

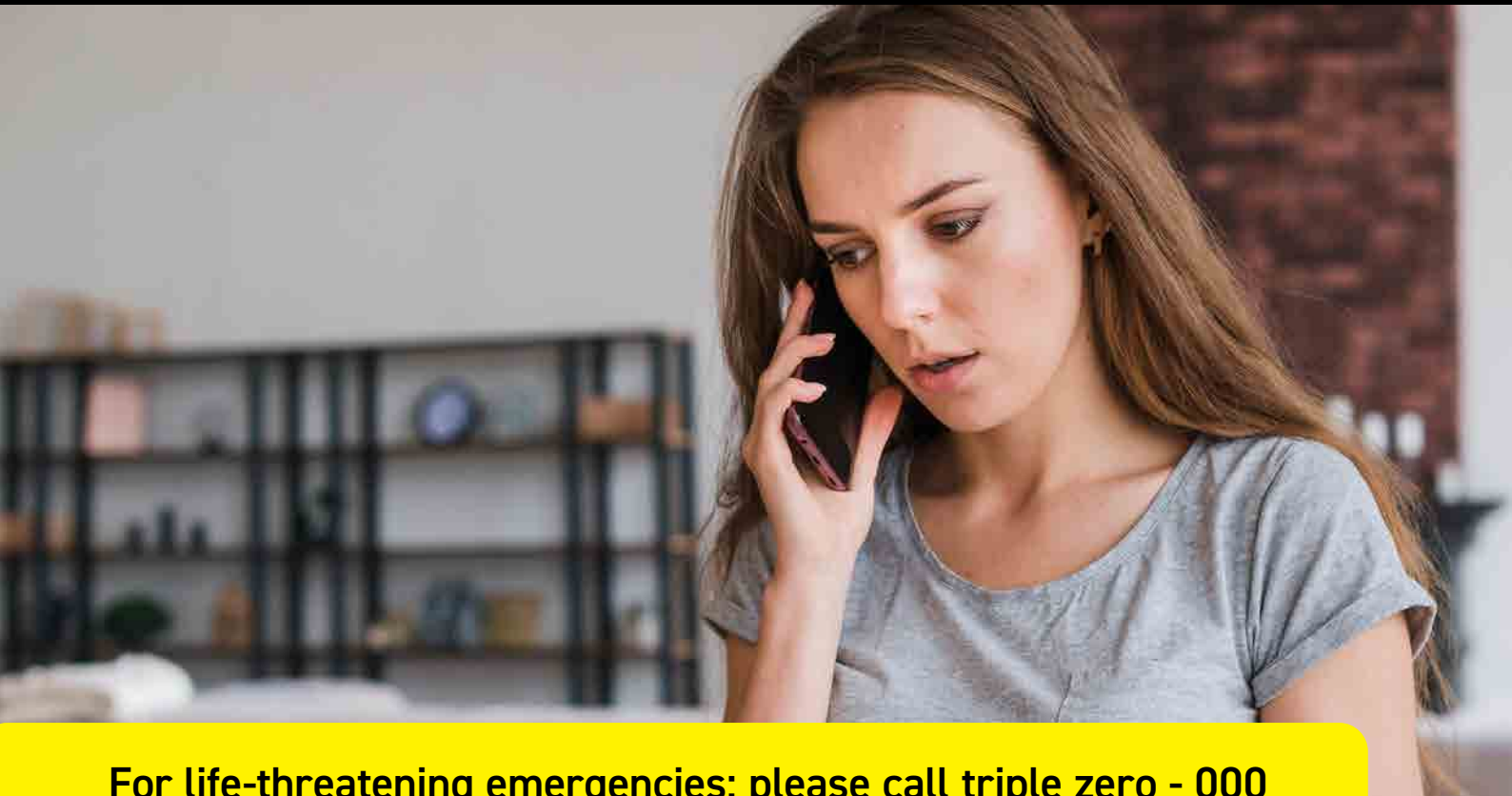
LOCAL DISASTER MANAGEMENT PLAN

2025-2028

Mackay Local Disaster Management Group



EMERGENCY CONTACTS



For life-threatening emergencies: please call triple zero - 000

Police / fire / ambulance

Bureau of Meteorology

bom.gov.au

Council's Emergency Management Dashboard

disaster.mackay.qld.gov.au

**Council's Disaster Co-ordination Centre
(when activated)**

1300 622 529

Ergon Energy

Faults only - 132 296

Fallen Powerlines

Call emergency services on 000 or
Ergon Energy on 13 16 70

Get Ready Queensland

getready.qld.gov.au

Mackay Regional Council

1300 MACKAY (622 529)
mackay.qld.gov.au

Maritime Safety

msq.qld.gov.au/Safety/
Preparing-for-severe-weather

Power Outage Finder

ergon.com.au and Outage Finder App

Policelink (non-urgent police reporting)

131 444

Queensland Ambulance Service

131 233 (Non-emergency situations)

Queensland Fire Department

fire.qld.gov.au

Red Cross Register: Find. Reunite.

Call (not text) 0403 251 226
to activate service register.redcross.org.au

Rural Fire Service

4965 6641
<https://www.fire.qld.gov.au/about-us/frontline-services/rural-fire-service-queensland>

Road closures

131 940
disaster.mackay.qld.gov.au

State Emergency Service (SES)

132 500
ses.qld.gov.au
SES Assistance App

CHAIRMAN'S FOREWORD



Mackay Regional Council and the Local Disaster Management Group are committed to achieving community safety for our residents and for visitors to our region.

This Local Disaster Management Plan (LDMP) has been prepared to meet the requirements of the Disaster Management Act 2003 and clearly defines the roles and responsibilities of all entities involved in disaster management. By specifying the duties and expectations of each stakeholder, we ensure a coordinated and efficient response to any disaster scenario.

The Mackay region is susceptible to some of the most significant natural hazards in Queensland. Tropical cyclones, riverine flooding, severe weather events, coastal inundation, heatwaves and bushfires have all impacted our community at one time or another. The LDMP identifies the types of events likely to occur in our area. By understanding these potential hazards, we can better prepare and tailor our strategies to effectively manage the risks.

Through government, private and community partnerships and memberships led by council, the LDMG will continually plan and educate the local community, incorporating the latest experiences and expertise in disaster management to minimise the effects of natural disaster and build community resilience.

It ensures that all entities involved in disaster management work seamlessly together, fostering collaboration and optimising resources during disaster events.

Our community can feel very secure in the fact that local emergency service agencies are dedicated and capable in their respective fields.

This plan is dynamic and risk-based and regularly updated to reflect changes in legislation and best practice. It also incorporates learnings from disasters within and outside our region.

This LDMP provides our community with a robust, multi-agency approach based on the four guiding principles of prevention, preparedness, response, and recovery (PPRR). By adhering to these principles, we aim to create a resilient and well-prepared community capable of facing any disaster.

This plan reflects our commitment to safeguarding our residents and ensuring a swift and efficient response to any emergency situation.

A prepared community is a resilient community.



Mayor Greg Williamson
Chair, Local Disaster
Management Group



Acknowledgement of Country:

Mackay Regional Council respectfully acknowledges the Traditional Owners of the land in our region, the Yuwi people and the Widi people, and we pay respect to the Elders past, present and emerging.

CONTENTS

EMERGENCY CONTACTS	2
CHAIRMAN'S FOREWORD	3
PART 1: DOCUMENT CONTROL	9
1.1 REVIEW AND RENEW	9
1.2 AMENDMENT CONTROL	9
1.3 DISTRIBUTION AND INSPECTION	9
1.4 APPROVAL AND AUTHORITY TO PLAN	9
PART 2: GOVERNANCE	10
2.1 SCOPE OF APPLICATION	10
2.2 PURPOSE	10
2.3 GUIDING PRINCIPLES	10
2.4 APPROACH TO DISASTER MANAGEMENT	10
PART 3: DISASTER MANAGEMENT ARRANGEMENTS	11
3.1 DISASTER MANAGEMENT GROUPS	11
3.1.1 Local Disaster Management Group	11
3.1.2 District Disaster Management Group	11
3.1.3 Queensland Disaster Management Committee	12
3.1.4 National Emergency Management Agency	12
3.2 AUTHORISING ENVIRONMENT	12
3.3 DISASTER MANAGEMENT PRIORITIES	13
3.4 STRATEGIC POLICY STATEMENT	13
3.5 EMERGENCY MANAGEMENT ASSURANCE FRAMEWORK	13
3.6 STANDARD FOR DISASTER MANAGEMENT	14
3.7 MACKAY REGIONAL COUNCIL CORPORATE PLAN	14
3.8 SUPPORTING DOCUMENTS	14
PART 4: MACKAY LOCAL DISASTER MANAGEMENT GROUP	15
4.1 ESTABLISHMENT	15
4.2 FUNCTION	15
4.3 MEMBERSHIP	16
4.3.1 Chairperson	16
4.3.2 Deputy Chairperson	16
4.3.3 Local Disaster Coordinator	16
4.3.4 Core Members	16
4.3.5 Proxy Members	16
4.3.6 Advisors	16
4.3.7 Observers	16
4.4 RESPONSIBILITIES	16

4.5 MEETINGS	23
4.5.1 Schedule	23
4.5.2 Quorum	23
4.6 REPORTING	23
4.6.1 Routine Business Reporting	23
4.6.2 Event Reporting	23

PART 5: COMMUNITY CHARACTERISTICS 25

5.1 GEOGRAPHY AND TOPOGRAPHY	25
5.2 CLIMATE AND WEATHER	25
5.3 OUR COMMUNITY	26
5.3.1 People and Population	26
5.3.2 Cultural Diversity	26
5.3.3 Income and Work	26
5.3.4 Dwellings	26
5.4 VULNERABLE POPULATION	26
5.5 PUBLIC BUILDINGS, SPACES AND EVENTS	27
5.6 COMMUNITY CRITICAL INFRASTRUCTURE AND SERVICE LOCALITIES	28
5.6.1 Referable Dams	29
5.7 ECONOMIC PROFILE	30
5.7.1 Mining/Industrial/Manufacturing Sector	30
5.7.2 Tourism Sector	30
5.7.3 Commercial Sector	30
5.7.4 Agricultural Sector	30
5.8 EDUCATION	31
5.9 SPORT AND RECREATION	31
5.10 MAJOR EVENTS	31
5.11 HAZARDOUS SITES	31

PART 6: OUR HAZARDS AND RISKS 33

6.1 HAZARDS	34
6.1.1 Tropical Cyclone	34
6.1.2 Flooding	36
6.1.3 Storm Surge and Tide	37
6.1.4 Bushfire	37
6.1.5 Severe Thunderstorms / Weather	38
6.1.6 Heatwave	38
6.1.7 Pandemic	38
6.1.8 Earthquake	39

CONTENTS

6.1.9 Landslides	39
6.1.10 Dam Failure	39
6.1.11 Tsunami	39
PART 7: DISASTER RISK ASSESSMENT	41
7.1 RISK ASSESSMENT OUTLINE	41
7.2 DISASTER RISK PLANNING	42
7.2.1 Risk Treatment	42
7.2.2 Residual Risks	42
7.2.3 Increased Risk from a Changing Climate	42
PART 8: PREVENTION	45
8.1 COMMUNITY EDUCATION	45
8.2 HAZARD REDUCTION PROGRAMS	46
8.3 BUILDING CODES, REGULATIONS AND STANDARDS	46
8.4 LAND-USE PLANNING	47
8.5 INSURANCE	47
PART 9: PREPAREDNESS	49
9.1 PLANNING	49
9.1.1 Hazard Specific Plans	49
9.1.2 Operational Sub Plans	49
9.1.3 Business Continuity Planning	50
9.1.4 Person-Centred Emergency Preparedness Plan	51
9.2 CAPABILITY INTEGRATION	51
9.2.1 Training and Education	51
9.2.2 Exercises	51
9.2.3 Lessons Management	51
9.2.4 Emergency Liaison Officers	51
9.3 COMMUNITY EDUCATION	52
9.3.1 Emergency Dashboard	52
9.3.2 Emergency Management Information	52
9.3.3 Disaster Ready Saturday	52
9.3.4 Community Disaster Awareness and Education Sessions	52
PART 10: RESPONSE	55
10.1 RESPONSE AND THE LOCAL DISASTER MANAGEMENT GROUP	55
10.2 ACTIVATION LEVELS	56
10.3 LOCAL DISASTER COORDINATION CENTRE	56
10.3.1 LDCC Structure	56

10.4 ACTIVATION RESPONSIBILITIES	57
10.4.1 Primary (Hazard-specific) Arrangements	57
10.4.2 Functional Lead Agencies	57
10.4.3 Coordination of Primary and Lead Agencies	57
10.5 DISASTER DECLARATION	58
10.6 CONCEPT OF OPERATIONS	58
10.6.1 Information Management	58
10.6.2 Operational Intelligence	59
10.6.3 Event Reporting	59
10.6.4 Logistics	59
10.6.5 Financial Management	59
10.6.6 Public Information and Warnings	60
10.6.7 Resupply	63
10.6.8 Emergency Supply	63
10.7 EVACUATION	64
10.7.1 Shelter and Safer Locations	64
10.7.2 Facilities	65
PART 11: RECOVERY	67
11.1 RECOVERY GOVERNANCE	68
11.1.1 Transition to Recovery	68
11.1.2 Local Recovery Group	68
11.2 LOCAL RECOVERY COORDINATOR	68
11.3 RECOVERY FUNCTIONS	69
11.3.1 Human and Social	69
11.3.2 Economic	69
11.3.3 Environment	69
11.3.4 Infrastructure	69
11.4 RECOVERY OPERATIONS	69
PART 12: ANNEXURES	70
12.1 Annexure 1 – Schedule of Figures and Tables	70
12.2 Annexure 2 – Abbreviations	71
12.3 Annexure 3 – Glossary	72



PART 1: DOCUMENT CONTROL

1.1 REVIEW AND RENEW

In accordance with Section 59 of the Disaster Management Act 2003 (the Act):

1. A local government may review, or renew, its Local Disaster Management Plan (LDMP) when the local government considers it appropriate.
2. However, the local government must review the effectiveness of the plan at least once per year.

As part of its commitment to continuous improvement, Mackay Regional Council will review this document at least annually, with relevant amendments made and distributed.

This plan will undergo a significant review every three years. Notice of amendments will be made to the Local Disaster Management Group (LDMG), Local Recovery Groups and the District Disaster Coordinator.

It is acknowledged that feedback from stakeholders and members of the community is essential.

Proposals for amendments or inclusions can be addressed in writing to:

The Chief Executive Officer
Attention: WHS & Emergency Management Program
Mackay Regional Council
PO Box 41
MACKAY QLD 4740

In person: At the nearest Mackay Regional Council Service Centre. A list of the centres can be found at www.mackay.qld.gov.au/contact/contact_council

By email: emteam@mackay.qld.gov.au

1.2 AMENDMENT CONTROL

The LDMP is a controlled document of Mackay Regional Council. The document controller is the Local Disaster Coordinator (LDC) who is authorised to make minor amendments that do not materially affect the plan.

VERSION	DATE	COMMENTS
1.0	November 2011	First Edition
2.0	October 2012	Reviewed and Updated
3.0	May 2016	Reviewed and Updated
4.0	August 2016	Reviewed and Updated
4.1	November 2017	Reviewed and Updated
5.0	January 2020	Full review
5.1	September 2021	Reviewed and Updated
5.2	August 2022	Reviewed and Updated
5.3	August 2023	Reviewed and Updated
6.0	August 2024	Full review

1.3 DISTRIBUTION AND INSPECTION

As per Section 60 of the Act, the plan is available for inspection, free of charge by members of the public on council's website mackay.qld.gov.au. Printed copies of the LDMP are available for purchase. Requests can be made via mail at:

The Chief Executive Officer
Attention: WHS & Emergency Management Program
Mackay Regional Council
PO Box 41
MACKAY QLD 4740

Council maintains a register of controlled copies on behalf of the LDMG, to record the distribution of the plan. Controlled copies of the plan will be updated and redistributed at least annually.

1.4 APPROVAL AND AUTHORITY TO PLAN

The plan has been developed by Mackay Regional Council in accordance with Section 57 and 58 of the Act. The plan conforms to the disaster management standards and disaster management guidelines.

In accordance with Section 80 (1b) of the Act, this plan has been reviewed and adopted by council on October 30, 2024 when the plan was adopted by resolution ORD-2024-227.

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Lisa Young 27/11/2024
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Lisa Young Date
Deputy Local Disaster Coordinator
Mackay Local Disaster Management Group

DocuSigned by:
Greg Williamson 27/11/2024
57BCFD431DAF4AB...
Mayor Greg Williamson Date
Chairperson
Mackay Local Disaster Management Group

PART 2: GOVERNANCE

2.1 SCOPE OF APPLICATION

This plan applies to the Mackay Local Government area (LGA).

2.2 PURPOSE

As legislated in Section 57 of the Act, the purpose of the LDMP is to:

- a) embed the state group's strategic policy framework for disaster management for the State, and detail council's policies for disaster management
- b) define the roles and responsibilities of entities involved in disaster management
- c) detail arrangements for the coordination of disaster operations and activities relating to disaster management performed by the entities involved in disaster management
- d) identify the events that are likely to happen in the area
- e) identify the strategies and priorities for disaster management for the area.

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

2.3 GUIDING PRINCIPLES

This plan and disaster management within Queensland follows the four guiding principles outlined in Section 4A the Act:

- a) Disaster management should be planned across the following four phases — of prevention, preparedness, response and recovery (PPRR).
- 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 other disaster management guidelines.
- c) Local governments should primarily be responsible for managing events in their local government area.
- d) District groups and the state disaster management group should provide local governments with appropriate resources and support to help the local governments carry out disaster operations.

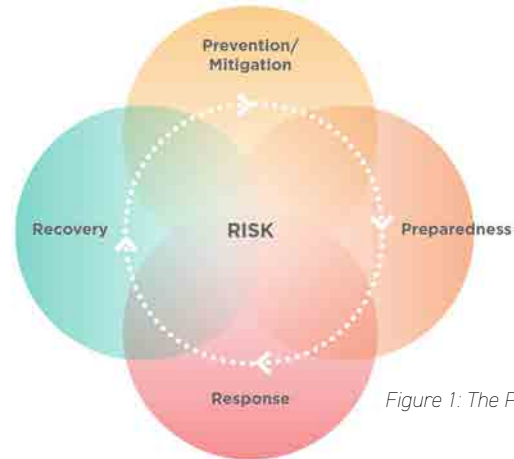


Figure 1: The PPRR cycle

2.4 APPROACH TO DISASTER MANAGEMENT

In accordance with Section 4A (a) of the Act, disaster management is planned across the four phases of disaster management.

PREVENTION

- To investigate and coordinate strategies and initiatives to eliminate or reduce the impact of the effects of hazards on the community, economy, infrastructure and environment using disaster risk management processes.

PREPAREDNESS

- To increase community safety and resilience through public awareness, information and education to encourage an all-agencies, all-hazards approach to disaster management within Mackay LGA.
- To identify resources to maximise council's operations capability.
- To develop contingency plans to address disaster operations issues.
- To enhance the capability of disaster management agencies by encouraging participation in training and exercises, equipment acquisition programs and the building of relationships.

RESPONSE

- To provide effective and efficient coordination of disaster response efforts during a disaster event to minimise the impact of an event in the Mackay LGA.
- To consider support to communities, other than Mackay LGA, who may be impacted by a disaster, within the broader arrangements of the Queensland Disaster Management Arrangements.

RECOVERY

- To ensure that the recovery priorities of the Mackay LGA community are identified and met across the functional areas of economy, environment, human-social and infrastructure (road and building).
- To ensure that recovery operations contribute to an increase in community resilience.

PART 3: DISASTER MANAGEMENT ARRANGEMENTS

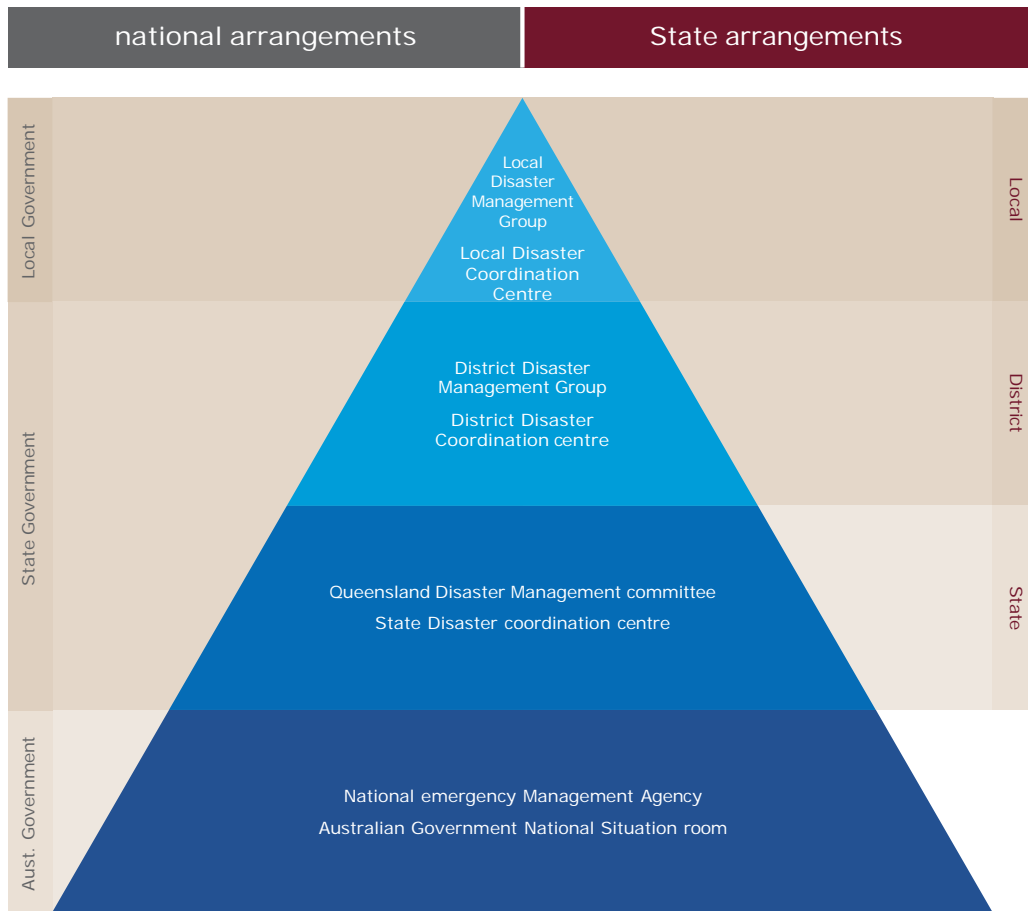


Figure 2. Queensland Disaster Management Arrangements

Local government is primarily responsible for managing disasters within the local government area. The Queensland Disaster Management Arrangements (QDMA) enable a progressive escalation of support and assistance through the tiers of the QDMA as required. If local governments require additional resources to manage an event, they can request support through the QDMA.

Queensland's whole-of-government disaster management arrangements are based on partnerships between government, non-government organisations, commerce and industry sectors and the local community. These arrangements recognise each level of the disaster management arrangements working collaboratively to ensure the effective coordination of planning, services, information and resources necessary for comprehensive disaster management.

Detailed information on the arrangements can be found online at [Queensland disaster management arrangements participant guide \(update\) | Disaster Management | Queensland Government](#)

3.1 DISASTER MANAGEMENT GROUPS

3.1.1 Local Disaster Management Group

Local governments are primarily responsible for managing disaster events in their local government areas. Local governments are ideally placed to provide specific disaster management at the community level given their knowledge and understanding of social, environmental and economic issues. They achieve coordinated disaster management through the LDMG.

3.1.2 District Disaster Management Group

Established under Section 22 of the Act, district groups comprise of representatives from regionally based Queensland government agencies which can provide and coordinate whole of government support and resource gap assistance to communities.

PART 3: DISASTER MANAGEMENT ARRANGEMENTS

The district group performs a support function within the disaster management arrangements by providing support and assistance to the LDMG, when requested by the local group. In accordance with Section 23 of the Act, the district group carry carries out a number of functions relating to disaster management. The primary functions are to:

- Ensure the disaster management and disaster operations in the disaster district are consistent with the state group's strategic policy framework for disaster management for the state.
- Develop effective disaster management for the district, including a district disaster management plan and to regularly review and assess disaster management arrangements.
- 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.

The Mackay Disaster District encompasses the Mackay, Whitsunday and Isaac Local Government areas.

3.1.3 Queensland Disaster Management Committee

The Queensland Disaster Management Committee (QDMC) is established under Section 17 of the Act and is the peak disaster management policy and decision-making body in Queensland, directly responsible for outcomes to the Premier. Under the Act, the main functions of the state group are to:

- Develop a strategic policy framework for disaster management for the state.
- Ensure an effective disaster management system is developed and implemented for the state.
- Ensure effective arrangements between the State and the Australian governments on matters relating to effective disaster management are established and maintained.
- Identify resources within and outside the state that may be used for disaster response operations.
- Provide reports and make recommendations to the Minister about matters relating to disaster management and disaster operations.
- Prepare a State Disaster Management Plan (SDMP).

3.1.4 National Emergency Management Agency

The National Emergency Management Agency (NEMA) plans and coordinates Australian Government assistance to Queensland. NEMA is the Commonwealth agency responsible for the planning and coordination of Australian Government assistance to the states and territories through the Australian Government National Situation Room. Queensland Police Service (QPS) and the Queensland Reconstruction Authority (QRA) are Queensland's key liaison bodies with the Australian Government for disaster management purposes.

3.2 AUTHORISING ENVIRONMENT

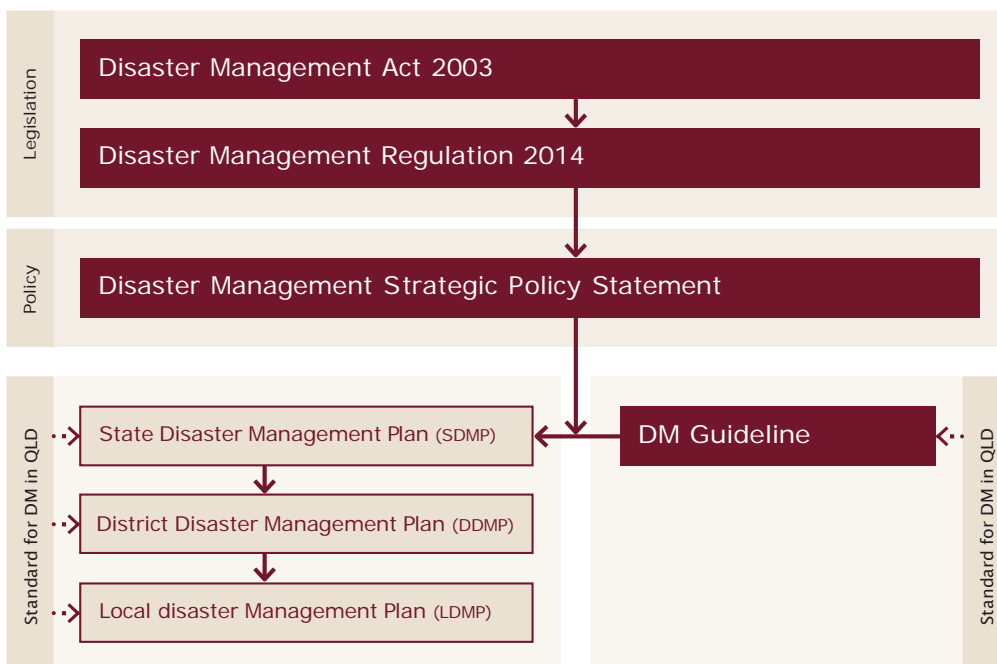


Figure 3 – Authorising environment



Figure 4: Key principles of effective disaster management in Queensland

3.3 DISASTER MANAGEMENT PRIORITIES

Council and the LDMG are committed to ensure council's responsibilities under the Act are executed through the following activities:

- Disaster risk management.
- Maintaining and enhancing a disaster response capability.
- Disaster management strategic, operational and contingency planning.
- Disaster management training and exercises.
- Developing recovery strategies that align with community need.
- Ensuring community resilience through enhancing awareness, education and engagement.

3.4 STRATEGIC POLICY STATEMENT

Disaster management and disaster operations in the Mackay LGA are consistent with the Queensland Disaster management 2016 Strategic Policy Statement, available for viewing online at: [Queensland Disaster Management 2016 Strategic Policy Statement](#)

3.5 EMERGENCY MANAGEMENT ASSURANCE FRAMEWORK

The Emergency Management Assurance Framework (EMAF) provides the structure and mechanism for reviewing and assessing the effectiveness of actions undertaken within Queensland's disaster management arrangements. It provides the context for continuous improvement within the sector, which is guided by four key principles as identified in Figure 4 – Key principles of effective disaster management in Queensland.

PART 3: DISASTER MANAGEMENT ARRANGEMENTS

3.6 STANDARD FOR DISASTER MANAGEMENT

Disaster Management arrangements for the Mackay LGA are also consistent with the Shared Responsibilities of the Standard for Disaster Management in Queensland which include:

SHARED RESPONSIBILITY	OUTCOMES
Managing Risk	Outcome 1: There is a shared understanding of risks for all relevant hazards Outcome 2: Risk is managed to reduce the impact of disasters on the community
Planning and Plans	Outcome 3: There is a shared understanding of how the impact of disasters will be managed and coordinated Outcome 4: Plans outline and detail how the impact of disasters on the community will be reduced
Community Engagement	Outcome 5: Entities proactively and openly engage with communities Outcome 6: The community makes informed choices about disaster management, and acts on them
Capability integration	Outcome 7: Resources are prioritised and shared with those who need them, when they need them Outcome 8: Entities develop integrated capabilities and shared capacity to reduce the impact of disasters on the community
Operations	Outcome 9: Operations minimise the negative impacts of an event on the community and provide the support needed for recovery
Collaboration and coordination	Outcome 10: Entities proactively work together in a cooperative environment to achieve better results for the community Outcome 11: A collaborative culture exists within disaster management

Figure 5: Standard for Disaster Management

3.7 MACKAY REGIONAL COUNCIL CORPORATE PLAN

Within the Mackay Regional Council Corporate Plan 2022 - 2027, council has committed to creating a safe, connected and resilient community as part of its commitment to community and environment, where council will continue to prepare and enable our community to withstand, adapt and recover from future challenges. The LDMP is a vital component of this strategy.

To view council's Corporate Plan visit Mackay Regional Council - Corporate Plan.

3.8 SUPPORTING DOCUMENTS

Mackay Regional Council has ensured that this LDMP is consistent with the Queensland Prevention, Preparedness, Response and Recovery Disaster Management Guideline, Queensland State Disaster Management Plan, Mackay District Disaster Management Plan and any threat-specific and functional policies, plans and guidelines issued by government agencies. This LDMP is also supported by various sub plans to guide specific functional areas of responsibility of disaster management.

PART 4: MACKAY LOCAL DISASTER MANAGEMENT GROUP



4.1 ESTABLISHMENT

In accordance with Section 29 of the Act, Mackay Regional Council has established the Mackay Local Disaster Management Group (LDMG).

4.2 FUNCTION

In accordance with Section 30 of the Act, the LDMG has the following functions:

- (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 the local government for its area to prepare a local disaster management plan.
- (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.
- (i) 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 this Act.
- (l) To perform a function incidental to a function mentioned in paragraphs (a) to (k).

PART 4: MACKAY LOCAL DISASTER MANAGEMENT GROUP

4.3 MEMBERSHIP

4.3.1 Chairperson

In accordance with Section 34 of the Act, there is to be a Chairperson appointed to the local group. The Chairperson is responsible for managing the business of the group. Council has appointed the Mayor of Mackay Regional Council to this role.

4.3.2 Deputy Chairperson

Under Section 34 of the Act, there is to be a Deputy Chairperson appointed to assist or act as the Chairperson as required. Council has appointed the Deputy Mayor of Mackay Regional Council to this role.

4.3.3 Local Disaster Coordinator

In accordance with Section 35 of the Act, there is to be a Local Disaster Coordinator (LDC) appointed for the LDMG. The LDC is responsible for managing the coordination of the disaster operations and to ensure strategic decisions of the LDMG are implemented (as far as practicable). Council's Director Infrastructure and Operations is the appointed LDC for the Mackay LDMG.

4.3.4 Core Members

Council appoints members to the LDMG for the purposes of ensuring that it can meet its functions, as required under Section 33 of the Act. Core members are appointed on the provision they have the necessary expertise or experience and delegation authority to assist with a comprehensive, all hazards, all agencies approach to disaster management.

4.3.5 Proxy Members

Proxy members serve as a secondary core member in the event the core member is unavailable to attend. Proxy members are expected to achieve the same level of skill and expertise as core members.

4.3.6 Advisors

Advisors provide additional support and expertise to the Mackay LDMG.

4.3.7 Observers

Observers and special guests may attend the Mackay LDMG meeting upon approval from either the Chairperson, Deputy Chairperson or LDC.

4.4 RESPONSIBILITIES

Effective coordination of disaster management relies on roles and responsibilities being clearly defined, communicated and understood. Outlined in Table 1 are the indicative disaster management roles and responsibilities of LDMG member organisations and other stakeholders.

For Mackay Local Government Area residents, businesses and community organisations -

Role:

Develop an awareness about the nature and potential impact of hazards, build resilience and self-reliance through disaster education campaigns and personal responsibility for managing risks to self, family, friends and community.

Responsibilities:

- Understand local risks and hazards.
- Know where to find information – disaster.mackay.qld.gov.au
- Know when to go.
- Know where to go.
- Know how to go.
- Know what to take.

Mackay LDMG Member Organisation Roles and Responsibilities - Table 1

Mackay Regional Council (Core member)	<p>Role Primary responsibility for managing events in their local government area (Section 4A of the Act).</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Coordination and administration of the Mackay LDMG, Local Recovery Groups and Local Disaster Coordination Centre. • Provision of a disaster response capability. • Provision of council resources necessary to meet statutory obligations. • Provide support to evacuation centres. • Coordination of council's water, sewage and solid waste. • Keep the community informed. • Ensure business continuity of all Mackay services during and following a disaster event. • Support the State Emergency Services in partnership with QPS.
State Emergency Services (Core member)	<p>Role Provision of assistance to the community for non-life-threatening situations during floods, storms or other similar events.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Vertical rescue. • Flood boat rescue. • Urban, rural and evacuation searches. • Emergency traffic management. • Agency support. • Incident management. • Community education.
Queensland Police Service (Core member)	<p>Role To enhance the safety of the community by assisting them to prepare for, respond to and recover from disaster events by providing support and guidance to disaster management groups at all levels.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Functional lead agency responsible for terrorism response, crash, search and rescue. • Authorise and coordinate directed evacuations in consultation with the LDC. • Provide support to the Mackay LDMG. • Support partner agencies in the Public Cyclone Shelter and evacuation centres. • Provide traffic management, including assistance with road closures and maintenance of roadblocks. • Prepare guidelines to inform local governments, district and state groups of disaster management related matters. • Ensure disaster management and disaster operations are consistent between plans, policies, standards and guidelines. • Ensure that persons performing functions under the Act in relation to disaster operations are appropriately trained. • Provide advice and support to the state group, local and district groups in relation to disaster management and disaster operations. • Facilitate and authorise Emergency Alert campaigns and SEWS to provide advice and warnings to communities affected by disasters and emergency situations. • Emergency supply acquisition and management of supplies and services in support of disaster operations. • Resupply of essential goods (food and basic commodities) to temporarily isolated communities, properties and individuals. • In partnership with Australian Red Cross, act as commissioning agency for Register Find Reunite Service and manage the registration of evacuees and enquiries

PART 4: MACKAY LOCAL DISASTER MANAGEMENT GROUP

Mackay LDMG Member Organisation Roles and Responsibilities - Table 1 continued

<p>Queensland Fire Department (Core member)</p>	<p>Role To enhance the safety of the community by assisting them to prepare for, respond to and recover from disaster events by providing support and guidance to disaster management groups at all levels.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Functional lead agency for structural, bushfire and chemical/hazmat incidents. • Develop and distribute (where primary agency) warnings to disaster management stakeholders and community. • Undertake damage assessment function (residential and commercial structures).
<p>Queensland Ambulance Service (Core member)</p>	<p>Role To enhance the safety of the community by assisting them to prepare for, respond to and recover from disaster events by providing support and guidance to disaster management groups at all levels.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Provide transport for persons requiring attention at medical or health care facilities. • To participate with other emergency services in counter disaster planning. • Coordinate all volunteer first aid groups during major emergencies and disasters. • Access, assess, treat, and transport sick and/or injured persons. • Protect persons from injury or death, during rescue and other related activities. • Provide and support temporary health infrastructure where required. • 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, biological and radiological operations support with specialist logistics and specialist paramedics.
<p>Queensland Reconstruction Authority (Advisory Member)</p>	<p>Role Lead agency responsible for disaster recovery and resilience in Queensland.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Providing responsive and integrated services to communities before, during and after natural disasters. • Coordinating programs that support and build disaster relief and recovery readiness, capability and resilience at the local level.
<p>Australian Red Cross (Advisory Member)</p>	<p>Role Works with communities and stakeholders to build capacity and strength in preparing for, responding to, and recovering from disasters. Red Cross is an auxiliary to government in the humanitarian space.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Development and provision of best practice guidance and information on disaster management and recovery related practice. • In Queensland, Red Cross manages Register.Find.Reunite on behalf of the commissioning agency, Queensland Police Service. This is a service that helps to register, find and reunite family, friends and loved ones during a disaster. For more information visit https://register.redcross.org.au/ • Provision of psychosocial supports to disaster affected communities. • Delivery of recovery supports and services in evacuation centres, recovery hubs and through outreach. • Support the management and operations of evacuation centres upon request from council. • Provide psychosocial supports and psychological first aid in evacuation centres, recovery hubs, and through outreach.

<p>Department of Treaty, Aboriginal and Torres Strait Islander Partnerships, Communities and the Arts (Advisory Member)</p>	<p>Role Functional lead for human and social recovery.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Advice and State Government human and social resources in support of LDMG-led recovery processes. • Coordination and collaboration between agencies engaged in human and social recovery at a district and state level. • Service delivery to disaster-affected people through triage assessment, outreach services and recovery hubs. • Financial assistance to disaster-impacted people through: <ul style="list-style-type: none"> - Emergency Hardship Assistance Grants. - Essential Services Hardship Assistance Grants. - Essential Household Contents Grants. - Structural Assistance Grants. - Essential Services Safety and Reconnection Scheme. • Information, advice, referral, counselling and personal support through arrangements with partner agencies. • The Management of Smart Service Queensland and the associated telephony systems on behalf of a number of government departments such as SES and the Community Recovery Hotline.
<p>Department of Education (Advisory Member)</p>	<p>Role Lead, manage and coordinate the department’s planning, preparation, response and recovery from disasters and emergencies.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Maintain the safety and wellbeing of students, staff and volunteers who work or participate in Department of Education (DoE) schools, institutions and workplaces. • Ensure that all state schools, regional offices and other workplaces have a documented emergency response plan. • Ensure that all DoE regional offices and key workplaces have a tested business continuity plan. • Ensure that DoE is prepared to respond to and recover from, disasters and emergencies. • Contribute to the state-wide response to disasters and emergencies, as required. • Provide workplace health and safety advice, information and awareness about electrical, chemical, asbestos and general safety matters in the lead up to, during and following cyclones, storms, floods and other disasters. • Facilitate the return of affected state schools to normal operations as soon as safe and practicable following an event. • Facilitate the transition of DoE facilities to cyclone shelters, places of refuge and evacuation centres, as required or directed.
<p>Department of Housing, Local Government, Planning and Public Works (Advisory Member)</p>	<p>Role Lead agency for housing and homelessness support services</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • The provision of housing assistance including social housing and the activation and management of the Emergency Housing Assistance Referral Service (EHASRS) and homelessness support services. • The Management of Smart Service Queensland

PART 4: MACKAY LOCAL DISASTER MANAGEMENT GROUP

Mackay LDMG Member Organisation Roles and Responsibilities - Table 1 continued

<p>Queensland Fire Department (Rural Fire Operations) (Advisory Member)</p>	<p>Role Lead agency for the Mackay Area Fire Management Group.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Respond to the outbreak of fires within the Mackay local government area. • Undertake a range of planning, preparation and mitigation activities, including hazard reduction burns. • Community education on fire behaviour and prevention. • Manage permits to light fires. • Assist other emergency service agencies during disasters.
<p>Energy Queensland (Ergon Energy) (Advisory Member)</p>	<p>Role Maintenance and/or restoration of electrical power supply.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Advise the LDMG and the public in relation to electrical power issues, including safety advice for consumers. • Request and provide assistance through the local group, as required, during disaster operations.
<p>Department of Transport and Main Roads (Advisory Member)</p>	<p>Role Functional lead agency for planning, coordination and implementation of roads and transport recovery in Queensland. Coordinate the effective and efficient delivery of state-controlled road and transport recovery and reconstruction activities.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Provide information and advice on the impact of disruptive events on road, rail, aviation and maritime infrastructure as it affects the transport system. • Enable an accessible transport system through reinstating road, rail and maritime infrastructure. • Assist with the safe movement of people as a result of mass evacuation of a disaster affected community. • Ensure the capability of logistics related industries are appropriately applied to disaster response and recovery activities.
<p>Department of Environment and Science (Advisory Member)</p>	<p>Role Functional Lead Agency for the environmental recovery.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Provide oiled wildlife response, traditional owner liaison, environmental and shoreline assessments and waste management advice and approvals for ship-sourced pollution at sea. • Provide information and advice with respect to regulated (tailings, contaminated water) dam locations, and coordinate expert advice on regulated dam safety and integrity. • Provide expert environmental advice in disasters. • Provide for the safety of national parks and agency-owned recreational centre users including issuing warnings in extreme conditions, closing areas where necessary and coordinating evacuations with QPS. • Provide advice on the management of national parks and expert knowledge of national parks to responding agencies. • Lead firefighting on the protected areas and state forest where there is no threat to life or property.

Mackay Health and Hospital Services - Mackay (Advisory Member)	<p>Role Coordinate and manage the health aspects of a disaster or emergency incident across the full spectrum of prevention, preparedness, response and recovery including health advice to the community, public health, clinical care, forensic support and mental health.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Lead agency for the response functions of public health, mental health, medical services and mass casualty management. • Primary agency for heatwave, pandemic influenza, biological and radiological incidents. • Develop health-focused disaster and emergency preparedness, response and recovery plans within the local context. • Develop and maintain disaster and emergency health response capability and capacity within the local area. • Implement business continuity plans and arrangements to maintain health services during disasters and emergencies. • Work across the local and district health sector including aged care facilities, private facilities, primary health and community care providers to ensure 'whole of health' arrangements are in place. • Provide local health disaster and emergency incident information to the public and disaster management stakeholders and develop and disseminate public health messaging. • Provide a local clinical response to mass casualty management (with QAS). • Provide recovery mental health support to affected communities (with DTATSIPCA). • Provide Public health and environmental health advice and support to local governments and affected communities and industries. • Provide environmental health risk assessment advice to other agencies, local government and industries. • Provide local communicable disease surveillance and response arrangements.
Maritime Safety Queensland (Advisory Member)	<p>Role Functional Lead Agency for ship-sourced pollution where it impacts, or is likely to impact, on Queensland Coastal Waters.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • MSQ Regional Harbour Master has the authority to close all ports and restrict all vessel movements within the port boundaries and state waters for severe weather events.
North Queensland Primary Health Network (Advisory Member)	<p>Role Mobilise and coordinate primary healthcare services quickly to provide the appropriate care, reducing burden on local hospitals before, during and after a disaster.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Attend LDMG meetings. • Provide Situational awareness reports to the LDMG on the status of primary healthcare services before, during and after a disaster.
North Queensland Bulk Ports (Advisory Member)	<p>Role Provision of advice to the LDMG on ports services.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Provide situational awareness reports to the LDMG on the status of port services pre impact and post impact to a disaster. • Responsible for first strike oil response (ship sourced) within the Port limits

PART 4: MACKAY LOCAL DISASTER MANAGEMENT GROUP

Mackay LDMG Member Organisation Roles and Responsibilities - Table 1 continued

<p>Optus (Advisory Member)</p>	<p>Role Provision of telephone and internet communication restorations.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Provision of communications facilities. • Advise the LDMG, request and provide assistance through the local group as required during disaster operations.
<p>NBN Co (Advisory Member)</p>	<p>Role Provision of telephone and internet communication restorations.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Provision of communications facilities. • Advise the LDMG, request and provide assistance through the local group as required during disaster operations.
<p>Sunwater (Advisory Member)</p>	<p>Role Functional lead for the management and operations of referable dams owned by and operated by Sunwater as required under the <i>Water Supply (Safety and Reliability) Act 2009</i>.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Development and implementation of Emergency Action Plans for Teemburra, Eungella, Peter Faust and Kinchant dams. • Warnings and notifications to Persons-At-Risk (PAR) downstream of referable dams. • Attend LDMG meetings. • Provide situational awareness reports to the LDMG on the status of referable dams before, during and after a disaster.
<p>The Salvation Army (Advisory Member)</p>	<p>Role To provide physical, emotional and spiritual support to all members of the Australian community, meeting them at their point of need.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Support disaster-affected people and emergency services workers during times of crisis by providing emergency catering through Salvation Army Emergency Services. • Support communities through the recovery process by providing holistic support that will promote the recovery of those communities.
<p>Surf Life Saving Queensland (Advisory Member)</p>	<p>Role Primary authority for closing beaches in Queensland, SLSQ will work with all local councils and land managers to ensure proactive and concise messaging about beach closures and associated hazards.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Provide advice on coastal and aquatic rescue management to government agencies. • Provide a network of support and advice to the LDMG in relation to disaster and emergency response.
<p>Mackay Airport (Advisory Member)</p>	<p>Role Provision of advice to the LDMG on airport operations.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Attend LDMG meetings. • Provide situational awareness reports to the LDMG on the status of airport operations before, during and after a disaster.
<p>Dalrymple Bay Coal Terminal (Advisory Member)</p>	<p>Role Provision of advice to the LDMG on coal terminal services.</p> <p>Responsibilities</p> <ul style="list-style-type: none"> • Attend LDMG meetings. • Provide situational awareness reports to the LDMG on the status of coal terminal services before, during and after a disaster

RACQ CQ Rescue (Observer)	Role Provision of advice to the LDMG on air rescue services.
Aurizon (Observer)	Role Provision of advice to the LDMG on rail services.
Queensland Marine Rescue (Observer)	Role Provision of advice to the LDMG on marine rescue services.

4.5 MEETINGS

The Chairperson or Deputy Chairperson of the Mackay LDMG is to preside at all LDMG meetings. If both are absent, the Chairperson or Deputy Chairperson may appoint another nominated member of the group to preside. A formal attendance record will be kept for each meeting of the Mackay LDMG. Minutes will be recorded and documented for each meeting.

4.5.1 Schedule

In accordance with the *Disaster Management Regulation 2014*, the members of the LDMG must meet at least once in every six months at the times and places decided by the Chairperson of the group.

4.5.2 Quorum

Under Section 13 *Disaster Management Regulation 2014*, a quorum for the group is set at one half of the number of members plus one or, if one half of the number of members is not a whole number, the next highest whole number.

4.6 REPORTING

Agency representatives will provide agency specific information relative to disaster management to the local group for routine and disaster operations.

4.6.1 Routine Business Reporting

- Changes in details for agency contact arrangements.
- Submission of agency reports (written or verbal), in accordance with the State's reporting template, for meetings of the LDMG, summarising:
 - o Agency Status.
 - o Agency Operations or Mitigation Undertaken.
 - o Agency Disaster Management Training.
 - o Agency Risks/Gaps.
 - o Any Other Matters.

4.6.2 Event Reporting

The LDCC commences reporting when stood up to provide situational awareness to the local, district and state disaster management levels. The LDCC, prepares and distributes situation reports and intelligence reports to the LDMG, DDMG and relevant stakeholders. The LDCC also prepares and distributes both an initial and final recovery plan, outlining the Local Recovery Group's objectives, to the Queensland Reconstruction Authority. The Mackay LDMG will ensure regular and accurate information is received from operational areas and actions taken during activations are recorded to ensure efficient operational response, forward planning and the contents of the LDMG reports are correct and timely.



PART 5: COMMUNITY CHARACTERISTICS

A risk-based approach to disaster planning includes establishment of community context, which takes into account information such as population demographics, infrastructure, industry, climate, geography, essential public assets and challenges of the area.

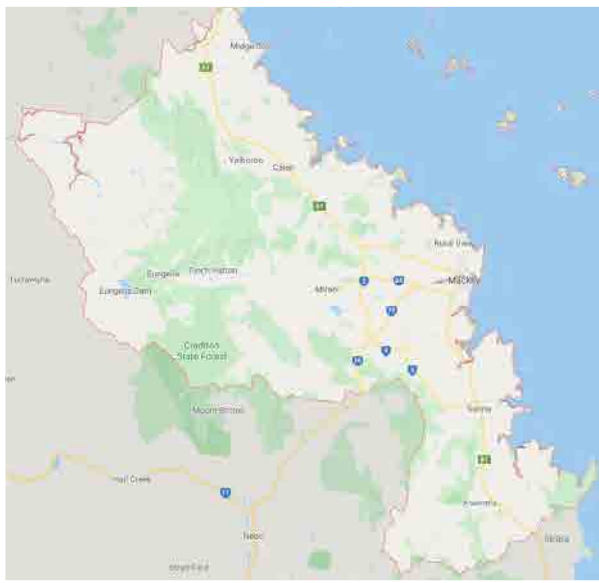


Figure 6: Mackay Local Government Area



5.1 GEOGRAPHY AND TOPOGRAPHY

The Mackay region forms part of the Mackay Disaster District and is bound by the local governments of Isaac and Whitsunday Regional councils. The total land area covers approximately 7622 km².

Most of the populated Mackay region is low lying, having an average elevation of less than 10 metres AHD (Australian Height Datum) adjacent to the coast, leading westward to the Connors and Clarke ranges, the latter supporting the community of Eungella with a sprinkling of mountainous peaks throughout the remainder.

The significant topographical feature is the Pioneer River which is fed from a 1500 square kilometre catchment in the Pioneer Valley and includes the major tributary of Cattle Creek and discharges to the Pacific Ocean via a path through the centre of Mackay.

As well as the Pioneer River, the region comprises other rivers and streams such as the O'Connell River, Bakers Creek, Sandy Creek, Alligator Creek and Plane Creek, which passes through the township of Sarina, with numerous other small streams discharging to the coast.

5.2 CLIMATE AND WEATHER

Mackay has a humid subtropical climate and can receive significant rainfall events.

Storm season typically occurs November through to April. During this time thunderstorms are common with potential for severe weather events accompanied by torrential rains, flooding and destructive winds. Monsoonal low-pressure systems and tropical cyclones occasionally affect Mackay and can cause very heavy, prolonged periods of rain, with totals of up to 200 mm often being recorded in 24 hours during these systems.

Average maximum temperatures range from 30.9 °C in January to 23.0 °C in July, while minimums range from 11.4 to 23.3 °C.

Mackay gets around 110 clear days annually.

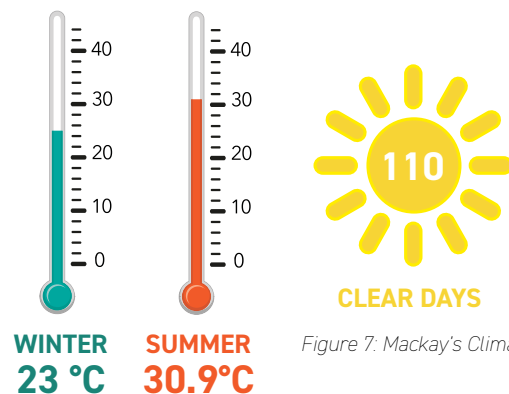


Figure 7: Mackay's Climate

PART 5: COMMUNITY CHARACTERISTICS

5.3 OUR COMMUNITY



5.3.1 People and Population

Population	126,907
Families	32,126
Aboriginal and/or Torres Strait Islander	7507
Median age	38
Currently attending an educational institution	26,983



5.3.2 Cultural Diversity

5.3.2.1 Top 6 country of birth

Australia	96,036
New Zealand	2847
England	2199
Philippines	1946
South Africa	1275
India	698

5.3.2.2 Language used at home (other than English)

Tagalog	938
Afrikaans	653
Filipino	586
Mandarin	389
Maltese	244



5.3.1 Income and Work

5.3.3.1 Employment Status

Full-time	38,161
Part-time	16,906
Away from work	3887
Unemployed	2443

5.3.3.2 Top 5 Industry of Employment

Coal mining	5596
Hospitals (except psychiatric hospitals)	2710
Primary education	1682
Supermarket and grocery stores	1513
Other social assistance services	1356

5.3.3.3 Median Weekly Income

Personal	\$866
Family	\$2215
Household	\$1853

5.3.3.4 Unpaid Work and Care

Provided unpaid assistance to a person with a disability, health condition or due to old age	10,086
Voluntary work	12,591

5.3.4 Dwellings

Occupied private dwellings	42,964
Unoccupied private dwellings	5173

5.4 VULNERABLE POPULATION

Mackay residents face a level of risk when a disaster impacts the community, however protective factors such as strong family and social connections enable many people to be better prepared and able to adapt to the effects of a disaster. This plan recognises that some people and communities do not have this support and that they are more likely to succumb to higher levels of risk, injury, loss or severe and longer-term impacts than others.

Mackay has several 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, rough sleepers and those who have difficulty communicating in English.

To reduce the impact of disasters on people with vulnerabilities, or people who may become vulnerable, DTATSIPCA has developed the [People with vulnerabilities in disasters - A framework for an effective local response](#). This framework outlines a state-wide approach to assist local governments and communities identify people who are, or who may be, highly susceptible to the impacts of disasters and plan activities to mitigate or increase their resilience and/or recovery.

The Disability Inclusive Disaster Risk Reduction (DIDRR) Framework supports further risk mitigation for people with disability and the [Mackay Regional Council - Person-Centred Emergency Preparedness \(P-CEP\)](#) workbook can also help people who are ageing at home, have a mental illness, a chronic health concern or other support needs.



5.5 PUBLIC BUILDINGS, SPACES AND EVENTS

The Mackay LGA is well serviced through public buildings including council offices and facilities (such as the Civic Centre, Art Gallery and libraries), Queensland Government department regional offices, swimming complexes, a racecourse, showgrounds, sporting facilities, primary and secondary schools, vocational education facilities and universities and places of worship.

There are many parks, playgrounds, public garden areas and open spaces. The Mackay region also plays hosts to many major cultural and social events including Global Grooves Multicultural Festival, Rumble on the Reef, the Mayors Charity Ball, Mackay Sports Expo, Mackay Marina Run and Twilight Run.

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Visit disaster.mackay.qld.gov.au and select "opt in" on the "Emergency Dashboard"

PART 5: COMMUNITY CHARACTERISTICS

5.6 COMMUNITY CRITICAL INFRASTRUCTURE AND SERVICE LOCALITIES

Critical infrastructure is given a high priority in the recovery stages of an extreme event. Table 2 shows the categories of critical infrastructure for the Mackay region.

Community Critical Infrastructure - Table 2

CATEGORY	NAME OF FACILITY OR SERVICE
Health facilities	Mackay Base Hospital, Mater Private Hospital, Sarina Hospital and Primary Health Care Centre, Mackay Private Hospital, extensive number of medical centres, day surgery and other specialist centres.
Emergency services	Queensland Police Service, Queensland Fire Department (Urban and Rural), Queensland Ambulance Service, State Emergency Service.
Major roads	Bruce Highway south to Brisbane and north to Cairns, Peak Downs Highway west to Clermont with links to Rockhampton and Brisbane.
Rail lines	Rail freight yard and railway station located in Paget, rail links to the coal ports of Hay Point and Dalrymple Bay, rail link south to Brisbane and north to Cairns, extensive cane tram lines throughout the region.
Air services	A commercial airport, located adjacent to the mouth of Bakers Creek in South Mackay, caters to regular domestic services, several smaller airstrips located in Palmyra, Marian, Turtle Park and Finch Hatton. A number of spaces within the region for helicopters to land, providing it is safe to do so.
Seaport	Port of Mackay at Mackay Harbour provides berths for general cargo, containers, bulk grain, tankers discharging both oil and LP Gas and a bulk sugar terminal. The Port of Hay Point (including Dalrymple Bay and Hay Point coal terminals) services coal mines in the Bowen Basin, Central Queensland, and are connected via rail. A commercial fishing base and a marina catering for charter vessels and other small craft are also located within the harbour. Some fishing vessels and pleasure craft use moorings in the Pioneer River below Forgan Bridge.
Power supply	Energy Queensland substations and transformers.
Gas supply	No underground reticulated gas supply, bottled gas is readily available from local distributors.
Water supply	Drawn largely from Dumbleton Weir and underground bores between Mackay and Dumbleton Rocks. Walkerston and Seaforth draw treated water from the Nebo Road Water Treatment Plant.
Sewerage	Wastewater treatment plants and sewerage reticulation is installed in each of the towns of Mackay, Sarina, Walkerston, Mirani and Marian, whilst other communities within the region are supported by septic tank systems.
Telecommunications	Services provided by Telstra, Optus, NBN and other providers with both landline and mobile services available. Copper cable network still exists with most of the trunk main network consisting of fibre optic cable. There are also dedicated telecommunications networks in the area for Police and Emergency services. Network of mobile towers strategically placed around the region which provide 4G/5G network. Major radio towers are located on Mount Blackwood and Black Mountain catering for radio broadcast and VHF and UHF service.

5.6.1 Referable Dams

The safety of water dams in Queensland is regulated under the *Water Supply (Safety and Reliability) Act 2008* (the Act). Under the Act, the Chief Executive of the Department of Resources is responsible for the regulation of referable dams in Queensland. A Referable Dam is defined as a dam which, after assessment, states the population at risk is two or more persons. Mackay has five Referable Dams within its LGA.



Referable Dams - Table 3

DAM	DETAILS
Middle Creek Dam	Located at Middle Creek Road, Sarina. Surface area of 17.5 ha. Catchment area of 7.4km ² . Full supply capacity of 1120 million litres. Managed by Mackay Regional Council.
Teemburra Dam	Located approximately 53km West of Mackay. Purpose is to supply irrigation water to sugarcane farms in the Pioneer Valley. The dam also supplies water to town water supply and industrial users. Surface area of 1,040 ha. Catchment area of 67.45km ² . Full supply capacity of 147,600 million litres. Managed by Sunwater.
Eungella Dam	Located on Broken River, approximately 72km west of Eton. Purpose is to supply water for mining and irrigation to the surrounding areas. Surface area of 848 ha. Catchment area of 142.0km ² . Full supply capacity of 112,400 million litres. Managed by Sunwater.
Kinchant Dam	Located approximately 30km southwest of Mackay. Purpose is to supply irrigation water to the Eton irrigation area. Surface area of 920 ha. Catchment area of 30.84km ² . Full supply capacity of 65,875 million litres. Managed by Sunwater.
Andrew Deguara Holding P/L	Private dam.

PART 5: COMMUNITY CHARACTERISTICS

5.7 ECONOMIC PROFILE

Mackay's Gross Regional Product (GRP) is estimated at \$11.820 billion, supports 54,582 jobs and has an annual economic output of \$25.041 billion. Output data represents the gross revenue generated by businesses/organisations in each of the industry sectors in Mackay.

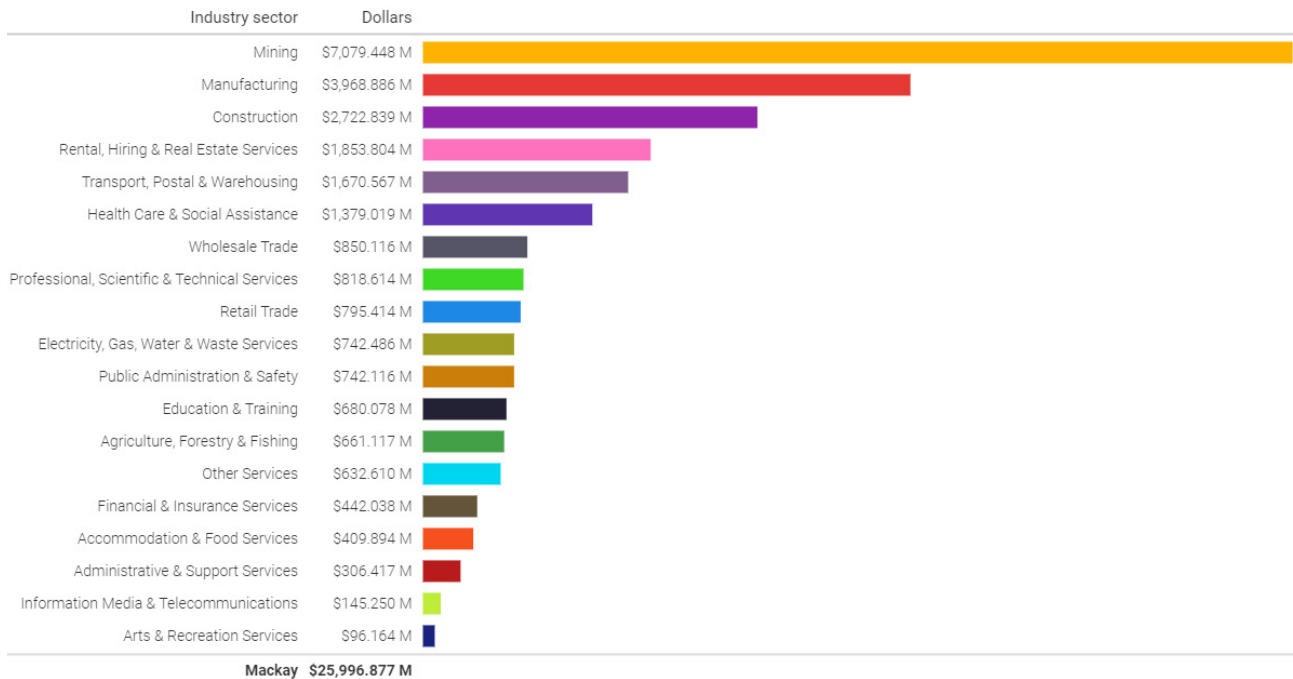


Figure 8: Mackay Industry sector outputs. (Source Mackay Economy Profile | Output, Industries | REMPLAN)

5.7.1 Mining/Industrial/Manufacturing Sector

The largest contributor to annual economic output in Mackay is mining, which represents 20.1 percent of total output. **Major industrial sites include:**

- Paget.
- Mackay Harbour.
- Glenella.
- Slade Point.
- Hay Point.
- Sugar mill sites at Racecourse, Marian, Sarina, Farleigh and Pleystowe.

5.7.2 Tourism Sector

The Mackay region is a regional, state and national tourism hub with tourism being economically significant at all levels.

In a local disaster management context, tourists pose additional challenges during a disaster because:

- The potential for large numbers of visitors needs to be considered during disaster and evacuation planning.
- Cultural and linguistic diversity (CALD) needs to be considered when communicating in the event of a disaster.
- Visitors' preparedness for any given disaster situation may be limited.

5.7.3 Commercial Sector

Mackay has several major commercial (retail and wholesale) business and shopping precincts which include restaurants and several clusters of high-density living. Major shopping centres include Caneland Central, Mount Pleasant Centre, Northern Beaches Shopping Complex, Sydney Street Markets, Parkside Plaza and many other locations.

5.7.4 Agricultural Sector

Mackay's agriculture industry is a significant contributor to the region's economy, with sugar cane being the primary agricultural product.

The region has approximately 80,000 hectares of cultivated land dedicated to sugar production, with around 69,000 hectares harvested for cane. The region is one of the largest sugar-producing areas in Australia, accounting for over a third of the country's total sugar production, of which around 85 per cent is exported globally.

5.8 EDUCATION

The Mackay region has numerous schools – public, private, independent and special. In addition, a number of childcare centres, kindergartens and early learning centres are located within the LGA.

Mackay is home to three providers of higher education.

- JCU Mater Clinical Training Centre.
- CQ University Mackay City.
- CQ University Mackay Ooralea.

Education Facilities - Table 4

SCHOOL TYPE	STATE	NON STATE	TOTAL
Primary	35	8	43
Secondary/combined	7	6	13
Special schools	1	1	2
Early Childhood	-	-	21
TOTAL	43	15	79

5.9 SPORT AND RECREATION

Mackay has a mix of large and small sporting and recreation facilities, these include open sports fields and community centres.

- Mackay Aquatic and Recreation Complex (Mackay ARC), Boundary Road, Mackay.
- Sugar Bowl Mackay, Norris Road Park Access, North Mackay.
- BB Print Stadium, Bridge Road, Mackay.
- Mackay Multi Sports Stadium, Bridge Road, Mackay.
- Pioneer Swim Centre, Malcomson Street, North Mackay.
- Memorial Swim Centre, Milton Street, Mackay.
- Mirani Swim Centre, Caroline Street, Mirani.
- Sarina Swim Centre, Anzac Street, Sarina.
- Bluewater Lagoon, River Street, Mackay.
- Mackay Turf Club, Peak Downs Highway, Ooralea.
- Andergrove Wake Park.
- Mackay Showgrounds Equestrian Facility.

There are numerous smaller sporting facilities and fields and community centres located across the region.

5.10 MAJOR EVENTS

Mackay hosts various high profile national and international events, most of which occur during the cyclone, summer storm and bushfire seasons. Major events pose challenges for evacuation and people management during disaster events.

A calendar of major events is available at [Mackay Regional Council - What's On](#).

5.11 HAZARDOUS SITES

Hazardous sites are located in the region but not in residential areas. Fuel oils such as diesel, petroleum and aviation fuels are stored at the Mackay Harbour and a Nitropril bulk storage facility is located at the harbour industrial site, well away from fuel tanks.

Both fuel and Nitropril are transported through the city enroute to the hinterland coal mines by means of road transport and rail.

Other hazardous chemicals and products are stored at many of the main industrial precinct facilities in South Mackay and Sarina for use in the production and maintenance of many industrial products, however all come under a strict licensing and QFD registration where required.



PART 6: OUR HAZARDS AND RISKS

A key component of disaster prevention and preparedness is for individuals, communities and responding entities to have a detailed understanding of our hazards and risks. The Mackay LGA has a unique topography and combines urban infrastructure with lower density residential areas. These aspects produce a broad range of possible hazards which have the potential to impact the community.

The Mackay LDMG utilises the Queensland Emergency Risk Management Framework (QERMF) to assess risks and hazards and inform its planning. This approach is collaborative and brings together LDMG members to ascertain the sources of potential harm, identify elements at risk and recognise any vulnerabilities. Through this process the LDMG has identified a range of hazards that Mackay is most likely to face.

Any risks identified by the Mackay LDMG are mitigated through local measures, supported by district and state when required. The identification of risks and hazards also informs an ongoing cycle of disaster management activities, some activities occurring continuously and others at various times in the year. The likely impact periods of natural disasters inform the disaster management activities calendar. Below is the Queensland Disaster Management Activities Calendar, demonstrating risk periods and correlating activities.

DISASTER MANAGEMENT ACTIVITIES CALENDAR



Figure 9: Disaster Management Activities Calendar (Source: Queensland State Disaster Management Plan)

PART 6: OUR HAZARDS AND RISKS

Tropical Cyclone Rating System - Table 5

CATEGORY	CENTRAL PRESSURE IN HECTOPASCALS	STRONGEST WIND GUST	TYPICAL EFFECT (INDICATIVE ONLY)
1	>985 hPa	Up to 125 km/hour	Minor house damage Damage to some crops, trees and caravans Small craft may drag moorings
2	985-970 hPa	125-170 km/hour	Minor house damage Significant damage to signs, trees and caravans Heavy damage to crops Risk of power failure Small craft may break moorings
3	970-945 hPa	170-225 km/hour	Some roof and structural damage Some caravan destruction Power failure likely
4	945-920 hPa	225-280 km/hour	Significant roof loss and structural damage to buildings Caravans destroyed Dangerous airborne debris Widespread power failure
5	<920 hPa	Greater than 280 km/hour	Extremely dangerous with widespread destruction

6.1 HAZARDS

The Mackay LGA has several natural and non-natural hazards that have the potential to affect the Mackay community. These are addressed in this section of the LDMP.

6.1.1 Tropical Cyclones

Tropical cyclones are the most disruptive and damaging natural hazard in Queensland with the potential to pose the most risk to life during impact. All Mackay LGA residents need to be prepared for a cyclone. Cyclones have made landfall in and around the region previously, causing deaths, destroying homes and infrastructure and having devastating effects on our beaches. Cyclones crossing the coast elsewhere in Queensland can still bring devastating wind and rain to the Mackay area.

As a cyclone approaches, the wind and rain gradually increases over several hours. Winds caused by cyclones are powerful enough to break large trees, roll over shipping containers, and blow away unsecured caravans,

garden sheds and patios. Strong winds associated with cyclones can cause extensive property damage and turn loose items into wind-borne debris that cause further building damage. Slow moving cyclones can take many hours to move past a particular location, causing extreme wind and rain that lasts hours and days after the initial coastal crossing.

The severity of a tropical cyclone is described in terms of categories, ranging from 1 (weakest) to 5 (strongest), related to the maximum mean wind speed. Table 5 explains the Tropical Cyclone Rating System in more detail. Tropical cyclones are referred to as "severe tropical cyclones" when they are producing "very destructive winds", which corresponds to category 3, 4 and 5. This is also the trigger point for opening of public cyclone shelters.

In recent years, the Mackay LGA has seen impacts from a number of tropical cyclone crossings.



Mackay Region Cyclone Crossings - Table 6

YEAR	NAME/CATEGORY	DETAILS
2017	Severe Tropical Cyclone Debbie Category 4	<p>Crossed near Airlie Beach in March, 2017. Shortly after crossing, Debbie slowed down to only 7 km/h, and locations such as Airlie Beach and Proserpine were exposed to the very destructive winds near the cyclones core for many hours. Proserpine recorded wind gusts to 165 km/h.</p> <p>A 2.6 metre storm surge was recorded by the Laguna Quays storm tide gauge, which exceeded the Highest Astronomical Tide (HAT) by 0.9 metres, despite the landfall occurring between low and high tide.</p> <p>Clarke Range, west of Mackay, received 986mm in the 48 hours to 9am Wednesday, March 29 and Mt Jukes, northwest of Mackay, recorded 635mm in the 24 hours to 9am Thursday, March 30. Nearly 100 people required assistance from floodwaters in the Eton and Homebush areas of Mackay due to flooding.</p>
2014	Cyclone Dylan Category 2	<p>Crossed near Bowen in January, 2014 causing heavy rainfall along the Central Queensland coast and adjacent inland areas.</p> <p>Clarke Range, west of Mackay, received 515mm in 24 hours.</p> <p>A 1.4 metre storm surge (not including wave set up) was recorded at Laguna Quays.</p>
2010	Severe Tropical Cyclone Ului Category 3	<p>Crossed near Airlie Beach in March 2010. Significant wind damage was reported around the Central Coast and Whitsundays district, mainly between Airlie Beach and Mackay. Reports of damage included widespread tree damage, large areas of sugarcane destroyed and localised structural damage, particularly to roofs. Around 50,000 homes lost power following the passage of the system.</p>

PART 6: OUR HAZARDS AND RISKS

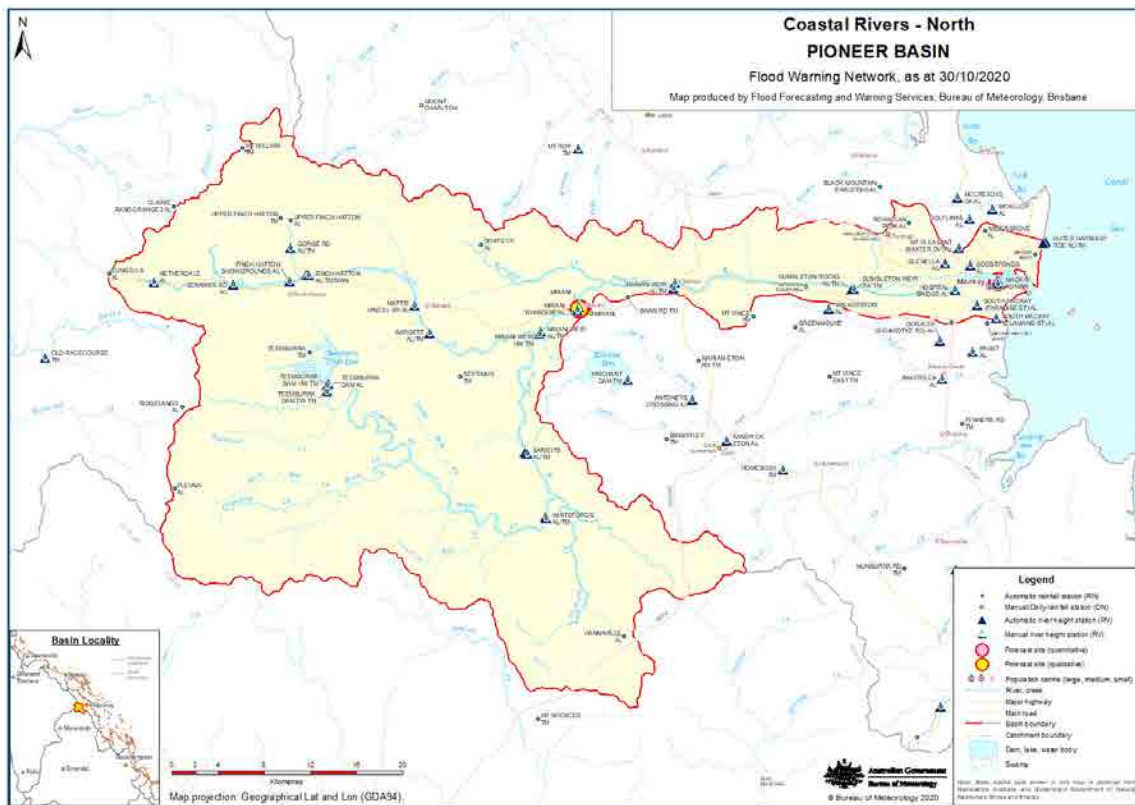


Figure 10: Pioneer River Basin Catchment Map (Source: Bureau of Meteorology)

6.1.2 Flooding

A flood is an overflow of water beyond the normal limits of a watercourse. Flooding occurs when water extends over what is usually dry land. This can happen when it escapes from a natural watercourse, such as a lake, river or creek. It can also happen when water is released from a reservoir, canal or dam. There are two types of flooding – riverine and flash.

Riverine flooding is where rivers break their banks and water covers the surrounding land. It's mostly caused by heavy rainfall, but can also be caused by king tides, storm surge and dam releases.

The Pioneer River is the largest drainage feature in the Mackay region with a catchment area of about 1560 square metres. The Pioneer River flows in an easterly direction from the Clarke and Connors Ranges to the sea at Mackay. Major creeks within the catchment include Cattle Creek, Teemburra Creek, Blacks Creek, Goosepond Creek, and Fursden Creek.

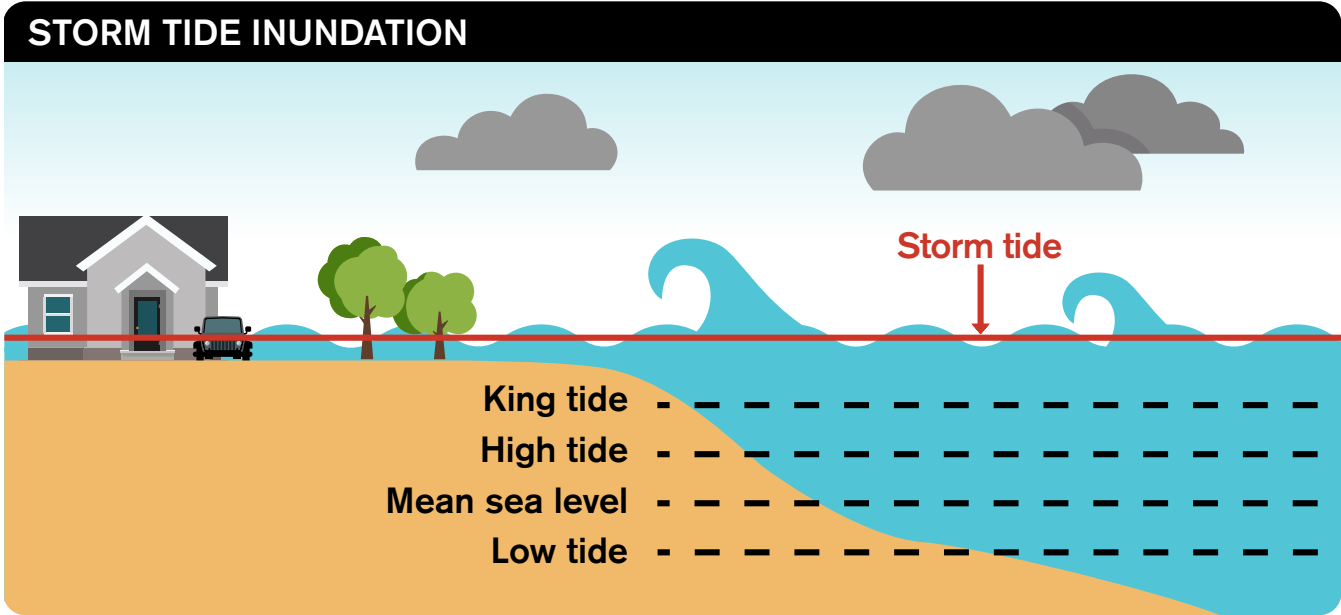
The CBD and North Mackay are protected by a river levee to a height of about 9.2m (LAT or gauge height). However, if the levee is overtopped or fails, there would be significant inundation through the CBD and/or North Mackay.

Flash flooding occurs within six hours of rain falling. It can happen after a short burst of heavy rain, such as from a thunderstorm. Flash floods can be a serious problem in urban areas if drainage systems can't cope and tend to affect a localised area.

The BoM will issue a Flood Watch when forecasted rainfall suggests that local and riverine flooding is possible. Its purpose is to provide early advice of a developing situation that may lead to flooding. A Flood Watch isn't a warning of imminent flooding.

The BoM will issue a Flood Warning if there is more certainty that flooding is expected in a particular location. Flood warnings are more targeted and are issued for specific catchments and locations within catchments. The severity of the expected flood will be categorized into three specific flood classifications – Minor, Moderate or Major flooding.

Council maintains a network of 50 river and rain gauges within in the Mackay LGA that provides real-time rainfall and river height information. Council also has seven flood monitoring cameras located at key locations to allow for situational awareness and evacuation pre-planning. Further information can be found at council's Emergency Dashboard.



King tide (Highest Astronomical Tide)
 Mean sea level (Equals 0 Australian Height Datum)
 Low tide (Lowest Astronomical Tide)

Figure 11: Storm Tide Inundation

6.1.3 Storm Surge and Tide

A storm tide is the rise of the ocean water level, combined with the tide at the time and strong onshore winds and/or reduced atmospheric pressure. This combination of effects, especially if it occurs on a high tide or king tide, can force sea water and pounding waves into areas that would normally be well above sea level and sometimes several kilometres inland if the land is low lying. The more intense the cyclone is, the higher the storm tide risk is.

The Mackay region has a very high risk of being impacted by cyclones, including storm tide, during the “cyclone season”, which officially runs from November to April. The Mackay region has several low-lying areas at significant risk from storm tide.

6.1.4 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 crown of the tree canopy can move rapidly.

The bushfire danger period extends from mid-late winter through to early summer (August to December). Seasonal conditions can exacerbate potential bushfire situations; 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.

Natural bushlands are prone to bushfire. Grassland fires are possible in most rural areas depending on seasonal conditions.

The Mackay Area Fire Management Group (AFMG) develops and reviews its Fire Management Plan in conjunction with council and other key stakeholders. This plan provides a shared understanding of the important geographical and access features of these estates and they contain information critical for balancing emergency response priorities with those of environmental conservation and protection of culturally sensitive sites.

PART 6: OUR HAZARDS AND RISKS



6.1.5 Severe Thunderstorms / Weather

Severe thunderstorms are localised events that usually do not affect areas as widely as tropical cyclones and floods, therefore, their impacts are often underestimated. Thunderstorms that produce any of the following events are classified as severe in Australia:

- Large hail (2cm or greater in diameter).
- Wind gusts (90km/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. In October 2021, the township of Yalboroo experienced a significant event which saw the township hit by hailstones up to 16cm in diameter.

The Bureau of Meteorology advised these were the largest hailstones seen in Australia since records began. The event caused extensive damage, including shattered windscreens and potential harm to livestock.

6.1.6 Heatwave

The Bureau of Meteorology defines a heatwave as three days or more of high maximum and minimum temperatures that is unusual for that location. Heatwaves are sometimes described as a "silent killer" and can result in significant health stress on vulnerable people.

This stress may result in death during the heat event, but in many cases, death occurs 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 also affect the reliability of infrastructure, such as power, water and transport services.

6.1.7 Pandemic

A pandemic is a worldwide spread of a new disease and is usually a viral respiratory disease. 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 quarantine of large numbers of people for a protracted period.

As the COVID-19 pandemic demonstrated, pandemic mitigation measures may have significant psychological and economic impacts in the community and may require significant changes to emergency response and planning by responsible agencies.

6.1.8 Earthquake

Earthquakes are the vibrations caused by rocks breaking under stress. The underground surface along which the rock breaks and moves is called a fault plane. Earthquakes in Australia are usually caused by movements along faults as a result of compression in the Earth's crust.

Earthquake hazard in the Mackay region is high in Queensland terms, moderate in Australian terms and low in global terms. On August 18, 2016, at 2.30pm the second largest earthquake on record in Queensland of 5.8 magnitude occurred just offshore within the Whitsunday region, about 50km from Bowen. This earthquake was felt across the entire region and large amounts of Queensland and was followed by more than 50 aftershocks.



6.1.9 Landslides

A landslide is the movement of rock, debris or earth down a slope. Landslides result from the failure of the materials which make up the hill slope and are driven by the force of gravity. Landslides can be triggered by natural causes or by human activity. In general, the factors which influence whether a landslide will occur typically include slope angle, climate, weathering, water content, vegetation, geology, slope stability and the amount of loading on the slope (overloading).

Major landslides have occurred in the Mackay region. Sarina Range was heavily impacted during Tropical Cyclone Debbie and resulted in the locality becoming isolated for a lengthy period of time. Eungella Range has also been impacted by heavy rainfalls. Other areas of the region which could be susceptible to landslides under certain conditions include Mt Pleasant, Mt Oscar, Blacks Beach, Dolphin Heads, Rural View, Golfink Heights, Nindaroo, Habana, Sarina and Eton Range.

6.1.10 Dam Failure

The Mackay LGA has five referable dams. A dam fails when there is a physical, structural collapse or an uncontrolled release of any water. All referable dams in Mackay LGA have emergency action plans that outline what areas would be inundated from a failure and what actions dam operators would take. All Mackay residents should be prepared for a dam failure, as these can occur in conjunction with severe weather events, which could make the impacts more widespread.

6.1.11 Tsunami

Tsunami are waves caused by the sudden movement of the ocean surface due to earthquakes, sea floor landslides, land slumping into the ocean, large volcanic eruptions or meteorite impacts in the ocean. There is little recorded history of tsunami in Australia, however the risk is still present.



PART 7: DISASTER RISK ASSESSMENT

Understanding disaster risk and disaster risk reduction are international priorities, as captured within the United Nations Office for Disaster Risk Reduction Sendai Framework for Disaster Risk Reduction 2015-2030 “Priorities for Action”. The Sendai framework is available on the United Nations Office for Disaster Risk Reduction website. Australia is a signatory to the Sendai framework. Consequently, the Queensland Government has introduced the Queensland Emergency Risk Management Framework (QERMF) to assist all levels of the disaster management sector in their development of risk reduction strategies.

Assessing community risk is a key and integral building block of disaster management planning. An understanding of the potential hazards and the risks they pose enhances the development of effective disaster management plans thereby lessening the impact of a disaster event.

The QERMF, available at [Disaster Management | Queensland Government](#), has been developed to inform a risk-based planning process across the disaster management sector in Queensland and has been endorsed by QDMC. The Mackay LDMG utilises the QERMF methodology in assessing and managing community risk.



7.1 RISK ASSESSMENT OUTLINE

There are four steps in the risk assessment process (refer to figure 12 on the following page), as detailed in the QERMF, namely:

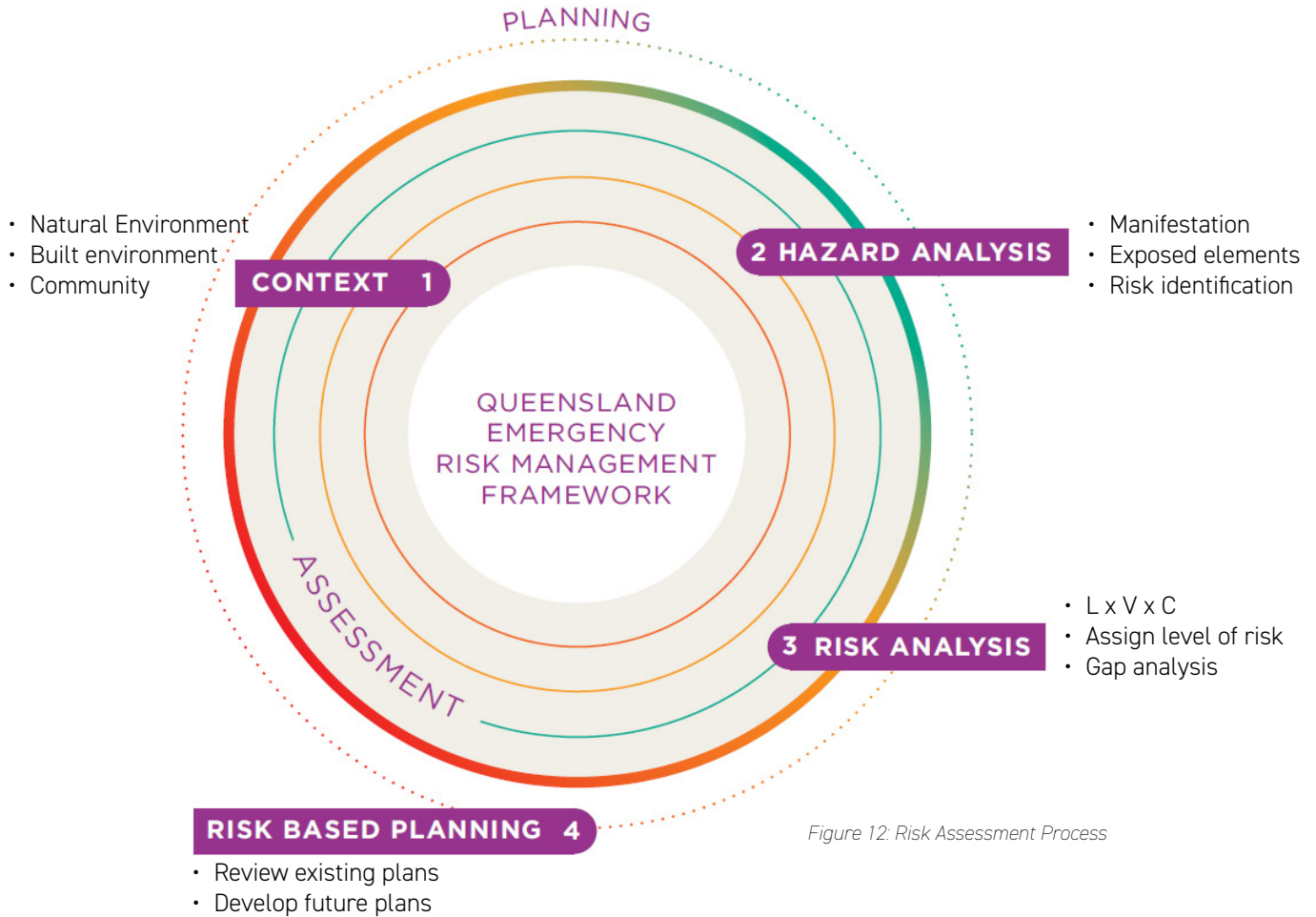
Step 1: Establishing the context – an understanding of the natural landscape, climate, demographics, economy, and community infrastructure.

Step 2: Analysing the hazards – relevant hazards are identified through probabilistic analysis of historical data for a specific area or region.

Step 3: Assessing the risk – formalises the risk analysis process and leads directly to the clear identification of risk that may arise when a potential hazard becomes reality.

Step 4: Risk-based planning – this comprises the treatment of identified risk and the management of residual risk and allows for effective planning at and between all levels of QDMA – local, district and state.

PART 7: DISASTER RISK ASSESSMENT



7.2 DISASTER RISK PLANNING

Disaster management planning reduces the unknowns. Planning increases the understanding of risks, vulnerabilities and treatment options across the social, built, economic and natural environments.

7.2.1 Risk Treatment

The Mackay LDMG is committed to identifying risk treatments including mitigation works, preparations for response and management of risks within their area of responsibility. Council will identify responsible agencies and plan for mitigation activities, response preparations and management of risks. Hazard-specific lead agencies have responsibility for hazard identification, assessment, and implementation of treatments.

7.2.2 Residual Risks

Residual risk is the disaster risk that remains even when effective disaster risk reduction measures are in place, and for which emergency response and recovery capacities must be maintained.

The presence of residual risk implies a continuing need to develop and support effective capacities for emergency services, preparedness, response and recovery, together with socioeconomic policies such as safety nets and risk transfer mechanisms, as part of a holistic approach. Council recognises that there will be instances when the Mackay LDMG identifies areas of residual risk, which will in turn require the application of suitable treatment options with the assistance of either the district or state levels of the QDMA system.

7.2.3 Increased Risk from a Changing Climate

Climate change is any change in the climate, lasting for several decades or longer, including changes in temperature, rainfall or wind patterns and, coupled with increased population growth and urban development, is likely to increase exposure and risks to Queensland communities and infrastructure.

Climate change increases the frequency, distribution, duration and intensity of weather events, which will expose the community to hotter summers, more intense rainfall, flooding, storms and cyclones. An emphasis on understanding the impacts and preparing for them will be integral to mitigating the risks of climate change.





PART 8: PREVENTION

Prevention refers to measures, regulatory and physical, to ensure that emergencies are prevented, or their effects mitigated. According to the Australian Institute for Disaster Resilience (AIDR) Glossary, mitigation is defined as measures taken in advance of a disaster aimed at decreasing or eliminating its impact on society and environment. Proactive, targeted prevention and mitigation strategies designed to address likely risk factors, the vulnerability of the population and reduce or eliminate the possible impact of disasters ultimately ensures safer, more resilient and sustainable communities.

Due to impact of natural disasters on the Mackay region, the community continues to develop resilience and an ability to adapt to the effects of disaster events. This is increasingly important as the frequency and intensity of natural disasters is predicted to rise.

Disaster resilience is a shared responsibility of all sectors, including all levels of government, business, Non-Government Organisations (NGO's) and individuals.

Examples of mitigation strategies include:

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

8.1 COMMUNITY EDUCATION

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

The Mackay LDMG utilises the state-wide Get Ready Queensland campaign as the overriding messaging for disaster awareness within Mackay. Funding made available to council through the Get Ready Queensland program is used to produce community education and awareness products and undertake disaster preparedness activities at key events, such as Disaster Ready Saturday.

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



8.2 HAZARD REDUCTION PROGRAMS

Agencies that make up the LDMG are responsible for ensuring risk sources are kept to a minimum and/or reduced wherever possible. Actions in this regard 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 and/or upgrade of high-risk hazards and structures.
- Public education to reduce disaster risks around the home.
- Catchment management programs (for example, waterway/natural drainage maintenance).
- Development, construction or installation of new infrastructure to reduce disaster impacts and expedite community recovery.

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

8.3 BUILDING CODES, REGULATIONS AND STANDARDS

Buildings and structures within the council jurisdiction are approved by registered Building Certifiers and regulated by relevant local, state and federal agencies as authorised by legislation, to ensure compliance with Australian building codes, regulations and standards.

Under the National Construction Code of Australia, areas of Australia are categorised according to the probability of being subject to cyclonic conditions. The Mackay region is recognised under legislation to be in a Wind Region C Tropical Cyclone Area. As such, all building applications are assessed to ensure they comply with legislation.



8.4 LAND-USE PLANNING

Managing land use is a key strategy to reducing disaster risks within the Mackay region. Through land-use planning, the potential for displacement, damage and disruption to communities can be reduced.

Council has prepared the Mackay Region Planning Scheme 2017 (Planning Scheme). The Planning Scheme can be located at Mackay Regional Council - Planning & Development.

The Planning Scheme is an evolving document and includes plans, reference for land use management, codes for development and requirements pertaining to the assessment of proposed developments.

As such, the Planning Scheme contributes to disaster risk reduction within identified hazard-prone/constraint areas. In particular, it maps land subject to:

- Potential bushfire hazard areas.
- Coastal erosion.
- Landslide hazard.
- Flood hazard.
- Storm tide inundation.

8.5 INSURANCE

Residents, businesses and other organisations are encouraged to evaluate their risks and consider appropriate levels of insurance, making sure that they understand what coverage they have in relation to natural disasters.

Get Ready Queensland has information to help residents ensure they are appropriately covered with insurance resources which can be found at [Insurance resources | Get Ready Queensland.](#)



PART 9: PREPAREDNESS

Preparedness is the taking of preparatory measures to ensure that, if a disaster event occurs, communities, resources and services can cope with the effect of that event. It is a critical element in minimising consequences of an event on a community and ensuring effective response and recovery.

Mackay LDMG preparedness activities are centred on three key elements:

- Planning
- Capability Integration; and
- Community Engagement.

9.1 PLANNING

At a local level, comprehensive planning occurs across all phases of disaster management – prevention, preparedness, response and recovery and all plans consider the specific vulnerabilities and elements at risk in the Mackay region.

The Mackay LDMG has plans for specific hazards with distinct operational requirements, specific functional activities and to ensure business disruptions are minimised. Council also assists the community to develop their own household emergency plans.

9.1.1 Hazard Specific Plans

While the Mackay LDMG maintains an all-hazards approach to disaster management, the LDMG recognises the unique operational and coordination requirements that some disasters may require. Council maintains several hazard specific plans to address these exceptional requirements, both as a lead agency and a support agency. Table 8 (see following page) identifies the primary (hazard-specific) agencies for the Mackay LGA as per the SDMP.

9.1.2 Operational Sub Plans

The Mackay LDMG is a lead agency for several response functions. The LDMG's operational plans address these specific activities that contribute to disaster management across all phases of PPRR and supports the LDMP.

Mackay LDMG Operational Sub Plans - Table 7

LDMG Activation Sub Plan
Evacuation Sub Plan
Evacuation Centre Sub Plan
Local Recovery Sub Plan
Resupply Sub Plan
LDCC Operations Sub Plan
Public Cyclone Shelter Operational Sub Plan
Public Information and Warnings Sub Plan
Pandemic Sub Plan

PART 9: PREPAREDNESS

Primary (hazard-specific) agencies - Table 8

HAZARD	PRIMARY AGENCY	OTHER RELATED PLANS (EXCLUDING SUB PLANS)
<ul style="list-style-type: none"> • Animal or plant disease (bio-security) 	Department of Agriculture and Fisheries	<ul style="list-style-type: none"> • 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) • DAF Disaster Management Plan
<ul style="list-style-type: none"> • Biological (human related) • Communicable Disease • Radiological • Pandemic • Heatwave 	Queensland Health	<ul style="list-style-type: none"> • Queensland Pandemic Influenza Plan • National Action Plan for Influenza Pandemic • State of Queensland Multi-Agency Response to Chemical, Biological and Radiological Incidents • Queensland Whole of Government Pandemic Plan • Heatwave Response Plan
<ul style="list-style-type: none"> • Earthquake • Landslip • Flood • Severe Weather • Cyclone 	Mackay Local Disaster Management Group	
<ul style="list-style-type: none"> • Fire – Structural • Fire – Bushfire • Chemical 	Queensland Fire Department	<ul style="list-style-type: none"> • Wildfire Mitigation and Readiness Plans • Queensland Bushfire Plan • State of Queensland Multi-Agency Response to Chemical, Biological and Radiological Incidents
<ul style="list-style-type: none"> • Major transport incident/s (road, rail, marine) 	Queensland Police Service	<ul style="list-style-type: none"> • Operational Procedures Manual (OPM) • Queensland Mass Casualty Incident Plan
<ul style="list-style-type: none"> • Ship sourced pollution 	Department of Transport and Main Roads	<ul style="list-style-type: none"> • Queensland Coastal Contingency Action Plan
<ul style="list-style-type: none"> • Terrorism 	Queensland Police Service	<ul style="list-style-type: none"> • Queensland Counter Terrorism Plan

9.1.3 Business Continuity Planning

The nature of disaster events means disruptions to operations are likely. A range of disruptions can occur including loss of power, ICT, communication, transport networks, disruptions to staffing, etc.

The Mackay LDMG encourages community groups, businesses, developers, sporting groups and others to prepare emergency and business continuity plans. The group especially encourages organisations that care for vulnerable sectors of the community, such as aged care providers, to prepare emergency plans in consultation

with the appropriate agency. Queensland Health have released the [Residential Aged Care - Planning Resource](#) for operators of aged care facilities to develop, review or update their business continuity and disaster or emergency management plans.

Further information on business continuity can be found at [Mackay Regional Council - Business continuity](#).

9.1.4 Person-Centred Emergency Preparedness Plan

In-line with Disability Inclusive Disaster Risk Reduction practices, council has introduced the Person-Centred Emergency Preparedness (P-CEP) Plan.

P-CEP is a process for people with disability to create a plan for their needs in emergencies. P-CEP can also help people who are ageing at home, have a mental illness, a chronic health concern, and other support needs. P-CEP was co-designed by people with disability, carers, community organisations, emergency services, and researchers. It provides the tools and guidance for people with disability to develop emergency plans that are tailored to their individual support needs, so they can maintain their safety and wellbeing during an emergency.

More information can be found at [Mackay Regional Council - Person-Centred Emergency Preparedness \(P-CEP\)](#)

9.2 CAPABILITY INTEGRATION

Council prepares for disasters through a continuous cycle of risk management, planning, coordinating, training, equipping, exercising, evaluating and taking corrective action to ensure effective coordination and response during disasters.

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

9.2.1 Training and Education

Disaster Management training provides an opportunity to promote awareness and develop competence. The Act requires that persons involved in disaster operations are appropriately trained. The Queensland Disaster Management Training Framework (QDMTF) outlines this training requirement for LDMG, LRG and LDCC members.

9.2.2 Exercises

An exercise is a controlled activity used to train or assess personnel, evaluate procedures and test the availability and suitability of resources. Exercises are an essential component of disaster preparedness and can be used by the Mackay LDMG and member organisations to enhance capacity and contribute to continuous improvement. In most cases, exercises are usually scenario based and focus on achieving specific objectives.

Legislatively, 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 local government can meet this requirement. The activation of the LDMG, for example dealing with a disaster, would also satisfy this legislative requirement.



9.2.3 Lessons Management

The Mackay LDMG subscribes to ongoing learning through a lessons management process. Council facilitates and coordinates routine debriefs, after action reviews and learning application from events, exercises, training, and reviews.

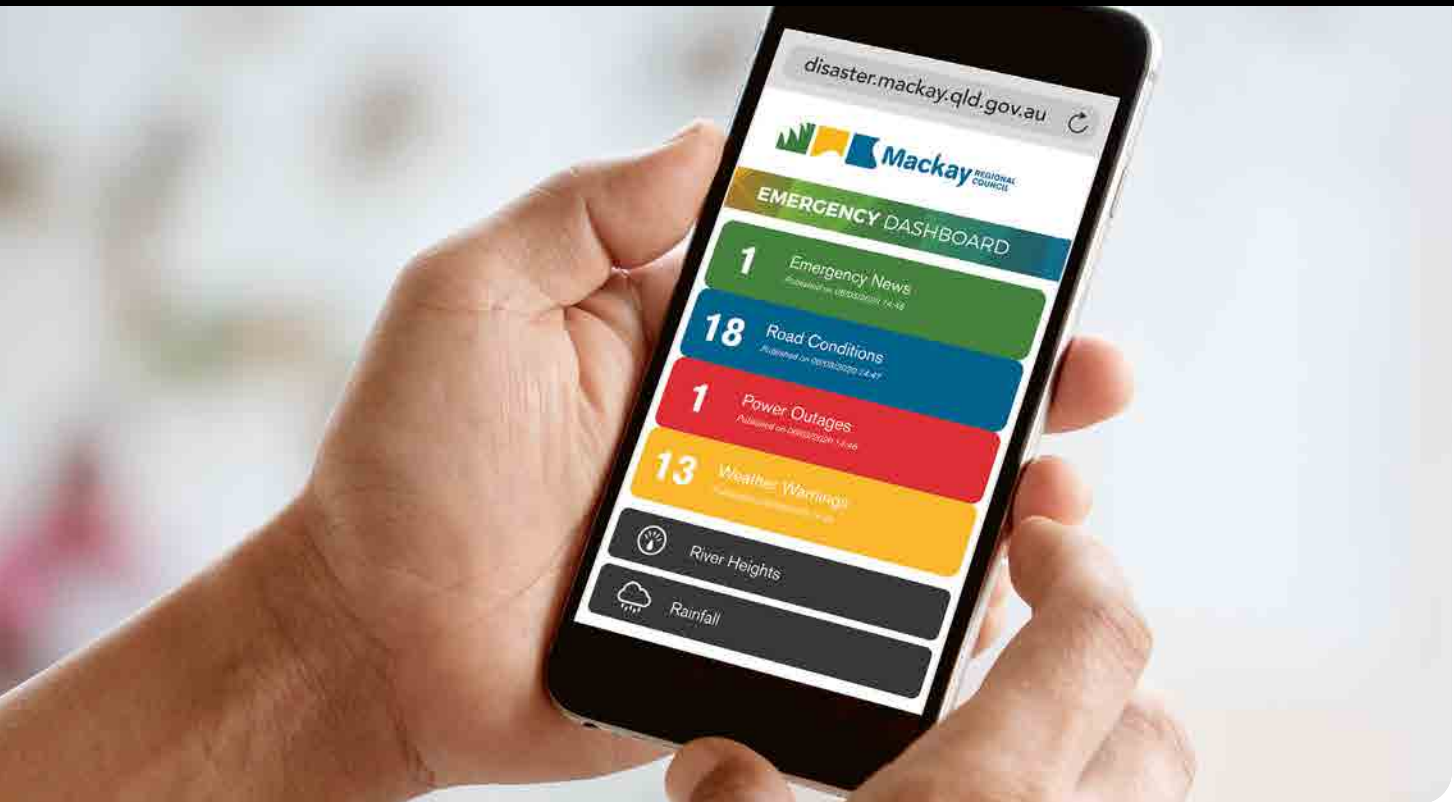
Council also engages with the Inspector-General of Emergency Management (IGEM), who maintains the state's disaster management assurance program to ensure best practice and alignment with The Standard for Disaster Management in Queensland.

9.2.4 Emergency Liaison Officers

Council maintains a network of volunteer Emergency Liaison Officers (ELO) in localities throughout the region that can become isolated during severe weather events. The ELOs provide local intelligence that can assist in maintaining situational awareness during an emergency.

ELOs are currently operating at Midge Point, Seaforth, Eungella, Middle Creek Dam, Koumala, Bloomsbury, Crediton and Laguna Quays. Residents interested in finding out more about the ELO program can email emteam@mackay.qld.gov.au

PART 9: PREPAREDNESS



9.3 COMMUNITY EDUCATION

The engagement and preparedness of communities directly influences their resilience. Council's community engagement aims to develop awareness of potential impacts of hazards, promote self-reliance through managing personal risk, actively engage vulnerable groups and encourage community led disaster resilience.

While council will continually engage with the community, it is important for the community to become self-reliant by taking personal responsibility for understanding their local hazards and risks as well as actions they can take to mitigate the effects of a disaster. The Queensland Government's Get Ready Queensland Prepare For Natural Disaster | Get Ready Queensland website promotes how residents can understand the risks and impacts to their community and be prepared for when an event occurs.

9.3.1 Emergency Dashboard

The Emergency Dashboard is the central point for disaster related information for Mackay region. The Dashboard contains disaster preparedness information, emergency alerts and warnings, power outages, road closures and weather warnings.

The emergency situation map, embedded in the Dashboard, is an interactive mapping tool which provides live information on road closures, flood monitoring cameras, QFD current incidents, evacuation zones and cyclone tracking map. The Mackay community also have the option to opt-in to receive live notifications of any emergency alerts and warnings which may be issued.

9.3.2 Emergency Management Information

Council has a dedicated [Mackay Regional Council - Emergency Management](#) page embedded within its public website. This page provides information, tools and resources such as evacuation maps, sand stockpile locations, household emergency planning and P-CEP to aid the Mackay community across all phases of PPRR.

9.3.3 Disaster Ready Saturday

Disaster Ready Saturday is a community focused disaster readiness information day held at Caneland Central shopping centre in November each year. This event is facilitated by council and includes key LDMG members and emergency response agencies who provide the Mackay community with advice, resources and tools on how to best prepare, respond and recover from a disaster. Persons who are new to the Mackay Region and who may not be familiar with life in the tropics are strongly encouraged to attend Disaster Ready Saturday and engage with disaster management experts.

9.3.4

Community Disaster Awareness and Education Sessions

Council undertakes face-to-face engagement with the community to provide valuable educational opportunities and resources. This engagement covers both wide, broad community events and events targeted at vulnerable or identified communities. Physical engagement includes presentations for school children, aged care facilities, vulnerable groups, progress associations, cultural and linguistic diverse communities, community groups, sporting associations, other groups and ad hoc occasions.





PART 10: RESPONSE

The Mackay LDMG disaster response involves taking appropriate measures before, during and immediately after an event, to ensure that its effects are minimised, and the affected community are given immediate relief and support. The Mackay LDMG activates both as the nominated lead agency, and to support other agencies in the coordination of disaster management activities. Alongside the LDMG, the Mackay LDCC and Public Cyclone Shelter Management Team (PCSMT) may also be activated.

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



10.1 RESPONSE AND THE LOCAL DISASTER MANAGEMENT GROUP

The LDMG is informed of the day-to-day emergency (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 event 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 and change of status of the Mackay LDMG can be authorised by the Chairperson, Deputy Chairperson, LDC or D/LDC on receipt of any of the following:

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

PART 10: RESPONSE

10.2 ACTIVATION LEVELS

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

There are four activation levels:



The levels are not sequential and may be skipped depending on the situation. The activation levels are based on the levels of activation in accordance with the SDMP and are described in Table 9 below.

LDMG Activation Levels - Table 9	
LEVEL OF ACTIVATION	DEFINITION
ALERT	A heightened level of vigilance and preparedness due to the possibility of an event in the area of responsibility. Some action may be required, and the situation should be monitored by staff capable of assessing and preparing for the potential hazard.
LEAN FORWARD	An operational state characterised by a heightened level of situational awareness of a disaster event (either current or impending), and a state of operational readiness. The LDCC is on standby – prepared but not activated.
STAND UP	Resources are mobilised, personnel are activated, and operational activities commenced. The LDCC is activated.
STAND DOWN	Transition from responding to back to normal core business operations. The event no longer requires a coordinated response.

10.3 LOCAL DISASTER COORDINATION CENTRE

The LDCC is established to implement the LDMG priorities, through the coordination of response and recovery activities. The LDCC is the central point of the council disaster coordination and is led by the LDC. The LDCC is staffed by council staff, who are trained in disaster management arrangements and their LDCC functions and supported by agency liaison officers from government and NGO's as appropriate to Mackay.

The primary LDCC is situated at Mackay Regional Council, Sir Albert Abbott Administration Building, 73 Gordon Street, Mackay. If necessary, a secondary LDCC is located at the Gordon White Library, 54 Phillip Street, Mount Pleasant.

10.3.1 LDCC Structure

The LDCC operates under a modified AIIMS (Australasian Inter Service Incident Management System) structure and provides a scalable approach to staff, roles and resources based on the nature, complexity and size of the event.

Under this structure, the LDCC can maintain the ability to:

- Effectively receive and manage information.
- Efficiently coordinate local resources and information.
- Identify and allocate tasks to agencies as needed in a timely manner.
- Pass information and requests for assistance to the DDMG.

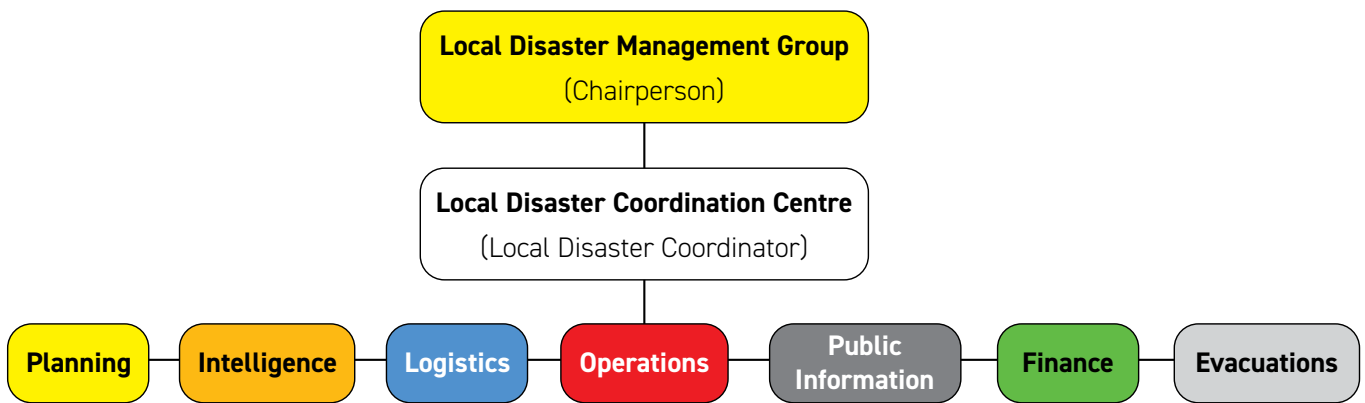


Figure 13: LDCC Structure

10.4 ACTIVATION RESPONSIBILITIES

While council is primarily responsible for managing events within the Mackay LGA, disaster management activities in Mackay can be led by different agencies, dependent on the hazard and function-specific arrangements. The primary, or lead, agency is responsible for the coordination and conduct of disaster operations during that hazard or functional activity.

The LDMG, LRG and LDCC may activate as either a lead agency response, or in support of the lead agency. This support includes logistic support, functional activities and ad hoc support requests. Importantly, each agency, as lead or support, remains in command of their own staff. Where an agency's local capacity is exceeded, they can request support through the LDMG. Where the support required is beyond the LDMG capability and capacity, the QDMA will be utilised to escalate the request to the DDMG as required.

10.4.1 Primary (Hazard-specific) Arrangements

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, QFD 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. Table 8 (above) details the primary (hazard-specific) agencies.

10.4.2 Functional Lead 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/emergency shelters, council is assisted by several 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. Table 10 details the functional lead agencies.

10.4.3 Coordination of Primary and Lead Agencies

During a disaster, a number of primary and lead agencies are likely to be operating 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.

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

Functional Lead Agencies - Table 10

FUNCTION	LEAD AGENCY
Animal management	Mackay Regional Council /RSPCA
Damage assessments	Queensland Fire Department
Evacuation (directed)	Queensland Police Service
Evacuation (voluntary)	Mackay Regional Council
Evacuation centre management	Mackay Regional Council supported by Australian Red Cross
Finance management	Agencies are responsible for their respective financial management
Impact assessments	Mackay Regional Council /QPS/Queensland Reconstruction Authority
Logistics	Mackay Regional Council
Public Health	Queensland Health
Public information	Primary agency (hazard-specific)
Public works	Department Housing and Public Works
Recovery	Activated local recovery groups – human and social, economic, environmental, infrastructure
Resupply	Mackay Regional Council /Queensland Police Service
Solid waste	Mackay Regional Council
Volunteering and donations	GIVIT and community groups

10.5 DISASTER DECLARATION

In accordance with Section 64 of the Act and with approval of the Minister, the DDC may declare a disaster situation for the district or a part of it. As outlined in Sections 75 and 77 of the Act, the declaration confers extra powers on declared disaster officers to perform actions, give directions and control movements within the declared area.

In declaring the disaster situation, the DDC is to be satisfied that a disaster has happened, is happening or is likely to happen, in the disaster district, and 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:

- Loss of human life.
- Illness or injury to humans.
- Property loss or damage.
- Damage to the environment.

10.6 CONCEPT OF OPERATIONS

10.6.1 Information Management

Document Management throughout the disaster response and recovery will be achieved through the Guardian IMS software. The software provides the ability to capture all tasks, decisions, actions and information related to an event including the maintaining of activity logs, public information and expenditure to provide clear and reasonable accountability and justifications for future audit and potential reimbursement purposes.

In the event of a long-term power or software failure, the LDCC will revert to a paper-based format.

10.6.2 Operational Intelligence

Operational intelligence is the collection, collation and analysis of data and information required to drive the decision-making process, forward planning, and conduct of operations to accomplish strategic objectives.

Other sources of information may include:

- Imagery/photographic.
- Communications.
- Telemetry (for example - flood gauges).
- Human experiences.
- Reports from community ELOs.

Two key outcomes of accurate and current operational intelligence are:

- Decision-making, planning, tasking, communications and messaging.
- A common operating picture at all levels through shared situational awareness.

10.6.2.1 Impact Assessment

A key contributor to the development of operational intelligence is through the conduct of impact assessments. The purpose of an impact assessment is to collect and analyse site damage evidence to provide the LDMG with comprehensive understanding of the impact of an event and may include:

- Extent of loss or injury to human life.
- Damage to property, infrastructure, or losses of other assets (eg livestock).
- The needs of the affected community (eg shelter, food, water).

There are two basic types of impact assessments:

Rapid Damage Assessments (RDA) - RDAs are undertaken immediately after 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 a broad assessment of the potential overall impact of the event and to set initial priorities.

Needs Assessment - using data from the initial RDA, the LDMG will conduct a needs assessment to establish the type, quantity and priorities of assistance required by disaster-affected communities.

10.6.3 Event Reporting

The LDCC commences reporting when stood up to provide situational awareness to the local, district and state disaster management levels. The LDCC prepares and distributes Situation Reports to the LDMG, DDMG and relevant stakeholders. The LDCC also prepares and distributes both an initial and final Recovery Plan, outlining the Local Recovery Groups objectives, to the Queensland Reconstruction Authority.

10.6.4 Logistics

Requests for support may come from Functional Lead Agencies, supporting agencies or the community. The LDC will maintain regular communications with the DDC during disaster events on the local resourcing status. Communication will also be maintained with local governments that share a boundary with Mackay. Any requests for assistance that are not able to be found within local resources will be the subject of a request for assistance to the DDC. These requests must be endorsed by the LDC prior to the submission to the DDC. Requests passed to a DDC will be registered and monitored in accordance with the standard operating procedures of the LDCC along with information about goods and/or services received as a result of these requests for assistance. In the event that the request for assistance cannot be actioned by the DDC, the DDC will request assistance through the Chairperson of the QDMC.

10.6.5 Financial Management

All agencies are responsible for meeting and recording their own operational expenses incurred during a disaster event, and for claiming reimbursement of any expenses allowed under the State Disaster Relief Arrangements (SDRA) and the Disaster Recovery Funding Arrangements (DRFA), if activated.

10.6.5.1 State Disaster Relief Arrangements

The SDRA is an all-hazards relief program that is 100 per cent State funded and covers natural and non-natural disasters. The purpose of the SDRA is to address personal hardship and community response needs for disaster events where the DRFA is unable to be activated. SDRA relief measures for Personal Hardship Assistance Scheme and Counter Disaster Operations are the same relief measures that are activated under the DRFA. The SDRA can be activated when DTATSIPCA identifies that local service providers have reached their capacity to provide a service to people identified as experiencing personal hardship as a direct result of a disaster event, or that there are no local service providers to assist in the event of a disaster.

The Director-General of the Department of the Premier and Cabinet (supported by QRA) is responsible for activating the SDRA.

PART 10: RESPONSE



10.6.5.2 Disaster Recovery Funding Arrangements

The DRFA is a joint funding initiative of the Australian and State governments to provide disaster relief and recovery payments and infrastructure restoration to help communities recover from the effects of natural disasters and terrorist acts. In Queensland, this program is managed on a whole-of-government basis by the QRA.

Eligible disasters under DRFA include cyclones, floods, landslides, meteor strikes, storms, bushfires, terrorist acts, tornadoes and earthquakes. Droughts, frosts, heatwaves, epidemics and events relating from poor environmental planning, commercial development or personal intervention are not eligible events under DRFA.

The DRFA activation relies on the damage, loss and personal hardship information provided by State and Local governments.

10.6.6 Public Information and Warnings

On LDCC activation, the release of public information related to the event will be coordinated by the Public Information (PI) Cell in the LDCC and will be shared using Mackay Regional Council's Emergency Dashboard, social media, broadcast media and on council's website. Council's call centre will also be used to disseminate information provided by the PI Cell. Council's corporate social media channels, including Facebook and X (formerly Twitter), are used to distribute approved key messaging and repost partner agency key messages.

Residents are actively encouraged to follow council through these mediums and subscribe to free Opt-In Notifications through the Emergency Dashboard. Mackay community members who have subscribed to the free Opt-In Notification service may receive email and SMS alerts with disaster and emergency alerts and warnings.

10.6.6.1 Warning Authorities

The following table details agencies that are responsible for the issuing of warnings.

10.6.6.1 Warning Authorities

The following table details agencies that are responsible for the issuing of warnings.

Warning Authorities - Table 11

ORGANISATION	WARNINGS / INFORMATION TYPE
Biosecurity Queensland	<ul style="list-style-type: none"> • Emergency animal diseases • Priority plant pests and diseases
Bureau of Meteorology	<ul style="list-style-type: none"> • Severe Weather Alerts (eg fire, weather, heatwave) • Flood Warnings and Watches • Marine Warnings • Tropical Cyclone Watch and Warnings • Tsunami Watch and Warnings • Severe Thunderstorm • Space Weather
Department of Transport and Main Roads	<ul style="list-style-type: none"> • Major road disruptions • Queensland Rail Disruptions
Energy Queensland (Ergon)	<ul style="list-style-type: none"> • Power outages
Mackay Regional Council	<ul style="list-style-type: none"> • Major infrastructure failure (water, sewerage) • Local warnings utilising the Australian Warning System
Queensland Fire Department	<ul style="list-style-type: none"> • Bushfires and major fires • Hazardous material incidents
Queensland Health	<ul style="list-style-type: none"> • Public Health Alerts • Heatwaves
Queensland Police Service	<ul style="list-style-type: none"> • Public Safety Preservation Act declarations • Terrorism incident • Emergency Alerts • Standard Emergency Warning Signal
Sunwater	<ul style="list-style-type: none"> • Dam release notifications • Dam spilling • Dam recreational safety
Telecommunication providers (Telstra, Optus, NBN)	<ul style="list-style-type: none"> • Telecommunication outages

PART 10: RESPONSE

10.6.6.2 Australian Warning System

The AWS is a national approach to information and warnings for hazards like bushfire, flood, storm, cyclone, extreme heat and severe weather. The AWS aims to provide consistent warnings to communities so that people know what to do when they see a warning level.

There are three warning levels:



ADVICE (Yellow):

An incident has started. There is no immediate danger. Stay up to date in case the situation changes.



WATCH AND ACT (Orange):

There is a heightened level of threat. Conditions are changing and you need to start taking action now to protect you and your family.



EMERGENCY WARNING (Red):

An Emergency Warning is the highest level of warning. You may be in danger and need to take action immediately. Any delay now puts your life at risk.

CYCLONE			
FIRE			
FLOOD			
HEAT			
STORM			
OTHER			

Figure 14: Australian Warning System

Each warning level has a set of action statements to give the community clearer advice about what to do. Calls to Action can be used flexibly across all three warning levels depending on the hazard.

See example Figure 15.

These warnings and calls to action will be issued in conjunction with Functional Lead Agency hazard warning through standard public communication procedures. Further information on the AWS can be found at [Australian Warning System](#).

ADVICE	WATCH AND ACT	EMERGENCY WARNING
<ul style="list-style-type: none"> ▶ Prepare now ▶ Stay informed ▶ Monitor conditions ▶ Stay informed/threat is reduced ▶ Avoid the area ▶ Return with caution ▶ Avoid smoke 	<ul style="list-style-type: none"> ▶ Prepare to leave/evacuate ▶ Leave/evacuate now (if you are not prepared) ▶ Prepare to take shelter ▶ Move/stay indoors ▶ Stay near shelter ▶ Walk two or more streets back ▶ Monitor conditions as they are changing ▶ Be aware of ember attack ▶ Move to higher ground (away from creeks/rivers/coast) ▶ Limit time outside (cyclone, heat, asthma) ▶ Avoid the area/avoid the flooded area ▶ Stay away from damaged buildings and other hazards ▶ Prepare for isolation ▶ Protect yourself against the impacts of extreme heat ▶ Do not enter flood water ▶ Not safe to return ▶ Prepare your property (cyclone/storm) 	<ul style="list-style-type: none"> ▶ Leave/evacuate (immediately, by am/pm/hazard timing) ▶ Seek/take shelter now ▶ Shelter indoors now ▶ Too late/dangerous to leave

Figure 15: Australian Warning System Action Statements

10.6.6.3 Emergency Alert

Emergency Alert (EA) 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 EA 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.

10.6.6.4 Standard Emergency Warning Signal

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. Responsibility for the management of SEWS in Queensland rests with the QPS Commissioner in coordination with the Queensland State Manager BoM for meteorological purposes. More information on SEWS can be found through Disaster Management | Queensland Government.

10.6.6.5 Sunwater Referable Dam Emergency Siren

Sunwater has dam emergency sirens installed on Lucas Paddock Road, Pinnacle (Teemburra Dam siren) and at the North Eton Community Park (Kinchant Dam siren).

In the highly unlikely event of a dam failure, the sirens will sound ensuring downstream communities receive urgent warning alerts. Siren warnings are in addition to existing Sunwater, council and LDMG emergency notifications.

Sirens will only be activated if an Emergency Action Plan has been triggered for dam failure (either expected or underway). They will not be activated in the event of water releases or downstream flooding. Further information on the dam emergency sirens can be found at [Emergency Management - Sunwater](#).

10.6.7 Resupply

Communities or individuals can become temporarily isolated which can cause significant hardship due to a depletion of their normal sources of food and basic commodities. Communities which are likely to be affected by such events should consider preparing well in advance for both the event and the expected period of isolation.

There are three distinct types of resupply operations traditionally undertaken in the Mackay region (see table 12).



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 and transport networks 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.

10.6.8 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, such as furniture, equipment and materials.
- Resource support for community evacuation centres, such as 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.

Types of Resupply Operations - Table 12

TYPE	OPERATION
Resupply of isolated communities	This operation occurs when people residing in a community have access to retail outlets, but those outlets are unable to maintain the level of essential goods required due to normal transport routes being inoperable as a result of a natural disaster event.
Resupply of isolated rural properties	Isolated rural properties are groups of individuals isolated from retail facilities due to normal transport routes being inoperable as a result of a natural disaster event.
Resupply of stranded persons	This operation provides essential goods to individuals who are isolated from retail facilities due to normal transport routes being inoperable as a result of a natural disaster event and are not at their normal place of residents. This is usually stranded travellers and campers.

10.7 EVACUATION

Evacuation of a particular area is necessary when a hazard threatens and puts at risk the safety of people within that area or following the impact of a hazard which has subsequently rendered the area uninhabitable. Evacuation becomes necessary when the benefits of leaving significantly outweigh the risk of 'sheltering-in-place'. There are three general types of evacuation:

Self-Evacuation -

This is the self-initiated movement of people to safer places prior to, or in the absence of, official advice or warnings to evacuate. Some people may choose to leave early even in the absence of a hazard but based on a forecast.

Voluntary Evacuation -

An individual can choose to self-evacuate prior to an announcement of either a LDMG coordinated voluntary evacuation or directed evacuation. Exposed persons who may be impacted by an impending hazard are encouraged to commence evacuation voluntarily.

Directed Evacuation -

Exposed persons or animal owners who are directed by the DDC or Declared Disaster Officer under legislation to evacuate an exposed area or part of the area.

10.7.1 Shelter and Safer Locations

The shelter stage of the evacuation process includes the provision of refuge to evacuees within nominated safer locations away from the potential hazard or area of impact. This stage of evacuation relates to the receiving, registration and temporary respite or accommodation of evacuees.

A safer location is a designated location which is not anticipated to be adversely affected by the hazard. Some safer location options do not require significant coordination or investment by LDMGs. These include sheltering in place, staying with friends and family or at neighbourhood safer places.

10.7.1.1 Shelter in Place

Shelter in place would be considered where the structure or location of the available buildings provides a safer environment during a disaster event or where the time prior to a disaster event is not adequate to conduct a safe withdrawal.

Residents should be encouraged to shelter in a structure that meets current building standards, has been well maintained and is considered a safer location for the impending hazard. If their current residence does not satisfy these criteria, it is recommended they are advised to move to a suitable location which may be with family and friends in the first instance. Persons who can move away without assistance are encouraged to relocate outside the area of the impending hazard.

Considerations include:

- Assistance cannot be provided during the event.
- Typically buildings that have been built since 1982, have been well maintained and are outside the impact of the hazard are safer than those that aren't.
- There may be a need to be self-sufficient for some time after the event.

10.7.1.2 Neighbourhood Safer Places

Neighbourhood safer places are buildings or open spaces where people may gather, as a last resort, to seek shelter. Neighbourhood safer place can be used as a possible safer location and would usually only be utilised during events where specific shelter is not required and the duration of the evacuation is not predicted to be lengthy. Neighbourhood safer place may not necessarily be staffed and evacuees may be requested to cater for their own basic requirements for a short stay. Pets are not permitted.

10.7.2 Facilities

10.7.2.1 Evacuation Centre

An evacuation centre is a designated building specifically selected as a location not anticipated to be adversely affected by the hazard. Evacuation Centres are pre-determined by the LDMG with the location hazard impact dependant.

Establishment and management of evacuation centres is a responsibility of the LDMG, in conjunction with DDMGs as necessary. LDMGs may enlist the services of the Australian Red Cross and other community or support agencies to assist them in the management and operation of evacuation centres.

When an evacuation is ordered and it is no longer safe to shelter in place, residents are advised to relocate to a designated evacuation centre that is open and staffed. Pets are not permitted.

10.7.2.2 Public Cyclone Shelter

A public cyclone shelter is a building specifically located and designed to provide protection to occupants from the effects of the most severe tropical cyclones until the cyclone threat has passed. For a structure to be designated as a public cyclone shelter, it must be designed and constructed in accordance with the *Design Guidelines for Queensland Public Cyclone Shelters*.

The primary purpose of a public cyclone shelter is to protect people evacuated from their homes, due to the threat from potential storm tide inundation or those without shelter who have been unable to find alternate accommodation outside the potential impact area during the passage of the cyclone.

The Mackay region has one public cyclone shelter located at the Northern Beaches State High School, 30 Rosewood Drive, Rural View.

This shelter has a maximum capacity of 800 persons. Evacuees to this shelter are expected to provide their own supplies (food, water, baby essentials, medications etc). Pets are not permitted within this shelter and evacuees are encouraged to make alternative arrangements for their pets.



10.7.2.3 Place of Refuge

Where the capacity of identified other safer locations may be exceeded a place of refuge may be an option. A place of refuge is usually a building that will provide a level of protection from the effects of the cyclone as it passes but has not been built or designed in accordance with the Cyclone Shelter Design Guidelines.

A place of refuge may be solidly built, outside storm tide areas and evacuation zones and could be one of the following but not limited to:

- Concrete commercial or government car parks.
- Shopping centres.
- Solid industrial buildings.
- School buildings.

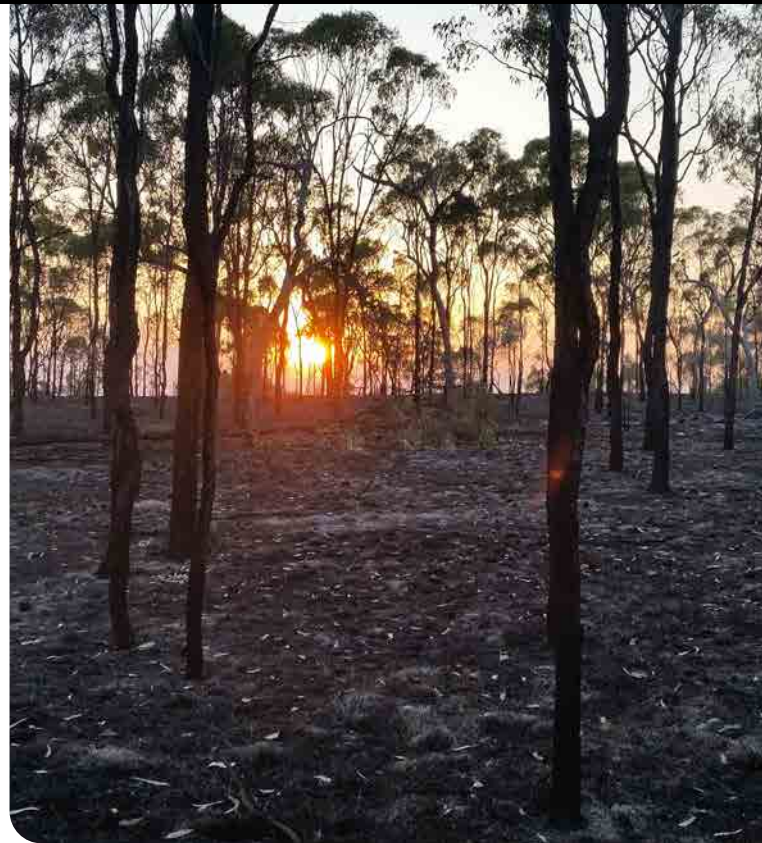


PART 11: RECOVERY

Disaster recovery is the coordinated process of supporting disaster-affected communities to return to a proper level of functioning. Disaster recovery requires a collaborative, coordinated, adaptable and scalable approach in which responsibility for delivery is shared between all sectors of the community including individuals, families, community groups, businesses and all levels of government.

The primary aim of recovery is to assist the region to regain appropriate and acceptable levels of functioning both initially and in the long term. It is important that any assistance provided empowers the community to assist with their own recovery and does not take away individual autonomy. Recovery planning and activities provide the impacted community with the opportunity to develop better capability and mitigation measures for future events.

The recovery phase commences alongside the response phase, and due to the complex nature of rebuilding communities, the recovery phase may continue well after the response to a disaster event has concluded. In some cases, this may be several years.



Community recovery services aim to assist communities to recover from the effects of disasters. Mackay Regional Council works closely with a range of agencies and organisations to help coordinate the assistance to affected individuals, families, or communities.

Disaster recovery is delivered in three broad stages:

- **Immediate/short-term recovery** aims to meet the immediate needs of individuals, businesses and the community affected by the disaster.
- **Medium-term recovery** occurs for weeks to months after an event in the form of reconstruction of physical infrastructure, restoration of the economy and of the environment and support for the emotional, social, and physical wellbeing of those affected.
- **Long-term recovery** continues the lines of effort of medium-term recovery and plans for the return to the new normal through addressing the longer-term needs of individuals and communities.

PART 11: RECOVERY



11.1 RECOVERY GOVERNANCE

Mackay LDMG recovery governance arrangements mirror those of the Queensland Government. By doing so, timely access to resources to support effective, needs based recovery efforts can be better achieved.

11.1.1 Transition to Recovery

The transition from response to recovery will be influenced by the nature of the disaster and therefore requires flexibility. Large scale or geographically diverse events may be a staged transition, with simultaneous response and recovery operations. The Local Recovery Group can activate before the formal transition to the 'recovery' stage.

11.1.2 Local Recovery Group

Council maintains a LRG to coordinate recovery efforts for the LDMG, in conjunction with various state and local agencies. The Local Recovery Subplan provides the framework for the coordination of recovery operations within the Mackay LGA. The LRG may continue to operate after the LDMG and LDCC have moved to stand down. The LRG consists of core members, and four subgroups, each directing the recovery efforts in a broad functional area. The Mackay LRG functional areas are human and social, economic, environment and infrastructure. Both the core group and subgroups bring together council, State Government departments, NGOs, emergency services and other agency representatives and networks.

The Mackay LRG will aim to:

- Ensure accurate and timely assessments of damage and recovery needs.
- Ensure essential infrastructure and essential services are returned to normal operations as soon as possible.
- Facilitate provision of welfare and assistance to residents and visitors in a fair and equitable manner that assists them to assist themselves.
- Encourage the business community to resume trading as soon as possible by implementing business continuity plans.
- Facilitate the rehabilitation of the environment wherever possible.
- Identify opportunities during recovery to enhance the sustainability, safety and resilience of the community.
- Align local recovery planning and arrangements with the State Plans and Recovery Guidelines.

11.2 LOCAL RECOVERY COORDINATOR

Mackay Regional Council's Director of Community Services has been appointed as the LRC with responsibility for coordinating recovery of the Mackay region, in conjunction with various state and local agencies, following a disaster event. The LRC will activate the Mackay LRGs based on impact and needs assessments, or as directed by the Chairperson of the LDMG.

11.3 RECOVERY FUNCTIONS

Effective recovery requires an integrated, multi-disciplinary approach which is a coordinated effort by all organisations involved. As recovery is a complex and potentially protracted process, to assist with overall and effective coordination, aspects of recovery are conceptually grouped into four inter-related functions applicable in an all-hazards environment.

11.3.1 Human and Social

Human and social recovery is the component that relates to the emotional, social, physical and psychological health and wellbeing of individuals, families and communities following a disaster.

This may include the provision or coordination of:

- Psychological, emotional, spiritual, cultural and social wellbeing support.
- Education support.
- Temporary accommodation.
- Financial assistance.

11.3.2 Economic

The economy may be subject to both direct and indirect impacts because of a disaster. Economic recovery aims to restore the community's economic impacts of a disaster event. Economic recovery strategies depend on the severity of the event.

The LDMG may include the following strategies:

- Stimulating the renewal and growth of the economy within the area.
- Supporting individuals and households.
- Facilitating businesses, industry and regional economic recovery and renewal.
- Facilitating financial assistance.

11.3.3 Environment

During disaster events there is great potential for environmental damage within the Mackay area. The environment suffers direct and secondary impacts from disasters and can be difficult to measure.

The LDMG focuses on:

- Assessing the environmental impact of the event (in conjunction with the Department of Environment, Science and Innovation).
- Rehabilitation of the natural environment.
- Preservation of community assets.

11.3.4 Infrastructure

Damage to the built environment often results in disruption, inhibiting the capacity of essential services and the community's ability to continue with work, education, etc. Infrastructure recovery involves assessing and restoring essential infrastructure, non-essential government and community infrastructure and privately owned infrastructure.

During a disaster event the LDMG will give priority to reinstating council's essential infrastructure, including:

- Water services.
- Sewerage services.
- Roads and bridges.
- Buildings.

Owners of assets will be responsible for the restoration of their own assets. The LDMG encourages all owners of assets to ensure that they have in place appropriate insurances.

11.4 RECOVERY OPERATIONS

The Local Recovery Sub Plan provides information on a framework for the coordination of recovery operations within the Mackay region. The procedures outlined in the Queensland Recovery Plan support this framework, the sub plan is part of this LDMP. The strategy it outlines is flexible and designed to address different types and sizes of disaster events, as required.

Recovery can also offer an opportunity to learn and build resilience so that Mackay is better prepared for future disaster events. Communities can further develop their capability and resilience through recovery activities that focus on sustainability and growth, community development initiatives, reconstruction efforts, risk reduction strategies and hardening of infrastructure and the built environment.

The Local Recovery Sub Plan includes transition arrangements from response to recovery stage, outlining the transfer of all required resources. It also identifies the scope of possible disaster recovery operations and the roles and responsibilities of all stakeholders involved in the process for short, medium and long-term recovery requirements.

PART 12: ANNEXURES

12.1 ANNEXURE 1 – SCHEDULE OF FIGURES AND TABLES

FIGURES:

Figure 1 – The Prevention, Preparedness, Response and Recovery Cycle	10
Figure 2 – Queensland Disaster Management Arrangements	11
Figure 3 – Authorising Environment	12
Figure 4 – Key Principles of Effective Disaster Management	13
Figure 5 – Standard for Disaster Management	14
Figure 6 – Mackay Local Government Area	25
Figure 7 – Mackay’s Climate	25
Figure 8 – Mackay Industry Sector Outputs	30
Figure 9 – Disaster Management Activities Calendar	33
Figure 10 – Pioneer River Basin Catchment Map	36
Figure 11 – Storm Tide Inundation	37
Figure 12 – Risk Assessment Process	42
Figure 13 – Local Disaster Coordination Centre Structure	57
Figure 14 – Australian Warning System	62
Figure 15 – Australian Warning System Calls to Action	62

TABLES:

Table 1 – Mackay Local Disaster Management Roles and Responsibilities	17 - 23
Table 2 – Critical Infrastructure and Services	28
Table 3 – Referrable Dams	29
Table 4 – Education Facilities	31
Table 5 – Tropical Cyclone Rating System	34
Table 6 – Mackay LGA Tropical Cyclone Crossings	35
Table 7 – Local Disaster Management Group Operational Sub Plans	49
Table 8 – Primary (Hazard-Specific) Agencies	50
Table 9 – Local Disaster Management Group Activation Levels	56
Table 10 – Functional Lead Agencies	58
Table 11 – Warning Authorities	61
Table 12 – Resupply Operations	64

12.2 ANNEXURE 2 – ABBREVIATIONS

ABBREVIATION	FULL TEXT
ABS	Australian Bureau of Statistics
The Act	Disaster Management Act 2003
AHD	Australian Height Datum
BoM	Bureau of Meteorology
CALD	Cultural and Linguistic Diversity
DTATSIPCA	Department of Treaty, Aboriginal and Torres Strait Islander Partnerships, Communities and the Arts
DAF	Department of Agriculture and Fisheries
DDC	District Disaster Coordinator
DDCC	District Disaster Coordination Centre
DDMG	Mackay District Disaster Management Group
DoE	Department of Education
DHPW	Department of Housing and Public Works
DRFA	Disaster Recovery Funding Arrangements
EA	Emergency Alert
EAP	Emergency Action Plan
EMAF	Emergency Management Assurance Framework
HAZMAT	Hazardous Materials
IGEM	Inspector-General Emergency Management
LDC	Local Disaster Coordinator
LDCC	Local Disaster Coordination Centre
LDMG	Local Disaster Management Group
LDMP	Local Disaster Management Plan
LGA	Local Government Area
LRC	Local Recovery Coordinator
LRG	Local Recovery Group
NBN	National Broadband Network
PPRR	Prevention, Preparedness, Response and Recovery
QAS	Queensland Ambulance Service
QDMA	Queensland Disaster Management Arrangements
QDMC	Queensland Disaster Management Committee
QDMTF	Queensland Disaster Management Training Framework
QERMF	Queensland Emergency Risk Management Framework
QFD	Queensland Fire Department
QPS	Queensland Police Service
QRA	Queensland Reconstruction Authority
QRP	Queensland Recovery Plan
RDA	Rapid Damage Assessment
RFS	Rural Fire Service
SDC	State Disaster Coordinator
SDCC	State Disaster Coordination Centre
SDMP	State Disaster Management Plan
SDRA	State Disaster Relief Arrangements
SES	State Emergency Services
SEWS	Standard Emergency Warning Signal
SITREPS	Situation Reports
SPP	State Planning Policy
SRC	State Recovery Coordinator

PART 12: ANNEXURES

12.3 ANNEXURE 3 – GLOSSARY

TERM	DEFINITION	REFERENCE
Activation	Activation involves the commencement of a process or activity in response to a trigger. An activation is not a declaration, nor is it dependent on the declaration of a disaster situation (see definition for declaration). For example, activation of a relief measure, as detailed in the Queensland Disaster Relief and Recovery Arrangements.	IGEM Lexicon
Alert (level of activation)	A level of activation: a heightened level of vigilance due to the possibility of an event in the area of responsibility. Some action may be required. The situation should be monitored by someone capable of assessing the potential of the threat.	IGEM Lexicon
All-agencies approach	All agencies should be involved to some extent in disaster management. The context of disaster management for specific agencies varies and may include ensuring the continuity of their business or service, protecting their own interests and personnel, and protecting the community and environment from risks arising from the activities of the organisation.	AIDR Manual 4 – Australian Emergency Management Thesaurus
All-hazards approach	Concerns arrangements for managing the large range of possible effects of risks and emergencies. This approach is useful in that a large range of risks can cause similar problems, and such measures as warning, evacuation, medical services and community restoration will be required during and following emergencies. Many risks will, however, require specific response and recovery measures, and may require specific prevention and mitigation measures.	AIDR Manual 4 – Australian Emergency Management Thesaurus
Australian Height Datum (AHD)	A common national survey height datum as a reference level for defining reduced levels; 0.0m AHD corresponds approximately to sea level.	AIDR Handbook 7 – Managing the Floodplain: A Guide to Best Practice in Flood Risk Management in Australia
Briefing	The process of advising personnel of the details of the incident or event with which they will be dealing.	IGEM Lexicon
Bushfire	A fire involving grass, scrub or forest.	IGEM Lexicon
Capacity	The combination of all the strengths, attributes and resources available within an organisation, community or society to manage and reduce disaster risks and strengthen resilience. Capacity may include infrastructure, institutions, human knowledge and skills and collective attributes such as social relationships, leadership and management.	IGEM Lexicon
Catchment	The area of land draining to a particular site. It is related to a specific location and includes the catchment of the main waterway as well as any tributary streams.	AIDR Handbook 7 – Managing the Floodplain: A Guide to Best Practice in Flood Risk Management in Australia
Community	A group with a commonality of association and generally defined by location, shared experience, or function. A social group which has a number of things in common, such as shared experience, locality, culture, heritage, language, ethnicity, pastimes, occupation, workplace, etc.	IGEM Lexicon
Comprehensive approach	The development of emergency and disaster arrangements to embrace the aspects of prevention, preparedness, response and recovery (PPRR). PRRR as aspects of emergency management, not sequential phases.	IGEM Lexicon
Consequence	This is used to refer to the outcome of an event affecting objectives. <ul style="list-style-type: none"> • A consequence can be certain or uncertain and can have positive or negative direct or indirect effects on objectives. • Consequences can be expressed qualitatively or quantitatively. • Any consequence can escalate through cascading and cumulative effects. 	ISO Guide 3100:2018 Risk Management - Guidelines

TERM	DEFINITION	REFERENCE
Control	The overall direction of emergency management activities in an emergency situation. Authority for control is established in legislation or in an emergency plan and carries with it the responsibility for tasking other organisations in accordance with the needs of the situation. Control relates to situations and operates horizontally across organisations.	IGEM Lexicon
Coordination	The bringing together of organisations to ensure effective disaster management before, during and after an event. It is primarily concerned with systematic acquisition and application of resources (people, material, equipment, etc) in accordance with priorities set by disaster management groups. Coordination operates horizontally across organisations and agencies.	IGEM Lexicon
Coordination Centre	A centre established at state, district or local level as a centre of communication and coordination during times of disaster operations.	IGEM Lexicon
Critical Infrastructure	The physical structures, facilities, networks and other assets which provide services that are essential to the social and economic functioning of a community or society.	IGEM Lexicon
Damage Assessment	The process of collecting quantifiable data that enables the assessment of the impact of an event. Data collected could be used to inform Impact Assessments.	IGEM Lexicon
Debrief	A meeting at the end of an operation with the purpose of assessing the conduct or results of an operation.	IGEM Lexicon
Debriefing	The process of sharing the good and bad points of the response to an incident as a means of improving any future planning and responses.	IGEM Lexicon
Declaration (of a disaster situation)	The formal procedure to enable declared disaster powers under the Disaster Management Act 2003 (s64-s69) as required. Specific powers may be used to prevent or minimise loss of life, injury or damage. This term specifically relates to declaration of disasters under the Disaster Management Act 2003. Which is distinct from a 'declaration of an emergency situation' as defined in the Public Safety Preservation Act 1986.	IGEM Lexicon
Declared area	(a) For a disaster situation declared under s64(l)-the disaster district, or the part of the disaster district, for which the disaster situation is declared; or (b) For a disaster situation declared under s69-the State or, if the disaster situation is declared for a part of the State, the part.	IGEM Lexicon
Directed evacuation	Also known as compulsory evacuation is where a relevant government agency has exercised a legislated power that requires people to evacuate. A directed evacuation under the Disaster Management Act 2003 requires the declaration of a disaster situation.	IGEM Lexicon
Disaster	A disaster is a serious disruption in a community, caused by the impact of an event, that requires a significant coordinated response by the State and other entities to help the community recover from the disruption.	IGEM Lexicon
Disaster district	A part of the state prescribed under a regulation as a disaster district. The Mackay Disaster District encompasses the Mackay, Whitsunday and Isaac LGAs.	IGEM Lexicon
Disaster management	Disaster management means arrangements about managing the potential adverse effects of an event, including, for example, arrangements for mitigating, preventing, preparing for, responding to and recovering from a disaster.	IGEM Lexicon
Disaster management group	Means the state group, a district group or a local group.	IGEM Lexicon

PART 12: ANNEXURES

TERM	DEFINITION	REFERENCE
Disaster management guidelines	The chief executive may prepare guidelines to inform the state group, district groups and local governments about matters relating to any of the following: a) The preparation of disaster management plans. b) The matters to be included in a disaster management plan. c) Other matters about the operation of a district group or local group the chief executive considers appropriate having regard to disaster management for the state.	IGEM Lexicon
Disaster management plan	The state group, district groups and local groups must prepare a plan (State Disaster Management Plan, District Disaster Management Plan and Local Disaster Management Plan) for disaster management in the state, disaster district and local government's area respectively.	IGEM Lexicon
Disaster management standard	The inspector-general may make one or more standards (each a disaster management standard) about the way in which entities responsible for disaster management in the state are to undertake disaster management.	IGEM Lexicon
Disaster Recovery Funding Arrangements	The DRFA is joint Commonwealth and State Government funding, providing financial assistance to help communities recover from eligible disasters.	Queensland Reconstruction Authority – Disaster Recovery Funding Arrangements
Disaster risk	The potential loss of life, injury, or destroyed or damaged assets which could occur to a system, society or a community in a specific period of time, determined probabilistically as a function of hazard, exposure, vulnerability and capacity.	IGEM Lexicon
Disaster risk assessment	A qualitative or quantitative approach to determine the nature and extent of disaster risk by analysing potential hazards and evaluating existing conditions of exposure and vulnerability that together could harm people. Property, services, livelihoods and the environment on which they depend.	IGEM Lexicon
Disaster risk reduction	Disaster risk reduction is aimed at preventing new and reducing existing disaster risk and managing residual risk, all of which contribute to strengthening resilience and therefore to the achievement of sustainable development.	IGEM Lexicon
Disaster situation	Means a disaster situation declared under s64(1) by the district disaster coordinator with the approval of the Minister, or by the Minister or Premier (s69).	IGEM Lexicon
District disaster coordinator	The chairperson of a district group is also the district disaster coordinator of the district group. The function of the district disaster coordinator is to coordinate disaster operations in the disaster district for the group.	IGEM Lexicon
District disaster management group	A district disaster management group is established for each disaster district. A district group consists of the persons prescribed by regulation to be members of the group.	IGEM Lexicon
Emergency Alert	A national telephone warning system that provides Australian emergency authorities with an enhanced ability to warn the community in the event of an emergency. The warning system is another tool available for organisations to issue emergency warnings. Emergency Alerts will be issued via landline and mobile telephones.	IGEM Lexicon
Emergency Management	Emergency management is also used, sometimes interchangeably, with the term disaster management, particularly in the context of biological and technological hazards and for health emergencies. While there is a large degree of overlap, an emergency can also relate to hazardous events that do not result in the serious disruption of the functioning of a community or society.	IGEM Lexicon
Evacuation	The planned movement of persons from an unsafe or potentially unsafe location to a safer location and their eventual return.	IGEM Lexicon

TERM	DEFINITION	REFERENCE
Evacuation Centre	A building located beyond a hazard to provide temporary accommodation, food and water until it is safe for evacuees to return to their homes or alternative temporary emergency accommodation.	IGEM Lexicon
Event	An event means any of the following: a) A cyclone, earthquake, flood, storm, storm tide, tornado, tsunami, volcanic eruption or other natural happening. b) An explosion or fire, a chemical, fuel or oil spill, or a gas leak. c) An infestation, plague or epidemic. d) A failure or disruption to an essential service or infrastructure. e) An attack against the state. f) Another event similar to an event mentioned in paragraphs (a) to (e) An event may be natural or caused by human acts or omissions.	IGEM Lexicon
Exercise	A controlled, objective-driven activity used for testing, practising or evaluating processes or capabilities.	IGEM Lexicon
Flash flood	Flood that is sudden and unexpected. It is often caused by sudden local or nearby heavy rainfall. It is generally not possible to issue detailed flood warnings for flash flooding. However, generalised warnings may be possible. It is often defined as flooding that peaks within six hours of the causative rain.	AIDR Handbook 7 – Managing the Floodplain: A Guide to Best Practice in Flood Risk Management in Australia
Flood	Flooding is a natural phenomenon that occurs when water covers land that is normally dry. It may result from coastal or catchment flooding, or a combination of both (see also catchment flooding and coastal flooding).	AIDR Handbook 7 – Managing the Floodplain: A Guide to Best Practice in Flood Risk Management in Australia
Flood classifications	A three-tiered scheme that classifies flooding as minor, moderate or major at key river height stations. They're defined by the water level that causes certain impacts.	Bureau of Meteorology – Flood warning services
Flood Warning	A Flood Warning is issued when there is more certainty that flooding is expected at a particular location. Flood Warnings are more targeted and are issued for specific catchments and locations within catchments. We forecast how severe the flood is expected to be in each Flood Warning.	Bureau of Meteorology – Flood warning services
Flood Watch	A Flood Watch provides information about a developing weather situation including forecast rainfall totals and catchments at risk of flooding. It can also indicate how severe a possible flood might be. It provides links to weather warnings, other flood-related information and contact details of relevant emergency services.	Bureau of Meteorology – Flood warning services
Functional Lead Agency	Multiple state agencies are responsible for various disaster response functions within Queensland. These responsibilities are allocated as a result of an agency's role in administering relevant legislation or ability to provide specialist resources. In some circumstances, these agencies will also coordinate with other agencies and organisations to undertake the nominated function.	State Disaster Management Plan 2023
Hazard	A process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption, or environmental degradation. Hazards may be natural, anthropogenic or socio-natural in origin.	IGEM Lexicon
Impact assessment	The analysis of the consequences of an event, including psychosocial (emotional and social), economic, natural and built environment.	IGEM Lexicon
Incident	An event, occurrence or set of circumstances that: <ul style="list-style-type: none"> • Has a definite spatial extent. • Has a definite duration. • Calls for human intervention. • Has a set of concluding conditions that can be defined. • Is or will be under the control of an individual who has the authority to make decisions about the means by which it will be brought to an end. 	IGEM Lexicon

PART 12: ANNEXURES

TERM	DEFINITION	REFERENCE
Intelligence	The product of a process of collecting and analysing information or data which is recorded and disseminated as intelligence to support decision making.	IGEM Lexicon
Jurisdiction	The state or territory in which an agency, organisation or statutory position has authority or responsibility.	IGEM Lexicon
Lean Forward (level of activation)	An operational state prior to 'stand up' characterised by a heightened level of situational awareness of a disaster event (either current or impending) and a state of operational readiness. Disaster coordination centres are on stand by, prepared but not activated.	IGEM Lexicon
Levels of activation	Queensland's disaster management arrangements are activated using an escalation model based on the following levels: <ul style="list-style-type: none"> • Alert. • Lean Forward. • Stand up. • Stand down. 	IGEM Lexicon
Likelihood	Used to refer to the chance of something happening, whether defined, measured or determined objectively or subjectively, qualitatively or quantitatively, and described using general terms or mathematically (such as a probability or a frequency over a given time period).	ISO Guide 3100:2018 Risk Management – Guidelines
Local Disaster Coordinator	The chairperson of the local group must, after consulting with the chief executive, appoint the chief executive officer or an employee of the relevant local government as a local disaster coordinator of the group. The person appointed must have the necessary expertise or experience and the appointment must be in writing.	IGEM Lexicon
Logistics	The range of operational activities concerned with supply, handling, transportation and distribution of materials. Also applicable to the transportation of people.	IGEM Lexicon
Major flooding	If the water level reaches the major flood level large areas are inundated. Many buildings may be affected above floor level. Properties and towns are likely to be isolated and major rail and traffic routes closed. Evacuation may be required. Utility services may be affected.	Bureau of Meteorology – Flood warning services
Minor flooding	If the water level reaches the minor flood level, it causes inconvenience. Low-lying areas next to water courses are inundated. Minor roads may be closed and low-level bridges submerged. In urban areas flooding may affect some backyards and buildings below floor level as well as bicycle and pedestrian paths. In rural areas removal of livestock and equipment may be required.	Bureau of Meteorology – Flood warning services
Mitigation	Activities intended to reduce or eliminate risks, or lessen the actual or potential effects or consequences of an event.	IGEM Lexicon
Moderate flooding	If the water level reaches the moderate flood level, the area of inundation is larger. Main traffic routes may be affected. Some buildings may be affected above floor level. Evacuation may be required. In rural areas removal of livestock is necessary.	Bureau of Meteorology – Flood warning services
Multi-agency response	The response to an incident where one or more agencies assists the jurisdictional control agency or agencies.	IGEM Lexicon
Non-Government organisation	Non-profit making organisation operating at the local, national, or international levels. Distinct from a governmental organisation, having no statutory ties with a national government.	IGEM Lexicon
Plan	A formal record of agreed emergency management roles, responsibilities, strategies, systems, and arrangements.	IGEM Lexicon
Planning process	The collective and collaborative efforts by which agreements are reached and documented between people and organisations to meet their communities' emergency management needs. It is a sequence of steps which allows emergency management planning to take place.	IGEM Lexicon

TERM	DEFINITION	REFERENCE
Preparedness	The knowledge and capacities developed by governments, response and recovery organisations, communities and individuals to effectively anticipate, respond to and recover from the impacts of likely, imminent or current disasters.	IGEM Lexicon
Prevention	Activities and measures to avoid existing and new disaster risks.	IGEM Lexicon
Primary (Hazard) agency	Primary agencies are allocated for a range of identified hazards and are responsible for the development of the hazard specific plan, in consultation with affected stakeholders. Hazard- specific primary state agencies have a responsibility to communicate and maintain relations with national hazard specific counterparts.	State Disaster Management Plan 2023
Probability	Refer to 'Likelihood'.	ISO Guide 3100:2018 Risk Management – Guidelines
Queensland's disaster management arrangements	Whole-of-government arrangements to ensure the collaborative and effective coordination of planning, services, information and resources for comprehensive disaster management.	IGEM Lexicon
Reconstruction	The medium- and long-term rebuilding and sustainable restoration of resilient critical infrastructures, services, housing, facilities and livelihoods required for the full functioning of a community or a society affected by a disaster, aligning with the principles of sustainable development and 'build back better', to avoid or reduce future disaster risk.	IGEM Lexicon
Recovery	The coordinated process of supporting disaster-affected communities' psychosocial (emotional and social), and physical well-being; reconstruction of physical infrastructure; and economic and environmental restoration.	IGEM Lexicon
Relief	Efforts to meet the needs of persons affected by a disaster, to minimise further loss through the provision of immediate shelter and basic human needs.	IGEM Lexicon
Residual risk	Residual risk is the disaster risk that remains even when effective disaster risk reduction measures are in place, and for which emergency response and recovery capacities must be maintained.	IGEM Lexicon
Resilience	A system or community's ability to rapidly accommodate and recover from the impacts of hazards, restore essential structures and desired functionality, and adapt to new circumstances.	IGEM Lexicon
Response	Actions taken directly before, during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected.	IGEM Lexicon
Risk	Effect of uncertainty on objectives. <ul style="list-style-type: none"> • An effect is a deviation from the expected. It can be positive, negative or both, and can address, create or result in opportunities and threats. • Objectives can have different aspects and categories and can be applied at different levels. • Risk is usually expressed in terms of risk sources, potential events, their consequences and their likelihood. 	ISO Guide 3100:2018 Risk Management – Guidelines
Risk analysis	Process to comprehend the nature of risk and to determine the level of risk. Risk analysis provides the basis for risk evaluation and decisions about risk treatment	ISO Guide 31073:2022 risk Management – Vocabulary
Risk assessment	Overall process of risk identification, risk analysis and risk evaluation.	ISO Guide 31073:2022 risk Management – Vocabulary

PART 12: ANNEXURES

TERM	DEFINITION	REFERENCE
Risk evaluation	Process of comparing the results of risk analysis with risk criteria to determine whether the risk is acceptable or tolerable. Risk evaluation assists in the decision about risk treatment.	ISO Guide 31073:2022 risk Management – Vocabulary
Risk treatment	Risk treatments that deal with negative consequences are sometimes referred to as "risk mitigation", "risk elimination", "risk prevention" and "risk reduction". Risk treatment can involve: <ul style="list-style-type: none"> • Avoiding the risk by deciding not to start or continue with the activity that gives rise to the risk. • Taking or increasing risk in order to pursue an opportunity. • Removing the risk source. • Changing the likelihood. • Changing the consequences. • Sharing the risk with another party or parties (including contracts and risk financing). • Retaining the risk by informed decision. 	ISO Guide 31073:2022 risk Management – Vocabulary
Safer location	A variety of designated locations which are not anticipated to be adversely affected by the hazard. Categories of safer locations comprise: <ul style="list-style-type: none"> • Shelter in place. • Neighbourhood safer places. • Friends and family. 	IGEM Lexicon
Shelter in place	An alternative or in addition to evacuation where individuals shelter within their homes, workplace or with family/friends if considered safe to do so.	IGEM Lexicon
Stand down (level of activation)	Transition 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.	IGEM Lexicon
Stand up (level of activation)	The operational state following 'lean forward' whereby resources are mobilised, personnel are activated, and operational activities commenced. Disaster coordination centres are activated.	IGEM Lexicon
Standard Emergency Warning Signal	A distinctive audio signal that alerts the community to the broadcast of an urgent message relating to a major emergency or disaster. It is intended for use as an alert signal to be played on public media such as radio, television and public address systems.	IGEM Lexicon
State Disaster Coordination Centre	The State Disaster Coordination Centre may be activated to coordinate the provision of resources to local and district groups upon request. The centre also ensures information about an event and associated disaster operations is disseminated to all levels, including to the Australian Government.	IGEM Lexicon
State Disaster Coordinator	Means a person appointed under s21B to coordinate disaster operations for the group and can be a deputy commissioner of the police service or another person the chairperson decides, after considering the nature of the disaster operations, should be appointed. The chairperson must consult with the commissioner of the police service before making the appointment and it must be in writing.	IGEM Lexicon
State Disaster Management Group	The Queensland Disaster Management Committee is the state group. The state group consists of the persons prescribed by regulation to be members of the group.	IGEM Lexicon
State Disaster Management Plan	The state group must prepare a plan for disaster management for the State. The chairperson of the state group must give a copy of the plan to each district and local group. The state plan must be consistent with the disaster management standards and disaster management guidelines.	IGEM Lexicon
State Disaster Relief Arrangements	The SDRA is an all-hazards relief program that is 100 per cent State funded and covers natural and non-natural disasters. The purpose of the SDRA is to address personal hardship and community needs for disaster events where the DRFA is unable to be activated.	IGEM Lexicon

TERM	DEFINITION	REFERENCE
Sub-plan	An annex to an existing plan, with additional statements of control/ coordination arrangements and roles/responsibilities.	IGEM Lexicon
Voluntary evacuation	Also known as recommended evacuation is where an evacuation advice has been issued, with people strongly encouraged to consider enacting their evacuation plans. Voluntary evacuees manage their own withdrawal, including transportation arrangements.	IGEM Lexicon
Vulnerability	The conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards. For positive factors which increase the ability of people to cope with hazards, see also the definition for 'capacity'.	IGEM Lexicon
Vulnerability (community)	Vulnerability in relation to disaster events is a fluid and complex concept. The definition of vulnerability in the Qld Vulnerability Framework comprises three components: <ul style="list-style-type: none"> • Target group statement - people who would benefit from additional and targeted assistance to prepare for, respond to, and recover from disasters. • Vulnerability indicators - for example proximity to an event, lack of financial resources, and disruption to, or lack of available services, supports/carers medication, aids and equipment. • Four protective factors - wellbeing, connection, knowledge and security. 	IGEM Lexicon
Welfare	The provision of immediate and continuing care of emergency affected persons who may be threatened, distressed, disadvantaged, homeless or evacuated; and, the maintenance of health, well-being and prosperity of such persons with all available community resources until their rehabilitation is achieved.	IGEM Lexicon

Mackay Local Disaster Management Group
Local Disaster Management Plan

