Queensland's State Disaster Management group: An all agency response to an unprecedented natural disaster

By Dr. Tracey M Arklay, Griffith University.

ABSTRACT

Queensland's management of unprecedented natural disasters in 2010-11 received worldwide acclaim. This article argues that the much publicised and largely effective response to extensive state-wide flooding and cyclone events was not an accident, but rather had foundations that were laid over many years of prior experience in preparing for a diverse range of natural disaster threats - including flood, cyclone, storm and fire. The organisational culture within the state's emergency agencies and the ongoing planning and training at the operational level was important, as was the learning and adaptation that had occurred previously. Queensland's largely 'bottom-up' approach to disaster management that gives responsibility to local government in the first instance, and prioritises collaboration is also an important part of the Queensland model. Effective collaboration requires good working relationships within and between government. In Queensland this was understood and modelled from senior management down, across the range of emergency agencies and the police. While many of these aspects exist in other jurisdictions, this paper argues that one key feature distinguishes Queensland's management of disasters, namely the presence of the State Disaster Management Group, a high level senior officials group, that provides for authoritative, decision making and confirms Queensland's claim to have an 'all hazard, all agency' approach to its disaster management arrangements. ®

Natural disasters are increasingly costly in human and economic terms. In Australia, Queensland, due to geography and population density, has the greatest risk profile of any state (Risk Frontiers, 2011). While hardly an enviable position to be in, this also means that Queensland has extensive experience dealing with disasters. In the summer of 2010-11, the organisational learning² by emergency agencies was seriously tested when almost 80 per cent of Queensland's 1.8 million kilometre land mass was adversely affected by rain events that caused extensive flooding. This disaster was soon followed by Cyclone Yasi, one of the most severe cyclones in living memory. In the aftermath, 36 people were dead (to date, three bodies have still not been recovered), in excess of five billion dollars of public and private infrastructure damaged or destroyed, and 2.5 million people adversely affected, as natural disaster relief and recovery arrangements were activated in all 73 of Queensland's local government areas (Queensland Government, 2011, p. 3-4). Queensland's disaster response is based on the four internationally recognised tenets of 'Prevent, Prepare, Respond and Recover', and the actions of disaster management agencies and volunteers during the 2010-11 event has been called 'global best practice' by outside observers.3 This article provides a descriptive account of the crisis unfolding in order to gain an understanding of the complexities confronting government and emergency agencies; analyses Queensland's emergency model and suggests that in important ways Queensland is different from other jurisdictions. Finally the paper argues that these factors along with past experience contributed to an effective 'global best practice' effort in 2010/11.

Methodology in judging success

Before proceeding, it is necessary to gauge the effectiveness and success of Queensland's management of the 2010-11 'rain events'. The literature speaks of the difficulty in rating the relative success or failure of public policies and government activities, particularly in relation to the 'paucity of policy oriented reflections' on the relative success of crisis management (McConnell, 2011, p. 65). This difficulty is compounded when the

¹ Organisational learning is often promoted in policy texts, but has not been broadly studied (Mahler 2010, p. 250).

² Queensland's disaster recovery recognised on world stage 16 June 2011 at http://www.qldreconstruction.org.au/news-media/54

³ Queensland's disaster recovery recognised on world stage' 16 June 2011 at http://www.qldreconstruction.org.au/news-media/54

⁴ Throughout December 2010, SDMG minutes confirm 'rain event' was the term used to describe the climatic conditions.



outcomes or results are subject to the appraisal of 'multiple constituencies' – as usually happens around crises, as there is frequently a lack of agreement between them as to what constitutes effectiveness, or success (Marsh & McConnell, 2010, p. 567). Not everyone agrees that the Queensland crisis was managed well. As any observer of the Queensland Flood Commission of Inquiry hearings would testify, stakeholders (for example, those assisting during disasters either as volunteers or as paid officials and those affected, such as flood victims or their families) use different criteria to judge success.

Judging a crisis response as a success or failure presents the evaluator with a range of methodological dilemmas. For example how do we distinguish 'success as a fact from success as interpretation'? (McConnell 2011, p. 64). To assist, McConnell has devised a framework that plots success on a scale from outright success to complete failure. He suggests crisis management responses will usually fit somewhere along this spectrum – in categories labelled as 'durable success' where success outweighs failures. to 'conflicted success' where successes and failures are equally balanced, to 'precarious success' where failures outweigh success. Bovens (2010, p.584) asserts that judging success should be distinguished between what he calls 'process' assessment and 'outcome' assessment. McConnell (2011, p. 68) provides a working definition:

A crisis management initiative is successful if it follows pre-anticipated and/or relevant processes and involves the taking of decisions which have the effect of minimising loss of life/damage, restoring order and achieving political goals, while attracting universal or near universal support and/no or virtually no opposition.

Based on this definition, this paper argues that Queensland successfully managed the 2010/11 crises, a judgement supported too in the assessment of the QFCOI interim report, which was generally supportive of the 'fundamental structure of the disaster management system' and made no substantive recommendations for change before the next wet season (p. 115). This paper argues Queensland's performance during this event, fits somewhere between outright success and the 'durable success' category on McConnell's success spectrum, in that the success of the 2010-11 event outweighed any purported failures.⁶

Stakeholders interviewed for this study, attribute Queensland's success to its prior experience in dealing with disasters as well as from learning from other jurisdictional experiences: Cyclone Larry (2006), the Gap storms (2008), the Victorian bushfires (2009) and Hurricane Katrina in the US (2005). Other states also have significant natural disaster experience. As such, that variable alone cannot fully explain Queensland's 'global best effort' mark. It is timely to ask therefore

⁵ As noted by Marsh and McConnell there are many claims about policy success, but few are supported by rigorous evidence.

⁶ While the QFCOI final report had 177 recommendations, it was generally satisfied with the work of emergency agencies. Its recommendations, particularly as they related to floodplain management, local planning instruments and future development taking flood considerations into account, is somewhat ambiguous, particularly as it relates to which jurisdiction – state or local – is responsible for final implementation (see McGowan, forthcoming).

what are the key points of difference between Queensland and other States, and are these differences sufficient to understand the effective response and demonstrated capacity of emergency agencies in 2010-11? Taking into account the subjective nature and inherent bias of judging success,⁷ it is argued that the 2010-11 response was a success for reasons that include both process and outcome related factors.

Process factors included:

- Regular, often twice daily, meetings of the SDMG.
 Present were representatives from local
- government and NGOs, power, telecommunication organisations and charities which ensured informed decisions based on the most up-to-date information possible;
- demonstrable cooperation between the all those involved (government, NGOs, private companies, charities and the ADF);⁸
- successful communication of up-to-date information was provided by the Premier and public officials after each SDMG meeting and broadcast across the state;
- the Queensland Police Service worked cooperatively with other disaster agencies, and effectively
- used social media technology to communicate information and field queries.

Outcome related factors included:

- no person going without clean drinking water despite up to ten communities with no water supplies or operating sewerage systems;
- in the days immediately after the disasters, no person reported a public health issue;
- a good disaster response is highly reliant on trained volunteers and in these disasters 2600 additional SES volunteers were deployed;
- offers of help were quickly matched with those urgently needing assistance;
- power and telecommunication facilities were more quickly restored after cyclone Yasi than in
- previous disasters, notably the smaller, less intense, cyclone Larry (DCS senior personnel, pers. comm., May 2011).

The Queensland difference

Australia's 'sunshine state' is no stranger to natural disasters (defined in legislation to include cyclones, floods, storm, storm tide, tsunami and bushfires).9 While other Australian states are also at risk from certain types of natural disasters, Queensland is unusually exposed to multiple threats. While it is the flooding and cyclones that are the most common threat in the summer months, these make up only one part of Queensland's 'complex disaster profile' (senior personnel, pers. comm., June 2011). While Western Australia has a similar threat exposure, the overall risk is lowered because of the relatively sparse population in many parts of the state, whereas Victoria and South Australia are more exposed to fire hazard. 10 Northern New South Wales shares the border with Queensland and is also exposed to similar weather conditions as southeast Queensland. Currently a memorandum of understanding is being developed between the two states to further develop cross-border SES arrangements.11

Queensland – Australia's most decentralised mainland state.

Since European settlement, successive Queensland governments have emphasised and promoted regional growth. This pattern of development has made Queensland the most decentralised state, with almost as many people living outside the South East region as in it (DEEDI, 2007). Currently there are 73 local government districts operating in Queensland (and a 74th district in Weipa, which is managed by the mining company Rio Tinto Aluminium). Melbourne is closer to Brisbane than Cairns and so perhaps unsurprisingly, some in the far north regard their capital city and the government that resides there with suspicion. This fact explains why past state governments initiated community based cabinet meetings that take the executive to regional areas of Queensland.

The dispersed, but relatively significant populations living in the regions, also has implications for the way the state's disaster management arrangements are organised, and explains the practical necessity for its 'bottom-up' approach to disaster management.

Queensland's disaster management arrangements

Within Australia, federal constitutional arrangements ensure that primary responsibility for disaster management falls to each state or territory. Disaster planning is premised upon the notion of shared

- 7 According to McConnell [2011], benchmarks for judging success include matching what occurred with, the stated objectives of crisis managers, benefit for individuals/groups/localities under threat, level and speed of improvement, adherence to industry standards, adherence to laws and contingency plans, comparison with the crisis experience of another jurisdiction, level of expert/ political/ public support for the initiatives.
- 8 Again, while not unusual in Australia this cooperation is in marked contrast to the events in New Orleans in 2005. As the Mayor of New Orleans at the time of Hurricane Katrina noted: 'I was still totally flabbergasted that by day three our federal and state governments had not pulled out all the stops to come and help us'. Later he attributed this lack of attention to one of three things 'race, class or partisan politics Pick one as there was some sort of discrimination happening' (Nagin, C 2011 pp. 168, 186).
- 9 The Disaster Management Act 2003 defines a disaster as 'a serious disruption in a community' which may be caused by natural or human acts or omissions (An Overview of the Queensland Disaster Management System, p. 2).
- 10 National risk profiles are currently being prepared under the National Strategy for Disaster Resilience.
- 11 Queensland Government response to the QFCOI Interim Report 2011, p. 11.



2600 SES volunteers were deployed during the response.

responsibilities, partnerships and collaboration between government and non-government sectors. When a disaster strikes, the principle of subsidiarity dictates that initial decisions on how best to respond are devolved down to the local level which is closest to the people and hence ideally located for deciding what needs to be done in the first instance (Wilkins 2009, p.4).

While the principle of subsidiarity applies to all Australian states, Queensland differs in its approach to disaster management because it operates an 'all agency position' as opposed to a combat agency model. whereby a particular, predetermined agency is responsible for managing a disaster in the first instance. Effectively this means that while in New South Wales, for example, NSW agriculture is the designated combat agency in any animal health emergency and the NSW Rural Fire Service is the agency of choice during a bushfire crisis (see NSW Emergency Management Arrangements, 2011), Queensland utilises a coordinated and focussed approach to disaster management, that not only includes government agencies but also involves non-government organisations like the RSPCA, Red Cross and telecommunication and power companies. All of these organisations and agencies are represented on the State Disaster Management Group (SDMG).

Queensland's disaster legislation

Recognising that disaster management requires a comprehensive approach, the Disaster Management Act 2003 updated 28-year Queensland legislation that was introduced after Brisbane's 1974 floods and Darwin's TC Tracy. The State Counter Disaster Organisation Act, passed in 1975, established the State Emergency

Service (SES) and remained largely unchanged until the state government, responding to terrorist attacks in New York in 2001 and a Council of Australian Government (COAG) report in 2002 in the lead up to a scheduled CHOGM meeting in Coolum, introduced new legislation in 2003. This legislation replaced two state level committees with a 'single peak disaster management, policy and decision making body', the SDMG. 13

The SDMG was created to provide a quick response mechanism for both the development of disaster management policy and the planning, preparation and coordination of the resources needed in times of disaster. 14 Initially comprising the Director-General (DG) of the Department of Premier and Cabinet, who remains the designated chairperson of the group, other members included the DG of the Department of Emergency Services (deputy chair-person), and other CEOs of selected departments. Following the machinery of government (MOG) changes in 2009 that reduced the total number of government departments to 13, all the DGs became members of the SDMG, which in 'peacetime' meets four times a year. Perhaps one unforeseen benefit was that with the smaller total number of government departments, all DGs became members - and as such were required to attend the quarterly meetings. The SDMG is therefore truly representative of every government department, empowered to make quick, authoritative decisions when necessary and enabled to take a whole-of- government approach to disaster management (DCS senior personnel, pers. comm., June 2011).

The SDMG is responsible for the development of the strategic policy framework around disaster

¹² COAG has driven a great variety of changes in natural disaster management since 2002/03 – including a much greater emphasis on coordination (see Natural Disasters in Australia: Reforming mitigation, relief and recovery arrangements (August 2002). URL: http://www.ag.gov.au/www/emaweb/rwpattach.nsf/VAP/(99292794923AE8E7CBABC6FB71541EE1)~Natural+Disasters+in+Australia+-+Review.pdf/\$file/Natural+Disasters+in+Australia+-+Review.pdf

¹³ See Queensland Parliamentary Debates (QPD), Reynolds, M., Disaster Management Bill, 2nd reading speech, 29 October 2003.

¹⁴ State Disaster Management Group - Annual Report 2003-04 p.7

management and for maintaining relationships with the Commonwealth government and non-government agencies. It is advised on available resources both within and outside the state that could be deployed during a disaster. It provides reports and recommendations to the responsible minister and based on this knowledge, prepares the State's Disaster Management Plan. Until December 2010, the state plan was unchanged since 2008. It was modified on December 22 to emphasise the tacit understanding of the centrality of local government in any disaster response. 15 In October-November 2010, the SDMG was extended to include the Local Government Association of Queensland (LGAQ). Following the disaster and subsequent recommendations by the QFCOI interim report, its membership again increased to include the Australian Defence Force (ADF) and Surf Life Saving Queensland. 16

Importance of leadership

Effective management of any crisis depends upon capable political and administrative leadership, whose duties include 'recognizing emerging threats, initiating efforts to mitigate them and deal with their consequences', and in the recovery phase provide direction to 're-establish a sense of normalcy' (Boin et al 2010, p. 706). As the discussion under highlights, both political and administrative leadership across jurisdictions and including the private sectors and NGOs fulfilled these criteria. Throughout the crisis local, state and federal government agencies acted collaboratively to restore normalcy and assist those affected. In this they were aided by Australia's intergovernmental arrangements that clearly set out funding and assistance criteria.

In 2009 despite previous disasters (i.e. Cyclone Larry) being managed reasonably well, the then director general of Premier and Cabinet foresaw that Queensland may not cope with a more extensive disaster. As a result the government commissioned a report into Queensland's disaster arrangements that while generally favourable, questioned some aspects of Queensland's disaster management system. It concluded that Queensland's lack of a designated coordinator potentially limited Queensland's capacity to respond to a more widespread disaster situation and argued that 'policing organisations have the capacity and competence to perform this role on a State-wide basis in a scalable way to deal with one or multiple disasters' (O'Sullivan & the Consultancy Bureau, 2009). It recommended an Assistant Commissioner

of Police be appointed with overall responsibility for state coordination. The report, handed down in 2009 was enacted in November 2010, one month before the flooding commenced.¹⁷

During the 2010-11 events, the police worked alongside emergency services personnel and local councils in a display of cooperation and teamwork. According to senior disaster personnel, 18 while the importance of relationships in crisis management was already understood, in the wake of Cyclone Larry (2006) they together with a senior police officer set about in purposeful consultation with the state's mayors to sure up understandings and to gain trust. Both organisations recognised some recommendations of the review would not be universally welcomed. As one senior official recalled, prior to amendments of the State Disaster Act 2003, 'a lot of shoe leather was worn out' traversing Queensland, in order to reassure mayors about the enhanced police role, and to stress that police would consult and assist rather than adopt the old style command and control approach, in the first instance. The feedback from many local councils in the aftermath of the crisis, suggest police throughout Queensland worked cooperatively and sensitively with other emergency personnel and local communities (pers. comm., July 2011). In doing so, police on the ground in affected communities, mirrored the behaviour modelled by deputy police commissioner, Ian Stewart, appointed as the state's Disaster Coordinator on the 24 December

The timing proved prescient. As those interviewed for this study noted, it is unlikely that the old disaster model, reliant upon comparatively limited numbers of dedicated disaster management personnel from EMQ and scores of volunteers being dispatched to where ever a local disaster had occurred, could have dealt with the unprecedented breadth of the 2010-11 disaster that included:

- all 314 residents evacuated from Theodore by helicopter;
- Condamine and Cardwell evacuated (in the case of Condamine, twice);
- Toowoomba flooding and then the Lockyer
- Valley devastation resulting in the loss of 22 lives, with more missing;
- 310 swift water rescues around the state (AFAC 2011);

¹⁵ This added to the four earlier tenets of the disaster plan: the prevent, prepare, respond and recover model, the all hazard response, the importance and responsibilities of all levels of the disaster management hierarchy, and ensuring communities were alert to natural disasters in their areas (see QFC0I Interim report 2011, p. 113).

¹⁶ Queensland Government response to the QFCOI Interim Report, August 2011, p. 10.

¹⁷ The commissioning of this report is one factor contributing to changes in the state's disaster management approach. As such it provides evidence of programmatic success, as the changes introduced because of it contributed to the effective response of an unprecedented disaster in 2010-11. This report also positively impacted on the final outcome of the 2010-11 crisis which enabled a better response across larger tracts of land than would have been possible, if (for example) police had not been given a lead agency role (for more on evaluating success see Marsh and McConnell [2010] and Bovens (2010) p. 584-85).

¹⁸ Fourteen structured and semi-structured interviews were conducted with senior staff from Director-General down, across a range of Queensland's disaster management agencies: The Department of Community Safety, Emergency Management Queensland, Fire and Rescue Service, Queensland Ambulance Service, as well as informal conversations with local government mayors, councillors, and senior police at the local government conference attended by the author in 2011 and/or by follow-up phone calls.

- 250 people evacuated from Cairns public and private hospitals to Brisbane – making it the largest aeromedical evacuation ever undertaken in Australia;¹⁹
- Everywhere from Rockhampton north isolated by road and rail:
- large areas of Brisbane and Ipswich, including parts of their CBDs, underwater;
- One of the most ferocious cyclones (Yasi) ever on record building in the Coral Sea;
- 10,500 people evacuated during TC Yasi,
- 136 000 residences affected, and
- a damage bill estimated at \$5.8 billion dollars.

This was the first time that police worked alongside non-uniformed disaster management staff, out of the same complex at Kedron. By all accounts, the level of cooperation that existed between uniformed police, Fire and Rescue service, and the Queensland Ambulance – organisations that all have their own distinctive cultures and hierarchies— and non- uniformed personnel was noteworthy and indicative of the emphasis placed on collaboration and the importance placed on fostering relationships by senior management. 'We may not all like each other, but we certainly respect each other' was a common refrain.

From drought to flooding plains – background to the crises

Following years of drought and restrictions on water usage, December 2010 was the wettest month in Queensland's recorded history.²⁰ The presence of a strong La Nina alongside the normal monsoon season ensured Queensland received a record rainfall. It was relentless. As dam levels rose, and the ground became completely saturated, Queensland braced itself for flooding. In the fog of the disaster, with events unfolding at a rapid rate in multiple locations, and with much of the data imperfect or incomplete, Queensland's disaster management agencies met regularly, under the intense scrutiny of the media and political spotlight, and implemented a response.

The SDMG 'war room'

By early December, some towns in North Queensland were already feeling the effects of the heavy rain, while in the lead-up to Christmas, Cyclone Tasha dumped more rain on Rockhampton and the South-East region. The first extraordinary meeting of the SDMG occurred on 24th December. The meetings of the SDMG took place at the State Disaster Coordination Centre in Kedron. The SDMG minutes convey little of the frenetic pace of those involved – many more than the eight members required to make up a quorum were present at every meeting. By the 24th December, members of the SDMG as well as the Premier, Deputy Premier, Minister for

Police, Corrective Services and Emergency Services and other relevant ministers were getting regular 5am situational reports. Special units and the police air wing were on constant stand-by and the state was at the highest level of preparedness, with road tek (sic) crews ready to be activated and road and rail networks being constantly monitored. Despite all these preparations, there was still an air of uncertainty about whether the state's resources could cope. It was at a meeting on the day before Christmas that the chairperson, Ken Smith raised the issue of appointing a State Disaster Coordinator (SDC) for the December rain event. It was agreed that Deputy Commissioner Ian Stewart, from the Queensland Police Service, would be the SDC effective immediately. The news was quickly relayed to district and local level coordinators.

As the rain continued, the number of extraordinary meetings increased. Beginning in December there were four extraordinary meetings on the 24th, 28th, 30th and 31st. In January, meetings took place on the 2nd, 4th, 5th and then following the 'inland tsunami' that devastated Toowoomba and the communities down the range in the Lockyer Valley, the number of meetings increased to twice daily. As the immediate crisis abated, the SDMG meetings returned to one per day for the 15th, 16th, 17th, 21st, 29th, 30th and 31st. When Cyclone Yasi started bearing down towards North Queensland in early February, the numbers of meetings again increased to twice daily.²¹

Four days after his appointment, on the 28th December, lan Stewart informed the SDMG that many local disaster management groups were operational. He spoke of 'hot debriefs', of disaster declarations having been made and the SDMG were told that a request for ADF assistance was under way.

By the 31st December the SDMG were given a summary of 'hot spots around Queensland' and were told that in Emerald, Condamine and Theodore, evacuations – in some instances of the entire town - had occurred. The ADF was on the ground and assisting with evacuations, the Red Cross was offering counselling to residents in Condamine and manning evacuation centres, meanwhile in Rockhampton 200 houses had been inundated and plans were underway to relocate the Royal Flying Doctors to Gladstone. In Yeppoon there was a problem with what to do with a ripe and ready for market pineapple crop, while in Bundaberg the SDMG dealt with rumours (later proved false) that the Paradise Dam had breached its wall. Returning from a tour of affected regions the SDC reported that the state recovery committee had met, meanwhile, as Queensland's coalmines filled with water, and the loss in export revenue was predicted to be significant, the Premier wrote to the Prime Minister requesting level six assistance.22

While these events were widespread and difficult enough, by the 5th January Major General Mick Slater

 $^{19\ (\}text{see too URL: http://www.defence.gov.au/news/raafnews/editions/} 5302/5302.pdf)$

²⁰ Australian Bureau of Meteorology, Special climate statement 24: an extremely wet end to 2010 leads to widespread flooding across eastern Australia, 2011, p.2, cited in the Interim Report 2011, p. 24.

²¹ The information contained in this paragraph and much of the information about what was discussed at the meetings that follow were sourced from the SDMG extraordinary minutes, provided to the QFCOI and a copy provided by the DCS to the author.

had been appointed to the position of chairperson of the Queensland Flood Recovery taskforce and the director-general and chair of the SDMG announced that with this and the Commonwealth Recovery Cabinet sub-committee now in place, meetings of the SDMG would be scaled back in order to allow these bodies to take a lead in the recovery. The director general of DCS, Jim McGowan raised the issue of leave management for volunteers and of the need to have a fatigue management policy. No further extraordinary meetings of the SDMG were planned. Then the unthinkable happened.

Managing the unmanageable

Just like much of Queensland, rain in December and January had left the Toowoomba catchment area saturated. In late December, the three dams servicing Toowoomba's population of 162 057 had reached 53.2 per cent. By the 10th January this level had risen to more than double that (127.2 per cent). That day, two intense thunderstorms crossed Queensland. By 11.00am they had joined and were headed in a southwesterly direction, towards the Toowoomba range. The heavy rain that resulted caused 'severe flash flooding' that drowned a mother and her son as they drove through a city intersection. As the QFCOI interim flood report noted 'this was not a situation in which any agency could have effectively warned residents of what was to come' (p. 230). The rainfall had already triggered the Toowoomba regional council to call a meeting to consider activating the local disaster management group. Present at that meeting were representatives of the Queensland Ambulance Service, the Queensland Police Service, Queensland Fire and Rescue, and Emergency Management Queensland, Telstra and the ABC. As they deliberated, calls started coming in about cars and people being swept away.²³

The SDMG met twice daily throughout this time. At the meeting on Wednesday 12th, along with the Premier, Deputy Premier and state ministers sat the Prime Minister, Julia Gillard, Senator Joe Ludwig, Defence Minister Stephen Smith and the Chief of the Defence Force Angus Houston. Also present either in person or via telephone were the mayors of Brisbane, Ipswich and Somerset, along with representatives from BoM and District Disaster Coordinators from Brisbane, Ipswich and Toowoomba.

While a working party made up representatives from ENERGEX, Police, Department of Public Works, Brisbane City Council and the deputy premier dealt with the imminent loss of power to the Brisbane CBD, the SDMG was informed by BoM representatives that the dams above Brisbane had peaked at 191 per cent the night before, and that controlled water releases would need to continue for the next two days until their flood compartments were empty.

The State Disaster Coordinator then reported on the conditions across Queensland. In Central Queensland the road to the south of Rockhampton was still closed, meanwhile the river at Chinchilla was flooded. Condamine had once again been evacuated, while St George, Surat, Warwick and Stanthorpe were being closely observed. In Toowoomba, police were still attempting to access areas of Murphy's Creek and Grantham to carry out search and rescue activities. This had been delayed due to poor weather conditions. In the township of Lowood, eight roof top rescues had been conducted (scores more were conducted throughout this event). The police were preparing for the rivers in Brisbane and Ipswich to peak. In Ipswich, ten areas had been evacuated and there were currently 12000 people registered at evacuation centres.

As flooding of the capital city began, two evacuation centres were established as the central business district was shut down. Over the next few days the SDMG would deal, among other things, with:

- Many public transport pontoons, a floating restaurant, and barges that had either broken free or were at risk of breaking free from their moorings. All threatened critical infrastructure. Further up on the Moggill stretch of the river, the Moggill ferry had broken free of one of the chains that secured it and was at risk too of being swept down the river;
- There was concern that a major private hospital near the Toowong reach of the river may need to be evacuated;
- All trains in the Mayne Rail yard had been moved and the yard was ready for evacuation if required;
- City cats and ferries had been removed from the river;
- Bus ways around the city centre were closed;
- A major piece of urban infrastructure, a floating, concrete walkway, had broken free of its moorings and along with numerous privately owned boats and pontoons was headed toward the river mouth and risking major bridges;
- Many suburbs across the city were flooding, with vehicle access and electricity supplies cut.

As these events continued to escalate, the SDMG ensured that towns and regions across the state were supplied with essential goods, access to clean drinking water, food and other supplies.

When the flood waters subsided, over 7000 volunteers armed with brooms, mops, gloves, buckets and shovels, joined 600 soldiers in the clean up around the capital. The Brisbane City Council organised buses to ferry volunteers to the worst affected areas, as strangers and passers-by pitched in to clean up the mud and muck. While this process was not perfect and later some people complained that there were so many volunteers

²² Level Six refers to Defence Assistance to the Civil Community (DACC). DACC Category 6 is support to civil authorities in the performance of nonemergency law enforcement related tasks where there is no likelihood that Defence personnel will be required to use force. The procedures for processing Category 6 requests is in annex H see: (http://www.floodcommission.qld.gov.au/__data/assets/file/0005/7673/Paule_Kevin_ attachment.pdf, p. 5)

²³ The QFCOI interim report (2011, p. 228-33) details these events.



Queensland Emergency Operations Centre, Ambulance Communications. Courtesy of Department of Community Safety.

'we felt like sea-gulls fighting over a chip', others remarked on the 'amazing sense of duty' that had been displayed (Papadikis, 2011).

In the following weeks the SDMG would be confronted with another natural disaster as Cyclone Yasi formed off the North Queensland coast. In the days leading up to the 3rd February, voluntary evacuations commenced as the ADF prepared to evacuate 234 patients from the Cairns base hospital. The day before Yasi made landfall, BoM notified the SDMG that it had been 'upgraded to a Category 5' cyclone and that 'severe weather conditions' were expected. Yasi's wind speed was measured at 285 km/h when it hit landfall at Mission Beach. Before the SDMG meeting on the Wednesday before the cyclone hit, a teleconference occurred between all police areas in the north of the state. The message was conveyed that 'emergency services may not be able to respond to calls for assistance and that people may have to be self-sufficient for some time after the cyclone hit'. Police were warned to 'prepare for significant trauma in the community'. Individual agencies including the ADF, DCS, Ergon Energy, Optus, LGAQ, Department of Transport and Main Roads, Queensland Health briefed the SDMG and the Premier about their preparations.

The literature on crisis management often refers to crisis in relation to national security (defence) issues rather than natural disasters per se. Furthermore, most of the literature uses overseas examples. Connery's observations about crisis management, particularly as it relates to the East Timor intervention, indicates there are some common themes that are applicable to both security crises and natural disaster emergencies.

In particular Connery notes that Australian crisis policymaking 'tends toward the collegial approach' and that this is in part due to the time pressures involved in crisis decision-making (Connery, 2010, pp. 142, 143). McGowan (2012) supports that noting that 'relationships need to be developed during "peace time" so that roles and responsibilities of all agencies and response personnel are clear'.

Through interviews conducted for this study, from the evidence provided in various governmental reports, as well as accounts provided by the SDMG extraordinary minutes, it is apparent that relationships and networks developed over a long period of time were a vital part in successfully managing these disasters. The contrasting evidence of Hurricane Katrina highlights this point, where a lack of trust, partisan politics and an uncoordinated response extended the suffering of thousands of New Orleans' citizens. This study argues that Queensland's regional pattern of development, its emphasis on a bottom up, local government in the first instance response and the importance placed on fostering relationships that is well-recognised and seemingly practiced by the senior staff of Queensland's emergency management agencies, was a vital contributor to Queensland's successful response.

The 2010-11 disaster – a retrospective review of the evidence

As large tracts of the state vanished under flood-water, the management of the response and recovery effort, led by the state's peak coordinating group, the SDMG

²⁴ Scholars such as Allan McConnell (University of Sydney) and Paul t'Hart (ANU) have both published extensively on crisis management, but most often use overseas cases as examples.



Queensland's 'all hazard, all agency' approach to its disaster management arrangements.

along with the actions of ordinary Queenslanders, later dubbed the 'mud army', gained world-wide attention. The Queensland Police Service's innovative use of social media to communicate with the state's residents would later be hailed as 'a world leading effort' in 'public engagement and emergency disaster responsiveness' (Queensland Police Service, 2011). As the disasters were unfolding, frequent media briefings by the Premier, flanked by experts in hydrology, or in uniform, provided information and calming reassurance. Her heartfelt appeal to Queenslanders succeeded in rallying the troops and waking a spirit of community that was palpable, a fact that delegations from overseas later commented on (Lutton, 2012).²⁵ In the initial weeks of recovery, the Premier's poll ratings received a substantial, if temporary, boost (Walker, 2011).

Across Australia, partisan politics diminish during times of natural disasters, as parties, politicians, and community groups from across the state and beyond, respond. Yet as Boin *et al* 2008 argue, disasters always have a political element to them, and it is the political dimension that often inhibit necessary reforms, including the development of more resilient, less dependent communities, despite this being a purported and agreed to aim of state and federal governments (see COAG 2010; Kapucu & Ozerdem, 2013 p.217). Former Attorney-General, Robert McClelland (2012) gave voice to this most recently:

The trouble is that politicians at all levels tend to focus and want to be seen after a disaster occurs because that's when it has most media attention. To get that, to be part of that scene, there is a lot of money that goes into post disaster compensation payments.

In responding to the need to better target government resources he continued:

Now these are \$1000 payments that go to individuals. They're in addition to hardship payments that are jointly funded by the states and territories. So what I have consistently said, we need to evaluate how efficient these payments are, these \$1000 compensation payments. Firstly to streamline them so that we target them to those who are most in need, but secondly to look at shifting a substantial amount of that money into preventative measures and one good example is last year, following the Queensland floods and cyclone Yasi, was about \$840 million in these \$1000 payments that went out to individuals. Now there was certainly a spike in consumer spending, plasma TVs and so forth, but there was no spike in insurance policies or buying generators for the next event.

McClelland's comments draw attention to the political context surrounding disaster management. In the case of the Bligh government, polls indicated an immediate 15-point boost in the polls, which quickly dissipated after the event. The short-term gain in popularity was probably helped by the \$1000 largely untargeted payments handed out to residents, in some instances for seemingly inconsequential hardship (no power for a relatively short period of time). However, as some policy analysts have noted, the longer-term consequences of these untargeted payments include raising expectations of what government's should do, reduce individual resilience as a result and limit the resources that could be spent on mitigation programs that would be cheaper and of more benefit in the longer term (see McGowan, 2012).

Conclusion – what does this tell us?

There are many lessons that can be learnt from Queensland's disaster of 2010-11. Most importantly, this paper argues that there is a clear advantage to having all the state's director-generals serving as members of the peak decision making body - in Queensland's case – the SDMG. Effectively, its whole-of-government perspective confirms Queensland does have an 'allagency' approach to its disaster management model. While effectively operating as a 'war-cabinet' during times of disasters, (meeting twice daily during the December/ January events), in 'peace-time' the SDMG meets quarterly to plan, strategise and prepare for future disasters (DCS senior personnel, pers. comm., June 2011). One important by-product of the all-agency approach is that any decision taken at those meetings are then enacted, providing a level of surety to those further

²⁵ Visiting overseas delegations from overseas countries have reportedly been amazed at the level of volunteerism on display during Australian disasters, noting such things don't occur in their countries (pers. correspondence with senior emergency personnel 2012).



down the chain of command, as well as those outside of government (i.e. insurance companies and NGOs).

Queensland's particular pattern of development and the decentralised nature of the state have perhaps necessitated a greater emphasis on the bottom-up approach than elsewhere. The state's disaster management alliance places an emphasis on the centrality of local government. This helps ensure a useful and timely information flow to the SDMG from the regions, and ultimately a more coordinated approach to planning between local and state jurisdictions.

While these arrangements are articulated in state and federal legislation, and seem to be understood, what is not so immediately apparent is how these arrangements contribute to building trust between the disaster agencies - many of whom have different perspectives on what should be prioritised. Interviews with key personnel at the state level, as well as more informal conversations with local councillors, confirm that the relationships developed during 'peace-time', enabled a level of understanding and communication during the fog and urgency of a disaster. Leadership commitment at the state and local level is crucial to building the networks that are a fundamental part of any successful disaster management approach. These networks are not just between government agencies and the different tiers but also between private companies and NGOs, who all have input into the SDMG. Finally, the Queensland response to the 2010-11 natural disasters

highlighted the importance of coordination, in clearly understanding what needed to be done and who was responsible for doing it; in having the most up to date information available and in having a flexible and scalable set of arrangements.

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About the author

Dr. Tracey Arklay is with the Griffith University, in Queensland. Her research interests are Queensland politics and history, political biography, elections and electoral systems. She can be contacted at t.arklay@griffith.edu.au.