

Chapter 5

Developing a national response to extreme weather: coordination, roles and responsibilities

Introduction

5.1 This chapter considers the roles and responsibilities of the Commonwealth, state, territory and local governments in Australia, as well as coordination between the different levels of government in managing and responding to extreme weather events. This chapter also discusses progress towards effective national coordination of climate change response and risk management, including areas for improvements.¹

The division of responsibilities between different levels of government

5.2 This section considers the responsibilities of the Commonwealth, state and territory and local governments in Australia in relation to extreme weather events and climate change adaptation.² As the Commonwealth government has noted, 'identifying the roles of government in adapting to climate change is the first step in building a coordinated approach'.³

Commonwealth

5.3 At the federal level, a number of departments and agencies have roles and responsibilities relevant to managing and responding to extreme weather events. The roles of key departments and agencies are set out below.

5.4 The Attorney-General's Department provides national coordination of emergency management, enabling a 'whole-of-nation, resilience based approach to preventing, preparing for, responding to and recovering from disasters'.⁴ Some of the Attorney-General's Department's work in this area includes the *Critical Infrastructure Resilience Strategy*, which aims to ensure the resilience and continued operation of Australia's critical infrastructure and the continuity of essential services in the face of all hazards, including extreme weather events.⁵

5.5 The Attorney-General's Department, through its Emergency Management Australia Division also operates the Australian Crisis Coordination Centre which is a 'dedicated all-hazards facility'. The Crisis Coordination Centre 'monitors and informs

1 See terms of reference (e), (f) and (g).

2 Note that 'adaptation' is defined by the *National Climate Change Adaptation Framework* as 'a process by which strategies to moderate, cope with, and take advantage of climate events are enhanced, developed and implemented': p. 20. Therefore, strategies to manage the increasing frequency of extreme weather events are a component of climate change adaptation.

3 Australian Government response to the Productivity Commission report: *Barriers to Effective Climate Change Adaptation*, March 2013, p. 8.

4 Attorney-General's Department, *Submission 64*, p. 2.

5 Attorney-General's Department, *Submission 64*, p. 7.

on domestic and international weather events which may impact, or cause disruptions to Australians'.⁶ The Centre also:

- centralises and coordinates information across the Australian government, states and territories during a crisis in Australia;
- coordinates Australian government physical and financial assistance for disaster relief – including Disaster Recovery Payments;⁷
- maintains the Disaster Assist website, which aims to provide 'better access to information about recovery assistance following a disaster';⁸ and
- maintains response plans to provide Australian government assistance to states and territories in response to an emergency—and, in particular, the Australian Government Disaster Response Plan.⁹

5.6 A number of agencies are involved in the dissemination of information relating to extreme weather events. For example, as discussed in Chapter 2, the Bureau of Meteorology is involved monitoring, assessment and forecasting of Australia's weather and climate system, and provides forecasts and issues weather warnings. It often works collaboratively with state and territory governments when issuing those warnings.¹⁰ The Commonwealth Scientific and Industrial Research Organisation (CSIRO), and particularly its Climate Adaption Flagship, undertakes research designed to deliver 'the best available scientific information and expertise to support Australia's efforts to adapt to climate change today in a practical and effective way'.¹¹

5.7 The Department of Human Services, in the event of emergencies caused by extreme weather events, has responsibilities to:

- ensure the continuity of payments and services, including delivering emergency payments;
- support pharmacists in dispensing Pharmaceutical Benefit Scheme medicines;

6 Attorney-General's Department, *Submission 64*, p. 17.

7 Attorney-General's Department, *Submission 64*, p. 17; see also Attorney-General's Department, *Disaster assistance*, <http://www.ag.gov.au/EmergencyManagement/DisasterAssistance/Pages/default.aspx> (accessed 24 June 2013).

8 Australian government, *Australian Government Disaster Assist*, <http://www.disasterassist.gov.au/Pages/default.aspx> (accessed 24 June 2013).

9 Attorney-General's Department, *Crisis Coordination Centre*, <http://www.ag.gov.au/EmergencyManagement/Pages/CrisisCoordinationCentre.aspx> (accessed 24 June 2013).

10 Bureau of Meteorology, *Submission 65*, pp 4 and 26.

11 CSIRO, Climate Adaptation Flagship, <http://www.csiro.au/org/ClimateAdaptationFlagshipOverview> (accessed 24 June 2013); see also CSIRO, *Submission 93*, p. 3.

- participate in local and state/territory recovery committees, including delivering services from established recovery centres; and
- support national emergency call centre surge capability to allow federal, state and territory government agencies to divert excess call loads received on their emergency (non-triple zero) call lines to the Department of Human Services.¹²

5.8 In 2011, the Department of Human Services implemented its own Emergency Management Framework which outlines the command, control and coordination arrangements for emergency responses.¹³

5.9 The health implications of extreme weather events were considered in Chapter 3. The Department of Health and Ageing (DoHA) submitted that, in the event of an extreme weather event of 'national consequence', its primary role is to 'provide leadership and national health sector coordination', including:

...provision of expert health advice and national policy development, logistical coordination of extra jurisdictional health sector resources (human, equipment and peripherals) and linkages to international health authorities and bodies.¹⁴

5.10 DoHA noted that the Australian Health Protection Principal Committee, which reports to the Australian Health Ministers' Advisory Council, has produced the National Health Emergency Response Arrangements to 'articulate the strategic arrangements and mechanisms for the coordination of the Australian health sector in response to emergencies of national consequence'.¹⁵

5.11 DoHA also advised that it had responsibilities in relation to aged care service providers, including supporting them in relation to risk management for emergency events to ensure continuity of care for people who receive aged care services, with minimal disruption; and providing advice and education to support them to develop adequate emergency management plans.¹⁶ In terms of mental health, the department also noted that Commonwealth funded mental health programs can be used in the medium to long term to support people affected by loss and trauma as a result of extreme climate event.¹⁷

5.12 The critical importance of telecommunications in the context of extreme weather events was discussed in chapter 4. The Department of Broadband, Communications and the Digital Economy (DBCDE) noted that 'while the government monitors developments, the maintenance and resilience of the commercial

12 Department of Human Services, *Submission 116*, p. 1; see also Department of Health and Ageing (DoHA), *Committee Hansard*, 7 June 2013, p. 7 for further discussion on maintaining supplies of pharmaceuticals in emergencies.

13 Department of Human Services, *Submission 116*, p. 2.

14 DoHA, *Submission 126*, pp 1–2.

15 DoHA, *Submission 126*, p. 1 and *Committee Hansard*, 7 June 2013, pp 1 and 4.

16 DoHA, *Submission 126*, p. 2; see also and *Committee Hansard*, 7 June 2013, p. 2.

17 DoHA, *Submission 126*, pp 2 and 3 and *Committee Hansard*, 7 June 2013, p. 3.

telecommunications network is ultimately a matter for the telecommunications carriers'.¹⁸ That department also noted that the Commonwealth government has developed *National Guidelines for the Request and Broadcast of Emergency Warnings* in consultation with state and territory governments and peak broadcast media bodies. The guidelines aim to improve the effectiveness and consistency of arrangements between all broadcast media, and all emergency management organisations, for the request and broadcast of emergency public warnings.¹⁹

5.13 The committee notes that a number of other Commonwealth departments may also be involved in managing and responding to extreme weather events, including the Department of Agriculture, Fisheries and Forestry, which provides assistance and support to farm families in times of drought.²⁰

5.14 The Department of Defence and the Australian Defence Forces may also be involved extreme weather events. Where civilian resources are inadequate, unavailable or cannot be mobilised in time, emergency *Defence Assistance to the Civil Community* arrangements enable the Australian Defence Force to contribute in order to save human life, alleviate suffering and prevent loss of animal life or property. Provision of Defence assistance follows a request from the relevant state or territory government to Emergency Management Australia. Over recent years, Australian Defence Force personnel have been involved in a number of domestic natural disaster relief efforts, including, for example, after Tropical Cyclone Yasi in north Queensland; and the Victorian bushfires in 2009.²¹

5.15 Finally, the leading agency coordinating the Commonwealth government's response in terms of adaptation for climate change is the Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education (DIICCSRTE).²² DIICCSRTE advised that climate change adaptation work across the Australian government is guided by several key policy documents, including the *National Climate Change Adaptation Framework* (Adaptation Framework) agreed by COAG in 2007; and the 2010 Australian government *Adapting to Climate Change: An*

18 Department of Broadband, Communications and the Digital Economy (DBCDE), *Submission 66*, p. 1.

19 DBCDE, *Submission 66*, p. 3.

20 Department of Agriculture, Forestry and Fisheries, *Drought Programs and Rural Assistance*, at: <http://www.daff.gov.au/agriculture-food/drought> (accessed 24 June 2013). Note that the National Drought Reform Program will be implemented from 1 July 2014 and will replace previous 'exceptional circumstances payments' which were considered 'no longer appropriate in the face of a variable climate': *National Drought Program Reform* at <http://www.daff.gov.au/agriculture-food/drought/drought-program-reform> (accessed 24 June 2013).

21 Australian Army, *Disaster relief at home*, at: <http://www.army.gov.au/Our-work/Community-engagement/Disaster-relief-at-home> (accessed 24 June 2013).

22 DIICCSRTE, *Committee Hansard*, 11 April 2013, p. 65.

Australian Government Position Paper (Adaptation Position Paper).²³ The Adaptation Framework is discussed later in this chapter.

5.16 The 2010 Adaptation Position Paper notes that 'different levels of government have different responsibilities and will therefore have different roles in helping Australia adapt to the impacts of climate change'.²⁴ The Adaptation Position Paper identifies four key roles for the Australian government in climate change adaptation:

- maintaining a strong, flexible economy and social safety net;
- leading national reform;
- managing Commonwealth assets and programs; and
- providing national science and information.²⁵

5.17 The Adaptation Position Paper identifies six national priority areas for action: water, coasts, infrastructure, natural ecosystems, natural disaster management, and agriculture.²⁶ In terms of natural disaster management, the paper simply states that 'action is required to ensure that we have the capacity to respond to a likely increase in natural disasters'. The paper also highlights the importance of embedding adaptation considerations and responses within existing policy and institutional frameworks.²⁷

5.18 The Adaptation Position Paper also states that a 'Climate Futures Report' will be produced every five years 'to track our progress on positioning Australia to adapt to climate change' and 'to evaluate how effective our collective adaptation efforts are'. It proposes that an initial Climate Futures Report will be produced before the end of 2010.²⁸ However, at the time of writing, no Climate Futures Report appears to have been published.²⁹

23 Department of Climate Change and Energy Efficiency (DCCEE), *Adapting to Climate Change in Australia—An Australian Government Position Paper*, 2010, <http://www.climatechange.gov.au/climate-change/publications/adapting-climate-change-australia%E2%80%9494-australian-government-position-paper> (accessed 7 June 2013).

24 DCCEE, *Adapting to Climate Change in Australia—An Australian Government Position Paper*, 2010, p. 9.

25 DIICCSRTE, *Answers to question on notice*, 11 April 2013, p. 4; see also DCCEE, *Adapting to Climate Change in Australia—An Australian Government Position Paper*, 2010, pp 9–10.

26 DCCEE, *Adapting to Climate Change in Australia—An Australian Government Position Paper*, 2010, pp 11–13.

27 DCCEE, *Adapting to Climate Change in Australia—An Australian Government Position Paper*, 2010, pp 12–13.

28 DCCEE, *Adapting to Climate Change in Australia—An Australian Government Position Paper*, 2010, p. 16.

29 See also Tom Arip, 'Government's climate future report in distant future', *Sydney Morning Herald*, 29 August 2011, <http://www.smh.com.au/national/governments-climate-future-report-in-distant-future-20110828-1jgmv.html> (accessed 24 June 2013).

Whole-of-government coordination between Commonwealth government departments

5.19 In terms of coordination between Commonwealth government departments in relation to management of extreme weather events, DIICCSRTE advised that an Interdepartmental Committee on Adaptation was established in 2008 to provide a mechanism for whole-of-government consultation and coordination on climate change adaptation policy and reform.³⁰ DIICCSRTE further told the committee that 'a strong focus of the Committee for 2012–13 was on agreeing a coordinated whole-of-government response to the Productivity Commission's inquiry into barriers to effective climate change adaptation'.³¹

5.20 However, some submissions called for a new independent Commonwealth government agency to coordinate climate change adaptation responses. The Australian Network of Environmental Defender's Offices (ANEDO), for example, suggested that the role of the Climate Commission could be expanded:

...there is a need for an authoritative climate change adaptation body, which will undertake investigation and planning, coordinate other institutions and actors, and advise government and the public generally. Presently, the Climate Commission has a limited remit along these lines, but its functions and resources are limited and they are not targeted specifically to the climate adaptation problem. The Climate Change Authority has a mandate generally limited to review of mitigation efforts. What is required is an institution...dedicated to development of adaptive capacity....The Climate Commission could be developed into such an entity, providing advice and recommendations on both mitigation and adaptation issues.³²

States and territories

5.21 Some submissions to this inquiry expressed the view that the Commonwealth government has a limited role with respect to responding to and managing extreme weather events and that primary responsibility rests with state and territory governments in their emergency management capacity. For example, the Attorney-General's Department advised that:

30 DIICCSRTE, *Answers to question on notice*, 11 April 2013, p. 3. The committee meets at least four times a year, and membership includes the Department of Prime Minister and Cabinet; Department of Sustainability, Environment, Water, Population and Communities; Department of Agriculture, Fisheries and Forestry; Attorney-General's Department; Department of Health and Ageing; Treasury; Department of Defence; Department of Infrastructure and Transport; Department of Resources, Energy and Tourism; Department of Human Resources; Department of Finance and Regulations; and Department of Regional Australia, Local Government, Arts and Sport.

31 DIICCSRTE, *Answers to question on notice*, 11 April 2013, p. 3.

32 ANEDO, *Submission 107*, p. 6.

...primary responsibility for the protection of life, property and the environment rests with the States and Territories in their capacity as first responders during times of emergency.³³

5.22 State and territory governments also have primary responsibility in the areas of health, in particular the delivery of hospital care. DoHA advised that:

State and territory health authorities have well established emergency management legislation, and well-rehearsed and integrated emergency management arrangements. Jurisdictional health authorities have existing command and control structures for the management of health facilities, public health units and pathology laboratory services. Additionally, in some jurisdictions ambulance services also come under the health authority response arrangements.³⁴

5.23 DoHA further submitted that each state and territory is responsible for determining its own internal coordination mechanisms to give effect to the National Health Emergency Response Arrangements.³⁵ For example, the committee was advised that state governments have their own heat plans—to provide information messages and to deal with the increased loads on hospitals.³⁶

5.24 State and territory governments also manage major infrastructure that may be affected by extreme weather (for example ports, transport networks).³⁷ Finally, state and territory governments, in conjunction with local government, are also responsible for a range of relevant regulation, including building codes and land use planning regulations.³⁸ These issues are considered later in this chapter.

5.25 At the same time, the committee heard that some states may lack capacity and coordination in the area of climate change adaptation.³⁹ For example, Associate Professor Laura Stocker expressed the view that the West Australian government 'in general does not identify climate science and coastal adaptation as a critical issue outside of the Department of Planning, who happen to work in that area'.⁴⁰ Associate

33 Attorney-General's Department, *Submission 64*, p. 2; see also DoHA, *Committee Hansard*, 7 June 2013, p. 1.

34 DoHA, *Submission 126*, p. 2.

35 DoHA, *Submission 126*, p. 2.

36 DoHA, *Committee Hansard*, 7 June 2013, pp 4–5.

37 Local Government Association of Queensland, *Submission 68*, p. 5; Northern Territory government, *Submission 129*, p. 13.

38 Adaptation Position Paper, p. 9.

39 See, for example, Mr Piers Verstegen, Director, Conservation Council of Western Australia, *Committee Hansard*, 7 March 2013, p. 14; Associate Professor Laura Stocker, Coastal Collaboration Cluster, Curtin University Sustainability Policy Institute., *Committee Hansard*, 7 March 2013, pp 16–17.

40 For example, Associate Professor Laura Stocker, *Committee Hansard*, 7 March 2013, p. 17.

Professor Stocker expressed the view that this is particularly due to concerns about liability.⁴¹ This issue is discussed further later in this chapter.

Role of local government

5.26 The committee heard that local governments play a key role in dealing with extreme weather events. Indeed, local government was described as being at the 'front line' of climate change.⁴² For example, the Western Australian Local Government Association (WALGA) submitted that:

Local Governments are increasingly at the forefront of climate change adaptation impacts, whether it is the impact on Local Government asset such as roads or planning for sea level rise impacts on coastal communities. Recently, it has become vital for Local Governments to prioritise preparedness for extreme weather events as the number of instances continues to rise.⁴³

5.27 The Victorian Centre for Climate Change Adaptation Research noted that:

Local governments have a critical role to play in climate change adaptation. The impacts of climate change are local and contextual. Further, often local government has the best knowledge of the local circumstances and is most closely in contact with those who will bear the costs and benefits of climate change impacts. Thus, it is the most appropriate level of government for many adaptation actions.⁴⁴

5.28 In particular, local governments coordinate and facilitate disaster management in their local area and lead community recovery operations.⁴⁵ In some states, this role is stipulated through legislation; for example in Western Australia local governments' key responsibilities in relation to emergency management are stipulated in the *Emergency Management Act 2005 (WA)* and *Bush fires Act 1954 (WA)*.⁴⁶

5.29 Similarly, the Brisbane City Council submitted that, under the Queensland *Disaster Management Act 2003*, it has an all hazards management plan, which is reviewed and tested annually and includes comprehensive disaster management arrangements for specific events. So, for example, during the 2011 floods, the Brisbane City Council set up a Local Disaster Coordination Centre to ensure a

41 For example, Associate Professor Laura Stocker, *Committee Hansard*, 7 March 2013, p. 16.

42 ANEDO, *Submission 107*, p. 8; see also COAG, *Roles and responsibilities for climate change in Australia*, <http://www.climatechange.gov.au/roles-and-responsibilities-climate-change-australia> (accessed 24 June 2013).

43 WALGA, *Submission 91*, p. 5; see also Tablelands Regional Council, *Submission 101*, p. 2.

44 Victorian Centre for Climate Change Adaptation Research, *Submission 165*, p. 8.

45 Local Government Association of Queensland, *Submission 68*, p. 5; see also Townsville City Council, *Submission 32*, p. 5; Tablelands Regional Council, *Submission 101*, p. 2.

46 WALGA, *Submission 91*, p. 2.

'coordinated council and interagency response' and which included 'relevant liaison officers from external agencies' to ensure seamless communication and support.⁴⁷

5.30 However, as noted in chapter 2, local governments are calling for more localised data to understand how climate change will affect them at the local level.⁴⁸

5.31 Local government is also responsible for the administration of relevant local planning and development regulations, and building codes. Building codes are discussed later in this chapter.

5.32 Some submitters called for more resources to support local government in relation to planning and implementation of climate change adaptation measures, including preparation and review of climate change adaptation plans and disaster response plans, and standard planning instruments.⁴⁹ For example, ANEDO stated:

The status of local government and the resources, skills, information and competence available to local governments need to be boosted substantially.⁵⁰

5.33 The Productivity Commission report recommended that:

To help clarify roles and responsibilities of local government for climate change adaptation, the state and Northern Territory governments should publish and maintain a comprehensive list of laws that delegate roles to local governments. This would assist both state and local governments assess whether local governments have the capacity to discharge their roles effectively.⁵¹

5.34 The Australian government agreed in principle to this recommendation, but noted that it is primarily a matter for state and territory governments, and that it would refer the recommendation to those governments for consideration.⁵²

Developing effective coordination between governments

5.35 Submitters noted the need for a nationally coordinated and collaborative approach to deal with extreme weather events.⁵³ As the Australian Local Government Association (ALGA) observed:

47 Mr Jason Cameron, Brisbane City Council, *Committee Hansard*, 22 February 2013, p. 1.

48 See, for example, Mr Adrian Beresford-Wylie, Chief Executive, Australian Local Government Association (ALGA), *Committee Hansard*, 11 April 2013, p. 1.

49 See, for example, Northern Alliance for Greenhouse Action, *Submission 47*, p. 4; ANEDO, *Submission 107*, p. 8.

50 ANEDO, *Submission 107*, p. 8.

51 Productivity Commission, *Inquiry Report: Barriers to effective climate change adaptation*, March 2013, recommendation 8.1.

52 *Australian government response to the Productivity Commission report: Barriers to Effective Climate Change Adaptation*, March 2013, p. 8.

53 See, for example, Local Government Association of Queensland, *Submission 68*, p. 5; Mr Adrian Beresford-Wylie, ALGA, *Committee Hansard*, 11 April 2013, p. 5; Mr Karagiannakis, Insurance Australia Group, *Committee Hansard*, 10 April 2013, p. 11.

...the reality is that disaster mitigation and addressing disasters really requires a partnership between the three levels of government. One of the issues that often comes up is the debate around roles and responsibilities between the three levels of government, but the reality is it is supposed to be an integrated partnership between the three levels of government.⁵⁴

5.36 Similarly, the Local Government Association of Queensland recognised that 'no one level of government is able to properly manage all elements of disaster management, which include prevention, preparation, response and recovery' and 'nor can any one element be properly managed in isolation'.⁵⁵

5.37 The Australian Medical Association (AMA) submitted:

Planning for the impacts of climate change and extreme weather requires efforts beyond any single agency or portfolio, and greater efforts are required to achieve a whole-of-government approach and better coordination across agencies and portfolios, and across different tiers of government.⁵⁶

5.38 Others also highlighted the importance of strong national leadership by the Commonwealth government in relation to climate change adaptation and responding to extreme weather events.⁵⁷ For example, the Conservation Council of Western Australia argued:

...it really requires a federal government process to comprehensively assess what the risks are across different jurisdictions and in different communities and then look at what the appropriate response is from a local government to a state government to a federal government level and, in some cases, it will be various combinations of those.⁵⁸

5.39 Dr Steven Hambleton from the AMA agreed:

In many cases it is a response at a local level...We cannot rely on local governments and even state governments to get it right. There needs to be some leadership at a federal level.⁵⁹

5.40 The committee heard that there have been a number of initiatives, particularly by the Council of Australian Governments (COAG), in recent years attempting to improve the coordination in relation to the management of climate change adaptation and extreme weather events. The committee heard that coordination between different levels of government has increased in recent years, but there is still room for

54 Mr Adrian Beresford-Wylie, ALGA, *Committee Hansard*, 11 April 2013, p. 5.

55 Local Government Association of Queensland, *Submission 68*, p. 5.

56 AMA, *Submission 104*, p. 11.

57 See, for example, ANEDO, *Submission 107*, p. 5; Dr Steve Hambleton, President, AMA, *Committee Hansard*, 11 April 2013, p. 22.

58 Mr Piers Versteegen, Conservation Council of Western Australia, *Committee Hansard*, 7 March 2013, p. 11.

59 Dr Steve Hambleton, AMA, *Committee Hansard*, 11 April 2013, p. 24.

improvement. Various initiatives and areas for improvements are discussed further below.

Role of the Council of Australian Governments (COAG)

5.41 Several submitters and witnesses suggested that COAG can and should play a role in improving inter-governmental coordination in relation to extreme weather events.⁶⁰ Indeed, the committee heard that there have been a number of initiatives by COAG recently to attempt to improve the coordination in relation to the management of climate change and extreme weather events. These include the:

- Select Council on Climate Change;
- National Strategy for Disaster Resilience; and
- National Climate Change Adaptation Framework.

Select Council on Climate Change

5.42 COAG established a Select Council on Climate Change in February 2011. The purpose of the Select Council on Climate Change was to:

- support an effective response to climate change policy issues with national implications; and
- provide a forum for the Australian government to engage with states, territories, local government and New Zealand on program implementation issues.⁶¹

5.43 As the Productivity Commission noted in its recent report on Barriers to Climate Change Adaptation (as outlined in Chapter 1):

...the COAG Select Council on Climate Change provides a forum for the Australia Government to work with state, territory and local governments on implementing climate change programs.⁶²

5.44 In 2012, the Select Council on Climate Change adopted a statement on *Roles and Responsibilities for Climate Change Adaptation in Australia*.⁶³ This document outlines the respective roles of the Commonwealth, state, territory and local governments in helping Australia adapt to the impacts of climate change. In terms of the Commonwealth's role, it largely reflects the Adaptation Position Paper as

60 See, for example, Dr Michael Eburn, *Committee Hansard*, 11 April 2013, p. 21; Mr Paul Considine, Australian Fire and Emergency Services Authorities Council (AFAC), *Committee Hansard*, 20 February 2013, p. 4; Mr Jason Cameron, Brisbane City Council, *Committee Hansard*, 22 February 2013, p. 2; see also Deloitte Access Economics, *Building our nation's resilience to natural disasters*, June 2013, p. 24.

61 DIICCSRTE, *Answers to question on notice*, 11 April 2013, p. 4.

62 Productivity Commission, *Inquiry Report: Barriers to effective climate change adaptation*, March 2013, p. 328.

63 Available at: <http://www.climatechange.gov.au/roles-and-responsibilities-climate-change-australia> (accessed 24 June 2013); see also DIICCSRTE, *Answers to question on notice*, 11 April 2013, p. 4.

discussed earlier in this chapter. It further states that the focus for state and territory governments should be on:

...ensuring appropriate regulatory and market frameworks are in place, providing accurate and regionally appropriate information, and delivering an adaptation response in areas of policy and regulation that are within the jurisdiction of the state. This includes key areas of service delivery and infrastructure, such as emergency services, the natural environment, planning and transport.⁶⁴

5.45 In terms of local government, the statement recognises that:

Local governments are on the frontline in dealing with the impacts of climate change. They have a critical role to play in ensuring that particular local circumstances are adequately considered in the overall adaptation response and in involving the local community directly in efforts to facilitate effective change. They are strongly positioned to inform State and Commonwealth Governments about the on-the-ground needs of local and regional communities, to communicate directly with communities, and to respond appropriately and in a timely manner to local changes.⁶⁵

5.46 The Victorian Centre for Climate Change Adaptation Research noted:

The Statement of Roles and Responsibilities is necessarily 'high level' and meant to provide general guidance, but implementation of the Statement needs to take account of the suitability of its approach for application in the many situations in which there is not a clear line between public and private and between local, state and federal jurisdictions, or where there are 'gaps' in the allocation of requisite authority.⁶⁶

5.47 The committee notes that the last meeting of the Select Council was in March 2013. DIICCSRTE advised that the Select Council on Climate Change has recommended to COAG that a permanent body to discuss ongoing joint issues related to climate change is not required and that climate change adaptation work should continue under the COAG Standing Council on Environment and Water.⁶⁷ However, the committee notes that this does not appear to be reflected in the current list of strategic priorities of the Standing Council on Environment and Water.⁶⁸

64 *Roles and Responsibilities for Climate Change Adaptation in Australia*, <http://www.climatechange.gov.au/roles-and-responsibilities-climate-change-australia> (accessed 24 June 2013).

65 COAG, *Roles and Responsibilities for Climate Change Adaptation in Australia*, <http://www.climatechange.gov.au/roles-and-responsibilities-climate-change-australia> (accessed 24 June 2013).

66 COAG, Victorian Centre for Climate Change Adaptation Research, *Submission 165*, p. 2.

67 DIICCSRTE, *Answers to question on notice*, 11 April 2013, p. 3; see also COAG Select Council on Climate Change, *Third meeting communique*, 22 March 2013, <http://climatechange.gov.au/climate-change/select-council-climate-change/meeting-communiqu%C3%A9s-and-papers/third-meeting> (accessed 25 June 2013).

68 See COAG Standing Council on Environment and Water, at: <http://www.scew.gov.au/> (accessed 24 June 2013).

5.48 The committee is also aware that the Productivity Commission has recommended that COAG commission an independent public inquiry to develop an appropriate response to managing the risks of climate change to existing settlements.⁶⁹ The Commonwealth government responded that it would 'consult with state and territory governments on the best way to address this issue'.⁷⁰

National Strategy for Disaster Resilience

5.49 Another initiative by COAG frequently referred to in submissions is the *National Strategy for Disaster Resilience—Building the resilience of our nation to disasters* (National Disaster Strategy), endorsed by COAG in 2011. The Attorney-General's Department explained that the purpose of the National Disaster Strategy is to:

...provide high-level guidance on disaster management to federal, state, territory and local governments, business and community leaders and the not-for-profit sector. The Strategy focuses on priority areas to build disaster resilient communities across Australia and recognises that disaster resilience is a shared responsibility for individuals, households, businesses and communities, as well as for governments.⁷¹

5.50 The Australian-New Zealand Emergency Management Committee⁷² is responsible for the implementation of the National Disaster Strategy. Implementation is also being overseen by the Standing Council on Policy and Emergency Management, which comprises responsible ministers from the Commonwealth, states, territories, New Zealand and a representative of the Australian Local Government Association.⁷³

5.51 Submitters were generally supportive of this strategy, expressing the view that it had improved coordination. For example, Dr Steve Hambleton from the AMA expressed the view that the National Strategy had 'improved coordination' but told the committee it still has some significant gaps around the health impacts of extreme weather events.⁷⁴

69 Productivity Commission, *Inquiry Report: Barriers to effective climate change adaptation*, March 2013, recommendation 11.1 and see further Chapter 11.

70 *Australian government response to the Productivity Commission report: Barriers to Effective Climate Change Adaptation*, March 2013, p. 11.

71 Attorney-General's Department, *Submission 64*, p. 2.

72 Membership of the committee comprises representations from the Commonwealth, states, territories, New Zealand and the Australian Local Government Association: see Attorney-General's Department, *Submission 64*, p. 3.

73 Attorney-General's Department, *Submission 64*, p. 2; see also Western Australian Local Government Association, *Submission 91*, p. 3.

74 Dr Steve Hambleton, AMA, *Committee Hansard*, 11 April 2013, p. 22. See also AMA, *Submission 104*, p. 2.

5.52 The Australian Red Cross believed that one of the strengths of the National Disaster Strategy was that it recognises the importance of collaboration.⁷⁵

5.53 Dr Michael Eburn also spoke positively about COAG providing high level guidance through the National Disaster Strategy, saying the role of COAG is:

... to set that high level policy and to then encourage and work with the states, who then have to encourage and work with their local governments to give it effect and teeth.⁷⁶

5.54 Mr Peter Davies from the Northern Territory Police, Fire and Emergency Services described the situation in the Northern Territory:

...the relationship between the Commonwealth and the Territory in terms of the flow of information has improved dramatically in recent years. Emergency management has become far more professional in recent years through the now Emergency Management Committee, and the cross-fertilisation of ideas has been really good.⁷⁷

5.55 However, the committee also heard that there is still considerable room for improvement in coordination in relation to emergency management. For example, the committee heard there is a need for better national coordination of fire services. Mr Peter Marshall, National Secretary, United Firefighters Union of Australia said:

It is our experience that the fire services are not coordinated to the extent where there is a central body that has standard policies and procedures. This was borne out in the royal commission here in Victoria, where the interoperability of the fire services was virtually non-existent. That is not in the interests of the public and it is not in the interests of the government to fund the fire services...We do not have common standard operating procedures across Australia. Each fire service does their own thing.⁷⁸

5.56 These differences in operating procedures impact the ability of firefighters from one jurisdiction (for example NSW) to effectively assist in fire operations in other states (for example Tasmania).⁷⁹

5.57 The committee notes that poor coordination in the area of emergency management was considered at length by the Productivity Commission in its report on *Barriers to effective climate change adaptation*. The Productivity Commission observed that:

75 Mr Andrew Coghlan, National Manager, Emergency Services, Australian Red Cross, *Committee Hansard*, 20 February 2013, p. 33.

76 Dr Michael Eburn, *Committee Hansard*, 11 April 2013, p. 21.

77 Mr Peter Davies, Acting Chief Information Officer, Northern Territory Police, Fire and Emergency Services, *Committee Hansard*, 7 March 2013, p. 5.

78 Mr Peter Marshall, United Firefighters Union of Australia, *Committee Hansard*, 20 February 2013, p. 17.

79 Mr Peter Marshall, United Firefighters Union of Australia, *Committee Hansard*, 20 February 2013, p. 17.

Each emergency service organisation has its own legislation, organisational hierarchy, training programs, operational processes and resources — which may result in a fragmented (or 'silo') approach to emergency management.⁸⁰

5.58 The Productivity Commission made a detailed recommendation that the Australian government undertake a public and independent review of disaster prevention and recovery arrangements.⁸¹

Committee comment

5.59 Compatibility and interoperability between emergency service organisations has been the subject of ongoing discussion. As noted in chapter 4, the committee examined this issue in part during its November 2011 inquiry into the capacity of communications networks and emergency warning systems to deal with emergencies and natural disasters. The committee also notes the recent report of the Parliamentary Joint Committee on Law Enforcement examining *Spectrum for public safety mobile broadband*.⁸²

5.60 The committee urges Australian governments to specifically address issues of compatibility and capacity to facilitate the most effective interoperability of emergency service organisations and their key personnel, especially for fire services.

Recommendation 9

5.61 The committee recommends that Australian governments specifically address issues of compatibility and capacity to facilitate the most effective interoperability of emergency service organisations and their key personnel, especially for fire services.

National Climate Change Adaptation Framework

5.62 In 2007 the *National Climate Change Adaptation Framework* (Adaption Framework) was endorsed by COAG. The Adaptation Framework 'covers a range of cooperative actions between all Australian governments to begin to address key demands from business and the community for targeted information on climate change impacts and adaptation options'.⁸³ The framework identified two priority areas for potential action: building understanding and adaptive capacity; and reducing

80 Productivity Commission, *Inquiry Report: Barriers to effective climate change adaptation*, March 2013, p. 248 and see also Chapter 13.

81 See further Productivity Commission, *Inquiry Report: Barriers to effective climate change adaptation*, March 2013, recommendation 13.1 and also Appendix 3 of this report.

82 Parliamentary Joint Committee on Law Enforcement, *Spectrum for public safety mobile broadband*, July 2013.

83 See further: DIICCSRTE, *Adaptation framework*, <http://www.climatechange.gov.au/climate-change/adapting-climate-change/adaptation-framework> (accessed 7 June 2013); see also Australian Risk Policy Institute, *Submission 70*, p.1; Australian Red Cross, *Submission 127*, p. 9.

vulnerability in key sectors and regions. It also promised the establishment of an 'Australian centre for climate change adaptation'.⁸⁴

5.63 In terms of extreme weather events, the framework identified two potential areas for action in relation to natural disaster management:

- undertake research to improve knowledge on the nature and expected extent of changes to existing risk profiles as a result of climate change for key events such as bushfires, flooding, cyclones, storm surges, wind and hail damage; and
- incorporate climate change issues into the planning for natural disaster response management, including the review of the 'National Disaster Mitigation Programme';⁸⁵ and improving information for emergency services and communities to foster awareness of climate change and adaptation responses.⁸⁶

Implementation of the framework

5.64 However, submitters generally argued more work is needed to fully implement and build on the framework. The Climate Institute submitted that the framework:

...provides an adequate foundation for government action to improve Australia's readiness for climate change. One of the most important aspects of the Framework is as a tool to drive better coordination of action across all levels of government. However, the lack of progress made in implementing the Framework is deeply concerning.⁸⁷

5.65 The Australian Risk Policy Institute argued that Australia needs to 'move beyond' the framework; simply 'positioning' Australia to act on climate change was not enough.⁸⁸ The AMA and the Climate Institute called for a 'refresh' of the framework.⁸⁹ The Hon Robin Chapple MLC, while describing the framework as a 'valuable and key statement of intent' noted that 'it is unclear as to whether the aims outlined in the Framework have been achieved'.⁹⁰

5.66 In suggesting that the framework be refreshed, the Climate Institute expressed the view that:

Australia still lacks a nationally coordinated approach to managing climate risks to major infrastructure, with much of the burden of policy

84 National Climate Change Adaptation Framework, April 2007, p. 6.

85 Note that this program has been superseded by the Partnership Agreement on Natural Disaster Resilience and the National Disaster Strategy.

86 See further: DIICCSRTE, *Adaptation framework*, April 2007, p. 27.

87 The Climate Institute, *Submission 105*, p. 5.

88 Australian Risk Policy Institute, *Submission 70*, p.1.

89 The Climate Institute, *Submission 105*, p. 2; AMA, *Submission 104*, p. 11.

90 The Hon. Robin Chapple MLC, *Submission 167*, p. 6.

implementation left to local councils – the least-resourced and most decentralized level of government. Information on Australia's preparedness for likely climate impacts is fragmentary and dispersed.⁹¹

5.67 At the local government level, the City of Melbourne submitted that there are still opportunities for improvement in effective national coordination of responses, strategies and support for adaptation activities. The City of Melbourne expressed the view that 'advancements in this area have not been felt at a local government level'.⁹² Others, such as the Local Government Association of Queensland, noted that the framework was due to be reviewed in 2011, but this 'does not appear to have occurred'.⁹³

5.68 However, DIICCSRTE advised that, between 2007 and 2012, the Commonwealth government provided \$126 million to establish the 'Australian Centre for Climate Change Adaptation Program' to support the implementation of the Adaptation Framework.⁹⁴ The committee notes that the DIICCSRTE website lists government 'initiatives contributing towards the implementation of the framework'. It is stated that these include:

- *CSIRO Climate Adaptation National Research Flagship*—investment of \$44m over five years for CSIRO to develop scientific solutions to help Australia adapt to the impacts of climate change and to inform national planning, regulation and investment decisions.
- *Climate Change Adaptation Research Facility (NCCARF)*—a Research Facility based at Griffith University in Queensland to bring together national expertise to help Australia, our industries and communities adjust to the impacts of climate change.
- *Australia's Farming Future*—provides \$130m over four years to improve the ability of primary producers to respond to climate change and manage their emissions.
- *Caring for our Coasts*—helping local communities protect the Australian coastline and prepare for the impact of climate change.
- *National Coastal Vulnerability Assessment*—to help better understand how climate change may impact our coastal communities.
- *Forest Industries Climate Change Research Fund*—\$5 million to address major knowledge gaps about the impact of climate change on forestry and forest industries in Australia.

91 The Climate Institute, *Submission 105*, p. 5.

92 City of Melbourne, *Submission 63*, p. 5.

93 Local Government Association of Queensland, *Submission 68*, p. 6.

94 DIICCSRTE, *Answers to question on notice*, 11 April 2013, p. 3.

- *Local Adaptation Pathways Program*—provided around \$2m in funding to help local government build their capacity to respond to the likely impacts of climate change.⁹⁵
- *Climate Change Adaptation Skills for Professionals Program*—an investment of almost \$2m to fund tertiary education, training institutions and professional associations to revise or develop professional development and accreditation programs for architects, planners, engineers and natural resource managers.
- *Water for the Future*—provides \$12.9 billion and aims to secure the water supply of all Australians, with four key priorities: taking action on climate change; securing water supplies; using water wisely; and supporting healthy rivers.⁹⁶

5.69 However, the committee also notes that some of these initiatives are no longer being funded, including the National Climate Change Adaptation Research Facility (NCCARF).

National Climate Change Adaptation Research Facility

5.70 As noted above, one of the key initiatives arising out the Adaptation Framework, was NCCARF, which the committee understands is not being funded beyond 30 June 2013.

5.71 The Commonwealth government provided \$50 million to fund NCCARF which was formed in 2008 to lead research in:

...a national interdisciplinary effort to generate the biophysical, social and economic information needed by decision-makers in government, and in vulnerable sectors and communities, to manage the risks of climate change impacts.⁹⁷

5.72 NCCARF has done this through three main programs:

- research to develop new information;
- networks that coordinate Australia's research community, build capacity and support effective interaction between research and decision-making communities; and
- outreach activities.⁹⁸

95 See also DIICCSRTE, *Answers to question on notice*, 11 April 2013, p. 2; Ms Benedikte Jensen, First Assistant Secretary, Adaptation, Science and Communication Division, DIICCSRTE, *Committee Hansard*, 11 April 2013, p. 63.

96 DIICCSRTE, *Government actions*, at: <http://www.climatechange.gov.au/climate-change/adapting-climate-change/adaptation-framework/government-actions> (accessed 21 June 2013).

97 NCCARF, *Submission 40*, p. 2; DIICCSRTE, *Answers to question on notice*, 11 April 2013, p. 3; DIICCSRTE, *Committee Hansard*, 11 April 2013, p. 63.

98 NCCARF, *Submission 40*, p. 2.

5.73 NCCARF focused on delivering information to decision-makers to support climate change adaptation investments and initiatives, and to allow end users of the research to be involved. In this way, NCCARF sought to build the capacity of the Australian community to adapt effectively to climate change impacts.⁹⁹

5.74 NCCARF's research portfolio of 142 projects involves 33 Australian universities, 61 Commonwealth, state and local government entities, and 26 private institutions. These are focussed on adapting to the impacts of extreme events, which are predicted to be a key outcome of climate change.¹⁰⁰ This has built research capacity within universities about adaptation, and also amongst decision makers and communities¹⁰¹ and was described by the Director of NCCARF, Professor Palutikof, as placing 'Australia in a globally leading position with respect to climate change adaptation'¹⁰² with the corollary being an understanding of extreme events.¹⁰³

5.75 NCCARF supported eight thematic networks that have around 5000 members. These thematic networks were:

- emergency management;
- settlements and infrastructure;
- human health;
- social, economic and institutional dimensions (including climate change adaptation as it relates to Australia's Indigenous communities);
- water resources and freshwater biodiversity;
- marine biodiversity and resources;
- terrestrial biodiversity; and
- primary industries.¹⁰⁴

5.76 These networks played a significant role in facilitating communication between researchers and those implementing appropriate adaptations. As the committee was told, NCCARF has interpreted scientific information to make it meaningful to the practitioner community and has acted as a:

...broker between the scientific community and the practitioner community to ensure that there is a common understanding of needs and also to act as an interpreter of the information about future climate change on behalf of decision-makers. We can work with decision-makers to help them to understand how much we know about climate change going forward, where

99 NCCARF, *Submission 40*, p. 2.

100 NCCARF, *Submission 40*, p. 3.

101 Professor Palutikof, Director, NCCARF, *Committee Hansard*, 10 April 2013, p. 29.

102 Professor Palutikof, NCCARF, *Committee Hansard*, 10 April 2013, p. 29.

103 Professor Palutikof, NCCARF, *Committee Hansard*, 10 April 2013, p. 29.

104 NCCARF, *Submission 40*, p. 3.

the uncertainties lie and how practitioners can work with those uncertainties in order to maximise the benefit of climate model output.¹⁰⁵

5.77 Many saw the value in the interdisciplinary work that NCCARF was facilitating, contributing to a cohesive research agenda around adaptation for extreme weather events. Witnesses expressed concern about the future of this good work once funding for NCCARF ceased, and especially about the capacity of decision makers to make evidence based decisions.¹⁰⁶

5.78 Professor Bruce Thom, an expert on coastal management, representing the Wentworth group, expressed his regret at the imminent conclusion of NCCARF, stating that '...we are going to leave lots of decision making, both in the private sector and in the public sector, in the lurch'.¹⁰⁷ He went on to say:

The CSIRO have their adaptation flagship, so there is an entity there, but that does not do the same sort of thing that NCCARF did, which was coming out of those types of projects that were very much linked to a lot of local government concerns. When you have these sorts of programs and you start them up for four years, you are really only just getting going.¹⁰⁸

5.79 Professor David Karoly also pointed out the contribution that NCCARF had made in relation to preparedness for extreme weather events:

The NCCARF had a disaster management and emergency response network in addition, and that will also disappear as a network. That was one of the few that were really coordinated across Australia in terms of research on changes in natural disasters in response to climate change.¹⁰⁹

5.80 Associate Professor Stocker explained the gap which would occur with NCCARF's cessation:

NCCARF have done an important job in hosting regular conferences, where we have all been able to meet and share ideas and information. The lack of ongoing funding for NCCARF is a problem for climate adaptation. The CSIRO is also doing good work and a lot of universities are doing coastal and climate adaptation work. But NCCARF had been the agency that was bringing all of that together and trying to coordinate it.¹¹⁰

105 Professor Palutikof, NCCARF, *Committee Hansard*, 10 April 2013, p. 30.

106 Dr Elizabeth Hanna, *Committee Hansard*, 11 April 2013, pp 14–15; Dr Anthony Kiem, *Committee Hansard*, 11 April 2013, pp 13 and 17–18; Professor Lesley Hughes, Wentworth Group of Concerned Scientists, *Committee Hansard*, 11 April 2013, p. 36; see also Glover, L, 'Speaking up for climate change adaptation', *The Conversation*, 11 March 2013.

107 Professor Bruce Thom, Wentworth Group of Concerned Scientists, *Committee Hansard*, 11 April 2013, p. 36.

108 Professor Bruce Thom, Wentworth Group of Concerned Scientists, *Committee Hansard*, 11 April 2013, p. 36.

109 Professor David Karoly, Wentworth Group of Concerned Scientists, *Committee Hansard*, 11 April 2013, p. 39.

110 Associate Professor Stocker, *Committee Hansard*, 7 March 2013, p. 16.

5.81 Associate Professor Stocker highlighted the importance of NCCARF's collaborative work:

The process of collaboration is incredibly important with climate adaptation because it is such a complex and interdisciplinary area. You have physical oceanographers, you have meteorologists, you have geomorphologists. Then there is the whole social side of the research about institutional arrangements and what institutional arrangements are best... We need mechanisms whereby we can have collaborative coproduction of knowledge.¹¹¹

5.82 The committee was advised that NCCARF was only ever intended to be a five year program, and had been extended by a further year to the end of June 2013. Further funding was not allocated to NCCARF in the 2013–14 federal budget.¹¹²

Gaps in the framework

5.83 The committee also heard there are gaps in the National Climate Change Adaptation Framework which need to be addressed. For example, Save the Children Australia pointed out that the Adaptation Framework 'does not mention children, families, or schools anywhere in its consideration of building understanding and adaptive capacity, nor in reducing sectoral and regional vulnerability'.¹¹³

5.84 The AMA commented that although COAG committed to including a national strategy for health and climate change in the Adaptation Framework, this has not occurred:

...a critical shortcoming in the current Adaptation Framework is the failure to develop a National Strategy for Health and Climate Change. The AMA recommends that this strategy be developed to complement the National Adaptation Framework, and to ensure Australia can better respond to the future health impacts of climate change and extreme weather events.¹¹⁴

5.85 Dr Steve Hambleton of the AMA explained that the Australian government needs to:

...develop a comprehensive and coordinated national strategy for climate change and health. We need policy leadership at this level to drive action and co-operation across all tiers of government—state governments, local governments and local sectors, with local groups being engaged.¹¹⁵

5.86 The AMA argued:

Despite the profound health risks posed by climate change and extreme weather events, the response to these risks has been characterised by a lack

111 Associate Professor Stocker, *Committee Hansard*, 7 March 2013, p. 17.

112 DIICSRTE, *Answers to questions on notice*, 11 April 2013, pp 2–3.

113 Save the Children, *Submission 111*, p. 6.

114 AMA, *Submission 104*, p. 11–12; see also Doctors for the Environment Australia, *Answers to questions on notice*, 20 February 2013, pp 1–2.

115 Dr Steve Hambleton, AMA, *Committee Hansard*, 11 April 2013, p. 22.

of national coordination and policy leadership... the national framework perpetuates the silo mentality that demarcates policy into discrete areas, and provided little impetus for the whole-of-government response needed to respond to climate change...It is critical a refreshed national framework supports improved communication and joint planning between portfolios, including health and ageing, environment, and infrastructure. Greater consideration is also needed to link the framework into other relevant national strategies and actions plans, and to articulate the respective roles and responsibilities of different tiers of government.¹¹⁶

5.87 Ms Fiona Armstrong from the CAHA also called for a national strategy on how to respond to the health risk of climate change:

Certainly there needs to be engagement across the sectors and between portfolios. We think it is regrettable that there is not currently much interaction between the climate and health portfolios. We could be developing policy that is very effective in terms of meeting our climate commitments and addressing and improving public health at the same time, but unless we have integration between these portfolios that will not occur. A national plan for climate and health would sit, I imagine, within the health portfolio but it would need to integrate closely with a whole range of other sectors to be effective.¹¹⁷

5.88 However, DoHA submitted that it is currently conducting an assessment across jurisdictions of the 'readiness of the Australian health system to respond to climate change'. DoHA explained that the assessment has a primary focus on governance and planning mechanisms within the health system and will enable identification of actions required to improve the health system's responsiveness to climate change.¹¹⁸

Other areas for improvements to coordination

5.89 Submitters also suggested a number of other areas where there is a need for better coordination and responses between and across governments. These included:

- legislative and regulatory reform at the national level;
- coordination and dissemination of information;
- construction standards and building codes; and
- land use planning.

5.90 These are considered in further detail below.

116 AMA, *Submission 104*, pp 11–12.

117 Ms Fiona Armstrong, Convenor, Climate and Health Alliance, *Committee Hansard*, 20 February 2013, p. 28.

118 DoHA, *Submission 126*, p. 4.

Legislative and regulatory reform

5.91 A number of submitters argued that legislative and regulatory reform at a national level would assist in the coordination of climate change management. For example, the Local Government Association of Queensland (LGAQ) said 'the consensus is that the establishment of systems, standards and legislative and regulatory frameworks to effectively coordinate and empower key sectors (in particular local government) is overdue'.¹¹⁹

5.92 Brisbane City Council similarly argued national legislation and standards would improve coordination. Mr Jason Cameron, Manager, Disaster Operations told the committee:

Consistent nationwide disaster and emergency management legislation and standardisation would provide increased opportunities for interoperability and support between states and territories across Australia. Consistency in the areas of responsibility, terminology, naming conventions, funding and strategic program arrangements would further assist local areas in enhancing preparedness and achieving greater community resilience. Examples of these areas may include incident management systems, terminology, levels of activation, interoperability between agencies and a nationalised disaster management set of standards.¹²⁰

5.93 Finally, Dr Michael Eburn argued that the Commonwealth has 'not clearly defined its role' in responding to extreme weather events and that 'effective national coordination of response to extreme weather events caused by climate change' ideally requires overarching Commonwealth natural disaster legislation.¹²¹ Dr Eburn pointed out that Australia does not have an individual statutory officer to manage and coordinate the federal response, unlike countries like the United States.¹²² He believed Commonwealth legislation should be enacted to provide for a national coordinator 'with the necessary powers to require agencies and states to be coordinated'.¹²³

5.94 Dr Eburn gave the following example to illustrate the need for legislation that defines and clarifies Commonwealth powers and key roles and responsibilities:

Assume there were some disaster in Australia and we needed to fly in a supply of medication that had not gone through the therapeutic goods assessment process but needed urgent clearance, and it was going to be flown into Sydney airport outside the curfew hours. I think there were 11 separate emergency declarations that had to be made by different ministers declaring that this was an emergency, rather than having the ability of the

119 LGAQ, *Submission 68*, p. 5.

120 Mr Jason Cameron, Brisbane City Council, *Committee Hansard*, 22 February 2013, p. 1.

121 Dr Michael Eburn, *Submission 8*, p. 9 and *Committee Hansard*, 11 April 2013, p. 15.

122 Dr Michael Eburn, *Submission 8*, pp 3–4.

123 Dr Michael Eburn, *Submission 8*, p. 9.

Commonwealth to declare: "This is an emergency. All these things will come into play".¹²⁴

5.95 As noted earlier in this chapter, submitters and witnesses also identified the need to clarify concerns about liability, which may be stymying coordination between state and territory governments. Dr Eburn noted that his research indicated that liability issues are 'horribly overstated':

If you actually look at how often litigation occurs it is incredibly rare and, so far, liability has not been established against these agencies, because the courts recognise they are making tough decisions in tough times in imperfect situations.¹²⁵

5.96 Nevertheless, the committee heard that liability concerns affect both state and local governments. The ALGA stated that councils are concerned about liability stemming from planning decisions when looking at adaptation to climate change.¹²⁶

5.97 Associate Professor Stocker commented that liability issues are also a concern for state governments. She expressed the view that the Western Australian government 'is certainly keen to divest itself of all responsibility and liability in terms of storm surge or sea level rise'. She further noted that:

Local government is very anxious that that liability is going to end up on their plate. They neither have the financial nor technical capacity to make the responses that they need to make now. They also very concerned about injurious affection. If they make decisions that disadvantage, for example, a developer, they are worried about being sued by that developer. They are very concerned about legal liability. Whether they act to respond to sea level rise or whether they do not act, they are concerned about legal liability either way. They would like the Commonwealth government, as it is expressed to me, to clarify and alleviate their concerns about liability.¹²⁷

5.98 ANEDO similarly submitted that:

Among other changes that need to be implemented in respect of local government are development of uniform national provisions for local government liability for climate-related impacts...¹²⁸

5.99 The committee notes that the Productivity Commission recommended that:

Local governments' uncertainty about their legal liability is a barrier to effective climate change adaptation. State governments should clarify the

124 Dr Michael Eburn, *Committee Hansard*, 11 April 2013, p. 15.

125 Dr Michael Eburn, *Committee Hansard*, 11 April 2013, p. 16.

126 Mr Adrian Beresford-Wylie, ALGA, *Committee Hansard*, 11 April 2013, p. 2.

127 Associate Professor Laura Stocker, *Committee Hansard*, 7 March 2013, p. 16.

128 ANEDO, *Submission 107*, p. 8.

legal liability of councils with respect to climate change adaptation matters and the processes required to manage that liability.¹²⁹

5.100 The Australian government noted in its response to the Productivity Commission report that it had funded two reports to help clarify legal liability issues of concern to local government, but acknowledged that 'local governments' current uncertainty about their legal liability is a potential barrier to effective climate change adaptation'.¹³⁰

5.101 The committee notes that the Productivity Commission rejected suggestions of a systematic review of regulations to identify constraints to effective climate change adaptation, noting that it had already identified a number of regulatory barriers and proposed reforms to address them.¹³¹ However, as noted earlier, the Productivity Commission did recommend, for example, that the Australian government commission an independent review of disaster prevention and recovery arrangements.¹³²

Coordination and dissemination of information

5.102 The committee was informed that there could be better coordination and dissemination of information relating to extreme weather events.¹³³ The committee notes that data collection, research and projections in relation to extreme weather events have also been discussed in chapter 2. For example, the Australian Local Government Association argued councils need more data on the likely impact of weather changes at the local level to help them 'make more informed decisions'.¹³⁴

5.103 The committee also heard that improvements could be made in relation to flood warnings, mapping and monitoring. For example, local governments carry much of the responsibility when it comes to flood risk management. The Bureau of Meteorology noted that local governments are responsible for issuing flash flood warnings.¹³⁵ Flood risk mapping in NSW is the responsibility of councils.¹³⁶ Similarly

129 Productivity Commission, *Report: Barriers to Effective Climate Change Adaptation*, recommendation 8.2 and see discussion at pp 168–169.

130 *Australian government response to the Productivity Commission report: Barriers to Effective Climate Change Adaptation*, March 2013, p. 9.

131 Productivity Commission, *Inquiry Report: Barriers to effective climate change adaptation*, March 2013, p. 331.

132 Productivity Commission, *Inquiry Report: Barriers to effective climate change adaptation*, March 2013, recommendation 13.1, p. 273.

133 Deloitte Access Economics, *Building our nation's resilience to natural disasters*, June 2013, p. 10.

134 Mr Adrian Beresford-Wylie, Chief Executive, Australian Local Government Association, *Committee Hansard*, 11 April 2013, p. 1.

135 Bureau of Meteorology, *Submission 65*, p. 28.

136 Mr Glenn Evans, Executive Officer, Floodplain Management Association, *Committee Hansard*, 10 April 2013, p. 19.

in Queensland, the LGAQ argued the 'burden of data collection, modelling and analysis' for local planning has been left to local governments to do.¹³⁷

5.104 The Bureau of Meteorology noted that flood level monitoring is one area that could be improved. The Bureau relies on river level data from state agencies and local governments which vary in capacity; for example most agencies are unable to service monitoring equipment 24 hours a day seven days a week.¹³⁸ There is also a lack of consistency around flash flood warnings—many local governments 'lack the resources and technical expertise' to deliver quality flash flood warnings.¹³⁹

5.105 The Bureau of Meteorology concluded that the current problems associated with flood monitoring are not due to a lack of effort or goodwill, but rather 'there are simply too many players with varied responsibilities and capacities, for an adequate, let alone future-ready, national flood monitoring network to eventuate'.¹⁴⁰

5.106 The committee also heard examples of where stakeholders are working together to improve flood coordination. For example, the Floodplain Management Association works with local, state and federal governments to 'develop and implement appropriate policies to reduce flood risks in the future'.¹⁴¹ The organisation has a membership of around 100 local councils, flood mitigation trusts, businesses and catchment authorities.

5.107 The committee is also aware that the Productivity Commission considered this issue in its report on *Barriers to Effective Climate Change Adaptation*.¹⁴² The Commonwealth government, through Geoscience Australia, is establishing a flood risk information portal, to 'provide a single access point to flood mapping data' and to 'improve the quality, availability and accessibility of flood mapping information in Australia'.¹⁴³ As the Productivity Commission noted:

This is an important initiative. Better coordination of flood mapping across Australia will allow for improved management of flood risk in the current climate. It will also provide a stronger basis for future measures to adapt to changes in flood risk due to climate change.¹⁴⁴

137 Local Government Association of Queensland, *Submission 68*, p. 3.

138 Bureau of Meteorology, *Submission 65*, p. 29.

139 Bureau of Meteorology, *Submission 65*, p. 29.

140 Bureau of Meteorology, *Submission 65*, p. 29.

141 Mr Glenn Evans, Floodplain Management Association, *Committee Hansard*, 10 April 2013, p. 19.

142 See Productivity Commission, *Inquiry Report: Barriers to effective climate change adaptation*, March 2013, Chapter 7, pp 117–145.

143 Productivity Commission, *Inquiry Report: Barriers to effective climate change adaptation*, March 2013, p. 136; and *Australian Government response to the Productivity Commission report: Barriers to Effective Climate Change Adaptation*, March 2013, p. 7.

144 Productivity Commission, *Inquiry Report: Barriers to effective climate change adaptation*, March 2013, p. 136; and see also recommendation 7.1.

5.108 The Productivity Commission further considered that:

...this initiative should also be expanded over time to encompass other natural hazards (particularly bushfires). A single source for natural hazard information would make it easier to assess the quality and consistency of existing information and identify areas for improvement.¹⁴⁵

5.109 In response, the Commonwealth government noted that:

... the coordination and dissemination of natural hazard information, including flood risk, coastal inundation, bushfires and extreme weather elements, will continue to be a core role for the Australian government.¹⁴⁶

Construction standards and building codes

5.110 A number of submitters and witnesses raised the need for improved and nationally consistent construction standards and building codes.¹⁴⁷ For example, insurance industry representatives argued coordinating building codes (to improve the durability of houses to withstand extreme weather events) would help reduce future risk.¹⁴⁸ The Brisbane City Council argued 'there is a key role for the State Government in developing and maintaining building standards for buildings in flood risk areas'.¹⁴⁹

5.111 The experience of recent natural disasters demonstrates the value of improved construction standards. Associate Professor David King, Director of the Centre for Disaster Studies, James Cook University, described how older homes in North Queensland suffered increased damage from Cyclone Yasi:

Yasi hit all the way from Cairns down to Townsville. All of that whole coast was within the cyclone impact and suffered fairly extensive damage. But the houses stood up. Wherever you went afterwards, the post-1980s houses were relatively undamaged....There was remarkable security and stability in the housing stock of North Queensland.¹⁵⁰

5.112 He attributed this to improvements in building codes:

There was legislation. There was a code. You had to build that way from around 1980—the late seventies onwards. Most of the damage was to houses that were pre-1970s, flimsily built houses—fibro, timber. The older

145 Productivity Commission, *Inquiry Report: Barriers to effective climate change adaptation*, March 2013, p. 136; and see also Suncorp, *Submission 77*, p. 2.

146 *Australian Government response to the Productivity Commission report: Barriers to Effective Climate Change Adaptation*, March 2013, p. 8.

147 See for example Professor John McAneney, Managing Director, Risk Frontiers, *Committee Hansard*, 10 April 2013, p. 1; Mr Karl Sullivan, General Manager Policy – Risk and Disaster Planning Directorate, Insurance Council of Australia, *Committee Hansard*, 10 April 2013, pp 10–11.

148 Ms Julie Batch, Group General Manager, Reinsurance, Insurance Australia Group, *Committee Hansard*, 10 April 2013, p. 15.

149 Brisbane City Council, answer to question on notice, p. 1.

150 Associate Professor David King, *Committee Hansard*, 22 February 2013, p. 13.

houses were the ones you see in the pictures of total destruction. When you are looking at the whole of the community, you can see these pockets of total destruction and the majority of the houses are virtually untouched. So building codes work. From that, I conclude the legislation works.¹⁵¹

5.113 Mr Davies of the Northern Territory Police, Fire and Emergency Services also noted that nationally coordinated building codes have assisted in preparedness for cyclones. He argued the construction standards have led to less damage from cyclones:

The building codes issue has been taken up nationally. We subscribe to national building codes, so where they are adjusted in regard to those sorts of projections the NT government follows along. For cyclones, for instance, we are region C. That drives the way our houses are constructed up here. As you would have seen from recent events on the east coast, the houses built to those construction standards performed very well in quite major cyclones.¹⁵²

5.114 Several submissions supported the need for national coordination in terms of developing uniform standards.¹⁵³ The committee notes that there is a National Construction Code, which has been developed and maintained by the Australian Building Codes Board, which reports to the COAG Building Ministers' Forum. The Productivity Commission recommended that this forum should 'develop a work program to embed consideration of climate change in the National Construction Code'.¹⁵⁴ The Commonwealth government noted in its response that the Building Ministers' Forum has agreed to the inclusion of climate change adaptation in their forward work program.¹⁵⁵

Land use planning

5.115 A number of submitters and witnesses raised the importance of risk informed land use planning in preparing for climate change and the impact of weather changes.¹⁵⁶ As outlined earlier in this chapter, land use planning is a responsibility of both state and local governments. However, CSIRO noted that:

151 Associate Professor David King, *Committee Hansard*, 22 February 2013, p. 13.

152 Mr Peter Davies, Northern Territory Police, Fire and Emergency Services, *Committee Hansard*, 7 March 2013, p. 1.

153 See, for example, Victorian Centre for Climate Change Adaptation Research, *Submission 165*, p. 8.

154 Productivity Commission, *Inquiry Report: Barriers to effective climate change adaptation*, March 2013, p. 328 and recommendation 10.1.

155 *Australian government response to the Productivity Commission report: Barriers to Effective Climate Change Adaptation*, March 2013, p. 10.

156 See for example Mr Paul Considine, AFAC, *Committee Hansard*, 20 February 2013, p. 4; Mr Glenn Evans, Floodplain Management Association, *Committee Hansard*, 10 April 2013, p. 21; Climate Action Network Australia, *Submission 92*, p. 2.

A key issue is that the ability of one tier of government to make a decision (within its respective responsibility) is constrained or even compromised by decisions at another level of government. For instance where local governments have statutory responsibilities for local planning and development controls, they do not generally have the capabilities to manage many of the legal and financial risks generated from those decisions. This is particularly the case in implementing planning controls on private property for storm surge events and coastal inundation where local governments have repeatedly looked to State Government to provide adequate legislative protection, regulatory clarity and or financial support to guard against legal action arising from local decisions made in the public good to limit risk.¹⁵⁷

5.116 The committee was also concerned to hear that local governments do not always have the capacity or resources to adequately plan for climate change or extreme weather events when making planning decisions.

5.117 Professor Palutikof, from the National Climate Change Adaptation Research Facility, argued that a lot of people working in local government 'lack the support that they need in terms of policy, regulation and legislation in order to feel that they are able to act around adaptation'.¹⁵⁸ ANEDO submitted that there is a need for standard planning instruments to provide guidance to local government on matters such as coastal planning in the context of climate change.¹⁵⁹

5.118 Submitters noted the need for land planning to consider the risk posed by extreme weather events; and for the community to be informed of these risks when choosing to live there. For example, the Northern Alliance for Greenhouse Action identified an:

...urgent need for climate change impacts, including extreme weather events, to be incorporated into local governments' planning and implementation of infrastructure and services, as well as urban planning and design.¹⁶⁰

5.119 The Australasian Fire and Emergency Services Authorities Council (AFAC) argued emergency services can only do so much if people continue to live in areas of high risk. Mr Paul Considine told the committee that AFAC considered land use planning to be 'an extremely important issue':

...choices are being made by people and by governments across Australia about the use to which people may put land and about the areas which will and will not be developed...What we want people to understand is that using land which is subject to natural catastrophes comes with risks and that those risks cannot be deferred to emergency services or passed on. They have to be accepted. If the decision is made to use the land in a particular

157 CSIRO, *Submission 93*, p. 26.

158 Professor Jean Patricia Palutikof, NCCARF, *Committee Hansard*, 10 April 2013, p. 31.

159 ANEDO, *Submission 107*, p. 8.

160 Northern Alliance for Greenhouse Action, *Submission 47*, p. 3.

way, the risks should be understood and it should be understood that emergency services cannot fill that gap.¹⁶¹

5.120 The ALGA believed that there has been less cooperation and discussion around planning and climate change adaptation since the dissolution of the COAG Local Government and Planning Ministers' Council. The ALGA called for the resurrection of that forum to discuss planning issues, particularly in relation to natural disasters and climate change.¹⁶² For example, the South Australian State Emergency Management Committee (SEMC) noted that the ministerial council had published guidelines on 'Planning Safer Communities', which suggests, among other matters, that land use planning consider strategic controls on the use and development of land in high risk areas.¹⁶³

5.121 The committee notes, once again, that the Productivity Commission considered land-use planning issues in its report on *Barriers to Effective Climate Change Adaptation*. The Productivity Commission stated that:

Local governments should consider the impacts of climate change in land-use planning decisions and should also consider changes to land-use planning regulations.¹⁶⁴

5.122 The Productivity Commission further recommended that:

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 the 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.¹⁶⁵

5.123 The Commonwealth government agreed in principle to this recommendation in its response, noting that it would refer the recommendation to the states and territories for consideration.¹⁶⁶

161 Mr Paul Considine, AFAC, *Committee Hansard*, 20 February 2013, p. 4.

162 Mr Adrian Beresford-Wylie, ALGA, *Committee Hansard*, 11 April 2013, p. 4.

163 State Emergency Management Committee, *Submission 162*, pp 18–19.

164 Productivity Commission, *Inquiry Report: Barriers to effective climate change adaptation*, March 2013, p. 327.

165 Productivity Commission, *Inquiry Report: Barriers to effective climate change adaptation*, March 2013, recommendation 9.1 and p. 188.

Need for collaboration with the community and business

5.124 Finally, the committee heard that solutions to climate change at the local level require a collaborative research response from scientists and local communities. Associate Professor Laura Stocker explained why collaboration is so important:

No one person has all the answers, so we actually need a vehicle for coming together and working together, not just as scientists, but with a community. Local people have knowledge, Indigenous people have knowledge. We need mechanisms whereby we can have collaborative coproduction of knowledge. That knowledge that emerges from those collaborative exercises is critical in terms of generating knowledge which is both applicable and local and, therefore, usable by local governments. That is what we are struggling with at the moment. We are pulling all the different types of information together and making it applicable and locally relevant to, say, the City of Mandurah or the cities of Bunbury or Busselton.¹⁶⁷

5.125 The Australian Council of Social Service (ACOSS) argued that governments need to collaborate more with the third sector when it comes to emergency planning, response and management. Dr Cassandra Goldie, Chief Executive Officer, explained ACOSS's position:

...we think really important planning must be done around collaboration and coordination. I am struck by the number of times when I have listened to government leaders talk about these events they talk about the role of the SES and the police—all the important emergency services—and the impact on businesses and farming communities, but it is rare for them to talk in any shape or form about this really important third sector of community organisations. Our expertise is in collaboration and coordination and human relationships. In the end, that is what is going to make the difference in terms of whether we recover quickly and well and we are stronger after that or we are going to be worse off and for a long time. So participation of our sector is absolutely vital.¹⁶⁸

5.126 Similarly, the Australian Red Cross recommended that a stronger focus is given to the role of community organisations as contributors to emergency management policy and practice development.¹⁶⁹

5.127 For example, the Australian Red Cross noted that the National Strategy for Disaster Resilience recognised that emergency management and disaster resilience is a partnership between communities, agencies, the private sector and governments. It felt that membership of relevant committees, including, for example, the Australia New

166 Australian government response to the Productivity Commission report: *Barriers to Effective Climate Change Adaptation*, March 2013, pp 9–10.

167 Associate Professor Laura Stocker, *Committee Hansard*, 7 March 2013, p. 17.

168 Dr Cassandra Goldie, ACOSS, *Committee Hansard*, 11 April 2013, p. 46.

169 Australian Red Cross, *Submission 127*, pp 30–31.

Zealand Emergency Management Committee should reflect this 'shared responsibility'.¹⁷⁰

5.128 The committee notes that the role of businesses, households and the community is recognised in a number of relevant initiatives outlined in this chapter, including the COAG statement on *Roles and Responsibilities for climate change in Australia* and the National Disaster Strategy.

5.129 Indeed, the Victorian Centre for Climate Change Adaptation Research noted that the emphasis in current policy is on 'shared responsibility' for disaster risk management and adaptation, involving business, households, industry and community organisations as well as government.¹⁷¹ The Centre agreed that all Australians need to take some level of responsibility, but noted that:

...this does not negate the need for government involvement, especially in the areas of strategic planning, risk mitigation and provision of resources. In many cases government, particularly at a federal level, is more appropriately positioned to access and collate information, assess and broker insurance needs, and implement large scale or resource intensive risk mitigation measures. Further, some sections of the community are not in a position to mitigate risk, because of age, infirmity or poverty. This is an issue of particular note in regions at risk, such as in rural and remote areas and for highly vulnerable communities.¹⁷²

Committee comment

5.130 Australia has experienced severe extreme weather events in recent years; and the evidence to the committee suggests that we are likely to experience them in greater frequency and/or intensity in the future. Preparing for, and responding to, extreme weather events requires cooperation, collaboration and coordination across a range of sectors and governments.

5.131 At the same time, national leadership by the Commonwealth government is also required. The Commonwealth government's own position paper on climate change adaptation identifies the importance of leadership at a national level in terms of managing and responding to extreme weather events. Rather, during the course of the inquiry, it became apparent to the committee that the Commonwealth government's oversight of its response to climate change and extreme weather events has not achieved all that is required. Key documents, such as the National Climate Change Adaptation Framework, have not been reviewed or properly implemented. Promised reports measuring Australia's progress on adapting to climate change, such as the 'Climate Futures Report', have not materialised.

5.132 The committee notes that a number of initiatives designed to implement the National Climate Change Adaptation Framework have been discontinued, including

170 Australian Red Cross, *Submission 127*, p. 30.

171 Victorian Centre for Climate Change Adaptation Research, *Submission 165*, p. 4.

172 Victorian Centre for Climate Change Adaptation Research, *Submission 165*, p. 5.

NCCARF. The committee agrees that NCCARF has created valuable opportunities for researchers, practitioners and academics to share their knowledge and experiences, to identify gaps in policy and practice and to build capacity around adaptation for extreme weather events. NCCARF also did this by publishing easy to read and understand fact sheets and practice guides, and providing accessible forums and seminars on a range of topics related to adaptation.

5.133 While the committee is pleased to see improvements in recent years in terms of coordination between different government agencies at the local, state and territory and Commonwealth level, particularly work by COAG, there is clearly still room for improvement.

5.134 The committee agrees with evidence that COAG should coordinate responses across governments to climate change and extreme weather events. The committee notes evidence that climate change adaptation work will continue under the Standing Council on Environment and Water. The committee considers that COAG should continue to play an important role in improving coordination across governments in relation to climate change adaptation and managing extreme weather events. A number of areas where such coordination could be improved have been discussed in this chapter.

5.135 In this context, the committee notes that the Productivity Commission made a number of recommendations in its report on *Barriers to Effective Climate Change Adaptation* (please see Appendix 3 of this report). These recommendations were designed to help clarify roles and responsibilities of various levels of government in Australia in relation to climate change and extreme weather events. The committee broadly endorses the recommendations of the Productivity Commission and, where possible, suggests that the Australian government implement those recommendations as soon as practicable.

Recommendation 10

5.136 The committee recommends that the Commonwealth government works with state and territory governments to continue to implement the recommendations of the Productivity Commission report, where possible, to improve coordination in relation to climate change adaptation.

Senator Simon Birmingham
Chair

