as to its role and responsibilities in a disaster situation.

The issue of evacuation is a good example of this. An emergency response agency may be in a good position, technically, to make decisions about whether a given area should be evacuated because of an impending natural hazard such as a flood. These same agencies may not, however, have either the authority or responsibility to enforce such a recommendation: and in any event, it may be inappropriate for them to try to do so. There have been recent historical examples of communities failing to comply with emergency services' recommendations to evacuate. Sooner or later, a failure of this nature will lead to substantial loss of life. The risk that this entails needs to be managed at a higher level than that of the response agencies. Governments need to provide political leadership and authority on whether communities should take the risk of not evacuating in the face of a known threat, and should spell out quite clearly the individual consequences of this decision. This is particularly so given that response agencies will generally not have the resources to rescue all community members if a community does not evacuate and is subsequently impacted by an event.

The recent spate of large-scale operational incidents has led to a number of inquiries into AFAC member agencies' response to incidents. Generally speaking, AFAC welcomes and promotes the need for after-action review of incidents so that lessons can be learned. Within the sector there has been a concern, however, that recent inquiries have not been based on a clear analysis of the benchmarks against which response is to be measured, a definition of what a 'successful' response looks like or a consideration of whether, realistically, better community outcomes could have been achieved. Very significant responsibility for outcomes has been fastened on emergency responders

at the time of the incident, with far less attention being given to prior government and individual decision-making which may have had equally or even more far-reaching consequences.

This is directly relevant to preparedness as it is impossible for agencies to be prepared unless they know in advance what outcomes are expected of them. Equally, advance setting of performance benchmarks allows informed decision-making by government about resource allocation. What is not helpful is for agencies to be criticised for failing to achieve an outcome that it did not know was to be used as a standard to measure its performance by.

Inquiries must also understand that in incident management as any field of human endeavour, practitioners will make mistakes or will make decisions in good faith that were justifiable on the evidence available at the time but later can be shown to have been wrong. The nature of emergency management decision-making requires those in charge to act when they often do not have access to all required information. It is not beneficial to focus on individual decision-making of this nature without an accompanying analysis of what is non-negotiable in agency performance and commensurately, where agencies may require additional resourcing to reach looked-for standards of reliability. AFAC member agencies are currently collaborating to establish, from a practitioner point of view, what good performance looks like: but ultimately it is the responsibility of government both to state clearly what it wants from its emergency agencies, and to provide sufficient resources to make that achievable.

2.3 Shared responsibility and community engagement

AFAC has particularly welcomed the National Disaster Resilience Strategy issued by COAG in which the concept of sharing responsibility for community safety between communities and government is discussed. This theme has also been taken up in Victoria where the conversation has been cast in terms of mutual obligation between government to provide for community safety, communities to prepare themselves to withstand disasters and for individuals to make informed decisions. Chapter 9 of the final report of the Victorian Bushfires Royal Commission (2010) discussed the shared responsibility for ensuring people's safety in bushfires between government and individuals, and the commentary there could equally be applied to other natural hazards such as flood and cyclone.

Post incident analysis often focuses on emergency service response at the time of the emergency, but less so on mitigation and resilience measures undertaken by governments and communities. Warnings to communities are not always possible before a natural hazard strikes. Government initiatives supporting the rebuilding of communities after disaster events when they are located in high risk locations, blunts the resilience messaging.

AFAC has commented in the past on the critical importance for governments and emergency response agencies of engaging with the communities they serve well before any emergency event[3]. Communities need to understand what will happen in an emergency situation, what emergency services can do for them (and what they cannot); and what is reasonably expected of community members to look after their own safety. Emergency warnings issued when an event is imminently

[3] See for example AFAC's submission to the Queensland Floods Commission of Inquiry, 2011, at http://www.floodcommission.qld.gov.au/__data/assets/file/0004/8086/Australasian_Fire_and_Emergency_Service_Authorities_Council_AFAC.pdf

threatening are of reduced value if communities do not know how they should react to them. Community acceptance of measures such as evacuation is likely to be enhanced where the community itself has been involved in the process of planning for evacuation to occur[4].

AFAC strongly supports the provision of adequate resources by government to promote community involvement in risk reduction and readiness activities, which in the long run have a far greater potential to save life than emergency response activities taking place after an emergency has occurred.

AFAC supports further refinement and promotion of the National Disaster Resilience Strategy, with an emphasis on assessing the efficacy of any proposed emergency management measure against whether it promotes or weakens community resilience, and ensuring that post-incident inquiries address in specific terms what impact community resilience – or lack of it – had on the outcomes, however difficult this may seem to be in terms of accommodating the sensitivities of affected people.

2.4 Risk reduction and land use planning

In relation to any emergency incident, including those events that result from extreme weather conditions, there will be a number of strategies that can be put in place to reduce the risk posed by the event or to mitigate the consequences. Examples are fire management activities such as prescribed burning, and floodplain management strategies such as the construction of levees.

The 2002 report to the Council of Australian Governments by a high level officials group *Natural Disasters in Australia* defined 'disaster mitigation' as 'measures taken in advance of, or after, a disaster aimed at decreasing or eliminating its impact on society and the environment'. The definition reflects the concept of preparedness in relation to those actions taken before a disaster. This report noted that greater investment in disaster mitigation is likely to reduce the economic cost of natural disasters to the nation, and the financial and social costs to individuals, communities and businesses, and especially to rural and regional Australia. It estimated the rate of return on expenditure on disaster mitigation conservatively at 15 per cent, and referenced analysis showing that over some 67 projects, every dollar invested in flood mitigation saved more than $2.10.

Effective planning and warning systems also reduce disaster damage and costs: papers by Smith and Gissing on the Taminda flood event (Bureau of Infrastructure, Transport and Regional Economics, 2001) and Gissing on Flood Action Plans (Australian Journal of Emergency Management, 2003) argue that in a well-prepared riverine flood environment, up to 80% of direct flood damage losses can be prevented by timely and accurate warnings.

The notion that it is cost-effective to plan and prepare effectively for disasters is borne out by a desktop review carried out for the UK Department for International Development in 2005[5], in which it was estimated that in the 1990's, $40 billion in investment could have saved $280 billion in economic losses worldwide from natural disasters. AFAC supports a proactive adoption of disaster

[4] See commentary in Australian Emergency Manual 20 *Flood Preparedness*, Attorney-General's Department 2009, pp20 et seq

[5] *Natural Disaster and Disaster Risk Reduction Measures*, Environmental Resources Management Ltd, 2005

mitigation measures by government, as this not only reduces the suffering of communities that are affected by natural disasters, but saves money as well.

The effects of extreme weather events can often be mitigated or even avoided by appropriate land use planning. Prominent examples are decisions to build on known floodplains or in highly fire-prone areas. There is an important balance that requires to be struck within a democratic society between people's freedom to use land and live as they wish, and the negative effects both on individuals and all society when risky land use planning decisions lead to losses and fatalities in extreme weather events. This principle has been recognised in reports over the past decade including *Natural Disasters in Australia*, (2002), the Council of Australian Governments' *National Inquiry on Bushfire Mitigation and Management* (March 2004), and the final reports of the Victorian Bushfires Royal Commission (2010) and the Queensland Floods Commission of Inquiry (2012).

Although, as discussed above, the performance of emergency services in responding to an incident is often closely scrutinised in post-incident inquiries, it must be borne firmly in mind that by the time an emergency has impacted or is about to impact on communities, it is already too late to avoid many of the negative effects. Even in the best-run events, not all community members will receive a warning. There may not even be time to issue a warning before impact. It is not yet fully understood what impact the increased level of information provided to communities will have. Will people develop warning fatigue? Might people, in responding to a warning, evacuate to a location of greater danger?

If, in carrying out the balancing act referred to above, decisions are made for people to live in bushfire prone areas or on floodplains, then this should not lead to response agencies being expected to eliminate the risk that this creates. AFAC suggests that emergency management practitioners do have a role in helping to mitigate that risk: specifically, expert emergency management advice is a key element in successful land use planning and understanding the risks associated with land use planning decisions, and fire and emergency services agencies may be well-placed to give this advice. There needs to be, however, a more developed discussion within society about the consequences of land use planning decisions, and an improved understanding that emergency response is not an alternative solution for good land use planning decisions.

There is an important information management issue around land use planning. There has been much recent discussion about incident information management and warnings, and emergency services. Fire and emergency services agencies have, as discussed above, made significant advances in dissemination of incident information to communities. It may be questioned, however, whether communities receive adequate information about the risks associated with living in a given location. It is unclear whose responsibility is it to give this information: there are vested interests that oppose the broad dissemination of risk information owing to perceived effects on property values, so that it can be a contentious field for emergency response agencies to be involved in. What information is made available is not always clearly conveyed: for example, do communities really understand the significance of a 1% annual exceedance probability flood level?

In our view, preparedness for extreme weather events requires an understanding, and acceptance, of the risk they pose to communities. Where a community reacts adversely to the impacts of a weather event that was predictable in its occurrence and effects, for example by criticising emergency responders for failing to avert the consequences of the incident, this suggests a lack of

understanding of what the risks are of living in that place. This in itself is a kind of unpreparedness: where a risk exists, people need to be psychologically prepared to experience the consequences of that risk.

In summary, many weather-related disasters are arguably the consequence of land use planning decisions. The best place to be in a flood or a bushfire is somewhere else: this is difficult when whole communities are located in prone areas. We do not think that evacuation or warnings, far less an expectation of or reliance on rescue or emergency response to avoid the consequences of extreme weather events, will ever be an adequate substitute for appropriate land use planning, adequate education of the public about the risks from natural hazards that they face, and realistic acceptance of risk by people who have chosen to live in hazard-prone areas.

Conclusion

AFAC member agencies are well aware of the challenges posed by extreme weather events and recognise the need to be prepared for an increase in their frequency and extent.

A prepared community is one in which emergency response agencies, government, and the people living in the community have partnered to understand the risk, to define the steps that each is expected to take in addressing the risk, and have actually taken those steps. Individuals, as well as governments and emergency response agencies, bear responsibility for their own decisions about safety in an emergency, and must understand the risk they have accepted in their environment and be prepared for it.

Specific attention needs to be given to the uses to which we permit land to be put in natural hazard-prone areas. It is critical that people living in those areas appreciate the risks they face and realise that emergency service agencies cannot shoulder that risk for them.

Strategic planning for large-scale disasters should recognise that the emergency response capacity of individual jurisdictions must have surge capacity built into it. It must also recognise that some situations cannot be dealt with adequately by the resources of one state or territory, and national co-operation must be planned and practised for in order to achieve the best possible outcomes for Australians in times of emergency.

If it would assist the Inquiry, AFAC is able to nominate witnesses who would be able to give more detailed evidence, supported by their expert knowledge in the field, on any of the above matters. If it would be useful to you to discuss this or any other matter related to this submission you should not hesitate to contact AFAC's Chief Executive Officer Stuart Ellis by telephone on 03 9419 2388.