Policy, planning, practice, politics and the COAG natural disasters review: Delivering to bushfire risk communities – a Queensland perspective

Briefing Paper No. 3

Alison Cottrell
and
David Lowe

May 2005

Introduction

The management of natural disasters in Australia has been influenced recently by policy changes at the international level and the national level and by more accurate and extensive evaluations of the economic and damage costs, the death and injury costs and the extent of government expenditure on natural disasters. The review of natural disasters by the Council of Australian Governments (COAG) resulted in the report *Natural Disasters in Australia: Reforming mitigation, relief and recovery arrangements* which made a large number of recommendations affecting how the three levels of government deal with the major types of natural disasters and hazards. The review aims to deliver changes to the ways governments can contribute to the development of safer, more sustainable, resilient and self-sufficient communities with ongoing reduction in the risk, damage and losses from natural disasters.

A number of theoretical policy development and decision making processes are reviewed and a range of impediments which may affect these processes in a practical sense in relation to natural disasters are evaluated.

Because the magnitude of the "all hazards" and "all levels of government" approach of the COAG review makes it complex, to gain a clearer understanding of the recommendations, it is necessary to focus on a manageable aspect of the review. Therefore, this discussion concentrates on the policy, planning and operational area of bushfire management as it applies to Local Government in Queensland keeping in view current Queensland Government priorities.

Disaster management

In Australia the International Decade for Natural Disaster Reduction (IDNDR) had an influence on the management of natural disasters. The IDNDR was designated by the United Nations to operate over the period 1990 to 1999 with objectives to reduce the loss of life, property damage, and social and economic disruption caused by natural disasters. At the World Conference on Natural Disaster Reduction held in Yokohama in May 1994, a mid-term review of the accomplishments of the Decade led to the adoption of the Yokohama Strategy and the principles

covering the following matters: risk assessment; disaster prevention and preparedness; prevention, reduction and mitigation of disasters; early warning systems; participation of all levels of government; application of proper design and patterns of development; sharing the necessary technology; environmental protection; and each country has the primary responsibility for protecting its people, infrastructure, and other national assets from the impact of natural disasters (UNOCHA, 1994).

Another event which had an impact on disaster management was the development and release of the Bureau of Transport Economics (BTE) report on the Economic Costs of Natural Disasters in Australia (BTE, 2001). This report revealed the significant magnitude of the economic costs of natural disasters to the Australian community. In developing this report it was discovered that although the database used by Emergency Management Australia (EMA) was the best available at the time it had a number of significant limitations. These limitations on the accuracy of the database included a heavy reliance on media reports, therefore also the frequency of non-reporting, the usage of insurance figures to estimate losses, and methods used to index losses in dollar terms. The indexation of insured loss to total loss was achieved by multiplying insurance costs by factors for each different disaster type which had been derived by Joy (1991, cited in BTE 2001, p.12). The BTE believed that some factors would lead to underestimates and other factors would lead to overestimates. Other significant features of the BTE report included, for example, for two of the largest natural disasters of Cyclone Tracy in Darwin in 1974 and the Ash Wednesday bushfires in Victoria and South Australia in 1983 the BTE was unable to locate a single document that attempted to estimate the total cost of the respective disasters.

Since the BTE report the IDRO has developed a disasters database and has estimated the equivalent current cost of Cyclone Tracy at $837 million and Ash Wednesday at $324 million (IDRO, 2005). To add some local perspective Cyclone Althea, which struck Townsville in 1971, was estimated to have an equivalent current cost of $147 million. The IDRO database does not provide details of how the estimates were derived, however, the data is included here to provide estimates of the individual events which the BTE report did not provide.

The BTE approach was to derive the total costs from a number of sources and analyse the costs in three broad categories – tangible direct costs; tangible indirect costs; and intangible costs. The

key findings of the BTE report were that between 1967 and 1999 natural disasters (with a total cost per event over $10 million) in Australia such as floods, bushfires, storms and tropical cyclones caused the following:

- total damage costs of $37.8 billion (including death and injury) and average annual costs of $1.14 billion;
- estimated average costs for a fatality of $1.3 million, $317,000 for a serious injury and $10,600 for a minor injury for a total cost of $1.4 billion and an average cost of $41 million per year.

New South Wales accounted for 44.5 per cent of the costs, Queensland 22 per cent, Northern Territory 13.1 per cent and Victoria 8.6 per cent of total disaster costs over the period.

Table 1 – Average Annual Cost of Natural Disasters by Event 1967 to 1999 (after BTE, 2001)

Event	Average Annual Cost $ million (1999 prices)	%
Flood	314.0	28.8
Severe storms	284.4	26.2
Cyclones	266.2	24.5
Earthquakes	144.5	13.3
Bushfires	77.2	7.1
Landslide	1.2	0.1
TOTAL	1087.5	100.0

When the costs of death and injury are included the average annual cost of natural disasters increases from $1.0875 billion (Table 1) to $1.14 billion. BTE warns, however, that three extreme events - Cyclone Tracy (1974), the Newcastle earthquake (1989) and the Sydney hailstorm (1999) – had strong influences on the variability of average annual costs and care must be taken when estimating the costs of future events from past events.

In the period 1967 to 1999 the BTE estimate the total cost of bushfires, causing damage greater than $10 million, to be $2.5 billion. Although the cost of bushfires is small (7.1%) relative to other events it is bushfires that cause the most deaths and injuries (Table 2) (BTE, 2001 p.52).

Table 2 – Deaths and Injuries by hazard type, 1967 – 1999

Event	Dead	Injured	Total cost ($million)
Bushfire	223	4,185	654
Cyclones	154	958	283
Flood	99	1,019	216
Severe storm	58	942	154
Landslide	18	1	24
Earthquake	13	191	33
TOTAL	565	7,296	1,364

To place the costs of natural disasters ($1.14 billion per year in 1999 prices) into perspective the BTE estimates that in 1996 road crashes cost $15 billion and aviation accidents cost $112 million, therefore, natural disasters represent a relatively small but significant cost (BTE 2001).

Council of Australian Governments (COAG)

Disaster management and related policy-making in a federal system requires an effective level of coordination and cooperation between the state and territory governments and the federal government. From the 1920s until the 1990s policy-making at this level has had a tangled nature (Fenna 2004) and a feature of this was the annual meetings of the Premiers, Chief Ministers and the Prime Minister where essentially the meetings were unilateral exercises where, for example, the Prime Minister and the Treasurer would make public the budget allocation for the states from the forthcoming federal budget.

The establishment in 1992 of the Council of Australian Governments (COAG) was viewed as a good example of cooperative federalism and its most notable achievement to date has been the

implementation of the Hilmer Report on competition policies and the resultant micro-economic reforms implemented subsequently at the state level (Fenna 2004).

COAG comprises the Prime Minister, the Premiers, Territory Chief Ministers and the President of the Australian Local Government Association and despite the fact that these 10 people meet only once per year for a few hours most of the details for consideration have already been decided upon by negotiation at ministerial council level or at meetings of senior government officers.

Review of Natural Disasters

In June 2001 COAG commissioned a review of Australia's approach to dealing with natural disasters to ascertain if the existing framework of arrangements was meeting the needs of people who were affected by the disasters. The review was undertaken by a High Level Group (HLG) which comprised officials from Commonwealth, State and Territory Governments and the Australian Local Government Association. The review concluded that current arrangements could be improved and recommended a paradigm shift in focus from disaster response and reaction towards cost-effective, evidence-based mitigation and anticipation.

The review revealed three specific strengths (COAG 2004, p.8) in the systems currently used to manage disasters: level of preparedness and response are effective for managing most disasters; strong emergency services sectors provide a speedy, visible and respected capacity to respond; and natural disaster relief arrangements are sound and effective in providing basic assistance to affected communities.

The review revealed eight specific weaknesses (COAG 2004, p. 8-9) in the systems currently used to manage disasters: lack of natural disaster risk assessments and natural disaster data and analysis; focus on response and reaction; lack of post-disaster assessments to identify lessons

learnt and opportunities for improvement; uneven recognition of the important role local governments have to play; lack of preparation for catastrophic disasters; limited availability of flood insurance; tendency to introduce ad hoc special relief schemes; and lack of coordinated national approach to disaster management.

COAG agreed that the Australasian Police Ministers' Council (APMC) would be responsible for the implementation of the identified reform commitments and recommendations and its membership would be augmented to include Ministers from those jurisdictions where portfolio responsibility for emergency management and natural disaster relief was not held by the Police Minister.

The COAG Natural Disasters review aims to create safer and more sustainable, resilient and self-sufficient communities leading to ongoing reduction in the risk, damage and losses from natural disasters which may occur in the future. The major features of the report *Natural Disasters in Australia: Reforming mitigation, relief and recovery arrangements* are 66 recommendations, which include 12 principal commitments for comprehensive reform of disaster management and the Disaster Mitigation Australia package.

The Disaster Mitigation Australia Package brings the total funding contributed by each level of government for disaster mitigation projects over the five years of the program to over $100 million (Queensland Government 2003b). The Package also includes commitments to: reform land use planning, development and building controls; usage of consistent risk assessment methodologies; and consistent data collection and research.

It is remarkable to observe that the nine principles from the Yokohama Strategy are well covered in the COAG recommendations but it has taken nearly 10 years to advance these principles into policy in Australia.

Government Expenditure

The COAG review also published the BTE paper on government expenditure (COAG 2004, Annex 8) which indicated that in 2000-2001 the combined expenditure by Commonwealth, State and Territory governments was $1.014 billion and was split 49% to preparedness and response; 38% to relief and recovery; and 11% to mitigation. Mitigation is defined as measures taken in advance of a disaster aimed at decreasing or eliminating its impact on society and the environment. Estimates of Local Government expenditure was provided by way of an Australian Local Government Association survey at $222 million for 2000-2001 and was split 43% to mitigation; 34% to preparedness and response; and 20% to relief and recovery. These estimates on expenditure are also based on the best available data, however, the COAG report views the estimates as "significant underestimates" and "most agencies believe this to be the case" (COAG 2004, p.127).

The BTE expressed the view that a high level of importance be placed on the provision of good information on the costs of natural disasters in order that the effectiveness of mitigation expenditure could be calculated. This is also important when assessing the efficacy of the implementation of natural disaster policies at all levels of government.

What is missing from the current analyses of costs and expenditure is a reflection of the recent international change in emphasis to include "triple bottom line" costings in the investigation of events so that economic, social and environmental costs are included in order that a more complete picture and a more accurate idea of the total costs of natural disasters could be developed. Campbell (2003, p.247) emphasizes the importance of this in relation to the triple bottom line by describing it as a triple helix where "those things are all interwoven, and we need to engage with the complex mix if we are going to change our fire management" and give greater consideration to the type of lifestyles and landscapes that Australians want to live and live in and learn to live with fire in the landscapes.

What is policy?

A recommendation becomes a policy when it has been adopted and when government agencies commence the processes necessary for the policy to be implemented. Thus the COAG recommendations, commitments and the package have been accepted as policy decisions, however, in a general sense from this stage there is still a long way to go toward implementing the decisions and making the policy work (Fenna 2004).

Many people are confused by what is meant by "policy". The term is a very general expression about beliefs, convictions or even moral instructions. Policy is not a public commitment to contribute $40 million over four years to construction of a Townsville ring road nor is it the provision of $80 million to meet the full cost of flood-proofing the Bruce Highway near Tully. Policy is about statements concerning beliefs, convictions, intentions or what you might promote as best practice in a particular field and the word can be used in diverse ways to apply to quite different types of statement, intention, action and inaction (Palmer & Short 2000). For example, 'policy' may apply to the following cases:

- general statements of commitments and objectives which can be found in the policy announcements and publications of politicians during election campaigns and can include statements such as "our policy is to support the people, communities and businesses of North Queensland";
- the achievements of government in a particular area such as "the new Medicare Safety Net reimburses 80% of out-of-pocket expenses";
- a specific statement of future intentions, for example, "review the Great Barrier Reef Marine Park Authority Act to improve the performance of the Great Barrier Reef Marine Park Authority, its office holders and its accountability frameworks";
- conventions that direct action or inaction, for example, "in a region like North Queensland it will never be economically viable to have terrestrial mobile coverage everywhere" (Howard Government, 2004).

Policy development and decision making

An analysis by Anderson (cited in Palmer & Short 2000, p. 29) indicates that there are three ways to proceed when decisions are being made on the processes of policy formulation. Firstly, the basis for "incrementalism", where all alternative policies are only incrementally different, is found in the work of Lindblom (1959) and has also been referred to as "muddling through". Lindblom argues that it is not possible for a policy maker to consider all of the possible policies nor all of the possible outcomes of policy. The process is too large and too complex; it is beyond the understanding of people. Instead the best policy is enacted by making small amendments or adjustments to existing policies and in this way the process is simplified. Critics of incrementalism argue that this type of policy-making can lead to easy agreement between policy-makers, however, the newer policy may remain too closely attached to what has occurred in its own particular past.

Secondly, there is the group of decisions that is made in a "rational-comprehensive" manner (Simon 1976) where choices are made after consideration of all of the options and all of the possible methods have been taken into account (Palmer & Short 2000). There are three steps to be undertaken and these include the listing of alternate strategies; determination of the consequences of the strategies; and comparative evaluation of the consequences (Simon 1976). The major problem that is recognized by Simon is that it is not possible for an individual to know all of the alternatives and all of the consequences. An advantage of the rational-comprehensive method, however, is that it can be used to establish the major issues that need to be considered.

Thirdly, with "mixed scanning" (Etzioni 1976) for decision making it is a more guidance-oriented approach than rational-comprehensive as compromise is used by employing a combination of rational-comprehensive and incrementalism. Rational-comprehensive is used to set goals and basic directions followed by utilization of incremental decision-making in order to choose the options from within the wider goals area. Pluralist societies and democracies tend to rely on achieving a certain level of consensus before moving forward and as a result tend to do "less than necessary later than necessary" (Etzioni 1976, p. 95). To achieve a level of consensus

is another way of ensuring fewer mistakes are made in a similar way that incrementalism makes smaller changes to decision-making processes. On the other hand totalitarian societies tend to try for "too much too early" and in many cases have to make subsequent repairs and adjustments. Etzioni (1976) argues that incrementalism is usually employed in pluralistic societies while rational-comprehensive decision-making or planning is favoured in totalitarian societies.

Although Anderson (cited in Palmer & Short 2000) has stated that there are three ways, and it is generally accepted in the literature that there are three ways to proceed in decision making, in fact there is now a fourth way. This fourth way is referred to as "diffusion" or "innovation" (Berry & Berry 1999) and is employed when inertia is rejected or other requirements mean that large changes to policy are needed. Research that these two policy scholars undertook in the 1990s indicates that "ultimately every government program can be traced back to some nonincremental innovation" (Berry & Berry 1999, p. 169). This does not mean the invention of policy or the development of new ideas but the adoption of programs new to the adopting entity by the emulation of programs already operating in other states, or by extension, to other countries. When a policy has been found to be successful in another jurisdiction the logic of incrementalism in relation to the avoidance of lasting mistakes and the desire to simplify the decision-making process guides the policy maker. It is appropriate to note that the diffusion of the nine principles from the Yokohama Strategy into the COAG recommendations may well mean that the larger steps in policy making relating to natural disasters can be undertaken with more confidence in the outcomes.

Lindblom continued to develop incrementalism by including strategic analysis to inform decision making and stated in a later paper the importance of understanding "that the size of the step in policy making can be arranged on a continuum from small to large" (Lindblom 1979, p. 517).

A model of these four processes based on Lindblom's 1979 model can be presented. It should be noted that the distances between the descriptors in the model below do not measure in any way the size of steps in policy making.

	rational-	mixed-	diffusion or
incrementalism	comprehensive	scanning	innovation

_____|_____|_____|_____|_____

Figure 1. Policy Model (after Lindblom)

Incrementalism has had widespread acceptance (Woodhouse & Collingridge 1993) and Lindblom remains of the view that the "world is so complex, human understanding so limited" (Lindblom & Woodhouse 1993, p. 150) but the term may have outlived its usefulness as critics argue its scholars "never attempted to clarify how decision makers could become better incrementalists" (Woodhouse & Collingridge 1993, p.1). Incrementalism has not been rejected and supporters argue it can be reframed to be useful to practitioners and scholars.

Support for diffusion/innovation is provided by Lindblom and Woodhouse as it can be that the cause of achieving a well-paced and reasonable judgement can be assisted by non-incremental innovation and having available a "diverse set of ideas on the subject in question" and that this "diversity will help prevent careless, grossly simplistic, premature agreement on policies that do not offer much prospect of ameliorating the problem" (Lindblom & Woodhouse 1993, pp. 147-148).

Inertia and accountability

Despite the theory advanced there are fears, however, that the magnitude and complexity of the changes to policy from the COAG Review, the extensive area of changes and the relatively long time-frame may not lead to cost-effective outcomes. In the past, major programs involving long lead times and operations in areas of natural resource management have had less than satisfactory outcomes.

In December 1992, the then Prime Minister introduced a National Strategy for Ecologically Sustainable Development which was endorsed by all levels of government. Program expenditure elements of over $1 billion over the period from 1993 to 2002 were managed by the Department of Primary Industries and Energy (DPIE) and Environment Australia. In a 1997 report of the Australian National Audit Office (ANAO 1997) on the Commonwealth Natural Resource Management and Environment Programs it is stated "…after some five years since the then Prime Minister's Statement on the Environment and nearly eight years into the Decade of Landcare, the Commonwealth is still unable to indicate in any detail the outcomes that have been achieved from any of the programs examined". The ANAO expressed the view that DPIE and Environment Australia had the "scope and capability to make significant improvements" (ANAO 1997, p.1) in many areas.

Bushfire policy and political impediments

It is usual for Australia's bushfire policies to be scrutinised subsequent to any bushfire season, however, the 2002-2003 season was a devastating season and the level of scrutiny which followed was remarkable. The Australian Capital Territory had the McLeod Inquiry, Victoria had the Esplin Inquiry and at the national level there was the COAG bushfire inquiry and the House of Representatives Inquiry (Commonwealth, 2003 p.315).

It was the view of the Queensland Government that State and Territory leaders had reiterated their commitment to cooperate with the COAG Inquiry on Bushfire Mitigation and Management, however, they had expressed their displeasure at "the unilateral action of the Prime Minister in establishing a non-expert House of Representatives Inquiry to be conducted without any reference to the States and Territories" (Queensland Government, 2003b). It should be noted that at the time the Federal Government was a Liberal/National Party Coalition and the State and Territory Governments were Australian Labor Party governments.

The House of Representatives Inquiry published in October 2003 the report *A nation charred: report on the inquiry into bushfires* (Commonwealth, 2003). The Chair of this inquiry, a member of the Federal Coalition, was critical that respective political leaderships of New South Wales, Victoria and the Australian Capital Territory who had chosen "not to contribute to the inquiry, claiming a lack of resources" but staff from many agencies from those States had attended and taken notes at the public hearings. A member of the inquiry insisted on a dissenting section in the report in which it was stated the reasons for the lack of support from some levels of government was that it "was a politicised inquiry and that therefore the subsequent findings would be subject to question or in some way biased". This member was also of the view that the establishment of the COAG bushfire review by the Prime Minister would limit the commitment of some state governments.

In addition, a group of members of the Inquiry provided an 'Additional Comments' section to the report in which they expressed regret that the report did not have the benefit of all relevant parties having articulated their point of view and allowing all evidence to be tested and that highly politicised inquiries do not allow rational evaluation of evidence. Other commentators external to the inquiry also held the view that the high level of criticism in the report of a perceived lack of prescribed burning may also be ideological (Brandes 2003). In a situation such as described, readers may wonder at the value of the report to communities faced with preparing for bushfire risks and the inefficiency and lack of accountability in the expenditure of public money.

Further, the COAG bushfire inquiry was politicised when the West Australian Government held up the release of the report for more than eight months as the Greens Party had objected to some of the recommendations. Premier Gallop had a firm belief that his government was elected with a very large assistance from Greens preferences in 2001 and he was keen to ensure that Green preferences would again assist his government to be re-elected in February 2005 (Crikey, 2005). Psephologists are not in agreement on whether it is Greens preferences or One Nation preferences that decided the outcome of the 2001 election or the 2005 election. The withholding of the report for political reasons also raises doubts about government accountability issues.

Other possible impediments to policy implementation

Leonard (2003, p.110) states the development of an Australian Standard for the performance of buildings in bushfires had "suffered from strong commercial influences". Wilson (2003, p.127) takes this statement further and includes political influences of state and local authorities succumbing to business interests in a similar way that local councils have been reluctant to build "crime prevention through environmental design features" for requirements into regulatory standards due to cost factors on developers or other entities with a vested interest.

Handmer (2003) warns that in policy and law areas there are often large gaps between what is prescribed and what actually happens in practice, for example, any policies which contradict the common law are very likely to fail in practice. It is not that the policies would fail *per se*, but people may not adopt, implement or adhere to policies that appear to be in conflict with the common law, for example, the imposition of liability on damage caused by the escape of fire is a settled common law and could not be overridden (A. Lowe 2005, pers. comm., 15 February).

An obvious and very worrying contradiction regularly occurs during bushfires and that is related to evacuation. The Australasian Fire Authorities Council has published a position paper on community safety and evacuation during bushfires (AFAC 2001) and almost all fire authorities are in agreement with the policy which advises people to consider staying at home and saving their property if adequate fire protection measures are in place and they are physically able, however, the police and the media work to achieve evacuation. The police are given legislative

authority to order evacuation of people irrespective of their level of preparedness and willingness to defend their property, for example, the *Disaster Management Act 2003* (Queensland Government 2003c) indicates that a police officer, a district disaster coordinator or a declared disaster officer may evacuate persons from a declared area. The media use inflammatory terms and sensationalise ideas and events which may influence people to evacuate, sometimes in non-rational ways. Campbell (2003, p.247) argues that the media provide "stories highlighting the apparent randomness of uncontrolled wild fire, not stories emphasising that well-prepared individuals who stay with their house are almost never burnt out".

Another influence which can reinforce perceived irrational behaviour is explained by Campbell (2003, p. 244) where we must "get over the perpetual characterization of wildfire in Australia as a terrifying aberration, an ineluctable, unpredictable Act of God" rather there should be education programs to instruct people how to live with fire and use it as a valuable resource management tool. An anthropomorphism, for example, "predicting the mood of a raging monster" was unfortunately used as a heading in a press release from the Bushfire Cooperative Research Centre (BCRC, 2005). The heading was not closely related to the body of the message.

Fire management policies which are in conflict with policies of organisations with no responsibilities for fire management can also be an impediment to effective implementation. Cheney (2003) cites examples relating to fire suppression where people have been prevented from undertaking suppression activities on their own property and on other property by the threat of legal action by tree preservation or nature conservation acts or regulations.

Galloway (2003, p. 241) indicates the view that "local governments are an absolutely key element in translating national policy directions at the local level" and explains that this needs further focus to assist in increasing the level of community involvement and awareness. It is vital that cooperation and coordination between state governments and local governments is at a high level as it is the local governments who know well what the local risks are and the priorities and needs of local residents.

Queensland Government Priorities

The current Queensland Government has established priorities to provide the following key directional statements (Queensland Government 2004) which will be subject to an enhanced focus for improvements for the period 2004 to 2007 i.e. this term of government:

1. Improving health care and strengthening services to the community;
2. Realising the Smart State through education, skills and innovation;
3. Protecting our children and enhancing community safety;
4. Managing urban growth and building Queensland's regions;
5. Protecting the environment for a sustainable future;
6. Growing a diverse economy and creating jobs;
7. Delivering responsive government.

The strategies and tactics relating to the above key directional statements will have an impact upon the policy and planning areas of relevant State Government departments, the Rural Fire Service and Local Governments. An important point to note is that it is highly likely that as the directional statements are essentially political statements, the statements will be changed at each change of, or renewal of government thus putting out-of-date each strategic plan which is based upon the directional statements. The Queensland Rural Fire Service 2001-2005 Strategic Plan (QFRS 2001), for example, became out of date in 2004 because the priorities of the previous Beattie Labor Government were: safe and more supportive communities; better quality of life; and valuing the environment.

Disaster Management in Queensland

In Queensland at the same time as the COAG Natural Disasters recommendations are being implemented into policy, also being operationalised are the *Disaster Management Act 2003* and the recommendations of the audit of the disaster management system conducted by the Queensland Auditor-General. The audit was undertaken from a governance, performance management and risk management perspective.

The audit found the disaster management system had not failed in any way but recommendations were made for the State Disaster Management Group and the Department of Emergency Services concerning prioritising the COAG recommendations, strategic frameworks, consistency and monitoring of disaster management plans and development of a state-wide hazard risk profile.

The Department of Emergency Services' Corporate Plan 2003-2007, especially the key result areas, will also impact upon policy in this area. The specified key result areas are: enhance community safety and prevention capability; enhance operational service delivery; develop and support our people; contribute to the national, state and local policy agenda; and continuous business improvement (DES 2004).

All of these implementation and operationalising events happening at the same time will certainly add to the complexity of the task.

In Queensland the State Disaster Management Group (SDMG) will oversee the implementation of the recommendations of the COAG Natural Disasters report. The SDMG was established as the principal organisation under the *Disaster Management Act 2003* for the purposes of disaster management throughout the State. In particular, the SDMG is responsible for disaster mitigation and disaster planning and preparation at a State level and for coordinating whole-of-Government response and recovery operations prior to, during and after a disaster impact. The SDMG comprises Chief Executive Officers (CEOs) from all Queensland Government Departments with the CEO of the Department of the Premier and Cabinet as the Chair and the Executive Director of Counter Disaster and Rescue Services is the Executive Officer.

The SDMG has established a responsibility matrix to assist in the implementation process and this matrix details the entities which will have a primary role, a support role, an operational role, an involvement role, a coordination role and a partnership role. Those entities with a primary role will also have strategic policy responsibilities and be fully accountable for completion of each particular project.

Not all of the COAG policy recommendations and commitments apply directly to Queensland or to bushfire management and this paper will review the appropriate sections and with a view to the Queensland Government priorities.

An important recommendation concerning the 12 commitments by all levels of government to comprehensive reform of Australia's natural disaster management is Recommendation 4 which states *"Heads of Government of the Commonwealth, States and Territories, and the President of the Australian Local Government Association (ALGA) agree to endorse and jointly implement the following commitments to reform the way Australia manages natural disasters and achieve safer, more sustainable communities and regions in economic, social and environmental terms:*

1. *develop and implement a five-year national programme of systematic and rigorous disaster risk assessments*

3. *develop, for each level of government, a natural disaster mitigation strategy to be implemented by the Commonwealth and each State and Territory commencing in year 2, and by Local Governments commencing in year 3*

4. *take action to ensure more effective statutory State, Territory and Local Government land use planning, development and building control regimes that systematically identify natural hazards and include measures to reduce the risk of damage from these natural hazards*

6. *reduce the problem of public infrastructure repeatedly damaged by natural disasters through cost-effective mitigation measures, to make infrastructure more resilient where feasible by proactive measures under the Disaster Mitigation Australia Package, and post-disaster measures under the Commonwealth Natural Disaster Relief Arrangements*

7. *develop jointly improved national practices in community awareness, education, and warnings which can be tailored to suit State, Territory and local circumstances*

8. *enhance the Commonwealth Natural Disaster Relief Arrangements to better support community recovery from natural disasters and agree to nine complementary model State and Territory arrangements providing more equitable natural disaster relief and recovery assistance nationwide*

12.   endorse a statement of contemporary roles and responsibilities of each level of government in natural disaster management."

Commitments 1, 3, 7 and 12 will be a primary role for the Counter Disaster and Rescue Service (CDRS) and the regional CDRS organisations with support from the Local Government Association of Queensland (LGAQ) and Department of Emergency Services (DES) Alliance, the LGAQ and the State Disaster Coordination Group.

Commitment 4 was essentially completed from a land management and planning perspective in Queensland with the introduction in June 2003 of the State Planning Policy 1/03 Mitigating the Adverse Impacts of Flood, Bushfire and Landslide (Queensland Government 2003a).

Commitments 6 and 8 will be an involvement for the DES, however, they will be substantially a responsibility for the federal Department of Transport and Regional Services (DOTARS) and Emergency Management Australia (EMA).

Recommendation 6 - that all three levels of government agree to implement a five-year Disaster Mitigation Australia Package consisting of:

- *a new national Disaster Mitigation Programme to invest up to $75 million per annum to put into effect the proposed commitments relating to data and research, disaster risk assessments, disaster mitigation strategies and measures, resilient infrastructure, and community awareness, education and warnings*

- *continuation of the Regional Flood Mitigation Programme at the current nationwide level of funding of $28.8 million per annum, adjusted to keep pace with inflation, and*

- *incorporation of the $9 million per annum currently invested nationally under the Natural Disaster Risk Management Studies Programme into the new Disaster Mitigation Programme.*

This recommendation has been completed although the amount designated in the 2003-2004 Budget was $68.5 million and the current funding rounds are open annually until the end of the 2007-2008 financial year.

Recommendation 9 - that the guidelines for the programmes allow for:

- *the local contribution to be reduced or waived in agreed exceptional circumstances where remote Indigenous communities or low capacity Local Governments would otherwise be precluded from participating, and*

- *the cost of upgrading infrastructure to be shared on a 50:50 basis by the Commonwealth and State or Territory, or, where Local Government infrastructure is involved, on a one third basis for each level of government.*

This recommendation will be a primary role for the DOTARS, Department of Premier and Cabinet, DES, the Department of Local Government and Planning (LG&P) with involvement from CDRS and Treasury and additional operational roles for LG&P.

Recommendation 13 - that the Local Government and Planning Ministers Council require the introduction, within a time frame of one year, of arrangements to ensure natural hazards, including floodplain and bushfire management objectives, are fully considered in the land use planning legislative frameworks of all levels of government.

Recommendation 14 - that all State and Territory jurisdictions introduce statutory land use planning policies and requirements governing development in areas which are subject to a significant risk of flood, bushfire, cyclone, landslip and storm surge, within a two-year timeframe.

Recommendations 13 and 14 are essentially completed in relation to flood, bushfire and landslide following the introduction of the State Planning Policy 1/03.

Recommendation 18 - that State and Territory regulatory authorities and Local Governments have systems of building control that ensure compliance of new buildings with current disaster resistant building standards.

This recommendation is a primary role for LGA&P to review the existing building controls and with an operational role for local governments and involvement from the LGAQ/DES Alliance, the LGAQ and the SDMG.

Recommendation 22 - that States and Territories review current planning legislation to ensure that there are no barriers or disincentives to Local Government, acting in the public interest, rezoning land with high natural hazard risks to avoid inappropriate development.

This recommendation is a primary role for the LGA&P with support from DES and local governments and involvement from the SDMG

Recommendation 23 - that all levels of government promote the planning and construction of cost-effective disaster resilient infrastructure through the development of mainstreaming strategies.

This recommendation will be a primary role for the Department of State Development and Innovation (SD&I) with support from the SDMG and coordination by Department CEOs. The implementation of strategies will be a complex task with operational roles by the DES, the Department of Main Roads (DMR), the Department of Natural Resources, Mines and Energy (DNRME), the Departments of Public Works, Health, Transport and local governments and the SDMG.

Recommendation 28 - that post-disaster assessments by relevant agencies routinely review the effectiveness of warning systems, including the degree to which the warnings resulted in intended changes in behaviour, the appropriateness of information provided, the effectiveness of warning delivery methods, and the cost benefit and cost efficiency of the warning system.

This recommendation will be a primary role for the CDRS, an operational role for the regional CDRS groups and support from the LGAQ/DES Alliance, the LGAQ and the State Disaster Coordination Group (SDCG).

Recommendation 30 - that a central element of the proposed approach to community awareness, education and warnings should be public awareness delivered at the local and community level.

This recommendation will be a primary role for the CDRS and an operational role for the CDRS regional groups.

Recommendation 40 - that post-disaster assessments be undertaken routinely after every event of significance and the findings incorporated into improved disaster management processes to deal with future events.

This recommendation will be a primary role for the CDRS, an operational role for the regional CDRS groups and support from the LGAQ/DES Alliance, the LGAQ and the SDCG.

Recommendation 41 - that arrangements put in place by governments and other parties for recovery from natural disasters should ensure support for disaster-affected communities in reconstruction of physical infrastructure and restoration of social, economic, physical and emotional wellbeing through effective, coordinated processes.

This recommendation will be a primary role for DOTARS, however, the responsibility for identifying changes to National Disaster Recovery Arrangements (NRDAs) and to establish additional processes for Queensland will be a primary responsibility of DES with support from the LG&P, Department of Premier and Cabinet, Department of Communities, Treasury and involvement from the LGAQ and local governments.

Recommendation 45 - that NDRA be amended to provide a more effective incentive for Local Governments to undertake disaster mitigation, by imposing a deduction of 10 per cent in available disaster relief assistance for any Local Governments not having disaster mitigation strategies in place and being implemented for their area by December 2005. This period would be extended in exceptional circumstances beyond the reasonable control of the Local Government concerned.

This recommendation will be a primary role for the Australian Emergency Management Committee (AEMC) with involvement from DES and support from the LGAQ/DES Alliance, the LGAQ and local governments. It is important to note that a political element meant that the deadline has already been extended to December 2006 as the LGAQ objected to the penalty nature of this recommendation.

Recommendation 58 - that each level of government examine and take action on the following recommendations from the Volunteers Summit:

(a) that all jurisdictions

- *agree to approach their respective occupational health and safety organisations in order to develop standards and codes of practice for volunteer organisations, and*

- *conduct an audit of legal risks faced by emergency sector volunteers, share the results, and develop responses*

(b) that the Commonwealth Government

- *considers providing support for employers of emergency services volunteers*

- *recognises emergency management volunteers as trainees*

- *examines the administrative processes associated with the implementation of the National Training Reform Agenda with a view to simplifying them*

(c) that State and Territory Governments

- *review and compare the legal protections provided in their legislation to determine whether it offers adequate cover for both volunteers and their organisations*

- *consider providing assistance with the provision of public liability insurance for emergency management volunteer organisations*

- *recognise emergency management volunteers as trainees*

- *provide funding to emergency sector volunteer organisations to enable them to implement the National Training Reform Agenda*

- *explore the provision of concessions to emergency sector volunteers*

(d) that Local Governments

- *examine the provision of concessions such as rate rebates to emergency services sector volunteers.*

The various components of this complex recommendation will be primary roles for the Department of Communities, the CDRS, the LGAQ/DES Alliance and the LGAQ. Some of the components will be an operational role for the DES and local governments; some of the components will require support from the Queensland Fire and Rescue Service (QFRS) and the Queensland Ambulance Service (QAS); some of the components will require the involvement of the SDMG, the Department of Communities and the LG&P.

Recommendation 59 - that more flexible funding arrangements, and an outreach strategy, be adopted by all levels of government to ensure that remote Indigenous communities have improved access to funding for mitigation measures. Flexible funding will be achieved through the Recommendation 9 undertaking that the local contribution for mitigation measures be reduced or waived by agreement in certain circumstances so that barriers to participation are removed.

This recommendation will be a primary role for DOTARS with support from CDRS, LG&P, LGAQ, local governments and indigenous communities and involvement from the SDMG.

It can be seen that in the short term the burden of these types of recommendations related to bushfires will fall most heavily on Local Governments (including indigenous communities), the LGAQ, the DES/LGAQ Alliance, the DES, the CDRS (including regional organisations) and the LG&P.

Conclusions

In order to commence the delivery of some of the benefits of the COAG natural disasters review of safer and more sustainable, resilient and self-sufficient communities the complex tasks associated with the COAG natural disasters recommendations relating to bushfires are required to be implemented into policy and planning areas and operationalised into practice at State Government and Local Government levels. In the short term the burden of these types of additional responsibilities will fall mostly on State Governments and Local Governments.

It is a complicated and difficult undertaking to estimate where these burdens will fall in the longer term, however, it is conceivable that further related responsibilities will flow from the Federal Government to the State Government and on to Local Government. The predicted flow of responsibilities could originate from the current COAG review and may result from future reviews, legislative changes and policy innovations. The impacts will be felt much more by Local Governments and in particular those Local Governments less able to cope with such impacts because of size, population, revenue levels or other reasons. The Queensland Fire and Rescue Service, the Rural Fire Service and other related service providers operating at the local level will also have impacts in their policy, planning and operations areas. In view of these matters it is suggested that the intensive exploration of local impacts is a crucial area for future research.

Bibliography

Australian National Audit Office (ANAO), 1997, *Audit report-Commonwealth Natural Resource Management and Environment Programs*, viewed 4 January 2005, http://www.anao.gov.au/WebSite.nsf/Publications/

Australasian Fire Authorities Council (AFAC), 2001, *Position paper on community safety and evacuation during bushfires,* viewed 15 February 2005, http://www.afac.com.au/docs/products/EvacpaperApril2001.pdf

Berry, FS & Berry, WD 1999, 'Innovation and diffusion models in policy research', in Sabatier, PA (ed.), *Theories of the policy process,* Westview Press, Colorado.

Brandes, I. (2003). *Burning questions: Australia's bushfire policy*, viewed 15 November 2004, Australian Review of Public Affairs, http://www.econ.usyd.edu.au/drawingboard/digest/0302

BTE 2001, *Economic costs of natural disasters in Australia*, Report 103, Bureau of Transport Economics, Canberra.

Bushfire Cooperative Research Centre (BCRC), 2005, *Predicting the moods of a raging monster*, BCRC press release 8 February 2005, viewed 10 February 2005, http://www.bushfirecrc.com/

Campbell, A 2003, 'Learning to live with fire' in Cary, G Lindenmayer, D & Dovers, S (eds), *Australia burning: fire ecology, policy and management issues*, CSIRO Publishing, Melbourne.

Cheney, P 2003, 'Economic rationalism, fear of litigation and the perpetuation of disaster fires' in Cary, G Lindenmayer, D & Dovers, S (eds), *Australia burning: fire ecology, policy and management issues*, CSIRO Publishing, Melbourne.

Commonwealth of Australia, 2003, *A nation charred: report on the inquiry into bushfires. House of Representatives Select Committee into the recent Australian bushfires*, The Parliament of the Commonwealth of Australia, Canberra.

Council of Australian Governments (COAG) 2004, *Natural disasters in Australia: reforming mitigation, relief and recovery arrangements*, Department of Transport and Regional Services, Canberra.

Crikey, 2005, *The WA state election*, viewed 4 February 2005, http://www.crikey.com.au/politics/2005/01/31-0007.html

Department of Emergency Services (DES) 2004, *Corporate Plan 2004-2008*, viewed 24 March 2005, http://www.emergency.qld.gov.au/publications/

Etzioni, A 1976, S*ocial problems,* Prentice-Hall, New Jersey.

Fenna, A 2004, *Australian public policy*, Pearson Education Australia, Sydney.

Galloway, L 2003, 'Lessons from the COAG disaster management review' in Cary, G Lindenmayer, D & Dovers, S (eds), *Australia burning: fire ecology, policy and management issues*, CSIRO Publishing, Melbourne.

Handmer, J 2003, 'Institutions and bushfires: fragmentation, reliance and ambiguity' in Cary, G Lindenmayer, D & Dovers, S (eds), *Australia burning: fire ecology, policy and management issues*, CSIRO Publishing, Melbourne.

Howard Government, 2004, *A stronger economy a stronger Australia: election 2004 policy supporting North Queensland*. Howard Government, Canberra.

Insurance Disaster Response Organisation (IDRO) 2005, *Major disasters since 1967*, IDRO, viewed 22 March 2005, http://www.idro.com.au/disaster_list/default.asp

Leonard, J 2003, 'People and property: a researcher's perspective', in Cary, G Lindenmayer, D & Dovers, S (eds), *Australia burning: fire ecology, policy and management issues*, CSIRO Publishing, Melbourne.

Lindblom, CE 1959, 'The science of "muddling through"', *Public Administration Review* vol. 19, no. 2, pp. 79-88.

Lindblom, CE 1979, 'Still muddling, not yet through', *Public Administration Review* vol. 39, no. 6, pp. 517-526.

Lindblom, CE & Woodhouse, EJ 1993, *The policy-making process* 3rd edn, Prentice Hall, New Jersey.

Palmer, GR & Short, SD 2000, *Health care & public policy*, 3rd edn, Macmillan, Melbourne.

Queensland Audit Office (QAO) 2004, *Audit of the Queensland Disaster Management System,* Auditor-General of Queensland Report No. 2, Queensland Audit Office, Brisbane.

Queensland Government, 2003a, *Mitigating the adverse effects of flood, bushfire and landslide,* State Planning Policy 1/03 and Guideline, Department of Local Government and Planning, Brisbane.

Queensland Government, 2003b, *Leader's Forum Communique-Natural Disasters*, viewed 6 January 2005, http://www.premiers.qld.gov.au/policy/intergovt/coagmincncl/Communiques/Leaders_Forums

Queensland Government, 2003c, *Disaster Management Act 2003*, Queensland Government, Brisbane.

Queensland Government 2004, *Premier of Queensland – Government Priorities,* Queensland
Government, viewed 2 December 2004,
http://www.thepremier.qld.gov.au/Government_Priorities/

Queensland Rural Fire Service (QRFS) 2001, *Queensland Rural Fire Service 2001-2005
Strategic Plan*, viewed 15 November 2004,
http://www.ruralfire.qld.gov.au/about_rfs/rfs_stratplan.htm

Simon, HA 1976, *Administrative behavior,* 3rd edn, Macmillan, New York.

UNOCHA, 1994, *Yokohama strategy and plan of action for a safer world*, viewed 7 February
2005, United Nations Office for the Coordination of Humanitarian Affairs,
http://www.reliefweb.int/ocha_ol/programs/idndr/yokohama/princi.html

Wilson, P 2003, 'Fire policy making: a social scientist's perception' in Cary, G Lindenmayer, D
& Dovers, S (eds), *Australia burning: fire ecology, policy and management issues*, CSIRO
Publishing, Melbourne.

Woodhouse, EJ & Collingridge, D 1993, *Incrementalism, intelligent trial-and-error, and the
future of political decision theory*, viewed 1 April 2005,
http:www.rpi.edu/woodhe/docs/redner.724.htm