

3

3 Disaster frameworks, preparation and planning

3.1 Disaster management framework

3.1.1 National disaster management framework

Queensland is part of a national disaster management framework, under which states and territories are responsible for planning for and responding to disasters and emergencies. However, in major disasters, the states and territories can seek assistance from the Commonwealth Government, as Queensland did in the 2010/2011 floods. Chapter 5 *Emergency response* has more information about the roles played by Commonwealth agencies, and in particular the Australian Defence Force, during the floods.

3.1.2 Queensland disaster management arrangements

The *Disaster Management Act 2003* provides the legislative basis for Queensland's disaster management arrangements. It establishes a disaster management hierarchy of three levels: the state disaster management group, district disaster management groups, and local disaster management groups.

In accordance with the Act, Queensland's state disaster management group has prepared a state disaster management plan which identifies four phases of disaster management: prevention, preparedness, response and recovery.¹

Local government plays a central role in all four phases and represents the front line in Queensland's disaster management arrangements.²

Local disaster management groups, established by local governments, have principal responsibility for managing disasters because they are best placed to decide what resources are required, when they are required and how best to apply them.³ A local group without sufficient resources to respond to a disaster can seek help from the district disaster management group. If the district group cannot provide the necessary assistance, it can request the aid of the state group. The state group, in turn, can seek assistance from the Commonwealth.

In 2008, the Queensland Government commissioned an independent review of Queensland's disaster management legislation, policies, guidelines and plans, to ensure that they were appropriate and effective (the O'Sullivan Review).⁴ The review also considered management and accountability in the State Emergency Service (SES). Many of the review's recommendations took effect in November 2010 through amendments to the *Disaster Management Act 2003*. One of the major changes was a shift in responsibility for the co-ordination of the disaster response phase from Emergency Management Queensland to the Queensland Police Service (see 3.1.3 *Disaster agencies in Queensland*).

Set out below is a summary of the arrangements and a brief description of the main government agencies involved in disaster management.

State level

The state disaster management group is the peak decision-making body for disaster management in Queensland. The state group is made up of the chief executive officers of all government departments, the principal officer of Emergency Management Queensland and chief executive of the Local Government Association of Queensland. It is responsible for ensuring that the state is in the best possible position to respond to potential disasters; part of that responsibility is the development and review of the disaster management strategic policy framework and the state disaster management plan. The state group co-ordinates the disaster response and recovery activities across all government agencies. It also liaises with Commonwealth agencies (the Australian Defence Force in particular) and non-government organisations with a role to play in disaster management.

The chairperson of the state group – the chief executive of the Department of the Premier and Cabinet – is responsible for appointing a state disaster co-ordinator and state recovery co-ordinator. During the 2010/2011 floods, Deputy Police Commissioner Ian Stewart was appointed the state disaster co-ordinator. Major-General Michael Slater DSC AM CSC currently holds the temporary appointment of state recovery co-ordinator.

State disaster management plan

The *Disaster Management Act 2003* requires that all disaster events be managed in accordance with the state disaster management plan.

The state plan articulates Queensland's disaster management arrangements. The current state plan was approved by the state disaster management group on 22 December 2010, during the Queensland floods. Until then, the 2008 version of the state disaster management plan applied. The 2008 state plan was based on four tenets:

- its approach should be based on the four disaster management phases of prevention, preparedness, response and recovery
- disaster management plans should cater for all hazards and disaster risks
- the responsibility for disaster management is to be shared among various agencies at all levels of the disaster management hierarchy
- communities need to be alert to natural disaster hazards in their area and informed about what to do in disasters.

The 2010 state disaster management plan reflects the changes made in November 2010 to the *Disaster Management Act 2003*. Importantly, the updated plan incorporates a fifth tenet that emphasises local level responses as central to Queensland's disaster management arrangements.

District level

District disaster management groups are the middle tier in the disaster management hierarchy. There are currently 23 district disaster management groups, each covering one or more local government regions. (See 5.6 *Boundaries* for more information on the interplay between boundaries.)

District disaster management groups must develop district disaster management plans for their geographic areas. Each district group is chaired by a district disaster co-ordinator who is a police officer at the rank of Inspector or above. The district disaster co-ordinator also co-ordinates resources across the district and seeks state assistance as needed during major disasters.

Local level

Local level disaster management is the foundation of Queensland's disaster management arrangements, and played a pivotal role in all phases of the 2010/2011 floods.

Under the arrangements, each local government establishes a local disaster management group whose functions include:

- developing and annually reviewing local disaster management plans for its region

- managing operations during a disaster
- liaising with the district group about the local group's disaster management activities
- educating members of the community about how they can prepare for, respond to and recover from disasters.

The mayor or another councillor of the local government is the chairperson of the local group and must appoint a local disaster co-ordinator for the region.

In 2009 the O'Sullivan Review confirmed that the pivotal role of local level groups was sound and effective, provided they received necessary resources and guidance from the district and state levels.⁵

More detail about local government's role in the response phase to the 2010/2011 floods can be found in *5.1 Local government response*.

3.1.3 Disaster agencies in Queensland

During the 2010/2011 floods, numerous government agencies were involved during the preparation, response and recovery phases. The main disaster organisations are described below.

Emergency Management Queensland

Emergency Management Queensland leads the co-ordination of disaster *prevention, preparedness* and *recovery* activities in Queensland. (Since November 2010 the Queensland Police Service has been responsible for coordinating the *response* phase of disaster management.) Emergency Management Queensland's functions include:

- monitoring the performance of state, district and local disaster management groups and their compliance with legislation and policy (see further discussion on this point at *3.3.2 Oversight of disaster management plans*)
- liaising with the Commonwealth Government about disaster management
- providing disaster management training, advice and other support to state, district and local disaster management groups (see *3.4 Disaster management training*)
- arranging the re-supply of essential goods to isolated communities (see *5.7 Re-supply* for discussion of re-supply arrangements during the 2010/2011 floods)
- managing the SES (*5.3.7 State Emergency Service* discusses the role of the SES during the 2010/2011 floods).⁶

Emergency Management Queensland produces guidelines to assist local, district and state disaster management groups in preparing their disaster management plans, and in other matters related to disaster planning (for example in how to evacuate communities). The agency is currently reviewing the local government disaster planning guidelines.⁷ The updated guidelines will be finalised before the next wet season and will assist local governments to revise their local disaster management plans. Other guidelines (for example, evacuation guidelines) are in draft form and will also be completed before the next wet season. Issues about the development and review of the guidelines are addressed at *3.3.3 Disaster management guidelines*.

Disaster response agencies

The Queensland Police Service leads the response phase in disasters, with senior officers performing the roles of district disaster co-ordinators during the 2010/2011 floods. During disasters, a temporary policing structure may be created in a region to cater for day to day policing as well as disaster response work.⁸

The SES is Queensland's primary response agency for storm and flood emergencies, but also provides support to other emergency service agencies.⁹ The SES is almost entirely staffed by volunteers who are organised into local groups and who work closely with local government. SES volunteers were involved before, during and after the 2010/2011 Queensland floods and have a continuing role in disaster preparation activities.

The Queensland Fire and Rescue Service provides response and rescue services for all hazards, including floods. Some firefighters are trained in swift water rescue and were called upon to perform rescues during the 2010/2011 floods (see section 5.3.1 for discussion of the role of the Queensland Fire and Rescue Service).

As well as its normal role in responding to medical emergencies, during the floods the Queensland Ambulance Service was involved in the co-ordination of aeromedical services, particularly in regional and isolated areas.¹⁰

Outside times of disaster, each of the disaster response agencies has a role in educating the community about disaster management and their agency's role in responding to disasters.

3.1.4 Disaster framework in the 2010/2011 floods

On the basis of the evidence the Commission has considered thus far, no changes are required to the fundamental structure of the disaster management system before the next wet season.

When the system operated as intended during the 2010/2011 floods, it functioned effectively. In some cases it did not operate as intended, requiring some improvement before the next wet season to address deficiencies in:

- awareness about the roles and responsibilities of local government, the Queensland police and other disaster agencies during a disaster (detailed in *3.4 Disaster management training*)
- local government capability to respond to disasters (detailed in *5.1 Local government response*)
- communication between the local, district and state disaster management groups during a disaster (detailed in *5.2 Communication between local, district and state groups*).

The arrangements with the Commonwealth generally worked well and the support provided was responsive and effective.¹¹ The ways in which those arrangements could be enhanced are discussed further at *3.2.2 State level planning*.

3.2 Preparation and planning

3.2.1 Local government preparation

Local governments across the state prepared in different ways for the 2010/2011 wet season and the ensuing floods; some took practical measures, while others took little action. Those local governments which had experienced flooding in early 2010 had a better understanding of what was needed to prepare their communities for the following wet season.

Most flood-affected councils, including Central Highlands, Balonne, Banana, Brisbane, Gladstone, Ipswich, North Burnett, Maranoa, Mackay, Moreton Bay, Goondiwindi, Somerset, and Southern Downs established stockpiles of sand and/or sandbags and distributed these as required before the floods.¹² In Brisbane, over 300 000 sandbags were filled and distributed,¹³ while around 10 000 were stockpiled by the Central Highlands Regional Council¹⁴ and 11 000 distributed by the Ipswich SES.¹⁵

The Fraser Coast Regional Council constructed a temporary levee in Maryborough,¹⁶ while new levees were constructed and existing levees inspected across the Balonne Shire and Goondiwindi region.¹⁷ The Balonne Shire Council also set up water pumps in the town of Dirranbandi to combat the possibility of leaks from an existing levee.¹⁸

The Gladstone, Ipswich, Central Highlands and Mackay local governments cleared vegetation and debris from drainage systems and flood gates to ensure these would not back up or overflow with the heavy rainfall predicted over the wet season.¹⁹ The Balonne Shire Council blocked the St George stormwater system to prevent backflow inundation.²⁰ The Ipswich, Central Highlands and Banana local governments checked and updated emergency supplies and equipment.²¹ The Central Highlands Regional Council provided its local SES and emergency service units with a new flood boat, new tyres for an existing vehicle, replacement boat propellers and hired an additional four wheel drive vehicle.²² The Council also worked with the Bureau of Meteorology and other bodies to ensure its ALERT river height and rainfall gauge network was operating correctly.²³

The ability of councils to prepare properly was influenced by the same factors that affected their ability to respond to the disaster: geographic differences and vulnerability to particular types of disasters; the priority they gave to disaster management; their experience in dealing with disasters; the resources available for disaster management; and the expertise and training of their staff.

See *5.1 Local government response* for a further discussion of local government response to the floods including recommendations for improvement.

3.2.2 State level planning

During the 2010/2011 floods the state disaster management group held 18 extraordinary meetings. Representatives from various non-member organisations attended these meetings and contributed to the decisions about the response and recovery.

The Australian Defence Force played an important role in the response through the deployment of helicopters to evacuate communities as well as to re-supply isolated communities. In other Australian jurisdictions, the defence force is a member of the relevant state or territory emergency committee (the equivalent of Queensland's state disaster management group).

The Australian Red Cross also played a significant role in both the response and immediate recovery phase through its management of evacuation centres. More information about the role of the Red Cross can be found in 5.5.6 *Australian Red Cross involvement in evacuations*.

The important role of these agencies in the response to the 2010/2011 floods could be enhanced by their involvement at an earlier stage in the state disaster management group's preparation and planning for disasters.

Recommendation

3.1 The state disaster management group should include representatives of the Australian Defence Force and the Australian Red Cross in its planning and preparation for the next wet season.

Recommendations about the role of essential service providers in state level preparation and planning are included in chapter 6 *Essential services*.

The role of the Australian Red Cross in local and district disaster management groups is discussed in 5.5.6 *Australian Red Cross involvement in evacuations*.

3.2.3 Risk management

Queensland adopts a risk management approach to manage disasters.²⁴ The state disaster management plan describes this as 'a systematic process of identifying, analysing, assessing, treating and mitigating risk to people, property and the environment'.²⁵

The state disaster management plan indicates (as did the 2008 version of it) that a state-wide register of Queensland's natural hazards is to be developed. This would include an assessment of potential disaster risks and how they are to be mitigated. Specifically, the 2010 state disaster management plan states:

EMQ (Emergency Management Queensland) is responsible for ensuring the conduct of a state-wide prioritised natural disaster risk assessment to inform the development of the State Risk Register. A state natural hazard risk assessment is being conducted in 2010-11 and an overview of the results will be provided in future versions of this Plan.²⁶

The state-wide natural hazard risk assessment was not completed during the currency of the 2008 plan which first proposed it, but it is presently under way. Once finished, it will be provided to local governments to help in refining their local disaster management plans. On the strength of the risk assessment's conclusions, the state will work with local governments most at risk of flooding. The risk assessment will also form the basis for the state-wide risk register, which is expected to be completed in time for the 2012/2013 wet season.

The importance of a hazard risk profile in disaster management was raised in the O'Sullivan Review.²⁷ The review emphasised the need to ensure that appropriate risk assessment informs strategic and policy decisions at all levels of the disaster management hierarchy.²⁸ It also suggested that the state disaster management plan should provide a strategic overview of the state's hazard and risk profile and agreed risk management strategies for certain disasters in certain parts of the state.²⁹

Recommendation

- 3.2 Risk management is fundamentally important to disaster management. The Queensland Government should, before the next wet season, ensure that the state-wide natural hazard risk assessment is completed and its results provided to local governments.

3.2.4 Activation level terminology

Disaster management groups use activation levels to describe their status in times of disaster. For example, the state disaster management group uses the following activation levels:

- ‘alert’, when warnings of a potential disaster have been received
- ‘lean forward’, which indicates an increased level of readiness; disaster co-ordination centres are placed on standby
- ‘stand up’, when emergency response is under way; disaster co-ordination centres are activated
- ‘stand down’ indicates the transition stage from response to recovery.

Local and district groups’ use of activation terminology is idiosyncratic; there is no requirement for them to use the same terminology as each other or the state group. This can create difficulties. For example, the Bundaberg local group’s use of different terminology from other participants in a disaster management teleconference caused confusion.³⁰

In large-scale disasters, where a number of disaster management groups are activated and are communicating with each other, a consistent use of terminology among the disaster management groups would avoid uncertainty. It may also be useful when councils seek assistance from other councils during a disaster. (Council-to-council assistance during the 2010/2011 floods is discussed in greater detail in 5.1.1 *Council-to-council assistance*.)

Ipswich City Council supports adoption of consistent activation terminology across local, district and state groups. Brisbane City Council, on the other hand, considers that terminology should be tailored to the circumstances of each council.

The issue of whether consistent terminology should be adopted requires further examination. As a starting point, it should be included in Emergency Management Queensland’s consultation with local governments as part of its review of local disaster management planning guidelines.

Recommendation

- 3.3 Emergency Management Queensland should, as part of its review of local disaster management planning guidelines, consider whether consistent activation terminology should be adopted.

3.3 Disaster management plans

State, district and local disaster management groups must develop disaster management plans that address risks in the areas for which they are responsible.³¹ Disaster management plans must be consistent with the Emergency Management Queensland planning guidelines and with the Disaster Management Strategic Policy Framework. Local disaster management plans must be approved by the relevant local government and must be made available for inspection by the public. The *Disaster Management Act 2003* requires that local and district groups review the effectiveness of their plans at least annually. Part of Emergency Management Queensland’s function to assess the effectiveness of disaster management includes reviewing local, district and state disaster management plans.

3.3.1 Local disaster management plans

The adequacy of local disaster management plans varied at the time of the 2010/2011 floods. Some had been revised and consolidated following council amalgamations in 2008,³² others had not.³³ Some plans had been amended to take into account changes to the disaster management legislation (in November 2010), while the review of some plans had not been completed or commenced.³⁴ Some plans had not identified the isolation of communities which occurred in the 2010/2011 floods as a possible risk.³⁵

Emergency Management Queensland was involved in developing some plans³⁶ but played no part in the production of others.³⁷ It said that it had a limited capacity to assist local groups prepare their plans.³⁸ (At least one local government engaged a private consultant to review its local disaster management plan.)³⁹ The view of the Local Government Association of Queensland was that Emergency Management Queensland's planning guidelines did not provide sufficient detail to satisfy the intent of the legislation.⁴⁰ Emergency Management Queensland is currently revising its local government disaster management planning guidelines. The Local Government Association has also expressed its willingness to support the development of plans.⁴¹

Many local disaster management groups are reviewing or will review their disaster management plans to address the issues arising from the 2010/2011 floods. (Under the *Disaster Management Act 2003*, all groups must annually review their plans.) For example, Ipswich City Council, having concluded that its plan was not user-friendly, is amending it (with funding from the Natural Disaster Resilience Program)⁴² so that the plan will be a series of step-by-step guides based on the different disaster phases.⁴³ Somerset Regional Council has also obtained funding to review its local disaster management plan.⁴⁴ The Local Government Association considers that priority should be given to ensuring that each local government has a plan that caters for large-scale events such as the 2010/2011 floods.⁴⁵

In addition to having a plan in place, it is important that members of local disaster management groups understand the local disaster management plan. One local disaster co-ordinator stated that he and the council-employed SES controller would have been the only council employees familiar with the local disaster management plan.⁴⁶

Local disaster management plans should be as accessible as possible to the local community. (The *Disaster Management Act 2003* requires a local government to make the local disaster management plan available for inspection.)⁴⁷ Any person can also obtain a copy of it by paying an appropriate fee. Local governments could increase general community awareness and understanding about local disaster management in their regions by publishing their plans (or relevant parts of their plans) on their websites.

Recommendations

- 3.4 Every local government susceptible to flooding should ensure that, before the next wet season, its local disaster management plan:
- is consistent with the *Disaster Management Act 2003*
 - addresses local risks and circumstances
 - can be used easily in the event of a disaster.
- 3.5 Every person who is required to work under a local disaster management plan should be familiar with the plan before the next wet season.
- 3.6 Every local government should publish its disaster management plan (and relevant sub-plans) on its website before the next wet season.

The publication of evacuation centre locations is discussed in *5.5 Evacuation*.

3.3.2 Oversight of disaster management plans

Emergency Management Queensland is responsible for reviewing and assessing the effectiveness of disaster management plans.

It has not had a consistent approach to the conduct of reviews: the way in which a disaster plan is reviewed is largely at the discretion of the Emergency Management Queensland director for the region in question.⁴⁸

The Local Government Association of Queensland suggested that oversight of plans needed to be strengthened, with more active review by Emergency Management Queensland.⁴⁹ There is no doubt that stronger reviewing mechanisms are required.

Emergency Management Queensland accepts that there is room for improvement in the processes it uses for reviewing local and district disaster management plans.⁵⁰ The agency is currently developing an 'audit tool' to standardise reviews, which district disaster co-ordinators will use in reviewing local plans. Meanwhile, Emergency Management Queensland will review district plans and a sample of local plans. It will also continue in its role of monitoring the 'planning environment across the state'.⁵¹ According to Emergency Management Queensland, the system can be in place before the next wet season.⁵²

District disaster co-ordinators are well placed to assess local disaster management plans because of their operational skills and knowledge of local conditions. The process might also help to develop relationships between the local and district levels. The concept of an audit tool to ensure consistency has merit, provided district disaster co-ordinators have the ability and the resources they need to review plans to the necessary level of detail.

Recommendations

- 3.7 Emergency Management Queensland should proceed with its proposed reviewing system before the next wet season.
- 3.8 Each district disaster co-ordinator should ensure that, before the next wet season, the disaster management plan of every local government in the co-ordinator's district susceptible to flooding:
 - is consistent with the *Disaster Management Act 2003*
 - addresses local risks and circumstances
 - can be used easily in the event of a disaster.
- 3.9 In order to assist district disaster co-ordinators in this task, and to ensure consistency and effectiveness, Emergency Management Queensland should:
 - provide a standardised approach for district disaster co-ordinators to follow, with all necessary guidance
 - generally oversee the reviewing process
 - before the next wet season, review a selection of local disaster management plans of local governments susceptible to flooding, which have already been reviewed at the district level.
- 3.10 Emergency Management Queensland should assess the effectiveness of the review system before the end of 2011, and report its results to the Commission by 31 December 2011.

3.3.3 Disaster management guidelines

Concerns were raised about the timing of Emergency Management Queensland's release of some of the disaster management guidelines in late 2010; including draft evacuation guidelines (see 5.5 *Evacuation*) and re-supply guidelines (see 5.7 *Re-supply*).

There was a view that the release of these guidelines was too close to the wet season, making it difficult for local governments to incorporate them into their disaster plans (particularly without prior consultation or training).⁵³ In future, Emergency Management Queensland should allow sufficient time for prior community consultation and training of disaster agencies before guidelines take effect.

3.4 Disaster management training

The *Disaster Management Act 2003* and the state disaster management plan require agencies and officers involved in disaster management to be appropriately trained and fully prepared to deal with disaster situations.⁵⁴ Emergency Management Queensland is primarily responsible for providing training in Queensland's disaster management arrangements.

In 2010, training was provided in various forms including short courses,⁵⁵ workshops, training exercises and consultation sessions.⁵⁶ In the lead up to the 2010/2011 wet season, Emergency Management Queensland also conducted various '*Disaster Management Act 2003*' consultation sessions and pre-season operational briefings. The consultation sessions explained the amendments to the legislation and their effects while the pre-season operational briefings were used to provide a seasonal outlook for the coming wet season.

Some local disaster management groups also conducted their own exercises following the commencement of the changes to the *Disaster Management Act 2003* in November 2010; both the Brisbane and Redlands local groups conducted desktop exercises based on disaster events in their regions.⁵⁷

3.4.1 Exercise 'Orko'

From 2 to 4 November 2010 Emergency Management Queensland conducted Exercise Orko, based on a hypothetical extreme weather event affecting three disaster districts (Toowoomba, Warwick and Dalby) and five local governments (Toowoomba, Lockyer Valley, Western Downs, Southern Downs and Goondiwindi) in south-west Queensland. It provided an opportunity to practise disaster agency co-ordination and test evacuation plans, emergency call centre capacity, re-supply arrangements, and communication between disaster management groups.

Eighty-three participants from each of the disaster management groups were required to respond as they would in a real event using their disaster management plans, standard operating procedures, supporting documentation and local knowledge. Participants considered the exercise useful; it allowed them to identify gaps in their disaster response.⁵⁸

3.4.2 Adequacy of training

Emergency Management Queensland has not had a consistent approach to identifying who needs training and the type of training required; something, it says, it is in the process of rectifying.⁵⁹

In the 2010 calendar year there was certainly variation in the training Emergency Management Queensland provided at the local level; some areas were given several training opportunities, others none. Indeed, some of the large local governments – generally those with resources dedicated to disaster management – conducted their own in-house training exercises in the lead up to the 2010/2011 wet season.⁶⁰

There were some general criticisms of the availability and effectiveness of the training provided by Emergency Management Queensland.⁶¹ At least one local government had developed its own disaster management training program and had provided training materials to other local governments.⁶² The same local government has also been approached by other local governments to provide disaster management training to its staff.⁶³ However, one local government mayor considered that Emergency Management Queensland had performed well in the training it delivered on changes to the *Disaster Management Act 2003*.⁶⁴

The Local Government Association of Queensland suggested there was a need for more practice and training between events, noting in general terms that Commonwealth and state funding reductions have affected the accessibility of training.⁶⁵ There is general acceptance that an increased emphasis on training in disaster management roles and responsibilities would enhance Queensland's overall disaster preparedness and response.

Emergency Management Queensland acknowledges that its own training has not been supported by a consistent framework and the existing training packages need to be reviewed and updated to align with the recent changes to the disaster management legislation and policy.⁶⁶ It has developed a training framework aimed at key positions in the Queensland disaster management arrangements and is liaising with Queensland police to deliver training at the district level. It has set a completion date of 30 June 2012 for the development of training material. In the meantime, training will be prioritised to regions that are at high risk of flooding.

There was a lack of disaster management expertise in some regions during the 2010/2011 floods, in part because of the disparity in levels of training received across the state. Large local governments with significant resources are in a better position than smaller or regional local governments as they have greater access to training.⁶⁷ The timing of the changes to the *Disaster Management Act 2003* and disaster arrangements in November 2010 may have limited the opportunity for training before the 2010/2011 wet season.⁶⁸

In regions that had previously been flooded in early 2010, there was a close working relationship between the local and district groups which, they considered, assisted greatly in their handling of the 2010/2011 floods.⁶⁹ Regular training exercises outside actual disaster situations, as well as affording opportunities to practise and to test disaster management plans, would help to develop these relationships.

The Commission has identified that training in a number of areas is needed before the wet season. For example, evidence from two local disaster co-ordinators, a district co-ordinator and an Emergency Management Queensland regional director suggested there are misunderstandings about roles under the post-amendment disaster arrangements.⁷⁰ District disaster management groups also identified training as a significant issue that they needed to address as a priority.⁷¹

Recommendations

3.11 Emergency Management Queensland should endeavour to ensure that before the next wet season:

- training is provided to those involved in disaster management at the local and district levels to ensure that the respective roles of all agencies, and in particular local government and the Queensland police, during an event are clearly understood
- training is provided to all local disaster co-ordinators
- training is provided to SES volunteers
- local disaster management groups are given practical training based on the event of large-scale flooding across different local government regions (as in Exercise Orko).

3.12 If training cannot be provided to every local government and disaster district before the next wet season, priority should be given according to each region's susceptibility to flooding.

3.5 Community education and driving in floodwaters

3.5.1 Community education

The importance of community education and awareness initiatives on flooding was a recurrent theme in submissions and in evidence before the Commission.

There have been various community education initiatives on disaster management at a national level. For example, in late 2010 the SES Natural Hazards Children's Awareness and Education Program launched a national campaign that included information to discourage children from swimming in flooded creeks.

This program also provided information about how to mitigate flood risks and work with the community to encourage disaster preparation.

Emergency Management Queensland has responsibility for ensuring communities are as prepared as possible for disasters.⁷² It conducts various educational campaigns, distributes brochures in the lead up to storm seasons and holds information sessions for community and school groups and at other public events to increase public awareness.⁷³

Local governments also play a central role in educating their communities about the natural hazards in their area and how community members can prepare for, respond to and recover from disasters. Some local governments made concerted efforts in the lead up to the 2010/2011 wet season through focussed community education and awareness programs.

The Barcaldine Regional Council, Central Highlands Regional Council and Mackay Regional Council disseminated information (as they do annually) through their periodical publications about how households could prepare in the lead up to the 2010/2011 wet season.⁷⁴ The same information was published on the councils' websites and local notice boards around the community.⁷⁵

After the 2008 Emerald floods, the then Emerald Shire Council (now part of the Central Highlands Regional Council) developed a guide for residents that was distributed throughout the shire.⁷⁶ The guide contained information on how to prepare and plan for disasters, including contact numbers for emergency service, council and essential services personnel in the region.⁷⁷ It also included evacuation maps and provided advice on how to prepare for an evacuation.⁷⁸ The document is currently being revised and will eventually be redistributed throughout the community.⁷⁹ The council is considering the use of other media such as DVDs to inform the public about disaster preparation.⁸⁰

With some help from State Government funding, the Rockhampton Regional Council prepared and distributed a disaster awareness DVD in the lead up to the 2010/2011 floods.⁸¹ The council considered it had been a success thanks to its marketing as a practical and useful advisory resource and its distribution in advance of the wet season.⁸²

The Mackay Regional Council took a number of measures to improve community awareness about disaster events in the lead up to the 2010/2011 floods. These included disseminating an emergency action guide with information about survival strategies during disaster situations which it advertised on a local billboard for six months,⁸³ using electronic billboards to broadcast safety messages before the floods,⁸⁴ publishing a 'Surviving Emergencies 2010/2011' notification in a local newspaper,⁸⁵ conducting a 'Cyclone Saturday' event, in which public displays were set up at a local shopping centre and warehouse,⁸⁶ and advertising the emergency action guide, key messages for the season and the Cyclone Saturday event in a local newspaper.⁸⁷

ABC local radio stations also played a significant role in providing information to the community about what to do to prepare for the wet season, as well as what to do in the event of a disaster. After the Bureau of Meteorology briefed ABC local radio managers about the prospect of widespread heavy rainfall and cyclones for the 2010/2011 wet season, ABC local radio stations broadcast more of these community service announcements than usual, with greater detail about how to prepare for emergency situations.⁸⁸

Community awareness was lacking in some areas. Community members in many of the flooded areas indicated that they were not aware of, or had not understood: the risk of flooding in their local area; the meaning and significance of flood warnings; whom they should contact for assistance in a disaster situation (see 5.3.7 *State Emergency Service*); or when to evacuate and the location of evacuation centres (see 5.5 *Evacuation*). In some regions the community was given very little, if any, disaster preparation and management advice before the floods.

Communities that are informed about risks in their region, and what to do when they eventuate, respond better to disasters. Emergency Management Queensland recognises that, in delivering disaster community education programs, it needs to co-ordinate with local government.⁸⁹ The agency is also exploring the use of social networking as a means to deliver disaster education initiatives in the future.⁹⁰ More community education is essential before the next wet season to improve general preparedness for flooding and the way communities respond. And, more particularly, the state and Commonwealth governments should both play a role in ensuring that the general public is aware of the dangers of driving in floodwaters (see 3.5.2 *Driving in floodwaters* below).

Recommendations

- 3.13 Before the next wet season, local governments susceptible to flooding should conduct community education programs which provide local information about (at least) the following topics:
- the measures households should take to prepare for flooding
 - the roles and functions of the SES and details of how to contact and join it
 - whom to contact if assistance is needed during a flood
 - contact details for emergency services in the area
 - the types of warnings that are used in the area, what they mean and what to do in the event of a warning
 - where and how to obtain information before, during and after a disaster
 - what is likely to happen during a disaster (for example, power outages and road closures)
 - evacuation
 - measures available for groups who require particular assistance (for example, the elderly, ill and people with a disability).
- 3.14 To ensure consistency, the Queensland Government should assist local governments to develop and deliver the community education programs.

The importance of providing information to the community is discussed further in *4 Forecasts, warnings and information* and in *5 Emergency response*.

3.5.2 Driving in floodwaters

Nine people died in Queensland during the 2010/2011 floods when their vehicles were caught in floodwaters.

Queensland police received many reports during the floods of drivers ignoring road closure signs and continuing to drive on flooded roads.⁹¹ To combat the risks involved, one district disaster co-ordinator used his daily media updates to remind people about the risks of driving into floodwaters.⁹² Some local radio and television stations had broadcast warnings against driving into floodwaters in the months leading up to the 2010/2011 wet season. In its severe weather warnings during the floods, the Bureau of Meteorology included advice from the SES which urged against driving, walking or riding through floodwaters.⁹³ Emergency Management Queensland had used media outlets willing to assist (as a community service) to issue similar warnings.

The significant number of deaths which occurred warrants a larger, state-wide and State Government-sponsored education campaign. There are also opportunities to address the problem at a national level. The National Emergency Management Committee is a Commonwealth body that provides advice and direction on national emergency management issues and policy. It has a community engagement sub-committee which conducts community engagement activities with a view to improving the way in which communities respond to emergency situations. There is a clear alignment between the role of the National Emergency Management Committee community engagement sub-committee and the need to educate the Australian public about the dangers of driving in floodwaters. A National Emergency Management Committee education strategy aimed at minimising road deaths through driving in floodwaters would also accord with Australia's *Natural Disaster Resilience Strategy*.⁹⁴

Recommendations

- 3.15 Before the next wet season, the Queensland Government should conduct a public education campaign about the dangers of driving into floodwaters.
- 3.16 The campaign should use various media and be designed to reach as many people as possible.
- 3.17 The National Emergency Management Committee should, as part of its education initiatives, consider developing a national public education campaign about the dangers of driving into floodwaters, using various media and commencing, if possible, before the next wet season.
- 3.18 The Queensland and Commonwealth governments should liaise to ensure a consistent message is delivered to the public.

(Endnotes)

- 1 State Disaster Management Group, 2010, *Queensland State Disaster Management Plan* [p5].
- 2 State Disaster Management Group, 2010, *Queensland State Disaster Management Plan* [p7].
- 3 State Disaster Management Group, 2010, *Queensland State Disaster Management Plan* [p14].
- 4 Jim O’Sullivan AC, APM and the Consultancy Bureau Pty Ltd, 2009, *Report on a Review of Disaster Management Legislation and Policy in Queensland*.
- 5 Jim O’Sullivan AC, APM and the Consultancy Bureau Pty Ltd, 2009, *Report on a Review of Disaster Management Legislation and Policy in Queensland* [p vii].
- 6 Exhibit 494, Statement of Bruce Grady, Appendix BG-1 - *Roles and responsibilities in support of disaster management arrangements – draft document*, 2010.
- 7 Information received from Queensland Government – State Disaster Management Group meeting 20 May 2011, draft minutes.
- 8 Transcript, Assistant Commissioner Stephen Gollschewski, 27 April 2011, Toowoomba [p811: line 34].
- 9 Department of Community Safety, *SES: Ordinary people doing extraordinary things*, 2009.
- 10 Exhibit 491, Statement of Mark Elcock, 17 May 2011 [p4: para 15; p5: para 18; p8: para 34].
- 11 Exhibit 495, State Disaster Management Group Ordinary Meeting Minutes, 2 March 2011 [p5]; Exhibit 302, Statement of Assistant Commissioner Peter Martin, 9 March 2011 [p17: para 76]; Exhibit 462, Statement of Inspector Marcus Hill, 4 March 2011 [p8].
- 12 Exhibit 481, Statement of William Wilkinson, 6 April 2011 [p2: para o]; Exhibit 270, Statement of Scott Norman, 1 April 2011 [p2]; Exhibit 463, Statement of Collin Head, 5 April 2011 [p4: para 2a-2b]; Exhibit 288, Statement of Colin Jensen, 25 March 2011 [p5: para 2.5]; Exhibit 334, Statement of Mark Holmes, 25 March 2011 [p2]; Exhibit 445, Statement of Anthony Trace, 6 April 2011 [p22: para 81]; Exhibit 336, Statement of Stuart Holley, 9 May 2011 [p2]; Exhibit 312, Statement of Anthony Martini, 8 May 2011 [p3]; Exhibit 321, Statement of Anthony Jacobs, 5 April 2011 [p1: para 2a]; Exhibit 249, Statement of Rodney Ferguson, 14 April 2011 [p4: para 33]; Exhibit 240, Statement of Peter Stewart, 4 April 2011 [p1: para 2a(i)]; Information received from Andrew Byrnes, 31 March 2011 [p1, para:2]; Statement of Mark Pitt, 1 April 2011 [p1: para 2].
- 13 Exhibit 288, Statement of Colin Jensen, 25 March 2011 [p5: para 2.5].
- 14 Exhibit 481, Statement of William Wilkinson, 6 April 2011 [p2: para o].
- 15 Exhibit 445, Statement of Anthony Trace, 6 April 2011 [p22: para 81].
- 16 Information received from Michael Kruger, 31 March 2011 [p1].
- 17 Exhibit 270, Statement of Scott Norman, 1 April 2011 [p2: para 2a-b, e-f, h-k]; Exhibit 240, Statement of Peter Stewart, 4 April 2011 [p1: para 2a(ii)].
- 18 Exhibit 270, Statement of Scott Norman, 1 April 2011 [p2: para 2l].
- 19 Exhibit 334, Statement of Mark Holmes, 25 March 2011 [p2]; Exhibit 445, Statement of Anthony Trace, 6 April 2011 [p22: para 79]; Exhibit 481, Statement of William Wilkinson, 6 April 2011 [p2: para h-k]; Exhibit 336, Statement of Stuart Holley, 9 May 2011 [p1].
- 20 Exhibit 270, Statement of Scott Norman, 1 April 2011 [p2: para 2d].
- 21 Exhibit 445, Statement of Anthony Trace, 6 April 2011 [p33: para 121c]; Exhibit 463, Statement of Collin Head, 5 April 2011 [p3: para j]; Exhibit 481, Statement of William Wilkinson, 6 April 2011 [p5-6: para 5 (d)-(g)].
- 22 Exhibit 481, Statement of William Wilkinson, 6 April 2011 [p5-6: para d-g].
- 23 Exhibit 481, Statement of William Wilkinson, 6 April 2011 [p3: para p].
- 24 State Disaster Management Group, 2010, *Queensland State Disaster Management Plan* [p8].

- 25 State Disaster Management Group, 2010, *Queensland State Disaster Management Plan* [p9].
- 26 State Disaster Management Group, 2010, *Queensland State Disaster Management Plan* [p22].
- 27 Jim O’Sullivan AC, APM and the Consultancy Bureau Pty Ltd, *Report on a Review of Disaster Management Legislation and Policy in Queensland*, 2009 [p20, p31].
- 28 Jim O’Sullivan AC, APM and the Consultancy Bureau Pty Ltd, *Report on a Review of Disaster Management Legislation and Policy in Queensland*, 2009 [p31].
- 29 Jim O’Sullivan AC, APM and the Consultancy Bureau Pty Ltd, *Report on a review of disaster management legislation and policy in Queensland*, 2009 [p30].
- 30 Exhibit 522, Statement of Michael Clerke, 27 May 2011 [p5].
- 31 Sections 49, 53, 57, *Disaster Management Act 2003*.
- 32 Exhibit 240, Statement of Peter Stewart [p1: para:1(b)]; Exhibit 334, Statement of Mark Holmes, 25 March 2011 [p1].
- 33 Exhibit 369, LGAQ Submission on Flood Preparedness, 11 March 2011 [p5].
- 34 Transcript, Anthony Jacobs, Brisbane, 9 May 2011 [p1589: line 19]; Exhibit 463, Statement of Collin Head, 5 April 2011 [p2: para: g].
- 35 Exhibit 290, Brisbane City Council Local Disaster Management Plan; Exhibit 313, *Moreton Bay Regional Council Local Disaster Management Plan*.
- 36 Transcript, Anthony Martini, 9 May 2011, Brisbane [p1520: line 39].
- 37 Transcript, Mark Holmes, 11 May 2011, Brisbane [p1704: line 30].
- 38 Transcript, Bruce Grady, 26 May 2011, Brisbane [p2656: line 36].
- 39 Transcript, Anthony Jacobs, 9 May 2011, Brisbane [p1588: line 37].
- 40 Transcript, Gregory Hoffman, 13 May 2011, Brisbane [p1984: line 54].
- 41 Transcript, Gregory Hoffman, 13 May 2011, Brisbane [p1984: line 38].
- 42 The Natural Disaster Resilience Program is a funding partnership between the Commonwealth Government and states and territories that provides funding for disaster mitigation activities.
- 43 Exhibit 446, Statement of Anthony Trace, 10 May 2011 [p70: para 262]; Exhibit 447, Submission of Ipswich City Council [p63: para 13.29].
- 44 Transcript, Anthony Jacobs, 10 May 2011, Brisbane [p1611: line 9].
- 45 Exhibit 369, LGAQ Submission on Flood Preparedness, [p5].
- 46 Transcript, Anthony Jacobs, 9 May 2011, Brisbane [p1589: line 52].
- 47 Section 60, *Disaster Management Act 2003*.
- 48 Transcript, Bruce Grady, 26 May 2011, Brisbane [p2655: line 43].
- 49 Exhibit 369, LGAQ Submission on Flood Preparedness, 11 March 2011 [p7].
- 50 Transcript, Bruce Grady, 26 May 2011, Brisbane [p2655: line 35].
- 51 Transcript, Bruce Grady, 26 May 2011, Brisbane [p2656: line 4].
- 52 Transcript, Bruce Grady, 26 May 2011 Brisbane [p2656: line 14].
- 53 Exhibit 334, Statement of Mark Holmes, 25 March 2011 [p12].
- 54 Section 16A(e), *Disaster Management Act 2003*; State Disaster Management Group, *State Disaster Management Plan*, 2010 [p28].
- 55 Emergency Management Queensland refers to the provision of ‘training’ and ‘exercises’. However, for the purpose of this report, Emergency Management Queensland’s ‘training’ courses are referred to as ‘short courses’, while its ‘exercises’ are referred to as ‘training exercises’.
- 56 Exhibit 494, Statement of Bruce Grady, Appendix BG-3, BG-4, BG-5, BG-6, BG-7, BG-8, BG-10, 26 May 2010.
- 57 Exhibit 302, Statement of Assistant Commissioner Peter Martin, 9 March 2011 [p4: para 13; p5 para: 15].

- 58 Exhibit 249, Statement of Rodney Ferguson, 14 April 2011 [p1: paras 4-5]; Information received from Robert Bundy, 27 May 2011 [p3, para:9]; Exhibit 258, Stanthorpe Sub-Group – Incident Control Centre Debrief 17 January 2011 [p6].
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- 59 Information received from Queensland Government [p10-11].
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- 60 Exhibit 445, Statement of Anthony Keith Trace, 6 April 2011 [p17].
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- 61 Transcript, Warren Day, 11 May 201, Brisbane [p1772: line 48].
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- 62 Exhibit 340, Statement of Warren Day, 14 April 2011 [p10-11: paras 80-87].
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- 63 Transcript, Anthony Jacobs, 10 May 2011, Brisbane [p1609: line 24].
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- 64 Transcript, Brad Carter, 23 May 2011, Rockhampton [p2452: line 24].
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- 65 Transcript, Gregory Hoffman, 13 May 2011, Brisbane [p1985: line 28].
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- 66 Information received from Queensland Government [p8].
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- 67 Transcript, Warren Day, 11 May 201, Brisbane [p1771: line 31].
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- 68 Transcript, Anthony Jacobs, 10 May 2011, Brisbane [p1609: line 33].
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- 69 Transcript, Brad Carter, 23 May 201, Rockhampton [p2457: line 19].
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- 70 Transcript, Mark Holmes, 11 May 201, Brisbane [p1709: line 20]; Transcript, Mark Holley, 11 May 2011, Brisbane [p1717: line 4]; Exhibit 462, Statement of Inspector Marcus Hill, 4 March 2011 [p10]; Information received from Robert Bundy, 27 May 2011 [p1].
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- 71 Information received from Bundaberg District Disaster Management Group, debrief meeting minutes 3 March 2011.
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- 72 Transcript, Robert Bundy, 28 April 2011, Toowoomba [p1000: line 30].
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- 73 Transcript, Robert Bundy, 28 April 2011, Toowoomba [p1000: line 35].
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- 74 Exhibit 471, Barcaldine Regional Council public notice, 24 May 2011 [p1-16]; Exhibit 479, Central Highlands Regional Council regional roundup, 25 May 2011 [p1]; Exhibit 337, Second statement of Stuart Holley, 9 May 2011 [p2].
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- 75 Exhibit 471, Barcaldine Regional Council public notice, 24 May 2011 [p1-16]; Transcript, Peter Maguire, 25 May 2011, Emerald [p2588: line 48].
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- 76 Transcript, Peter Maguire, Emerald, 25 May 2011 [p2588: line 47]; Exhibit 478, Statement of Peter Maguire, Annexure G, *Emerald and Gemfields Region: A residents' guide to preparing and responding to disasters*, 25 May 2011 [p1-19].
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- 77 Exhibit 478, Statement of Peter Maguire, Annexure G, Emerald and Gemfields Region: A residents' guide to preparing and responding to disasters, 25 May 2011 [p4].
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- 78 Exhibit 478, Statement of Peter Maguire, Annexure G, Emerald and Gemfields Region: A residents' guide to preparing and responding to disasters, 25 May 2011 [p8-13].
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- 79 Transcript, Peter Maguire, 25 May 2011, Emerald [p2588: line 49].
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- 80 Transcript, Peter Maguire, 25 May 2011, Emerald [p2588: line 58].
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- 81 Exhibit 459, Statement of Brad Carter, 31 March 2011 [p9]; Transcript, Brad Carter, 23 May 2011, Rockhampton [p2451: line 36].
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- 82 Transcript, Brad Carter, Rockhampton, 23 May 2011 [p2451: line 47].
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- 83 Exhibit 337, Second statement of Stuart Holley, 9 May 2011 [p2].
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- 84 Exhibit 337, Second statement of Stuart Holley, 9 May 2011 [p2].
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- 85 Exhibit 337, Second statement of Stuart Holley, 9 May 2011 [p2].
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- 86 Exhibit 337, Second statement of Stuart Holley, 9 May 2011 [p3].
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- 87 Exhibit 337, Second statement of Stuart Holley, 9 May 2011 [p2].
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- 88 Statement of Stephen McClelland, 29 April 2011 [p7-8: paras 26-28].
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- 89 Transcript, Bruce Grady, 26 May 2011, Brisbane [p2675: line 55]
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- 90 Transcript, Bruce Grady, 26 May 2011, Brisbane [p2676: line 1].
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- 91 Transcript, Assistant Commissioner Peter Martin, Brisbane, 6 May 2011 [p1475: line 40 – p1476 line 10].
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- 92 Transcript, Assistant Commissioner Peter Martin, Brisbane, 6 May 2011 [p1475: line 41].
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- 93 Exhibit 37, Statement of James Davidson, Annexure JD-1 Bureau of Meteorology Report to Queensland Floods Commission of Inquiry, March 2011 [p76-80, 82-141, 144-492, 776-870].
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- 94 Council of Australian Governments, *National Strategy for Disaster Resilience: Building our nation's resilience to disasters*, 2011.
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