



State Disaster Management Group

Annual Report 2004-2005



Queensland Government
State Disaster Management Group

Table of Contents

- LETTER OF TRANSMISSION..... page 3
- EXECUTIVE SUMMARY page 4
- HIGHLIGHTS OF 2004-2005 page 4
- FUTURE DIRECTIONS..... page 5
- STATE DISASTER MANAGEMENT GROUP FUNCTION AND MEMBERSHIP page 6
- OVERVIEW OF THE DISASTER MANAGEMENT SYSTEM page 7
- ELEMENTS OF DISASTER MANAGEMENT..... page 10
 - Disaster Research page 10
 - Policy and Governance..... page 11
 - Disaster Risk Assessment page 13
 - Disaster Mitigation..... page 14
 - Disaster Preparedness page 16
 - Disaster Response page 18
 - Disaster Relief and Recovery page 22
 - Post-Disaster Assessment..... page 31
 - Weather Warnings..... page 32

Letter of transmission

The Hon Pat Purcell MP
Minister for Emergency Services

Dear Minister

I have pleasure submitting the Annual Report of the State Disaster Management Group (SDMG) for the period 2004-2005 in accordance with Section 44 of the *Disaster Management Act 2003*. This Report is the second produced by the SDMG and highlights the actions undertaken by agencies that support the Queensland Disaster Management System.

It is intended that this Report be distributed to all state government departments, local governments and other non-government agencies that contribute to the Queensland Disaster Management System. The Report will also be available at www.emergency.qld.gov.au and www.disaster.qld.gov.au to keep Queenslanders aware of the initiatives and actions undertaken to ensure a safe and secure Queensland.

The Report highlights achievements for 2004-2005 and outlines future directions in continuing to strengthen disaster management arrangements for Queensland. It recognises and builds upon the need for “a comprehensive, all hazards, all agencies” approach to disaster management including better prepared communities.

I commend the Report to you.

Yours sincerely



Dr Leo Kelilher
Chairperson
State Disaster Management Group

Executive Summary

This is the second Annual Report issued by the State Disaster Management Group. It records the achievements within Queensland's Disaster Management System over the past year and seeks to forecast future challenges.

2004-2005 was a busy time for disaster management not only in Queensland but worldwide.

This Report outlines the disaster management arrangements that exist in Queensland and how these are underpinned by a comprehensive, all Hazards, all Agencies approach to deliver efficient and effective disaster management that is responsive to community needs. The Report demonstrates the important roles governance, mitigation and post-event assessment all contribute to the disaster management system.

A number of initiatives were undertaken during 2004-05, particularly in the areas of disaster research, disaster preparedness and governance. The State's counter-terrorism capability has been strengthened and further enhanced by collaboration between agencies in training, capability and exercises between agencies.

A new section on post-disaster assessment and governance is the first step towards ensuring a more robust governance framework applies to the disaster management system. In response to the audit of the Queensland Disaster Management System undertaken by the Queensland Audit Office, a number of initiatives to improve governance and risk management elements were undertaken, including the disaster management strategic policy framework being jointly prepared with community and government stakeholders. The framework will support the strengthening of Queensland's capacity to develop and implement effective coordinated measures to reduce the impact of disaster events.

Progress on a number of reforms under way during 2004-05 has also been reported, particularly in the areas of disaster relief and recovery where the Natural Disaster Risk Management Studies Programme has been incorporated into the Natural Disaster Mitigation Programme.

Progress on the implementation of the key recommendations from the Council of Australian Governments' Report *Natural Disasters in Australia: reforming mitigation, relief and recovery arrangements* continue to be a prime focus of the Report.

The Report concludes with a summary of operational activities undertaken during 2004-05 by the State Disaster Coordination Centre in response to disaster and emergency events.

Highlights of 2004-2005

- Delivered rapid and effective response to the outbreak of Citrus Canker in central Queensland, thereby minimising the economic and social impacts of this serious disease to the citrus and nursery industries and to local communities.
- Developed Industry Biosecurity Plans to increase industry self-management of plant diseases, and collaborated with Plant Health Australia in the development of a national plant diagnostics network.
- Strengthened Queensland's counter-terrorism capability further by:
 - Development of the Queensland Government Counter-Terrorism Strategy 2005-2007, which aims to reduce the vulnerability of the State to a terrorist attack and minimise the impact of any potential terrorist incident;
 - Establishment of the Queensland Counter-Terrorism Committee which monitors the implementation and performance of the State's counter-terrorism responsibilities;
 - Developed and implemented the Local Government Counter-Terrorism Risk Management Kit to enhance local government capacity to assess and incorporate counter-terrorism considerations in disaster management arrangements and planning; and
 - Conducted 14 counter-terrorism risk management workshops for key stakeholders.
- Implemented the Addendum to the Australian Code for the Transport of Explosives by Road and Rail. This will improve safety and security in the transport of explosives and has brought Queensland into line with national requirements.
- Launched the first Emergency Services Unit in the Indigenous community of St Pauls in Far North Queensland in June, 2005. Established under the *Disaster Management Act 2003*, these multi-service volunteer units will provide assistance to the community in times of emergency and disaster.
- Established a formal partnership, the Disaster Management Alliance, between the State Government through the Department of Emergency Services and local governments, through the Local Government Association of Queensland, for the purpose of enhancing collaboration and coordination between the two spheres of government on disaster management and mitigation.

Future Directions

- Continue to implement the *Disaster Management Act 2003* through provision of the Disaster Management Strategic Policy Framework, the State Disaster Management Plan, the State Risk Assessment Framework and the Disaster Management Planning Guidelines for Local Government.
- Participate in the counter-terrorism exercise 'Orchid Alert' and the national exercise 'Eleusis' involving an outbreak of Avian Influenza, and apply lessons learnt to improve Queensland's crisis and consequence disaster management capability.
- Continue to enhance Queensland's counter-terrorism arrangements through the implementation of the Queensland Government Counter-Terrorism Strategy 2005-2007.
- Utilise Vector Command simulator technology to strengthen Queensland's disaster management capability at all levels of the disaster management system.
- Review the Queensland Disaster Management System to enhance the integration of a more robust governance and risk management framework in accordance with the recommendations of the Queensland Audit Office Report No. 2, 2004-05 and the Disaster Management Act 2003.
- Contribute to implement the Australian Tsunami Warning System protocols in partnership with Commonwealth and state agencies.
- Through the Disaster Management Alliance arrangements, undertake a needs analysis of local government capacity to conduct effective disaster management within local government areas. The results of this needs analysis will inform an Action Plan to guide the partnership in the development of local government capacity-building initiatives.
- Establish Regional Disaster Management Frameworks to ensure a coordinated and collaborative approach to disaster management between local governments in defined regions. The basis of these regional frameworks will be Regional Disaster Management Groups – collectives of local governments operating under a Regional Organisation of Councils or District Local Government Association structure. Creating Regional Disaster Management Groups will assist in the development of regional risk assessments and will enable local governments to effectively implement regional disaster management solutions as appropriate.

State Disaster Management Group

Function

The State Disaster Management Group (SDMG) is the peak policy and planning group for disaster management in Queensland. The main functions of the SDMG include:

- develop a strategic policy framework for disaster management for the state;
- ensure effective disaster management is developed and implemented for the state;
- ensure effective arrangements between the state and the Commonwealth about matters relating to effective disaster management are established and maintained;
- identify resources, in and outside the state, that may be used for disaster operations;
- provide disaster management and disaster operations reports and recommendations to the Minister; and
- prepare the State Disaster Management Plan.

The State Disaster Management Group is supported by the:

- State Disaster Coordination Group - an operational coordination group; and
- State Disaster Mitigation Committee - a mitigation policy and planning committee.

Queensland Cabinet approved the establishment of the Queensland Counter-Terrorism Committee in December 2004 to formalise existing networks and strengthen whole-of-government counter-terrorism arrangements in Queensland.

Membership

Chairperson

Dr Leo Keliher



Dr Keliher was appointed Director-General of the Department of the Premier and Cabinet in November 2001. He previously worked as Commissioner of the New South Wales Department of Corrective Services, as Director-General of Queensland Emergency Services, and within the Queensland Public Sector Management Commission.

Leo holds a Bachelor of Economics, with First Class Honours, and a Master of Arts from the University of Queensland, as well as a doctorate from the London School of Economics and Political Science at the University of London. In addition, Leo is a Director of South Bank Corporation, a Director of the Australian and New Zealand School of Government Foundation Board and a member of the Great Barrier Reef Marine Park Authority.

Deputy Chair

Michael Kinnane *ESM, FAIM*



Michael was appointed as Director-General of the Department of Emergency Services in December 1998. Prior, he held executive leadership responsibilities within the Department from 1990, including Director, of the Chemical Hazards and

Emergency Management Unit, and Executive Director roles in Statewide Services and the former Support Services Business Unit. Michael previously held positions with the Commonwealth Public Service and with the International Labour Organisation of the United Nations. In 2003, he was awarded the Centenary Medal for distinguished service to the Public Sector.

Other members of the State Disaster Management Group include:

- Commissioner, Queensland Police Service
- Director-General, Department of State Development and Innovation
- Director-General, Queensland Health
- Director-General, Department of Primary Industries and Fisheries
- Director-General, Department of Local Government, Planning, Sport and Recreation
- Director-General, Department of Communities
- Director-General, Department of Public Works
- Director-General, Queensland Transport
- Executive Director, Counter Disaster and Rescue Services (Executive Officer for SDMG)

Overview of the Queensland Disaster Management System

Queensland's whole-of-government disaster management system is based upon partnership arrangements between state and local governments. These partnership arrangements recognise that each level of the disaster management system must work collaboratively and in unison, to ensure communities benefit from appropriate disaster management planning, preparedness, mitigation, response and recovery.

The Queensland system involves local, district and state support. This enables a progressive escalation of support and assistance as required. Support from the Commonwealth Government is also available in the event of a disaster.

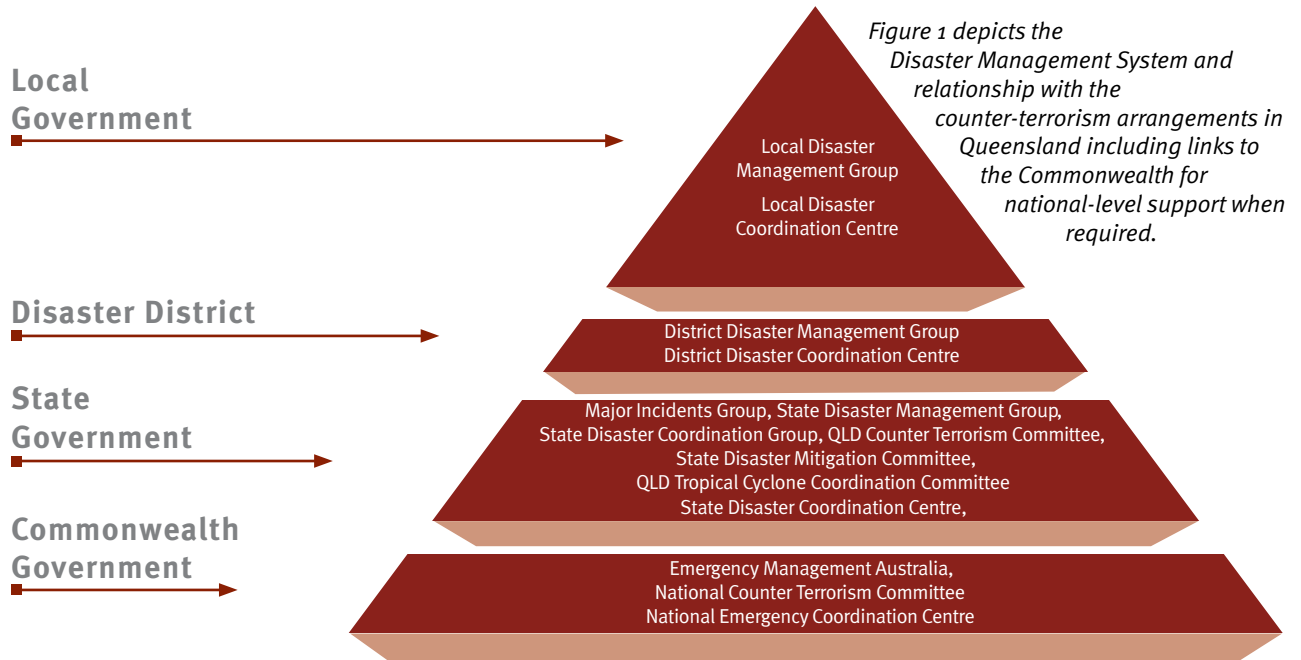
The principal structures that make up Queensland's Disaster Management System are:

- Disaster Management Groups that operate at state, district and local levels and which are responsible for the planning, organisation, coordination and implementation of all measures to mitigate/prevent, prepare for, respond to and recover from disaster situations;
- Coordination Centres at state, district and local levels that support Disaster Management Groups in coordinating information, resources and services necessary for disaster operations;
- State government functional lead agencies through which the functions and responsibilities of the State Government in relation to disaster management are managed and coordinated;

State Disaster Management Group

- State government threat-specific lead agencies responsible for the management and coordination of combating specific threats; and

- Committees, either permanent or temporary, established under the authority of the Disaster Management Groups for specific purposes relating to disaster management.



Functional Arrangements

To provide for the effective coordination of state-level capabilities in disaster management, Queensland has adopted the concept of functional lead agencies. Each functional lead agency is responsible to the State Disaster Management Group for the provision of specific state government services, expertise and support, as needed, to communities or the Queensland Government prior to, during and after disaster events.

Function	Lead Agency
Community Recovery	Department of Communities and Disability Services Queensland
Transport and Transport Engineering	Queensland Transport
Health	Queensland Health
Building and Engineering Services	Department of Public Works
Emergency Supply	Department of Public Works
Communications	Department of Public Works
Electricity/Fuel/Gas Supply	Department of Energy
Coordination of Disaster Management System	Department of Emergency Services
District Disaster Coordination	Queensland Police Service

Threat Specific Arrangements

In addition to functional lead agency responsibilities, state government departments and agencies have a designated lead agency role for a number of identified specific threats. These lead agencies are assigned responsibility to prevent and prepare for specific threats based on their core business.

The Queensland Disaster Management System coordinates resources in support of lead agency combat operations as required, but remains responsible for the wider management of the consequences of the specific threat under arrangements described above.

Representatives of threat-specific lead agencies are members of the State Disaster Coordination Group and may have membership of Disaster Management Groups at district and local levels as required.

Activations and Declarations

Activation of the Queensland Disaster Management System can occur when there is a need for:

- Operational coordination to monitor potential threats or response operations;
- Operational coordination to support response operations being conducted by a designated combat agency;
- Coordination of resources in support of disaster response and recovery operations at local government or district level; or
- Statewide disaster response and recovery operations.

Lead Agency	Threat
Queensland Fire and Rescue Service, Department of Emergency Services	Bushfire
Maritime Safety Queensland, Queensland Transport	Oil Spill at Sea
Department of Primary Industries and Fisheries	Emergency Animal/Plant Disease
Queensland Police Service	Terrorism

Tropical Cyclone Ingrid damage at Lockhart River community.



Elements of Disaster Management

The lessons from the recent world disaster and emergency events are clear – a comprehensive, all Hazards, all Agencies approach is the foundation of effective and efficient disaster management. Multi-agency operational planning needs to be integrated across different jurisdictions allowing collaboration of responses, cooperation in their implementation, coordination of activities and effective communication across cultures and technologies.

In addition, Australia's national reforms concerning disaster mitigation, relief and recovery stemming from the Council of Australian Governments 2002 report *Natural Disasters in Australia: reforming mitigation, relief and recovery arrangements* and the recent audit of Queensland's Disaster Management System changed public policy and the way in which individuals, communities, local governments and state agencies prepare for, respond to and recover from emergency events including natural and non-natural disasters.

The elements of disaster management also demonstrate the importance of how governance, mitigation and post-event assessment contribute to effective and efficient disaster management and safer and more supportive communities. The following actions outline how a comprehensive, all Hazards, all Agencies approach has been applied to disaster management in Queensland during 2004-05.

Disaster Research

Disaster research may be broadly understood as the systematic inquiry, before and after a disaster, into a relevant disaster management problem.

During 2004-2005 a number of research projects were administered by the committees and working groups that support the State Disaster Management Group, including the State Disaster Coordination Group, the State Disaster Mitigation Committee and the Queensland Tropical Cyclone Coordination Committee. Local governments also were very active in disaster mitigation research.

Cyclone Shelter Facilities (lead agency Public Works)

The Queensland Department of Public Works is undertaking a review of public cyclone shelter arrangements in the coastal communities of Queensland. An expected outcome is a revised list of potential buildings suitable for upgrading to shelter building status. The review will also result in the development of long-term strategies for the provision of shelter building locations in cyclone- impacted areas of Queensland.

Building in Bushfire and Cyclone Prone Areas (shared lead agency)

The Queensland University of Technology (on behalf of the Department of Public Works), and James Cook University are undertaking separate research into the effects of bushfire and cyclone on buildings, particularly in residential areas. The bushfire research will test data from two South East Queensland local governments together with the 2002 Canberra bushfire data to adapt a national tool for bushfire risk assessment, whilst the James Cook University is investigating the damage following Cyclone Ingrid and reporting on the effects on buildings in residential areas.

To strengthen the Australian Building Code, the Queensland Department of Local Government Planning, Sport and Recreation and Building Codes Queensland have been working with the Australian Building Codes Board, the state governments in Northern Territory and Western Australia to review the testing standard for securing metal roofing for buildings in cyclonic areas. The revised standard, expected to be completed by 2006, will form part of the Building Code of Australia and be regulated in all States.

Ocean Hazards Assessment (shared lead agency)

A number of shared agency projects were undertaken during 2004-2005. They include:

- Reviewed modelling methodologies for evaluation of storm tide impacts and priorities for mitigation at technical workshops held in November 2004. (Environmental Protection Agency)
- Developed a series of reports under the Queensland Climate Change and Community Vulnerability to Tropical Cyclones Project. This research examined storm tide impacts, particularly storm surge threats in key localities along the Queensland coast. The project received an Emergency Management Australia state and national Australian Safe Communities Award. (Environmental Protection Agency and Bureau of Meteorology)
- A four-year Storm Tide Mapping Project funded through the jointly funded Natural Disaster Mitigation Programme commenced during 2004 to map storm tide inundation risk in Queensland coastal areas. (Emergency Services)

Local Government Research

Queensland local governments continued their research into natural disaster risk assessment and mitigation initiatives by funding available through the Natural Disaster Mitigation Programme.

Tropical Cyclones

An international conference, Storms, Science to Disaster Mitigation, was held in Brisbane 5-9 July 2004. State and Commonwealth agencies contributed to sponsoring of the mitigation workshops. The lessons learnt from the workshops will inform mitigation strategies considered by the State Disaster Mitigation and the Queensland Tropical Cyclone Coordination Committees.

Climate Change (lead agency Natural Resources and Mines)

Research continued into tools and methods to provide forecasting and assessment of climate change and its impacts on Queensland. This included analysis of the interaction of solar variability, greenhouse gases and stratospheric ozone depletion and improvements in the modelling of climate change impacts.

Changes in the nature and extent of natural hazards due to changes in climate may require assessment of the adequacy of existing disaster management plans including planning for increased intensity of events and increased geographic range of occurrence. Climate change may generate new hazards for a given location, such as heatwave or dust storm and where necessary, threat-specific plans can be developed on the basis of improved research and robust projections.

Policy and Governance

Policy and governance refers to the ways and means that ensure accountability, business risk assessment and efficiency of those involved in emergency and disaster management. The following steps were taken to address strengthening governance and risk management frameworks within the Queensland Disaster Management System.

Queensland Audit Office Recommendations

The Queensland Audit Office (QAO) Report, *Audit of the Queensland Disaster Management System, Audit Report No 2, 2004-2005* was tabled in the Legislative assembly in August 2004. The Report found that across all levels of government, systems were in place that supported the planning and management of the consequences of disasters. However, the report identified there was scope for improvement through enhanced integration of more robust governance and risk management frameworks. In response, the Department of Emergency Services commenced development of a strategic policy framework for disaster management that would incorporate the intent of the audit findings with the aim to ensure good government, leadership, performance reporting, transparency and the efficient and effective use of shared resources.

Storm near Longreach November 2004 (Photo courtesy of Anthony Cornelius)



Disaster Management Strategic Policy Framework (lead agency Emergency Services)

The framework recognises that disaster management is a whole-of-government responsibility and will seek to foster improved partnerships and cooperation among a wide range of stakeholders. The framework will support the strengthening of Queensland's capacity to develop and implement effective, coordinated measures to reduce the impact of disaster events. It is also an important step in the implementation of Queensland's commitment to reforms under the COAG report *Natural Disasters: Reforming mitigation, relief and recovery arrangements in Australia*.

Consultation with key stakeholders across government commenced in June 2005. Workshops were held in Brisbane and Townsville with community and government stakeholders and research institutions. A discussion paper outlining initial stakeholder feedback collected during these workshops will be distributed in August, 2005. The completed framework will be presented to the State Disaster Management Group for their consideration and endorsement.

Disaster Management Alliance (lead agency Emergency Services)

The Disaster Management Alliance is a formal partnership between Queensland local governments, through the Local Government Association of Queensland, and the Department of Emergency Services to enhance collaboration and coordination between all levels of government to ensure communities benefit from appropriate disaster management planning, preparedness, mitigation, response and recovery.

The aim of the Alliance is to ensure that changes to disaster management occur in an effective and efficient way that will result in improved community safety and increased community resilience in the event of a disaster or emergency situation.

A Memorandum of Agreement establishing the Alliance between the Local Government Association of Queensland and the Department of Emergency Services will commence in July 2005. The agreement outlines the principles, outcomes, responsibilities and relationships that will support the operation of the collaborative disaster management alliance between the LGAQ and DES.

Tropical Cyclone Consultative Framework

A consultative framework has been formalised between the Bureau of Meteorology and relevant Queensland agencies through their ongoing membership of the Queensland Tropical Cyclone Coordination Committee (QTCCC) and related subgroups. This will ensure tropical cyclone management and mitigation matters are facilitated formally via briefing papers provided to the State Disaster Mitigation Committee outlining relevant activities. The framework will continue to assist the relationships between the Bureau and other relevant agencies through representation on this committee, the QTCCC and other related subgroups.

The Bureau will continue to engage relevant agencies in the annual tropical cyclone education programmes which precede the tropical cyclone season.

Strategic Framework for the Protection of State Government Built Infrastructure

The Department of Public Works is proposing the establishment of a Disaster Mitigation Working Group. The Working Group will have a number of key functions which include:

- review of existing disaster mitigation arrangements and funding opportunities for the implementation of disaster mitigation strategies;
- research with a disaster mitigation context on the design, construction and maintenance of government built assets and infrastructure;
- development of mitigation strategies for government built assets and infrastructure;
- review of funding opportunities for the implementation of disaster mitigation strategies; and
- development of holistic recommendations on how the department might assist in the implementation of whole-of-government mitigation strategies.

Flood Risk Management Policy (lead agency Natural Resources and Mines)

Preparation of the State Flood Risk Management Policy continued during 2004-2005. The policy will allow for a comprehensive and consistent approach to flood studies, flood mitigation and planning and will help determine priorities for flood mitigation to be incorporated in local and state government planning.

Safety and Marine Environmental Protection (lead agency Queensland Transport)

Developed risk management framework to improve the outcomes of safety and marine environmental protection.

Natural Disaster Risk Management Studies Programme and Natural Disaster Mitigation Programme (lead agency Transport and Regional Services (Commonwealth))

From 1 July 2004, the Natural Disaster Risk Management Studies Programme has been incorporated into the new Natural Disaster Mitigation Programme. All three spheres of government provide funding under these national programmes. Local governments and other eligible organisations will be able to continue to apply for funding under the Natural Disaster Mitigation Programme to conduct natural disaster risk management studies.

Local Government Counter-Terrorism Risk Management Kit

Jointly prepared by the Queensland Police Service, Department of the Premier and Cabinet, Local Government Association of Queensland and Department of Emergency Services, this kit is a practical guide to develop local government capacity to assess and incorporate counter-terrorism considerations in disaster management planning arrangements. Kits were distributed to local governments at workshops during 2004-2005.

Disaster Mitigation

Disaster mitigation is the means taken in advance of, or after, a disaster aimed at decreasing or eliminating its impact on society and the environment.

Natural Disaster Mitigation Programme (lead agency Commonwealth Transport and Regional Services administered by Emergency Services in Queensland)

From 1 July 2004, the Natural Disaster Risk Management Studies Programme has been incorporated into the new Natural Disaster Mitigation Programme. All three spheres of government provide funding under this national programme. Local governments and other eligible organisations apply for funding under the Natural Disaster Mitigation Programme to conduct natural disaster risk management studies and resource mitigation initiatives.

This national programme provides funds to local and State agencies for natural disaster mitigation works, measures and related activities that contribute to safer and sustainable communities which are better prepared to cope with the effects of natural disasters. In Queensland during 2004-05, 41 mitigation proposals were approved for funding to commence mitigation initiatives.

Draft Guideline for Mitigating the Adverse Impacts of Storm Tide Inundation (lead agency Environmental Protection Agency)

A Guideline to provide advice and information on interpreting and implementing coastal hazards policy provided in the State Coastal Management Plan has been developed following targeted consultation among the development community. The Guideline aims to ensure that storm tide inundation is adequately considered when decisions are made about development, particularly in the making or amending of local government planning schemes, the assessment of development applications, and when land is designated for community infrastructure. These guidelines are due for completion in 2005-06 and will support the State Planning Policy 1/03, *Mitigating the adverse impacts of Flood, Bushfire and Landslide*.

Tropical Cyclone Mitigation Strategy (shared lead agency)

A project management group has been established to develop a tropical cyclone mitigation strategy to support state and national disaster mitigation in storm tide, storm surge and related events. The group is made up of members of the Queensland Tropical Cyclone Coordination Committee. The group will continue to work with relevant local governments to integrate tropical cyclone mitigation into local disaster management plans.

Amendment to the Guideline supporting State Planning Policy 1/03 Mitigating the Adverse Impacts of Flood, Bushfire and Landslide (lead agency Emergency Services)

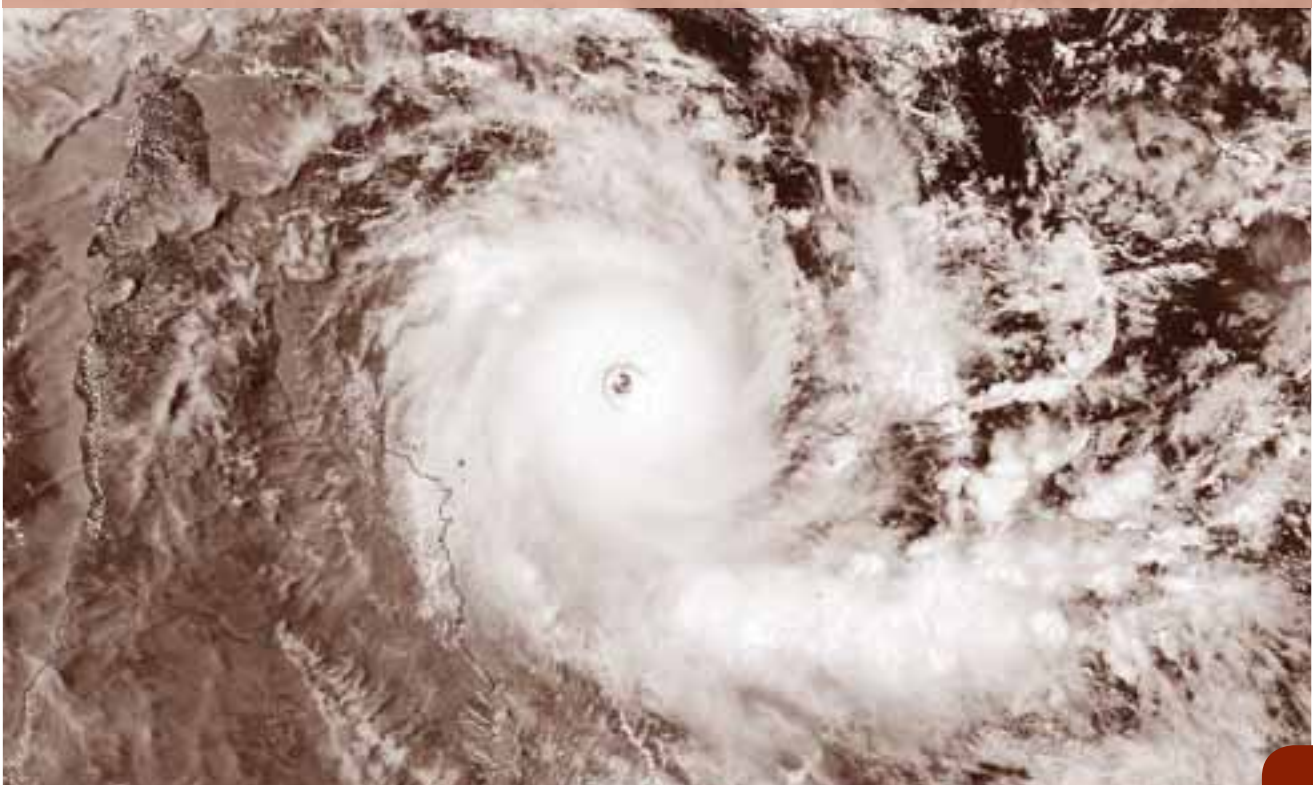
The Department of Emergency Services, in collaboration with the Department of Local Government, Planning, Sport and Recreation is preparing amendments to the Guideline supporting State Planning Policy 1/03. The proposed amendments will remove ambiguity regarding policy intent and to ensure more efficient application of the policy. A public notice to prepare amendments was advertised in December 2004 and submissions sought until March 2005. Only one public submission was received regarding bushfire matters. Discussions are continuing with Department of Local Government, Planning, Sport and Recreation to finalise the review process.

Storm Tide Mapping Project (lead agency Emergency Services)

In partnership with the Environmental Protection Agency, Bureau of Meteorology, Department of Natural Resources and Mines, Department of Local Government, Planning, Sport and Recreation Local Government Association of Queensland, and with the support of local governments; the Department of Emergency Services is undertaking a four-year project to develop a consistent series of storm tide maps for all Queensland local government areas with a storm surge risk.

This project, in addition to providing maps to assist in preventing, preparing for, responding to, and recovering from, storm tide inundation in coastal Queensland, will guide future development providing baseline information to inform strategic planning processes and priorities in Queensland coastline areas. It will also form the basis for the future delivery of other similar programs in Australia and overseas.

Eye of Tropical Cyclone Ingrid off Queensland coast *(Courtesy of Australian Bureau of Meteorology)*



Disaster Preparedness

Disaster Preparedness includes arrangements which ensure that, should an emergency occur, all resources and services which are needed to cope with the effects, can be efficiently mobilised and deployed.

Assess Cyclone Shelter Facilities in Coastal Communities (lead agency Public Works)

It has been identified that there currently are insufficient fully compliant public tropical cyclone shelters in Queensland.

James Cook University is currently undertaking research on wind driven debris damage and effects of cyclones on buildings. This research will provide valuable information to support the creation/upgrading of facilities that have potential to be used as shelters.

Under the 2005-06 Natural Disaster Mitigation Programme, funding has been approved for the upgrading of an additional two facilities, the Sarina Shire Council's Community Hall in Sarina and the Assembly Hall of the Ignatius Park Christian Brothers Secondary College in Townsville.

Tropical Cyclone Storm Tide Warning Response System Handbook

This handbook has been jointly prepared by members of the State Disaster Management Group and the Australian Bureau of Meteorology. The sixth edition 2004 was released in October, 2004. It was issued to all authorities in Queensland charged with the preparation and execution of plans dealing with responses to the threat of storm surges generated by tropical cyclones.

Annual Training and Awareness Programme – Queensland Transport and Main Roads Portfolio (lead agency Queensland Transport)

A statewide training/awareness programme is in place to deliver to Queensland Transport, Queensland Rail and Main Roads staff on an annual basis. Workshops will be held throughout the state on this portfolio's responsibilities for disaster preparedness.

Counter-Terrorism (shared lead agency)

The Department of the Premier and Cabinet worked with key agencies such as the Queensland Police Service, Department of Emergency Services and Queensland Transport to lead a range of counter-terrorism initiatives during 2004-2005. They included:

- Establishing and providing on-going support to the Queensland Counter-Terrorism Committee.
- Representing the state on the National Counter-Terrorism Committee.
- Developing and launching the *Queensland Government Counter-Terrorism Strategy 2005-2007* to provide strategic policy direction in building Queensland's capacity to counter-terrorism.
- Preparing the Queensland Plan for the Protection of Critical Infrastructure from Terrorism.
- Preparing for Exercise Orchid Alert in Queensland as part of the National Counter-Terrorism Committee's Exercise Program.
- Conducting workshops to support implementation of the Local Government Counter-Terrorism Risk Management Kit.
- Progressing maritime security matters.
- Delivering mass gatherings workshops.
- Delivering the pilot of an Automated Notification System.

The opening of the DES Cannon Hill Special Operations Centre and expansion of the Queensland Combined Emergency Service Academy at Whyte Island were also key initiatives which have strengthened the state's counter-terrorism capabilities.

Communications Systems

Under the Response Management Programme, the Queensland Police Service conducted an examination of its current communication systems, i.e. Computer Aided Despatch and Mobile Data Systems, in the context of an anticipated future-shared communications initiative with the Department of Emergency Services.

Foot and Mouth Disease and Bovine Spongiform Encephalopathy (lead agency Primary Industries and Fisheries)

Continued enhancement of Queensland's preparedness against incursion of Foot and Mouth Disease and Bovine Spongiform Encephalopathy was enhanced through the following initiatives:

- contribution to the national Rapid Response Team;
- establishment of a cross-sectoral Standstill Zone Management Group and development of the guidelines; and
- collaboration with the Biosecurity Cooperative Research Centre on a number of projects to enhance surveillance effectiveness.

Continued engagement in national plant biosecurity systems, including moves towards commitment to the Plant Health Australia Emergency Plant Pest Deed, will happen during 2005-2006.

Biosecurity Surveillance (lead agency Primary Industries and Fisheries)

The Northwatch programme continued to provide enhanced biosecurity surveillance and response in remote North Queensland. This programme also improved general surveillance systems for ongoing diagnosis and analysis of submissions to animal and plant health laboratories.

An increased emphasis on surveillance for emerging infectious diseases and animal-human disease interactions will continue, including the development of new disease testing methodologies and completion of the Queensland Biosecurity Strategy, through effective representation on national policy forums.

Bushfires near Grandchester (Photo Courtesy of Anthony Cornelius)



Public Awareness Initiatives

An important component of building community resilience is the provision of public awareness of what to do prior to, during, and after an event. During 2004-05, a number of government agencies delivered public awareness initiatives including:

- Queensland State Archives presented a range of public programmes such as the Flood, Fire and Famine exhibition. This exhibition was designed to highlight the contribution made by Queensland public authorities in responding to natural disasters throughout Queensland.
- Department of Emergency Services produced and delivered dialect-specific and culturally appropriate disaster management awareness campaigns through the Indigenous Radio Service to increase the capacity of Indigenous communities to prepare for and respond to emergency and disaster events.
- Australian Bureau of Meteorology in partnership with the Department of Emergency Services conducted annual workshops prior to commencement of the cyclone season, which runs from 1 November to 30 April. Held in Brisbane and various North Queensland locations, the workshops were aimed at those agencies involved in preparing for and responding to cyclone events and addressed preparedness for the hazards associated with cyclones, including storm tide and storm surge.

Community awareness activities aimed at disaster preparedness will continue during 2005-06 and will be further enhanced by the Disaster Management Alliance between the Department of Emergency Services and the Local Government Association of Queensland.

Maritime Safety and Security

In partnership with the Commonwealth Government, Queensland Transport, Maritime Safety Queensland and the State's seven port authorities, port security measures prescribed by the Commonwealth Maritime Transport Security Act 2003 were implemented. This included upgrade of the marine communication network in the Cairns region to provide an extended coverage for vessel traffic system and marine distress calls.

Queensland Transport, Maritime Safety Queensland will continue to work with the Commonwealth and State agencies, to enhance maritime security through the:

- Development and delivery of a statewide Vessel Traffic Management Information System (VTMIS) which will be an online system for booking and scheduling ship movements.

- Completion of oil spill contingency plans for the ports of Thursday Island, Skardon River and Weipa and the Gold Coast area. Port authorities were previously responsible for oil spill contingency planning within port limits.

Officers from the Water Police will also enhance maritime security by attending Australian Customs training and courses on conducting searches.

Road Construction Resistance to Flood Damage (lead agency Main Roads)

The Department of Main Roads applies road construction techniques that continue to improve road resistance to flood damage. The department adopts a whole of life approach towards management of the State-controlled road infrastructure network.

The Australian Tsunami Warning System (lead agency Bureau of Meteorology)

The Australian Government has recently committed to an Australian Tsunami Warning System, located in the Indian Ocean, to augment the Pacific Ocean Tsunami Warning System.

Following a Submission by the Department of Foreign Affairs and Trade, in conjunction with the Bureau of Meteorology, Geoscience Australia, and Emergency Management Australia, Federal Cabinet approved a \$68.8 million funding package to support this initiative.

The Department of Emergency Services currently supports the Bureau of Meteorology's work in relation to the Australian Tsunami Warning System through its membership and co-chairing of the Queensland Tropical Cyclone Coordination Committee and with its participation in and representation on, the national committee that is tasked with designing the "road map" for the warning system implementation.

Disaster Response

Disaster response is defined as actions taken in anticipation of, during and immediately after an emergency to ensure that its effects are minimised.

Queensland's response capability has been enhanced by numerous initiatives undertaken through disaster research, policy and governance, disaster risk assessment, mitigation and preparedness. During 2004-05, the State Disaster Coordination Centre was involved in the following operations:

Bushfire Support – 14 August and 17 October 2004

Counter Disaster and Rescue Services regional personnel, State Disaster Coordination Centre personnel and the State Disaster Management Group Duty Officer were required to render counter disaster operational support to Queensland Fire and Rescue Service during bushfires that occurred from 14 to 15 August 2004, and from 8 to 17 October 2004.

Storm Damage and Flooding – South East Queensland 5 to 8 November 2004

Commencing 5 November, continuing daily and culminating on 8 November 2004, storm activity impacted South East Queensland districts, extending from the border ranges to Maroochydore. The storms caused flash flooding and resultant water entry to homes and businesses. Natural Disaster Relief Arrangements were activated. The Department of Communities provided support to cases of personal hardship within Brisbane, Logan and Gold Coast City local government areas.

Tilt Train Incident – 16 November 2004

Shortly after midnight, Q Rail's tilt train derailed near Lowmead Road, Berajond, 40 km north of Bundaberg and 39 km south of Miriam Vale with all carriages off the track and power lines down. The train including seven carriages and two diesel engines had a total of 156 passengers, five staff and two drivers on board. All operational divisions of the Department of Emergency Services were involved in the response including:

- fourteen ambulance vehicles (with a further 16 responding from outside the area);
- seventy-one Queensland Ambulance staff;
- six Queensland Fire and Rescue Service appliances;
- thirty-six QFRS staff;
- one Rural Fire appliance;
- five State Emergency Services crews; and
- rescue helicopters from Queensland Rescue, Sunshine Coast and Bundaberg.

All agencies attend tilt train incident.



Storm Damage – Crows Nest 2 December 2004

On 2 December 2004, severe thunderstorms impacted the Darling Downs and Granite Belt area. The storms produced some large hail and damaging wind gusts. The Minister for Emergency Services activated relief measures under the State Disaster Relief Arrangements (SDRA), as the Department of Communities identified two cases of personal hardship within Crows Nest Shire.

Storm Damage – Clermont 6 December 2004

On 6 December 2004, severe thunderstorms impacted the Central Highlands and Coalfields District. The storms produced golf-ball sized hail, heavy rain and damaging wind gusts. Department of Communities identified several cases of personal hardship within Belyando Shire, and the Minister for Emergency Services approved the activation of relief measures under the State Disaster Relief Arrangements (SDRA).

Storm Damage – South East Queensland 6 December 2004

During the evening of 6 December 2004, storm activity impacted South East Queensland. The storms caused flash flooding and resultant water entry to homes in low-lying areas. Similar storms occurred over six days affecting areas as far north as Gympie. State Emergency Service crews responded to numerous calls for assistance in relation to storm damage over the areas affected. The Minister for Emergency Services approved the activation of relief measures under the State Disaster Relief Arrangements (SDRA) following the storm activity and flash flooding that occurred due to this severe weather.

Flooding – Rubyvale 16 December 2004

On 16 December 2004, 100 millimetres of rain fell in 30 minutes in the catchment of Policeman's Creek Rubyvale which resulted in approximately 30 houses being inundated with water to approximately one metre in depth. The Department of Communities identified several cases of personal hardship, and the Minister for Emergency Services approved the activation of relief measures under the State Disaster Relief Arrangements (SDRA).

Tsunami – Banda Aceh 26 December 2004

An earthquake of magnitude 9 on the Richter scale struck close to Aceh on the island of Sumatra, Indonesia at 7.59am local time on Sunday 26 December 2004. It then swung north with multiple tremors into the Andaman Islands in the Indian Ocean. A series of tsunamis hit Thailand close to Patong, Karon and Kata on Phuket Island, as well as Krabi, Phi Phi Island and Kao Lak. It also hit the east coast of Sri Lanka, the Maldives and other areas in the region. It was the largest tsunami in 40 years and the fifth strongest since 1900. The SDCC received a request from Emergency Management Australia under the AUSASSISTPLAN arrangements, to provide a self-sufficient medical assistance team. This team named Foxtrot was drawn from Queensland Health with support from the Queensland Fire and Rescue Service and the Queensland Ambulance Service. The team spent approximately 14 days providing medical assistance to the injured in Banda Aceh.

Tropical Cyclone – Kerry January 2005

Tropical Cyclone Kerry had been in the Coral Sea for several days and was slowly starting to move towards the central Queensland coast in particular, the Hervey Bay area. The State Disaster Coordination Centre monitored these movements and to capture valuable information, in relation to the large waves Tropical Cyclone Kerry might generate, the Environmental Protection Agency with the assistance of the Queensland Rescue Helicopter Service deployed a Baby Ocean Buoy into Hervey Bay. The buoy was recovered about 17 kilometres north east of where it was deployed, and provided valuable data on the effects of cyclones on this area. This information had not been previously recorded by any permanent wave recording equipment.

Tropical Cyclone – Harvey 5 to 6 January 2005

Tropical Cyclone Harvey formed on Saturday 5 February over the central Gulf of Carpentaria, and crossed the mainland coast, at approximately 1700 hours in the vicinity of the Queensland and Northern Territory border. The system then weakened into a rain depression and continued to move inland in a southerly direction as it continued to degenerate. The Minister for Emergency Services activated State Disaster Relief Arrangements (SDRA) to facilitate resupply operations to isolated Gulf of Carpentaria communities. This activation was subsequently combined into an event under the Commonwealth/ State Natural Disaster Relief Arrangements (NDRA).

Tropical Cyclone – Ingrid 4 to 11 March 2005

On 4 March 2005 a tropical low in the Gulf of Carpentaria moved across Cape York and into the Coral Sea. On 6 March 2005 it intensified into Tropical Cyclone Ingrid and tracked south. On 8 March it further intensified to a category 5 and moved in a westerly direction towards Coen (north of Cairns) with wind gusts above 320 km/h. Tropical Cyclone Ingrid impacted Cape York over the period 8-11 March. The cyclone crossed the coastline as a category 4 system and was accompanied by a one-metre storm tide. Tropical Cyclone Ingrid continued its westerly journey and entered the Gulf of Carpentaria between Aurukun and Weipa on 10 March 2005. On 11 March it continued on a westerly track towards the Northern Territory. The Minister for Emergency Services activated Commonwealth/State Natural Disaster Relief Arrangements for local government areas including Cairns, Cook, Douglas, Eacham, Herberton, Johnstone and Mareeba.

Storm Damage – Brisbane 19 May 2005

A severe thunderstorm with hail affected many Brisbane inner city suburbs resulting in minor flooding due to blocked roof gutters. Traffic was disrupted in some areas due to the excessive amount of hail making roads impassable. Some schools and the Brisbane City Hall received water damage due to the large amounts of hail.

Visit by Nuclear Powered Warship 7 to 13 June 2005

As part of the Australian Government's agreement to visits by nuclear powered warships of foreign allied countries, the USS Louisville, a Los Angeles class fast attack submarine of the United States Navy visited Brisbane for the purposes of crew rest and recreation.

Flooding – South West Queensland 12 June 2005

From 12 June 2005, significant rainfall resulted in flooding across South West Queensland Districts. The flooding isolated properties and damaged road networks across the South West Queensland corner. Barcoo, Diamantina and Bulloo reported significant road damage totalling \$3.75M. Stranded motorists and properties required food resupplies.

Flooding and Landslide – Gold Coast 29 to 30 June 2005

From 29-30 June 2005, the Gold Coast city area was inundated with very heavy rains. Reports of up to approx 500-600 mm of rain were received across the city.

This extensive amount of rain resulted in considerable localised flooding across the Gold Coast area and damage to private and public infrastructure resulting in major road closures, closure of the Gold Coast Airport and inundation of properties.

Landslide at Currumbin June, 2005.



Miami Caravan Park sustained damage to a large number of caravans and a landslip occurred on Currumbin Hill making some homes unsafe for habitation. This landslip also impacted the Currumbin Bird Sanctuary, silting up their ponds and damaging the fencing around the animal enclosures.

A disaster situation was declared by the Gold Coast Disaster District Coordinator with the approval of the Minister for Emergency Services to help ensure the safety of those residents affected, as well as provide protection for those performing work on the site.

Avian Influenza and Severe Acute Respiratory Syndrome (SARS)- ongoing

The State Disaster Coordination Centre has been receiving situation reports from the Australian Government Department of Health and Aging on the status of Avian Influenza and Severe Acute Respiratory Syndrome since 29 January 2004. The State Disaster Coordination Centre continues to maintain a watching brief.

Citrus Canker Outbreak - ongoing

In late June 2004 an outbreak of the bacterial Citrus Canker disease was detected on a property at Emerald. The State Disaster Coordination Centre continues to maintain a watching brief and the Department of Primary Industries and Fisheries continue to implement the National Citrus Canker Eradication Programme.

Date	Destination	Cargo	Method	Kilograms
10 Jan	Burketown	Foodstuffs	Fixed wing	1,738
21 Jun	Stranded motorists near Diamantina Lakes, and an isolated station.	Foodstuffs and Medical supplies	Rotary wing	180
			Total:	1,918

Summary of Resupply Operations

As a result of flooding in the Gulf during January, road closures occurred resulting in communities becoming isolated. Similar conditions impacted central western Queensland again in June. This resulted in requests for the resupply of almost two tonnes of essential foods and medical supplies, to the following communities by charter aircraft:

Disaster Relief and Recovery

The Council of Australian Governments' Report defines disaster relief as the provision of immediate shelter, life support and human needs of persons affected by, or responding to, an emergency. Disaster recovery is defined as the coordinated process of supporting emergency-affected communities in the reconstruction of the physical infrastructure and restoration of emotional, social, economic, physical well being.

The prime mechanism utilised by the Queensland Government for providing relief and recovery assistance to communities affected by natural disaster events is the Commonwealth Natural Disaster Relief Arrangements. This funding is available for bushfire, earthquake, flood, storm (including hailstorm), cyclone, storm surge, landslide, tsunami, meteorite strike and tornado.

The funding arrangements provide a cost sharing formula between the state and Commonwealth governments as well as a range of pre-agreed relief measures which may be activated by the Queensland Government immediately following a disaster event, once a need has been established.

The Commonwealth Minister for Finance determines terms and conditions of assistance under NDRA (including loan and subsidy ceilings). All assistance schemes must comply with the determination by the Minister for Emergency Services.

Expenditure commitments from Queensland disaster events during 04-05 totalled \$87.2 million. Of this total, the Commonwealth Government contributed \$22.7 million.

Under the cost sharing formula for the NDRA programme for 2004-05, Queensland was required to meet the initial amount of \$45.6 million. The next \$34.1 million was to be equally shared Commonwealth 50% and state 50%. Expenditure in excess of \$79.7 million was to be shared Commonwealth 75% and State 25%.

Activation threshold for 2004-05 is \$240,000 up from \$200,000 in 2003-04. The local government trigger now ranges from \$114,000 to \$1,140,000 for 2004-05.

DPI & F officers inspecting orchards in quarantine area.



Improved relief and recovery operations

To further enhance natural disaster relief arrangements, a cross jurisdictional group comprising state, territory, Commonwealth Government and other stakeholder representatives was formed to progress the Council of Australian Government natural disaster relief arrangements reform agenda. The following reforms continue to be progressed:

- allowing for damaged infrastructure upgrades;
- establishing additional assistance measures through the Community Recovery Modules;
- improving NDRA accessibility for low-capacity councils and Indigenous communities;
- removing personal intervention provisions in relation to arson;
- removing sewerage and water services from ineligible public undertakings; and
- enhancing post-disaster recovery information collection to improve the nations, understanding of the cost of disasters.

Government approval of the agreed NDRA final reform package will be sought in the first half of 2006, with rollout of new assistance measures planned to take effect from 1 July 2006.

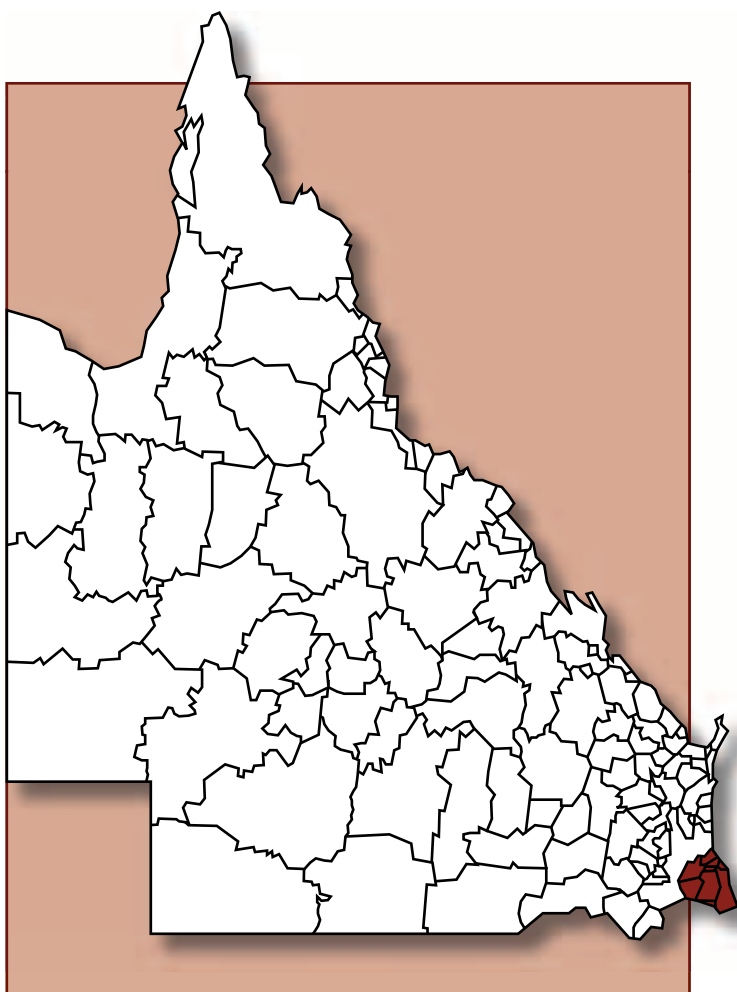
To enhance recovery arrangements state government agencies involved in the disaster management system will continue to work with National Recovery Committee representatives to better define and manage recovery operations.

Natural disaster funding arrangements activated

During 2004-05, natural disaster funding arrangements were activated for the following disaster events.

State Disaster Management Group

South East Queensland Storms and Flooding 5-8 November 2004



Event timing and location – commencing 5 November, continuing daily and culminating on 8 November 2004, unstable meteorological conditions resulted in storm activity impacting South East Queensland Districts extending from the border ranges to Maroochydoore.

The storms caused flash flooding and resultant water entry to homes and businesses as well as damage to primary production enterprises.

The Rocklea area of Brisbane was severely affected. The storms were particularly active across Boonah, Gold Coast, Logan and Brisbane.

Personal hardship was reported from the Rocklea (Brisbane), Logan and Gold Coast areas.

Assistance activated – the Minister for Emergency Services activated State Disaster Relief Arrangements (SDRA) for storms from 5-7 November 2004. This activation was subsequently combined into an event under the Commonwealth/State Natural Disaster Relief Arrangements (NDRA) for the storm/flood event from 5-8 November 2004.

NDRA relief measures activated

- Disaster Relief Assistance Scheme
- Counter Disaster Operations
- Restoration of Public Assets
- Concessional Loans to Primary Producers
- Concessional Loans to Small Businesses

Area formally defined for assistance - communities in South East Queensland affected by storms and flash flooding between 5 and 8 November 2004.

Local government areas affected include: Brisbane, Gold Coast, Logan, Ipswich, Boonah, Beaudesert.

* Details of NDRA relief measures and NDRA administering authorities are available from:

<http://www.disaster.qld.gov.au/publications/#7>

Clermont Storms 6 December 2004

Event timing and location- on 6 December 2004, severe thunderstorms impacted the Central Highlands and Coalfields District. The storms produced golf ball-sized hail, heavy rain and damaging wind gusts.

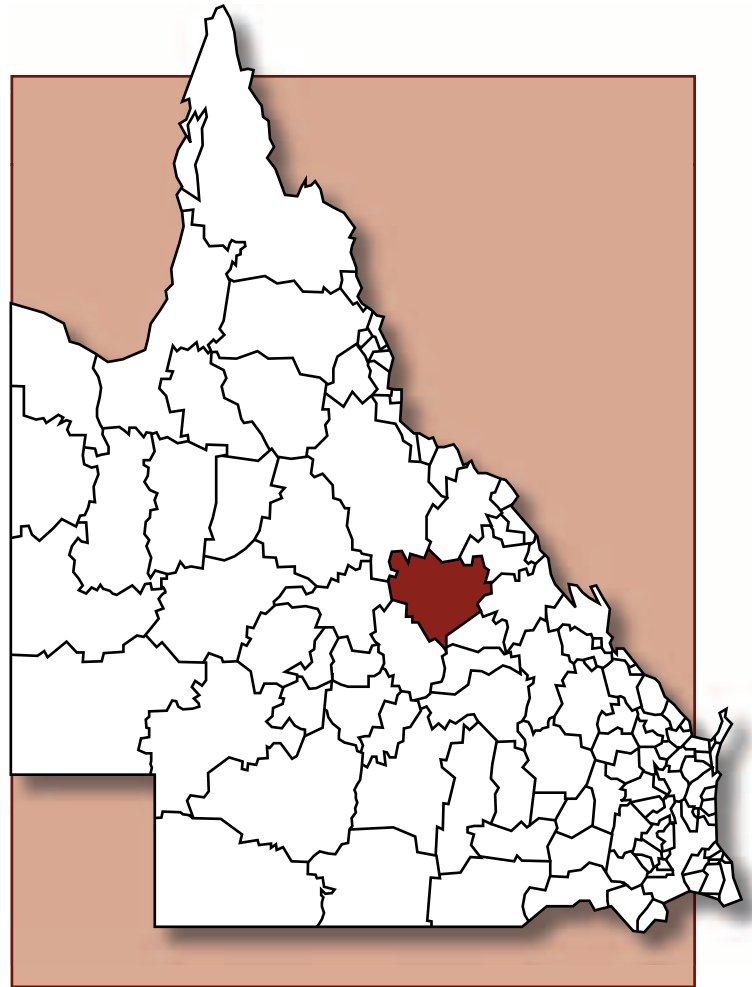
Personal hardship was reported from within the Belyando Shire Council area.

Projected state expenditure on relief measures was insufficient to trigger the activation of Commonwealth/ State Natural Disaster Relief Arrangements (NDRA)

Assistance activated – the Minister for Emergency Services activated State Disaster Relief Arrangements (SDRA).

SDRA Relief measures activated:

- Disaster Relief Assistance Scheme

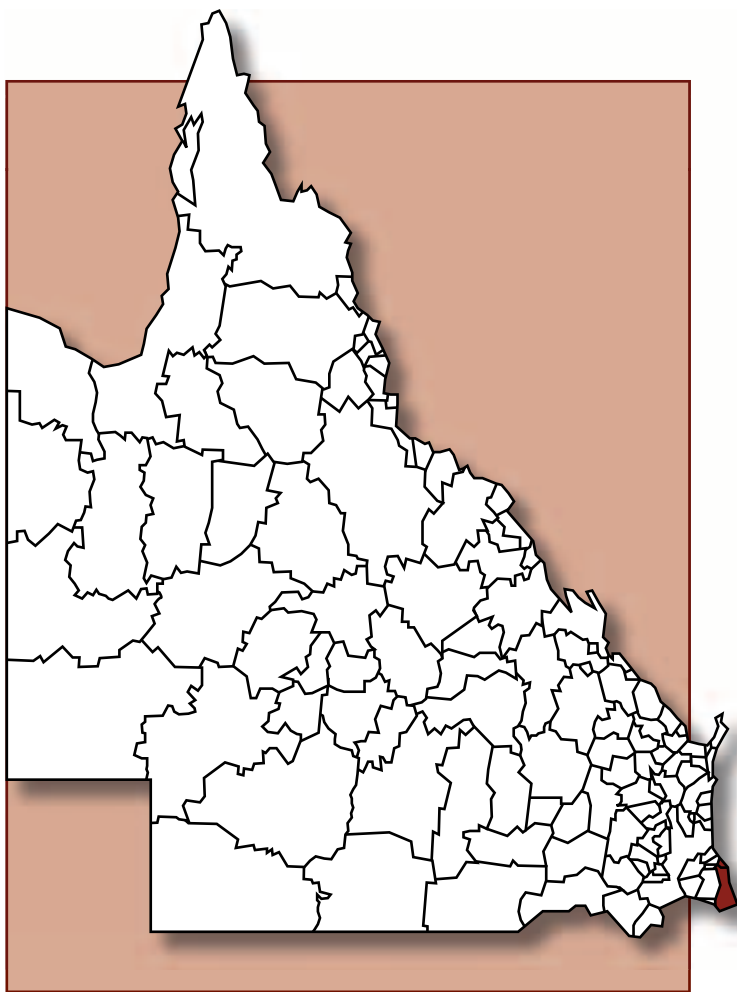


Area formally defined for assistance - communities in Belyando Shire affected by storms on 6 December 2004. Belyando local government area affected.

Event timing and location – during the evening of 7 December 2004, storm activity impacted South East Queensland causing flash flooding and water entry to homes in low-lying areas.

Personal hardship was reported from within the Gold Coast City Council area.

South East Queensland Storms and Flooding 7 December 2004



Projected State expenditure on relief measures was insufficient to trigger the activation of Commonwealth/ State Natural Disaster Relief Arrangements (NDRA)

Assistance Activated – The Minister for Emergency Services activated State Disaster Relief Arrangements (SDRA).

SDRA relief measures activated:

- Disaster Relief Assistance Scheme
- Counter Disaster Operations

Area formally defined for assistance- communities in Gold Coast local government area affected by storms and flash flooding on 7 December 2004.

Crows Nest Storms December 2004

Event timing and location – on 2 December 2004, severe thunderstorms impacted the Darling Downs and Granite belt area. The storms produced large hail and high winds.

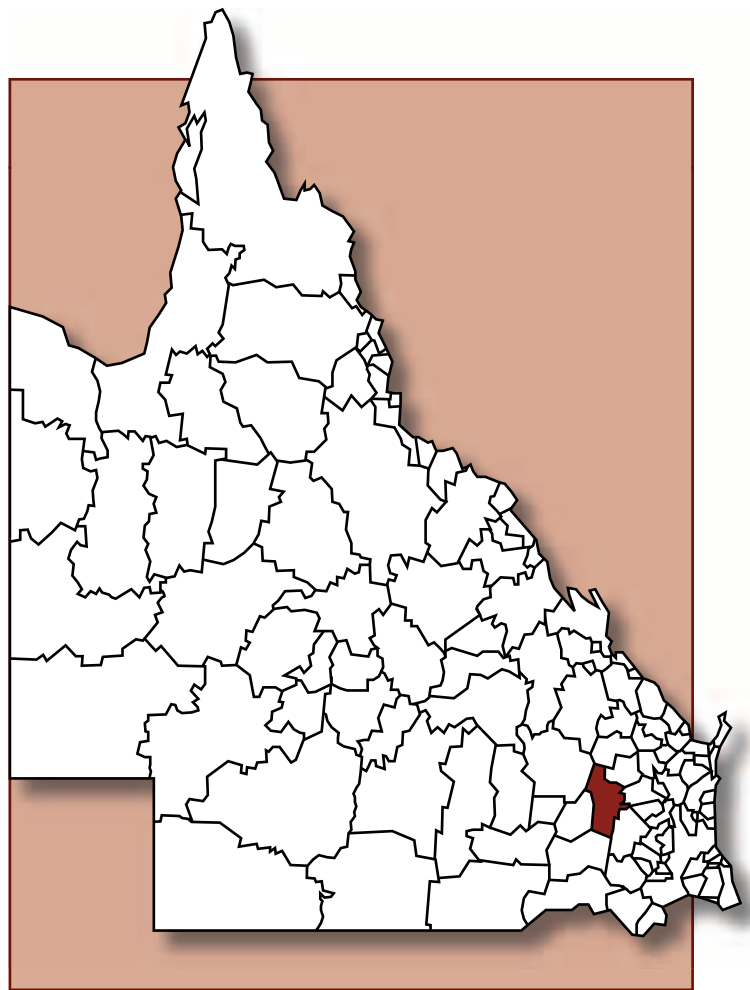
Personal hardship was reported from the Crows Nest Shire area.

Projected state expenditure on relief measures was insufficient to trigger the activation of Commonwealth/ State Natural Disaster Relief Arrangements (NDRA).

Assistance activated – the Minister for Emergency Services activated State Disaster Relief Arrangements (SDRA).

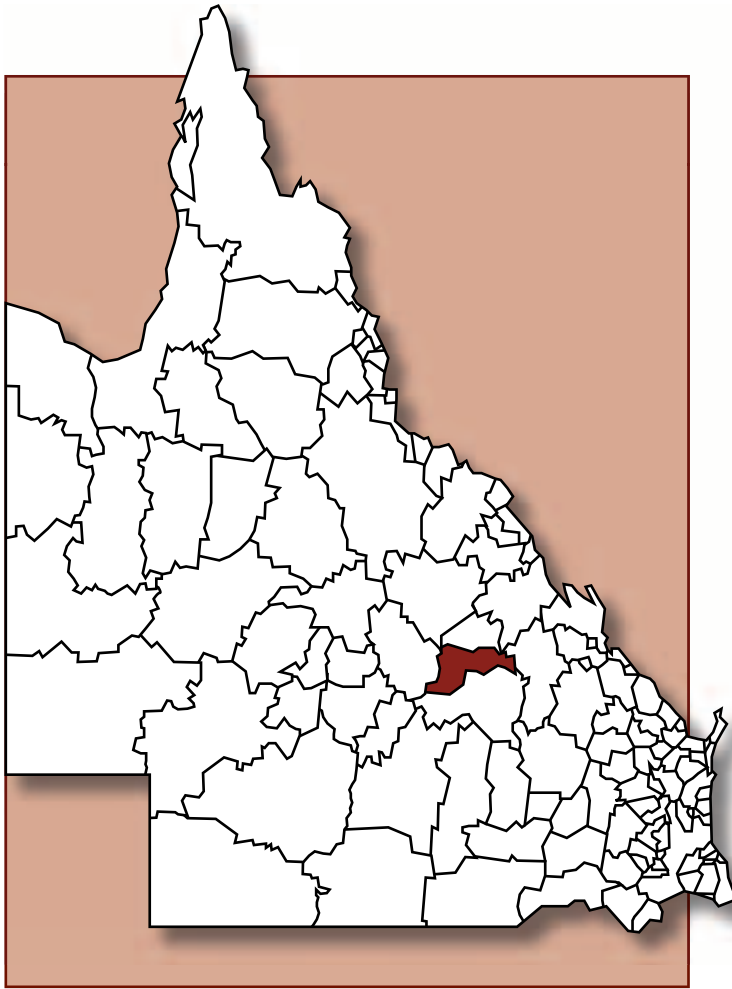
SDRA relief measures activated:

- Disaster Relief Assistance Scheme



Area formally defined for assistance - communities in Crows Nest Shire affected by storms on 2 December 2004.
Crows Nest local government area affected.

Flooding Rubyvale, Emerald Shire 16 December 2004



Event timing and location – on 16 December 2004, heavy rains in the catchment of Policeman’s Creek, Rubyvale, resulted in flash flooding that inundated approximately 30 houses to a depth of 1 metre.

Personal hardship was reported from within the Emerald Shire Council area.

Projected state expenditure on relief measures was insufficient to trigger the activation of Commonwealth/ State Natural Disaster Relief Arrangements (NDRA).

Assistance activated – the Minister for Emergency Services activated State Disaster Relief Arrangements (SDRA).

SDRA relief measures activated:

- Disaster Relief Assistance Scheme
- Counter Disaster Operations

Area formally defined for assistance - communities in Emerald local government area affected by flash flooding on 16 December 2004.

Tropical Cyclone Ingrid and Far North Queensland Flooding March 2005

Event timing and location – on 4 March 2005 a tropical low in the Gulf of Carpentaria moved across Cape York and into the Coral Sea. On 6 March 2005 it intensified into Tropical Cyclone Ingrid and tracked south. On 8 March it further intensified to a category 5 and moved in a westerly direction towards Coen (north of Cairns) with wind gusts above 320 km/h.

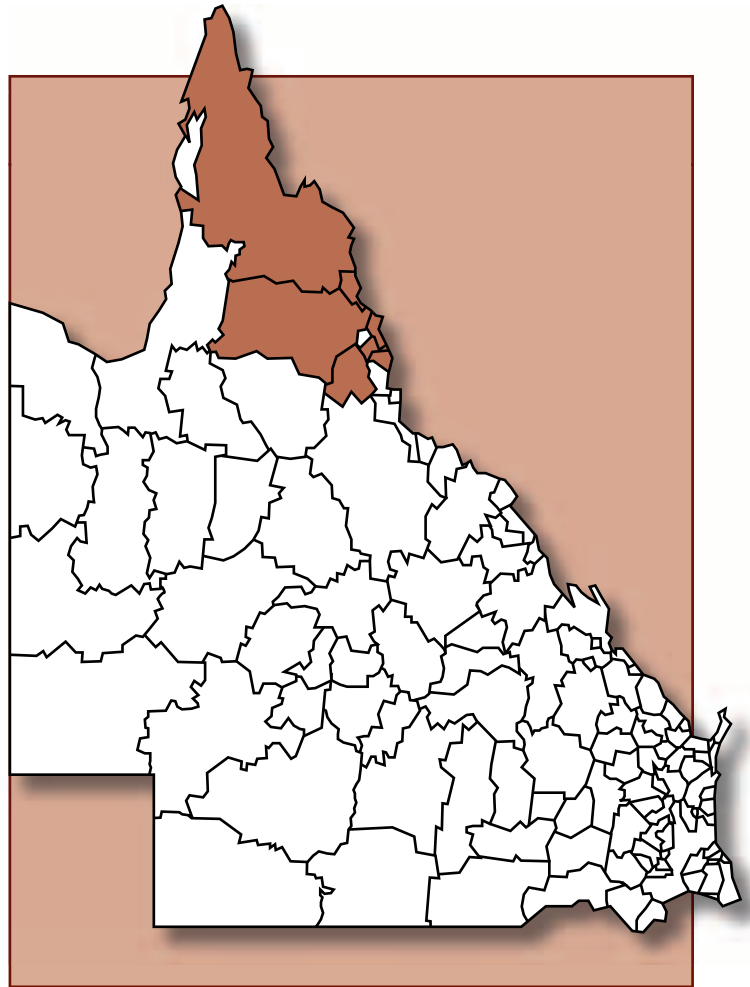
TC Ingrid impacted Cape York over the period 8-11 March. The cyclone crossed the coastline as a category 4 system and was accompanied by a one-metre storm tide. TC Ingrid continued its westerly journey and entered the Gulf of Carpentaria between Aurukun and Weipa on 10 March 2005. On 11 March it continued on a westerly track towards the Northern Territory.

Damage occurred to road networks from flooding associated with the cyclone.

Assistance activated – the Minister for Emergency Services activated Commonwealth/State Natural Disaster Relief Arrangements (NDRA).

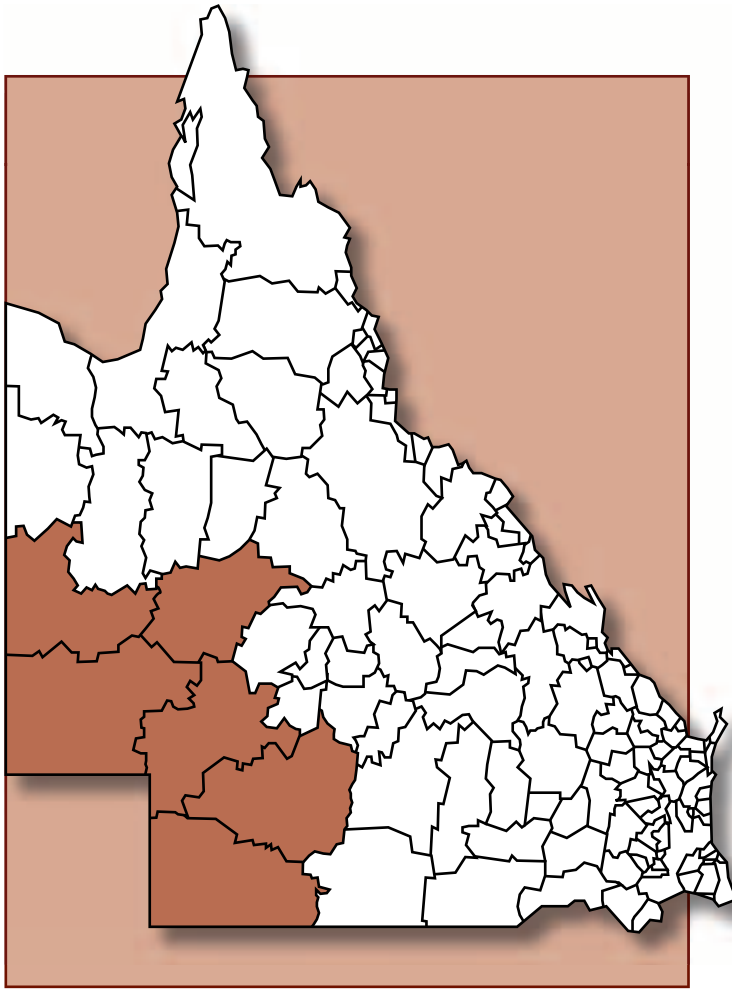
NDRA relief measures activated:

- Counter Disaster Operations
- Restoration of Public Assets



Area formally defined for assistance - Far North Queensland communities affected by TC Ingrid and subsequent flooding in March 2005. Local government areas affected include: Cairns, Cook, Douglas, Eacham, Herberton, Johnstone and Mareeba.

South West Queensland Flooding June 2005



Event timing and location - From 12 June 2005, significant rainfall resulted in flooding across South West Queensland Districts. The flooding cut road networks and isolated properties.

Assistance activated – the Minister for Emergency Services activated the Commonwealth/State Natural Disaster Relief Arrangements (NDRA).

NDRA relief measures activated:

- Counter Disaster Operations
- Restoration of Public Assets

Area formally defined (by Minister for Emergency Services) for assistance -

South West Queensland communities affected by flooding from June 2005.

Local government areas affected include – Barcoo, Boulia, Bulloo, Diamantina, Quilpie and Winton. The area will progressively be extended as damage advices are received.

South East Queensland Flooding June 2005

Event timing and location – Following the passage of an East Coast Low, extensive rain fell over South East Queensland, with extremely heavy rainfall impacting the Gold Coast area. This triggered widespread flooding across the Gold Coast area, resulting in major road closures, closure of the Gold Coast Airport and inundation of properties.

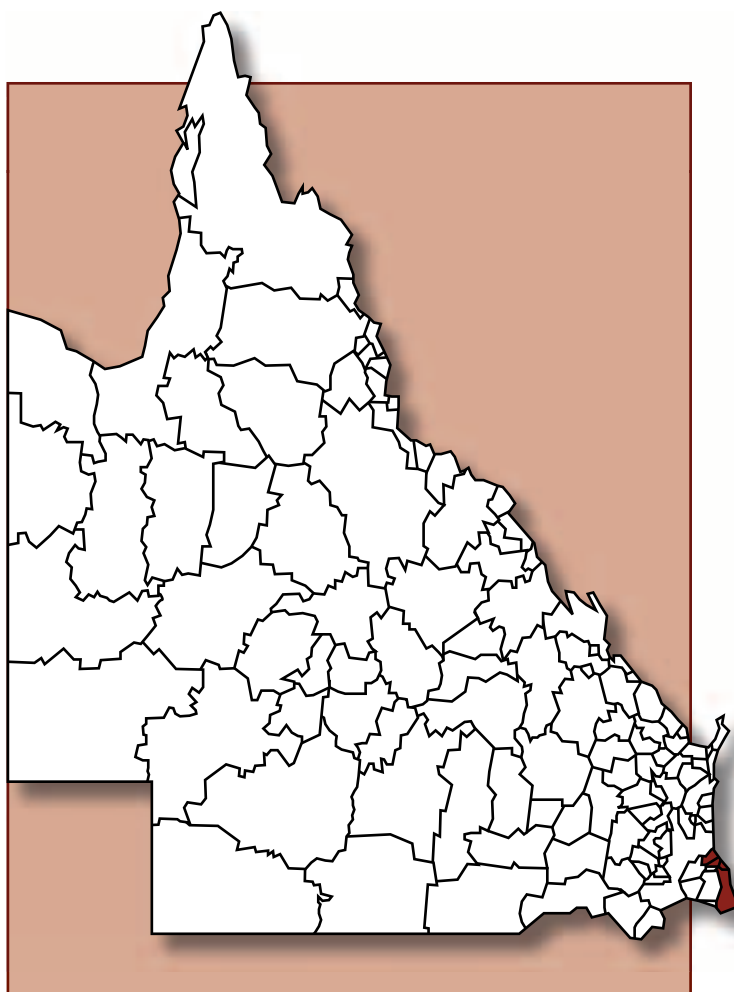
Personal hardship was reported from within the Gold Coast City Council area.

State Disaster Relief Arrangements were activated and subsequently replaced by NDRA.

Assistance activated – the Minister for Emergency Services activated the Commonwealth/State Natural Disaster Relief Arrangements (NDRA).

NDRA relief measures activated

- Disaster Relief Assistance Scheme
- Counter Disaster Operations
- Restoration of Public Assets



Area formally defined for assistance - communities in Gold Coast local government area affected by flooding in late June 2005.

Post-Disaster Assessment

Post-disaster assessment addresses risks revealed by an emergency or disaster event to improve future development of mitigation measures. Post-disaster assessment forms part of continuous improvement of the whole disaster management system.

During 2004-05, a number of assessments were undertaken after emergency events to inform development of improved mitigation strategies and measures. Some of these included:

- Post-event aerial and on-ground surveys carried out by Bureau of Meteorology and Environmental Protection Agency for Tropical Cyclones Harvey and Ingrid.
- Assessment of buildings and their ability to withstand wind loads undertaken by James Cook University.
- Damage investigation after Tropical Cyclone Ingrid to enhance future mitigation in cyclone-impacted areas.

Weather Warnings

The State Disaster Coordination Centre has a very close relationship with the Bureau of Meteorology as Queensland has a high frequency of severe natural phenomena affecting communities throughout the state. The Centre has access to 20 Bureau of Meteorology weather radar sites around the state.

During the period July 2004 to June 2005, 697 warnings were received from the Bureau as follows:

Date(s)	Warning	No.	Area/Districts
17-18 July	Gale	15	North Eastern area
29-29 August	Fire Weather	5	Warrego and Channel Country districts
5 September	Severe Thunderstorm	2	South East Coast district
13 September	Fire Weather	3	Central West, Upper Flinders and Gulf districts
19 September	Severe Thunderstorm	2	Wide Bay and Burnett district
28 September	Fire Weather	5	Central West, Maranoa and Warrego districts
1 October	Severe Thunderstorm	9	South East Coast district
5 October	Severe Thunderstorm	2	Wide Bay and Burnett district
7-8 October	Fire Weather	6	South East Coast, Wide Bay and Burnett districts
14-15 October	Fire Weather	4	South East Coast, Darling Downs and Granite Belt, and Maranoa districts
17 October	Severe Thunderstorm	4	Darling Downs and Granite Belt districts
18 October	Severe Thunderstorm	6	Darling Downs and Granite Belt, Wide Bay and Burnett, and Capricornia districts
19 October	Severe Thunderstorm	8	South East Coast district
20 October	Severe Thunderstorm	6	Central Coast and Whitsunday districts
22-24 October	Fire Weather	9	South East Coast, Maranoa, Darling Downs and Wide Bay and Burnett districts
24 October	Severe Thunderstorm	8	Eastern Darling Downs, South East Coast and Wide Bay and Burnett districts
26 October	Severe Thunderstorm	9	Darling Downs district
26-27 October	Fire Weather	5	Maranoa and Warrego district
29 October	Severe Thunderstorm	2	Central Highlands and Coalfields district
3 November	Severe Thunderstorm	9	Darling Downs and Granite Belt, South East Coast, Wide Bay and Burnett districts
7 November	Severe Thunderstorm	3	Wide Bay and Burnett district
13 November	Fire Weather	5	Maranoa and Warrego, Central Highlands and Coalfields and Darling Downs and Granite Belt districts
15 November	Severe Thunderstorm	2	Capricornia, Central Highlands and Coalfields, Central Coast and Whitsunday districts
17 November	Severe Thunderstorm	3	Central Highlands and Coalfields districts
18 November	Severe Weather	2	Mackay City
19 November	Severe Thunderstorm	4	Gulf and Channel Country districts
21-23 November	Gale	12	North Eastern area
29 November - 1 December	Fire Weather	5	Maranoa and Warrego district

2 December	Severe Thunderstorm	8	Darling Downs, Granite Belt, Wide Bay and Burnett districts
4 December	Severe Thunderstorm	5	Central Highlands and Darling Downs districts
6 December	Severe Thunderstorm	6	Maranoa, Warrego, Darling Downs, Central Highlands and Coalfield districts
7 December	Severe Thunderstorm	7	Darling Downs, Granite Belt, Central Highlands and Coalfield districts
7 December	Severe Thunderstorm	7	Wide Bay and Burnett district
7 December	Severe Thunderstorm & Flash Flooding	3	South East Coast district
8 December	Severe Thunderstorm	7	Darling Downs, Wide Bay and Burnett district
9 December	Severe Thunderstorm	4	Capricornia, Wide Bay and Burnett districts
9 December	Severe Thunderstorm	4	Central West and North West districts
11 December	Severe Thunderstorm	3	Channel Country and Maranoa Warrego districts
12 December	Severe Thunderstorm	4	South East Coast district
13 December	Severe Thunderstorm	14	Capricornia, South East, Wide Bay and Burnett districts
14 December	Severe Thunderstorm	2	Capricornia district
14 December	Severe Thunderstorm	2	Herbert and Lower Burdekin district
20 December	Severe Thunderstorm	8	South East Coast, Wide Bay and Burnett districts
21 December	Severe Thunderstorm	2	Capricornia, Wide Bay and Burnett districts
22 December	Severe Thunderstorm	5	Darling Downs, Maranoa and Warrego districts
23 December	Severe Thunderstorm	6	South East Coast district
24 December	Severe Thunderstorm	4	Darling Downs, Wide Bay and Burnett districts
27 December	Severe Thunderstorm	4	South East Coast district
27-28 December	Fire Weather	5	Maranoa and Warrego districts
5-20 January	Flood	17	Nicholson, Gregory, Leichhardt, Cloncurry and Flinders Rivers
5 January – 7 February	Flood	39	Georgina and Burke Rivers, and Eyre Creek
8-11 January	Hurricane	13	North Eastern area
9-10 January	Gale	4	Coastal Waters between Coolangatta and Cape Melville
11-12 January	Storm/Cyclone	5	North Eastern area
12-14 January	Fire Weather	7	Maranoa and Warrego district
12-15 January	Gale	16	North Eastern area
17 January	Severe Thunderstorm	9	Capricornia District
21 January	Severe Thunderstorm	5	Darling Downs and Granite Belt districts

21 January	Severe Thunderstorm	5	South East district
21-23 January	Flood	5	Coastal Rivers between Townsville and Cairns
22 January	Severe Thunderstorm	2	Darling Downs, Granite Belt and South East Coast districts
22-25 January	Severe Weather	19	Cairns to Bundaberg
23-24 January	Flood	8	Coastal Rivers between Cardwell and Mackay
23-24 January	Flood	3	Don River
23-25 January	Flood	8	Haughton River
23-25	Gale	9	North Eastern Area
24-28 January	Flood	8	Cape Burdekin River
30 January	Severe Thunderstorm	3	Southern Parts of South East district
2 February	Severe Thunderstorm	8	South East Coast, Darling Downs and Granite Belt districts
5-8 February	Cyclone Warning	22	Port MacArthur to Weipa
6 February	Severe Thunderstorm	2	South East Coast area
6-7 February	Storm Tide	7	NT/QLD Border, Mornington Island, Sth. Gulf of Carpentaria
7-9 February	Fire Weather	5	Maranoa, Warrego, Darling Downs and Granite Belt
11-14 February	Gale	14	North Eastern area
17 February	Severe Thunderstorm	4	Darling Downs and Granite Belt districts
23 February	Severe Thunderstorm	1	Gulf Country
25 February	Severe Thunderstorm	2	North West district
5-10 March	Storm Tide	22	North Eastern Area
7-13 March	Tropical Cyclone	58	Coastal Communities between Port Douglas and Lockhart River
8-9 March	Gale	11	Coastal Waters between Cardwell and Cape Melville
11-13 March	Flood	3	Coastal Rivers and Streams between Daintree and Ingham
21 March	Severe Thunderstorm	12	South East Coast, Wide Bay and Burnett district
25 March	Severe Thunderstorm	6	Wide Bay and Burnett district
26 March	Severe Thunderstorm	14	South East Coast, Wide Bay and Burnett district
3-5 April	Gale	12	North Eastern area
14-15 April	Gale	6	North Eastern area
3-5 May	Gale	10	North Eastern area
11-12 May	Gale	4	North Eastern area
13-14 May	Gale	9	North Eastern area
19 June	Gale	3	North Eastern area
28 June-1 July	Gale	15	North Eastern area

