

2010–11

Annual Report No.8

State Disaster Management Group

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Letter of compliance

The Honourable J Dempsey MP
Minister for Police and Community Safety
GPO Box 15195
Brisbane QLD 4002

Dear Minister

On behalf of the State Disaster Management Group (SDMG), I am pleased to present the SDMG Annual Report for 2010-11.

The report has been prepared with the support of member agencies of the SDMG and in collaboration with disaster management groups as provided under the *Disaster Management Act 2003*.

The report details the activities undertaken in 2010-11 to maintain and enhance disaster management in Queensland, including the extensive response and recovery operations performed when a series of natural disasters struck Queensland between November 2010 and April 2011.

The structure of the report aligns with the disaster management principles of prevention, preparedness, response and recovery as prescribed in legislation. In this way, it provides a holistic overview of the disaster management activities that are undertaken before, during and after an event to build the resilience of Queensland communities to disaster impacts.

I certify that the SDMG Annual Report 2010-11 complies with s. 44 of the *Disaster Management Act 2003*.

The report will be made available online at www.disaster.qld.gov.au.

Yours sincerely



Jon Grayson
Chairperson
State Disaster Management Group

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1 The year in review

The combined 2010-11 disaster events in Queensland represent the most significant response and recovery challenge in the state's history.

The State Disaster Management Group (SDMG) Annual Report 2010-11 provides information about state-level disaster management activities undertaken in response to these events. It also details activities undertaken to support the state in mitigating and managing the effects of disaster, and efforts towards post-disaster recovery and system improvements.

Disaster events

Flooding was widespread across Queensland from November 2010 to January 2011.

The first flood events began in Central Queensland on 30 November 2010. On 10 January 2011, a flash flood described as an instant inland tsunami struck Toowoomba and the Lockyer Valley. Just days later, significant floods hit Ipswich and Brisbane.

By the second week of January, 200,000 people in Queensland were flood-affected and three quarters of the state had been declared a disaster zone. A total of 35 people lost their lives as a result of the flooding, including 21 deaths in Toowoomba and the Lockyer Valley, and there was extensive and widespread property damage.

The following month, Tropical Cyclone Yasi crossed the coast near Mission Beach. The category five cyclone brought high winds, heavy rainfalls and a five metre storm tide at Cardwell. One person was killed.

Tropical Cyclone Yasi is one of the most powerful cyclones to have affected Queensland since records commenced. It was the third cyclone to impact Queensland in the 2010-11 season. Tropical Cyclone Tasha (category one) crossed the north tropical coast early on Christmas Day and Tropical Cyclone Anthony crossed the Queensland coast near Bowen as a category two system on 30 January 2011.

The scale, impact and resource implications of these disaster events have extended Queensland's disaster management arrangements over a protracted period of time.

Disaster operations

Effective disaster response and recovery efforts need to be timely, adequately resourced and coordinated, and the 2010-11 events required significant contributions from wide-ranging stakeholders. In 2010-11, state-level disaster operations included:

- a total of 34 extraordinary meetings of the SDMG held between 24 December 2010 and 10 February 2011 in response to flood and cyclone events in Queensland

- 12 district disaster declarations and two state-level declarations
- activation of the State Disaster Coordination Centre (SDCC) 11 times to provide assistance for significant disaster events in Queensland as well as the Christchurch earthquake and Japan tsunami
- activation of the Queensland Government Crisis Communication Network (CCN) from December 2010 to June 2011 to coordinate agency communications and public messaging
- delivery of 53 separate warnings and 90 campaigns through the Emergency Alert public warning system
- ongoing and extensive deployment of personnel from government and non-government agencies to undertake diverse functions during the response and recovery phases
- administration of financial assistance through a range of state and Commonwealth government packages, and collection of \$276 million in donations through the Premier's Disaster Relief Appeal.

Disaster management activities

Disaster operations are only made possible through activities undertaken before a disaster event to mitigate risk and ensure that disaster management stakeholders are aware of their roles and responsibilities. Disaster prevention and preparedness activities were undertaken prior to the 2010-11 events and new actions have since been initiated to enhance the state's readiness for future disasters.

Among the activities undertaken to maintain or enhance disaster management in Queensland during 2010-11 were:

- the introduction of the *Disaster Management and Other Legislation Amendment Bill 2010* to effect recommendations from the 2009 O'Sullivan review of the Queensland disaster management arrangements (QDMA)
- significant disaster research into the effects of cyclone events on construction materials and appropriate agency responses to heatwave
- hazard modelling for tsunami and storm tide events and the development of geo-spatial applications to build knowledge and inform decision-making
- the development of community education and awareness messages, including public information for culturally and linguistically diverse (CALD) communities and other special needs groups
- the delivery of disaster management training, including training on the QDMA to more than 5,000 people from state government, local government, non-government organisations and the State Emergency Services (SES)

- the participation of multi-agency stakeholders in disaster management exercises to maintain the skills of personnel and to test and validate plans and procedures.

Disaster management priorities

The priorities for state disaster management are being informed by post-disaster assessments of the 2010-11 events. The consequences of these events now pose a long-term major challenge in terms of reconstruction of property and infrastructure, reinvigoration of the economy, and rehabilitation of the environment. The psycho-social rehabilitation of members of the community who suffered personal loss and trauma as a result of these events will also present major challenges over an extended time period.

In 2011, the Queensland Reconstruction Authority (QRA) was established as the statutory body to coordinate Queensland's significant post-event reconstruction activities, and other state-level agencies maintain ongoing involvement in Queensland's recovery efforts. Relief and recovery is an ongoing priority for the disaster management sector in 2011-12.

Many agencies have undertaken post-disaster assessments of their actions in relation to the 2010-11 events as part of the continuous improvement of the QDMA. On 17 January 2011, the Queensland Government established the Queensland Floods Commission of Inquiry (QFCoI) to provide an independent and thorough examination of the events leading to the 2010-11 floods, all aspects of the response, and the subsequent aftermath. The recommendations from this inquiry process are expected to inform the priorities for state disaster management for years to come.

2 Disaster management arrangements

Queensland Disaster Management Act 2003

In Queensland, the *Disaster Management Act 2003* (the Act) provides the legislative basis for the state's disaster management arrangements.

The Act provides a framework in which all levels of government, government-owned corporations, non-government organisations, partners and stakeholders can work collaboratively to ensure effective disaster management across the state.

The Act makes provision for the establishment of disaster management groups for the state, disaster districts and local government areas respectively. It also provides the legislative basis for the preparation of disaster management plans and guidelines, declarations of disaster situations, establishing the SES, and ensuring communities receive appropriate information about preparing for, responding to and recovering from disaster events.

Legislative amendments

On 1 November 2010, the *Disaster Management and Other Legislation Amendment Bill 2010* came into effect. This Bill supported the implementation of a number of recommendations from an independent review of the QDMA (the O'Sullivan Review), which was commissioned by the Queensland Government in 2009.

One of the major changes was a shift in responsibility for the coordination of the disaster response phase from Emergency Management Queensland (EMQ) to the Queensland Police Service (QPS). Other amendments effected by the *Disaster Management and Other Legislation Amendment Bill 2010* included:

- clarification of the objectives of the QDMA
- reallocation of roles in disaster management groups and the creation of new roles, including the positions of State Disaster Coordinator (SDC) and State Recovery Coordinator (SRC)
- clarification of the roles of state and local governments in relation to the SES
- amendments to the process and requirements for declaring a disaster situation
- provision for the establishment of temporary disaster district groups where required
- In the 2010-11 disaster events, the revised disaster management roles at state and district levels were operationally tested for the first time.

State Disaster Management Group

The SDMG is the peak disaster management policy and decision making body in Queensland under s. 18 of the Act.

The role of the SDMG is to ensure that effective disaster management is developed and implemented for the state. This includes developing the

Queensland Government Disaster Management Strategic Policy Framework (SPF) and the State Disaster Management Plan (SDMP).

The SDMG also establishes and maintains effective arrangements between the Queensland Government and the Commonwealth Government on matters relating to disaster management, including the coordination of state and Commonwealth assistance.

In 2010-11, the SDMG provided strategic direction and support in response to the flood and cyclone events that impacted Queensland. The group provided high-level direction for disaster operations under the leadership of the SDC, who was appointed by the chair of the SDMG on two occasions. The Deputy Commissioner, Regional Operations, QPS was appointed to the position from 24 December 2010 to 21 January 2011 in response to the Queensland floods and from 28 January to 11 February 2011 in response to Tropical Cyclones Anthony and Yasi.

The SDMG also facilitated effective coordination between the Queensland Government, the Commonwealth Government and other key stakeholders to support disaster management during the challenging events of 2010-11. This included the identification of resources within and outside the state that could be used to enhance disaster operations and expedite recovery.

The group provided timely and accurate reports and made key recommendations to the Premier of Queensland and the Minister for Police, Corrective Services and Emergency Services about matters relating to disaster management and operations.

Membership

The SDMG reports to the Minister for Police, Corrective Services and Emergency Services regarding disaster management in Queensland.

The group comprises the chief executive of each Queensland Government department as well as the Assistant Director-General of EMQ and the Chief Executive Officer of the Local Government Association of Queensland (LGAQ). This breadth of membership ensures the SDMG can undertake a collaborative, whole-of-government approach to disaster management.

The chairperson is the Director-General of the Department of the Premier and Cabinet (DPC), and the Director-General of the Department of Community Safety (DCS) is the deputy chairperson.

The SDMG is supported by an executive officer from the QPS, who is appointed by the Commissioner of Police.

Meetings

In 2010-11, the SDMG held four ordinary meetings as a manner of routine business.

Meetings were held on:

- 8 September 2010
- 12 October 2010
- 2 March 2011
- 20 May 2011.

In response to the disaster events of 2010-11, the SDMG also held a series of extraordinary meetings for the purpose of strategic decision-making to support state disaster management activities.

A total of 34 extraordinary meetings were held between 24 December 2010 and 10 February 2011. Full details of meeting dates are available at Appendix 1.

State Disaster Coordination Group

Established as a sub-committee under s. 48 of the Act the State Disaster Coordination Group (SDCG) is the implementation body of the SDMG, carrying out its strategic direction, and focusing on preparedness and response issues to achieve outcomes for Queensland communities.

The SDCG comprises senior representatives from government agencies and non-government organisations who have a significant role in disaster management. The group is now co-chaired by EMQ and the QPS as an outcome of findings from the 2009 O'Sullivan Review.

From time to time, the SDCG may establish ad-hoc working groups to progress key disaster management priorities.

During a disaster event, SDCG member agencies have a responsibility for ensuring a suitably qualified officer is available to represent their agency in a liaison officer role where required.

During the 2010-11 reporting period, three ordinary SDCG meetings were held with additional extraordinary meetings taking place around disaster events, including:

- 28 meetings in response to the Central Queensland floods and Tropical Cyclone Tasha
- two meetings in response to Tropical Cyclone Anthony
- 10 meetings in response to Tropical Cyclone Yasi.

Key achievements for the SDCG during 2010-11 included:

- finalising the 2009-10 post-season review of disaster management activities by SDCG member agencies and identifying learnings for future events
- coordinating cross-agency bushfire mitigation and preparedness activities for 2010-11 as part of a broader state-level strategy
- supporting the whole-of-government response to multiple and prolonged disaster activations during the 2010-11 events
- facilitating an Operational Debrief Meeting in May 2011 to review the activities of SDCG member agencies in response to the 2010-11 season.

District Disaster Management Groups

Queensland is divided into disaster districts that encompass 73 local government areas. District Disaster Management Groups (DDMGs) operate in accordance with the Act to provide support and guidance for local-level disaster management, including coordinating the provision of Queensland Government assistance where required.

There are a total of 23 DDMGs across the state. Queensland's disaster districts are outlined in a map provided at Appendix 2.

Membership

Representatives from regionally-based government agencies, government-owned corporations and non-government organisations may be members of DDMGs. Membership should include those stakeholders who can provide and coordinate whole-of-government support and resource assistance to communities that may be affected by disaster in a given district.

Following the 2010 changes to disaster management roles under the QDMA, QPS officers assumed the role of District Disaster Coordinator (DDC) and chairperson in each DDMG.

Meetings

In 2010-11, DDMGs in Queensland held 87 ordinary meetings and a further 105 extraordinary meetings in response to disaster events.

Local Disaster Management Groups

Under s. 33 of the Act a local government must establish a Local Disaster Management Group (LDMG) for its local government area. LDMGs play a key role in the QDMA and are best placed to determine the requirements of their local communities. There are a total of 74 LDMGs across the state, each chaired by a local government councillor.

3 Prevention

The Act mandates:

- 'the taking of preventative measures to reduce the likelihood of an event occurring or, if an event occurs, to reduce the severity of the event' (s. 4A).

Disaster mitigation efforts are undertaken by SDMG member agencies in response to state risk assessments and seek to prevent or reduce disaster impacts for communities, the economy, infrastructure and the environment.

3.1 Disaster research

In 2010-11, SDMG members supported significant research into the impacts of cyclone and heatwave events and appropriate risk treatment options for Queensland communities.

Cyclone effects on construction materials and methods

The Department of Public Works (DPW) provided ongoing grant funds to James Cook University's (JCU) Cyclone Testing Station to explore the effects of high winds and windborne debris on building design and construction materials.

Testing was undertaken to identify building materials and construction methodologies that are resistant to high-speed wind and windborne debris environments.

The research identified a range of materials that meet the impact loading criteria for public cyclone shelters in Queensland, and the results are available online via the DPW website.

The research output will inform the future construction of public cyclone shelters in Queensland. Further details about this activity are provided under the *Preparedness* section of this report.

Heatwave response

Queensland Health (QH) continued its two-year study into heatwave response in partnership with Monash University. Research outcomes are currently being compiled and will inform future policy development to support preparedness for heatwave events and associated increases in hospital admissions.

QH also contributed to a number of relevant research projects under the jurisdiction of the Commonwealth Government's Australian Health Protection Committee. These projects related to:

- planning and capability building for pandemic influenza response
- the development of the AUSTRAUMAPLAN, which is a mass casualty plan under the National Health

- Emergency Response Health Arrangements
- national Medical Transport capability and coordination arrangements
- the national mass casualty Triaging Tag system
- hospital mass casualty surge capability
- health aspects of the Chemical, Biological and Radiological Terrorism Plan.

3.2 Policy

Policy can be used as a tool to advance mitigation strategies to reduce disaster impacts for Queensland communities. In 2010-11, policy development and review activities were undertaken at state-level to mitigate infrastructure and environmental damage from disaster events.

Review of the State Planning Policy

In 2010-11, the Department of Local Government and Planning (DLGP) reviewed aspects of State Planning Policy 1/03: Mitigating the Adverse Impacts of Flood, Bushfire and Landslide (SPP 1/03). This policy is one of a suite of statutory State Planning Instruments under the *Sustainable Planning Act 2009*.

The review considered how SPP 1/03 communicates state interests relating to flood, bushfire and landslide in order to inform local decisions on land use planning and development. It also assessed the technical guidance available for the identification of natural hazard management areas across Queensland.

SPP 1/03 is scheduled for subsequent review by DCS in September 2013. The 2013 review will take into account recommendations from the QFCoI and land use planning activities for flood mitigation as undertaken by the QRA.

Audit of flood planning provisions in local planning schemes

In 2010-11, DLGP partnered with the QRA to audit current flood related provisions in the planning schemes of 25 local government areas that were affected by the Queensland floods.

The audit has commenced and seeks to identify, collate and analyse the provisions of selected Queensland Planning Schemes in order to develop a comprehensive understanding of their application in the assessment of development in flood plain areas.

Drafting of the Queensland Development Code

During the reporting period, DLGP also developed a draft Queensland Development Code to align with the national standard for building in flood-prone areas.

The Queensland Development Code aims to support the reduction of property damage in a flood and assist people to return to their homes more quickly post-event.

It establishes standards for the construction of buildings in flood hazard areas and includes the requirement that parts of dwellings, such as bedrooms and essential building services, are raised to reduce the risk of damage during future flood events. The code will potentially address additions to existing dwellings as well.

3.3 Risk assessment

Disaster risk assessments are used to identify community vulnerability through the identification of hazards, the analysis of risk, and review of the likelihood and consequence of disaster events occurring. In 2010-11, in addition to state and district level risk assessments, SDMG member agencies supported tsunami and storm tide hazard modelling, the development of a risk register for biosecurity, and the implementation of risk assessment processes in relation to transport and health infrastructure specifically.

Risk assessments by DDMGs

During the reporting period, DDMGs provided assistance to LDMGs for the purpose of conducting local disaster risk management assessments in accordance with the National Emergency Risk Assessment Guidelines and AS/NZS ISO 31000:2009 Risk Management – Principles and Guidelines.

DDMGs also reviewed local disaster management plans and conducted relevant DDMG risk assessments to identify hazards that may significantly impact across local government boundaries. This process supports an enhanced understanding of appropriate strategies for risk treatment, including the application of district support to local government areas where applicable.

State-wide risk assessments

A State-wide Natural Hazard Risk Assessment is being finalised by Risk Frontiers (Macquarie University) with funding from the Natural Disaster Resilience Program (NDRP). Risk modelling approaches are being applied to historical records from 1900 to 1999 to assess the natural hazards that threaten Queensland. The project is being managed by the DCS Strategic Policy Division.

The report is scheduled for publication in October 2011 and will be followed by a second phase of work to produce a State Risk Register. The State Risk Register will enhance understanding of Queensland's natural hazard risk profile and support the prioritisation of mitigation strategies over time.

Hazard modelling

In 2010-11, the Department of Environment and Resource Management (DERM) received grant funding to undertake a range of risk assessment studies that will continue to build knowledge about the likelihood and consequence of specific natural hazards occurring in Queensland. The projects being undertaken by DERM include:

- scenario modelling to assess the near-shore tsunami hazard for specific sections of Queensland's east coast and modelling of inundation for two locations (Natural Disaster Mitigation Program funding)
- a review of the Emergency Management Australia (EMA) storm tide inundation mapping guideline with a view to developing a best practice guideline for Australia (Natural Disaster Mitigation Program funding)
- a storm tide study in the Gulf of Carpentaria and inundation mapping of selected locations under current and future scenarios (Natural Disaster Risk Management Studies Program funding).

Biosecurity risk register

On 5 April 2011, the Department of Employment, Economic Development and Innovation (DEEDI) released the Biosecurity Queensland Pest and Disease Risk Register. The register identifies major pests and disease threats facing Queensland and associated risk treatment strategies. The information in this document will form the basis for future work by the department.

Assessment of transport infrastructure threats

The Department of Transport and Main Roads (DTMR) continued its routine activity to identify disaster risks in relation to transport infrastructure in consultation with internal and external stakeholders.

Assessment of risks to Queensland health facilities

QH undertakes risk assessment of health facilities in accordance with its Emergency Preparedness and Continuity Management policy, and in 2010 established a new consultation process to better identify preparedness and response capability issues.

The Emergency Management Coordinators Network (EMCN) is an internal, formal network led by the Director, Emergency Management Unit. The membership comprises Emergency Management Coordinators from each of the Department's corporate office divisions and health service districts. The EMCN convenes every second month to:

- discuss and resolve emergency incident management system issues relevant to QH operations
- endorse proposed disaster management arrangements and disaster response protocols
- receive and disseminate updates on the QDMA
- advise on the status of QH's disaster preparedness and response capability.

The EMCN complements QH's Disaster Management Collaborative (DMC), which was established in early 2009. Clinical and organisational leaders from QH, health sector partners and disaster management stakeholders in areas where health-related disaster planning issues have been identified receive an open invitation to participate in the DMC. The DMC convenes up to four times per year.

In 2010-11, QH also undertook the following security risk assessment activities in relation to health facilities:

- continued a review of its Pandemic Influenza Plan with a focus on incorporating lessons learned as an outcome of the Pandemic H1N1 event in 2009
- reviewed regular business within at-risk health services and facilities under the Interim Tsunami Response Protocol
- finalised a review of the Dengue Fever Outbreak Control Plan
- commenced a review of the Hendra Virus Outbreak Control Plan to establish appropriate systems and processes following recent outbreak events.

These activities are intended to support targeting future mitigation actions to achieve safer health facilities in Queensland.

4 Preparedness

The Act provides for:

- ‘the taking of preparatory measures to ensure that, if an event occurs, communities, resources and services are able to cope with the effects of the event’ (s. 4A).

In 2010-11, SDMG member agencies undertook a range of activities towards the long-term goals of sustained behavioural change for disaster preparedness and building the resilience of Queensland communities to disaster impacts. This activity is consistent with state and Commonwealth government priorities for disaster management.

4.1 Resilience

In 2010-11, building the resilience of communities to disaster impacts achieved enhanced recognition as a priority objective for national disaster management, and Queensland’s resilience building activities were supported through funding from the state and Commonwealth governments.

National Strategy for Disaster Resilience

The National Strategy for Disaster Resilience (NSDR) was developed by the National Emergency Management Committee (NEMC) and endorsed by the Council of Australian Governments (COAG) on 13 February 2011. The NSDR mandates the increased participation of Queensland communities in local-level disaster management.

The NSDR states that disaster resilience is a shared responsibility across the whole of society. Attention needs to be directed towards ways to actively engage and empower communities to take ownership of disaster management functions rather than investing in further government-led solutions. Similar resilience based approaches founded on shared responsibility have been advocated as smart practice in New Zealand, the United Kingdom, Canada and the United States.

DCS has developed an Action Plan for Disaster Resilience, which aligns Queensland disaster management activities with the NSDR and advances the resilience based approach that the Department had earlier initiated in response to the 2009 Victorian Bushfires Royal Commission.

Natural Disaster Resilience Program

The NDRP provided further funding support to local government and other stakeholders for activities to build community resilience to disaster impacts.

The NDRP is a four-year competitive grant program and is funded through shared contributions from the Commonwealth Government, the Queensland Government and eligible applicants. The NDRP replaced the Natural Disaster Mitigation Program, Bushfire Mitigation Program and, from 2010-11, the National Emergency Volunteer Support Fund.

EMQ administers NDRP funding in Queensland. In 2010-11, \$12.59 million was allocated across 70 projects under the second round of funding. Funding administration is based on a risk-based approach, which prioritises projects that address Queensland’s greatest disaster threats (flood, storm tide, cyclone, severe storm and bushfire). Round three grants will be administered in 2011-12.

Queensland Climate Change Strategy initiatives

DCS has received funding under the Queensland Government’s Climate Change Strategy to enhance the ability of Queensland communities to prepare for natural disaster impacts.

In 2010-11, EMQ commenced the Disaster Preparedness in Vulnerable Communities program to build the capacity of individuals, families and businesses to contribute towards their own safety and wellbeing in the event of a natural disaster. Digital media products for disaster preparedness were developed during the reporting period. These products included instructional DVDs for businesses and homeowners, which outline appropriate measures to take to reduce disaster impacts. Distribution of these products has commenced and will continue in 2011-12.

EMQ also contacted Indigenous councils to commence implementation of the Keeping Our Mob Climate Safe initiative. Four Indigenous disaster management field officers were appointed in 2010-11 and are working collaboratively with Indigenous communities to enhance disaster management planning and exercises, improve local capability, and recruit and support volunteers for disaster events.

Community resilience survey

In May 2011, DCS engaged the Queensland Government’s Office of Economic and Statistical Research (OESR) to survey over 3,000 individuals and households regarding their resilience to natural disaster impacts. The survey was prepared with input from subject matter experts from JCU and Griffith University, and was funded under the NDRP.

DCS has previously used surveys to measure the disaster preparedness measures taken by individuals and households in Queensland, but this is the first time that a survey has been used to assess resilience in Queensland communities.

The survey results are scheduled for release in 2011-12 and will assist the disaster management sector to identify and understand differences in the resilience of Queensland communities by locale. The results will also support the design of future projects to enhance community resilience as mandated by the NSDR.

Queensland Disaster Management Alliance

The Queensland Disaster Management Alliance continued to function in the 2010-11 period following its establishment in June 2010.

The alliance is a joint initiative between DCS and LGAQ to support a collaborative approach to disaster management in Queensland across state and local agencies. It is supported by the Resilient Communities through Partnerships memorandum of agreement.

During the reporting period, DCS committed \$50,000 to support the local government annual disaster management conference (to be held in July 2011). The aim of the conference is to enhance attendees' knowledge of community resilience-building approaches, education and awareness initiatives, and the implications of changes to the QDMA.

DCS previously sponsored the June 2010 conference in its capacity as an alliance member.

4.2 Community education and awareness

Under s. 30 of the Act, local government has the legislative responsibility to provide community awareness and education programs in relation to natural disasters, and the state has an oversight and support function in this component of disaster management.

In 2010-11, SDMG member agencies provided support through the state-wide delivery of pre season seminars and the development of consistent messaging for Queensland communities.

Pre-season seminars

During September and October 2010, EMQ delivered its annual Pre-Season Disaster Preparedness Seminars to disaster management stakeholders across the state.

These seminars are supported by the Queensland Tropical Cyclone Consultative Committee (QTCCC), the Bureau of Meteorology (BoM) and DERM for the purpose of providing public information on weather-related risks for the coming season and promoting disaster preparedness in Queensland communities.

A total of 538 participants attended seminars in ten regional locations.

The Seminars were held in Charleville (7 September), St George (9 September), Mackay (7 October), Beenleigh (12 October), Gladstone (13 October), Rockhampton (14 October), Innisfail (19 October), Charters Towers (21 October), Gympie (25 October) and Kowanyama (27 October).

Attendees provided positive feedback on the value of seminar content, specifically the BoM's seasonal outlook and flood warnings, and discussion in relation to hypothetical disaster events.

The results of evaluation will inform planning for Pre-Season Disaster Preparedness Seminars in 2011-12.

Disaster preparedness messages for Queensland communities

State-level agencies aim to support local government and Queensland communities with consistent primary awareness and action messages for disaster preparedness. In 2010-11, disaster preparedness information was developed for general audiences and special needs groups.

Information for general audiences

In preparation for the 2010-11 storm and cyclone season, EMQ released the SES Get Ready Guide. This ten page information booklet provides advice for individuals and households on how to best prepare for natural disasters. The key messages are:

- prepare an emergency plan
- prepare an emergency kit
- prepare your home
- tune into warnings.

The SES Get Ready Guide will be used as a foundational resource to support community education activities undertaken by the SES and EMQ and may be disseminated by local councils.

In 2010-11, the Department of Justice and Attorney-General (DJAG) provided public information on electrical safety before, during and after disaster events. This information was made available to businesses and community members through a variety of media, including brochures and a contribution to the Cyclone Survival Guide in the Cairns Post newspaper.

The Queensland Government, through DEEDI, participated on the Food and Grocery Sector Group, which developed information for Queensland communities about essential food supplies that should be stored in case of emergency events. This information is available online at www.pantryst.com.au.

SDMG members, including EMQ and DERM, also contributed to the development of Green Cross Australia's *Harden Up Queensland* website (www.hardenup.org).

The website is a public portal for the access of preparedness information to build community resilience to disaster impacts. Web development was supported by NDRP funding administered by EMQ, and DERM provided historical and projected climate data for the climate trends section of the website.

Information for special interest groups

SDMG members contributed to the development of messages for CALD communities in 2010-11:

- DCS provided subject matter advice for a Multicultural Affairs Queensland communiqué, which was distributed to approximately 220 community groups to support disaster preparedness for Tropical Cyclone Yasi
- EMQ translated its Preparing for Cyclones brochure and other emergency information resources into a range of languages to support preparedness in CALD communities
- EMQ continued its National Indigenous Radio Service campaign to broadcast culturally relevant community safety messages about cyclone, storm and flood events to Queensland's Indigenous communities.

Notably, in 2010, EMQ and the Australian Red Cross achieved formal recognition for their contribution to the disaster preparedness of people with a disability. These agencies were awarded the Queensland Safer Communities Award 2010 for the development of the Emergency REDiPlan, which is an information resource to support disaster planning by people with a disability, their families and carers. The Emergency REDiPlan was also highly commended in the State and Territory Government Category at the Australian Safer Communities Awards 2010.

During 2010-11, the Department of Education and Training (DET) undertook work to promote disaster preparedness specifically for school principals and TAFE institute directors. The department developed an emergency management page on its internal website to provide quick reference guides and links to relevant websites. Prior to the 2010-11 season, extensive communication strategies were implemented and communications were maintained during the response and recovery phases of recent events. A directive (No. 01/2010) was also developed and published online to assist principals with the necessary approval for temporary school closure in the situation of a natural disaster.

Evaluation of public messaging

In 2010, the QTCCC funded an independent evaluation of the effectiveness of an educational DVD that has been developed by Rockhampton Regional Council to enhance risk awareness and support community preparedness for cyclone and bushfire events.

The committee considered that the *Disaster Happens* DVD could be readily localised to other communities if its distribution was shown to enhance preparedness for Rockhampton households.

The DVD was distributed to 10,000 households in Rockhampton during September and October 2010, and the evaluation is currently being undertaken by the Centre for Disaster Studies at JCU. The funding agreement is being managed by EMQ on behalf of the QTCCC, and evaluation findings are expected in 2011-12. The QTCCC will maintain a watching brief over the evaluation and consider the implications of its findings.

4.3 Planning

SDMG member agencies continued work to enhance the understanding of and planning for disaster events in 2010-11. This included planning in relation to specific hazards that are a risk for Queensland communities as well as functional planning to ensure agency disaster preparedness.

Hazard-specific planning

Construction of the Queensland Emergency Operations Centre

Construction of the Queensland Emergency Operations Centre (QEOC) at the Emergency Services Complex in Brisbane was completed in April 2011. The centre will support state-level coordination of disaster management in relation to a range of hazards. The project had earlier commenced in June 2009.

The Queensland facility is consistent with international best practice for effective communications centre management and disaster coordination, and information and communication technology (ICT) capability for disaster management has been enhanced.

The SDCC is now based in QEOC and its Watch Desk capability has consequently expanded. In May 2011, additional staff members were recruited and this increase in personnel will support improvements in the allocation of requests for assistance to the SES.

Construction of public cyclone shelters

On 9 May 2011, the Queensland Government announced that ten new public cyclone shelters would be built to withstand category five cyclones in Queensland. Public cyclone shelter construction will be funded through contributions from the Queensland Government and donations from the Emirate of Abu Dhabi made in response to the 2010-11 disaster events.

Rather than being limited to operation in a disaster, the new buildings will be multi-purpose facilities that allow for year-round community use.

Alternative uses for the public cyclone shelters may include gymnasiums, indoor sports facilities, performing arts centres and community halls.

DPW has undertaken a four-week consultation period with members of parliament and local government mayors regarding the location of these cyclone shelters, and final site selection will be agreed by a multi departmental executive-level officer group.

DPW will coordinate and manage the public cyclone shelter construction project and progressively deliver the shelters during 2012 and 2013.

Information management

The All Hazards Information Management (AHIM) program commenced in March 2011. DCS has allocated \$6.9 million over three years to the program, which aims to improve information management systems for the disaster management sector and support preparedness for the range of natural hazards that present risks to Queensland communities.

Functional planning

Implementation of the O'Sullivan Review recommendations

In 2010-11, EMQ took a lead role in implementing recommendations from the 2009 review of the QDMA. This work included developing and reviewing key policies, procedures and guidelines and supporting councils and community organisations to undertake resilience-building projects.

As part of this work program, EMQ developed the draft Queensland Evacuation Guidelines for Disaster Management Groups and distributed them to stakeholders for review. The guidelines incorporate an all-hazards approach and provide for consistency in evacuation processes in Queensland.

EMQ also wrote the interim Local Disaster Management Guidelines to reflect the introduction of the *Disaster Management and Other Legislation Amendment Bill 2010* and changes to the SDMP. These guidelines provide advice on the operation and governance of LDMGs and the development of local disaster management plans. They are scheduled for finalisation in 2011-12.

Review of resupply principles and processes

Under the QDMA, DPW is responsible for emergency resupply and the department has developed guiding principles for the provision of resource support during a disaster event. The principles identify the role of DPW in providing supplementary support when critical resources are not available to response agencies under their normal supply arrangements due to the magnitude, duration or nature of an event.

In 2010-11, DPW also implemented a new Request for Assistance format, which has been incorporated into the Guardian Incident Information system.

The Guardian system is used by more than half of all local governments in Queensland so the new process is widely accessible to LDMGs. However, an alternative paper-based system is also available for local governments that do not operate the Guardian system.

Development of bedding resource protocols for evacuation centres

DPW and QH developed the Provision of Bedding Resources Protocol to support the resourcing of evacuation centres during disaster events. The protocol was released on 20 December 2010 and operationalised during the disaster events in 2011.

Consistent with emergency resupply principles, the protocol aims to support local authorities with supplementary assistance if their local arrangements to supply bedding and linen to evacuation centres prove insufficient during an event.

A basic tenet of the protocol is that commercial quantities of inflatable mattresses and/or camp stretchers may be supplied on consignment from pre-arranged providers. DPW also maintains a cache of approximately 500 inflatable mattresses at the Queensland Government's Sales and Distribution Services (SDS) warehouse in Brisbane. QBuild regional offices will have access to caches of similar stock in smaller quantities from locally based suppliers. Access to DPW and QBuild stocks in a disaster event can be initiated through DDMGs.

System improvements for the health sector

In 2010-11, the Queensland Ambulance Service (QAS) partnered with QH to draft the Planning Guidelines for Mass Gathering Events. QAS reviewed and updated its Heatwave Emergency Management Plan and implemented the National (SMART) Triage system, which was an outcome of research conducted by QAS on behalf of the Council of Ambulance Authorities during 2008-09.

QH also made system improvements to enhance internal and cross agency coordination in the event of environmental health threats.

QH built an integrated system to respond to potential threats. The system engages environmental health, clinical and state wide services in coordinated efforts to respond to pandemic, chemical, biological and radiological emergencies as well as natural disasters. QH also implemented partnership agreements between the health sector, school communities and general industries to protect and sustain the community during a pandemic.

QH will continue to build command, control and coordination capability across health services in 2011-12. It has commenced work to better enable QH senior executives to operate effectively in the integrated disaster incident management system.

The QH Emergency Management Unit plays a key role in developing agency-wide emergency preparedness and continuity management capabilities to give effect to the department's obligations under the SDMP. During the reporting period, the unit undertook the following functional planning activities:

- reviewed the Emergency Preparedness and Continuity Management Policy and Guidance Manual
- granted interim approval for the revised Mass Casualty Sub-Plan to the Queensland Health Disaster Plan 2008
- upgraded the State Health Emergency Coordination Centre (SHECC) capability relating to audio visual and telecommunications support.

The unit also supported emergency preparedness and continuity management through participation on a range of interagency disaster management groups.

Capacity building for psychological first aid

Queensland Health implemented the national eight-step Psychological First Aid concept in 2010-11 with the objective of supporting Queensland Government agencies to work in partnership to minimise the psychological impact of disaster events.

Disaster responders are trained to provide the first-level of psychological intervention in the immediate aftermath of a disaster and identify risks to personal and community recovery.

Planning for infectious disease

In 2010-11, a memorandum of understanding was established to better manage the threats to human and animal health from infection with a zoonotic disease. The memorandum sets out the conditions for multi-agency coordination between QH, DEEDI and Biosecurity Queensland, DJAG, and Workplace Health and Safety Queensland.

Transport infrastructure planning

DTMR developed a new Transport and Main Roads Emergency Plan in 2010-11, which incorporates scalable critical incident management arrangements.

DTMR has established an Emergency Management Portal as the single point of truth for emergency management reference materials and to enhance communication with its emergency management officers across the state.

The department routinely works with external stakeholders to undertake planning for disaster events. In 2010-11, this included:

- contributing to the effective management of transport system networks through the review and implementation of Road Network Incident Management Plans for whole-of-state incident management and the restoration of safe road access in a timely manner

- increasing the capacity of the 13 19 40 Traffic and Traveller Service (web and telephone) to ensure timely, accurate information about road access, outages and restrictions
- working with representatives from the logistics and supply industries to increase the capability of the transport and freight supply sector to operate during times of significant road outages
- working with industry and local government to strengthen transport infrastructure and its resilience to natural hazards, including the upgrading of identified regional airports and roads.

Planning for community recovery

In 2010-11, the Department of Communities (DoC) carried out functional planning in relation to its responsibilities for community recovery in a disaster event.

In the lead-up to the 2010-11 season, department personnel conducted a range of preparedness activities to ensure that regional staff and external partners could deliver community recovery functions in a disaster activation. This included training approximately 1,500 government employees from 11 agencies to perform community recovery functions.

All regions within the department reviewed and amended their district Community Recovery Plans and refreshed their Business Continuity Plans in collaboration with their respective LDMGs and DDMGs during 2010-11.

Education and training

DET undertakes disaster planning through its Emergency Response Taskforce and Emergency Management Response Unit.

The Emergency Response Taskforce was established in 2010-11 to provide a single point of coordination and information collation for the education and training sector, and the taskforce provided support to DET's regions and Technical and Further Education (TAFE) institutes during the year's disaster events.

DET also maintained its Emergency Management and Response Unit within the Infrastructure Services Division to develop departmental emergency management policy and procedures. This unit provided emergency management advice and support to state schools, TAFE institutes and educational workplaces, and established systems and processes to manage the response and recovery phases in 2010-2011.

Geo-spatial applications

The Queensland disaster management sector uses technology to inform and support preparedness actions through the development and use of geo-spatial applications.

Digital Elevation Model project

In 2010-11, the DCS Digital Elevation Model (DEM) project was extended to include inland flood towns. This project is an initiative under EMQ's Protecting Our Coastal Communities (POCC) program of work.

Digital elevation data will now be used to create a 3D representation of terrain in more than 90 areas of Queensland. The results from this project will inform future flood modelling and support evacuation planning by disaster management groups. Full details of the areas under study are available in Appendix 3.

The tendering process for this component of the DEM project was coordinated through DERM and data output is scheduled for release to all councils in mid-2012.

Aerial imagery

EMQ activated the Emergency Imagery Fund to enable capture of aerial and satellite imagery of towns during the 2010-11 flood events. The Emergency Imagery Fund resides with DERM but is funded by EMQ's Protecting our Coastal Communities project.

The spatial data images that were acquired through this process were used by DERM and the QRA to support development of the 2010-11 interim floodlines for the reference of the disaster management sector and community members.

The floodlines have been made available to the public on the QRA website. The images will also support validation of future flood studies and provide a permanent record of the extent of flooding in the 2010-11 events.

T-TOM

DTMR developed T-TOM in 2010-11. This interactive geo-spatial mapping system will provide real-time amalgamation of diverse mapping, video and geospatial data in relation to transport infrastructure in particular.

4.4 Training

In 2010-11, SDMG member agencies undertook work to build the capability of agencies, partners and stakeholders to undertake their roles under QDMA.

Development of the disaster management training framework

The Queensland Disaster Management Training Framework was implemented in 2010-11 to ensure that key stakeholders were made aware of relevant changes resulting from the 2009 O'Sullivan Review.

The framework provides for the progressive roll-out of training programs to agencies involved in disaster management at the local, district and state levels.

It outlines the core training courses and inductions that need to be undertaken by stakeholders to support fulfilment of their disaster management roles and responsibilities.

Course materials are scheduled for finalisation by EMQ before 1 November 2012.

Disaster management training delivery

Personnel from SDMG member agencies had the opportunity to participate in Joint Emergency Services Training (JEST) in Cairns (27-29 July 2010) and the Sunshine Coast (22-24 March 2011). This training was also facilitated outside the reporting period in Brisbane (14-16 June 2010) and the Gold Coast (14-16 September 2011).

EMQ provided disaster management training to over 5,000 people from state government, local government, non-government organisations and the SES during 2010-11.

EMQ delivered the Introduction to the Queensland Disaster Management Arrangements (IQDMA) course to 847 participants. The IQDMA course was later updated to incorporate changes made to legislation and policy as a result of the O'Sullivan Review. The IQDMA was relaunched as QDMA training and delivered to a further 431 participants from April to June 2011. EMQ also committed funding to deliver a flexible learning option for delivery of the QDMA training to support increased uptake of the course.

EMQ delivered the Local Disaster Coordinator (LDC) Induction course to 58 participants during the 2010-11 reporting period.

The agency also increased its resource management and reporting capabilities through the use of an internet portal for disaster management training. The portal enables EMQ staff to capture accurate information on disaster management training delivery across the state. It streamlines the provision of updated course materials and reduces the necessity for printing large amounts of hard copy documentation.

In 2010-11, EMQ continued to endorse nominations for Queensland disaster management stakeholders to attend courses delivered by the Australian Emergency Management Institute (AEMI).

In support of its increased disaster management responsibilities under the revised QDMA, the QPS provided training services to external and internal personnel in 2010-11. This training included:

- state-wide education and information sessions for LDMGs and DDMGs about amendments to the Act
- two executive officer/DDC workshops
- disaster management training for commissioned officers at the Incident Command Symposium

- disaster management training for senior sergeants as part of the Incident Command Development Course
- training for QPS officers to support deployment in the SDCC during disaster events.

The QPS also reviewed and updated its Introduction to Disaster Management training booklet and Operational Procedures Manual to ensure consistency with contemporary disaster management legislation and guidelines.

DERM focused on the provision of specialist response training for its personnel in relation to environmental incidents including:

- delivery of oiled wildlife response training to staff and community groups at Townsville, Hervey Bay and Moreton Bay
- specialist environment and scientific training for staff involved in providing environmental input to marine pollution events
- environmental incident response training for personnel in regional centres including Brisbane, Toowoomba, Townsville, Cairns and Mount Isa.

DTMR conducted state-wide education and awareness activities for its staff in relation to disaster preparedness, response and recovery more broadly. The focus was on ensuring comprehensive awareness of the department's emergency management arrangements, the QDMA, the Australasian Inter-service Incident Management System, and specialist emergency incident initiatives such as Maritime Safety Queensland's oil spill response arrangements.

QH facilitated training in relation to community recovery and its staff members also participated in volunteer training in 2010-11. The range of training provided included:

- Disaster Connect in partnership with the Adventist Development Relief Agency in November 2010. The program taught psychological first aid to agency volunteers
- training in the CBRN Safe Psychosocial First Responder Guidelines in June 2011. Training was organised by community recovery responders and targeted JEST participants
- the Foundations of Disaster Psychosocial Disaster Management to TAFE student counsellors in March 2011
- Executive Level 3 Training to staff members from health service districts, Population Health and the Mental Health Directorate in April 2011
- State Disaster Volunteer Training for QH Service District personnel in March 2011. This training was delivered by EMA.

QAS continued to maintain its commitment to building Queensland's urban search and rescue (USAR) specialist capability in 2010-11 and now has 36 USAR trained paramedics.

4.5 Exercises

The disaster management sector undertakes periodic exercises to maintain the skills of personnel and to test and validate plans and procedures.

The SDCC led and participated in a range of exercises in 2010-11 to maintain its operational currency and inform continuous improvement activities. SDCC activity in this regard included:

- participation in Exercise Mercury on 10 August 2010, a multi-jurisdictional counter terrorism exercise to improve national capability to manage terrorist threats
- facilitating Exercise Open Heaven on 20 October 2010 to test the operational skills and knowledge of SDCC volunteer staff and improve the readiness of the SDCC for disaster events
- facilitating Exercise Tempest on 24 April 2011 as a whole-of-government exercise with 62 participants who had received SDCC training. The exercise focused on the roles, responsibilities and functions of the four SDCC cells deployed during operations (operations, planning, logistics and intelligence).

EMQ maintained a leadership role in the facilitation of disaster management exercises in 2010-11. Activities ranged from desktop discussions to hypothetical exercises that tested and validated integrated emergency management capabilities across agencies. EMQ facilitated the following exercises during the reporting period:

- Exercise Orko to test whole-of-government disaster management arrangements at the local, district and state levels. The exercise scenario was based around a hypothetical event affecting the Dalby, Toowoomba and Warwick disaster districts and local governments in Goondiwindi, Lockyer Valley, Southern Downs, Toowoomba and Western Downs
- several smaller-scale exercises to test the preparedness and capability of key disaster management stakeholders, which were staged in conjunction with DoC and held in the North Queensland, Central Queensland, South West and South East regions
- a desktop exercise in May 2011 in relation to nuclear power warships for QH personnel.

In addition, EMQ and the QPS supported executive officers to prepare and deliver desktop and field training exercises for LDMGs and DDMGs.

Through Biosecurity Queensland, DEEDI developed and conducted a national exercise in relation to managing a national animal disease emergency. Exercise Red Feather aimed to enhance the ability of Biosecurity Queensland and the poultry industry to respond to a highly pathogenic avian influenza outbreak and manage key risk areas.

It tested the development of high-level disaster response strategies and policies relating to movement controls and the management of zoonotic disease.

Eighteen training events were facilitated by DEEDI through this exercise. The exercise objective was achieved and three subsequent discussion workshops were conducted from August to October 2010.

QH and QAS participated in the exercises with a specific focus on managing mass casualties in large-scale disaster events. QAS reports participation in Exercise Ice Capture, which tested new methods for managing casualties and witnesses to disaster events, and the outcomes of this exercise will be used to inform the development of cross-agency procedures.

QH and QAS support the disaster management sector by having personnel trained in the Emergo educational simulation system. Queensland has over 40 Senior Emergo instructors from these agencies, and they facilitated desktop exercises in Mount Isa (August 2010), Mackay (October 2010) and Cairns (December 2010) as well as a practical mass casualty exercise in Toowoomba in May 2011.

SDMG members also participated in a range of other desktop discussion exercises in 2010-11 and the outcomes will inform priority areas for improving agency capabilities:

- the Brisbane Airport Exercise was coordinated by the Brisbane Airport Emergency Committee in October 2010 with a specific focus on testing the capabilities of QH, QAS, QPS and the Royal Brisbane Women's Hospital in an emergency event at the airport
- DTMR facilitated a discussion exercise on 24 November 2010 that examined the issues and challenges associated with a multi-agency response to a marine chemical incident in a remote part of Far North Queensland. The exercise engaged representatives from Commonwealth, state and local governments as well as a local shipping company
- DTMR conducted several desktop scenarios to test the preparedness of the department's Critical Incident Management Team
- DERM, Maritime Safety Queensland and Queensland Rail collaborated in desktop exercises for disaster management scenarios during 2010-11.

4.6 Warnings and alerts

In December 2010, the SDMG issued the Emergency Alert Queensland Operational Guidelines, providing LDMGs and DDMGs with criteria and protocols for the use of this public warning system.

Emergency Alert is a \$15.65 million telephone-based national emergency warning system funded by the Commonwealth Government. Communities in areas at risk of serious or life-threatening disaster events may be alerted with a recorded voice message or SMS sent via landline or mobile telephones.

The system was launched in December 2009 and EMQ participated in the Emergency Alert Media, Education and Awareness National Working Group to support development of the associated marketing campaign and support its implementation in Queensland.

5 Response

The Act requires:

- ‘the taking of appropriate measures to respond to an event, including action taken and measures planned in anticipation of, during, and immediately after an event to ensure that its effects are minimised and that persons affected by the event are given immediate relief and support’ (s. 4A).

The scale and impact of disaster events during 2010-11 required significant and protracted engagement in disaster operations at state-level.

5.1 Activation of response arrangements

In 2010-11, there were a total of 12 district disaster declarations and two state declarations.

Due to extensive flooding throughout Queensland in late 2010, four disaster declarations were made under the provisions of the Act (covering the districts of Longreach, Dalby, Gladstone, Bundaberg, Rockhampton and Roma) and these were extended into 2011. A further three district declarations were made in 2011 (Gympie, Maryborough, and Toowoomba).

As major flooding spread across the state, the Premier of Queensland and the Minister for Police, Corrective Services and Emergency Services made a state-level declaration on 11 January 2011, which covered 15 disaster districts (Brisbane, Bundaberg, Dalby, Gladstone, Gold Coast, Gympie, Ipswich, Logan, Maryborough, Redcliffe, Rockhampton, Roma, Sunshine Coast, Toowoomba and Warwick).

As a result of the heavy and widespread rain associated with Tropical Cyclones Anthony and Yasi, a further two district declarations were also made for Townsville and Mackay on 30 January 2011. On 1 February 2011, another state-level declaration was made for eight disaster districts (Cairns, Gladstone, Innisfail, Longreach, Mareeba, Mackay, Mount Isa, and Rockhampton) and a subsequent district declaration was made for Townsville and Innisfail on 16 February 2011.

Full details on disaster activations are provided in Appendix 4.

5.2 Disaster coordination centre operation and management

State Disaster Coordination Centre

The SDCC provides an operational venue for the SDCCG to provide state-level support to disaster operations through the QDMA and in accordance with the decisions of the SDMG. The SDCC also ensures information about an event and disaster operations are communicated to all involved.

The SDCC was activated and provided assistance for 11 large-scale disaster events in 2010-11 (see table below). The SDCC was also engaged in other minor state-wide operations that did not require formal activation.

Table 1: SDCC activations in 2010-11

Activations	Dates
South West Queensland low	September 2010
Flood assistance to Victoria	September 2010
South East Queensland storms	October 2010
Queensland floods and Cyclone Tasha	November 2010 - February 2011
South Queensland flooding	November 2010 - December 2011
Tropical Cyclone Anthony	January 2011 - February 2011
Tropical Cyclone Yasi	February 2011
Assistance to New Zealand earthquake	February 2011
Atherton Tableland flash flooding	March 2011
Assistance to Japan’s tsunami	March 2011
Maranoa flooding	April 2011

Police Operations Centre

The Police Operations Centre (POC) was established at QPS Headquarters in response to the flash flooding in Toowoomba and Lockyer Valley.

The POC functioned to build situational awareness in relation to the scale of events in three police districts (Brisbane, Ipswich and Toowoomba). The POC identified the location of police resources deployed to deal with flood events and coordinated police resources in support of regional police operations.

It continued to operate during Queensland's subsequent tropical cyclone events and was ultimately stood down on 14 February 2011.

State Health Emergency Coordination Centre

The SHECC stood up on 22 December 2010 in response to the floods in Toowoomba and Lockyer Valley and was active until 18 February 2011. During this time, the SHECC was relocated from the Brisbane central business district to Princess Alexandra Hospital when the central city precinct was flooded.

Public Health Emergency Operations Centre

QH's Public Health division also established a Public Health Emergency Operations Centre (PHEOC) and activated a number of sites based at Public Health units to best serve flood affected communities.

QH appointed physicians and environmental health staff to provide extensive advice and services from December 2010 to February 2011, and their output and results included:

- 15 fact sheets and seven advisories for public and private industry audiences distributed via fax to responding agencies and/or clinicians
- 23 local governments provided with advice on food safety, water quality, sewage treatment issues, waste management and asbestos, vector control and communicable diseases
- 41 towns in eight local government areas subject to boiled water alerts due to compromised water supplies
- advice provided to agencies on public health risks associated with the operation of evacuation and recovery centres
- the deployment of environmental health and vector control staff from non-flood-affected areas in Queensland and interstate, including 42 staff deployed to five councils in response to seven formal requests to assist with flood recovery
- 36 cases of the water-borne bacterial disease leptospirosis confirmed in flood-affected areas between 1 January 2011 and 15 February 2011 (53 across Queensland in total)
- advice provided to the public on leptospirosis, including the distribution of Public Health Alerts to general practices and emergency departments in relation to the increased incidence and appropriate treatment. The Communicable Diseases Branch continues to monitor the incidence of leptospirosis in the community and will investigate clusters of the disease to establish the source and provide appropriate information to those people at risk
- registration of a small increase in Barmah Forrest virus infection, particularly in Rockhampton Public Health Unit area (24 cases from 1 January to 15 February 2011).

Across major hospitals in south-east Queensland, approximately 8,000 specialist outpatient appointments and 745 elective surgery procedures were postponed as a direct result of the flood events.

By 7 February 2011, all flood-affected hospitals had returned to normal service levels. At 17 February 2011, flood damage had resulted in total operating costs of \$6.24 million and estimated capital costs of \$6.11 million across QH.

Additional information about the activation of response arrangements by QH may be found at Appendix 5.

5.3 Communications

SDMG member agencies provided leadership and support for the many cross-government communication activities that occurred as a result of the 2010-11 disaster events. Communications during this period came from multiple, diverse sources for a range of purposes related to the disaster response.

Queensland Government Crisis Communication Network

The Queensland Government CCN was activated in December 2010 in response to flooding events. Due to the large magnitude of these events and subsequent smaller events that occurred around the state, the CCN remained activated until June 2011.

The CCN is chaired by the DPC and its members are communication directors from relevant agencies. The network works to coordinate agency communications and public messaging across agencies.

Members of the CCN met three times in-person at the start of the disaster events (on 4 January, 18 January and 4 February 2011). However, 24-hour communication and information sharing was maintained via e mail and telephone.

During the activation period, the CCN was represented at all high-level disaster management meetings. CCN representatives provided communication advice and information from these meetings back to the wider CCN network. The network also provided a vital service to agencies throughout the emergency response by organising relief staff when required.

Smart Service Queensland disaster services

In 2010-11, Smart Service Queensland (SSQ) provided online and contact centre services in support of EMQ, DoC and DPC. The demand on SSQ during this period included, but was not limited to, delivering the SES 132 500 hotline and answering over 165,000 phone enquiries for disaster services.

The Queensland Government flood information site (<http://www.qld.gov.au/floods/index.html>) was managed by SSQ and recorded over 900,000 page views from 29 December 2010.

Bureau of Meteorology

In 2010-11, the BoM provided the SDCC with a total of 7,425 weather notifications in the form of warnings, bulletins and advices. Of these notifications, 733 required follow-up action by the SDCC.

Emergency Alert

In 2010-11, the Emergency Alert system was used to deliver a total of 90 campaigns featuring 53 separate warnings and critical advice for communities affected by floods or cyclones. The system was used extensively during the 2010-11 Queensland floods and Tropical Cyclone Yasi.

Media

The QPS successfully provided public information during the 2010-11 disaster events via Facebook, Twitter, live news streams and media releases. Police media activity during this period on social media networks has since been acknowledged as smart practice. The QPS Media and Public Affairs Branch reports that in the 24-hour period following the flash floods in the Lockyer Valley, *'the number of 'likes on the QPS Facebook page increased from approximately 17,000 to 100,000'*. In this way, the QPS was able to proactively push out large amounts of disaster response information to a mass audience.

The DCS Media and Corporate Communications Branch hosted regular live media crosses from inside the SDCC during the 2010-11 flood events and Tropical Cyclone Yasi. This included daily crosses to morning television shows, news bulletins and current affairs programs. Media representatives provided feedback that the television coverage supported viewers to better understand the emerging disaster situation.

DCS also recorded and assisted in issuing Emergency Alert messaging, coordinated key messages broadcast by other government agencies, and ensured the accuracy of warnings issued to the public via radio. The department monitored social media during the disaster events and analysis of this online activity will be used to inform the future development of communication strategies for disaster management.

Electrical safety

Public information about maintaining electrical safety during flood and cyclone events was published on the DJAG website from 5 January 2011. Online information included a pod-cast covering a range of priority topics (generators, power reconnection, solar panels, and using licensed operators).

An Electrical Safety Alert in relation to reconnection was distributed to all licensed electrical contractors and workers in Queensland on 20 January 2011, and advice about flood-affected installations was sent out the subsequent day.

DJAG also distributed extensive electrical safety communications to other government agencies to support their public information campaigns. The department provided advice to electricity distribution entities and relevant contractor and union groups, and to tradespeople and community members at emergency centres.

In addition, DJAG provided advice during site visits to flood-affected areas and liaised with local Workplace Health and Safety Queensland representatives to extend the reach of public messages about electrical safety during disaster events.

Asbestos removal

QH collaborated with Workplace Health and Safety Queensland on a media strategy in relation to safe asbestos removal during disaster events. A fact sheet on the handling of flood damaged asbestos was developed and made available via the QH website from 25 January 2011.

QH also liaised with DERM and local councils regarding the safe disposal of waste materials and communicated information about asbestos collection to licensed contractors.

Transport infrastructure

DTMR provided disaster management stakeholders with daily emails that provided up-to-date warnings of pending adverse weather systems and advice about the escalation of critical incidents.

The 13 19 40 Traffic and Traveller Service (web and telephone) was used to provide the public and other agencies with advice about the status of road access on the state-wide road network.

The department also liaised with the SDCC and the QPS to prioritise and enable key road network openings and supported other government agencies in priority emergency equipment or critical resupply freight movements.

Community health advice

The 13 HEALTH telephone number, QH website and associated disaster management web-pages were promoted to the community in fact sheets and media releases to support an effective response to disaster events.

There were 8,728 calls to 13 HEALTH in relation to flood issues between 1 January and 17 February 2011, and QH had handled a total of 140 flood-related media enquiries as at 17 February 2011.

The QH flood and cyclone response and recovery website received a total of 56,683 hits from 4 January to 18 February 2011. Fact sheets developed in November 2010 were posted to the website and content was reorganised with the addition of new material during the response phase.

School closures

DET provided up-to-date information on school closures to parents, staff and the broader community through its department website during the response phase to the 2010-11 events.

5.4 Deployments

Personnel from state-level agencies were extensively deployed during the response to the 2010-11 events to fulfil a diverse range of functions.

Queensland Government deployments

A total of 1,078 QPS members were deployed, specifically:

- 36 officers and staff members to support 24-hour coverage in the SDCC, including four personnel who provided secretariat support to the SDMG
- 52 officers and staff members to the POC
- 552 officers and staff members to assist Toowoomba police and the Toowoomba disaster management groups in the aftermath of local flash flooding
- 438 officers and staff members to assist regional police, LDMGs and DDMGs in areas affected by Tropical Cyclone Anthony and Tropical Cyclone Yasi.

Other SDMG member agencies also deployed personnel to disaster-affected areas, and the following information is indicative of the scale and scope of those deployments:

- DPW established the SDCC Travel Unit to manage the deployment of personnel to North Queensland in response to Tropical Cyclone Yasi. The unit was set up using staff from the Queensland Government Chief Procurement Office in conjunction with commercial provider HRG
- DTMR deployed department personnel to impact zones and used these staff members to ensure the flow of accurate and timely information about interruptions in the transport infrastructure
- QAS deployed local ambulance officers to assist in flood-affected communities. The service also collaborated with QH in the deployment of personnel to establish a medical evacuation assessment centre in Gladstone and to set up temporary hospitals in St George and Goondiwindi in the event that local facilities were flooded. Tactical Medical Facilities at Gladstone and Goondiwindi Airports were rapidly established to assist with patient staging during aero medical retrievals and transports
- QH managed the deployment of mental health and human social recovery teams to relieve local service providers. By 15 February 2011, 465 staff members were registered for deployment including 352 QH staff members and 113 personnel from other agencies. A total of 265 deployed staff delivered psychological first aid, and QH assisted 8,901 people through the flood recovery centres

- QH also provided clinical and human-social services at 16 evacuation centres in Queensland, including the Lockyer Valley communities severely impacted by flash flooding.

Australian Defence Force deployments

The Australian Defence Force (ADF) contributed to disaster operations in Queensland during the following operations:

- 30 November 2010 to 23 January 2011 (Queensland floods)
- 10 January 2011 to 21 January 2011 (Toowoomba and Lockyer Valley flash flood events)
- 28 January 2011 to 11 February 2011 (Tropical Cyclones Anthony and Yasi).

Full details of ADF contributions are provided in Appendix 6.

QH managed the deployment of ADF personnel for human-social response efforts. Through the ADF Joint Task Force 637, the following assistance was provided:

- five environmental health teams made up of two environmental health technicians with vehicles and equipment and five individual environment health officers. Transport was provided for two radiation health officers, an electrician and equipment to Queensland Radioactive Waste Stores near Esk
- three health planners and two water specialists were deployed to support PHEOC operations
- four psychologists working in two teams to support mental health services.

Interstate support

QH coordinated the deployment of health services staff from interstate jurisdictions to assist in the response efforts, including:

- 11 human social officers from New South Wales deployed to Ipswich
- seven human social officers from Victoria deployed to Emerald and other Central Queensland locations
- a public health water specialist from Victoria Health deployed to the PHEOC to assist with water quality policy advice from 15-19 January 2011
- four staff from the Northern Territory Department of Health deployed to Ipswich City Council to assist with vector control and conduct flood inspections from 21-25 January 2011.

In addition, QAS deployed ambulance officers from New South Wales, Victoria and South Australia to supplement emergency health care services to communities in flood affected areas.

Aerial operations

Between 27 December 2010 and 28 January 2011, the QPS Air Wing was heavily involved in the response to the Queensland floods. QPS aircraft completed 344 flight hours and travelled 101,369 kilometres, moving a total of 1,366 passengers and 30,267 kilograms of equipment and specialised cargo.

In response to Tropical Cyclone Yasi, the QPS Air Wing flew a further 107 hours over 32,412 kilometres and transported 437 passengers.

EMQ's Helicopter Rescue Service was also engaged in the disaster response with a total of 143.5 engine hours undertaken during the Queensland floods and a further 58.5 engine hours in response to Tropical Cyclone Yasi.

Helicopter crews were able to save the lives of 43 people who were left clinging to trees, cars and rooftops when flash flooding impacted the Lockyer Valley. In 2011, EMQ's Helicopter Rescue Service was honoured with the Goodrich Rescue of the Year Award (US) 2011 and the Shephard Search and Rescue 2011 Crew Award for their efforts.

International deployments

In response to the Christchurch earthquake on 22 February 2011, the Commonwealth Government deployed an Australian Medical Assistance Team (AUSMAT). QH and QAS staff members were involved in the AUSMAT and QAS facilitated a 75 bed Tactical Medical Centre where more than 300 patients presented for treatment.

In 2010-11, QH commenced development of a Queensland Volunteer Register for Queensland Health practitioners seeking to be deployed as part of AUSMAT.

QAS deployed a further paramedic as part of the Commonwealth Government's Operation Pakistan Assist, which was in response to the extensive flooding that occurred in the country during August 2010.

5.5 Evacuation

The 2010-11 events led to the evacuation of a total of 3,677 houses and 5,912 people in high-risk areas. A mandatory evacuation order was issued for the 300 residents of Theodore on 27 December 2010 as a result of flooding in Central Queensland, and this was the first time that an entire town in Queensland had been evacuated. Following a request from the Queensland Government, the ADF supplied two Blackhawk military helicopters to assist in the evacuation to a nearby mining camp in Moura.

Flooding also caused the evacuation of residents from other Queensland communities (including Alpha, Chinchilla, Condamine, Emerald, Goondiwindi, Ipswich, Rockhampton, Stanthorpe and St George) and in North Queensland evacuations were undertaken in response to Tropical Cyclone Yasi.

From 26 December 2010, Retrieval Services Queensland coordinated aero-medical transport and retrieval activity in response to flood events in Queensland with QAS providing logistic support. At January 2011, a total of 362 transfers had been coordinated. This included transfers facilitated during the evacuation of five hospitals and four aged care facilities in Theodore, Emerald, St George, Mungindi and Goondiwindi.

Queensland Health also assisted in the evacuation of a private aged care facility in Brisbane to Sunnybank Private Hospital when flooding reached the state's capital. A total of 36 acute patients and 69 aged care patients were evacuated in this situation.

In preparation for the anticipated effects of Tropical Cyclone Yasi, QAS later worked with QH to evacuate, and then repatriate, more than 200 patients from the Cairns Base and Cairns Private Hospitals.

To support evacuations during the 2010-11 disaster events, DERM provided advice to the SDCC in relation to storm tides and potential coastal impacts. The department also effectively managed the closure and evacuation of affected National Parks, and this ensured the safety of recreational campers and walkers.

Emergency accommodation

In the absence of sufficient public cyclone shelters to accommodate people during Tropical Cyclone Yasi, DPW used a 1998-99 building database to identify the most appropriate alternative accommodation options for use as 'places of refuge'. A number of buildings were temporarily upgraded by local QBuild personnel under the direction of an experienced structural engineer. The upgrade works were generally limited to improving the debris impact resilience of buildings, and this included fixing structural ply panels over windows to provide an enhanced degree of safety for occupants.

DPW's experience in providing short-term emergency accommodation for Tropical Cyclone Yasi will be used to inform the planning and construction of additional public cyclone shelters in 2011-12 and 2012-13.

5.6 Impact assessment

To make informed decisions during a disaster response, senior levels of government require immediate, up-to-date information about the impacts of disaster events on local communities.

During the 2010-11 events, DERM assisted by assessing the timing and extent of flooding based on data from BoM stream and river gauges, and worked with bulk water managers to support decision making in relation to excess water releases.

The department also provided other subject matter advice in the areas of waste management, water supply and sewerage treatment.

Likewise, DEEDI provided early assessments of the economic impacts of 2010-11 disaster events based on advice from regional staff, industry groups, producers and local government. Biosecurity Queensland managed the animal welfare aspects of the events to minimise stress for animal owners, and the agency played a specific role in providing emergency management advice to incident responders during the outbreak of Myrtle Rust fungal disease (January – February 2011) and the Hendra virus (from June 2011).

QH provided public health advice to LDMGs and DDMGs and assisted in sourcing environmental health officers and vector control staffing support to local governments in Central Queensland, Wide Bay, the Darling Downs and the South West, Ipswich, the Lockyer Valley and the Somerset region. QH also completed food, pharmacy and other relevant business inspections in these flood-affected communities.

Geo-spatial data

During the 2010-11 events, DERM provided detailed spatial information for use by all response agencies and, for the first time, activated an international treaty to gain free access to a wide range of satellite and aerial imagery. DERM also supplied Geographic Information Systems staff to relieve DCS staff during the extended response period.

Mapping undertaken by DERM and EMQ supported operational deployments and the assessment of disaster impacts on local environments. The data illustrated the extent of flooding events throughout Queensland. DERM also produced maps for DCS to support the deployment of SES members in Tropical Cyclone Yasi.

5.7 Volunteer management

At state level, DoC was the lead agency for providing advice on volunteer management arrangements and for working with key community and industry stakeholders to support productive volunteering during the disaster response phase.

In late 2010 and early 2011, DCS volunteers across the state from the SES, Rural Fire Service and QAS provided support and assistance to help other Queenslanders respond to the effects of the Queensland floods and Tropical Cyclone Yasi.

SES volunteers provided storm and flood assistance, QAS volunteers assisted with the provision of pre-hospital medical care to the sick and injured, and Rural Fire Service volunteers provided flood and storm rescue and recovery assistance. The QDMA were also supported by staff and volunteers from across the country and from New Zealand.

In addition, Surf Life Saving Queensland (SLSQ) provided valuable assistance during the Brisbane floods with lifesavers from the Gold and Sunshine Coasts working directly with EMQ to provide emergency response and assistance to residents affected by the rising floodwaters, assisting and evacuating residents in flood-affected regions.

5.8 Donation management

DoC played a leadership role in managing community offers of assistance during the 2010-11 disaster events, particularly with regard to corporate offers.

The department developed databases to handle offers of assistance, established referral pathways, and liaised with corporate bodies and other key government organisations to determine appropriate avenues for offers to be directed.

Premier's Disaster Relief Appeal

The Premier's Disaster Relief Appeal was first activated in response to Tropical Cyclone Tasha and the flooding in south-east Queensland during January 2011. The Appeal was extended to cover Tropical Cyclone Yasi and the Roma floods, and distribution was managed in three rounds of funding (Personal Hardship, Rebuilding, and Repair).

SSQ supplied systems and processes for the collection of approximately 230,000 online donations generating \$42 million towards the Appeal. The agency also managed phone donations during the two-hour Australia Unites telethon, which was broadcast by Channel Nine and staffed by 220 volunteers. The telethon generated a further \$39 million for the Premier's Disaster Relief Appeal.

In total, the Appeal collected \$276 million, which was distributed by 30 June 2011. This includes \$19.5 million distributed through St Vincent de Paul for the relief of ongoing personal hardship.

DERM provided assistance to the Premier's Disaster Relief Appeal by validating claims with spatial data, and DPW continued to provide telephone and web service support through SSQ for donation management during the recovery phase.

Policy development for donation management

DCS will now take the lead in coordinating a whole-of-government working group to develop the Queensland Policy for Offers of Assistance – Donations, Volunteers and Goods in Disasters. This policy will be consistent with the National Guidelines for Managing Donated Goods and will enhance donation management in future disaster events.

5.9 Resupply

When communities or individuals are cut off for an extended period from their normal sources of food and basic commodities, the Queensland Government provides support through the resupply of essential items.

There were 23 state-level resupply operations coordinated by the SDCC in 2010-11 in response to floodwaters isolating people and properties. The total movement of supplies in these operations was over 105 tonnes. Full details of state-level resupply operations are detailed in Appendix 7.

Some communities required multiple resupplies due to long periods of isolation caused by road closures. A number of local governments also conducted their own operations, which typically provided support to isolated homesteads and were undertaken using light aircraft or mustering helicopters.

DTMR worked with industry, local government and transport sector stakeholders to restore critical freight networks for regional resupply. This logistics resupply coordination effort included the establishment of a dedicated freight permits office to liaise with industry and provide access for freight across the damaged road network. Regular meetings with operational stakeholders were reinstated to maintain a collaborative approach to restocking and resupply efforts.

DPW notes the wide range of provisions that were supplied during the response to the 2010-11 floods. The department reports supplying bedding materials, portable or demountable ablution facilities for isolated persons, cleaning materials, bottled water, hygiene packs for community evacuation centres, and vehicles with fuel cards.

6 Recovery

The Act provides for:

- ‘the taking of appropriate measures to recover from an event, including action taken to support disaster-affected communities in the reconstruction of infrastructure, the restoration of emotional, social, economic and physical wellbeing, and the restoration of the environment’ (s. 4A).

Recovery is undertaken as a component of disaster operations, and in 2010-11, SDMG member agencies dedicated significant financial and human resources to provide relief to Queensland communities in the aftermath of the flood and cyclone events.

6.1 Financial assistance

The primary mechanism used by the Queensland Government to provide assistance to those affected by natural disasters is the Natural Disaster Relief and Recovery Arrangements (NDRRA).

In response to the significant 2010-11 events, the Premier’s Disaster Relief Appeal was initiated for the receipt of financial assistance from community members and corporate donors, as previously stated.

The QRA was also established to coordinate and manage state wide recovery and reconstruction efforts, and it was made responsible for all Queensland submissions for NDRRA funding.

Natural Disaster Relief and Recovery Arrangements

NDRRA funding assistance is generally made up of a 75 per cent contribution from the Commonwealth Government and 25 per cent from the Queensland Government. SDMG member agencies have provided information that demonstrates the breadth of purposes to which NDRRA funding was directed in 2010-11, and this information is reported in relation to the relevant functional areas of the recovery effort.

The Commonwealth Government established oversight and accountability measures to ensure value for money in the rebuilding of disaster-affected regions. The following committees and taskforces worked with Queensland agencies for the administration of NDRRA funding in 2011:

- the National Disaster Recovery Committee of Cabinet
- the National Disaster Recovery Taskforce (for specialist assistance and advice to Commonwealth Ministers and Commonwealth bodies involved in the flood recovery efforts)

- the Prime Minister’s Business Taskforce (bringing together Australian business leaders to assist with business recovery and rebuilding efforts in Queensland)
- the Australian Government Reconstruction Inspectorate (supporting integrity and accountability in rebuilding projects).

Queensland Reconstruction Authority

Queensland’s recovery efforts were enhanced by the establishment of the QRA on 21 February 2011 under the *Queensland Reconstruction Authority Act 2011*. This statutory body is continuing to support the efficient and effective coordination of the Queensland Government’s program of reconstruction and recovery and assists lead agencies to maintain strong relationships with their counterparts at Commonwealth Government level.

The QRA, in consultation with the Queensland Treasury and DPC, developed and implemented the National Partnership for Natural Disaster Reconstruction and Recovery to expedite disaster recovery efforts through a common understanding of governance, financial reporting and audit, and funding approval arrangements. This partnership provided for the upfront payment of up to \$2 billion from the Commonwealth Government in 2010-11.

Operation Queenslander

Operation Queenslander refers to the state-wide Economic and Environmental Recovery and Reconstruction Plan developed by the QRA in 2011.

The plan provides strategic guidance for all levels of government, non-government organisations, industry, businesses, local community groups and individuals in relation to the disaster recovery. It sets the framework for district and local planning and recognises that planning and recovery efforts have already commenced in many areas.

The plan is a living document and will be reviewed in detail throughout the reconstruction effort. Progress in relation to the plan will be reported in the 2011-12 SDMG Annual Report.

Damage Assessment and Reconstruction Monitoring system

Queensland’s ability to recover from natural disasters and monitor subsequent reconstruction efforts has been significantly enhanced with the development and implementation of the Damage Assessment and Reconstruction Monitoring system (DARMSys™).

DARMSys™ facilitates the collection of early and accurate information on the scale and impact of disaster events.

The system was developed by the QRA in collaboration with the Queensland Fire and Rescue Service (QFRS).

Introduced as a pilot program in April 2011, the QRA is using DARMsys™ to collect real-time data through the use of hand held Geographic Positioning System devices. This information is sent electronically to populate a Geographic Information System database.

In the aftermath of the 2010-11 events, there have been in excess of 30,000 damage assessments conducted state-wide using DARMsys™. QRA personnel are travelling through flood and cyclone-affected communities and collecting data street by-street and house-by-house to identify areas of greatest need. The dataset is supporting the Queensland Government to prioritise assistance for the most vulnerable community members.

Routine audits of impacted communities are being conducted to monitor Queensland's reconstruction progress against baseline data. Data has been used to enhance situational awareness for the SDMG and it is enabling relevant state government agencies to effectively allocate resources for their reconstruction efforts. The DARMsys™ information has also been made available to councils to inform environmental health and social recovery activities.

The system was acknowledged by the World Bank as an instrumental tool that has enhanced Queensland's ability to recover quickly from the 2010-11 disaster events, and is a further example of how Queensland's disaster management stakeholders have utilised technology to enhance operational effectiveness and efficiency.

Build Back Blitz program

The QRA initiated the Build Back Blitz program to support the repair and rebuilding of disaster affected homes.

To this end, the QRA has identified households requiring priority assistance to restore their homes to a minimum habitable standard. The process has been undertaken in consultation with DoC and several non-government organisations (including the Salvation Army, St Vincent de Paul, Micah Projects, Lifeline and the Australian Red Cross).

Through the Build Back Blitz program, a number of affected Queensland home owners with limited financial resources (no access to the Premier's Disaster Relief Appeal or insurance funding) are now receiving assistance to rebuild their homes.

The QRA also developed Build Back Navigator, which is an online tool to provide Queenslanders with information and checklists about the decision process for determining if rebuilding is required.

Join Forces program

The Join Forces program was an important QRA initiative that has encouraged and facilitated donations towards Queensland's recovery efforts. The program is matching corporate donations with community organisations requiring funding.

At 30 June 2011, a total of \$48.6 million had been donated and 293 matches had been made between corporate donors and communities requiring assistance. The Join Forces website has attracted 176 organisations to register for assistance and more than 95 per cent have received some level of funding or support.

The achievements of the Join Forces program included facilitating the \$30 million donation from the Emirate of Abu Dhabi towards building cyclone shelters in Queensland and enabling pro-bono legal support to assist the Lockyer Valley Regional Council for conveyances under the Grantham land swap project.

6.2 Deployments

In addition to deploying personnel during the disaster response, SDMG member agencies continued to provide and support ongoing staff deployments to assist Queensland's recovery efforts.

The following information provided by SDMG agencies is indicative of the ongoing human resource commitment:

- DERM contracted community-based regional natural resource management bodies to provide assistance to landholders and communities in disaster-affected areas. Over 800 volunteers were managed and supported to clean up debris on farms and public areas in the Darling Downs region alone. Over 450km of fencing was re-erected or re-built and a further 70km of fencing was removed
- DJAG provided assistance to people affected by the flood and cyclone events through community recovery and volunteer programs. As part of the DoC Community Recovery program, 125 DJAG staff members were deployed 237 times to disaster affected areas for a total of 1,185 days. 33 staff members were deployed to the SSQ call centre, and six staff received ongoing training for deployment to the SDCC
- DJAG also established its own volunteer program to facilitate the deployment of departmental staff. A total of 62 DJAG staff members volunteered for 132 days to support local clean-up events, including assisting land managers in the Darling Downs, Toowoomba and Warwick disaster districts to repair fences and remove debris from properties; cleaning up Jindalee State Primary School and Brisbane Parks; and providing support to St Vincent de Paul and the Australian Red Cross

- DJAG performed a specific liaison role for government agencies to reduce the administrative burden in relation to staff applying for Special Leave during the disaster events
 - DoC deployed more than 2,000 personnel to assist in the recovery efforts during the 2010-11 storm and cyclone season. At the peak period of 10 February 2011, the department was coordinating 733 staff members in the field
 - The QPS deployed officers and staff members to the QRA and the Lockyer Valley Regional Council to assist with flood recovery efforts. The Chief Superintendent, Operations Support Command, QPS was appointed as a representative on the North Queensland Recovery Authority. The QPS also oversaw the role of its DDCs in the development of DDMG-level whole-of-government and non-government organisation recovery strategies
 - DERM also released departmental staff to work on community recovery activities across the state.
- organisations in their economic recovery efforts:
 - Tropical Cyclone Yasi (Category B) loan approvals: \$295,000 to five small businesses and \$897,000 to eight primary producers
 - Tropical Cyclone Yasi (Category C) recovery grant approvals: \$5.14M to 857 small businesses, \$9.82M to 1,433 primary producers, and \$672,000 to 105 not-for-profit organisations
 - Tropical Cyclone Yasi (Category D) loan approvals: \$545,000 to two small businesses and \$7.54M to 19 primary producers
 - Queensland Flooding (Category B) loan approvals: \$3.16M to 22 small businesses and \$7.29M to 49 primary producers
 - Queensland Flooding (Category C) recovery grant approvals: \$31.64M to 3,637 small businesses, \$32.68M to 4,462 primary producers and \$828,000 to 111 not-for-profit organisations
 - Queensland Flooding (Category D) loan/grant approvals: \$7.58M to 18 businesses and \$6.72M to 12 primary producers.

6.3 Functions of recovery

For the purpose of effective cross-agency collaboration, disaster recovery is conceptually grouped into four functions:

- the restoration of the economy
- the rehabilitation of the environment
- the emotional, social and physical wellbeing of disaster-affected residents
- the reconstruction of physical infrastructure.

In 2010-11, SDMG member agencies were engaged across all aspects of disaster recovery to meet significant community need.

Economic

Under Operation Queensland, DEEDI is the appointed lead agency with regards to the economic component of Queensland's reconstruction efforts.

An Economic Recovery Coordination Group has been established to guide the implementation process and it includes the mayors of several disaster-affected councils as well as industry representation. Four control groups representing specific industry sectors have been set up to provide advice and support to this group.

Natural Disaster Relief and Recovery Arrangements funding

NDRRA financial assistance was provided to businesses and producers that suffered direct damage as a result of the 2010-11 disasters. The intent was to assist their return to normal production.

DEEDI notes that at 30 June 2011, the following NDRRA funding was administered to support small businesses, primary producers and not-for-profit

The Queensland Government made a special request to the Commonwealth Government to approve the introduction of Category D for businesses and producers. Category D is only activated in exceptional circumstances and allows for specific measures tailored in response to a given event. The Commonwealth Government agreed to the proposal for a Category D loan and grant package as standard assistance to businesses and products would be insufficient due to the severity of the damage they suffered in the 2010-11 events.

Natural Disasters Jobs and Skills Package

The Natural Disaster Jobs and Skills Package is an \$83 million program that aims to assist up to 10,000 Queenslanders during the recovery phase.

The package is facilitating community work placements, providing jobs and skills development officers, supporting apprentices and trainees, and assisting priority skills development in Queensland. It was developed by Skills Queensland, in partnership with DEEDI, DET and the Commonwealth Government's Department of Education and Workplace Relations.

At 30 June 2011, the total level of investment under the Natural Disaster Jobs and Skills Package was \$32 million and 2,769 people in Queensland had been assisted including:

- the creation of 901 jobs on 47 disaster relief projects run by Queensland's Green Army
- the commencement of a \$6 million Apprentice Work Teams strategy to engage out-of-work apprentices to work on disaster recovery projects
- the commencement of a \$4 million Government Apprenticeship Program providing grants to local government for the employment of up to 200 additional apprentices in priority skill areas.

Rural Resilience Package

A \$20 million Rural Resilience Package is also being co-funded by the Queensland and Commonwealth Governments. The package is being targeted at the areas hardest hit by Tropical Cyclone Yasi (including the Cassowary Coast, Hinchinbrook and parts of the Tablelands, Charters Towers, Etheridge and Flinders).

In 2010-11, the package supported the appointment of industry recovery officers and farm financial counsellors as well as forthcoming industry and community grants, specifically:

- \$1.5 million for 15 industry recovery officers based in industry organisations to provide on the ground assistance to affected areas
- \$1.6 million in industry grants to be administered in 2011-12. Grants of up to \$100,000 will be made available to help industries to better prepare for future severe weather events. Money may be used to provide training, equipment or materials, marketing campaigns, investment in new technologies for long-term sustainability, and business recovery activities.

A community grant process is also scheduled for announcement in 2011-12.

The main component of the Rural Resilience package in 2010-11 was Operation Clean Up. Similar to Operation Farm Clear after Tropical Cyclone Larry, its purpose was to assist with the removal of debris from primary production and tourism enterprises. This helped to maintain the continuity of the rural workforce, which might otherwise have been displaced after the 2010-11 disaster events.

As at 30 June 2011, 800 businesses had requested help under this operation. Up to \$9.5 million had been allocated to employ local labour to assist with the clean-up and a further \$6 million was spent on hiring contractors for situations where it was unsafe or impractical to use local labour.

Under Operation Clean Up, waterway debris removal was coordinated by the QRA, Local River Improvement Trusts, Natural Resource Management Groups and DERM. This coordination ensured a more efficient clean-up process, streamlining activities on Queensland properties, and avoiding duplication with other programs also eligible for NDRRA funding.

Fodder drops

DEEDI coordinated fodder drops with AgForce for a limited number of agricultural producers requiring this service because they were isolated by disaster impacts. The fodder drop coordination service was a short-term program publicised via local ABC radio and through a Premier's media release.

Costs for this service were met by the producer as fodder drops are not a standard natural disaster assistance measure under the NDRRA.

Category C recovery grants were, however, able to be used to fund fodder drop activities more broadly.

Alternative transport arrangements for producers

Flooding in 2010-11 disrupted transportation networks and DEEDI has assisted producers, where possible, by organising alternative transport arrangements to bring their produce to market.

Tourism Industry Support Package

Much of the recovery support provided to the tourism industry has been delivered by Tourism Queensland, DEEDI and the Commonwealth Government through a \$12 million Tourism Industry Support Package.

A total of \$10 million has been allocated for marketing activities to communicate that message that Queensland tourism operators are open and ready for business post-event. Expenditure includes:

- \$5.5 million for domestic marketing. This includes a 100 per cent subsidy for subscription to the Australian Tourism Data Warehouse, which is the national digital tourism information. At 30 June 2011, 675 operators had been involved in campaign activity, and a total of 548 products have been listed on the Australian Tourism Data Warehouse
- \$2.2 million for retail campaigns in New Zealand, Japan, China and the United Kingdom. At 4 May 2011, there had been 10,140 website visits to www.queenslandholidays.com.au from New Zealand users, which is an increase from 2,749 in 2010. There had also been 3,000 direct sales to China
- \$800,000 for a global young and adventure traveller campaign. This campaign included activities to encourage backpackers already in Australia to visit Queensland during their stay. As an outcome, 100 passengers made bookings and 340 pre-registrations were received on the Student Flights website by 13 April 2011
- \$700,000 for a global publicity blitz to bring international and domestic travel writers, news journalists and bloggers to Queensland. A total of 180 media representatives attended, including freelance and staff writers on nine different itineraries
- \$300,000 for international marketing activities with airline partners and the travel trade. A total of 3,572 seats were sold on Air Asia and Singapore Airlines flights to Australia in April 2011.

A further \$2 million has been allocated for industry development activities that are tailored to the needs of individual regions. Activity to date includes:

- capability-building programs and workshops with a focus on online development, sustainability, distribution, marketing, communication improvement, weather-proofing, customer service and grant funding

- tourism recovery forums in nine locations (Toowoomba, Mission Beach, Townsville, Roma, Goondiwindi, Hervey Bay, Bundaberg, Agnes Waters and Airlie Beach) to raise awareness on available assistance for operators
- the Queensland On Tour road show, which enabled 200 Queensland tourism operators to travel through Victoria and New South Wales to raise awareness of local tourism. Queensland On Tour generated positive feedback with 83 per cent of respondents agreeing that it achieved its objective
- assistance for tourism businesses to attend interstate and international trade shows to promote Queensland as a tourist destination, including the Australian Tourism Exchange in Sydney in April 2011
- advice to tourism operators on opportunities associated with the emerging China market with workshops held in the Brisbane, the Gold Coast, the Sunshine Coast, Whitsundays and Tropical North Queensland
- trade advisory support on growth for small to medium tourism operators.

Industry Supply Chain Flood and Cyclone Recovery plans

In 2011, DEEDI facilitated the development of industry-owned Supply Chain Recovery Plans. These plans identify risk and support resilience in relation to transport and logistics, information flows, and innovation. During the reporting period, plans were developed for horticulture, cotton, grains, sugar, beef, dairy, intensive livestock, and commercial fishing and aquaculture. The plans are intended to encourage Queensland businesses to resume and build activity after the 2010-11 disaster events.

Environment

As the lead agency for environmental recovery efforts, DERM coordinated over 50 state-level activities in consultation with the QRA's Environment Sub Committee. The scope of these activities was wide-ranging (including water and sewerage infrastructure, mining and industry, marine health, wildlife, riparian and coastal ecosystems, protected areas, landscapes, waste and contamination, and cross-reconstruction activities).

The department also supported recovery efforts by providing a range of spatial information services to inform decision-making by SDMG member agencies and other disaster management stakeholders.

Transitional Environmental Programs

DERM assessed and approved over 100 applications for Transitional Environmental Programs (TEPs) or amendments to TEPs for mines dealing with flood impacts. A TEP allows a mine operator to complete actions outside of agreed environmental authority conditions. TEPs exist for specified timeframes and require adherence to special conditions.

The objective of the disaster-related TEPs was to ensure that mines could safely recommence operations and that dewatering activities were conducted in a manner that did not harm the environment.

River Improvement Trusts

DERM undertook assessments of formal applications by River Improvement Trusts for grant assistance under the NDRRA in accordance with the requirements of the Queensland Disaster Relief and Recovery Arrangements Guidelines.

The department also provided advice for flood damage repairs to watercourses and water-related infrastructure, and a temporary exemption from the requirement for development permits was introduced for 'like for like' replacement and repair works in declared disaster zones.

Flood Recovery Package

Additional assistance was made available to organise and undertake debris clearance and remove chemicals as part of the Flood Recovery Package. This \$2.35 million financial assistance package was provided by DEEDI for intensive flood recovery activities and to fill gaps in NDRRA assistance. In 2011, the package supported debris clean-up and assistance for chemical container clearances in the areas most greatly impacted by flooding.

The Flood Recovery Package also supported the provision of additional farm financial counsellors and flood recovery officers and the development of bio-security pest and weed management strategies in 2010-11. Technical aspects of the package concluded on 30 June 2011. However, the additional financial counsellors were extended until 31 December 2011. In 2011-12, further recovery assistance will be provided under this package for mental health awareness and support.

Workplace health and safety

DJAG, through Workplace Health and Safety Queensland, assisted 1,665 business and individuals in flood-affected communities and over 500 business and individuals in cyclone-affected areas to manage hazards during the clean-up and rebuilding process.

A natural disaster hotline was set up and operated seven days a week (7.00 am to 7.00 pm) to provide advice on health and safety issues associated with the reconstruction process. In 2010-11, this hotline managed 300 calls.

A Workplace Health and Safety cyclone recovery team worked closely with the Cassowary Coast Regional Council Local Disaster Management Committee, the DDC, Queensland Health and DPW with regards to managing natural hazards in cyclone-affected areas.

DERM also completed the industrial hazardous waste clean-up at Rocklea in 2011 where over 2,200 containers were located and appropriately removed.

Asbestos clean-up in Tully Heads and Hull Heads

DERM field staff provided specific advice and education materials in relation to asbestos as a potential health and safety risk post-event. Their service included a kit with 24 web-links to relevant disaster safety information resources, and this was distributed to workplaces and members of the general public.

Significant damage was caused to approximately 100 residents at Tully Heads and Hull Heads as a result of the storm tide impact associated with Tropical Cyclone Yasi, and a large number of these impacted residences were constructed with asbestos-containing material.

The Cassowary Coast Regional Council sought assistance through the QDMA to effectively manage the necessary asbestos clean-up operation and allay community safety fears.

DPW, through QBuild, managed this project. Teams of QBuild personnel and QBuild-managed Class A specialist asbestos removal contractors removed asbestos-containing material from the two townships on 15 February 2011. The drain on available QBuild resources from damage to public infrastructure during the 2010-11 events necessitated the deployment of QBuild personnel from other less affected regions including the South Coast and Whitsunday areas.

Asbestos-containing material was removed from all public spaces of Tully Heads and Hull Heads and up to the outside walls of private properties. Any loose material in a building which may have become dislodged by wind was also removed to make the site safe. The management of all other fixed material within a dwelling or building remained the owner's responsibility.

Where asbestos had been deposited in nearby wetlands, it was also removed as part of the clean up project. Contractors were engaged to pump out and make safe all swimming pools and septic tanks for the health and wellbeing of the community and workers involved in the recovery works. QBuild electricians conducted electrical inspections in partnership with Ergon Energy to ensure affected private properties were made electrically safe before power could be reconnected.

Water supply schemes

DERM supported the recovery of 104 affected water supply schemes and 84 affected sewerage schemes to return to operational capacity after the 2010-11 events. A small number still require permanent repairs or replacement works.

The Department also streamlined requirements under the *Water Act 2000* and *Water Regulation 2002* to assist disaster recovery efforts.

National parks

DERM reopened 137 of 162 National Parks affected by the flood and cyclone events in 2010-11. Nine of the state's ten most popular parks were able to re-open in time for the Easter holiday season.

Human-social

DoC led the state-wide human-social aspect of recovery under the QRA in response to the 2010-11 disaster events.

The department partnered with key government and community agencies to deliver recovery services, including the members of the Human and Social Subcommittee (QH, the Commonwealth Government's Department of Families, Housing, Community Services and Indigenous Affairs Uniting Care Community, the Australian Red Cross, St Vincent de Paul, and the Salvation Army).

Amongst the achievements of DoC during the reporting period was the establishment of 42 Community Recovery Centres to receive applications for financial assistance and to provide information and referrals about counselling and support services. These centres were staffed by officers trained by DoC and personnel from community recovery partner agencies (including Centrelink, Lifeline Community Services and the Australian Red Cross). Where appropriate, Community Recovery Centres also accommodated staff from DEEDI, the Building Services Authority and the Insurance Council of Australia to centralise service delivery.

In addition, the department facilitated the set-up of the community recovery hotline and calls to the hotline were managed by SSQ. Approximately 100,000 calls were received during 2010-11.

Natural Disaster Relief and Recovery Arrangements funding administration

The Department of Communities reports that \$39 million in NDRRA funding was made available to support community recovery, mental health, financial wellbeing and people with a disability including:

- \$20 million (Category C) for a Community Development and Recovery Package to fund community development and intensive support to disaster-affected communities
- \$11.25 million (Category A) for a Mental Health Disaster Recovery Package to support the emotional wellbeing of disaster-affected communities
- \$5.8 million (Category A) for financial counselling to support families and individuals
- \$2 million to support people with a disability, their families and carers.

In addition, the Department activated the Personal Hardship Assistance Scheme (Category A) in a total of 45 local government areas as per standard disaster management arrangements. Some local government areas were activated twice.

A Disaster Recovery Purchasing Framework was developed by DoC to secure and distribute additional funds under NDRRA Category A.

DoC notes that NDRRA financial assistance was provided to individuals and households through grant administration including:

- 56,121 Emergent Assistance Grants (total \$20.1 million)
- 10,409 Essential Household Grants (total \$15.5 million)
- 954 Structural Assistance Grants (total \$7.9 million)
- 1,178 Essential Services Safety and Reconnection Scheme Grants (total \$254,026 for safety inspections and \$2.5 million for repairs).

DoC also developed new financial assistance initiatives for activation under the NDRRA determinations for the 2010-11 events. Grants and loans were made available for non-government organisations including:

- NGO Recovery Grants (Category C). Grants of up to \$25,000 to help with the costs of repairing and replacing office equipment and cleaning premises
- NGO Recovery Loans (Category B). Concessional loans of up to \$100,000 with a grant of up to \$5000 to help with costs of repairing and replacing damaged plant and equipment, repairing buildings and replacing lost stock
- NGO Recovery Loans (Category D). Concessional loan of up to \$600,000 with a grant of up to \$50,000 for major repairs and replacement of equipment.

Community Development and Recovery Package

Led by DoC, the Community Development and Recovery Package will ultimately provide \$20 million over two years to deliver the Community Development and Engagement Initiative and the Flexible Funding Program. These programs aim to restore and further develop community networks and build community leadership to manage the impacts of disasters.

The Community Development and Engagement Initiative is providing funds to employ and support community development officers in the 17 local governments most greatly impacted by the disaster events of 2010-11. These officers will work directly with community members to identify recovery priorities, activate recovery projects and assist in preparation activities for future disaster events.

Flexible Funding Program grants are being made available to 73 local governments to implement projects that may help local communities deal with the impacts of the 2010-11 disasters and contribute to their ongoing disaster preparedness.

Mental Health Disaster Recovery Package

QH and DoC are delivering mental health support and intervention services to disaster-affected individuals and families through the Mental Health Disaster Recovery Package. Initiatives under this package include:

- \$6.5 million for additional community mental health services in 11 locations across Queensland
- \$3.5 million for mental health information and promotion.

In addition to the package, \$37 million has been allocated for QH to provide 126 temporary specialist mental health staff and deliver a state-wide Family Bereavement Service.

QH has also been working closely with non-government organisations (including Lifeline and the Australian Red Cross) to provide counselling services during the recovery phase.

Financial counselling

DoC will administer a total of \$5.8 million to provide financial counselling services to Queensland communities through a hotline and 16 service outlets. It is estimated that 80,000 hours of financial counselling service will be provided over two years.

Disability care plans

In 2010-11, \$2 million has been provided to organisations to provide support to individuals with a disability, their families and carers. This funding was made available for situations where there was an urgent and critical need and access to other forms of support was not available because of disaster events.

Vaccination services

In south-east Queensland, QH converted dental vans to mobile facilities that provided vaccinations, primary health care and human-social recovery support to local communities.

Services were provided from 16 January 2011 in 22 areas (West End, Rocklea, Fairfield, Goodna, St Lucia, Jindalee, North Ipswich, Booval, North Booval, Bundamba, New Farm, Graceville, Lowood, Barellan Point, Riverview, Corinda, Kenmore, Yeronga, Oxley, Moore's Pocket, Chelmer and Sherwood). By early February 2011, 3,150 vaccinations had been provided.

A further 16,665 diphtheria/tetanus vaccines were administered, including 535 doses of ADT to North Queensland as part of the cyclone response, and 560 diphtheria/pertussis/whooping cough vaccines were distributed through health facilities, recovery and evacuation centres, mobile vans and general practices.

Education

DET undertook recovery activities towards ensuring the continuity of education services in Queensland after the 2010-11 floods and cyclones.

This included establishing an online classroom service, which provided learning activities in core subject areas (English, mathematics and science) for students unable to attend their school site as a result of recent disaster events. The department set up a telephone hotline for isolated parents and students to support online classroom access, and a total of 60 school communities were supported in this way.

Through its Information Technology Branch, DET delivered mobile School-in-a-Box kits. Consisting of a pre-built server and laptops with 3G wireless internet network capability, these kits were able to be rapidly deployed to schools to restore essential applications, email, voice and data services within shortened timeframes.

DET also established a Recovery Delivery Team to focus specifically on returning schools, TAFE institutes and kindergartens to pre-event status. DET and QBuild coordination teams were set up to coordinate the timely assessment of facilities. DET checked suppliers of relocatable buildings and furniture to ensure the availability of replacement stock and facilitated the identification of alternative sites for schools and TAFE institutes as required.

In addition, the department undertook ongoing work to ensure that families had access to safe and appropriate child care so that parents could resume work or undertake disaster clean-up activities.

Legal assistance

DJAG assisted recovery efforts for disaster-affected communities through the provision of legal assistance and the replacement of legal documents.

In 2010-11, DJAG replaced 3,864 birth certificates, 597 marriage certificates, and 33 death certificates at no cost to Queenslanders who had lost these documents in floods, cyclones or the Christchurch earthquake. The department also waived fees for replacing occupational or business licences and temporarily deferred penalties enforcement action, the majority of payment arrangements (such as direct debits) and fine option orders (unpaid community service) for disaster affected communities.

In addition, DJAG provided information and advice to disaster management stakeholders and the community about profiteering and price gouging, insurance, water-damaged vehicles, door-to-door traders and charities. Staff members also explored legal issues with individuals and community groups through Flood and Cyclone Legal Help, which is a partnership between Legal Aid Queensland and DJAG.

Infrastructure

DPW manages the interagency committee that is coordinating the reconstruction and repair of Queensland Government buildings, iconic buildings, community buildings, residential accommodation and business facilities.

DPW has been on the frontline for recovery efforts with approximately 850 QBuild staff and around 360 contractors involved in infrastructure assessments and clean-up and recovery efforts. The estimated value of remedial works undertaken by DPW, through QBuild, in 2010-11 is \$57 million. It should be noted that this figure is not representative of the whole-of-government cost as not all rectification works are being undertaken through DPW or QBuild.

Government infrastructure

Through QBuild, DPW was involved in the clean-up and recovery of approximately 2,500 government assets including schools, police stations, health facilities, government-owned residences and other government infrastructure. The department managed contract personnel as required.

DPW provided technical services in the recovery of its own flood-affected government and major leased buildings and infrastructure in central Brisbane. This included the QH Building, Forestry House, 61 Mary Street, the Neville Bonner Building and the Goodwill Bridge.

DPW notes that of the many hundreds of schools impacted by the floods in January 2011, due to extensive damage only three (Milpera State High School, Milton State School and Rocklea State School) were unable to open for the commencement of the school year on 24 January 2011.

The department was also extensively involved in the recovery of some of Queensland's most iconic infrastructure including Suncorp Stadium at Milton, Queensland Tennis Centre at Tennyson and Southbank-based facilities including the Queensland Performing Arts Centre, the Gallery of Modern Art and the State Library.

With regards to emergency operations, DCS assisted its regional staff to undertake repairs to department facilities and ensure the continuity of operational services.

QAS provided an enhanced presence in Condamine and Theodore to support the clean-up operation after residents were permitted to return to their towns, and the department assisted in ordering equipment and organising the high-volume travel requests which originated from the Disaster Coordination Centres through the QDMA.

Private infrastructure

At the request of DoC, DPW (through QBuild and Project Services) was directly responsible for the completion of more than 1,380 structural assessments on private residences after damage from flooding and cyclone impacts.

Electricity

DTMR worked with Ergon Energy, local government and Queensland Government agencies to identify the emergency power generation needs of a range of critical infrastructure. Once priorities were established, the department was able to liaise with equipment hire companies to provide appropriate power solutions.

A particular success of the flood recovery efforts was the collaboration between QBuild, Ergon Energy and the Rockhampton Regional Council to establish and implement a streamlined process of electrical re-connections to flood-affected private dwellings, which supported local residents to return to their homes promptly.

In addition, the QRA has partnered with Energex, Ergon Energy and Powerlink to prepare a draft electrical safety guideline for disaster-affected areas.

Transport infrastructure

DTMR worked to restore and reopen the state and local road network, the majority of which was damaged to varying extents during the 2010-11 events. It established a dedicated Flood Recovery Unit to coordinate the restoration of Queensland roads, the issuing of access permits to restore freight movement around the state, and other flood recovery activities. In addition, the department provided regular reports to stakeholders on the status of reconstruction efforts for road and transport infrastructure.

The department worked to improve the clarity and consistency of procedures for closing and reopening roads. DTMR implemented improvements to public information provision in regional and urban areas such as the use of local road names and the positioning of signage on major road intersections in regional areas where internet access is sparse.

Likewise, DERM has implemented upgrades and improvements to the 13 19 40 Traffic and Traveller Service to enhance the accuracy and timeliness of road condition information for the public and disaster management stakeholders.

During 2010-11, DTMR worked with interstate counterparts to enhance cross-border traffic management arrangements, including the establishment of direct links between New South Wales road conditions websites and the drafting of an agreement with neighbouring states to manage the provision of information to cross-border travellers.

The department also continued the upgrading of regional airports across the state as well as the ongoing improvement of rail, maritime and road networks.

Planning

The QRA is supporting planning activities for the betterment of Queensland communities post-event.

In 2010-11, the QRA facilitated the declaration of the Grantham Reconstruction Area and then released the Development Scheme for public consultation.

The QRA compiled a Hazard Management Plan for a number of the communities that were flooded, which supplements standard planning scheme provisions and will be available for immediate adoption by local governments who do not have sufficient flooding provisions.

In addition, the QRA has run Local Plan Workshops in conjunction with the World Bank. A total of 18 workshops were delivered in 15 locations to assist local governments to develop their recovery plans. Four one-on-one briefings were also provided to local governments that were unable to attend scheduled workshops. Over 220 staff from all state regional offices and 30 local governments attended these workshops in 2010-11.

DLGP has also been involved in planning processes associated with the recovery phase. In response to disaster impacts, DLGP introduced temporary planning controls to rebuild flood-affected areas in the Lockyer Valley, Brisbane and Ipswich. The department reviewed and developed internal guidelines and advisory notes on repairing and cleaning damaged buildings and the use of flood resilient materials to mitigate the impacts of future events.

DLGP reviewed Timber Queensland's publication on the impact of floodwater on timber structures and the Queensland Building Service Authority's guideline on the requirements for rebuilding and repairing flood-damaged buildings. The department also provided flood-specific information on its website with links to relevant resources and issued fact-sheets on a range of topics to assist affected property owners.

6.4 Post-disaster assessment

Disaster management practice may be improved through the systematic evaluation of performance before, during and after a disaster event. Post-disaster assessment forms part of the continuous improvement process for the QDMA.

Information in relation to post-disaster assessment for the 2010-11 events will be provided in the SDMG Annual Report for 2011-12. However, some member agencies have identified early learnings that have informed activity and improvements in the reporting period.

Significantly, the QFCol commenced on 17 January 2011 and will provide the most comprehensive post-disaster assessment of the 2010-11 flood events.

Cairns Base Hospital evacuation debrief

As an outcome of the Cairns Base Hospital evacuation debrief, the Cairns and Hinterland Health Service District identified the need to identify safe places for temporary emergency medical sites to ensure provision of emergency and specialised healthcare services in disaster events.

A total of 15 sites have subsequently been assessed based on access for patients, helicopters, ambulances and healthcare staff as well as geographic location and likelihood of flooding. Agreements have been made on three sites that could be easily mobilised as alternative health treatment centres in future events (Tropical North Queensland Institute of TAFE, JCU and Woree State School).

As part of the recovery process, the Premier of Queensland requested the District to include the Tropical Cyclone Yasi experience in the development of the Cairns and Hinterland Health Service Plan. The draft plan outlines the future services the community may need and where and when services will be required as well as providing information about evacuation planning. It identifies the need for back-up medical services in the event of an evacuation of Cairns Base Hospital. As a result, a new site is being proposed at Edmonton to provide supporting health services such as operating theatres.

Transport infrastructure debriefs and after-action reviews

DTMR has conducted debriefs and after-action reviews for its divisions and regions in order to capture learnings from the 2010-11 events. The department subsequently developed an action plan that highlights the importance of accurate information and timely communication, the coordination of effort, and the timely deployment of resources.

Review of Public Works plans and processes

In 2011, DPW reviewed the impact of the Brisbane flood event on departmental service areas and its ability to continue to provide services to other government departments during and after disaster events. Learnings relating to business continuity were identified and strategies covering matters such as communication with staff, information systems continuity and client information regarding resource and facilities needs are being implemented to improve business continuity capabilities.

DPW's Functional Support Plan and Business Continuity Plan for disaster management have also been extensively reviewed and amended to reflect improvements identified following the 2010-11 disaster events. The plans will be reissued before the commencement of the 2011-12 storm and cyclone season.

After the 2010-11 storm and cyclone season, DPW and QH also reviewed the Provision of Bedding Resources Protocol and subsequently implemented lessons learned from disaster activations during the Queensland floods and Tropical Cyclone Yasi.

Community recovery review

In April 2011, DoC commenced a review into its response to the 2010-11 disaster events. The objective of the review was to ensure the capability of the department to deliver flexible and scaled community recovery responses in future disaster events. A consultant from Corporate Success Group was engaged to provide objectivity in leading face-to-face interviews with over 170 participants in the review.

The response by DoC to the 2010-11 disaster events, although considered to be a success, highlighted a range of lessons that could provide opportunities for improvement. Five key areas have been identified and will inform priority work by the department in 2011-12.

Queensland Floods Commission of Inquiry

The QFCol was established by the Queensland Government on 17 January 2011 to provide an independent and thorough examination of the events leading to the 2010-11 floods, all aspects of the response, and the subsequent aftermath.

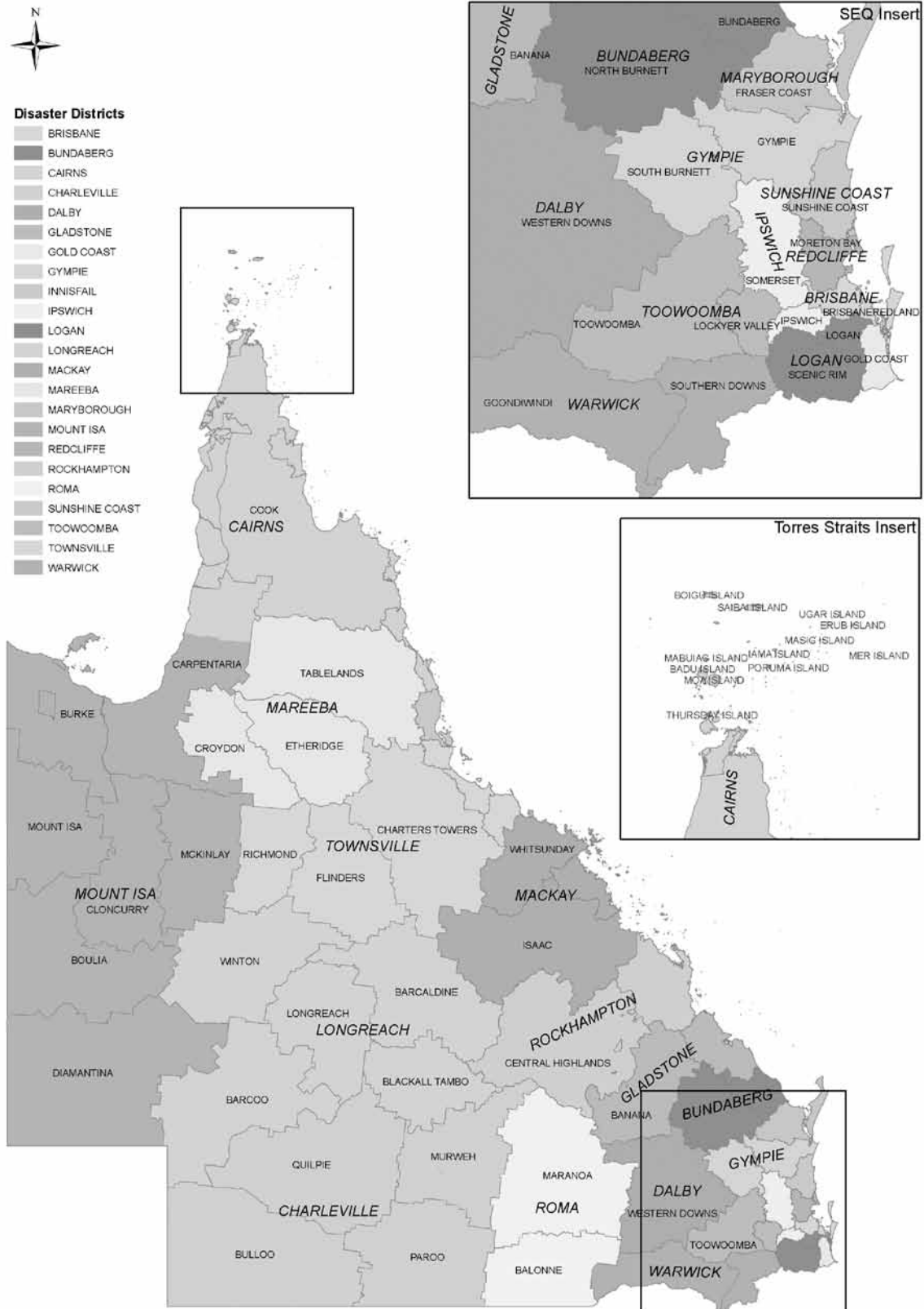
Key interim recommendations from the QFCol will be implemented in advance of the 2011-12 wet season. The SDMG Annual Report 2011-12 will address the recommendations which are expected to inform the priorities for state disaster management over coming years.

7 Appendices

Appendix 1: SDMG extraordinary meetings 2010-2011

Meeting date	Time
24 December 2010	1000 hours
28 December 2010	1500 hours
30 December 2010	0730 hours
31 December 2010	1500 hours
2 January 2011	1400 hours
4 January 2011	1500 hours
5 January 2011	1430 hours
11 January 2011	0800 hours
11 January 2011	1700 hours
12 January 2011	0800 hours
12 January 2011	1700 hours
13 January 2011	0800 hours
13 January 2011	1700 hours
14 January 2011	0800 hours
15 January 2011	0900 hours
16 January 2011	0900 hours
17 January 2011	1700 hours
21 January 2011	1000 hours
28 January 2011	1700 hours
30 January 2011	1000 hours
31 January 2011	1700 hours
1 February 2011	0800 hours
1 February 2011	1700 hours
2 February 2011	0800 hours
2 February 2011	1700 hours
3 February 2011	0800 hours
3 February 2011	1600 hours
4 February 2011	0800 hours
4 February 2011	1600 hours
5 February 2011	1500 hours
6 February 2011	1700 hours
7 February 2011	1700 hours
8 February 2011	1700 hours
10 February 2011	1700 hours

Appendix 2: Map of Queensland disaster districts



Appendix 3: Identified areas for Digital Elevation Model (DEM) capture

Local Government area	Town
Balonne	Bollon Dirranbandi Hebel Mungindi St George Thallon
Banana	Baralaba Biloela Thangool Goovigen and Jambin Rannes Taroom Theodore Wowan
Barcaldine	Alpha Aramac Barcaldine Jericho Muttaborra
Barcoo	Jundah
Blackall Tambo	Blackall Tambo
Boulia	Boulia Urandangi
Bulloo	Hungerford Thargomindah
Central Highlands	Bluff Emerald Rolleston Rubyvale-Fossicking
Cloncurry	Cloncurry Dajarra
Goondiwindi	Goondiwindi Inglewood Talwood Texas Yelarbon
Gympie	Goomeri Kilkivan
Isaac	Clermont Dysart Moranbah Nebo
Lockyer Valley	Lockyer Valley South
Longreach	Longreach

Local Government area	Town
Maranoa	Amby Injune Mitchell Muckadilla Mungallala Roma Surat Wallumbilla Yuleba
McKinlay	Kyuna McKinlay
Murweh	Augathella Charleville Morven
North Burnett	Abercorn Eidsvold Gayndah Monto Mundubbera
Paroo	Cunnamulla Eulo Wyandra Yowah
Quilpie	Adavale Eromanga
Richmond	Maxwelton Richmond
Rockhampton	Mount Morgan
Scenic Rim	Scenic Rim (whole LGA)
Somerset	Esk Kilcoy Lockyer Creek Gap Toogoolawah
South Burnett	Kingaroy to Murgon Kumbia Proston
Southern Downs	Leyburn Stanthorpe
Townsville	Woodstock Majors Creek Roads
Western Downs	Condamine Dulacca Flinton Kogan Meandarra Warra
Winton	Winton

Appendix 4: Disaster declarations

District disaster declarations

Disaster district	Date of declaration	Reason
Longreach Dalby Gladstone	28 December 2010 (1246 hours)	Flooding
Bundaberg	29 December 2010 (1050 hours)	Flooding
Rockhampton	29 December 2010 (1412 hours)	Flooding
Roma	31 December 2010 (1150 hours)	Flooding
Gympie	10 January 2011 (1305 hours)	Flooding
Maryborough	10 January 2011 (1555 hours)	Flooding
Toowoomba	26 January 2011 (0001 hours)	Flooding
Mackay	30 January 2011 (1415 hours)	Cyclone Yasi
Townsville	30 January 2011 (1415 hours)	Cyclone Yasi
Townsville and Innisfail*	16 February 2011 (0001 hours)	Cyclone Yasi
Mackay	31 March 2011 (1355 hours)	Landslide as a result of heavy rain
Roma	19 April 2011 (1535 hours)	Heavy rain likely to cause flooding

* Innisfail (Tully Heads and Hull Heads) extended from 3 March to 16 March 2011

State disaster declarations

Disaster district	Date of declaration	Reason
Brisbane Bundaberg Dalby Gladstone Gold Coast Gympie Ipswich Logan Maryborough Rockhampton Roma Redcliffe Sunshine Coast Toowoomba Warwick	11 January 2011 (1000 hours)	Flooding
Cairns Mareeba Innisfail Mackay Rockhampton Longreach Mt Isa Gladstone	1 February 2011 (0900 hours)	Cyclone Yasi

Appendix 5: Queensland Health activation of response arrangements

Cape York	The District reconstituted its Emergency Planning Committee, updated its terms of reference and reassigned responsibility for emergency management to the Director, Corporate Services. The District is finalising a new Emergency Preparedness Continuity Management plan and facilities have reviewed their emergency procedures ready for the next wet season
Central Queensland	<p>District support was provided through executive representation on the Local Disaster Management Group. The Theodore and Emerald Hospitals were closed and patients evacuated to centres across and beyond the District by helicopter, road ambulance and water transport. The Rockhampton Hospital experienced significant exit block in discharging patients who were unable to access their place of residence. Gladstone Hospital provided care and management for patients being transferred to Brisbane or Townsville via helicopter from Rockhampton.</p> <p>Queensland Health staff provided counselling, medical treatment, medication replacement, immunisation, and accommodation services to clients in evacuation and recovery centres across the District including Rockhampton Central Queensland University, Theodore, Emerald, Biloela and Moura. Mental health support services were supplemented by Victorian and New South Wales (NSW) mental health staff. Rockhampton Hospital provided logistics, patient flow, clinical governance support for isolated hospitals and accommodation for post discharge patients as well as support for drugs, renal fluids, and staffing. Staffing arrangements included flying in locum medical staff, support for staff returning from leave and locum staff, and local accommodation for out of town staff. Twenty-three (23) renal dialysis patients from across the District were accommodated in motels and nursing homes in Rockhampton. A temporary clinic was set up at Gracemere (satellite town to Rockhampton) from 2 to 17 January 2011</p> <p>Twelve (12) Emerald Hospital patients were evacuated to hospitals in Brisbane, Blackwater and Springsure on 30 December 2010. Community mental health services were provided to support Emerald with the support team in the early weeks of January from other districts. Services provided at the Emerald evacuation and recovery centres consisted of a 24/7 clinic providing Senior Medical Officer (SMO) anaesthetics, SMO emergency, two midwives, nurses and enrolled nurses and administrative support. A secondary emergency department and primary care clinic was mobilised to Anakie Street GP clinic on 30 December 2010. Aged and frail community evacuees were assessed by the Community Health Team, scripts and medications were sourced and the evacuees were assisted with Activities of Daily Living. Three patients were transferred to Emerald Hospital via the Council truck. Gladstone and Moura services were fully functioning. Blackwater, Springsure and Biloela operated as normal with an additional midwife sourced for one week's roster at Biloela. Baralaba was intermittently isolated by flood water and patients were transported to health appointments using QAS and barge. Medications were delivered by boat and helicopter to Taroom patients.</p>
Central West	All hospital facilities were functioning throughout the flood events

Darling Downs – West Moreton	<p>From 27 December 2010 the majority of the hospitals in this District were isolated for some periods, for a number of days or on multiple occasions. A number of hospitals required generator power for prolonged durations. On 10 January 2011, the department confirmed arrangements with QAS and St Vincent’s Hospital Toowoomba to ensure the public emergency needs of Toowoomba’s east were met. Toowoomba Hospital (TH) lost water supply after failure of the council reticulation system. Bore and tank capacity enabled water supply needs to be maintained and hospitals were directed to boil water and increase bottled water stocks. The TH old mortuary was brought back on line in addition to the main mortuary when 11 bodies were brought to the mortuary. A refrigerated van on site between 11 and 17 January 2011 was not required.</p> <p>On 11 January 2011 flooding in the Lockyer Valley with Ipswich under threat and the DCEO was recalled to duty to manage the West Moreton area. The District now operates as two hubs except Gatton, Darling Downs, and Taroom, Central Queensland.</p>
Metro North	<p>The Royal Brisbane and Women’s Hospital (RBWH) operated at reduced levels and outpatient appointments were cancelled during the flood emergency response however services were built to usual levels by 20 January 2011. The Prince Charles Hospital (TPCH) was fully functional throughout the emergency response. Significant demand from general medical patients during January 2011 extended hospital resources.</p> <p>Services at Caboolture, Redcliffe and Kilcoy Hospitals were reduced for a few days however all facilities were fully operational by 15 January 2011. On 11 January 2011 Caboolture Hospital had limited access and increasingly isolated with limited surgical cover and complex trauma cases transferred to either TPCH or RBWH. On 13 January 2011, Kilcoy Hospital was rationing water, although supplies were deemed adequate and power was operational.</p> <p>On 12 January 2011 all Redcliffe Hospital clinics except the fracture clinic were cancelled. By 17 January 2011, Mental Health services were provided and all evacuated facilities were re-occupied. Four mental health staff were provided to Toowoomba from 15 January 2011 to provide body identification support. Community health teams of nurses, social workers, psychologists, mental health and indigenous health workers were rostered and commenced manning the RNA recovery centre when it opened. Registrations at the RNA declined in the week prior to 17 January 2011 from 1,200 to 370 with 20 client contacts recorded for 16 January 2011.</p> <p>When school commenced on 24 January 2011, the Primary and Community Health Services (P&CHS) presence at the Indooroopilly recovery centre was reduced. Taringa 7 Day Medical Centre (a local Medical Practice) provided bulk billed services to flood victims at the Indooroopilly recovery centre and triage out to relevant Emergency Departments as necessary. A pharmacy located with the Taringa practice arranged dispensing of scripted medications and link back with GPs. Metro North mental health services provided mental health support. The Alcohol and Drug Information Service (ADIS), methadone dosing and other key programs recommenced operations at Biala, Roma Street on 17 January 2011</p>
Metro South	<p>Residents from Pine Log Nursing Home were relocated from the QE2 evacuation centre to Sunnybank Private Hospital on 16 January 2011. Princess Alexandra Hospital ceased the “Code Yellow” on 17 January 2011. Initially four Recovery centres were opened and remained open for four weeks. One Registered Nurse and one Mental Health Worker were deployed to each recovery centre in Metro South. The Redland Hospital upgraded its HEOC in June 2011 and is fully functional.</p>

South West	<p>Surat Hospital and Dirranbandi Multipurpose Service were fully functional with deployed staff and agency staff. The major issue for the hospital was isolation and resupply. St George evacuated high care residents from Warawee Nursing Home and high risk inpatients from St George Hospital on 5 January 2011. All services were maintained including inpatient admissions.</p> <p>Evacuation – One acute patient was evacuated from Mungindi Hospital to Moree Hospital on 13 January 2011 and four residents from Mungindi Hospital were relocated to Fairview Retirement Village. The Hospital maintained an emergency outpatients' clinic and a full complement of staff supplemented by agency and deployed RNs. St George had an evacuation centre which Queensland Health supported with psychological first aid provided by a Community Nurse and Mental Health Nurse</p>
Sunshine Coast	<p>All normal operations were in place from Thursday 13 January 2011. Caloundra services operated as normal with the exception of five surgery cancellations on Wednesday 12 January 2011. Specialist Outpatients Department (SOPD) and Elective Surgery at Gympie Hospital were cancelled from 10 to 14 January 2011. Scheduled surgeries recommenced 17 January 2011. All other services continued to operate. Elective surgery and SOPD at Nambour Hospital were cancelled from 10 to 13 January 2011. Over 200 SOPD appointments were postponed and there were approximately 35 surgery cancellations. Skeleton community services were operating on 12 January 2011. Social Work services were offered at the Gympie evacuation centre and Gympie Hospital provided accommodation for both staff and renal patients. Maleny Hospital and the Glenbrook Aged Care facility conducted business as usual.</p>
Wide Bay	<p>Six to eight renal patients were relocated to Hervey Bay for a week for dialysis. Hervey Bay established a clinic for a week staffed by medical and nursing staff at Granville when it was isolated due to flood waters.</p> <p>Evacuation – There was one evacuation centre in Bundaberg and one in Maryborough with support provided to the centres via community teams and Mental Health Services.</p>

Appendix 6: Australian Defence Force contribution to Queensland disaster operations 2010-2011¹

Army and Navy contributions

Queensland floods

Total aircraft hours	775.9 hours
Total stores carried	45,684 kilograms
Total people carried	905 civilians 27 civilian casualties 342 ADF personnel
Total fuel used	190,055 kilograms

Tropical cyclones Anthony and Yasi

Total aircraft hours	244.8 hours
Total stores carried	3,879 kilograms
Total people carried	20 civilians 293 ADF personnel
Total fuel used	81,764 kilograms

RAAF contributions

Queensland floods

Total aircraft hours	266.8 hours
Total stores carried	688,410 kilograms
Total people carried	187 civilians 400 ADF personnel
Total fuel used	611,431 kilograms

Tropical cyclones Anthony and Yasi

Total aircraft hours	107.3 hours
Total stores carried	322,765 kilograms
Total people carried	70 civilians 255 ADF personnel
Total fuel used	333,389 kilograms

Resupply by ADF

A total of 204 tonnes of food lifts were undertaken by the RAAF for cyclone affected communities.

Resupply details	Townsville	Innisfail	Cairns	Total
Combat Ration Pack (for consumption) Measure = Package	0	486	2,800	3,286
Bottled water (for consumption) Measure = Litre	0	483	0	483
Stores Measure = Tonne	30	25	49	104
Military Air Movement of Stores Measure = Tonne	0	0	0	207
Principal Items Measure = Individual Item	0	4	0	4
Debris cleared from roads (but not removed) Measure = KM cleared	161	0	0	161
Roads Cleaned (debris removed) Measure = KM cleaned	260	129	35	424
Community Property (yards & grounds cleared) Measure = Acre	90	106	0	196
Trees cut & cleared from site Measure = Number of trees	0	228	0	228
Debris Collected & dumped Measure = Tonne	0	323	0	323
Houses cleared of debris (debris not always removed) Measure = Number of houses	0	149	0	149
Movement of civilians air or road Measure = number of people	90	14	211	315
Homes contacted - door knock Measure = Homes contacted	5,000	456	0	5,456
Houses tarped (tarpaulins not provided) Measure = Number of houses	0	13	0	13

Appendix 7: State-level resupply operations

Date	Destination	Cargo	Method	Kilograms
30/12/10	Springsure	Essential foods	Fixed wing	7,459
30/12/10	Blackwater	Essential foods	Fixed wing	6,341
31/12/10	Roma	Essential foods	Fixed wing	14,930
31/12/10	Emerald	Essential foods	Fixed wing	18,000
01/01/11	Emerald	Essential foods	Fixed wing	350
01/01/11	Blackwater	Essential foods	Fixed wing	10,800
04/01/11	Emerald	Essential foods	Fixed wing	6,780
14/01/11	Coen	Essential foods	Fixed wing	3,500
21/01/11	Coen	Essential foods	Fixed wing	3,315
09/02/11	Springsure	Essential foods	Fixed wing	1,350
10/02/11	Burketown	Essential foods	Fixed wing	2,825
16/02/11	Doomadgee	Essential foods	Fixed wing	1,740
17/02/11	Coen	Essential foods	Fixed wing	2,860
08/03/11	Bedourie	Essential foods	Fixed wing	2,700
08/03/11	Burketown	Essential foods	Fixed wing	3,592
08/03/11	Doomadgee	Essential foods	Fixed wing	1,665
09/03/11	Coen	Essential foods	Fixed wing	3,440
16/03/11	Gregory Downs	Essential foods	Fixed wing	1,430
16/03/11	Burketown	Essential foods	Fixed wing	1,700
23/03/11	Doomadgee	Essential foods	Fixed wing	1,670
28/03/11	Burketown	Essential foods	Fixed wing	5,290
31/03/11	Coen	Essential foods	Fixed wing	3,312
31/03/11	Doomadgee	Essential foods	Fixed wing	560

8 Glossary of terms for disaster management

Disaster	<p>A serious disruption in a community, caused by the impact of an event, that requires a significant coordinated response by the State and other entities to help the community recover from the disruption.</p> <p>From <i>Disaster Management Act 2003, s. 13(1)</i></p>
Disaster management	<p>Arrangements about managing the potential adverse effects of an event, including, for example, arrangements for mitigating, preventing, preparing for, responding to and recovering from a disaster.</p> <p>From <i>Disaster Management Act 2003, s. 14</i></p>
Disaster mitigation	<p>The means taken in advance of, or after, a disaster aimed at decreasing or eliminating its impact on society and the environment.</p> <p>From COAG report <i>Natural Disasters in Australia: Reforming mitigation, relief and recovery arrangements (2002)</i></p>
Disaster preparedness	<p>Arrangements that ensure that, should an emergency occur, all those resources and services which are needed to cope with the effects can be efficiently mobilised and deployed.</p> <p>From COAG report <i>Natural Disasters in Australia: Reforming mitigation, relief and recovery arrangements (2002)</i></p>
Disaster research	<p>May be broadly understood as a systematic inquiry, before and after a disaster, into a relevant disaster management problem.</p> <p>From COAG report <i>Natural Disasters in Australia: Reforming mitigation, relief and recovery arrangements (2002)</i></p>
Disaster response capability	<p>The ability to provide equipment and a suitable number of persons, using the resources available to the local government, to effectively deal with, or help another entity to deal with, an emergency situation or a disaster in the local government's area.</p> <p>From <i>Disaster Management Act 2003, s. 80(2)</i></p>
Disaster response	<p>Actions taken in anticipation of, during and immediately after an emergency to ensure that its effects are minimised.</p> <p>From COAG report <i>Natural Disasters in Australia: Reforming mitigation, relief and recovery arrangements (2002)</i></p>
Disaster relief and recovery	<p>Disaster relief is the provision of immediate shelter, life support and human needs of persons affected by, or responding to, an emergency.</p> <p>Disaster recovery is the coordinated process of supporting emergency-affected communities in the reconstruction of the physical infrastructure and restoration of emotional social, economic, physical wellbeing.</p> <p>From COAG report <i>Natural Disasters in Australia: Reforming mitigation, relief and recovery arrangements (2002)</i></p>
Disaster risk assessment	<p>The process used to determine risk management priorities by evaluating and comparing the level of risk against predetermined standards, target risk levels or other criteria.</p> <p>From COAG report <i>Natural Disasters in Australia: Reforming mitigation, relief and recovery arrangements (2002)</i></p>

9 Abbreviations used in this report

ADF	Australian Defence Force
AEMI	Australian Emergency Management Institute
AHIM	All Hazards Information Management program
AHPC	Australian Health Protection Committee
AUSMAT	Australian Medical Assistance Team
BoM	Bureau of Meteorology
CALD	Culturally and linguistically diverse
CCN	Queensland Government Crisis Communication Network
COAG	Council of Australian Governments
DCS	Department of Community Safety
DDC	District Disaster Coordinator
DDMG	District Disaster Management Group
DEM	Digital Elevation Model
DET	Department of Education and Training
DEEDI	Department of Employment, Economic Development and Innovation
DERM	Department of Environment and Resource Management
DJAG	Department of Justice and Attorney-General
DLGP	Department of Local Government and Planning
DoC	Department of Communities
DPW	Department of Public Works
DPC	Department of the Premier and Cabinet
DTMR	Department of Transport and Main Roads
DMC	Disaster Management Collaborative
DDMG	District Disaster Management Group
EMA	Emergency Management Australia
EMCN	Emergency Management Coordinators Network
EMQ	Emergency Management Queensland
FRP	Flood Recovery Program
JCU	James Cook University
JEST	Joint Emergency Services Training
LDC	Local Disaster Coordinator
LDMG	Local Disaster Management Group
LGAQ	Local Government Association of Queensland
NEMC	National Emergency Management Committee

NSDR	National Strategy for Disaster Resilience
NDRRA	Natural Disaster Relief and Recovery Arrangements
NDRP	Natural Disaster Resilience Program
POC	Police Operations Centre
POCC	Protecting Our Coastal Communities
PHEOC	Public Health Emergency Operations Centre
QAS	Queensland Ambulance Service
QDC	Queensland Development Code
QDMA	Queensland disaster management arrangements
QEOC	Queensland Emergency Operations Centre
QFCoI	Queensland Floods Commission of Inquiry
QFRS	Queensland Fire and Rescue Service
QH	Queensland Health
QPS	Queensland Police Service
QRA	Queensland Reconstruction Authority
QTCCC	Queensland Tropical Cyclone Consultative Committee
RSQ	Retrieval Services Queensland
SDC	State Disaster Coordinator
SDCC	State Disaster Coordination Centre
SDCG	State Disaster Coordination Group
SDMG	State Disaster Management Group
SDMP	State Disaster Management Plan
SDS	Sales and Distribution Services
SES	State Emergency Service
SHECC	State Health Emergency Coordination Centre
SLSQ	Surf Lifesaving Queensland
SPF	Queensland Disaster Management Strategic Policy Framework
SPP1/03	State Planning Policy 1/03: Mitigating the Adverse Impact Flood, Bushfire and Landslide 10
SRC	State Recovery Coordinator
SSQ	Smart Services Queensland
TMC	Tactical Medical Centre
TMF	Tactical Medical Facilities
TEP	Transitional Environmental Programs
USAR	Urban Search and Rescue
WHSQ	Workplace Health and Safety Queensland

