MAREEBA LOCAL DISASTER MANAGEMENT PLAN 2021/22

Contents

FOREWORD	5
ENDORSEMENT	6
PART 1: ADMINISTRATION AND GOVERNANCE	7
Amendments and Version Control	7
Amendment register	7
Distribution	8
Authority to plan	8
Responsibilities	8
Queensland's Disaster Management Arrangements	8
Purpose of the Plan	10
Structure of the Plan	10
Objective of the Plan	10
Prevention	10
Preparedness	10
Response	11
Recovery	11
Emergency Management Assurance Framework	11
Scope	
PART 2: MAREEBA LOCAL DISASTER MANAGEMENT GROUP	12
Establishment	12
Functions	12
LDMG Membership	12
Chairperson	12
Deputy Chairperson	13
Local Disaster Coordinator	13
Core Membership	13
Invitees and observers	14
Sub-groups and working groups	14
Activation	
Business-as-usual arrangements	14
General organisational roles and responsibilities	15
PART 3: DISASTER RISK ASSESSMENT	
Community Context	
Geography	
Climate and Weather	

Population	26
Our Age	26
Where We Come From	26
Our Education	26
Disability	26
Linguistic diversity	27
What we do	27
Cultural Diversity	27
Vulnerable populations	27
Social Support Infrastructure	27
Community Preparedness & Capacity	27
Critical Infrastructure	28
Transportation - Road System	28
Transportation - Railway	28
Transportation - Airfields	28
Wastewater network	29
Electrical network	29
Water Supply	29
Buildings	30
Medical Facilities	30
Hazards	30
Bushfire	30
Cyclones	31
Severe Storms	31
Flooding	31
Dams	32
Epidemics/pandemics (human-related)	32
Exotic animal and plant diseases	32
Heatwaves	33
Earthquakes	33
Terrorism	33
Major Infrastructure Failure	34
Risk analysis	34
PART 4: PREVENTION	35
Queensland Government prevention roles and responsibilities	35
Land Use Planning	35

Hazard reduction programs	36
Building codes, regulations and standards	36
Insurance	36
PART 5: PREPAREDNESS	38
Response capability	38
Training	38
Exercises	38
Evaluating the exercise	39
Post-event review	39
Preparedness notification and dissemination	40
Bureau of Meteorology	40
Emergency Management Dashboard	40
Early Warning Network	40
LDMG and member organisation responsibilities	40
Emergency planning	41
Local Disaster Management Plan principles	41
Primary and lead agency plans	41
Community emergency plans	41
Community awareness and education	41
Community education	42
PART 6: RESPONSE	43
Emergency response and the Local Disaster Management	Group43
Activation levels for response arrangements	43
Local Disaster Coordination Centre	45
Emergency warning notification and dissemination	45
Family, friends and neighbours	46
Social media, websites and notification services	46
Emergency Alert	46
Standard Emergency Warning Signal (SEWS)	46
Mainstream media (radio, television and newspapers)	46
Public information and media management	46
Coordination and capability support	47
Impact assessment	47
Post-impact assessment	47
Needs assessment	48
Financial management	49

Disaster financial assistance arrangements	49
Disaster Recovery Funding Arrangements (DRFA)	49
State Disaster Relief Arrangements (SDRA)	49
Logistics management	50
Disaster declaration	50
Resupply	50
Emergency supply	51
Accessing support and allocating resources	51
Hazard-specific arrangements	52
Primary (hazard-specific) agency	52
Functional arrangements	52
Lead (function) agencies	52
General arrangements related to primary and lead agencies	52
Coordination of primary and lead agencies	52
Primary and lead support agencies	52
Primary (hazard-specific) agencies	53
Functional Lead Agencies	53
PART 7: RELIEF	55
Evacuation Centres	55
Donating to affected people	55
Volunteering	56
Isolated communities	56
PART 8: RECOVERY	57
Phases of recovery	57
Phase 1 – Post impact and early recovery	57
Phase 2 – Recovery and restoration	57
Phase 3 – Transition	57
Functions of Recovery	58
Queensland Government Responsibilities	60

FOREWORD

Mareeba Shire Council has an estimate resident population of 22,000 and is dispersed across 53,457km2. Mareeba, with a district population of over 10,000, is the main commercial and administrative centre and lies 64 km south west of Cairns. Most of the shire's remaining population reside in and around smaller towns and districts including Kuranda, Koah, Speewah, Biboohra, Mt Molloy, Julatten, Mt Carbine, Mutchilba, Dimbulah, Irvinebank, Watsonville, Almaden and Chillagoe.

The Mareeba Local Disaster Management Plan (LDMP) provides the framework for a multiagency response and recovery operations. It integrates with Queensland's disaster management arrangements and is an important tool in how we can prepare ourselves and how we respond to disasters or serious events.

This is a dynamic document that will be regularly reviewed and kept up to date in line with any changes in legislation and reflect learning's from events within Australia or elsewhere.

It should always be remembered that community safety is everyone's responsibility and I would ask that you too do your part and develop your own emergency plan so that you and your family are well prepared for any disaster should it arise.

CR ANGELA TOPPIN

MAYOR

ENDORSEMENT

Mareeba Shire Council

This plan has been developed by, and with the authority of, Mareeba Shire Council pursuant to sections 57 and 58 of the *Disaster Management Act 2003*. The plan conforms to the state planning guidelines.

Section 80(1)(b) requires Council to approve its Local Disaster Management Plan (LDMP).

The plan was endorsed by Mareeba Shire Council on 18 August 2021.

Mareeba Local Disaster Management Group

The plan was endorsed by the Mareeba Local Disaster Management Group on 28 June 2021.

28/06/2021

Cr Angela Toppin Mayor

Chairperson Mareeba Local Disaster

Management Group

28/06/2021

Peter Franks

Chief Executive Officer

Mareeba Local Disaster Coordinator

PART 1: ADMINISTRATION AND GOVERNANCE

Amendments and Version Control

This plan will be reviewed on an annual basis and relevant amendments will be made and distributed.

Indicative Timeframes for review:

April-June	Local Disaster Management Plan reviewed and proposed amendments highlighted
July	Draft Local Disaster Management Plan distributed to Local Disaster Management Group for feedback
August	Reviewed plans submitted to Council for approval (if necessary)
September	Updated plan submitted to District Disaster Management Group for endorsement

Mareeba Shire Council maintains responsibility for the secretariat role of the Mareeba Local Disaster Management Group. Proposals for amendments or inclusions (from residents, businesses, visitors and other stakeholders can be addressed in writing to:

Chief Executive Officer Mareeba Shire Council PO Box 154 Mareeba QLD 4880

info@msc.qld.gov.au

Minor amendments that do not materially affect the plan can be authorized by the Chief Executive Officer, Mareeba Shire Council.

Amendment register

Version	Date	Comment
1.00	July 2014	Plan developed and endorsed post deamalgamation
2.00	July 2020	Complete review and revision incorporating 2018 Queensland State Disaster Management Plan (endorsed by Council 16/09/2020)
2.01	May 2021	Complete review and revision

Distribution

The master copy of this plan is held in the Mareeba Shire Council Chambers. The plan is also available on the website: msc.qld.gov.au.

Authority to plan

This plan has been prepared by Mareeba Shire Council for the Mareeba Shire local government area under the provisions of section 57(1) of the *Disaster Management Act 2003* (the Act).

Responsibilities

In accordance with section 30(1)(f) of the Act, the LDMG is responsible for managing disaster operations in the area. It does so under policies and procedures defined by the Queensland Disaster Management Committee (QDMC).

In the event of a disaster, decision-making authority for disaster management in the local government area rests with the LDMG. The Chairperson is responsible for managing of the business of the group.

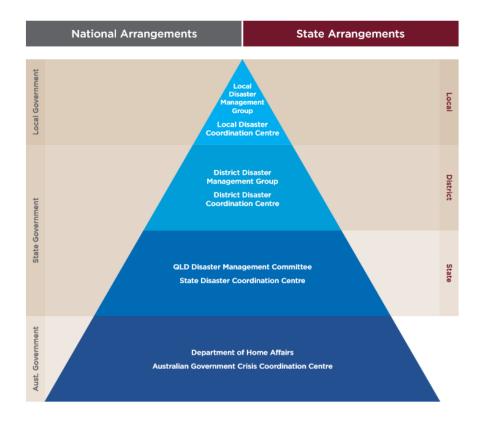
The Chairperson is supported by the Local Disaster Coordinator (LDC), who is responsible for managing the coordination of disaster operations and activities performed by disaster response and recovery agencies.

Queensland's Disaster Management Arrangements

The LDMG forms part of the Queensland Disaster Management Arrangements (QDMA). The arrangements include local, district and state tiers, as shown on the following page. They enable a progressive escalation of support and assistance through each tier as required, and they are geared towards providing support and coordination to the local level.

The Australian Government is also included in the arrangements as a fourth level, in recognition that Queensland may need to seek federal support in times of disaster.

The arrangements recognise and promote collaboration to ensure comprehensive disaster management through the effective coordination of disaster risk planning, services, information and resources.



For detailed information regarding the arrangements, please refer to the Prevention Preparedness, Response and Recovery Disaster Management Guideline https://www.disaster.qld.gov.au/dmg/Pages/DM-Guideline

Purpose of the Plan

The purpose of the LDMP is to:

- detail the arrangements for the coordination and management of resources
- ensure the safety and wellbeing of the community prior to, during and after a disaster

The plan provides a comprehensive, all-hazards, all-agencies approach to disaster management

(An 'all-hazards' approach means that the plan addresses all threat types in a holistic manner).

Structure of the Plan

The LDMP is an overarching document that details the structure, management arrangements and governance provisions which underpin the process. It gives an overview of the arrangements in place for dealing with disasters and sets out the role of the LDMG.

The plan is designed to be flexible so it can be adapted to any disaster event affecting the region to ensure an integrated, coordinated and timely response.

The LDMP is complemented by operational sub plans which are designed to expand on information contained in the LDMP.

Objective of the Plan

The objective of the plan is to protect people, property and the environment from the impacts of disaster. The intent is to achieve this through risk reduction measures and response and recovery strategies, and by working towards increased community resilience. To achieve this, the plan follows the four guiding principles outlined in the Act, which are:

- a) Disaster management should be planned across the following four phases prevention, preparedness, response and recovery.
- b) All events, whether natural or caused by human acts or omissions, should be managed in accordance with the strategic policy statement, the state disaster management plan and any disaster management guidelines.
- c) Local governments should primarily be responsible for managing events in their local government area.
- d) District groups and the state group should provide local governments with appropriate resources and support to help the local governments carry out disaster operations.

The strategies for the four phases are as follows:

Prevention

• Investigate and coordinate risk management strategies to reduce the impact of disaster events on the community.

Preparedness

- Increase community resilience by increasing knowledge and education.
- Encourage shared responsibility and an all-hazards approach to disaster management—including the resources and arrangements used to support response and recovery.
- Enhance local capability by encouraging participation in training and exercises, contributing to equipment acquisition programs, and building relationships.

Response

- Provide effective and efficient coordination of disaster response and recovery in order to safeguard people, property and the environment.
- Provide support to remote communities who may be affected by a disaster.

Recovery

- Ensure that the recovery priorities of the Mareeba Shire community are identified and met across the functional areas.
- Ensure that recovery operations help to build community resilience.

Emergency Management Assurance Framework

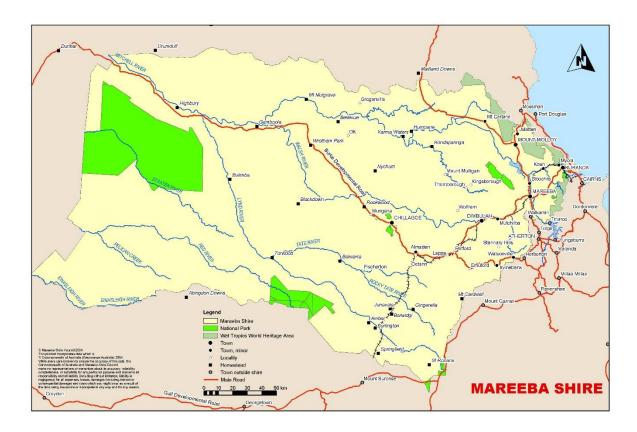
The Inspector-General of Emergency Management has issued a standard pursuant to section 16N of the Act. This is referred to as the Emergency Management Assurance Framework (EMAF).

The EMAF represents a commitment by Queensland's disaster management stakeholders to position Queensland as the most disaster-resilient state in Australia. The framework supports accountability and builds consistency across all levels of the disaster management arrangements. It also reinforces a shared responsibility for delivering better disaster management outcomes for the community.

For more information on the EMAF visit Igem.qld.gov.au.

Scope

This plan applies to the local government area of Mareeba Shire Council, as shown below.



PART 2: MAREEBA LOCAL DISASTER MANAGEMENT GROUP

Establishment

Mareeba Shire Council has established a Local Disaster Management Group (LDMG) in accordance with s. 29 of the Act.

For detailed information regarding the operations of Local Disaster Management Groups, please refer to the Prevention Preparedness, Response and Recovery Disaster Management Guideline https://www.disaster.qld.gov.au/dmg/Pages/DM-Guideline

Functions

The functions of the LDMG are:

- a) to ensure that disaster management and disaster operations in the area are consistent with the state group's strategic policy framework for disaster management for the State.
- b) to develop effective disaster management, and regularly review and assess the disaster management.
- c) to help Council to prepare a LDMP.
- d) to identify, and provide advice to the relevant district group about, support services required by the local group to facilitate disaster management and disaster operations in the area.
- e) to ensure the community is aware of ways of mitigating the adverse effects of an event, and preparing for, responding to and recovering from a disaster.
- f) to manage disaster operations in the area under policies and procedures decided by the State Group.
- g) to provide reports and make recommendations to the relevant district group about matters relating to disaster operations.
- h) to identify, and coordinate the use of, resources that may be used for disaster operations in the area.
- to establish and review communications systems in the group, and with the relevant district group and other local groups in the disaster district of the relevant district group, for use when a disaster happens.
- j) to ensure information about a disaster in the area is promptly given to the relevant district group.
- k) to perform other functions given to the group under the Act.

LDMG Membership

In accordance with Section 33 of the Act, Council appoints the membership of the LDMG.

Chairperson

Mareeba Shire Council appoints the Mayor to the role of Chairperson of the LDMG.

In line with the Act, the chairperson has the following functions:

manage and coordinate the business of the group

- ensure, as far as practicable, that the group performs its functions;
- report regularly to the relevant district group, and the chief executive officer of the department about the performance by the local group of its functions.

Deputy Chairperson

Mareeba Shire Council appoints the Deputy Mayor as the Deputy Chairperson of the LDMG. The Deputy Chairperson assists the Chairperson as required.

Local Disaster Coordinator

The Chairperson of the LDMG appoints a Local Disaster Coordinator (LDC) for the group. For Mareeba the Chief Executive Officer is appointed to this role.

The Manager Technical Services is appointed as the Deputy LDC.

The LDC has the following functions:

- to coordinate disaster operations for the local group;
- to report regularly to the local group about disaster operations;
- to ensure, as far as practicable, that any strategic decisions of the local group about disaster operations are implemented.

Core Membership

The core membership of the LDMG is detailed below:

Organisation	LDMG Position	Organisational Role
Statutory appointments and	Chairperson	Mayor, Mareeba Shire Council
those appointed because of	Deputy Chairperson	Deputy Mayor, Mareeba Shire
the office they hold at		Council
Mareeba Shire Council	Local Disaster Coordinator (LDC)	CEO Mareeba Shire Council
	Deputy LDC	Manager Technical Services
		Mareeba Shire Council
Mareeba Shire Council	Chairperson Built Environment	Director Infrastructure
	& Infrastructure Sub Group	Services
Mareeba Shire Council	Chairperson Economic Sub	Director Corporate and
	Group	Community Services
Mareeba Shire Council	Chairperson Public Health and	Manager Development and
	Environment Sub Group	Governance
Mareeba Shire Council	Chairperson Community	Manager Community
	Support Sub Group	Wellbeing
Queensland Police Service	Member	Officer in Charge
Queensland Fire and	Member	Inspector
Emergency Services (Urban)		
Queensland Ambulance	Member	Officer in Charge
Service		
Queensland Fire and	Member	Emergency Management
Emergency Management		Coordinator
Queensland Health	Member	Medical Superintendent
Red Cross	Member	Liaison Officer
State Emergency Services	Member	Area Controller

Each member is able to nominate a deputy member who may exercise the role of the core member in the absence of that member if approved by the Chairperson.

The LDMG has standing advisors who are experts in their field.

The permanently appointed advisors are listed below:

Organisation	LDMG Position	Organisational Role
Ergon	Advisor	Area Manager
Telstra	Advisor	Area General Manager
Sunwater	Advisor	Area General Manager
Department Education	Advisor	Education Advisor
Department of Communities,	Advisor	Area Manager
Housing and Digital Economy		

Invitees and observers

The LDMG also invites representatives from non-member organisations to contribute to the business of the group.

These representatives will have the necessary expertise or experience, and delegated authority to assist the group in considering their approach to the ongoing planning, testing and reviewing of the shire's disaster management arrangements.

Sub-groups and working groups

The LDMG may form sub-groups or working groups to assist as necessary. Membership of these groups will reflect the necessary expertise for the particular function or threat at the time.

Activation

The LDMG is activated by the Chairperson or Deputy Chairperson on receipt of specific warnings, requests or advice.

In the case of a fast breaking event or potential event with significant community consequences, the LDC may activate the Local Disaster Coordination Centre (LDCC) to respond without activating the LDMG.

Business-as-usual arrangements

Council and other member organisations, as primary agencies and lead agencies, may also activate their own business-as-usual arrangements without the activation of the LDMG, the LDMP or the LDCC.

General organisational roles and responsibilities

Effective coordination of disaster events relies on roles and responsibilities being clearly defined and communicated.

Outlined below are the indicative roles and responsibilities LDMG member organisations and other stakeholders. State government departmental and organisational roles and responsibilities are adapted from the Queensland State Disaster Management Plan or legislation.

Organisation	Indicative roles and responsibilities
Mareeba LDMG	Disaster coordination and support to agencies, including:
	Situation assessment
	 The collection, collation, evaluation and dissemination of
	information relating to the current and predicted status of
	the disaster
	Event priority determination
	The establishment of priorities among the many distinct
	incidents that may make up a disaster event.
	Essential resource acquisition and allocation
	The acquisition of resources from the agencies involved or
	from external sources to support the disaster response
	Policy level support of interagency activities
	The making of local policy level decisions, where required, if
	existing arrangements are not sufficient to support the
	disaster response.
	Coordination with other groups
	Coordination with other groups such as the District Disaster
	Management Group (DDMG) and cross-border coordination
	bodies.
	Coordination with elected and appointed officials
	 The briefing of elected and appointed officials on disaster- related issues in the local area
	 Coordination of summary information Coordination of summary information such as impact
	assessments.
	Coordination of public information
	Coordination of information among agencies and other
	groups to ensure consistency in messages to the public.
	groups to ensure consistency in messages to the public.
Mareeba Shire Council	Carry out primary (hazard) and/or lead (functional) agency roles
	as nominated in this plan.
	Ensure the business continuity of essential local government
	services including, but not limited to:
	 public health, including refuse disposal
	 maintenance (including debris clearance) of parks,
	shire-controlled roads and bridges
	 animal management
	 environmental protection
	 Provide a secretariat to the LDMG.
	 Conduct and implement prevention and preparedness
	arrangements, including community education.

	Callest analyse and disconsingta information from the control
	 Collect, analyse and disseminate information from telemetry systems in conjunction with the Bureau of Meteorology. Support the State Emergency Service (SES) Unit in conjunction with Queensland Fire and Emergency Services. Coordinate immediate welfare and recovery needs in conjunction with partner organisations. Provide advice to the LDMG and action reasonable requests during disaster operations, as required.
Australian Defence Force Access through DDMG	 Consider Defence Aid to the Civil Community (DACC) when requested through the appropriate channels. Provide advice to the LDMG and action reasonable requests during disaster operations, as required.
Australian Red Cross	 Upon request from Council, activate staff to operate, manage and subsequently close evacuation centres as agreed. Operate the Register. Find. Reunite. service. Provide advice to the LDMG and action reasonable requests during disaster operations, as required.
Australian Government Bureau of Meteorology Access through DDMG	 Provide forecasts, warnings and long-term outlooks on environmental phenomena that affect the safety, prosperity and resilience of Australians.
Department of Agriculture and Fisheries Access through DDMG	 Carry out primary (hazard) and/or lead (functional) agency roles as nominated in this plan. Coordinate efforts to prevent, respond to and recover from pests and non-human disease, and to address livestock welfare. Provide advice related to stock. Coordinate destruction of stock or crops in an emergency pest/disease situation.
Department of Communities, Housing, and Digital Economy	 Carry out primary (hazard) and/or lead (functional) agency roles as nominated in this plan. Provide human and social relief and recovery information and advice across all stages of disaster management. Administer personal finance assistance under the State Disaster Relief Arrangements (SDRA) or the Recovery Funding Arrangements (DRFA). Provide support and resources to the local affected area. Purchase the registration of volunteers through the Volunteering Queensland Community Response to Extreme Weather (CREW) and the referral of offers of assistance from spontaneous volunteers. Upon request, source additional relief and recovery volunteers. Provide advice to the LDMG and action reasonable requests during disaster operations, as required.

Department of Energy and Water Access through DDMG

- Regulate the operation of energy and water supply industries.
- Maintain and develop a readiness for energy and water supply emergencies, regardless of the hazard type.
- These energy emergency supply responsibilities cover the electricity, liquid fuels and natural gas sectors, and involve:
 - developing and implementing energy policies and plans to improve the protection and resilience of Queensland's energy systems.
 - developing the capability to coordinate action to mitigate against energy supply deficiencies during any emergency event (including a terrorist incident).
 - facilitating actions within and across the energy sectors in response to an emergency event.
- The water emergency responsibilities, include:
 - ensuring emergency action plans are in place for referable dams (those that could put people at risk if they were to fail) to ensure appropriate action is taken in the event of incidents or failures of the dams
 - exercising dam safety emergency powers if needed to minimise the risk of failure of a dam or to minimise the consequences of failure
 - overseeing drinking water and recycled water incident management.

Department of Environment and Heritage Protection Access through DDMG

- Carry out primary (hazard) and/or lead (functional) agency roles as nominated in this plan.
- Regulate the operation of mining, petroleum and gas, and other industrial sites in terms of their environmental impacts

 including water and waste treatment operations.
- Provide situational monitoring of events and incidents across industrial sites, and authorise emergency waste water releases as necessary.
- Monitor and advise on the management of affected native wildlife outside national park estates, and reduce conflict and risks to the community due to the displacement of
- this wildlife.
- Establish mechanisms for industry, landowners and local governments to receive necessary environmental approvals for recovery (for example, temporary landfills, fill extraction for road repairs, dredge spoil disposal, retrieval of hazardous materials, repairs to heritage listed places and provision of dispensation to nature refuge holders).
- Conduct investigations pursuant to the Environmental Protection Act 1994 and other environmental and conservation legislation.

Department of Education and Training

 Maintain the safety and wellbeing of students, staff and volunteers who work or participate in Department of Education and Training schools, institutes and workplaces.

- Ensure, as far as practicable, that all state instructional institutions and workplaces have a documented emergency management plan.
- Minimise interruption to essential services to allow teaching and learning to be maintained or resumed as a priority.
- Protect critical resources where possible.
- Facilitate the return of state instructional institutions to normal operations as soon as possible.

Department of Communities, Housing and Digital Economy Access through DDMG

- Carry out primary (hazard) and/or lead (functional) agency roles as nominated in this plan.
- Maintain contact registers for:
 - professional service providers (for example, geotechnical, structural and civil engineers; heritage architects; and other professional officers and consultants)
 - specialist building contractors, service providers and suppliers
 - building services and trade personnel to support regional-based disaster response or recovery operations.
- Coordinate structural assistance grant assessments (excluding caravans and vessels) on behalf of the Department of Communities, Child Safety and Disability Services.
- Provide temporary accommodation solutions and services for affected members of a community (non-social housing clients and/or response/recovery teams).
- Coordinate temporary office type accommodation for use by state government agencies and departments as forward command posts, recovery centres, local disease control
- centres, storage facilities and ablution facilities—including connection of building services.
- Coordinate temporary leased accommodation for state government agencies and departments.
- Coordinate technical advice on the structural suitability of buildings for use as community evacuation centres, places of refuge or cyclone shelters.
- Carry out other building and engineering services tasks as requested by a District Disaster Coordinator or the State Disaster Coordination Centre within the scope of the building
- and engineering services function.
- Coordinate emergency fleet vehicles.

Department of Local Government, Racing and Multicultural Affairs Access through DDMG

- Provide advice to assist delivery agencies to plan, sequence and prioritise work.
- Support the building of flood risk management and resilience in conjunction with the Queensland Reconstruction Authority.
- Manage the development and implementation of disaster mitigation and resilience funding programs

Department State Development, Manufacturing, Infrastructure and Planning Access through DDMG

- Support disaster mitigation considerations in development planning and in built environment and infrastructure design.
- Through the State Planning Policy, ensure the state's interests in natural hazards, risk and resilience are properly considered in all levels of the planning system.

Department of Environment and Science Access through DDMG

- Carry out primary (hazard) and/or lead (functional) agency roles as nominated in this plan.
- Provide for the safety of national parks and agency-owned recreational centre users. This may include issuing warnings in extreme conditions, closing areas where necessary and
- coordinating evacuations with the Queensland Police Service.
- Provide advice on the management of national parks to responding agencies.
- Lead fire-fighting on the protected areas and state forests where there is no threat to life or property.

Department of Premier and Cabinet Access through DDMG

- Support and provide advice to the Premier as Chairperson of the Queensland Disaster Management Committee and as leader of the government.
- Coordinate and liaise with the Australian Government's Crisis Coordination Centre in relation to Queensland Government policy positions (when required).
- Represent Queensland at meetings of the National Crisis
 Committee when initiated by the Australian Government.
- Coordinate and represent Queensland Government positions on national bodies such as the Australia-New Zealand National Emergency Management Committee, the Australia-
- New Zealand Counter-Terrorism Committee and the Council of Australian Governments.
- Maintain and coordinate any actions relating to the Memorandum of Understanding between the Queensland Government and Non-Government Organisations—Disaster
- Relief Appeal Management.

Department of Transport and Main Roads

- Carry out primary (hazard) and/or lead (functional) agency roles as nominated in this plan.
- Provide information and advice on the impact of disruptive events on road, rail, aviation and maritime infrastructure.
- Enable an accessible transport system through reinstating road, rail and maritime infrastructure.
- Assist with the safe movement of people due to mass evacuation of a disaster-affected community.
- Ensure the capability of logistics-related industries is appropriately applied to disaster response and recovery activities.

Energy Queensland

- Maintain and/or restore electrical power supply.
- Provide advice in relation to electrical power, including safety advice for consumers.
- Provide advice to the LDMG and action reasonable requests during disaster operations, as required.

Inspector-General Emergency Management

- Regularly review and assess the effectiveness of disaster management by district and local groups, including district and local disaster management plans.
- Regularly review and assess cooperation between entities responsible for disaster management in the state, including whether systems and procedures employed by those
- entities are compatible and consistent.
- Set disaster management standards.
- Regularly review and assess disaster management standards.
- Review, assess and report on performance (against disaster management standards) by entities responsible for disaster management in the state.
- Work with entities performing emergency services, with departments, and with the community to identify and improve disaster management capabilities, including volunteer capabilities.
- Identify opportunities for cooperative partnerships to improve disaster management outcomes.

Queensland Ambulance Service

- Carry out primary (hazard) and/or lead (functional) agency roles as nominated in this plan.
- Provide, operate and maintain ambulance services.
- Access, assess, treat and transport sick and/or injured people.
- Protect people from injury or death during rescue and other related activities.
- Coordinate all volunteer first aid groups during major emergencies and disasters.
- Provide and support temporary health infrastructure where required.
- Collaborate with the Queensland Clinical Coordination Centre in the provision of paramedics for rotary wing (helicopter) operations.
- Participate in search and rescue, evacuation and victim reception operations.
- Participate in health facility evacuations.
- Collaborate with Queensland Health in mass casualty management systems.
- Provide disaster, urban search and rescue, chemical hazard (hazmat), biological and radiological operations support with specialist logistics and specialist paramedics.

Queensland Fire and Emergency Services

Queensland Fire and Emergency Services

- Carry out primary (hazard) and/or lead (functional) agency roles as nominated in this plan.
- Contribute to prevention and preparedness activities—including community education.
- Provide impact assessment and intelligence-gathering capabilities at the request of Council.
- Provide advice to the LDMG and action reasonable requests during disaster operations, as required.
- Prepare guidelines on behalf of the QDMC as per section 63 of the Act.
- Establish and maintain arrangements between the state and federal governments about matters relating to effective disaster management.
- Ensure that disaster management and disaster operations in the state are consistent with
- the state group's strategic policy framework, the Queensland State Disaster Management
- Plan, the disaster management standards, and the disaster management guidelines.
- Ensure that people performing functions under the Act in relation to disaster operations are appropriately trained.
- Provide advice and support to the state group and local and district groups in relation to disaster management and disaster operations.
- Carry out planning and logistics functions of the SDCC.
- Provide situational monitoring.
- Coordinate, support and manage the deployment of SES resources as required. In consultation with local government, appoint a suitably experienced and/or qualified officer as SES Coordinator to support the coordination of SES operations.
- Coordinate and manage resupply (of food and other essentials) and emergency supply operations.
- Coordinate and manage the deployment of air assets including fixed wing and rotary aircraft.
- Coordinate disaster management training in accordance with the Queensland Disaster Management Training Framework.

Fire and Rescue Service and Rural Fire Service

- Provide control, management and pre-incident planning of fires (structural, landscape and transportation).
- Support the Queensland Police Service when requested in the coordination of search and/or rescue events as defined in the inter-governmental agreement.
- Provide rescue capability for people trapped in any vehicle, vessel, by height or in confined space.
- Carry out rescues of people isolated or trapped in swiftwater/floodwater events.
- Provide advice, chemical analysis and atmospheric monitoring at chemical/hazmat incidents.

Provide mass and technical decontamination capabilities under the State Biological Disaster and State Radiological Disaster response. Provide urban search and rescue capability for building collapse events. Support the Queensland Hazardous Materials Incident Recovery Plan. Provide impact assessment and intelligence-gathering capabilities. **State Emergency Service** Search and/or rescue missing, trapped or other people under the direction of the Queensland Police Service, in line with the inter-governmental agreement. Provide emergency repair and protection of damaged or vulnerable critical infrastructure. Provide emergency repair and protection of damaged essential living areas (for example, a room for sleeping, meal preparation and personal hygiene). Telstra Provide emergency communication facilities and specialist Provide advice to the LDMG and action reasonable requests during disaster operations, as required. Queensland Health Carry out primary (hazard) and/or lead (functional) agency roles as nominated in this plan. Provide appropriate information on public and community health risk and preventative measures. Protect and promote health in accordance with the Hospital and Health Boards Act 2011, Hospital and Health Boards Regulation 2012, Health and Public Health Act 2005, and other relevant legislation and regulations. Provide a whole-of-health emergency incident management and counter-disaster response capability to prevent, respond to, and recover from a state-declared emergency or disaster event. Provide (through its hospital and health services) coordinated multidisciplinary support for disaster response and recovery, including specialist health services and specialist health knowledge representation. Provide state representation at the Australian Health Protection Principal Committee. Provide state-wide clinical and forensic services support for disaster and response recovery. Promote optimal patient outcomes. Provide appropriate on-site medical and health support. Clinically coordinate aeromedical transport throughout the state. In a disaster situation, provide staff to the Emergency Helicopter Tasking Cell.

	 Provide health emergency incident information for media communication.
Queensland Police Service	 Carry out primary (hazard) and/or lead (functional) agency roles as nominated in this plan. Preserve peace and good order. Prevent crime. Manage crime scenes and potential crime scenes. Conduct investigations pursuant to the <i>Coroners Act 2003</i>. Provide a disaster victim identification capability. Provide for the effective regulation of traffic. Coordinate evacuation operations. Control and coordinate search and rescue operations. Activate and manage the registration of evacuees and associated inquiries in conjunction with the Australian Red Cross. Provide security for damaged or evacuated premises. Respond to and investigate traffic, rail and air incidents. Coordinate the review and renewal of the Queensland State Disaster Management Plan.
Queensland Reconstruction Authority Access through DDMG	 Carry out primary (hazard) and/or lead (functional) agency roles as nominated in this plan. Develop and implement disaster recovery, resilience and mitigation policy. Develop and implement flood risk management and resilience, including the Brisbane River Catchment Flood Study and the Flood Warning Gauge Network Review. Coordinate and monitor recovery, including developing event-specific recovery plans and reporting to government and the community on recovery progress. Administer Disaster Recover Funding Arrangements (DRFA) and state disaster relief arrangements (SDRA) measures. Conduct negotiations with the federal government for natural disaster funding arrangements in consultation with the Department of Premier and Cabinet and Queensland Treasury. When requested, support Queensland Fire and Emergency Services (QFES) with rapid damage assessments of housing in disaster-impacted areas. Provide input as required by QFES to state-wide risk-based planning. Support QFES in coordinating whole-of-government disaster management data and data management policy. Undertake damage assessments of public infrastructure in collaboration with local governments. Liaise with local governments and state agencies to gather information to negative DREA director activitions most.

information to ensure DRFA disaster activations meet

Australian Government criteria.

	 Prepare briefs to request activation of the DRFA and the SDRA. Share knowledge and innovative solutions to build resilience, sustainability and self-reliance across governments, industry and communities. Drive the enhancement of disaster resilience throughout Queensland, ensuring that the state's resilience goals and objectives are achieved, including implementation of the Queensland Strategy for Disaster Resilience. Facilitate activities that assist in the coordination of offers of goods and services through partnership with the not for profit organisation, GIVIT.
Sunwater	 Provide advice and information regarding Tinaroo Falls Dam Prepare and maintain the Sunwater Dam Safety Emergency Action Plan.
	 Coordinate Bulk Water Supply to Mareeba Shire.
	 Disseminate notifications and warnings to downstream stakeholders.

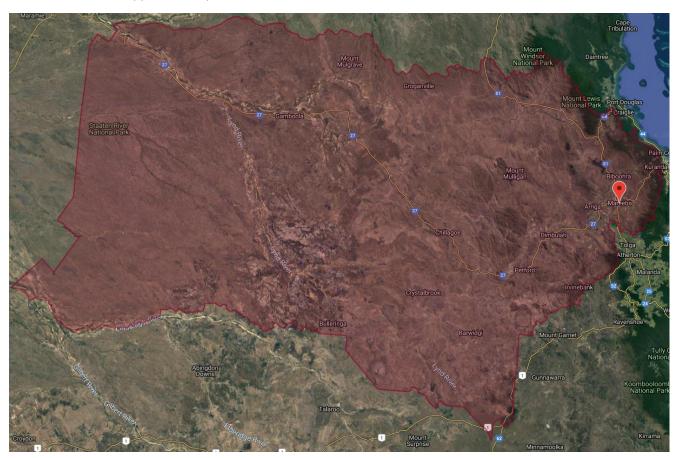
PART 3: DISASTER RISK ASSESSMENT

Community Context

The preparation of this LDMP has included consideration of the population, infrastructure, industry, climate, geography, assets, challenges and hazards of the Mareeba Shire.

Geography

The Mareeba Shire area 53,472km2 in size and is located at the base of Cape York Peninsular in Far North Queensland, approximately 1800km north of Brisbane and 100km west of Cairns.



The topography of the region varies considerably. The eastern border of the region is predominantly tropical in nature with fertile soils, lush growth and relatively high rainfall. This part of the region is the most densely populated and heavily farmed.

The western part of the region is characterised by open bush plans interspersed with relatively low ridge systems. Soils are poor and rainfall is considerably lower than the eastern part of the region.

Climate and Weather

Mareeba is considered to be tropical climate with an average temperature of 22.8 degrees Celsius and 1909 mm of rain annually, although the amount of rainfall is considerably higher in the eastern part of the region and lesser in the western region.

Storm season and bushfire threats occur during the spring and summer months of September to April. The heaviest rainfall occurs during the summer months and is usually associated with cyclones or summer storms.

Population

As at 9 August 2016 the population of the region was 21,557 with 62.9 % of residents in the working age group (15-64).

Mareeba is the major service centre for residents in outlying towns and farming districts and contains a range of shops and essential service providers. Smaller towns and rural residential localities are dispersed across the eastern region, whilst the western region is sparsely populated with most residents living in Dimbulah and Chillagoe.

There is significant fluctuations in population numbers throughout the year due to high visitor numbers and itinerant workers working in the agricultural industry.

Our Age

Age Group	
0-14	18.1%
15-24	11.4%
25-34	11.4%
35-44	12.1%
45-54	14.0%
55-64	14.1%
65-74	11.3%
75-84	6.0%
85 +	1.8%

Where We Come From

Our Ancestry	
Australian	27.0%
English	22.1%
Italian	8.0%
Irish	7.4%
Scottish	6.0%

Our Birthplace (Other than Australia)	
England	2.9%
Italy	2.6%
New Zealand	2.0%
Germany	0.9%
Papua New Guinea	0.7%

Our Education

Highest Level of Education	
Bachelor Degree or above	10.3%
Advanced Diploma & Diploma	6.7%
Certificate level IV	2.3%
Certificate III	15.0%
Year 12	12.9%
Year 11	4.2%
Year 10	14.2%
Certificate level II	0.1%
Year 9 or below	10.7%
No education attainment	0.6%

Disability

1,072 people or 4.9% of the Mareeba Shire population have reported needing help in their day -to-day lives due to disability.

Linguistic diversity

Top 5 Languages other than English	
Italian	4.0%
German	0.9%
Mandarin	0.5%
French	0.4%
Croatian	0.3%
English only spoken at home	75.8%
Households where a non-English	13.9%
language is spoken	

What we do

Industry of Employment	
Other Fruit and Tree Nut Growing	4.9%
Hospitals (except Psychiatric Hospitals)	4.0%
Primary Education	2.8%
Supermarket and Grocery Stores	2.6%
Local Government Administration	2.6%

Cultural Diversity

Aboriginal and Torres Strait Islander people comprise 12.9% of the Mareeba Shire population.

Vulnerable populations

The region has a number of vulnerable populations. These include, but are not limited to, those in aged care facilities, seniors residing in their homes, people with a disability, people with chronic medical conditions, and those who have difficulty with communicating in the English language.

Social Support Infrastructure

Social support infrastructure in the area is extremely limited with essential government and non-government services usually provided in Mareeba or Kuranda. Some provide outreach services to smaller rural towns and districts. However, most people still have to travel to these services and the budgets of most of the human service agencies preclude them expanding their outreach services.

The geographically dispersed population and the fact that many residents are socially isolated, means that many in the population have a relatively low socio-economic position compared to the rest of the Queensland population.

Community Preparedness & Capacity

Notwithstanding a small percentage of the populace, the community is essentially regarded as having the capacity to respond to and recover from most situations. The pragmatic rural values in the community engender a significant degree of self-reliance, which brings stability, foundation and sustainability.

There is a solid base of emergency service response capacity spread across the region, with Queensland Police Service, Queensland Fire & Emergency Service, both urban and rural volunteer, Queensland Ambulance Service, and State Emergency Service volunteers are represented in most communities.

Critical Infrastructure

Transportation - Road System

Public transport infrastructure is extremely limited in the region which means that most people have to rely on private transport to travel to work and to access essential and specialist services, including medical services. Most communities are connected by a network of sealed roads, however there is no train network and only a very limited public bus network. Lack of adequate transport infrastructure may prove to be a problem in the response to a major event.

The major road transport routes are:

North: The Mulligan Highway from Mareeba to Mount Molloy and further north to the Cook Shire. This road is subject to regular flooding problems at Lake Mitchell, Mt Molloy and the McLeod River. The road is also regularly flooded in Mareeba, at the Granite Creek Bridge, which effectively bisects the town, as well as closing access to the north and west.

The Rex Highway traverses between Mount Molloy and the coastal strip, via Julatten. This road is subject to regular flooding problems on the western side of Julatten, and has experienced major landslide problems on the Rex Range, at the coastal end of the road.

South: The Kennedy Highway from Mareeba to Atherton and beyond into the Tablelands Regional Council area.

East: The Kennedy Highway from Mareeba to Cairns via the Kuranda Range. This road is subject to blockages caused by wet season landslides.

The Gillies Highway traverses from Atherton to Gordonvale via the Gillies Range. This road is subject to regular landslides and flooding problems at the bottom of the range, within the Cairns Regional Council area.

West: The Burke Developmental Road from Mareeba to the Gulf of Carpentaria via Dimbulah and Chillagoe. The road is bitumen to Almaden and predominantly graded gravel to Chillagoe, with formed up gravel to Kowanyama. This road is subject to regular flooding problems at Dimbulah, Chillagoe and a number of small creek crossings.

Transportation - Railway

Queensland Rail operates passenger services from Cairns to Forsyth, travelling through Mareeba, Mutchilba, Dimbulah, Almaden, Mt Surprise and Einasleigh. Past weather events have seen the line closed for a number of days, the most serious event being in February 2000, when the Granite Creek Bridge in Mareeba was washed away.

A tourist passenger service operates between Cairns and Kuranda. The rail line traverses the Kuranda range and much of the line is not accessible by road transport.

Transportation - Airfields

Mareeba Aerodrome, the only Civil Aviation Safety Authority certified aerodrome in the region, is owned and managed by Mareeba Shire Council. It is located approximately 7.5km south of Mareeba, off the Kennedy Highway. The aerodrome has a single sealed runway system, 1505m long and 30m wide.

The traffic operating into Mareeba is a mixture of light commuter style single and twin engine charter aircraft and helicopter service operators. A weight limit of 5,700kg currently applies, severely restricting the potential use of the facility for disaster relief purposes.

Local airfields in the more rural areas of the shire council area are plentiful, and potentially provide the principal means of resupply during prolonged periods of isolation caused by severe weather events.

Wastewater network

Reticulated wastewater treatment systems are in place in the more populated areas of the Mareeba Shire, while septic treatment arrangements are more common in the rural areas. Most systems have the potential to cause health and/or environmental problems within 24 hours of the lack of electrical power.

Reticulated stormwater systems are in place in the more populated areas of the Mareeba Shire. Stormwater infrastructure in rural areas is limited to bridges, culverts, open channels and floodway's.

Electrical network

Power supply is managed by Ergon Energy and is sourced through the Powerlink transmission network connecting to power stations across Queensland, including stations near Rockhampton and Gladstone. The electrical supply is vulnerable to the external influences such as weather conditions or third party events causing supply interruptions.

<u>Transmission:</u> The electricity is transported through the Power link high-voltage transmission network. Electricity is transmitted from the power stations at high voltage (up to 330,000 volts) to Powerlink bulk supply substations so it can travel long distances efficiently. At Powerlink's high-voltage bulk supply substations voltage is reduced to a lower voltage (66000 to 132,000 volts) to allow distribution.

<u>Distribution:</u> The area is served from the one 132/66kV Bulk Supply Connection Point, T55 Turkinje substation located near Mareeba. The Tableland system consists of a 66kV sub transmission network, a dual circuit 132kV transmission line from Turkinje to the Craiglie 132/22kV zone substation near Port Douglas, and a single circuit 132kV line to the Lakeland 132/66/22kV substation which supplies the Cooktown area. Power is distributed via a number of substations across the Tablelands.

Water Supply

Water supplies to communities across the Council include major dams, creeks, bores and irrigation channels. Most, but not all, of the water supplies are treated.

Water supplies for Chillagoe, Dimbulah, Mareeba, Mount Molloy and Kuranda come from:

- Barron River
- Sunwater Irrigation Network & Bores
- Hunter Creek

There are a number of irrigation channels that traverse the eastern part of the Tablelands, emanating from Tinaroo Falls Dam. These channels are part of the Mareeba-Dimbulah Water Supply Scheme and are critical to the farmlands to the west of Mareeba and to the economy of the area generally.

From a vulnerability perspective, the tropical location of the area will normally ensure that ample water supplies exist, and extreme conditions for a protracted period would be required to imperil those supplies. In some areas, however, reservoirs are relatively small for the population served.

Power is required to support water distribution and treatment. Extended power failures will lead to a loss of reticulated water supply.

Buildings

The majority of buildings in the Mareeba Shire are low-set, timber or masonry / concrete construction with iron roofing. Some double storey buildings exist in the business centres – most of these are used for retail activities e.g. hotels or offices above retail outlets.

Building stock is mostly over 30 years old and was constructed prior to the introduction of improved cyclone-rated building codes. Light industry facilities where they exist usually have steel frames and iron roofing and cladding.

Medical Facilities

Public Hospitals & Primary Health Centres: Queensland Health provides public hospitals and primary health centres in Mareeba, Chillagoe and Dimbulah.

An overview of facilities available at each Hospital and Primary Health Centre can be found at: http://www.health.qld.gov.au/wwwprofiles/cairns.asp

Private Medical Practitioners: Situated in Mareeba, Kuranda, and some smaller communities across the region.

Hazards

The QFES Risk Assessment team has conducted a risk assessment for Mareeba LDMG based on the Queensland Emergency Risk Management Framework (QERMF). Whilst the final assessment is yet to be completed, the following natural and non-natural risks have the potential to affect the Mareeba Shire community. These are addressed on the following pages.

Bushfire

'Bushfires and grassfires are common throughout Australia. Grassfires are fast moving ... They have a low to medium intensity and primarily damage crops, livestock and farming infrastructure, such as fences. Bushfires are generally slower moving, but have a higher heat output ... Fire in the top of the tree canopy can move rapidly.

The bushfire season extends from mid–late winter through to early summer. Seasonal conditions can exacerbate potential bushfire situation. This is especially the case if a relatively wet summer/autumn period (which produces good vegetation growth) is followed by a cold, dry winter and warm spring. This can result in abundant quantities of dried vegetation especially if the cycle occurs over several years.

The communities of Mareeba – Dimbulah – Mutchilba - Chillagoe - Mount Molloy - Mary Farms - Koah and Speewah are quite vulnerable to bushfires as the vegetation is largely savannah and eucalypt natural vegetation. Fallow agriculture lands around Mareeba create bushfire risks and mitigation strategies by each individual landowner to reduce the risk of bush fires is to be encouraged.

The eastern communities of Julatten and Kuranda - in the wetter rainforest/higher altitude belt, are quite different in vegetation type and do not pose a bushfire threat under existing weather patterns.

Due to the high likelihood of bushfires in the region, a Bushfire Mitigation Plan (BRMP) exists for the area. The BRMP documents and encourages proactive actions to mitigate bushfire hazard and risk

through planning and actions by land managers, owners or occupiers, as per section 67 of the Fire and Emergency Services Act 1990.

The Disaster Management Act 2003 and the Queensland State Disaster Management Plan provides the authority to promote bushfire mitigation planning as an important component of Local Disaster Management Plans

The Queensland State Disaster Management Plan stipulates that Queensland Fire and Emergency Services (QFES) has primary management responsibility for ensuring the preparation of Bushfire Mitigation and Readiness Plans.

The BRMP process is consistent with the hazard specific planning envisaged under the Queensland Disaster Management Arrangements (QDMA).

Cyclones

A tropical cyclone is defined as a non-frontal low pressure system of synoptic scale developing over warm waters having organised convection and a maximum mean wind speed of 34 knots or greater extending more than half-way around near the centre and persisting for at least six hours.

Due to its latitude the Mareeba Shire is vulnerable to tropical cyclones, mainly in the period from November to April annually. The Mareeba Shire Council Area is vulnerable to cyclones from two directions, either from the Pacific Ocean to the east or from the Gulf of Carpentaria from the northwest.

Modelling completed by the QFES Hazard and Risk Unit show a high risk of heavy wind and rain for the region should a high category cyclone cross through Cairns. This would potentially result in destructive winds, flash flooding and moderate to major flooding and significantly impacted on critical infrastructure including the road network, power transmission lines and telecommunication assets.

Crop damage from winds and flooding associated with tropical cyclones in particular has caused significant economic losses in the past. Climate change predictions suggest that future cyclones may be more intense.

Severe Storms

Severe thunderstorms are localised events because they do not, usually not affect areas as widely as tropical cyclones and floods do. Their devastating impact is often underestimated.

Thunderstorms that produce any of the following events are classified as severe if one or more of the following conditions are met in Australia:

- large hail (2 cm or greater in diameter)
- wind gusts (90 km/hr or greater)
- tornadoes
- heavy rainfall conducive to flash flooding.

Severe thunderstorms are likely to cause damage to property, crops and natural vegetation', and have been known to result in death or injury

Flooding

Flooding is defined as:

... a general and temporary condition of inundation of normally dry land areas from overflow of inland or tidal waters from the unusual and rapid accumulation or runoff of surface waters from any source.

The following flooding is of significant concern in specific areas of the Mareeba Shire, with a number of areas subject to water incursion into residences during severe events:

- Mareeba (in the north-eastern areas of the town close to the Barron River)
- Biboohra
- Bilwon
- Oak Forest

During the 2018 "North Queensland Flooding" there were a number of flash flooding events that impacted areas around Speewah and Koah and cut the Kennedy Highway between Mareeba and Kuranda in a number of places. A significant number of residences were inundated with water and suffered extensive damage.

This same event caused flash flooding in the western areas of the region with damage sustained to key road infrastructure.

Dams

A dam is considered to have failed when part or all of it physically collapses, or where there is an uncontrolled release of any of the contents from the dam.

There are several dams in the Mareeba Shire area which, if they were subject to a catastrophic failure, would result in major flooding, which would potentially cause significant loss of life; damage to property and the environment; and economic privation. Those dams are:

- Tinaroo Falls Dam north-east of Atherton
- Lake Mitchell (Quaid's) Southedge Dam north of Mareeba
- Ibis Dam Irvinebank south east of Irvinebank

Emergency Action Plans for each referable dam are available from the Local Disaster Coordinator and are available in the Mareeba Local Disaster Coordination Centre.

Epidemics/pandemics (human-related)

A pandemic is a widespread infectious disease that spreads quickly and widely among human or animal populations.

The outbreak of an infectious disease within the human population could cause the normal response systems within the community to be overwhelmed. It could involve isolation and the quarantine of large numbers of people for a protracted period. Business continuity of LDMG member agencies may be challenged and capacity to respond may be impacted.

Exotic animal and plant diseases

In Queensland, an exotic animal and plant disease is considered to be a biosecurity event.

A biosecurity event is one:

... that is, was or may become a significant problem for human health, social amenity, the economy or the environment,

and is, was or may be caused by a pest, disease or contaminant.55

Animal and plant diseases could be introduced or spread through movement of livestock and crops through the LGA. These diseases could include Foot and Mouth, Anthrax, Brosolosis, Rabies, Newcastle disease, Screw-worm fly, African swine fever, or Avian influenza (strain H5N1). An outbreak of any of these could cause a major health risk in the area.

Of primary concern are diseases that are transmissible from animals to people (known as zoonotic).

Heatwaves

A heatwave is any long period of very hot weather. In Australia, heatwaves are usually in the range of 37°C to $42^{\circ}\text{C}.49$

The Bureau of Meteorology operates a Heatwave Service between the start of November and the end of March. This covers the entire summer season.

Heatwaves are sometimes described as a silent killer. Weather events such as tornadoes, floods, cyclones or severe thunderstorms tend to receive a lot of media attention, focusing on how many people have lost their lives or been injured. Heatwaves are not associated with these violent events, and therefore are generally not reported in the media to the same extent.

However, heatwaves can result in significant health stress on vulnerable people. This stress may result in death during the heat event, but in many cases, death can occur well after the heatwave has passed. Often it can be difficult to determine whether the heatwave caused death, as many of those who die have a pre-existing or contributing health condition.

Intense heatwaves may affect normally reliable infrastructure, such as power, water and transport services.

Earthquakes

Earthquakes have not in the immediate past been a major threat in the Mareeba Shire Council area. *Recent* historical data exists in relation to tremors which have caused minor damage, but none has caused any great concern. Notwithstanding, the existence of even a slightly volatile seismic environment acts as a prompt for maintaining situational awareness of the threat, and its possible consequences.

Terrorism

A 'terrorist act' is an act, or a threat to commit an act, that is done with the intention to coerce or influence the public or any government by intimidation to advance a political, religious or ideological cause, and the act causes:

- death, serious harm or endangers a person
- serious damage to property
- a serious risk to the health or safety of the public, or
- seriously interferes with, disrupts or destroys critical infrastructure such as a telecommunications or
- electricity network.

The National Terrorism Threat Advisory System has a five-level scale that is intended to provide advice about the likelihood of an act of terrorism occurring in Australia. When the threat level changes, the Australian Government provides advice on what the threat level means, where the threat is coming from, potential targets and how a terrorist act may be carried out.

The National Terrorism Threat Level is regularly reviewed in line with the security environment and intelligence.

Major Infrastructure Failure

One of the most serious issues facing disaster managers in the 21st century is society's dependence upon technology. The same technology which makes life easier for all, and which everyone takes for granted when it is functioning as planned, has the potential to fail, for a variety of reasons, with potentially devastating consequences.

There is the potential for a "ripple effect", where the failure of one essential service may lead to progressive failures of other essential services – e.g. loss of power would lead to loss of communications, loss of reticulated water supply, loss of sewage treatment capability, etc.

All forms of electronic communication would be affected, affecting such diverse areas as banking and commerce (no automatic teller machines or EFTPOS availability) the transport sector (airline bookings, radar, air traffic control), television, the internet and telephone systems in all government offices (all spheres of government).

It is important to note that it is probable that the problem will not only affect this area, but would probably have state-wide and possibly national consequences, resulting in a lack of external support capacity.

Risk analysis

Risk analysis is the process used to understand the nature of risk and to determine the level of risk. The level (or rating) of risk is expressed as a combination of consequence and likelihood (or probability) and can be represented by the following formula:

consequence x likelihood = risk level

Consequence refers to the outcome of an event, whereas likelihood is the chance of the event occurring in the first place.

The risk level is the combination of consequence and likelihood expressed as being very low, low, medium, high or extreme.

As discussed previously, the Hazard and Risk unit is finalising the risk assessment for Mareeba Shire based on the Queensland Emergency Risk Management Framework. Once completed, the LDMP will be updated to include detailed information.

PART 4: PREVENTION

Prevention (disaster mitigation) is a risk treatment that outlines the steps taken before or after a disaster to decrease future impact on communities, the economy, infrastructure and environment.

Traditionally, implementation of appropriate and targeted mitigation initiatives can offer sustainable cost savings to communities and government in the event of a disaster. Mitigation efforts can reduce the consequences of events, even if they fall short of preventing an event from happening.

Depending on the chosen strategies, mitigation initiatives should work towards reducing the financial and social costs to communities over time, improving the built environment, and reducing impact on the natural environment.

Examples of mitigation strategies include:

- undertaking design improvements to reduce the risk of disaster and to provide more resilient future infrastructure, or updating or hardening existing infrastructure or services
- encouraging land-use planning that recognises the sources of risk
- preparing communities and response agencies
- undertaking resilience activities, including establishing partnerships between sectors and the community
- having a clear understanding of hazards, their behaviour, associated risks and interaction with vulnerable elements, and communicating these.

The development of mitigation strategies should flow from analysis of the risk register. There should also be a clear link to the member organisations of the Local Disaster Management Group. This is to ensure that each risk and strategy is coordinated and managed by the most appropriate entity.

Queensland Government prevention roles and responsibilities

Load Agency	Prevention Functions
Lead Agency	Prevention Functions
Queensland Fire and Emergency Services	 Hazard mapping
	 Bushfire mitigation programs
Queensland Reconstruction Authority	Disaster resilience and mitigation policy and planning
	 Disaster mitigation and resilience
	funding
Department of Local Government, Racing and	Disaster mitigation and resilience
Multicultural Affairs	funding
Department of State Development,	Building our Regions program
Manufacturing, Infrastructure and Planning	 Land use planning
Department of Housing and Works	Building Code

Land Use Planning

Managing land use is a key strategy in reducing disaster risks to minimise the potential for displacement, damage and disruption to communities.

Council prepares and maintains the Mareeba Shire Planning Scheme. This scheme includes plans, references for land-use management, codes for development, and requirements relating to the assessment of proposed developments.

As such, the scheme contributes to disaster risk reduction within identified hazard-prone/constraint areas, in particular:

- potential bushfire hazard areas (this allows for the identification of an appropriate class of building construction)
- waterways (allowing for minimum building setbacks)
- areas of unstable soils and areas of potential landslip hazard
- natural hazard (flood) management areas (this allows for the identification of appropriate development standards so that private and community infrastructure can be sited above recommended flood levels).

Hazard reduction programs

The agencies that make up the LDMG are responsible for ensuring risk sources are kept to a minimum and/or reduced wherever possible. Such actions include:

- bushfire fuel load reduction through contemporary land management practices including prescribed burning, maintenance of existing fire breaks and identification of additional fire breaks
- inspection and maintenance of high risk hazards and structures
- public education to reduce disaster risks around the home
- catchment management programs (for example, waterway/natural drainage maintenance).

Each organisation undertaking these measures is responsible for implementing and maintaining an appropriate hazard

reduction program and reporting on progress and outcomes to the LDMG.

Building codes, regulations and standards

Building codes, regulations and standards are designed to ensure consistent, safe and sustainable development of buildings and infrastructure. Building is regulated by Council under the *Building Act* 1974 and the *Building Regulation 2006*. The codes, regulations and standards cover areas including drainage, fire separation, and construction in flood hazard areas.

Insurance

Residents, businesses and other organisations are encouraged to evaluate their risks and consider appropriate levels of insurance.

The 'Understand Insurance' website (developed by the Insurance Council of Australia) provides practical information to help residents, businesses and other organisations find out more about insurance and make decisions to meet their needs. It looks at what insurers do, how insurance products work and why they might be necessary.

It also covers how to understand risks, what to consider when choosing a product and an insurer, how to manage the cost of a premium, and how to lodge a claim.

More information is available at Understandinsurance.com.au.

The Insurance Council of Australia coordinates liaison between government and the insurance industry during the recovery phase of a disaster event. This focuses on:

- providing senior industry representation to each state and federal recovery group
- providing a 24-hour escalation path for insurance queries from the impacted community
- providing key insurance data and decision support to the community and government
- providing clear public communication about the insurance response to the event
- providing liaison between insurers, assessors, brokers, trades and suppliers at an industry level on issues of collective importance in delivering services to the impacted community.

PART 5: PREPAREDNESS

Preparedness activities are designed to increase the capability of communities in order to reduce the impact of disasters.

Examples of preparedness activities include:

- Developing and implementing community awareness programs
- Developing effective information management and collection of historical data events
- Developing concise and effective community communications methods
- Ensuring that accurate and current plans are in place.

The LDMG establishes and maintains relationships with lead and support agencies, local community groups and local volunteer service groups. This is to build a culture of ownership and partnership with the group members to increase the LDMG's overall disaster management capability.

Response capability

Council maintains a response capability through its funding and extensive support of the State Emergency Service (SES) Units within Mareeba Shire. Council also collects and distributes the Rural Fire Levy and an Emergency Management Levy on behalf of the Queensland Government.

Internally, Council has identified teams with relevant capabilities and expertise to assist in providing a disaster response capability.

Training

Training is important in ensuring that all agencies can seamlessly integrate within the disaster planning arrangements and contribute to an effective and coordinated response.

The LDMG has adopted the Queensland Disaster Management Training Framework (QDMTF), developed by Queensland Fire and Emergency Services (QFES). QFES delivers the training and maintains records of it using a learning management system.

Exercises

An exercise is a controlled activity used to train or assess personnel, evaluate procedures and test the availability and suitability of resources. It usually uses scenarios and focuses on specific objectives.

Exercises are an essential component of disaster preparedness and can be used by the LDMG and member organisations to enhance capacity and contribute to continuous improvement.

Additionally, the Act requires the effectiveness of the LDMP to be reviewed at least once a year. Conducting an exercise is one way in which the LDMG can meet this requirement. Should the LDMG have been active during the period (for example dealing with a disaster), this would also satisfy this requirement.

Exercises reinforce training and maintain the disaster management capability of the group. This could include exercising:

- processes within the LDMG (for example, activation, communications and decision-making)
- disaster management activities (for example, coordination centre management, evacuation, and resupply of food and other essentials)

- interactions between the LDMG and the District Disaster Management Group (DDMG)
- response arrangements for specific hazards (for example, pandemics, floods and cyclones).

Exercises can be conducted in a number of ways, including the following:

- Discussion exercises (desktop exercises) can be used by participants to think through scenarios or plans, talk through issues and identify possible solutions.
- Functional exercises can be conducted in an operational environment with participants performing their individual roles and functions. These exercises can be used to practise or evaluate procedures or decision-making, or to assess the interaction of groups (for example, the interactions between coordination centres and field units).
- Field exercises involve the mobilisation of personnel and/or resources to simulated events or
 incidents. They are the most labour and planning intensive type of exercise; however, they allow
 participants to be tested under a degree of realistic operational stress in a controlled
 environment.

Evaluating the exercise

In all cases, those conducting the exercises must define the objectives before they start. Each exercise should be evaluated in terms of:

- its success in meeting its original aim
- the extent to which it met each of its objectives
- how it was conducted.

'Hot debriefs', (conducted immediately following an exercise), allow participants to raise issues while they're still fresh in their minds. A more detailed review, conducted within a few days of the exercise, allows participants time to provide a more considered view of the exercise. All exercises should incorporate both types of debriefs.

Post-event review

After disaster events occur, the LDMG should review the operational activities undertaken. This is a key component in ensuring capability development and the continuous improvement of disaster management arrangements.

Post-event reviews are conducted to:

- assess disaster operations undertaken, including actions, decisions or processes
- document those processes that worked well and identify a course of action to ensure they are recorded and updated for use in the next operation/event
- assess capability and consider where additional training, community education and/or exercises may be needed.

The LDMG may choose to review its operations following an event through a hot debrief or a post-event debrief (similar to those used to evaluate exercises). During protracted operations the LDMG may choose to conduct multiple hot debriefs to identify significant issues and provide prompt solutions for immediate implementation.

The post-event debrief might be held days or weeks after an operation, when participants have had an opportunity to form a considered view of the effectiveness of the operation. It may also be conducted using a cooperative panel approach, with panel members drawn from various agencies. This process is designed to look for improvements to Queensland Disaster Management Arrangements. It is also designed to identify improvements in relation to the conduct of business between the Queensland Disaster Management Committee, the DDMG and the LDMG.

The report from the post-event analysis may make recommendations regarding how disaster management is delivered within the QDMA. These recommendations can be made to/about any of the three disaster management levels (local, district and state) and/or organisations involved.

Preparedness notification and dissemination

Bureau of Meteorology

Warning products issued by the Bureau of Meteorology (BoM) include severe weather warning, tropical cyclone advice and tsunami warnings. The community is encouraged to subscribe to these. Monitoring may also occur through Bom.gov.au/ or through the BoM App from Google Play Store or Apple Store.

Emergency Management Dashboard

Mareeba Shire Council's Emergency Management Dashboard provides the community with a comprehensive and user-friendly platform for accessing information on the current status of events. It includes emergency news, road conditions, weather warnings, power outages and other information.

To view the dashboard visit http://emergency.msc.qld.gov.au/

Early Warning Network

Mareeba Shire Council has teamed up with the Early Warning Network (EWN) to provide residents of the Mareeba Shire access to an alerting system for severe weather and other emergency events. It uses publicly available information to provide subscribers with alerts relevant to their chosen location.

Alerts will come predominately by email and SMS, although there is the ability to send voice alerts as required. Residents are encouraged to join and in doing so become better prepared for emergency events. Please note the following:

The Mareeba Shire Council Early Warning Service is a service intended to provide to subscribers, via alert messages sent through the Early Warning Network (EWN) system, early warning of potential emergency and/or severe natural disaster and weather events relevant to a chosen location based on information from publicly available sources.

LDMG and member organisation responsibilities

The LDMG has established notification and dissemination processes to allow communication between member organisations. This process considers the time restrictions of rapid onset events such as dam failures.

LDMG secretariat does not use the LDMG notification system to send out any publicly available warnings or notifications to member organisations. Member organisations are required to subscribe and manage their subscription to these services themselves.

Emergency planning

Local Disaster Management Plan principles

The LDMG recognises the importance of planning for disaster events and actively promotes this to all disaster management agencies.

When preparing the Local Disaster Management Plan and sub plans, the LDMG:

- Uses risk management principles specified under AS/NZ ISO 31000:2009 and the National Emergency Risk Assessment Guidelines (NERAG)
- Adopts a comprehensive, all-agencies approach to disaster management
- Considers community preparedness
- Consults with agencies and community stakeholders as appropriate.

Council is responsible for maintaining the LDMP, in consultation with member agencies. In addition, Council maintains a number of sub plans detailing coordination and support arrangements for the LDMG.

Primary and lead agency plans

The LDMG expects that primary (hazard/threat-specific) and lead (functional) agencies will prepare and maintain written emergency plans, to support the LDMP and associated sub plans to control hazards and to manage the delivery of the disaster management functions for which they are responsible.

Community emergency plans

The LDMG encourages community groups, businesses, developers and others to prepare emergency and business continuity plans. The group especially encourages organisations that care for vulnerable sectors of the community (for example, aged care facilities) to prepare emergency plans in consultation with the appropriate organisations.

Any organisations that wish to provide Council with copies of their plans may do so by emailing

info@msc.qld.gov.au

Community awareness and education

There is an onus on the member agencies that make up the LDMG to ensure the community is aware of the relevant hazards and risks and knows how to prepare for, respond to and recover from them.64 The lead agencies are responsible for community education related to their specific hazards.

Examples of this operating locally within Mareeba Shire are:

- Council's website and social media sites
- Emergency management brochures and materials
- QFES's Prepare, Act, Survive campaign
- The Bureau of Meteorology's warnings and website.

Hazards and community characteristics may be similar across local governments, and media broadcast areas will often overlap local government boundaries. In recognition of this, the LDMG will

continuously look for opportunities to promote and undertake shared messaging and joint programs with the relevant organisation, including neighbouring LDMGs.

The LDMG coordinates community education activities conducted by the appropriate organisations to inform the community about some of the following matters:

- local disaster risks
- what is likely to happen during a disaster (for example, power outages and road closures)
- the appropriate actions to take in preparing for a disaster event
- who to contact if assistance is needed during a disaster (and contact details)
- local evacuation arrangements (when to evacuate and where)
- information about the Register. Find. Reunite. service
- specific measures available for groups who require particular assistance (for example, the elderly, those with healthcare needs, and people with disability)
- what to do with household pets when evacuating
- types of warnings that are used in the area, what they mean and what to do when a warning is issued
- where and how to obtain information before, during and after a disaster.

LDMG community education activities are targeted at addressing the specific needs of local communities. They include general information as well as targeted education programs for groups with particular needs.

Community awareness and education strategies currently adopted by the group include:

- publications explaining disaster preparedness and emergency procedures
- media releases explaining disaster preparedness and emergency procedures
- publications prepared by lead agencies detailing the measures that should be taken to prevent,
 minimise and deal with the effects of emergency and disaster events
- media campaigns to raise awareness and encourage the community to implement preventative measures and be aware of hazards.

Community education

The organisations that make up the LDMG are responsible for ensuring the community is aware of the relevant hazards and risks, and of how to prepare for, respond to and recover from them

The LDMG agree to utilise the state-wide Get Ready Queensland campaign as the overriding messaging for disaster awareness within Mareeba Shire.

Each member organisation is responsible for implementing targeted community campaigns, relative to its expertise and primary (hazard) and functional (function) lead agency status.

PART 6: RESPONSE

The principal purpose of emergency response is the preservation of life, property and the environment.

Emergency response and the Local Disaster Management Group

The LDMG is informed of the day-to-day incident response undertaken by primary agencies, including emergency services. Once activated, the LDMG's role is to:

- efficiently and effectively coordinate the response to an event
- minimise the impact of a disaster on the community
- detail the strategic manner in which elements of the LDMG will deal with day-to-day disaster management business
- determine how information will be shared on events that may affect the local government area.

Activation of the LDMG can be authorised by its Chairperson or Deputy Chairperson on receipt of any of the following:

- a warning of an impending threat that would require a coordinated multi-agency response
- a request from:
 - o a lead or primary agency for assistance under this plan
 - o a support agency for assistance under this plan
 - o the District Disaster Coordinator (DDC)
 - an affected neighbouring local government (to provide assistance under mutual aid arrangements)
- advice from the state of an impending disaster.

Activation levels for response arrangements

It is critical that the LDMG and its members maintain awareness of events occurring in the LGA. This will ensure an appropriate and measured activation of the LDMG.

There are four activation levels. They are:

- alert
- lean forward
- stand up
- stand down.

The levels are not sequential and may be skipped depending on the situation. The activation levels are described in the following table.

	Description	Triggers	MSC Actions
Alert	 There is an awareness of a hazard that has the potential to affect the LGA No further action is required; however, the situation should be monitored by someone capable of assessing the potential risk 	There is awareness of a risk source (threat) that has the potential to affect the LGA to an extent that a coordinated multi- agency response would be required or requested There is awareness of a risk source (threat)	 Monitor the risk source through communication with the primary agency Maintain situational awareness Brief the LDC and key staff Provide advice of the LDMG response level to the DDC Report, by exception only, to the DDC and/or LDMG Undertake emergency response activities through LDMG members' core business arrangements.
Lean Forward	 This is an operational state prior to 'stand up', characterised by a heightened level of situational awareness of a disaster event (either current or pending) and a state of operational readiness The Local Disaster Coordination Centre (LDCC) is on standby—prepared but not activated 	 There is a likelihood that a threat may affect the LGA to an extent that a coordinated multiagency response would be required or requested The threat is quantified but may not yet be imminent There is a need for public awareness 	 The LDC places the Chairperson and Deputy Chairperson of LDMG on watching brief Establish communication protocols with the primary and warning agencies Maintain situational awareness and confirm level and potential of the threat Provide advice of the LDMG response level to the DDC Issue warning orders to key staff and agencies Prepare LDCC but don't activate it Determine trigger point for move to stand up Conduct initial briefing of LDMG Provide ad-hoc and reporting by exception only to DDC and/or LDMG Initiate public information and warnings
Stand Up	The operational state following lean forward, at which resources are mobilised, personnel are activated and operational activities are commenced	 The threat is imminent The community will be or has been affected Requests for support received by the LDMG There is a need for coordination 	 LDC to brief Chairperson and Deputy Chairperson of LDMG LDMG meets LDCC is activated and operational LDMG assumes control of disaster operations in the LGA Implement standard operating procedures

	LDCC is activated		 Provide regular reporting to DDC and/or LDMG
Stand Down	 The transition is made from responding to an event back to normal core business and/or continuance of recovery operations There is no longer a requirement to respond to the event and the threat is no longer present. 	 There is no requirement for coordinated response Community has returned to normal function Recovery taking place 	 LDC approves stand down Conduct final checks of outstanding tasks Make the transition to business as usual and/or recovery Make a final situation report to DDC and/or LDMG

Local Disaster Coordination Centre

The LDCC is responsible for coordinating operations under the direction of the LDC and in line with the LDMG's direction. This includes (but is not limited to) the:

- coordination and planning of disaster operations
- dissemination of public information and warnings
- coordination of reporting to the relevant stakeholders.

Council operates and resources the LDCC. Liaison officers from relevant organisations also operate from within the LDCC.

Emergency warning notification and dissemination

The LDMG is responsible for ensuring the community is aware of ways to prevent, prepare for, respond to and recover from a disaster. This involves raising awareness of identified threats and the means by which the public should respond at an individual and/or household level. It may also include warnings and directions, as provided by primary agencies relating to the particular hazard.

The Chairperson of the LDMG (or delegate), is the official source of public and media information for the group's coordination and support activities.

Primary and functional lead agencies provide media liaison for issues relating to their organisational roles.

Individual organisations maintain responsibility for internal reporting on their business in accordance with their established procedures.

Community members may receive warnings and information from a number of different sources—some official, some not. These sources are discussed in further detail below.

Family, friends and neighbours

Family, friends and neighbours are an extremely powerful source of warning information. However, this information should always be verified by official sources.

All members of the community are encouraged to check on family, friends and neighbours and to share official warnings with them.

Social media, websites and notification services

Facebook and Twitter are the two most common social media platforms used by disaster management organisations in Queensland. A search of each of these platforms by organisation name will assist in obtaining relevant information.

Social media feeds are available from Qldalerts.com and Council's Emergency Management Dashboard for those who are subscribed to social media platforms.

Emergency Alert

Emergency Alert is the national telephone warning system used by emergency services and Council to send voice messages (to landlines) and text messages (to mobile phones) within a defined area about likely or actual emergencies.

The Emergency Alert system will only be used in dangerous situations where there is likely to be an impact on human life.

It relies on telecommunications networks to send messages, and message delivery cannot be guaranteed.

Standard Emergency Warning Signal (SEWS)

When disasters loom or a major emergency happens, residents will be alerted by the sound of the Standard Emergency Warning Signal (SEWS) before critical television or radio broadcasts.

The SEWS is a wailing siren sound used throughout Australia for various emergency events of major significance, such as cyclones, flooding and severe storms. When community members hear the signal, they should pay careful attention to the message that follows and act immediately on the advice given. There are strict rules on the use of this warning signal in Queensland

Mainstream media (radio, television and newspapers)

The use of mainstream media is essential for the provision of emergency warnings. Mainstream media channels are generally very proactive in the monitoring of official sources.

Public information and media management

During a disaster, it is critical that the public information provided to the media is consistent across all agencies. To ensure the release of appropriate, reliable and consistent information it is recommended that:

- joint media conferences be held at designated times involving key stakeholders, including the Chairperson of the LDMG where feasible
- key spokespeople should be senior representatives of the LDMG agencies involved in the event.

Consideration of the following should occur:

• The scheduling of media conferences requires a coordinated approach to ensure there is no conflict between state, district or local announcements.

 Statistics are a potentially contentious issue requiring careful checking with all agencies before release.

Each agency is to comment only on its own areas of responsibility and should consult the LDC (or delegate) to ensure consistent messaging to the community.

During an event it is recommended that the LDMG develops a flexible media management strategy that:

- Identifies key messages to share with the community, including reinforcing the LDMGs role in coordinating support to the affected community
- Identifies preferred spokespersons for factual information (for example, evacuation measures and road closures)
- Is consistent with the crisis communication network arrangements outlined in the Queensland Government Arrangements for Coordinating Public Information in a Crisis (further details are located at disaster.qld.gov.au)

Coordination and capability support

Each organisation is responsible for ensuring that it has appropriate resources to deliver its agreed roles and responsibilities. Where an organisation's local capacity is exceeded, it can request support through the LDMG.

In a multi-agency response, the LDMG coordinates and supports the response capability of individual organisations. Where the LDMG is unable to provide the requested support for the organisation, it will follow the established processes to seek assistance from the DDMG.

Impact assessment

Impact assessment is the organised process of collecting and analysing information after an emergency or disaster to estimate:

- extent of loss of/injury to human life
- damage to property and infrastructure
- the needs of the affected community in terms of response, recovery and future (prevention and preparedness) assistance.

Impact assessments provide the LDMG with a source of comprehensive, standardised information on the effect an event has on various elements of the community. This information is then used to set priorities and make decisions about the response to an emergency or disaster, and to take the initial steps leading to recovery.

There are two basic types of impact assessment:

- 1. post-impact assessment, which examines the ways in which an event has affected a community
- 2. needs assessment, which examines the type, amount and priorities of assistance needed.

Post-impact assessment

There are two types of post-impact assessment:

Rapid damage assessments (RDA)

RDAs are undertaken immediately following an event to gather a high-level view of consequences and potential consequences. Sources of information include:

- calls for assistance recorded at emergency services communications centres and through the Council's call centre
- information and assessment data provided by LDMG members, representatives and advisors
- media monitoring and reporting.

The RDAs provide initial and often unconfirmed information. The information collected is used to provide an assessment of the potential overall impact of the event and to set initial priorities.

Comprehensive damage assessment (CDA)

CDAs will commence as soon as possible after an event to accurately establish the impact.

All LDMG members and requested relevant organisations are will undertake detailed impact assessments relating to their area of jurisdiction.

Depending on need, the LDMG may coordinate the formation and operation of multiagency damage assessment teams to systematically collect and analyse impact assessment data.

Needs assessment

Using data from the initial rapid and comprehensive damage assessments, the LDMG will conduct a needs assessment to establish the type, quantity and priorities of assistance required by disaster-affected communities.

Financial management

LDMG member organisations will be responsible for their financial management and procurement matters. Council will assume responsibility for financial management of the LDCC during the event.

When an event occurs, each organisation should immediately begin accounting for personnel and equipment costs relating to disaster operations (in accordance with its own policies and procedures) provide evidence for reimbursement from the various assistance arrangements.

Care and attention to detail must be taken throughout the disaster operations period to maintain logs, formal records and file copies of all expenditure (including personnel timesheets). This will provide clear and reasonable accountability and justification for future audit and potential reimbursement purposes.

Disaster financial assistance arrangements

There are two sets of financial arrangements that, if activated, provide financial support to Queensland communities affected by a disaster event. They do this through the reimbursement of eligible expenditure.

Disaster Recovery Funding Arrangements (DRFA)

Under the joint Australian Government-State Disaster Recovery Funding Arrangements 2018, assistance is provided to alleviate the financial burden on states and territories. It also supports the provision of urgent financial assistance to disaster affected communities.

Under these arrangements, the state or territory government determines which areas receive assistance and what assistance is available to individuals and communities.

Where the arrangements have been activated, the Australian Government may fund up to 75 per cent of the assistance available to individuals and communities. This contribution is delivered through a number of assistance measures and may include:

- personal hardship and distress assistance, including the engagement of a Community Recovery Officer to work with individuals and families receiving personal hardship and distress assistance
- counter disaster operations
- concessional loans or interest subsidies for small businesses and primary producers
- transport freight subsidies for primary producers
- loans and grants to voluntary non-profit organisations and needy individuals
- the reconstruction of essential public assets
- community recovery funds.

In addition, clean-up and recovery grants may be made available to assist businesses, including farm businesses, to resume trading as soon as possible. The grants may be used for clean-up activities, replacement of damaged equipment and stock, and other general repairs.

State Disaster Relief Arrangements (SDRA)

The intent of the SDRA is to assist in the relief of communities whose social wellbeing has been severely affected by a disaster event (natural or non-natural). The SDRA are state-funded and not subject to the Australian Government imposed event eligibility provisions or activation threshold. As

a result, the SDRA are able to address a wider range of disaster events and circumstances where personal hardship exists.

Logistics management

When the LDMG requires logistics support and/or resources to meet operational requirements that are beyond local capacity and capability, it sends a request for assistance to the District Disaster Coordination Centre (DDCC).

At times, administrative boundaries may separate resources from affected communities. In planning, the LDMG considers resources in neighbouring LGAs in addition to those locally.

Disaster declaration

In accordance with the Disaster Management Act 2003, and subject to several factors, 'a District Disaster Coordinator for a disaster district may, with the approval of the Minister, declare a disaster situation'68 for a district or for one or more local government areas within the district in whole or in part.

The declaration confers extra powers on particular groups to perform actions, give directions and control movements within the declared area.

In declaring a disaster situation:

A district disaster coordinator for a disaster district may, with the approval of the Minister, declare a disaster situation for the district, or a part of it, if satisfied –

- a) a disaster has happened, is happening or is likely to happen in the disaster district; and
- b) it is necessary, or reasonably likely to be necessary, for the district disaster coordinator or a declared disaster officer to exercise declared disaster powers to prevent or minimise any of the following:
 - i. loss of life
 - ii. illness or injury to humans
 - iii. property loss or damage
 - iv. damage to the environment

Even when a disaster situation is declared, Council is still primarily responsible for managing operations.

Resupply

The LDMG is responsible for supporting communities in preparing for temporary isolation. It is also responsible for ensuring procedures are in place for resupply of food and other essentials during times of isolation.

Most events that isolate communities occur on a seasonal basis, and their effects on roads can be predicted with reasonable accuracy. Communities that are likely to be affected by such events are expected to prepare well in advance for both the event and the expected period of isolation.

To help with this, the LDMG conducts community education programs that focus on the community and household preparations to be made prior to the expected time of impact.

Planning for resupply operations considers the necessity and urgency of the request. It will need to balance the diversion of limited resources from other activities (such as supporting rescue, evacuation centres or similar), with the needs of the isolated community.

Emergency supply

'Emergency supply' is the acquisition and management of emergency supplies and services in support of disaster operations. Emergency supply can include:

- resource support in the establishment of forward command posts, community recovery centres and/or disease control centres. This may include furniture, equipment and materials
- resource support for community evacuation centres. This may include furniture, bedding material and health and hygiene products
- bottled water and bulk water supplies
- temporary structures such as marquees and portable ablution facilities
- small plant equipment hire services (such as chainsaws and pressure washers).

Before requesting emergency supply:

- every effort will be made to exhaust local supplies
- attempts will be made to support local economies
- organisations will use their own internal acquisition processes.

Queensland Fire and Emergency Services (QFES) is the functional lead agency for emergency supply.

Accessing support and allocating resources

Requests for support may come from lead agencies, supporting agencies or the community. These requests must be registered and acted on in accordance with the standard operating procedures for Council's LDCC.

The LDC may request assistance from local agencies, businesses and community groups for additional resources.

The LDMG will maintain regular communications with the DDMG, to coordinate the actions and resources required to respond and recover from the impact of disaster events. It will also maintain communication with local governments that share a boundary with the area.

Any requests for assistance that cannot be met within local resources will be submitted to the District Disaster Coordinator. The LDMG Chairperson or the LDC must endorse these requests.

If the request for assistance cannot be actioned by the District Disaster Coordinator, the will request will be forwarded to the Chairperson of the State Disaster Coordination Centre.

Hazard-specific arrangements

Primary (hazard-specific) agency

A primary agency is the organisation in control of the management of a specific threat. 'Control' relates to managing what should be done, when and by whom. Control operates horizontally across agencies that are contributing to the management of the particular hazard.

For example, during a bushfire threat, the QFES is the primary agency. It will control all agencies that are contributing to management of the bushfire. This includes giving directions and tasks to supporting agencies, allowing access into various zones and/or determining the need for evacuation.

Primary agency status is usually bestowed by legislation, common law, regulations, state plans or by agreement of the LDMG.

Functional arrangements

Lead (function) agencies

A functional lead agency is the organisation in control of the management of a specific function. For example, when an evacuation centre is required, Council is the functional lead agency and will control all agencies that are contributing to the management of the evacuation centre. This includes giving directions and tasks to supporting agencies, and opening and allowing access to centres.

A functional lead agency will be supported by other agencies that have agreed roles in the delivery of the disaster management function. For example, in the management of evacuation shelters/emergency shelters, the Council is assisted by a number of agencies such as the Australian Red Cross, the Queensland Police Service and the State Emergency Service.

Functional lead agency status is usually bestowed by legislation, common law, regulations, state plans or by agreement of the LDMG.

General arrangements related to primary and lead agencies

Coordination of primary and lead agencies

During a disaster, a number of primary and lead agencies may be in operation at the same time. For example, a disaster may involve the management of a number of threats and the delivery of a number of disaster management functions (such as evacuation centre management or public health).

The LDMG's role in coordination is to ensure primary, lead and support agencies have the resources and information needed to carry out their agreed roles.

Coordination operates horizontally across agencies, but does not extend to the control of threats or functions, or to the command of agency resources.

Primary and lead support agencies

Members of the LDMG agree to support other organisations through the provision of mutual aid. A support agency assists the primary or lead agency in the delivery of their objectives.

While under the control of a primary or lead agency, support agencies retain responsibility for commanding their resources and ensuring that their own standard operating procedures are correctly implemented.

Primary (hazard-specific) agencies

Hazard	Primary agency	Other related plans (excluding sub-plans)
Air crash	Queensland Police	• Nil
	Service	
Animal or plant disease	Department of Agriculture and Fisheries	 Queensland Veterinary Emergency Plan Australian Aquatic Veterinary Emergency Plan (AQUAVETPLAN) Australian Veterinary Emergency Plan (AUSVETPLAN) Australian Emergency Plant Pest Response Plan (PLANTPLAN) Biosecurity Emergency Operations Manual (BEOM)
Biological	Cairns Hinterland Hospital	Queensland Pandemic Influenza Plan
(human related)	and Health Service	National Action Plan for Influenza Pandemic
Communicable		State of Queensland Multi-Agency Response
disease Radiological		to Chemical, Biological and Radiological Incidents
Earthquake and landslip	Mareeba Shire Council	Dam Safety Emergency Action Plans
Fire - structure or	Queensland Fire and	Fire Mitigation Plan
bushfire	Emergency Services	
Flood, storm,	Mareeba Shire Council	Lake Tinaroo Emergency Action Plan
cyclone or		
severe weather Hazardous	Queensland Fire and	State of Queensland Multi-Agency Response
material/s	Emergency Services	to Chemical, Biological and Radiological
incident		Incidents
Heatwave	Cairns Hinterland Hospital and Health Service	Heatwave Response Plan
Rail crash	Queensland Police Service	• Nil
Road crash	Queensland Police Service	• Nil
Terrorism	Queensland Police	Queensland Counter-Terrorism Plan
	Service	National Counter-Terrorism Plan

Functional Lead Agencies

Tarretional Lead Agencies			
Function	Lead Agency	Other related plans (excluding sub plans)	
Animal rescue	Queensland Fire and	• Nil	
	Emergency Services		
Communications	Mareeba Shire Council	• Nil	
Community	Initial response:	• Far Northern and Innisfail Districts Human	
support	Mareeba Shire Council	and Social Recovery Plan	
	Followed by:		
	Department of		
	Communities, Child Safety		
	and Disability Services		

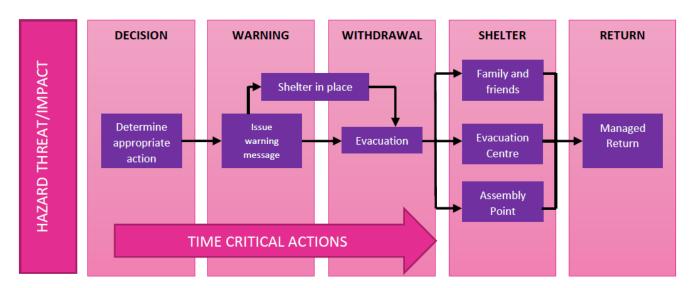
Electrical, fuel	Department of Energy and	• Nil
and gas supply	Water Supply	
Emergency Supply	Queensland Fire and Emergency Services	• Nil
Evacuation	Voluntary: Mareeba Shire Council Directed and/or mass scale: Queensland Police Service	Queensland Evacuation Guidelines
Evacuation centre management	Mareeba Shire Council	 Australian Red Cross Preferred Sheltering Practices Evacuation Centre Field Guide Evacuation Centre Planning and Operational Considerations COVID-19
Impact and damage assessment	Mareeba Shire Council	• Nil
Mass casualty	Cairns Hinterland Hospital and Health Service	• Nil
Public information and warnings	Public Information: Mareeba Shire Council Public Safety Business Agency Warnings: Mareeba Shire Council Queensland Fire and Emergency Services on advice from the primary agency	 Emergency Alert Guidelines Standard Emergency Warning Signal (SEWS) Guidelines
Resupply	Mareeba Shire Council	Queensland Resupply Guidelines
Search and/or rescue	Queensland Police Service	Intergovernmental AgreementThe National Search and Rescue Manual
Transport	Department of Transport and Main Roads	• Nil

PART 7: RELIEF

Relief is a transitionary phase that occurs during both response and short-term recovery operations. It is defined as 'the effort to meet the immediate needs of persons affected by a disaster, to minimise further loss through the provision of immediate shelter and life support.'

Evacuation Centres

The primary reason for an evacuation is the preservation of life. The process of evacuation is managed through the response phase and follows a defined process with five stages:



Evacuation centres are opened to meet an immediate need for those with no other option, in order to preserve life, wellbeing and safety. They should not be the primary source of shelter or relocation.

Evacuation centres abide for the Australian Red Cross Preferred Emergency Sheltering Practices, which provide for:

- One toilet for every 20-50 people
- 1.2m² 5m² of floor space per evacuee
- One shower for every 30 to 50 people

Preferred evacuation solutions for community members to consider—in priority order—are:

- 1. A destination of the person's choosing (for example, with family, friends or neighbours)
- 2. Established accommodation (for example, a hotel, motel or caravan park)
- 3. Evacuation centre.

It is important to note that Mareeba LDMG does not have a cyclone shelter facility and that in the event of a cyclone evacuation centres would only be opened after the threat of the cyclone has passed. There is a Last Place of Resort Refuge, however this can only house 160 people and would only be opened if essential to preserving life to displaced persons.

Donating to affected people

Council and the Queensland Government have partnered with GIVIT to manage all offers of donated goods and services (including corporate offers of assistance) following Queensland disasters.

Affected people register with GIVIT detailing what their needs are. GIVIT then matches these needs with goods currently being donated. This eliminates the need for organisations to store and sort unexpected donations.

GIVIT also accept donations of money. 100% of funds received by GIVIT during a disaster are spent on urgently needed items. Wherever possible, the items are purchased from businesses in the disaster-affected area to assist recovery of the local economy.

To donate, visit Givit.org.au

Volunteering

The desire to help disaster victims is an indication of the health of the community.

The best way a person can start their volunteering is to find out if family, friends and neighbours need assistance. This should always be done under their direction and with their consent.

It is also imperative that volunteers act safely. WorkCover Queensland provides guidance on how to be safe. For more information, visit Worksafe.qld.gov.au/injury-prevention-safety/workplace-hazards/dangers-in-your-workplace/storms-and-floods.

After assisting family, friends and neighbours, all volunteers should register with Volunteering Queensland's Emergency Volunteer Service by visiting Emergencyvolunteering.com.au/qld or phoning 1800 994 100. They will then be contacted if additional volunteers with their skills are required.

Isolated communities

Communities that become physically isolated, particularly due to flooded roads, have been identified during the risk management process. These communities do not necessarily require evacuation, but additional support may be needed to help people stay in their homes. Occupants of areas known to become isolated are strongly encouraged to plan for periods without access to food and essential household items.

PART 8: RECOVERY

Recovery is 'the coordinated process of supporting affected communities, families and individuals in the reconstruction of the built environment and the restoration of their emotional, social and economic wellbeing, as well as the natural environment.'

Queensland has adopted nationally established principles for recovery that recognise that successful recovery relies on:

- understanding the context
- recognising complexity
- using community-led approaches
- ensuring coordination of all activities
- employing effective communication
- acknowledging and building capacity

Recovery is also defined under the Disaster Management Act 2003 as:

a) Providing relief measures to assist persons affected by the disaster who do not have the resources to provide for

their own financial and economic wellbeing.

- b) Restoring essential infrastructure in the area or areas affected by the disaster.
- c) Restoring the environment in areas affected by the disaster.
- d) Providing health care to persons affected by the disaster, including temporary hospital accommodation.

Phases of recovery

Recovery is undertaken across three phases. These phases are contained in the Queensland Recovery Plan and are summarised below.

Phase 1 – Post impact and early recovery

Includes: Immediate short-term recovery

This phase occurs at the same time as response. It involves addressing and supporting the immediate needs of individuals, businesses and the community affected by the event. In this phase, the objectives are to understand the effect of the event, and to begin planning to support response and recovery.

Phase 2 – Recovery and restoration

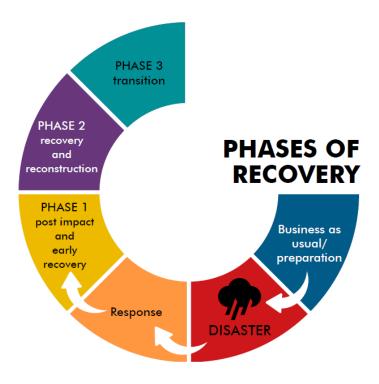
Includes: Medium-term recovery

In the recovery and restoration phase, methodical steps are taken to reconstruct and enhance all disaster-affected communities, functions and infrastructure.

Phase 3 - Transition

Includes: Long-term recovery

In the transition phase, recovery and reconstruction is progressively handed over to agencies or organisations - including government, community-based or industry-led sectors. This phase ends when all recovery and reconstruction responsibilities are back to being managed as business as usual.



Functions of Recovery

Effective recovery requires an integrated, multi-disciplinary approach to analysing needs, engaging the community, and planning. Recovery is a complex and potentially protracted process. To help coordinate this, it is grouped into five functions. These often overlap, and recovery arrangements must reflect the interrelationship between them.



Economic recovery includes:

- renewal and growth of
 - the micro economy (within the affected area) and the macro economy (overall economic activity of the state)
 - o individual and household entities (for example, employment, income and insurance claims), private and government business enterprises, and industry
 - assets, production and flow of goods and services capacity for the export of goods and services from the affected region

o securing the confidence of overseas markets.

Roads and transport recovery includes repairing and reconstructing roads and transport systems.

Human and social recovery includes addressing:

- personal support and information
- physical and emotional health
- psychological, spiritual, cultural and social wellbeing
- public safety and education
- temporary accommodation
- financial assistance to meet immediate individual needs
- uninsured household loss and damage.

Building recovery includes:

- · repairing and reconstructing
 - o residential and public buildings
 - o commercial, industrial and rural buildings and structures
 - o government structures
 - utility structures, systems and services (water, sewage, energy and communications)
 - other essential services
- dam safety.

Environment, (or natural environment) recovery includes:

- restoration and regeneration of
 - o biodiversity (species and plants) and ecosystems
 - natural resources
 - o environmental infrastructure
 - amenity/aesthetics (for example, scenic lookouts)
 - o culturally significant sites and heritage structures
- management of environmental health, waste, contamination and pollution, and hazardous materials.

Queensland Government Responsibilities

Functional	Economic	Roads and	Human and	Building	Environment
Recovery		Transport	Social		
Group		- Tanoport			
Chair/Lead Agency	Director-General State Development	Director-General Transport and Main Roads	Director-General Communities, Child Safety and Disability Services	Director-General Housing and Public Works	Director-General Environment and Heritage Protection
Roles and Responsibilities	Provide strategic advice to the Queensland Government and relevant stakeholders on the economic impacts of an event and the proposed methods to advance economic recovery.	Coordinate the efficient and effective delivery of road and transport recovery activities.	Lead and coordinate planning and implementation of the Human and Social recovery function in Queensland.	Coordinate efficient and effective information exchange, issues identification and resolution between state agencies, local government, building industry and insurance providers.	Lead and coordinate the planning and implementation of the environmental function of recovery in Queensland.
Key Tasks	Liaise with affected stakeholders and local governments, identify and address issues and risks, and measure the ongoing economic impacts and rate of recovery. Monitor the impacts on the affected area's economic viability and develop strategies to minimise the effects on individuals and businesses (as required). Facilitate linkages with job providers and employment agencies to source labour, re-establish supply chains and undertake joint marketing activities (as required).	Identify isolated communities and assign prioritised resources for recovery works. Develop regional reconstruction projects and activities in collaboration with stakeholders. Develop implementation plans for recovery and reconstruction. Develop, review and submit Disaster Relief Funding Arrangements (DRFA) submissions for approval. Implement recovery and reconstruction plans, including monitoring and reporting.	Support local and district disaster management groups. Administer the Personal Hardship Assistance Program. Establish multiagency recovery hubs. Provide Social Service system navigation. Provide case coordination for vulnerable people and uninsured rebuilds. Purchase extraordinary relief and recovery services if required.	Facilitate temporary accommodation solutions for displaced people. Provide assistance/ advice to support repair and restoration of state-owned public buildings. Facilitate the coordination of building safety inspections. Provide building advice and information to support community recovery. Provide advice to the building industry supply chain.	Manage environmental risk associated with recovery activities. Repair critical flood monitoring infrastructure. Monitor discharges from impacted mine sites. Repair infrastructure on the protected area estate (national parks and state forests). Manage rural and bushfire hazard mitigation on the protected area estate and unallocated state land. Facilitate repair of heritage listed places.

The service components of each of the five functions are not necessarily delivered by the lead agency. The lead agency works with multiple private and public sector partners who deal directly with the community and individual families and businesses to achieve recovery.

While these five functions provide the framework for the recovery structure, the final structure depends upon the nature and consequences of an event. For example, events such as cyclones may cause large-scale damage to housing and the built environment and may require more emphasis on infrastructure recovery. Other events, such as pandemics, may require more emphasis on the human-social aspects of recovery.

The LDMG encourages an all-agencies approach to recovery. This involves identifying a range of organisations to support the lead functional agency and the LDMG in implementing an effective recovery over the short-, medium- and long term.