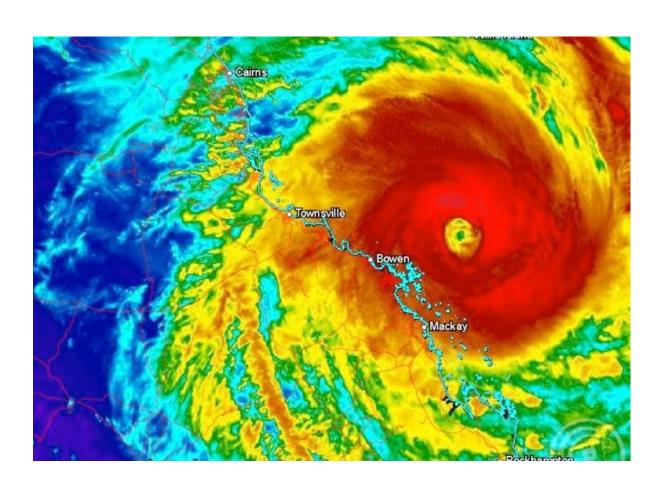




TOWNSVILLE LOCAL DISASTER MANAGEMENT PLAN









Foreword

Foreword from the Chair of the Townsville Local Disaster Management Group

Community First

The responsibility to keep our city safe lies with all of us.

Townsville City Council and the Local Disaster Management Group is committed to playing a key role in achieving community safety for residents and visitors.

As a community, we have experienced Mother Nature's fury over the past few years with Tropical Cyclone Debbie threatening us in 2017, the severe rain depression that sat over Townsville for a week in 2018, 2019's unprecedented Monsoonal Rain Event, and in 2020-2022 we experienced a global pandemic with COVID-19, which thankfully didn't have the significant consequences in our community as it did overseas.

While Townsville is a beautiful place to live, like any region there is a potential risk for emergency events and natural disasters such as cyclones, bushfires and flooding. Townsville City Council is strongly committed to educating residents about the natural hazards that can occur in North Queensland and making sure that our community is as prepared as it can be..

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

Cyclones have been a part of life in North Queensland for some time and it can be easy to become complacent. However, an increase in the severity of natural disasters around the globe, including cyclones, tsunamis, bushfires and flooding, is a constant reminder to us all that we need to remain vigilant and prepared.

Although we as a community may not be able to prevent disasters and serious events from occurring, we can prepare our community and enhance our resilience to the adverse impact of any threat through effective consultation, education and pre-planning.

It is a challenge - and a role - this council and the Local Disaster Management Group are committed to meeting.

Cr Jenny Hill

Mayor of Townsville City Council & Chair of Townsville Local Disaster Management Group

Standard for DM - Shared Responsibility	Outcome
Community Engagement	5

Endorsement

The preparation of this Local Disaster Management Plan has been undertaken in accordance with the *Disaster Management Act 2003 (the Act)*, to provide for effective disaster management in the local government area.

This plan is recommended for distribution by the Townsville Local Disaster Management Group.

Approved for distribution by the Townsville Local Disaster Management Group.

Wayne Preedy ESM

Local Disaster Coordinator

Townsville Local Disaster Management Group

Date: 11 / 07 / 2023

Endorsed by the Townsville City Council on

Cr Jenny Hill

Mayor

Townsville City Council

Date: 23 / 08 / 2023

Cr Jenny Hill

Chair

Townsville Local Disaster Management Group

Date: 11 / 07 / 2023

Acknowleadged by the Townsville District Disaster Management Group.

Chief Supt Chris Hodgman
District Disaster Coordinator

Townsville District Disaster Management Group

Date: 11 / 08 / 2023

Standard for DM - Shared Responsibility	Outcome
Planning and Plans	3

Consultation

This plan was distributed to the Townsville Local Disaster Management Group Full Committee for consultation and review. The table below reflects the feedback received from the group. Due to the large number of Advisory Members, only those that have provided feedback have been included in the table.

Organisation	Name of consulted	Date distributed	Comments received
Core Members			
Chair	Cr Jenny Hill	22 May 2023	
Councillor / Deputy Chair	Cr Kurt Rehbein	22 May 2023	
LDC	Wayne Preedy	22 May 2023	22 May 2023
	Matt Richardson		
	Mat Green		
TCC-ERG	Seren McKenzie	22 May 2023	31 May 2023
	Matt Richardson		
	Travis Richards		
LRRG	Ryan Hall	22 May 2023	
	Van Ta Placidi		
TLDMG Communications	Sarah Sullivan	22 May 2023	
	Richard Hannay		
	Katrina Appleton		
DH	Tania Sheppard	22 May 2023	
	Gregory McKillop		
	Rebecca Simmons		
Ergon	Ben Sanderson	22 May 2023	
	Jeffrey Shears		
	Jason Hockings		
QAS	David Wright	22 May 2023	23 May 2023
	Sandie Gawn		
QFES	Kevin Anderson	22 May 2023	
	Stephen Knight		
QPS	Dean Cavanagh	22 May 2023	7 June 2023
	Todd Noble		
	Greame Paterson		
SES	Bob Griffiths	22 May 2023	
	Alison Maclean		

Organisation	Name of consulted	Date distributed	Comments received
	Lewis O'Rourke		
TEL	Lisa Woolfe	22 May 2023	
	Claudia Brumme-		
	Smith		
THHS	Kieran Keyes	22 May 2023	29 May 2023
	Libby Preedy		
Shelters & Evac Centres Working Group	Melissa McKeown	22 May 2023	
	Tamarah Moore		
Advisory Members			
Icon Cancer Centre	Georgina Whelan	22 May 2023	24 May 2023
Townsville Multicultural Support Group	Stephanie Naunton	22 May 2023	23 May 2023
Townsville Airport	Kyle Morris	22 May 2023	23 May 2023
Disaster Relief Australia	Ewan Cayzer	22 May 2023	5 June 2023
Department of Transport and Main	Andrew Thomas	22 May 2023	2 June 2023
Roads			
XO – DDMG	Brenton Webb	22 May 2023	13 June 2023
Working Group Representatives			
Asbestos Working Group	Kimberley Nitschke		
Environmental Health Working Group	Melissa McKeown	22 May 2023	
Evacuation & Transport Working Group	Dean Cavanaugh	22 May 2023	
Magnetic Island DMG	Steven Lord	22 May 2023	
Rollingstone DMG			
Townsville Aged Care Partnership			
Group			
Townsville District Disaster Health	Libby Preedy	22 May 2023	29 May 2023
Functional Working Group	(Secretariat)		
Other			
TCC-EM	Zac Dawes	22 May 2023	22 May 2023
	Nadine Turner		22 June 2023
	Zahid Ahmed		
	Darron Irwin		2 June 2023
	Michael McCall		01 June 2023
	Christine Mushaya		27 Jun3 2023

Document Control

Amendment Control

The *Townsville Local Disaster Management Plan* (TLDMP) is a controlled document. The controller of the document is the Townsville Local Disaster Coordinator (LDC). Any proposed amendments to this plan should be forwarded in writing to:

Local Disaster Coordinator Townsville City Council PO Box 1268 Townsville, QLD 4810

The LDC may approve inconsequential amendments to this document. The LDC will ensure that any changes to the content of the document will be submitted to the Townsville Local Disaster Management Group (TLDMG) for approval and be endorsed by the Townsville City Council.

A copy of each amendment will be forwarded to those identified in the distribution list. On receipt, the amendment is to be inserted into the document and the Amendment Register updated and signed.

Amendment Register

Ame	endment	Plan Updated		
Version No.	Issue Date	Inserted by	Action	Date
01 Initial Plan	June 2005	A. Morris	Initial Plan	24 June 2005
02	February 2008	A. Morris	Post-Amalgamation Review	February 2008
03	November 2008	A. Morris	New Guidelines	25 November 2008
04	November 2009	A. Morris	Annual Review	24 November 2009
05	June 2011	A. Morris	Annual Review and New Guidelines	21 June 2011
06	October 2012	A. Morris	Annual Review and New Guidelines	25 October 2012
07	June 2013	A. Morris	November 2012 Audit and New Guidelines	19 June 2013
08	October 2014	A. Morris	Annual Review	6 October 2014

Amendment		Plan Updated		
Version No.	Issue Date	Inserted by	Action	Date
09	October 2015	G. Hammond	Annual Review	15 October 2015
10	November 2016	C. Jordan	Annual Review	1 November 2016
11	January 2018	W. Preedy	Annual Review	3 January 2018
12	January 2019	W. Preedy	Annual Review	14 January 2019
13	May 2020	W. Preedy	Annual Review & update re COVID-19	8 May 2020
14	April 2022	W. Preedy	Annual Review	30 June 2022
15	March 2023	W. Preedy	Annual Review	30 June 23

Disaster Management Definitions

Townsville Local Disaster Management Plan

Key Disaster Management defiinitions are detailed at Annexure A.

Abbreviations Used in Disaster Management

Key abbreviations used in Disaster Management are contained at Annexure B.

Distribution

Distribution of this plan is controlled by maintaining two (2) versions of each document – one (1) containing personal details and one (1), where personal details have been removed. The Townsville Local Disaster Management Group ensures compliance to the *Information Privacy Act 2009* by allowing only the version, which excludes personal details, to be made available to the public.

This plan has been distributed in accordance with the Consultation List on Page 4.

Standard for DM - Shared Responsibility	Outcome
Planning and Plans	3

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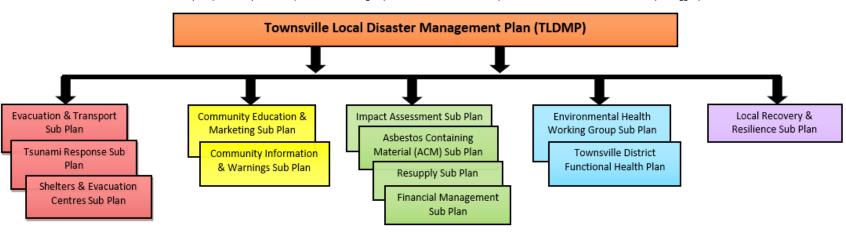
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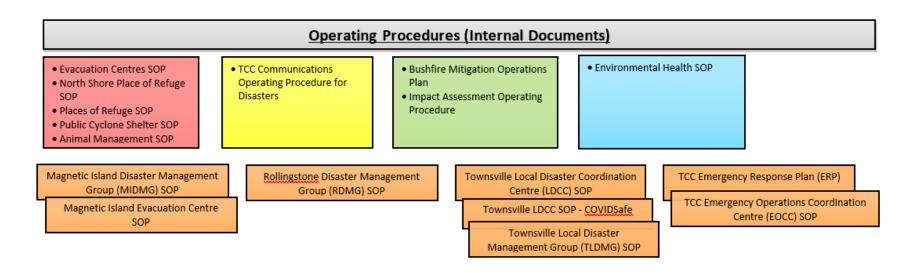
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Plan Matrix

Townsville Local Disaster Management Plan Matrix

Please note: This matrix depicts plans and procedures, which have been grouped based on their relationship to one another rather than on hierarchy or trigger points for activation.





Part One - Administration and Governance

1.1 Authority to Plan

The *Townsville Local Disaster Management Plan* (TLDMP) has been prepared by the Townsville Local Disaster Management Group in accordance with the *Disaster Management Act 2003* Section 57(1) to ensure the effective coordination of resources necessary to counter the effect of disasters within the Townsville City Council area.

This plan is developed using the *National Emergency Risk Assessment Guidelines*, the *Australian/New Zealand Standard AS/NZS ISO 31000:2009 Risk management – Principles and guidelines* and the *Department of Community Safety – Qld Disaster Management Planning Guidelines* to effectively identify, analyse and treat risks faced by the local community.

This plan is prepared using the *Queensland Prevention, Preparedness, Response and Recovery (PPRR)*Disaster Management Guideline 2018 and ensuring integration with the District Disaster Management Plan and the Queensland Disaster Management Committee strategies.

A TLDMG *Standard Operating Procedures (TLDMG SOP)* has been developed, which details the processes and procedures required to execute the TLDMG functions.

1.2 Purpose

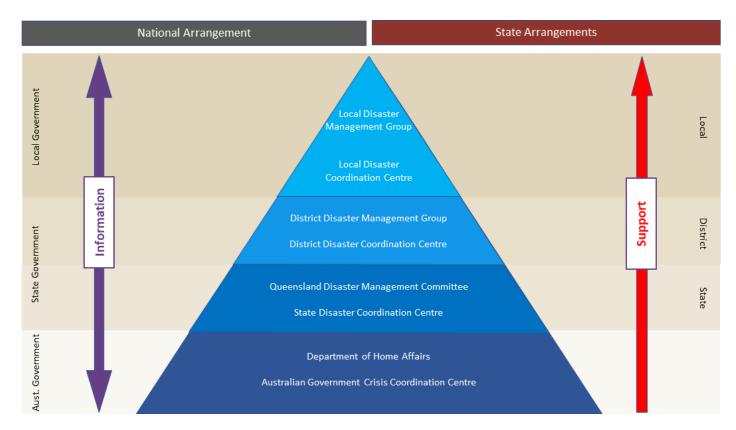
1.2.1 Purpose of the Disaster Management Plan

This plan details the arrangements within the Townsville City Council local government area to plan and coordinate capability in disaster management and disaster operations.

The purpose of the plan is:

- To operationalise council's policies in relation to disaster management, through the formation and maintenance of the Local Disaster Management Group;
- To ensure the Local Government and the Local Disaster Management Group comply with their disaster management obligations under the *Disaster Management Act 2003*;
- To meet council's obligation to ensure a well-informed community regarding tropical weather and provide a safer environment;
- For other purposes related to disaster management that the Local Government might determine.

1.2.2 Queensland Disaster Management Arrangements (QDMA)



Standard for DM - Shared Responsibility	Outcome
Planning and Plans	3

1.2.3 Key Disaster Management Groups in Queensland

Queensland's Disaster Management Arrangements are coordinated by groups at the local, district and state level. The state is comprised of 22 disaster districts and 77 Local Government Areas (LGA), each represented by a group with specific functions – these are detailed below:

1.2.3.1 Local Disaster Management Group

Group	Local Disaster Management Group (LDMG)
Formation	A local government must establish an LDMG for the local government's area in accordance with the Disaster Management Act 2003.
	Local government areas are indicated in Schedule 1 of the Disaster Management regulation 20147.
Members	 chaired by a councillor of the local government members may be appointed by the relevant local government members are to be appointed only if the relevant local government is satisfied the person has the necessary expertise or experience the LDMG must include at least one person nominated by the Commissioner, Queensland Fire and Emergency Services (CQFES).
Functions	 Chair must appoint a Local Disaster Coordinator (LDC) to manage disaster operations for the area Chair may appoint a Local Recovery Coordinator (LRC) in consultation with the State Recovery Policy and Planning Coordinator (SRPPC) to manage recovery at the local level, ideally not the same person as the LDC Chair manages and coordinates the business of the group and ensures it performs its functions ensure consistency between local disaster management operations and the Queensland Disaster Management 2016 Strategic Policy Statement³ and other policies and procedures decided by the Queensland Disaster Management Committee (QDMC) develop effective disaster management, and regularly review and assess disaster management assist local government to prepare a disaster risk assessment and a Local Disaster Management Plan (LDMP) identify and coordinate resources for disaster operations in the area identify and provide advice to the district group about residual risks and support services required by the local group to facilitate disaster management and disaster operations ensure community awareness about mitigating the adverse effect of an event and preparing for, responding to and recovering from a disaster establish and review communications to ensure their effectiveness for use when a disaster happens establish, when necessary, a recovery group.
Communications	To the relevant district group: information about a disaster or recommendations on disaster operations advice on residual risks and support services required by the local group written notice of group members annually.

1.2.3.2 District Disaster Management Group

Group	District Disaster Management Group (DDMG)
Formation	A DDMG must be established for each disaster district.
	Disaster district areas are detailed in the Disaster Management regulation 2014 ⁷ and shown in Appendix B.
Members	 Chairperson, Deputy Chairperson and Executive Officer, appointed by the Commissioner, Queensland Police Service (QPS) if satisfied each has the necessary expertise members may be appointed by the relevant local government areas within the disaster district representatives of a government department or Hospital and Health Service in, consultation with the department's chief executive and the DDMG Chair.
Functions	 ensure consistency of district disaster management and operations with the Queensland Disaster Management 2016 Strategic Policy Statement³ and other policies and decisions made by the QDMC develop effective disaster management, including a District Disaster Risk Assessment and District Disaster Management Plan, and regularly review and assess disaster management activities review and assess the disaster management risk assessments and plans of local groups in the district identify residual risks, make plans, and coordinate resources for disaster operations in the area ensure community awareness about mitigating the adverse effects of an event and preparing for, responding to and recovering from such an event establish and review communications within the district group and with relevant local groups establish, when necessary, a recovery group.
Communications	To the QDMC and relevant local group: reports and recommendations relating to disaster management and disaster operations prompt notification about an event or disaster in the district.

1.2.3.3 Queensland Disaster Management Committee

Group	Queensland Disaster Management Committee (QDMC)
Formation	The state group, the QDMC, is established under s. 17 of the Disaster Management Act 2003.
Members	 Premier and Minister for the Olympic and Paralympic Games (Chairperson) Deputy Premier, Minister for State Development, Infrastructure, Local Government and Planning and Minister Assisting the Premier on Olympic and Paralympic Games Infrastructure (Deputy Chairperson) Treasurer and Minister for Trade and Investment Minister for Education, Minister for Industrial Relations and Minister for Racing Minister for Police and Corrective Services and Minister for Fire and Emergency Services, Minister for Energy, Renewables and Hydrogen and Minister for Public Works and Procurement, Minister for Communities and Housing, Minister for Digital Economy and Minister for the Art, Minister for Health and Ambulance Services Minister for Regional Development and Manufacturing and Minister for Water Minister for Transport and Main Road

Assisting officials

- Director-General, Department of the Premier and Cabinet
- Director-General, Department of State Development, Infrastructure, Local Government and Planning
- Under Treasurer, Queensland Treasury
- Commissioner, Queensland Ambulance Service
- Commissioner, Queensland Fire and Emergency Services
- Commissioner, Queensland Police Service
- Director-General, Department of Education
- Director-General, Queensland Health
- Chief Health Officer
- Director-General, Department of Transport and Main Roads
- Director-General, Department of Energy and Public Works
- · Director-General, Department of Communities, Housing and Digital Economy
- Director-General, Department of Regional Development, Manufacturing and Water

By Invitation

- State Disaster Coordinator
- State Recovery Coordinator

Observers

- Chief Executive Officer, Local Government Association of Queensland
- Inspector-General Emergency Management

Functions

- prepare the State Disaster Management Plan (SDMP)
- · develop a strategic policy framework for disaster management
- ensure effective disaster management is developed and implemented for the state
- establish and maintain effective arrangements between the state and the Commonwealth relating to effective disaster management
- · identify resources, in and outside the state, that may be used for disaster operations
- coordinate state and Commonwealth assistance for disaster management and disaster operations.

Communications

The QDMC provides reports and makes recommendations, where appropriate, about matters relating to disaster management and disaster operations.

Source: Queensland State Disaster Management Plan Version 1.2 2023

1.3 Objectives

The objective of the TLDMP is to facilitate the implementation of effective and efficient disaster management strategies and arrangements. In accordance with *Section 57 (2) of the Act*, the plan must include provisions for the following:

- (a) The development, review and assessment of effective disaster management for the local government area including arrangements for mitigating, preventing, preparing for, responding to and recovering from a disaster;
- (b) Compliance with the Queensland Disaster Management Committee's (QDMC) Strategic Policy Framework, the State Disaster Management Plan, the Local Disaster Management Guidelines, and any other Guidelines relevant to local level disaster management and disaster operations;
- (c) The roles and responsibilities of entities involved in disaster operations and disaster management in the area:
- (d) The coordination of disaster operations and activities relating to disaster management performed by the entities mentioned in paragraph (c);

- (e) Events that are likely to happen in the area;
- (f) Strategies and priorities for disaster management for the area;
- (g) The matters stated in the disaster management guidelines as matters to be included in the plan;
- (h) Other matters about disaster management in the area the local government considers appropriate.

The plan will address and provide prevention and preparedness strategies through mitigation and education programs for the local community as well as addressing response and recovery procedures.

Standard for DM - Shared Responsibility	Outcome
Planning and Plans	3

1.4 Strategic Policy Statement

Disaster management and disaster operations in the Townsville local government area are consistent with the *Queensland Disaster Management 2016 Strategic Policy Statement*.

1.4.1 Objectives

- Strive to safeguard people, property and the environment from disaster impacts
- Empower and support local communities to manage disaster risks, respond to events and be more resilient.

1.4.2 Strategies

To drive an effective disaster management system we will:

- Ensure disaster operation capabilities are responsive and effective
- Build capacity, skills and knowledge to enable adaptation to changing environments
- Effectively collaborate and share responsibilities for disaster management across all levels of government, industry and communities
- Effectively communicate to engage all stakeholders in disaster management
- Incorporate risk based planning into disaster management decision making
- Continuously improve disaster management through implementation of innovation, research and lessons learned.

Standard for DM - Shared Responsibility	Outcome
Managing Risk	1, 2
Planning and Plans	3

1.5 Standard for Disaster Management

Disaster Management arrangements for the Townsville local government area are also consistent with the 6 Shared Responsibilities and 11 Outcomes of the <u>Standard for Disaster Management in</u> <u>Queensland</u>, which include:

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

1.6 Scope

This plan details the arrangements necessary to undertake disaster management within the Townsville City Council (TCC) LGA. This entails the use of any local, State and Commonwealth government department and/or agencies and all resources available for the prevention of, preparedness for, response to and recovery from, the effects of disasters or events having a community consequence, whilst utilising an all hazards approach.

VERSION 15.0

Standard for DM - Shared Responsibility	Outcome
Planning and Plans	3

1.7 Disaster Management Priorities

1.7.1 Townsville City Council (TCC) Response to Disaster

The TCC and the Local Disaster Management Group are committed to ensuring that the city's responsibilities under the *Disaster Management Act 2003* are executed in full by:

- Working within the State Disaster Management Strategic Policy Statement, which focuses on a
 comprehensive, all hazards approach with all levels of government working in partnership to
 reduce the effects of disasters
- Protecting health, safety and quality of life and economic vitality
- Protecting our natural and built environment
- Recognising and valuing the benefits of partnership and collaboration across all levels of government, community and industry, in all aspects of disaster management
- Respecting the diversity of Queensland communities
- Ensuring accountability and transparency of disaster management in Queensland.

Standard for DM - Shared Responsibility	Outcome
Managing Risk	1, 2
Planning and Plans	3, 4
Capability Integration	8

1.7.2 Integration with TCC's Corporate and Operational Planning Processes

Local government plays a major role in disaster management. Under the *Disaster Management Act 2003*, one of local government's main roles is to ensure it has a disaster response capacity. An all hazards approach is taken when writing disaster management plans.

As per the *TCC's Corporate Plan 2021 – 2026*, council aims to enhance community knowledge of, and access to, council services to improve community wellbeing, resilience, health and safety through the following goals:

Goal		Description
1.1.1	Transition to real time digital information.	By 2026, operate real time dashboards
	- Smart monitoring.	that provides customers information on
	- Provision of real time data to support	the status of the city across a range of
	decision making.	performance indicators and values.

		By 2026, provision of real time data, fault reporting and status for customers, such as smart meters on all homes.
		*incl. council's Emergency Management and
		Disaster Dashboard
5.2.3	Document knowledge and experience in	By 2024, partner in the delivery of skills and
	emergency management to become a	simulation training to other local
	specialist tropical climate leader	governments and our northern neighbours
		to increase health, economic and
		environmental resilience from disaster
		events.

Source: Townsville City Council Corporate Plan 2021 - 2026

Council incorporates Disaster Management into its core business functions by:

- Assigning council resources to maintain a capability to coordinate the response and resources
 for an event or disaster within the Townsville City Council area. (see *Townsville City Council Emergency Response Plan*).
- Actively providing information and warnings about an event or disaster to the public and appropriate emergency services as per legislative responsibility.
- Annually reviewing and exercising disaster management plans.
- Actively providing public education on disaster preparedness.
- Actively mitigating against potential disaster situations to reduce community vulnerability.
- Liaising with Queensland Fire and Emergency Services (QFES) on disaster management planning and training activities.
- Assisting local volunteer groups associated with the TLDMG with training activities.
- Actively providing disaster management training to staff and the TLDMG.
- Actively working with the community towards strengthening community resilience against disasters.
- Assisting State and Federal agencies in the recovery of the community after an event or disaster.

1.7.3 Local Government Development Priorities

In accordance with the *State Planning Policy - Mitigating the Adverse Impacts of Floods, Bushfire & Landslide*, development approvals (Planning and Building) are adopted and assessed against the relevant legislation and Planning Scheme for the region.

1.8 Disaster Management Activities

1.8.1 Activities Calendar

PREVENTION

Key Activities

Reporting, Assessing, Planning, Training & Exercising

PREPAREDNESS

Key Activities

Reviewing, Planning, Training, Exercising, Cabinet Submission & Community Awareness

RESPONSE

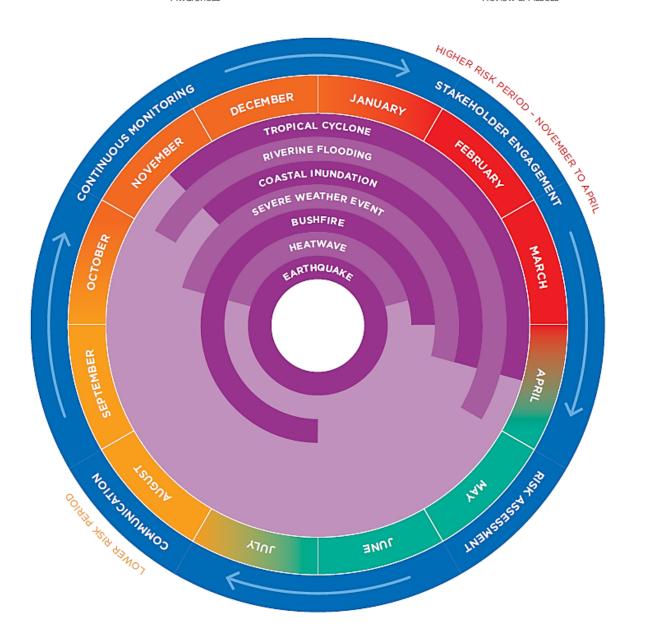
Key Activities

Responding, Recovering, Meetings & Reporting

RECOVERY

Key Activities

Post Event Series i.e. Meetings Assurance Activities Review & Assess



Source: Queensland State Disaster Management Plan

1.8.2 Internal Review

In accordance with Section 59 of the Act, the Townsville Local Disaster Management Group will review the effectiveness of the TLDMP and all associated sub plans annually. The LDC will instigate the annual review and will involve all Members of the TLDMG.

The timeline for the annual review will be as follows:

Timeframe	Activity
February – June	TLDMG reviews and amends (as required) the main plan
July	Revised plan submitted to TLDMG for acceptance / amendment
August	Reviewed plan submitted to council for approval
August	Updated plan submitted to the District Disaster Management Group
August	Implementation of the IGEM Prioritisation tool
Remainder of year	Minor amendments only
July - December	Training and exercises

This Plan will also be reviewed periodically by council's Internal Audit Department as required to ensure compliance to relevant State Government Acts and legislation.

The master contact list for all organisations/persons involved in the council's disaster management arrangements shall be reviewed / updated at each meeting of the LDMG (and associated Sub Groups) and will be held by the Local Disaster Coordinator.

1.8.3 External Assessment

On completion of each internal review, the TLDMP will be provided to the DDMG for the purpose of assessing consistency across the district and conducting external assessment of the Plan. The DDMG will ensure the review process addresses the requirements of the *Standard for Disaster Management* as determined by the Inspector General Emergency Management (IGEM). Unless the external review highlights a critical change, the required amendments will be implemented with the next annual review of the Plan.

1.8.4 Further Triggers for Review

In addition to the requirement for the annual review of the TLDMP, the following range of conditions may trigger the need for the Plan to be reviewed independent of the review program. These include:

- an exercise or operational activation of the Plan highlights significant deficiencies in arrangements, systems or processes;
- changes to the boundaries to which the Plan is applicable resulting in altered risk levels;
- changes to the risk profile of the local government area resulting in altered risk levels;
- changes within the environment, community population, demographics or hazards resulting in increased risk levels:
- changes to available resources or agencies with a role in delivery of disaster management response and recovery which impacts on group capability;
- changes to legislation, policy or arrangements; or
- at the request of the District Disaster Coordinator.

Where one or more of these triggers are identified within the local area, the review will be undertaken as soon as practical, regardless of the existing timeframes of programmed reviews.

Part Two – Local Disaster Management Group – Terms of Reference

2.1 Townsville Local Disaster Management Group (TLDMG)

Formation

Under the *Disaster Management Act 2003* (Section 29), a local government must establish a Local Disaster Management Group (LDMG) for the local government area.

As per Section 4A(c) of the Act, the local government, through the LDMG, retains primary responsibility for managing disaster events contained within the local government area.

Functions

- 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;
- to develop effective disaster management, and regularly review and assess the disaster management;
- to help the local government for its area to prepare a local disaster management plan;
- 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;
- 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;
- to manage disaster operations in the area under policies and procedures decided by the State group;
- to provide reports and make recommendations to the relevant district group about matters relating to disaster operations;
- to identify, and coordinate the use of, resources that may be used for disaster operations in the area;
- to establish and review communications systems in the group, and with the relevant district group and other local groups in the disaster district of the relevant district group, for use when a disaster happens;
- to ensure information about a disaster in the area is promptly given to the relevant district group;
- to perform other functions given to the group under this Act;
- to perform a function incidental to a function mentioned in paragraphs (a) to (k).

Standard for DM - Shared Responsibility	Outcome
Planning and Plans	3

Membership Appointment of Members

The Queensland Prevention, Preparedness, Response and Recovery Disaster Management Guideline 2018 section 2.3.3 states the Local Disaster Management Group members are appointed under section 33 of the Act and should have the necessary expertise or experience and delegated authority to assist with a comprehensive, all-hazards, all-agencies approach to disaster management.

The LDMG must consist of the following Members:

- Chairperson (must be a councillor) appointed by the relevant local government;
- Deputy Chairperson (must be a councillor) appointed by the relevant local government;
- Local Disaster Coordinator (recommended to be the CEO of the local government or other council employee with relevant expertise and experience to be the LDC) appointed by the Chair of the LDMG after consulting with the Chief Executive (QFES Commissioner);
- Other persons appointed by the relevant local government area, incl. council representatives, local emergency services (i.e. Queensland Fire and Emergency Services, Queensland Police Service, Queensland Ambulance Service and State Emergency Service), non-government organisations, representatives of functional lead agencies and a Local Recovery Coordinator.

In addition to the legislated members of the group. The TLDMG may appoint members or advisors to ensure adequate capability and capacity for specialist functions of disaster management.

Under Section 14 of the *Disaster Management Regulation 2014*, with the approval of the chairperson, LDMG Members may have an appointed <u>deputy</u>. The nominated person must have the necessary expertise or experience and is appropriately trained to take on their responsibilities, should they be unavailable, or to provide additional support during extended operations.

Members and deputies to TLDMG members shall be appointed in writing with signed approval from the Chair of the TLDMG. As per Section 33 of the Act, and section 9 of the Regualtion, as per Section 37 of the DM Act the TLDMG will provide written notice of the members and deputies of the group to the Chief Executive (Commissioner QFES) & the District Disaster Coordinator at least once a year.

Accountability and Authority of Members

The principal LDMG Members and Working Group Members and liaison officers from each organisation must have:

• The authority to commit their respective organisation to the LDMG's agreed decisions.

- The authority to commit their respective organisation's resources without having to confer with superiors.
- A sound understanding of the Local Disaster Management Plan.

The principal LDMG Members and Working Group Members and liaison officers from each organisation shall:

- Regularly submit appropriate disaster control or mitigation information to the Local Disaster Coordinator.
- Ensure adequate planning and control measures for disaster control are implemented within their own organisation.
- Upon activation of the TLDMG in a disaster, to forward situation reports to the Local Disaster Coordinator at intervals as may be required by him on the activities of the members' organisations.

Absence from the locality of a principal LDMG member, and the possibility of protracted operations, require that a standby representative (i.e. deputy) from each organisation be identified and briefed on the requirements of their roles and responsibilities under the plan.

Responsibilities

In undertaking TLDMG responsibilities, members must ensure they:

- Attend TLDMG activities with a full knowledge of their agency resources and services and the expectations of their agency;
- Are available and appropriately briefed to actively participate in TLDMG activities to
 ensure that plans, projects and operations use the full potential of their agency or
 function, while recognising any limitations;
- Are appropriately positioned within their agency to be able to commit agency resources to TLDMG normal business activities; and
- Attend and complete appropriate disaster management training to ensure an adequate level of understanding of the Queensland Disaster Management Arrangements and Framework.

Standard for DM - Shared Responsibility	Outcome
Planning and Plans	3, 4
Operations	9
Collaboration and Coordination	10, 11

Key LDMG Positions

Position	Chairperson - Local Disaster Management Group	
Appointment	Appointed by the relevant local government; must be a councillor of the local government, as prescribed in the Disaster Management Regulation 2014.	
Role	 manage and coordinate the business of the group ensure the group performs its functions report regularly to the relevant district group, and the Commissioner, Queensland Fire and Emergency Services, about the performance by the local group of its functions. 	

Position	Local Disaster Coordinator
Appointment	Appointed by the Chair of the Local Disaster Management Group after consulting with the Commissioner, Queensland Fire and Emergency Services, as prescribed in the <i>Disaster Management Act 2003</i> .
Role	 coordinate disaster operations for the local group report regularly to the local group about disaster operations ensure that any strategic decisions about disaster operations by the local group are implemented.

Source: Queensland State Disaster Management Plan Version 1.2 2023

Townsville Local Disaster Management Group TLDMG Composition

The composition of the Townsville Local Disaster Management Group is as follows:

TLDMG Position	Member	Deputy
Core Member - Chairperson	TCC - Councillor (Mayor)	TCC - Councillor (Core Member)
Core Member- TCC	TCC - Councillor (Deputy Chair)	
Councillor & Deputy Chair		
Core Member – Local	TCC – Team Manager, Emergency	• TCC - General Manager,
Disaster Coordinator	Management	Engineering & Asset,
		Infrastructure Planning
		• TCC - General Manager,
		Property Fleet & Emergency
		Management
Core Member - TCC	TCC - Director, Infrastructure &	• TCC - General Manager,
Emergency Response Group	Operations (Chair, TCC Emergency	Construction, Maintenance &
	Response Group)	Operations
		• TCC - General Manager, Water
		& Resource Recovery
		• TCC - General Manager,
		Engineering & Asset,
		Infrastructure Planning

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TLDMG Position	Member	Deputy
		• TCC - General Manager,
		Property Fleet & Emergency
		Management.
Core Member – Local	TCC – Chief Planning and	TCC - Director Community,
Recovery Coordinator	Development Officer	Environment & Lifestyle
Core Member – TLDMG	TCC – General Manager,	TCC - Head Communications &
Communications	Community Engagement	Marketing
Core Member - Department	Dept of Housing- Regional Director	Dept of Housing – Principal
of Housing	Northern Region	Contracts Officer
		Dept of Housing - Area
		Manager, Townsville Housing
	Time is the second	Service Centre
Core Member - Health	THHS - Health Service Chief	THHS - EPCM Coordinator THUS - Towns will a Maintaine.
	Executive	THHS – Townsville University
		Hospital Campus Manager
Carre Manulana CAS	OAS OIS Transport	THHS - Chief Operating Officer
Core Member – QAS	QAS - OIC Townsville	QAS – OIC Kirwan QAS – OIC North are Books as
		QAS – OIC Northern Beaches OAS – OIC South Townsville
		QAS - OIC South Townsville
Core Member - QFES	QFES - Director Regional	QFES - Inspector Manager
6 14 1 000	Development	Professional Development
Core Member – QPS	QPS - Inspector	QPS – Senior Sergeant
Core Member – SES	SES - Local Controller	SES - Representative
Core Member – Power	Ergon – Maintenance Program Manager (Lines)	Ergon – Manager, Engineering Lines
Core Members - Shelters &	TCC - General Manager,	TCC - Team Manager,
Evacuation Centres	Environmental Health & Regulation (Working Group Chair)	Environmental Health & Regulation
Core Member – TEL	TEL - Chief Executive Officer	TEL - Director, Tourism & Events
Advisory Member	TCC - Chief Executive Officer	
Advisory Member -	TCC - Team Manager, Property	
Asbestos Working Group	Management (Working Group	
	Chair)	
Advisory Member -	TCC - General Manager,	
Environment Health WG	Environmental Health & Regulation	
	(Working Group – Chair)	
Advisory Member	AECOM - Associate Director Water	
	Resources	
Advisory Member	Air Services Australia –	
	Representative	

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TLDMG Position	Member	Deputy
Advisory Member	Aurizon - Representative	Aurizon – Representative
Advisory Member	Australian Red Cross –	Australian Red Cross -
	Representative	Representative
Advisory Member	Coast Guard – Representative	Coast Guard – Representative
Advisory Member	Department of Defence - 3rd	Department of Defence - 3rd
	Brigade – Brigadier	Brigade – ADF Liaison Officer
Advisory Member	Department of Defence - RAAF -	Department of Defence - RAAF -
	Wing Commander	Representative
Advisory Member	Department of Education (DoE) -	Department of Education (DoE) -
	Representative	Representative
Advisory Member	Department of State Development	
	Infrastructure, Local Government	
	and Planning (DLGRMA) –	
	Representative	
Advisory Member	Department of Transport and Main	Department of Transport and Main
	Roads (TMR) – Representative	Roads (TMR) – Representative
Advisory Member	Department Of Transport & Main	Department Of Transport & Main
	Roads – Maritime Safety	Roads – Maritime Safety
	Queensland (TMR-MSQ) -	Queensland (TMR-MSQ) -
	Representative	Representative
Advisory Member	Department of Treaty, Aboriginal	Department of Treaty, Aboriginal
	and Torres Strait Islander	and Torres Strait Islander
	Partnerships, Communiites and the	Partnerships, Communiites and the
	Arts – Representative	Arts – Representative
Advisory Member	Disaster Relief Australia (DRA) –	Disaster Relief Australia (DRA) –
	Representative	Representative
Advisory Member	GIVIT - Representative	GIVIT - Representative
Advisory Member	Icon Cancer Centre –	Icon Cancer Centre -
	Representative	Representative
Advisory Member	Magnetic Island Disaster	Magnetic Island Disaster
	Management Group – Chair	Management Group - Chair
Advisory Member	NBN – Representative	
Advisory Member	NQ Primary Health Network (NQ	NQ Primary Health Network (NQ
•	PHN) – Representative	PHN) – Representative
Advisory Member	Optus – Representative	Optus - Representative
Advisory Member	Origin Energy – Representative	Origin Energy – Representative
Advisory Member	Port of Townsville Limited –	Port of Townsville Limited –
	Representative	Representative
		<u> </u>

TLDMG Position	Member	Deputy
Advisory Member	Queensland Fire & Emergency	
	Services - Emergency Management	
	Coordinator (QFES-EMC)	
Advisory Member	Queensland Fire & Emergency	Queensland Fire & Emergency
	Services – Rural Fire Service (QFES–	Services - Rural Fire Service (QFES-
	RFS) – Representative	RFS) – Representative
Advisory Member	QPS - District Disaster Management	
	Group (QPS-DDMG) -	
	Representative	
Advisory Member	Queensland Rail (QR) -	Queensland Rail (QR) -
	Representative	Representative
Advisory Member	Queensland Reconstruction	Queensland Reconstruction
	Authority (QRA) – Representative	Authority (QRA) – Representative
Advisory Member	Riverside Marine Townsille	Riverside Marine Townsille
	(FantaSea) – Representative	(FantaSea) – Representative
Advisory Member	Rollingstone Disaster Management	Rollingstone Disaster Management
	Group (RDMG) – Representative	Group (RDMG) – Representative
Advisory Member	SeaLink North Queensland -	SeaLink North Queensland -
	Representative	Representative
Advisory Member	Services Australia – Representative	Services Australia - Representative
Advisory Member	Surf Life Saving Queensland (SLSQ)	Surf Life Saving Queensland (SLSQ)
	– Representative	– Representative
Advisory Member	Telstra Country Wide –	Telstra Country Wide -
	Representative	Representative
Advisory Member	Townsville Aged Care Partnership	TACPG - Deputy Chairperson
	Group (TACPG) - Co-Chairpersons	
Advisory Member	Townsville Aviation Pty Ltd –	Townsville Aviation Pty Ltd –
	Representative	Representative
Advisory Member	Townsville Chamber of Commerce	Townsville Chamber of Commerce
	– Representative	– Representative
Advisory Member	Townsville Mulitcultural Support	
	Group (TMSG) – Representative	
Advisory Member	Townsville Public Health Unit	
	(TPHU), – Representative	
Advisory Member	Translink - Representative	Translink - Representative
Advisory Member	Volunteering North Queensland Inc	Volunteering North Queensland Inc
	(VNQ) – Representative	(VNQ) – Representative

A contact list for TLDMG Members and Advisory Members can be found at <u>Annexure C</u>. Personal details have been removed from public versions of this plan to comply with the *Information Privacy Act 2009*.

Standard for DM - Shared Responsibility	Outcome
Capability Integration	7
Operations	9
Collaboration and Coordination	10, 11

2.2 TLDMG Working Groups

The TLDMG has established eight (8) Working Groups for the purpose of assisting in the preparation and implementation of the Local Disaster Management Plan. The function and membership of these groups are set out below. These Working Groups include:

- Asbestos Working Group
- Environmental Health Working Group
- Evacuation & Transport Working Group
- Local Recovery & Resilience Group
- Magnetic Island Disaster Management Group
- Rollingstone Disaster Management Group
- Shelters & Evacuation Centres Working Group
- Townsville Aged Care Partnership Group

2.2.1 Asbestos Working Group

Chair:	TCC - Team Manager, Property Management
Membership:	DES - Representative
	DEPW – Representative
	WHSQ - Representative
	Townsville Public Health Unit - Representative
	QFES - Fire & Rescue - Representative
	QPS - Representative
	TCC - General Manager, Environmental Health & Regulation
	TCC - Team Manager Resource Recovery Services
	(Advisory) Representatives from neighbouring Councils
	(Advisory) Representatives from TCC Infrastructure and Operations and
	Community Engagement.
	(Advisory) Local Disaster Coordinator, TLDMG
	(Advisory) Department of Defence – Liaison Officer
	(Advisory) Cyclone Testing Centre Staff
	(Advisory) Building Services Australia – Representative
	Others as required by the nature and extent of the event
Responsibilities	Take responsibility for a whole of government ACM response within the
	disaster zone

Maintain responsibility for the development, review and testing of the ACM Sub Plan
Identify roles and responsibilities for the management of ACM during the disaster situation
Determine a consistent course of action to be taken in managing ACM across the disaster event based on the legislative and the operational policy requirements
Determine the resources required to effectively and efficiently manage the ACM
Ensure the effort and expenditure are appropriate to the task
Address any issues which have major implications to the task
Reconcile any differences in approach to the task by different agencies and resolve any disputes which may arise
Report on the progress of the operation to the TLDMG and,
Contribute to messaging content for communications to the public through
the provision of subject-matter expertise, etc.

2.2.2 Environmental Health Working Group

Meeting frequency:	At least twice per year
Chair:	TCC - General Manager, Environmental Health & Regulation
Membership:	 TCC - Environmental Health & Regulation - Representative TLMDG - Community Engagement - Representative TCC - Townsville Water & Wastewater - Representative TCC - Townsville Waste - Representative Townsville Public Health Unit (TPHU) - Representative
	 Department of Environment & Science (DES) - Representative (Advisory) Local Disaster Coordinator (LDC), TLDMG
Responsibilities:	 Conduct reviews and evaluations of the Environmental Health Working Group Sub Plan and provide expert advice to help refine the roles, responsibilities and key actions required to ensure the effective implementation of the plan. Review resources available to assist in the activation of this plan. Communicate this plan within each agency and provide appropriate training as required. Conduct and actively participate in any exercises testing the performance of this plan and provide constructive evaluations and suggested improvements. Provide reports to the LDC and TLDMG.

2.2.3 Evacuation & Transport Working Group

Meeting frequency:	At least annually		
Chair:	QPS Core Member on TLDMG		
Deputy Chair:	QPS Deputy Core Member on TLDMG (OIC of one of the major stations)		
Chair:	QPS Core Member on TLDMG		
	Representative • (Advisory) TCC Construction Maintenance & Operations (CMO) – Representative • (Advisory) TCC Spatial Services – Representative • (Advisory) Townsville Airport Pty Ltd – Representative • (Advisory) Willows Shopping Centre – Representative		

and the public as required, in the event of a disaster or major event.

Review and maintain the Evacuation Operation Procedure Develop event-specific evacuation plans as required; Assess Rapid Damage Assessment and hydrology data to inform the decisionto evacuate; Establish strategies, tactics and operational requirements for thedevelopment of traffic management plans; Provide reports and make recommendations to the TLDMG about matters relating to transportation disaster management issues; Regularly review and assess the Evacuation & Transport Sub Plan; Review and maintain the Transport Resource List available to assist the TLDMG with its response to disaster events; and Coordinate the provision of transport of personnel, equipment, provisions

2.2.4 Local Recovery & Resilience Group

Meeting frequency:	At least twice per year			
Membership:	Organisation	Responsible Person	LRRG Position	
	Townsville City Council	Deputy Mayor (Cr Mark Molachino)	Member – Chair	
	Townsville City Council	Councillor (Cr Kurt Rehbein)	Member – Deputy Chair	
	Townsville City Council	Chief Planning & Development Officer	Member – LRC, TLDMG	
	Townsville City Council	Director Community Environment and Lifestyle	Member – Deputy LRC, TLDMG	
	Townsville City Council	Councillor (Cr Margie Ryder)	Member – Chair, Environmental Task Force	
	Townsville City Council	Chief Sustainability Officer	Member - Coordinator, Environmental Task Force	
	Townsville City Council	Councillor (Cr Maurie Soars)	Member - Chair, Economic Task Force	
	Townsville City Council	Chief Financial Officer	Member - Coordinator, Economic Task Force	
	Townsville City Council	Councillor (Cr Ann-Maree Greaney)	Member - Chair, Human Social Task Force	
	Townsville City Council	General Manager, Community and Lifestyle	Member – Coordinator, Human Social Task Force	

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	Townsville City Council	Councillor	Member - Chair,
		(Cr Kurt Rehbein)	Infrastructure Task
			Force
	Townsville City Council	General Manager, Major	Member –
	· ·	Projects	Coordinator,
		Ţ	Infrastructure Task
			Force
	Department of Treaty,	District Community Recovery	Member
	Aboriginal and Torres	Coordinator	
	Strait Islander	eo a mater	
	Partnerships,		
	Communities and the		
	Arts		
	Australian Red Cross	Representative	Member
	Queensland Fire &	Emergency Management	Member
	Emergency Services (QFES)	Coordinator	
	Townsville Hospital &	EPCM Coordinator	Member
	Health Service (THHS)		
	Townsville City Council	Team Manager,	Advisor – LDC, TLDMG
		Emergency Management	
	Queensland Police Service	Senior Sergeant	Advisor – Executive
	(QPS)		Officer,
			DDMG (or Deputy)
	Queensland	Director, Recovery	Advisor
	Reconstruction	Director, Resilience	
	Authority		
	Key Community Group Rep	oresentatives as required	Advisor
	Key Business Representati	ves as required	Advisor
	Key Agency Representative	es as required	Advisor
Sub Groups:	The Local Recovery and Resilience Group has four functional recovery groups and the membership for each of those subgroups is detailed in the <i>TLDMG Local Recovery and</i>		
	Resilience Plan		
Responsibilities:			f disaster events, as well
			ed by the Chair, TLDMG.
	The LRRG provides:		
	o a forum for agencie	s to discuss the effect of the ever	nt/disaster on agency
	service provision and plan for a coordinated approach to the recovery and		
		ce building process;	

o community consultation to allow the community to be part of the recovery and	
community resilience building process;	
coordination of recovery management and information management process atthe	
local level.	

2.2.5 Magnetic Island Disaster Management Group

Meeting	At least annually	
frequency:		
Chair:	Officer in Charge, QPS Magnetic Island	
Membership:	QPS Magnetic Island - Representative	
	Magnetic Island Health Service (MIHS) – Representative	
	QAS Magnetic Island - Representative	
	QFES Magnetic Island - Representative	
	SES Magnetic Island - Representative	
	Ergon Energy – Representative	
	TCC - Representative	
	(Advisory) Team Member from TCC Emergency Management Section	
	(Advisory) Magnetic Island Community Care Association - Representative	
	(Advisory) RFSQ - Representative	
	(Advisory) QLD Parks and Wildlife - Representative	
	(Advisory) Optus - Representative	
	(Advisory) Surf Life Saving Queensland - Representative	
	(Advisory) Sunbus - Representative	
	(Advisory) SeaLink - Representative	
	(Advisory) Magnetic Island Ferries - Representative	
Responsibilities:	Activation of MIDM SOP and MIDM Evacuation Centre SOP	
	Review of MIDM SOP and MIDM Evacuation Centre SOP	
	Liaison with LDC on Magnetic Island Disaster Management community education	
	programs	

2.2.6 Rollingstone Disaster Management Group

Meeting frequency:	At least annually
Chair:	Officer in Charge, QPS Rollingstone
Membership:	QPS Rollingstone - Representative
	Crystal Creek Community Association - Representative
	Rollingstone and Districts Community Association – Representative
	QFES Rural Fire Service Queensland – Rollingstone Rural Fire Brigade –
	Representative
	SES Rollingstone – Representative
	Toomulla Community Association - Representative

	Others as listed in Rollingstone Disaster Management Standard Operating
	Procedures (RDM SOP)
	 (Advisory) Team Member from TCC Emergency Management Section
Responsibilities:	Activation of <i>RDM SOP</i>
	• Review of <i>RDM SOP</i>
	 Liaison with LDC on RDM community education programs

2.2.7 Shelters & Evacuation Centres Working Group

Chair:	SECC Core Member on TLDMG	
Deputy Chair:	SECC Deputy Core Member on TLDMG	
Core Members:	Australian Red Cross	
	Queensland Police Service (QPS)	
	Queensland Ambulance Service (QAS)	
	Queensland Fire and Emergency Services (FRS)	
	Queensland Fire and Emergency Services (EM)	
	State Emergency Services (SES)	
	Local Disaster Coordinator (LDC)	
	Queensland Health (TPHU representative)	
	Department of Housing (DH)	
Advisory Members:	CentaCare North QLD	
	St Vincent De Paul Society	
	The Salvation Army	
	• 54 Reasons	
	Department of Treaty, Aboriginal and Torres Strait Islander Partnerships,	
	Communities and the Arts (DTATIPCA)	
	Department of Energy and Public works	
	Claw Group	
	St John Ambulance Service	
	Disaster Relief Australia (DRA)	
	TCC - Resource Plant Allocation (RPA)	
	Department of Education (DoE)	
	Townsville Multicultural Support Group (TMSG)	
Roles and	To actively participate in the reviews and evaluations of the Shelters and	
Responsibilities	Evacuation Centres Sub Plan and provide expert advice to help refine the	
	roles and responsibilities and key actions required to ensure the effective	
	implementation of the Sub Plan.	
	To confirm each agencies individual emergency response plan meets the	
	requirements of this Sub Plan.	
	To communicate this sub plan within each agency and provide the	
	appropriate training as required.	
	 To actively participate in the SECWG meetings. 	

To actively participate in any exercises testing the performance of this sub		
plan and provide constructive evaluations and suggested improvements.		
 To provide reports to the LDC - TLDMG via the General Manager 		
Environmental Health & Regulation as necessary.		

2.2.8 Townsville Aged Care Partnership Group (TACPG)

Meeting frequency:	At least annually		
Chair:	Bolton Clarke Rowes Bay (Residential Aged Care Provider) – Residential Manager		
Deputy Chair:	Carlyle Gardens (Blue Care) - Village Manager		
	St James Retirement Village – Village Manager		
Membership:	Local Disaster Coordinator, TLDMG		
	 TCC Emergency Management Section – Representative 		
	QAS – Representative		
	QPS - Representative		
	THHS - Representative		
	TPHU – representative		
	NQ PHN - Representative		
	Cate's Chemist - Representative		
	Arcare North Shore – Representative		
	Blue Care Townsville Aged Care Facility - Representative		
	Bolton Clarke Glendale - Representative		
	Bolton Clarke Rowes Bay (Independent Living) – Representative		
	• Bolton Clarke Rowes Bay (Residential Aged Care Provider) - Representative		
	Carinity Fairfield Grange – Representative		
	Carlyle Gardens (Blue Care) – Representative		
	 CofC Palms Aged Care Service (Ingham) - Representative 		
	 CofC Rockingham Aged Care Service (Cardwell) - Representative 		
	 CofC St James Retirement Village - Representative 		
	Life Without Barriers - Representative		
	Loreto Home for the Aged – Representative		
	OzCare Villa Vincent – Representative		
	Parklands Residential Aged Care Facility (THHS) - Representative		
	Saint Vincents Care Douglas – Representative		
	Regis Aged Care – Representative		
	Shalom Elders Village (Blue Care) – Representative		
	The Good Shepherd Home - Representative		
Responsibilities:	Facilitate discussion between residential aged care facilities and retirement		
	villages in the Townsville area to identify and address issues, risks and areas		
	for development		
	Annual updating of <i>Townsville Aged Care Partnership Group (TACPG) Facility</i>		
	Information Lists		
	Annual updating of TACPG Agreement		

2.3 Other Disaster Management Working Groups

Townsville City Council actively participates in various non-TLDMG Working Groups, including:

- Joint Council Disaster Management Group
- Townsville District Disaster Health Functional Working Group.

The function and membership of these groups are set out below.

2.3.1 Joint Council Disaster Management Group

Meeting frequency:	At least twice per year	
Chair:	Rotating	
Membership:	Local Disaster Coordinators from:	
	Burdekin Shire Council	
	Cairns Regional Council	
	Cassowary Coast Regional Council	
	Charters Towers Regional Council	
	Cook Shire Council	
	Flinders Shire Council	
	Hinchinbrook Shire Council	
	Douglas Shire Council	
	Mareeba Shire Council	
	Tablelands Regional Council	
	Townsville City Council	
Responsibilities:	Review and maintain the Joint Council Disaster Management Group MoU	
	Discuss disaster management news and issues relevant to each LGA, share	
	learnings, strategies and education/training tools and initiatives.	

2.3.2 Townsville District Disaster Health Functional Working Group

Meeting frequency:	At least twice per year	
Chair:	Chief Operating Officer, Townsville Hospital and Health Service (THHS)	
Membership:	Health Incident Controller/Chief Operating Officer, THHS (Chair)	
	Emergency Preparedness and Continuity Management Coordinator, THHS	
	(Secretariat)	
	Chief Medical Officer, THHS (Deputy Chair)	
	Service Group Director, Rural Hospitals Service Group, THHS	
	 Service Group Director, Mental Health Service Group, THHS 	
	Service Group Director, Indigenous Health Service Group, THHS	
	Townsville Public Health Unit representative, THHS	
	Director of Pharmacy, THHS	
	Group Laboratory Manager, Townsville, Health Support Queensland (HSQ)	

	 Townsville DDMG Executive Officer, QPS Local Disaster Coordinator, TLDMG/Team Manager, Emergency Management, TCC Queensland Ambulance Service representative North Queensland Primary Health Network representative
	 Mater Health Services, North Queensland representative Lavarack Health Centre representative, ADF Joint Operations Support Services representative, ADF Emergency Management Coordinator, QFES Retrieval Services Queensland (RSQ), Northern Operations representative Blue Care representative Townsville Private Clinic representative Queensland Government Air Rescue Helicopter Service, Townsville Base representative Royal Flying Doctors Service, Townsville Base representative Department of Health - Aged Care representative Chair, Townsville Aged Care Partnership Group
	 Chair, Charters Towers LDMG Aged and Vulnerable Persons Working Group National Disability Insurance Agency (NDIA) representative Icon Cancer Centre representative
Responsibilities:	 Develop and advise the Townsville DDMG and LDMG of principles, standards and structures which govern and optimise a health response in an emergency or disaster event. Provide a systematic framework for the management of any large emergency and disaster event that requires a coordinated approach across multiple health services or agencies. Development of plans to identify and mitigate major health risks at facility and district level. Oversee compliance with relevant standards and legislation for disaster
	 management. Work in partnership with external agencies to ensure responses are optimised to meet the communities need. Ensure resolution of issues referred to the working group. Facilitate/participate in annual disaster management training exercises to test plans and sub plans.

Standard for DM - Shared Responsibility	Outcome
Capability Integration	7
Operations	9
Collaboration and Coordination	10, 11

2.4 Disaster Response Functions and Associated Lead Agencies

Response Function	Description	Lead Agency
Building and engineering services	To provide for the continuity of service of essential water and sewerage services, building inspections, road, rail, bridge and marine facility damage assessment, maintenance or repair, and demolitions and debris clearing as required.	TCC and DEPW
Donations and Offers of Assistance	To coordinate Offers of Assistance by the public, incl. the delivery and distribution of goods / resources donated by the public that have not been donated directly to community services and clubs.	TLDMG and GIVIT
Electricity infrastructure and supply	To provide advice on power infrastructure / supply and restoration of power supply as per the <i>Critical Facility Power Restoration List</i> .	Ergon Energy (via Energy Queensland)
Emergency medical retrieval	Emergency medical retrieval covers a primary response to an incident in a pre hospital situation. A primary response may involve road ambulance, aeromedical evacuation, and specialist vehicles. Queensland Health, through a collaborative arrangement between the QAS and Retrieval Services Queensland will coordinate emergency medical retrieval	THHS, Queensland Health
Emergency supply	Emergency Supply is the acquisition and management of emergency supplies and services in support of displaced persons during disaster operations. Emergency supply can include: Resource support in the establishment of forward command posts. Community recovery centres and/or disease control centres including: furniture, equipment and materials Resource support for community evacuation centres including: furniture, bedding materials, health and hygiene products Bottled and bulk potable water supplies Temporary structures (i.e. marquee and portable ablution facilities) Small plant and equipment hire services	QFES

Response Function	Description	Lead Agency
	To support local economies affected by disasters, every effort should be made to exhaust local supplier networks before requesting assistance from outside the impacted area.	
	Where local capacity is exhausted, QFES coordinates the acquisition and management of emergency supplies, through the State Disaster Coordination Centre (SDCC) when activated, or through the SDCC watch desk outside of activation periods.	
	Agencies are to use their own internal acquisition/supply and support resource capability before requesting further support.	
	The acquisition of specialist resources requiring a permit, licence or specific technical knowledge is the responsibility of the respective agency.	
Evacuation management	To provide for the planned relocation of persons from dangerous or potentially dangerous areas to safer areas and eventual return.	QPS, TLDMG, Australian Red Cross, Evacuation & Transport Working Group
	To safeguard the lives of community members, it may be necessary for evacuation to occur. LDMG's will manage evacuations in their area of responsibility.	
	Queensland uses the Australian Red Cross national database system "Register Find Reunite" which assists in locating individuals and responding to enquiries regarding people who may be in a disaster affected area.	
Impact assessment	To assist the TLDMG in planning, formatting, and conducting a complete impact assessment. This assessment gathers information on the magnitude of the event, and the extent of its impact on both the population and the community infrastructure.	QFES, QRA and TCC

Response Function	Description	Lead Agency
Language / Interpreter	Provide language and interpreter support during a disaster event and ongoing	Townsville Multicultural Support
Support	support in community engagement activities as required.	
Local Recovery	The provision of immediate and continuing care of disaster affected persons in the local area who may be / have been impacted by an event.	Local Recovery & Resilience Group
Logistics	To develop a process to manage the receipt and delivery of the appropriate supplies, in good condition, in the quantities required, and at the places and times they are needed.	TLDMG
Mass casualty management	A mass casualty event is an incident or event where the location, number. Severity or type of live causalities requires extraordinary resources. Mass casualty management includes: • Treatment of injured • Transport and reception of injured • Provision of health and medical services • Provision of clinical recovery services Queensland health is the responsible agency for the provision of an integrated response to mass casualty management.	THHS
Mass fatality management	Mass casualty management: In cases of mass fatalities, Queensland health and QPS have joint responsibility for:	THHS and QPS
(incl. Victim identification)	 Management of deceased, including coordination of transport and victim identification Notification of, and liaison with, next of kin Liaison with and support to the State Coroner 	
Public Health, Mental Health and Medical Services	To provide coordination of the hospital and health resources required in responding to healthcare needs following a disaster event.	THHS
Public information and warnings	Providing a "single point of truth" for the management and dissemination of accurate, useful and timely information and warnings to the public during disaster events.	TCC (on behalf of the TLDMG)

Response Function	Description	Lead Agency
Resupply	When communities, properties or individuals are isolated for an extended period	QFES, TLDMG, QPS
	from their normal sources of food and basic commodities, support will be	
	provided, dependent upon the respective circumstances.	
	The entity isolated will determine the responsible agency/group. Therefore	
	multiple lead agencies are identified for this function.	
Reticulated Water	The Queensland government undertakes a policy and regulatory role in partnership	TCC
Supply and Dam	with energy and water supply partners across the state. In Townsville, it is TCC that	
Safety	fulfils this role. Emergency Action Plans have been developed and are updated	
	annually for Ross Dam and Paluma Dam.	
Search and Rescue	Coordinating the use of resources in search and rescue in response to an actual or	QPS, QFES, SES
	potential disaster condition.	
Telecommunications	Locally we have Liaison officers from Telstra, Optus and NBN that are in regular	NBN, Optus, Telstra
	contact with the LDCC and LDMG	
Temporary emergency	To provide for the management of facilities which provide affected people with	Department of Hosuing and
accommodation	basic human needs including accommodation, food and water, and	Shelters & Evacuation Centres
	welfare/recovery processes.	Working Group
Transport systems	To coordinate the use of transportation resources to support the needs of the	Evacuation & Transport Working
	TLDMG and other disaster support groups requiring transportation capacity to	Group, TMR, Aurizon, QR, Port of
	perform emergency response, recovery and assistance missions.	Townsville, Townsville Airport
Volunteer	To coordinate community volunteers that seek to assist in times of disaster	Disaster Relief Australia, GIVIT,
management		VNQ

Standard for DM - Shared Responsibility	Outcome
Planning and Plans	3, 4
Collaboration and Coordination	10, 11

Organisational Responsibilities

Organisation	Responsibilities
Local Government	 Maintenance of the Local Government function (via council's Emergency Response Plan) Maintenance of normal Local Government services to the community: Water, Wastewater and Waste services Public health Animal control Environmental protection Roads and Drainage Transport Networks Maintenance of a disaster response capability Maintenance of telemetry and warning systems (incl. TARDIS, FEDSS) Collection and interpretation of information from telemetry systems, conjointly with BOM and AECOM Provision and maintenance of infrastructure for Local SES Units Arrangement and preparation of Shelters & Evacuation Centres Description of Shelters & Evacuation Centres
TLDMG	 Ross River and Paluma Dam Operations Development of the comprehensive Local Disaster Management Planning strategies Design and maintenance of a public education/awareness program Design, maintenance and operation of a LDCC, including the training of sufficient personnel to operate the Centre Coordination of support to response agencies Reconnaissance and impact assessment Provision of public information prior to, during and following disaster event impacts Recommendations re. areas to be considered for directed evacuation Public advice re. evacuation of at-risk areas Identification, resourcing, staffing and operation of Shelters and Evacuation Centres Provision of locally based community support services
Department of Defence	 Advisory on Australian Defence resources Scenario-planning and intelligence (Crisis Appreciation and Strategic Planning)
Department of TMR	 Advisory on transportation systems, networks, operations and resources
Disaster Relief Australia	 Incident management team assistance Mapping (using Auspace) Work order management Spontaneous volunteer management Assist with impact assessments Debris management (home debris cleaning & removal, "muck/gut out"

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Organisation	Responsibilities
	Expedient home repairs
	Downed tree removal
	Maintenance of electrical power supply
Ergon (Energy Qld)	Advice in relation to electrical power
Ligon (Energy Qiu)	 Restoration of power
	Safety advice for the community
Port of Townsville	 Advisory on Port operations and resources
	 Assessment, treatment and transportation of injured persons
QAS	 Assistance with evacuation (for medical emergencies)
QAS	 Provision of advice regarding medical special needs sectors of the
	community
	 Coordinate emergency supply
	 Resupply
	 Impact Assessment (via Survey123 system)
	 Access to TOM mapping (this will be the State point of truth)
	 Fire Behaviour Analysts (forward planning Bushfire behaviour)
	 Urban Search and Rescue (USAR)
	Swift water / floodwater rescue
	 Public education, community messaging, warnings and alerts
	• Fire and Rescue staffing as part of the staffing of cyclone shelters (part of
QFES	the shelter management team)
	 Assistance with conduct of evacuations
	 HAZMAT / Chemical incident Plume modelling
	 Provision of Disaster Management training for LDMG members and other
	identified stakeholders in accordance with the Queensland Disaster
	Management Training Framework.
	 Coordinate, support and manage the deployment of SES resources (as
	required, in consultation with local government, appoint a suitably
	experienced and/or qualified officer as SES Coordinator to support the
	coordination of SES operations

Organisation	Responsibilities
QPS	 Preservation of peace and good order Prevention of crime Security of any site as a possible crime scene Investigation of the criminal aspect of any event Coronial investigation procedures Traffic control, including assistance with road closures and maintenance of road blocks Crowd management/public safety Coordination of search and rescue (See State Rescue Policy) Management of evacuations Security of evacuated areas Registration of evacuated persons (activity undertaken by Red Cross, where they have a presence)
Queensland Rail	Advisory on Queensland Railway resources
SES	 Assisting the community to prepare for, respond to and recover from an event or disaster Public Education Rescue of trapped or stranded persons (see State Rescue Policy) Search operations for missing persons Emergency repair/protection of damaged/vulnerable buildings Assistance with debris clearance First Aid Traffic Control Short term welfare support to response agencies Assistance with impact assessment Assistance with communications Assistance with lighting Flood boat operations Assistance with evacuations Assistance with staffing of shelters
Telecommunications	Advice on telecommunication infrastructure and services
providers	Maintenance and restoration of communications supply
Townsville Airport Pty Ltd	Advisory on Airport operations and resources
Townsville Enterprise Limited	 Provide advice to LDMG on "mass gathering" or large scale events planned for the region Liaison with accommodation providers on emergency accommodation Provide Tourists and accommodation providers with advice & warnings on event / disaster Disseminating information to other Visitor Information Centres in the region

Organisation	Responsibilities		
Townsville Hospital & Health Service	 Coordination of medical resources Public health advice and warnings to participating agencies and the community Psychological and counselling services for disaster affected persons as per service delivery requirements Ongoing medical and health services required during the recovery period to preserve the general health of the community 		

Duties of the Townsville Local Disaster Management Group

The Duties of the Townsville Local Disaster Management Group include:

- (a) Preparation and revision of the Local Disaster Management Plan;
- (b) Provision of assistance to the Local Disaster Coordinator during Disaster Management operations.
- (c) Promotion of disaster management education to the community.

Duties of the Working Groups

The Duties of the Working Groups shall be:

- (a) To elect a chairperson, who will be the Group's representative on the TLDMG.
- (b) To revise the areas of the TLDMP for which the respective working groups have responsibility.
- (c) To provide a forum for discussion and planning relating to their respective functional areas within the *Townsville Local Disaster Management Plan*.
- (d) To assist the TLDMG in the preparation of short term, medium term and long term strategies to reduce the risk of disasters and their effect on the community.

Induction

The LDC, in consultation with the QFES-EMC, will ensure that all TLDMG Members including Deputies and replacement Members will undertake LDMG Induction as soon as possible.

Records of LDMG Induction will be maintained within the Queensland Disaster Management Training Framework Register.

2.5 Meetings

The Chairperson or Deputy Chairperson of the TLDMG is to preside at all TLDMG meetings. If both are absent, the Chairperson or Deputy Chairperson may appoint another nominated Member of the group to preside. If both officers are absent, the TLDMG will choose a nominated Member to preside.

A formal Attendance Record will be kept for each meeting of the TLDMG.

Minutes will be recorded and documented for each meeting of the TLDMG.

2.5.1 Schedule

The TLDMG will meet at least five (5) times per year (February, April, July, October and December) and as required for activations. Advisory members will be invited to two (2) (July and December) of the five (5) meetings and as required during activations.

The appointments of Members and Deputies to the Townsville Local Disaster Management Group are to be endorsed at each TLDMG meeting, as required.

2.5.2 Quorum

Quorum for a Local Disaster Management Group meeting is equal to one-half the number of Members plus one (1). An appointed Deputy attending a meeting on behalf of a Member is to be counted in the quorum. There are 15 members nominated as Core Members of Townsville LDMG; therefore, at least eight (8) members or their nominated deputy is required to achieve a quorum.

Standard for DM - Shared Responsibility	Outcome
Planning and Plans	3, 4

2.6 Reporting

The LDC of the TLDMG is responsible for the administrative responsibilities of the group.

The normal business reporting requirements of the TLDMG are as follows:

- Maintenance of membership (incl. Deputies) and contact lists
- Documentation of meeting minutes and distribution of minutes to TLDMG Members and Advisory members
- Submission of reports and annual TLDMG status reports (including annual planning requirements) as required to the DDMG
- · Outcomes and actions for exercises conducted
- Submission of the TLDMG Members and Deputies List to the DDMG twice per year.

Part Three - Disaster Risk Profile

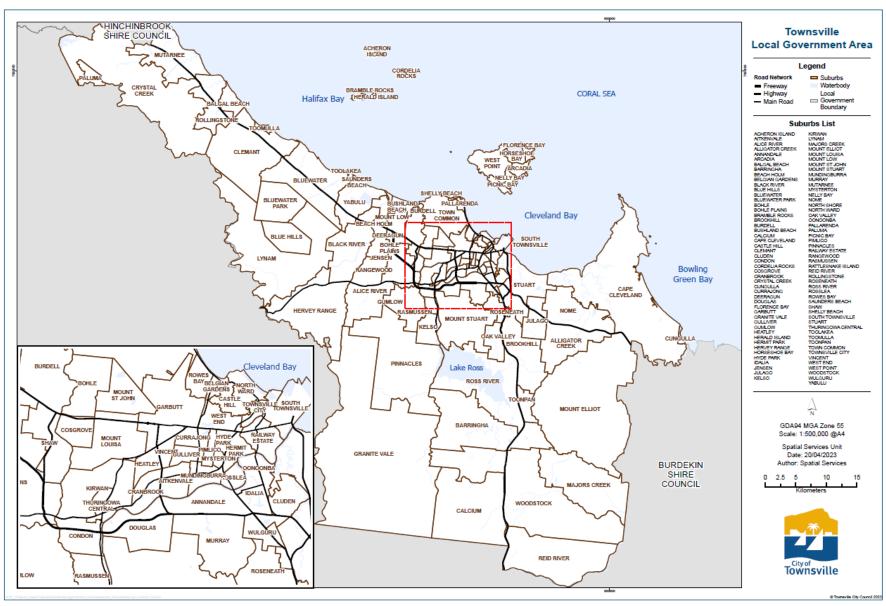
3.1 Community Context

3.1.1 Introduction

Townsville is a coastal city bounded by mountain ranges in a semi-tropical environment. The region is characterised by diverse landforms and ecosystems. In the low lying coastal plain, there are a number of rivers, creeks and freshwater wetlands. Hills and mountains rise out of the coastal plain, while the long coastline features beaches, mangrove estuaries, saltpans and coastal swamps.

The Townsville Local Government Area (LGA) adjoins Hinchinbrook Shire Council to the north, Burdekin Shire Council to the south and Charters Towers Regional Council to the west. The Townsville LGA includes the areas of:

Acheron Island	• Condon	• Lynam	Reid River
Aitkenvale	Cordelia Rocks	Majors Creek	 Rollingstone
Alice River	Cosgrove	Mount Elliot	 Roseneath
Alligator Creek	Cranbrook	Mount Louisa	Ross River
 Annandale 	Crystal Creek	Mount Low	• Rosslea
• Arcadia	• Cungulla	Mount St John	• Rowes Bay
Balgal Beach	• Currajong	Mount Stuart	• Saunders Beach
• Barringha	 Deeragun 	 Mundingburra 	• Shaw
• Beach Holm	• Douglas	• Murray	Shelly Beach
Belgian Gardens	• Florence Bay	• Mutarnee	South Townsville
Black River	• Garbutt	 Mysterton 	• Stuart
• Blue Hills	Granite Vale	Nelly Bay	Thuringowa Central
 Bluewater 	 Gulliver 	• Nome	• Toolakea
Bluewater Park	• Gumlow	North Ward	• Toomulla
• Bohle	Heatley	Oak Valley	• Toonpan
• Bohle Plains	Herald Island	 Oonoonba 	Town Common
Bramble Rocks	Hermit Park	 Pallarenda 	Townsville City
• Brookhill	Hervey Range	• Paluma	• Vincent
• Burdell	Horseshoe Bay	• Picnic Bay	West End
Bushland Beach	Hyde Park	• Pimlico	West Point
Calcium	• Idalia	 Pinnacles 	• Woodstock
Cape Cleveland	• Jensen	Railway Estate	Wulguru
Castle Hill	• Julago	 Rangewood 	• Yabulu
• Clemant	• Kelso	 Rasmussen 	
• Cluden	Kirwan	Rattlesnake Island	



Source: Townsville City Council Demographic Profile Townsville Suburbs, August 2020

Standard for DM - Shared Responsibility	Outcome
Planning and Plans	3

3.1.2 Geography

3.1.2.1 Area

Townsville is located approximately halfway between the tip of Cape York and Brisbane. The local government area covers 3,738 sq kilometres (or 0.2% of the total area of Queensland) with a coastline of about 230km extending from Mt. Spec in the North, along coastal communities to the Bohle River and continuing south through Cleveland and Bowling Green Bays to the Haughton River. The western boundary of the local government area is the Great Dividing Range.

(Source: City Profile - TCC Website)

3.1.2.2 Topography

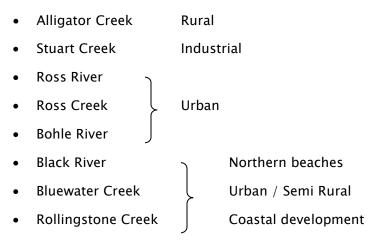
The urban areas of Townsville have been developed primarily along the coastal fringe on the flood plain areas adjacent to the Ross River and Bohle River. There are several small elevated sites within the developed area including:

- Castle Hill
- Mount Louisa
- Mount Stuart.

The Townsville area is bounded by the Great Dividing Range (Hervey's Range) to the west, from the Mount Elliot area to the south and the Paluma Range to the north.

3.1.2.3 River Systems

The location of the Great Dividing Range has created many catchment areas which have small well defined catchments with relatively quick run off times (12 hours or less) for rainfall. The major systems are:



3.1.2.4 Geology

The regional geological setting for Townsville is complex; ancient rocks approximately 600 million years old form a basement or foundation, which is clearly concealed by rocks of younger igneous activity - volcanic eruptions and emplacement of molten granite magmas.

In more recent geological times, extensive areas have experienced the effects of erosion, and in some places, have been covered by sediments produced from further erosion. (Source: Trezise and Stephenson (1990))

However, the simplified surface geological conditions are clearly reflected in the physiography of the landscape and may be summarised as:

- Coastal Plain (Flat coastal lowlands)
- Coastal Ranges Isolated mountain masses
- Hervey Range Escarpment.

The marine sector (offshore) of the City of Townsville comprises the Continental Shelf (inner and middle; Trezise et al, 1989), a shallow, gently sloping platform (with depth below sea level ranging from 30 to 200m) mantled by both marine and terrestrial sediments a few million years old, upon which the coral reefs of the Great Barrier Reef are built. The complex structural domain that exists today can be inextricably linked to the regional plate tectonics in the development of the Coral Sea Basin.

(Source: Centre for Earthquake Research in Australia report 'EARTHQUAKE RISK ASSESSMENT FOR THE CITY OF TOWNSVILLE' June 2006)

Soils in the City of Townsville (Mainland Suburbs)

Comprehensive surveys of the soils of the Townsville coastal plain have been documented by Murtha (1975, 1982). The surface geology of a significant portion of the Mainland Suburbs of the City is composed of Quaternary alluvial deposits. Most of the soils are composed of sand and clay. Soil depths are variable with maxima in the range of about 100–150cm. These are overlain by the shallow soils (erosional and depositional products). Urban and rural development is concentrated in these areas.

(Source: Centre for Earthquake Research in Australia report 'EARTHQUAKE RISK ASSESSMENT FOR THE CITY OF TOWNSVILLE' June 2006)

3.1.2.5 Vegetation

The local vegetation reflects the particular climate and weather patterns of the area and contrasts with the wetter north and drier west. Dry tropical and eucalypt dominated savannah vegetation prevails in the lowlands and reaches the coast in places, and deciduous vine thickets occur as a mosaic of isolated patches.

Narrow riverbank communities thread through the coastal plain and are heavily populated by eucalyptus and paperbarks. Rainforests are prevalent in the high rainfall upland areas of Mount Elliot in the south and the Paluma Range in the north. The Paluma Range uplands are incorporated in the Wet Tropics World Heritage Area.

3.1.3 Townsville Community Profile

Townsville City Council has developed "Townsville Community Profiles" to provide a summary of key statistics from each Townsville electoral division including socio-demographics, diversity, employment, community and social infrastructure and social services. The profiles draw upon the latest data from council and the Australian Bureau of Statistics. Refer to www.townsville.qld.gov.au to view these profiles in detail.

3.1.3.1 Population

The population data breakdown for the Townsville City Council Area is as follows:

Area	Number
Aitkenvale	4,815
Alligator Creek and District	3,131
Annandale	8,546
Balgal Beach – Rural West	3,971
Belgian Gardens – Rowes Bay	2,640
Black River – Alice River – Hervey Range	5,818
Bohle Plains - Rangewood - Shaw	6.176
Castle Hill – North Ward	6,193
Condon	6,029
Cosgrove - Mount Louisa	10,280
Cranbrook	5,910
Currajong	2,557
Deeragun – Jensen	6,284
Douglas	7,983
Gulliver	2,902
Heatley	3,969
Hermit Park	3,652
Hyde Park - Mysterton	2,186
Idalia - Cluden - Oonoonba	7,435
Julago - Stuart	1,999
Kelso	10,924
Kirwan	21,121
Magnetic Island	2,546
Mount Low - Burdell - Beach Holm	20,458
Mundingburra	3,604

Area	Number
Murray - Roseneath and District	2,004
Pimlico	2,004
Railway Estate	2,979
Rasmussen	4,844
Rosslea	1,885
Rural South East	977
Shelly Beach - Garbutt and surrounds	3,353
South Townsville	2,443
Thuringowa Central	1,929
Townsville City	3,027
Vincent	2,270
West End	3,984
Woodstock District	686
Wulguru	4.475
Central Business District	4,815
TOTAL - Townsville City Council	197,989

Source: <u>Townsville Community Profiles</u>

3.1.3.2 Community Resilience

The population of the Townsville region continues its annual increase with opportunities presented through the northern economic boom. Although people are flocking to North Queensland for the opportunities and staying for the lifestyle, this has created a community, where a large percentage of residents are new to the North Queensland environment and weather. Long term and particularly, rural residents with previous experiences of disaster events are generally resilient and to a large extent self-supportive, at least for several days, during and after a natural disaster. Newer and younger residents with no memory or experience of a disaster event, such as Tropical Cyclone Larry and more recently Tropical Cyclone Yasi and the 2019 Rain Event, are likely to be less prepared to cope and more dependent on government services.

As Townsville is the major centre in the North Queensland area, there is a vast range of State and Federal Department support readily available to the community. There is also an extensive range of non–Government organisations (NGOs) and community groups established within the area. However, the majority of these organisations are experiencing ageing and the dwindling of membership numbers (an Australia wide trend). This pressures the ability and effectiveness of community service groups to respond in emergencies.

3.1.4 Economics and Industry

Townsville is regarded as the commercial, industrial and administrative hub of North Queensland. The city's strategic location, with rail and road links in the north, south and west, allows the sea port to

manage shipments of minerals, livestock, sugar and other cargo. Businesses are also attracted by our plentiful supply of water, power and real estate.

Tourism in Townsville and throughout the Northern Region is viewed often in local economic reports as an important aspect of the regional economy and with the potential to expand. Given the distances to be travelled, the Townsville area and the Northern Region are comparatively successful in attracting tourists.

Townsville is renowned for its easy-going lifestyle, tropical weather and natural surroundings, which range from arid landscapes to rainforests and the Great Barrier Reef. With family-friendly entertainment and vibrant cultural experiences always on offer, the city's population has grown rapidly in recent years as visitors taste the lifestyle and return to live as locals.

3.1.4.1 Business/Industry

The following table shows the diversity of employment by industry within the Townsville area in 2022–2023:

Industry	Number
Accommodation and Food Services	7,032
Administrative and Support Services	2,558
Agriculture, Forestry and Fishing	1,017
Arts and Recreation Services	1,951
Construction	8,708
Education and Training	9,998
Electricity, Gas, Water and Waste Services	1,447
Financial and Insurance Services	1,516
Health Care and Social Assistance	17,737
Information Media and Telecommunications	1,871
Manufacturing	5,052
Mining	903
Other Services	4,737
Professional, Scientific and Technical Services	5,509
Public Administration and Safety	12,275
Rental, Hiring and Real Estate Services	1,740
Retail Trade	8,806
Transport, Postal and Warehousing	4,702
Wholesale Trade	2,000
Total industries	99,559

Source: National Institute of Economic and Industry Research (NIEIR) © 2023. Compiled and presented in economy.id by.id (informed decisions). as viewed in the Townsville City Council Community Profiles https://economy.id.com.au/townsville/employment-by-industry

3.1.4.2 Natural Resources

The Townsville Region's main natural resources are its fisheries and extractive materials, which make a substantial contribution to the regional economy. Resources such as good agricultural land, forests and timber and water are less significant, and the region tends to rely on adjacent areas such as the Burdekin, which provides horticultural produce and supplements the regions bulk water supplies. These resources are of economic and social importance in creating jobs and export earnings, as well as in providing recreation opportunities for residents and visitors.

The region is provided with a range of significant quarry materials, which support the regional building industry. An abundance of granite, silica, quartz, gravel, hard rock, clay and limestone exists.

The region is also nationally and internationally recognised for the quality of recreational fishing which provides a substantial attraction for tourists. A substantial commercial fishing industry is based in Townsville. Aquaculture and the downstream processing of seafood are seen as having growth potential.

Good quality agricultural land is relatively limited to the alluvial flats associated with rivers and creeks. The unreliable rainfall means that agricultural activities are limited to dry land cane farming and fruit tree cropping. The grazing of beef cattle on the lesser quality lands that predominate the region is the main agricultural pursuit (Queensland Department of Communication and Information, Local Government, Planning and Sport 2000).

3.1.4.3 Mining and Mineral Processing

Mining industry development has led to the region becoming a major centre for mineral processing. Three large mineral processing plants are located in the Townsville area:

Townsville Copper Refinery (Mount Isa Mines-MIM)

Commissioned in 1959, this refinery which processes copper ore mined in Mount Isa is now Australia's largest copper refinery. Copper produced to 99.995% purity in sheet form is then exported overseas.

Yabulu Nickel Refinery (currently not operational)

The Yabulu nickel refinery, commissioned in 1974, was regarded as one of the largest and most efficient nickel and cobalt refineries in the world. Nickel ore was imported from Indonesia, New Caledonia and the Philippines, and nickel and cobalt products were exported worldwide. This facility ceased operations in 2016; however, some products remain on site.

Zinc Refinery (Sun Metals Corporation (SMC))

This zinc smelting and electronic zinc refining plant, commissioned in 1999, produces 170,000 tonnes per annum of high purity zinc metal at full production. It produces sulphuric acid as a by-product, which is used by the Phosphate Hill fertiliser project near Mount Isa. SMC has completed construction on sulphuric acid storage facility in the Port of Townsville for export. SMC has a

purpose-built high capacity hopper to expedite discharge from vessels in the Port of Townsville and invested heavily on road transport to optimise use of the Port Access Road and facilitate rapid transfer of raw materials from the port to the SMC facility.

The mining sector supports a range of infrastructure services in the region, including rail infrastructure such as the Townsville-Mount Isa rail link and the Townsville Port, which is a major point of export for Queensland's metallic mineral production (Department of Natural Resources & Mines 2002).

3.1.4.4 Agriculture

Agricultural production plays an important role in the Northern Region economy.

Commodities for which the Northern Region is a major state producer include capsicums, chillies and peppers (66.5% of Queensland's production), beans (49.4%), sugar cane (36.1%), mangoes (40.9%), tomatoes (67%) and rock melons (39.5%). Pineapples are also produced on large plantations around Rollingstone and processing potatoes are grown around Majors Creek.

As is the case with the mining sector, the Townsville Port is a major point of export for agriculture. Major agricultural exports passing through the port include bulk sugar, meat and meat products and live cattle.

3.1.4.5 Transport

The development of the transport network throughout the Northern Region has been an important historical theme. The size and relative isolation of the region, along with expanding trade in industries such as mining and tourism are factors in the continuing expansion of this network.

The Townsville Region is the meeting point of major road and rail networks and also provides high quality sea port and air services.

3.1.5 Critical Infrastructure and Essential Services

3.1.5.1 Critical Facilities

A wide range of facilities, important to community safety and wellbeing before, during and after any emergency, exist throughout the area. The loss or dislocation of these critical facilities would greatly exacerbate the impact on the community.

Some critical facilities are important to the economy of the State, whilst others are potentially significant to the wider national and international safety. They include:

- police and emergency service facilities (incl. SES and other volunteer groups);
- Defence Force facilities including RAAF Garbutt and Lavarack Barracks;

- Hospitals and medical facilities (Townsville University Hospital, Mater Hospital (2 sites), health centres, doctor's surgeries, pharmacies);
- telecommunication centres (telephone exchanges, microwave repeaters, cell phone towers);
- major power generation and supply control facilities (power stations, switching yards, substations, transmission lines);
- water supply, treatment and reticulation facilities;
- sewerage treatment and pumping facilities;
- transport facilities (airfields, port facilities, train stations, bus terminals and depots, marinas, etc.)
- fuel storage and supply; and,
- food processing, storage or distribution facilities.

3.1.5.2 Sensitive Areas

A further range of facilities exist at which people, especially children or the elderly, may congregate or be concentrated. These include:

- child care centres, schools and other educational facilities including James Cook University;
- residential aged care facilities and assisted independent living facilities;
- caravan parks, marinas and other forms of commercial accommodation;
- shopping centres;
- churches and community centres;
- social and recreational facilities such as clubs and sporting venues; and,
- prisons.

3.1.5.3 Dwellings

Residential properties hold approx.. 85,000 dwellings within 74,000 residential building and represent by far the greatest proportion (over 90%) of the number of developed properties in the area. The wind loads standard (Standard AS1170.2 Minimum design loads on structures: Part 2 – Wind loads was first published in 1973 with the current (6th) edition published in 2002) was first adopted under the *Queensland Building Act* in 1981. Over 65% of the buildings have been erected since the mid 1970's.

Most dwellings in the area are one or two storey, constructed over a timber frame with block or brick external walls with metal roofs. The remainder of the roofs are predominantly tile-clad, with a small number of older buildings with fibro roofing. By far the majority of roofs are high pitched and hip-ended although there are some pockets with very few flat roofs. There has been a marked increase in the number of high rise apartment and visitor accommodation buildings constructed (and currently under construction) over recent years.

3.1.5.4 Lifeline Infrastructures

The wellbeing and safety of the community is also dependant on a range of lifeline infrastructure networks. These include:

- the road network;
- · the rail network;

- power reticulation services;
- water reticulation services;
- sewerage reticulation services;
- telecommunications services;
- logistic support facilities (e.g. fuel and food supply).

3.1.5.5 Power

There is no base-load power station in the study area. There are two gas turbine power stations located within the study area that provide peak load supplementation. The Mt Stuart Power Station is an Open Cycle Gas Turbine generator with a capacity of 419 MW, and the Townsville Power Station (located at Yabulu) is a Combined Cycle Gas Turbine generator with a capacity of 242 MW. Note that they are both operated by independent generation companies.

There are two large-scale solar farms in the study area. The Ross River Solar Farm, with a capacity of 128 MW, and the Sun Metals Solar Farm, with a capacity of 143 MW. Both of these solar farms are semischeduled market generators. They are operated by independent generation companies and they are connected to the Powerlink transmission network.

There are 275 kV and 132 kV power transmission lines operated by Powerlink within the Council area. This infrastructure forms part of the State and National grid and is all carried on steel towers. They are located within cleared and well maintained easements. The 132 kV network has 4 connection points with the Ergon Energy 66 kV subtransmission network.

Reticulation of the power supply is operated by Ergon. There are approximately 2,000 km of high and low voltage power cables and lines within the study area supply reticulation network. This consists of a 66 kV subtransmission network that supplies 23 zone substations, 11 kV distribution network supply approximately 4700 distribution substations, and a low voltage network for customer connections and street lighting. Most of this infrastructure is above ground and carried on timber poles with a combined length of approximately 4000 km. Underground reticulation is confined to the Townsville CBD area and some of the more recent residential subdivisions. Supply to Magnetic Island is from the mainland via twin undersea cables with a combined length of 23.7 km.

Ergon operates 23 zone substations within the Townsville area.

High voltage transmission lines are susceptible to failure in dense bushfire smoke which permits the line to arc to the ground through the smoke. Ground-mounted transformers will be vulnerable to inundation hazards.

In the unlikely event that all incoming power transmission supply is lost, Powerlink and Ergon would work hand in hand to restore supply by creating a corridor from the south, either from the coastal 132kV line from Collinsville/Strathmore or via a 275kV line from Nebo/Strathmore, into Townsville. This would then be used to initially supply critical load and allow the gas turbines to start. Even with only one

connection point to the 132kV network, the Ergon 66kV ring is capable of supplying emergency load (of approximately 60 – 90 MVA) to the entire city and maintaining proper statutory voltages to the customers; however, this is dependent on the type and extent of damage sustained to the distribution network. As per Ergon's policy, critical supplies on the distribution 11kV are normally supplied via underground and as such, are only susceptible to flooding.

If power is lost, the knock-on effect on other lifeline infrastructures, especially water supply, sewerage systems and telecommunications, can be great. Gravity fed water supply would continue to operate until power supply (either mains or stand-by generators) to the pumps resumed, unless the reservoirs were empty.

The TLDMG, in conjunction with Ergon Energy, has developed a *Critical Facility Power Restoration List*, for electrical resupply to essential services and businesses within the local government area. This list will be reviewed annually. Due to commercial-in-confidence, this list is stored internally with the LDC.

3.1.5.6 Water Supply and Sewerage – General

Most urban properties have access to reticulated supply, but in most rural areas, water supply (including fire-fighting water) is from rainwater catchment tanks, dams or swimming pools. Concrete, metal and some fibreglass tanks are quite resilient to high temperatures, however, PVC tanks can lose their rigidity and melt if exposed to the levels of heat associated with bushfires.

The use of PVC piping to carry water from tanks to the building can also be a problem, especially if it is exposed above ground level. In most areas where water supply is provided by tanks, water pumps are electric-powered and the loss of power during a fire can cut off the water supply. The availability of a petrol or diesel-powered backup pumping capacity greatly increases the ability to fight a fire.

The in-ground pipe networks are susceptible to damage during earthquakes and landslides, especially those older segments made of brittle material such as AC or cast iron. Above ground pipes can also be affected by landslides and probably earthquakes. Pumping equipment is dependent on the power supply.

Pumping stations for both water supply and sewerage systems are susceptible to damage if inundated or subject to high levels of radiant heat in bushfires.

3.1.5.7 Water Supply

The urban areas and some non-urban residential areas of the study area are served by 2489 km of reticulation pipeline operated by Townsville City Council. Pipes range in size from 1050 mm trunk mains to 32 mm reticulation conduits. The most common materials used are PVC, asbestos cement (AC) and concrete-lined iron. Water is reticulated by gravity from 130 reservoirs.

The primary water supply is sourced from the Ross River Dam. The Douglas Water Treatment Plant is located in Douglas and provides approximately 80% of the city's water supply needs. The Northern Beaches communities' water supply is mostly serviced from the Northern Water Treatment Plant situated.

north of Rollingstone (Kulburn) with water sourced from Crystal Creek and Paluma Dam. Paluma is serviced by a local weir and treatment plant. Cungulla sources water via a pipeline from Guru.

A bulk water supply pipeline exists between the Haughton Channel and the Ross River Dam and is currently being extended to source water directly from the Burdekin River.

Most of the reticulation infrastructure is underground, though some trunk mains, including the supply trunk from Crystal Creek, are above ground in some sections. Supply to Magnetic Island is via undersea trunk mains.

3.1.5.8 Sewerage

Sewerage reticulation is confined to the urban areas of the study area and the main infrastructure is underground. The majority of the 1285 km of pipeline network uses PVC pipes with AC and vitreous china making up a significant percentage, especially in the older areas. There are six waste water treatment plants across the study area (Mount St John, Cleveland Bay, Condon, Toomulla, Horseshoe Bay and Picnic Bay). 45 sewerage–monitoring devices will be installed in 2020/21 to assist in providing situational awareness in relation to sewerage overflows.

3.1.5.9 Natural Gas

The North Queensland Gas Pipeline (NQGP) is a high pressure natural gas pipeline transports gas from Moranbah and supplies gas to customers at Yabulu and Stuart in the Townsville region. The pipeline is buried at an average depth of 900mm and constructed from steel with diameters of 300mm and 250mm protected with an anticorrosion coating and cathodic protection system. Pipeline isolation valves are located at Collinsville and Woodstock and pipeline operations are monitored 24/7 by remote control room with local on call support. In case of an emergency QPS and QFES would be the lead agency with assistance from NQGP.

3.1.5.10 Telecommunications

Telecommunication infrastructure is reliant on main power supply. Telecommunication providers will determine the priority of site restoration in consultation with Ergon and Emergency Services. Our Field Services teams health and safety is our number one priority, and restoration of sites could be delayed until safe access is available.

Fixed Lines - NBN Co

Across the Townsville LGA, NBN Co is now responsible for the majority of the fixed line telecommunications infrastructure across Australia, which includes the formerly owned Telstra copper wire network. There is a multi-technology mix across the LGA, predominantly Fibre to the Premise and Fibre to the Node in urban areas, which is both underground and aerial (overhead) and involves roadside cabinet assets and exchanges. eg, Castle Hill, Mundingburra, Aitkenvale are serviced by aerial infrastructure. There are 150 Retail Service Providers selling services to customers over the NBN network.

Regardless of technology, any equipment connected to the nbn™ access network will not work during a power outage. While a significant part the nbn™ access network has in-built power back up, power outages may last longer than the battery life. Therefore, nbn's messaging is that communities should be prepared to be without landline phone and internet services for some time. While nbn will deploy generators in the case of an emergency event to power its infrastructure assets in the case of power outages, it's important to remember, unless there is backup power or generators in individual premises to power modems etc, telecommunications will not work.

Fixed Lines - Private Networks

Some Enterprise customers and Government agencies have their own private networks provided by telecommunication companies eg Emergency Service agencies and large enterprise customers including Australian Defence Force.

Mobiles Services

It should be noted that mobile phone base stations may be out of service due to high winds that can damage towers; therefore, the use of mobile phones should not be relied upon during emergencies. In the event of loss of mobile sites congestion may be experienced on other mobile sites in an overlapping area.

Mobile Services - Telstra

Telstra operates 3G, 4G and 5G mobile networks in the Townsville City Council District. As part of Telstra's Disaster Season preparations, Telstra provides Ergon with a list of Telstra's priority sites across Queensland and in most cases when Ergon power is restored to our sites, Telstra's services are also restored. Our sites typically have battery backup or generators, however these aren't designed to maintain services for extended power outages. Our key network sites in the Townsville City Council district have permanent generators and fuel reserves onsite.

Telstra's recovery efforts include the deployment of additional field resources and community recovery teams, the use of drones helping to restore vital mobile services in disaster-hit communities quickly and safely, the release of disaster assistance packages for impacted consumers and businesses, the switching of payphones to have free calls and free data on Telstra Air and the deployment of Cell on Wheels (COWs) and Satellite COWs as required.

Mobiles Services - Optus

Optus mobile services are supported by a team of local technicians. In the event of loss of mains power supply, Optus mobile towers have battery backup services to prevent immediate loss of communications. Optus have backup generators staged locally in the Townsville area and have supporting fuel resupply arrangements in place. Optus have installed auto-start generators at strategic mobile sites that may be difficult to reach in the event of a disaster such as sites on Magnetic Island and Rollingstone.

Temporary Equipment

Telecommunication companies have a backup temporary equipment that can be deployed during events based on priorities.

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Emergency calls

Calls made to 000 will be carried on any available mobile network. You must be in the coverage area of one of the mobile providers in Australia to make an emergency call.

3.1.5.11 Roads

The Bruce Highway links Townsville to the southern and northern areas of Queensland, with the western areas being accessible via the Flinders Highway.

The urban road network is well developed and experiences continuous upgrading to meet increases in demand for road based transport. There are approximately 1791 km of constructed public roads. They range in importance from the multi-lane Bruce Highway (approximately 130 km Federal roads) to minor tracks (180 km of unsealed roads). There are also 'private' roads within areas such as the National Parks, ICU and Lavarack Barracks.

There are several areas on the highways that are susceptible to flooding during the wet season and may isolate the urban area. Some roads may be blocked by landslide debris, fallen trees (during bushfires or severe winds) and bushfire smoke.

The most vulnerable points tend to be bridges and other choke points such as railway crossings. There are 24 bridges and 161 major culverts on this road network with an additional 116 bridges on the shared pathway network. There are also 61 railway level crossings – some are protected by boom gates; the majority of them have warning lights.

3.1.5.12 Rail

There are over 120 km of main-line rail crossing the area. The Region is serviced by two major rail networks, the North Coast line between Brisbane and Cairns, and the Mount Isa line to the west. Both major rail networks have been upgraded recently to allow heavier and more efficient trains to operate and to reduce travelling times for freight and passenger trains.

There are spur lines to the port facilities and to rail freight depots in the CBD area and Stuart. None of this network is electrified. Pacific National Queensland operates above-rail intermodal and bulk services from its major regional centre at Stuart. Aurizon operates major locomotive and wagon maintenance facilities at Stuart.

Signalling and control equipment relies on electricity and telecommunications and is controlled by Queensland Rail from its building in Flinders Street in the CBD. As with roads, the most vulnerable points are level crossings, bridges, cuttings, embankments and overpasses.

Queensland Rail is responsible for the state's passenger operations, regional track maintenance and support services, and is owned by the Government. Aurizon (a privatised national company) operates the above-rail intermodal, coal and bulk services, and below-rail coal network in North Queensland.

3.1.5.13 Airport

Townsville Airport is shared between Department of Defence (DoD) and Townsville Airport Pty Ltd (TAPL). DoD is responsible for the areas used exclusively for Military and TAPL is responsible for the areas used exclusively for Civil Operations. The areas of common use are called 'Joint User Areas'.

The Airport has two (2) sealed runways. The primary Runway is capable of facilitating all Civil and Military aircraft operating in Australia. Use of the Airport is generally shared between regular public transport, general aviation, Military, Domestic and International closed charter services.

Regular public transport operate domestic scheduled services for approximately 1.7 million passengers per year. General aviation operate fixed and rotary wing services predominantly throughout northern Queensland, and aero-medical services from Lifeflight, Royal Flying Doctor Service and Queensland Government Air.

DoD units based at Garbutt (RAAF Townsville) 27 Squadron and the 5th Aviation Regiment (Army Aviation Corps) equipped with Chinook helicopters. These units are supported by a range of administrative, logistic and maintenance elements.

The airfield pavement is largely resilient to most hazards but may be blocked by flood waters (including storm tide) and debris from damaged buildings. Support facilities such as terminals and fuel systems could be damaged by destructive wind, earthquake and inundation hazards. The airfield will probably be closed in the face of a severe tropical cyclone where high winds make flying operations too dangerous.

3.1.5.14 Port of Townsville

The Port of Townsville (the Port) has eight berths servicing the export needs of North Queensland's minerals, agricultural and pastoral sectors, and facilitates the import of critical supplies such as petroleum products, cement, mining consumables, project cargo, containerised and general cargo. The facilities include rail and road access, deep-water berths to the wharf side, as well as storage and maintenance facilities.

The Port is a strategic location for the Australian Defence Force. The Ports Berth 10 accommodates Australia's largest military vessels, *HMAS Canberra* and *HMAS Adelaide*. Operating services are available for ADF and other visiting military vessels including refuelling and ship services.

Fuel Import Hub

The demand for fuel imports through Townsville is projected to increase due to the commencement of new mining projects in the Northern Australia region, as well as population growth. The Port has bunker

fuel pipelines on Berths 9 and 10 to enable Navy vessel refuelling, further increasing the demand for the import of fuel via Berth 1 and an important capability for Defence.

To support the growth of containerised cargo, project cargo and general cargo, the Port has recently completed construction for the upgrade of Berth 4 and a Cargo Handling Facility.

The Port is exposed to high seas and is likely to be closed in the face of an approaching severe cyclone.

3.1.5.15 Logistics Facilities

Townsville is a major logistic supply centre. A large number of bulk warehouses, including cold stores, are located in the Townsville urban area and serve outlets across the Far North Queensland region and beyond.

The most significant facilities, however, are the bulk fuel facilities located within the port area. These facilities provide fuel to a very large catchment including Mount Isa. Resupply of fuel is by tanker from either Brisbane or Singapore.

3.1.6 Public Buildings, Spaces and Events

The Townsville region has several major suburban shopping centres and the CBD area that daily attracts large numbers of shoppers. Four cinema complexes, a very active night club and restaurant area within the CBD and The Strand, major sporting venues for national and local sports, The Ville Casino, Entertainment Centre, art galleries, museums, Civic Theatre and Riverway Arts & Entertainment Centre all provide a large range of events for the community. There are also many popular day use outdoor venues for the community along The Strand, at the beach suburbs and at various parks.

There are a large range of community events held in the Townsville area. These include annual events such as Get Ready Day, NTI Townsville 500 V8 Supercars, Eco Fiesta, North Australian Festival of Arts, Seniors Luncheon, Australian Festival of Chamber Music and monthly and weekly community markets to name a few.

3.2 Hazards

3.2.1 Climate and Weather

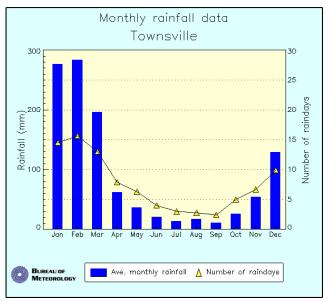
Townsville is situated within the Burdekin Dry Tropics Region, which extends approximately 95,000 square kilometres and includes Charters Towers, Bowen and Ayr.

The weather is predominantly dry through the winter months, the peak tourist season, with an average maximum temperature of 28.1°C. During the Wet Season, between November and April, the temperature can reach 35.0°C, with humid conditions and this is generally the period that cyclones and storms may affect the community.

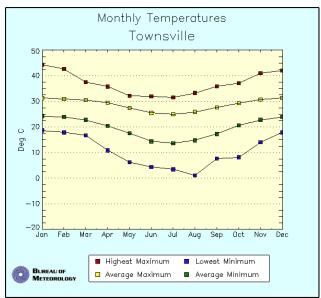
High intensity tropical storms and cyclones feature in the regions weather pattern. Tropical cyclones, the most infamous being Cyclone Althea in 1971 and Cyclone Yasi in 2011, may produce a complex hazard of heavy rain and land floods, destructive winds and storm surges on the coastal fringes. Water logging, soil erosion, riverbank and coastal erosion, depositing of sediments on fertile land and large scale transport of marine sediments are associated problems.

Townsville experiences an average rainfall of 1143mm/year and 91 rain days, with the majority of this rain falling between November and April. (Source: City Profile - TCC Website)

With residential development along flood plain areas of the Ross and Bohle Rivers and many communities along the coastline, cyclones and storm tide effects and localised flooding from monsoonal rains are the greatest natural hazard in the area.



Monthly average annual statistics for rainfall (Source: BoM)



Maximum and minimum monthly temperatures. (Source: BoM)

3.2.1 Hazardous Sites

Work Health and Safety Queensland has identified and licensed sites throughout Townsville, where hazardous materials, thought to be of potential risk to the community including flammable liquids and material as well as bulk storage of agricultural and industrial chemicals are stored. A major hazard facility must be licenced in acordnace with Queensland Governments Work Health and Safety Regulation 2011 Chapter 9. The Hazardous Sites List provided by WHSQ will be reviewed annually and due to commercial-in-confidence, this list is stored internally with the LDCC.

3.2.2 Hazard Analysis

Studies have been undertaken for many years by the Thuringowa City Council and Townsville City Council - now amalgamated to Townsville City Council by the State Government 15 March 2008.

Some studies were undertaken under the Natural Disaster Risk Mitigation program. An "All Hazards Study" for the Townsville City Council area (pre amalgamation) was completed in December 2009, with a further "All Hazards Study" for the Former Thuringowa Local Government Area being completed in November 2010. The outcomes of these studies give an overall strategy for treatment options and mitigation programs for the new council. (Refer to Annexure D).

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The main identified threats to the region include the following:

3.2.2.1 Storms / Cyclones and Flooding

Due to its geographical positioning the area can experience cyclones during the months of November to April, which is known in North Queensland as the cyclone season or wet season; however, some cyclones have been recorded as late as June. Cyclones usually lose intensity over land. Recent studies indicate Townsville is exposed to cyclones at annual exceedance probabilities of between 10 % (Category 1) to 1.33 % (Category 5).

Source The Queensland Severe Wind Hazard Assessment (Queensland Fire and Emergency Services, 2021, Part 1, p.159)

Storm tides associated with cyclonic events pose the greatest risk to the beach side villages and urban coastal suburbs of our community. The *Emergency Action Guide* and "Storm Tide Evacuation Zone" maps for suburbs are available on council's public website (www.townsville.gld.gov.au).

An additional 27 rain and river gauges were installed in 2020/21 to enhance situational awareness of catchment areas during extreme weather events. Three (3) flood cameras provide real-time information to the community via our Emergency Management and Disaster Dashboard (http://disaster.townsville.gld.gov.au/). Cameras are positioned at the following locations:

- Allambie Lane
- Saunders Beach Road (The Dip)
- Mount Low (Stony Creek at Bruce Highway)

Allambie Lane - Culvert 26/04/22 14:06:35



Saunders Beach Road - North 09/05/22 14:56:18



Bruce Highway, Mount Low Bridge (Stoney Creek) 26/04/22 14:06:33



3.2.2.2 Landslides

Constant heavy rains may lead to landslides in various areas within the region. Landslides last occurred in several suburbs during the heavy rains associated with Cyclone Tessi in April 2000. The latest 'Steep Slope Assessment Report' undertaken by council in 2004 is available on council's public website. The landslide hazard mapping has been included with council's City Plan.

3.2.2.3 Bushfires

Part of the region is under World Heritage, National or State Forest Parks or Crown Lands, with the remaining being available for residential and industrial use. The greater part of the eastern region is classified as a medium bushfire hazard area.

3.2.2.4 Earthquakes

From historical data it could not be stated that the region is a high risk area in terms of the likelihood of being subjected to an earthquake at a sufficient level to cause significant loss. Nevertheless, it is within the realms of possibility that the region could be impacted by such an event. It is of particular note that the epicentre of an earthquake can be over 100km from the point of impact.

3.2.2.5 Epidemics and Pandemics

The risk of an outbreak of disease such as pandemic influenza throughout the population could cause the health system to be taxed to its limits and may involve the isolation and quarantine of a substantial number of people for a protracted period. This has been the case with the Coronavirus (COVID-19) pandemic in 2020, which required essential services to activate their respective Business Continuity Plans and mandated the Australian community to implement strict social distancing measures and hygiene protocols. COVID-19 tested local supply arrangements, in particular with basic hygiene items such as toilet paper, tissues, hand sanitiser, hand wash, disinfectant wipes and face masks.

3.2.2.6 Emergency Animal Disease

Potential exists in Australia for the rapid spread of exotic animal diseases with a subsequent impact on the rural and national economy. One of the secondary industries in the north of the region is cattle breeding/fattening. An animal disease such as foot and mouth disease would impact on the local scene.

There are no poultry producers within the region. Any instance of disease such as Avian Influenza or Newcastle Disease would only affect domestically kept birds and wildlife.

3.2.2.7 Exotic Plant Disease

Although agriculture is a minor business within the region, a major outbreak of disease in either the fruit or sugar industry would have an economic effect on the community.

3.2.2.8 Tsunami

From historical data and latest research undertaken by Geoscience Australia it could not be stated that the region is at high risk in terms of the likelihood of being subjected to a Tsunami. Nevertheless, it is within the realms of possibility that the area could be impacted by such an event

Like storm tides, tsunamis pose the greatest risk to the beach side villages and urban coastal suburbs of our community. The *Tsunami Evacuation Guide* is available on council's public website (www.townsville.qld.gov.au). Note: Boundaries for "at-risk" areas differ between tsunami and storm tide events.

3.2.2.9 Major Infrastructure Failure

The widespread loss of power, with consequential interference with telecommunications, water supply, or sewage treatment systems will have a major impact on the community. As power outages in the area are mostly due to cyclonic activity the possibility of roads being cut off due to flooding may result in the services being disrupted for extended periods. Council was successful in receiving grant funding for a backup power supply at the Douglas Water Treatment Plant to maintain water treatment and pumping capability, as well as mobile trailer–mounted generators for tidal gate operations and to support other identified infrastructure.

Disruption of communications facilities will also have a major impact on the disaster management coordination capacity in the affected area.

3.2.2.10 Dam Failure

The Ross River Dam includes features which have reduced the possibility of a dam burst or river flood, and an extensive monitoring program continues and multiple redundancies have been built into the operating procedures of the dam. An independent review was conducted by the Office of the Inspector–General Emergency Management (Queensland) following the 2019 Unprecedented Monsoon Event that Townsville experienced. The details of this *2019 Monsoon Trough Rainfall and Flood Review* can be found on Council's website (www.townsville.gld.gov.au).

3.2.2.11 Hydrocarbons/Chemical/Hazardous Materials/Oil Spills

Spills of hydrocarbons and chemical substances affect the functionality of Townsville's infrastructure networks and have the potential to create both nuisance and hazardous conditions and can be very harmful to the natural environment.

Water Based Spills

Department of TMR-Maritime Safety Queensland (MSQ) is the lead agency in responding to such incidents. The *Queensland Coastal Contingency Action Plan (QCCAP)* outlines prevention, preparation, response and recovery arrangements for ship-sourced marine pollution incidents (oil and/or chemical spills).

TMR and the Local Government Association of Queensland have signed a protocol agreement to facilitate ongoing cooperation. TMR-MSQ, as the combat agency, may seek council's assistance during a significant marine pollution incident. The Port of Townsville's *First Strike Oil Spill Response Plan*, a supplement to the QCCAP, lists roles and responsibilities for local marine incidents.

Nelly Bay Harbour is included in this arrangement, where council would deploy resources as required by TMR to assist in cleanup and rectification. Council's Integrated Sustainability and Environmental Services also have a support function from a corporate perspective.

Land Based Spills

Land based spills are managed by council's Maintenance Section as per *Operating Procedures (CE027)*. Pending the extent and type of spill, council's Environmental Health Department has investigative powers and would support and assist the response team.

Spills entering the stormwater network are also responded to by council's Maintenance Section as per *Operating Procedures (CE027)*; however, the State Government's Department Environment and Heritage Protection does have some responsibility under the *Environmental Protection Policy (Water)*. In addition,

spill support and advice is available from the Environmental Unit of council's Construction, Maintenance & Operational area.

Hazardous spills are managed by QFES and would only be supported by council where requested and safe to do so. Council's Integrated Sustainability and Environmental Services also have a support function from a corporate perspective.

3.3 Risk Assessment

Council undertook Natural Disaster Risk Management (NDRM) Studies under the Federal and State Governments Natural Disaster Risk Management (NDRM) program. These studies assessed impacts on the community from natural disasters for the pre-amalgamated Townsville City Council and Thuringowa City Council areas. The Townsville City Council report was accepted by council in 2009. The report of the former Thuringowa City Natural Disaster Risk Management (NDRM) was accepted by council in 2010. Copies of these studies are available on council's website (www.townsville.qld.gov.au). The 'All Hazards' studies are complementary to councils' Enterprise Wide Risk Management Plan.

This process included:

- a review of existing studies to identify the risks within the context of the *Australian and New Zealand Standard AS/NZS4360–2004 'Risk Management' (now ISO 31000:2018 Risk Management Guidelines*) and the disaster risk management process guidelines provided by the Counter Disaster and Rescue Services, Department of Emergency Services (now QFES, Department of Fire and Emergency Services) (Zamicka & Buchanan 1999).
- Undertaking additional studies as required.
- Analysis and evaluation of risks and development of an overall risk profile.
- Development of risk treatment strategies to allow council to adopt a staged program of capital works for mitigation, inputs to town planning considerations (new Townsville City Plan) and modifications to the *Townville Local Disaster Management Plan* to reduce the likelihood and consequence of hazardous events on the local community.

Standard for DM - Shared Responsibility	Outcome
Managing Risk	1, 2

3.3.1 Evaluation Criteria

The tolerable or acceptable levels of community risk, which were established in the initial report, have been adopted for this report.

Notional 'design' level of hazard severity employed in the Townsville region

HAZARD	THRESHOLD	COMMENTS
Destructive	EOO year ADI	Established in the wind loading standard of the BCA since
wind	500 year ARI	about 1981.

HAZARD	THRESHOLD	COMMENTS
		This has been the threshold for development in the planning
Flood	50 year ARI	scheme for many years, but it has been increased to the 100
		year ARI level in the past few years.
Storm tide	100 year ARI	Established under the State Coastal Management Plan and
Storm tide	100 year Aki	implemented since 2005.
Landslide	Planning boundary only	Established under SPP 1/03 and implemented since 2004.
Bushfire	Planning boundary only	Established under SPP 1/03 and implemented since 2004.
Earthquake 500 year ARI		Established in the earthquake loading standard under the BCA
		since about 1985

The studies utilised the following criteria:

- 1. "reduce, and preferably eliminate, the risk of death or injury to emergency workers engaged in responding to any hazard impact;
- 2. reduce, and preferably eliminate, the risk of death or injury to the general population;
- 3. reduce, to an acceptable level, the risk of destruction or damage to public infrastructure and facilities;
- 4. reduce, to an acceptable level, the risk of destruction or damage to private property;
- 5. manage the impact of natural hazard impacts on cultural heritage and the natural environment to the extent that loss of heritage is minimised and the biodiversity of flora and fauna is maintained;
- 6. minimise the long-term impact on the local economy."

3.3.2 Risk Comparison

HAZARD	SCENARIO RISK	MANAGE	AWARE	URGENCY	GROWTH	OUTRAGE	TOTA
							L
Destructive wind	6	3	2	2	3	3	19
River flood	5	3	2	3	2	4	19
Storm tide	5	3	3	3	3	4	21
Landslide	5	2	3	2	2	3	17
Bushfire	5	1	2	1	2	2	13
Earthquake	4	4	4	2	2	1	17

The assessment of total risk shows storm tide poses the greatest threat to the Townsville community, with destructive winds and riverine flood a close second. Bushfire poses the lowest overall level of risk.

The risk matrix used for these evaluations are located within the All Hazard studies on council's public website (www.townsville.gld.gov.au). Contact council for more information on these studies.

The list of the All Hazards Studies is contained in (Annexure D).

*Note - It is intended to conduct a new study in 2023/24 utilising the Queensland Emergency Risk Management Framework (QERMF).

3.4 Risk Treatment

Disaster management is included in Townsville City Council's risk assessment workshops undertaken annually to develop the risk profile of each Division. The Enterprise Wide Risk Management Strategic Framework and Process is used across council. A number of reviews and studies undertaken by sections or by large consultancies utilising the council framework as part of their projects including Climate, All Hazards and Flood Mitigation Studies.

Business Continuity Plans have also been developed for all sections across council to ensure continuity of services in the event of an unplanned disruption.

3.5 Mapping

Council has developed a suite of Community Disaster Management Profile Zone maps and text tables, which include population by suburb, critical infrastructure and essential service information, shelter and evacuation centre locations and other relevant local details. These Profile Zone maps and text tables will be used internally by the LDC and Chair of the TLDMG, in conjunction with the Bureau of Meteorology advice, to assess which areas would be affected by the event.

Hazard specific mapping has also been developed for storm tide, tsunami, flooding, bushfire and landslide events, which may affect the local community.

Part Four - Capacity Building

4.1 Community Education

The *TLDMG Community Education and Marketing Sub Plan* lists strategies and annual plans for community awareness activities. The goals of the plan include:

- Building community awareness of the effects of tropical weather locally;
- Building community resilience by being prepared for natural disaster events; and
- Imparting knowledge regularly to fight against community complacency.

Programs within the plan utilise a range of engagement tools and strategies, which include:

- · School education programs
- Community group education programs
- · Regular and consistent media stories
- High-risk weather season advertising campaigns (radio, TV, newspaper, billboard, social media)
- Information for new residents and tourists
- Displays at community events including Get Ready Townsville (features TLDMG members displays)
- Specific information for indigenous and migrant groups (TMSG & CALD Community)
- Advice to business and industry
- Planning workshops
- Information for aged and disabled care groups.

The TLDMG also aims to enhance community disaster awareness and preparedness by providing access to the TLDMP and associated sub plans on Townsville City Council's public website (www.townsville.qld.qov.au) and having the information available through its social media sites.

Hard copies of the TLDMP are available at council's Customer Service Centres for public viewing. Hard copies can be purchased from council for a fee of \$15 AUD.

Standard for DM - Shared Responsibility	Outcome
Community Engagement	5, 6

4.2 Training

4.2.1 TLDMG Members

The *Act* provides a legislative requirement for QFES to ensure that persons involved in disaster operations are appropriately trained. It is the responsibility of all stakeholders with disaster management and disaster operations roles to undertake the training relevant to their role as outlined in the *Queensland Disaster Management Training Framework*.

The LDC will ensure a suitable disaster management training program is designed and implemented, in collaboration with any training provided by QFES.

The training program may include specific training, through workshops, discussion forums, and formal instruction and through training exercises in order to maintain the disaster management knowledge and understanding levels of all participants at the highest possible level.

As the TLDMG strives for continuous improvement, the TLDMG has carried a motion requiring all Core and Deputy Core members of the TLDMG to complete the manadory and needs based training modules as outlined in the learning pathway for each specific role in the <u>Queensland Disaster Management Training Framework</u>. Whilst there is no current legislation governing training for advisory members and members of the subgroups, the expectation is that those members will complete the Queensland Disaster Management Arrangements (QDMA) as a minimum requirement.

The training status of TLDMG Members will be tabled at each TLDMG meeting.

The LDC will also liaise with QFES in relation to accessing State/Federal training programs and will arrange for members of the Local Disaster Management Group and sub committees to be made aware of training courses being offered by the Queensland Government or any other appropriate agency.

4.2.2 Council Staff incl. Local Disaster Coordination Centre Staff

The following training opportunities are offered, at least annually, for staff involved in disaster management and operation of the Local Disaster Coordination Centre (LDCC):

Training	Who	Ву	When
Introduction to Council's Disaster Management Process	Council staff and LDCC staff	Emergency Management Section, TCC	Annually (July to December)
Queensland Disaster Management Arrangements (QDMA)	Councillors, Council staff and LDCC staff	QFES & LDC	Course held at least twice per year
QDMTF Disaster Coordination Centre Course	TLDMG members, Council staff and LDCC staff	QFES/LDC	Annually
Townsville LDCC Training Program (incl. Guardian IMS)	TLDMG member agencies, Council staff and LDCC staff	Emergency Management Section, TCC	Annually (July to December)
Other courses required as per QDMTF learning pathways	TLDMG members, Council staff and LDCC staff	LDC and QFES	As required

Standard for DM - Shared Responsibility	Outcome
Planning and Plans	3, 4
Capability Integration	7, 8

4.3 Exercises

Exercises are a key component of disaster management strategies:

- to practice coordination and liaison procedures between participating organisations in responding to a disaster event,
- to identify and take steps to address any serious procedural and/or functional weaknesses, and
- to test the effectiveness of all plans and procedures.

4.3.1 Local Disaster Coordination Centre Exercises

Disaster management exercises are held annually as arranged by the LDC (Team Manager, Emergency Management) and conducted to ensure:

- the activation of the LDCC, including staffing requirements, setting up of the facility, emergency power operation, communication links, etc. is tested; and
- to practice the use of the Incident Management System with all Council and other personnel who will work in the LDCC when it is operational.

4.3.2 Full Local Disaster Management Group Exercises

Discussion exercises for the TLDMG, are to be held annually to test the disaster management planning arrangements. Where practical these are to be facilitated by an independent facilitator.

The TLDMG will participate, where possible, in exercises being conducted by other relevant emergency services that may require the involvement of the Local Disaster Management Group.

4.3.3 Operational Plan Exercises

To be conducted prior to the review of the Operational Plans. Designated responsible agencies should prepare and conduct discussion exercises with members of the working groups to assist in the development of the operational planning process.

If through the course of the exercise it is recognised that there is a need for change in key Representatives such as Chairs of Groups, the LDMG will as soon as practicable, inform the District Disaster Coordinator, of the new appointment.

4.3.4 Exercise Schedule

The TLDMP and associated sub plans are to be execised annually between July and December each year. The LDC will determine the components of the plan and the nature of the exercise to be conducted based on identified weaknesses and a threat analysisis from agencies such as the Bureau, with regard to predicted weather over the next 12 months.

4.3.5 Exercise Evaluation

An evaluation process will be implemented for each exercise of the TLDMG, with the primary focus being on continuous improvement of local procedures.

Where possible, a person external to the TLDMG will conduct the exercise evaluation of all major exercises to ensure the process is conducted in a competent, timely, fair and cost-effective manner. The evaluator will be required to possess relevant experience, as well as a comprehensive understanding of the Queensland Disaster Management Arrangements. An example of this would be an LDC from another LDMG or a QFES EMC, who is <u>not</u> a core member of the TLDMG, fulfilling the role of Exercise Evaluator.

For desktop and small scale exercises the LDC can act as the exercise evaluator and utilise the debrief templates to record feedback and outcomes.

For major exercises, consideration is recommended for the utilisation of external evaluators from IGEM or other combat agencies involved in the exercise.

Standard for DM - Shared Responsibility	Outcome
Planning and Plans	3, 4
Capability Integration	7, 8

4.4 Post-Disaster Review

The review of operational activities undertaken during a disaster is a key component in ensuring capability development and the continuous improvement of disaster management arrangements.

The TLDMG may choose to review its operations following an event through one or more of the following:

Hot debrief	Short debrief (30 minutes maximum) undertaken immediately after operations are complete giving participants the opportunity to share learning points while the experience is still very fresh in their minds. Multiple hot debriefs during protracted operations may be appropriate to identify significant issues and provide prompt solutions for immediate implementation. These debriefs will be instigated and organised by the LDC. Notes from these debriefs will be distributed as soon as practicable.
Post-event (Cold) debrief	To be held within two (2) weeks following an operation, when participants have had an opportunity to take a considered view of the effectiveness of the operation. Minutes from the post-event debrief will be distributed as soon as practicable and tabled at the next meeting of the TLDMG.

Recommendations resulting from the reviews will be reported to the TLDMG and forwarded to the DDC for consideration.

A Timeline of Events for TLDMG and LDCC will be prepared by the LDC following the event. This report will be tabled at the next TLDMG and council meetings.

View the Timeline of Events for the 2019 Monsoon Event.

Standard for DM - Shared Responsibility	Outcome
Planning and Plans	3, 4
Capability Integration	8

Part Five – Response Strategy

5.1 Warning Notification and Dissemination

LDMG members will receive warning products via a number of means.

The DDC will receive notification directly from the State Disaster Coordination Centre (SDCC) and internally through Queensland Police Service Communication Centres and will ensure the dissemination of warnings to vulnerable LDMGs within the district.

The LDC and a number of agencies will also receive warnings directly from the Bureau of Meteorology (Brisbane). The TLDMG will be notified by the LDC and may also receive notification from internal agency central offices. LDMG members will receive warning products via a number of means including text messaging, email and/or direct phone calls.

Details regarding responsibility for notification processes within LDMG member agencies are detailed in respective agency plans. Agency plans will include detailed contact registers to achieve dissemination of warnings.

The responsibilities of LDMG members for notification in the local government area are shown in the following table:

Responsible Agency	Group/Agency Notified
QPS	Queensland Police Service Stations and establishments
QFES (via SDCC Watch Desk)	QFES (inclusive of Fire and Rescue, Emergency Management,
Q. 25 (via 52 ce viateri 2 csit)	Rural Fire Service and State Emergency Service Units/Groups)
	TLDMG members
TLDMG	Council
	Community
	Council's Emergency Response Group
Townsville City Council	Council staff
	Councillors
TLDMG members	Internal staff from each organisation

The process for the notification and dissemination of warning products is not a function dependant on the activation of the LDMG. It is the responsibility of LDMG Executives and nominated Members, Advisors and Deputies regardless of the status of activation of the LDMG, to ensure that the appropriate persons (as per their respective plans) are notified of this information.

Refer to the TLDMG Community Information and Warnings Sub Plan for more details.

Standard for DM - Shared Responsibility	Outcome
Planning and Plans	4
Community Engagement	5, 6
Operations	9
Collaboration and Coordination	10, 11

5.2 Activation

The LDC is responsible for activating the TLDMG. This would generally occur following consultation with the Chair of the TLDMG and the DDC.

The four (4) levels of activation are:

	A heightened level of vigilance due to the possibility of an event in the area of
Alert	responsibility. No action is required however the situation should be monitored
	by someone capable of assessing the potential of the threat.
	An operational state prior to 'stand up' characterised by a heightened level of
Lean Forward	situational awareness of a disaster event (either current or impending) and a state
	of operational readiness. LDCC on standby; prepared but not activated.
	The operational state following 'lean forward' whereby resources are mobilised,
Stand Up	personnel are activated and operational activities commenced. LDMG is activated
	with / without LDCC being activated (depending on needs of the event)
	Transition from responding to an event back to normal core business and/or
Stand Down	recovery operations. There is no longer a requirement to respond to the event
	and the threat is no longer present.

The local levels of response activation are outlined at **Annexure E.**

Standard for DM - Shared Responsibility	Outcome
Planning and Plans	3, 4
Capability Integration	7, 8
Operations	9
Collaboration and Coordination	10, 11

5.3 Local Disaster Coordination Centre (LDCC)

The Townsville LDCC is a purpose-built facility located at 113 - 123 Dalrymple Rd, Garbutt.

The TLDMG has developed *Local Disaster Coordination Centre Standard Operating Procedures (LDCC SOP)*, which detail processes for management of the LDCC. A copy of this document can be requested from the LDC. The TLDMG has also developed an LDCC SOP for use in the event of an emergency or disaster event in a COVID-19 environment.

If required because of building damage or access issues, the LDC will liaise with Council's Assets and Fleet Department to ascertain the most suitable alternate location for the LDCC. Several meeting rooms and Call Centre areas have been identified as being suitable alternate locations.

5.4 Concept of Operations for Response

5.4.1 Operational Reporting

The LDC will ensure operational reporting from TLDMG to DDMG and QDMC commences once the TLDMG is activated. Once the Local Disaster Coordination Centre is activated, all reporting will be as listed in the *LDCC SOP* and *TLDMG Standard Operating Procedures* or otherwise advised by the DDMG.

5.4.2 Financial Management

In November each year, council's Financial Services Department will ensure all Divisions of council have prepared and distributed to all staff, the method within council's Business Management system of tracking all costs associated with a disaster event. Costs and associated documentation will be forwarded to council's Disaster Recovery Funding Arrangements (DRFA) Claims Officer for processing for each event. Refer to the *TLDMG Financial Management Sub Plan*.

5.4.3 Media Management

Communications and media management for a disaster event will be undertaken as per the *TCC* Communications Emergency Response Procedure and TLDMG Community Information & Warnings Sub Plan.

5.4.4 Accessing Support and Allocation of Resources

The TLDMG will continually assess the current and future tasks for the disaster event with the local available resources. For any gaps in this process (i.e. if the disaster escalates beyond the resources of the TLDMG), a Request for Assistance with details of the tasks will be forwarded to the Townsville District Disaster Management Group.

5.4.5 Activation of Local Disaster Management Arrangements

The authority to activate the TLDMG is initiated by the TLDMG Chairperson. Advice of activation is to be provided to the District Disaster Coordinator.

The Chairperson, or their delegate, can implement this plan on receipt of:

1. A warning of an impending threat which in the opinion of the Chairperson or their delegate, would require a coordinated community response;

- 2. A request from a Lead Agency or DDMG for assistance under the Local Disaster Management Plan.
- 3. At the recommendation of the QDMC.

Upon activation of this plan, the following process will occur:

- 1. The Local Disaster Coordinator is to advise TLDMG Members, Advisory Members and Working Group Chairs of the activation and instruct them to proceed to the LDCC for a meeting to assess the situation and determine immediate action required.
- 2. TLDMG Members, Advisory Members and Working Groups to activate their respective organisations' resources as determined at the TLDMG meeting.
- 3. Lead Agencies and Support Agencies will respond as per their agency plans and as requested by the TLDMG. Evacuation of residents, if required, will be undertaken as per evacuation processes.
- 4. Acting on advice from the Lead Agency, the Local Disaster Coordinator will coordinate the recall of participating organisations and stand down the TLDMG.

Members of participating organisations will be debriefed by their respective agencies prior to stand down. A debrief involving all Operational Organisations will be conducted by the Chairperson or his delegate as soon as possible after the completion of the operation.

5.4.6 Impact Assessment Process

For any disaster or emergency event, it is paramount that the TLDMG, council's Emergency Response Group and their subsequent operating bodies understand the extent and nature of physical damage to council infrastructure and private, commercial and industrial buildings.

The process for assessing the immediate, physical impacts to community and private properties will be as per the *TLDMG Impact Assessment Sub Plan*. A copy of this sub plan is available on council's website (www.townsville.qld.qov.au).

5.4.7 Establishment of Forward Command Post

The establishment of a Forward Command Post (FCP) will be governed by the scale and location of the event. Emergency Services agencies will normally establish a FCP as per their respective operating procedures and if warranted. If this occurs, council will provide a Liaison Officer to assist at the FCP if required.

As per council's *Emergency Response Plan*, the Dalrymple Road Depot will be utilised to coordinate and task council and other agencies'/organisations' crews with works to be undertaken in the field. This will be reviewed for each event.

5.4.8 Resupply

Although Townsville is basically a large urban environment, a disaster event may create some issues in supplying essential goods to isolated communities, isolated rural properties and stranded persons. The infrastructure, topography and location of population centres are such that it is considered that resupply will not be regularly experienced in the area with disaster events.

All issues of resupply will be undertaken as per the *TLDMG Resupply Sub Plan*. A copy of this sub plan is available on council's website (www.townsville.qld.gov.au).

5.4.9 Management of Volunteers

The TLDMG will work closely with Disaster Relief Australia (DRA) for the management of spontaneous volunteers. GIVIT may also be able to assist with the management of volunteers and offers of assistance for disaster events.

Volunteering North Queensland (VNQ) will be involved in the recovery phase as a referral service and will assist to coordinate support through VNQ and the Townsville Local Recovery Coordinator in areas such as church groups and other community and/or volunteer groups. VNQ is an Advisory Member organisation of the TLDMG and operates separately to Volunteering Queensland.

5.4.10 Management of Donations

Donations to council from the community for disaster events will be managed as follows:

Type of Donation	Managed By				
	GIVIT	St Vincent de Paul	TCC ERG	DRA	VNQ
			(via LDCC)		
Food	$\overline{\checkmark}$				
Goods, clothing, toys and bedding	\square	\square			
Offer to volunteer to assist	$\overline{\square}$			V	\square
Services, plant and equipment	$\overline{\mathbf{V}}$				

Donations will be managed in accordance with:

- Australian Government National Guidelines for Managing Donated Goods; and
- Queensland State Recovery Office Tools to Assist with Managing Donated Goods.

Standard for DM - Shared Responsibility	Outcome
Planning and Plans	3, 4
Capability Integration	7, 8
Operations	9
Collaboration and Coordination	10, 11

5.5 Hazard Specific Arrangements

The following Plans will be utilised for specific areas or services for a disaster event affecting the Townsville area:

Issue	Response Plan	Responsibility	Reviews
Ross River Dam	Ross River Dam Emergency Action Plan	Water and Resource Recovery (TCC)	Plan reviewed annually
Paluma Dam	Paluma Dam Emergency Action Plan	Water and Resource Recovery (TCC)	Plan reviewed annually
Public health - including: * food supply * vector, infectious disease control * animal control * personal hygiene	TCC Environmental Health Emergency Response Procedure	Environmental Health & Regulation (TCC)	Plan reviewed annually
Public health - including: * refuse and waste disposal * disposal of dead stock and animals * disinfection of buildings and premises	TCC Resource Recovery Services Emergency Response Procedure	Resource Recovery (TCC)	Plan reviewed annually

Standard for DM - Shared Responsibility	Outcome
Managing Risk	1, 2
Planning and Plans	3, 4

Part Six - Recovery Strategy

6.1 Local Recovery & Resilience Sub Plan

The Local Recovery & Resilience Sub Plan applies to emergency/disaster events occurring within the Townsville City Council local government area whereby local resources are sufficient to deal with the process of recovery.

In the event that local resources are insufficient or overwhelmed to deal with the recovery process a request may be made to the District Disaster Management Group (via the Townsville LDMG) for additional resources, assistance and/or activation of the District Disaster Community Recovery Plan.

In the event that the *District Disaster Community Recovery Plan* / Committee are activated, the Local Recovery & Resilience Group (LRRG) may be required to assist the District Disaster Community Recovery Committee in undertaking recovery operations as determined by the Chair of the District Disaster Community Recovery Committee.

This plan is available on council's public website (www.townsville.qld.gov.au).

6.2 Recovery Functions

Townsville City Council Councillors will chair Recovery sub groups aligned to functional areas of recovery. Townsville has opted for a model based on "four" functional sub groups. They are as follows:

- 1. Human & Social;
- 2. Economic:
- 3. Built Environment (incorporating Buildings and Roads & Transport); and,
- 4. Natural Environment.

This plan acknowledges that successful community recovery requires attention to all aspects of recovery. As well as recognising these elements, the plan takes a whole-of-community approach and develops strategies, which identify agencies and services in these) elements, thus giving the community a high degree of self-determination.

The local levels of recovery activation are outlined at Annexure F.

Standard for DM - Shared Responsibility	Outcome
Planning and Plans	3, 4
Operations	9
Collaboration and Coordination	10, 11

Part Seven – Local Disaster Management Sub Plans

7.1 Operational Sub Plans

Plan Description	Responsibility	Status
Asbestos Containing Materials (ACM) Sub Plan	TCC Property Services	Reviewed annually
Community Education and Marketing Sub Plan	Local Disaster Coordinator and TCC Community Engagement	Reviewed annually
Community Information and Warnings Sub Plan	Local Disaster Coordinator and TCC Community Engagement	Reviewed annually
Environmental Health Working Group Sub Plan	TCC Environmental Health & Regulation	Reviewed annually
Evacuation and Transport Sub Plan	Local Disaster Coordinator	Reviewed annually
Financial Management Sub Plan	Local Disaster Coordinator	Reviewed annually
Impact Assessment Sub Plan	Local Disaster Coordinator and TCC Infrastructure & Operations	Reviewed annually
Local Recovery and Resilience Sub Plan	Local Recovery and Resilience Group	Reviewed annually
Resupply Sub Plan	Local Disaster Coordinator	Reviewed annually
Shelters and Evacuation Centres Sub Plan	Shelters and Evacuations Centres Working Group	Reviewed annually
Tsunami Response Plan for Townsville	Local Disaster Coordinator	Reviewed annually
Ross River Dam Emergency Action Plan	TCC Water & Resource Recovery	Reviewed annually
Paluma Dam Emergency Action Plan	TCC Water & Resource Recovery	Reviewed annually

Public versions of these plans are available at <u>www.townsville.qld.gov.au</u>.

7.2 Stakeholder Agreements

The Townsville Local Disaster Management Group has also developed partnership agreements with several organisations within the local government area to assist in preparing for and responding to disaster events. These include:

- AECOM;
- Australian Red Cross;
- Department of Education;
- GIVIT;
- Joint Council Disaster Management Group (refer to Section 2.1.5);
- Salvation Army;
- St John Ambulance;
- Disaster Relief Australia (DRA);
- Townsville Enterprise, Ltd (TEL);
- Townsville Aged Care Partnership Group (TACPG);
- Youth With A Mission (YWAM); and,
- Various consultancy services for the provision of subject-matter expertise.

The stakeholder agreements may be obtained from the Local Disaster Coordinator, TLDMG.

Part Eight - TLDMG Forward Planning

Forward planning is integral to the ongoing improvements of the TLDMG and its operations. It also ensures the TLDMG continues to adapt to the needs of the community.

2023 - 2024

Action	Status		
Nominate TLDMG Core Members and deputies, for approval by TLDMG.	Ongoing		
Nominate TLDMG Advisory Members and deputies, for approval by	Ongoing		
TLDMG.			
Identify training requirements and coordinate with QFES as required for:	Ongoing		
Core Members and deputies			
Advisory Members and deputies			
 Local Recovery and Resilience Group members 			
Local Disaster Coordination Centre Staff			
QFES to maintain Queensland Disaster Management Training Framework	Ongoing		
Matrix for regular feedback to the TLDMG			
Conduct annual review of TLDMG arrangements utilising the IGEM	Conducted as part of		
Disaster Management Prioritisation Tool	IGEM Capability Review		
	for Townsville Disaster		
	District		
Ensure integration and adaptation of Crisis Appreciation and Strategic	Ongoing		
Planning (scenario-timeline planning) into Council and TLDMG planning			
activities			
Conduct hazard study and risk assessment utilising the Queensland	Planned for 2023/24		
Emergency Risk Management Framework (QERMF)			
Conduct a refresh and redesign of the TLDMP and Sub Plans	Planned for 2023/24		

Annexure Index

Α	<u>Disaster Management Definitions</u>
В	Abbreviations use in Disaster Management
С	TLDMG Contact List
D	Hazard Studies in Townsville Area
E	Levels of Activation for Response Arrangements
F	Levels of Activation for Recovery Arrangements

Annexure A – Disaster Management Definitions

Advisor	A person invited to participate in the business of a disaster management group in an advisory capacity on an as-required basis.
Alert	A heightened level of vigilance due to the possibility of an event in the area of responsibility. No action is required however the situation should be monitored by
	someone capable of assessing the potential of the threat.
Chair	The person appointed by the local government as the Chair of the Local Disaster
	Management Group.
Chief Executive	The Chief Executive of the department, as referred to in the Disaster Management
	Act 2003, is currently the Director-General of the Department of Community
	Safety.
Community	A group of people with a commonality of association and generally defined by
	location, shared experience or function.
Community	The adaptive capacity of its members to respond to and influence the
Resilience	consequences of disasters to continue an acceptable level in functioning and
	structure (Adapted from the <i>United Nations International Strategy for Disaster</i>
	Reduction: 2002 and The Community Resilience Manual, Canada, 2000).
Consequence	The outcome of an event or situation expressed qualitatively or quantitatively,
	being a loss, injury, disadvantage or gain.
Command	The direction of members and resources of an agency in the performance of the
	agency's roles and tasks. Command operates vertically within an agency. Relates to
	single agencies.
Control	The overall direction of the activities, agencies or individuals concerned. Control
	operates horizontally across all agencies, functions and individuals. Relates to
	situations.
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 operate
	horizontally across organisations and agencies.
Coordination	A centre established at State, District or Local level as a centre of communication
Centre	and coordination during times of disaster operations -
	e.g. SDCC- State Disaster Coordination Centre,
	DDCC- District Disaster Coordination Centre,
	LDCC- Local Disaster Coordination Centre.
Deputy Chair	The person appointed by the local government as the Deputy Chair of the Local
	Disaster Management Group.
Disaster	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 to recover from the disruption (Disaster Management Act 2003)

Disaster District	Part of the state prescribed under a regulation as a disaster district.
Disaster Management	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 (<i>Disaster Management Act 2003</i>)
Disaster Management Functions	The services essential to managing the impacts and consequences of an event.
Disaster Mitigation	The taking of preventative measures to reduce the likelihood of an event occurring or, if an event occurs, to reduce the severity of the event (<i>Disaster Management Act, 2003</i>)
Disaster Operations	Activities undertaken before, during or after an event happens to help reduce loss of human life, illness or injury to humans, property loss or damage, or damage to the environment, including, for example, activities to mitigate the adverse effects of the event (<i>Disaster Management Act 2003</i>)
Disaster Preparedness	The taking of preparatory measures to ensure that, if an event occurs, communities, resources and services are able to cope with the effects of the event (<i>Disaster Management Act, 2003</i>)
Disaster Research	May be broadly understood as a systematic inquiry, before and after a disaster, into a relevant disaster management problem (COAG, Natural Disasters in Australia: Reforming mitigation, relief and recovery arrangements: 2002)
Disaster Response	The taking of appropriate measures to respond to an event, including action taken and measures planned in anticipation of, during and immediately after an event to ensure that its effects are minimised and that persons affected by the event are given immediate relief and support (<i>Disaster Management Act, 2003</i>)
Disaster Response Capability	The ability to provide equipment and a suitable number of persons, using the resources available to the local government, to effectively deal with or help another entity to deal with an emergency situation or a disaster in the local government's area (<i>Disaster Management Act 2003, S80 (2</i>)).
Disaster Response Operations	The phase of disaster operations that relates to responding to a disaster (<i>Disaster Management Act, 2003</i>)
Disaster Recovery	The taking of appropriate measures to recover from an event, including action taken to support disaster affected communities in the reconstruction of infrastructure, the restoration of emotional, social, economic and physical wellbeing, and the restoration of the environment (<i>Disaster Management Act, 2003</i>)
Disaster Recovery Operations	The phase of disaster operations that relates to recovering from a disaster (Disaster Management Act, 2003)
Disaster Relief	The provision of immediate shelter, life support and human needs of persons affected by, or responding to, an emergency (COAG, Natural Disasters in Australia: Reforming mitigation, relief and recovery arrangements: 2002)

Disaster Risk Assessment	The process used to determine risk management priorities by evaluating and comparing the level of risk against predetermined standards, target risk levels or other criteria (<i>COAG</i> , <i>Natural Disasters in Australia: Reforming mitigation, relief and recovery arrangements: 2002</i>). Incorporates the processes of risk identification, risk analysis and risk evaluation
	(ISO Guide 73:2009 Risk management - Vocabulary)
District Disaster Coordinator (DDC)	A person appointed under the <i>Disaster Management Act 2003</i> who is responsible for the coordination of disaster operations in the disaster district for the District Disaster Management Group.
District Disaster Management Group (DDMG)	The group established under the <i>Disaster Management Act 2003</i> to provide coordinated State government support and resources to the Local Disaster Management Group.
District Disaster Management Plan	A plan prepared under the <i>Disaster Management Act 2003</i> that documents planning and resource management to counter the effects of a disaster within a disaster district.
Emergency Preparedness	A state of readiness, which enables Government agencies involved in disaster management, the private sector, communities and individuals to mobilise, organise, and provide relief measures to deal with an impending or current disaster or the effects of a disaster.
Event	 Any of the following: (a) A cyclone, earthquake, flood, storm, storm tide, tornado, tsunami, volcanic eruption or other natural happening; (b) bushfire; (c) an explosion or fire, a chemical, fuel or oil spill or a gas leak; (d) an infestation, plaque or epidemic; (e) a failure of, or disruption to, an essential service or infrastructure; (f) an attack against the State; (g) another event similar to an event mentioned above. An 'event' may be natural or caused by human acts or omissions (<i>Disaster</i>
	Management Act 2003, S16 (1) & (2)).
Executive Officer DDMG	A person appointed to the position of Executive Officer to the District Disaster Management Group by the Commissioner, Queensland Police Service.
Executive Team	The Chair, Deputy Chair and Local Disaster Coordinator of a local group.
Functional Lead	An agency allocated responsibility to prepare for and provide disaster management
Agency	function and lead organisations that provide support roles.
Guidelines	Guidelines are developed under s63 of the under the <i>Disaster Management Act</i> 2003 to inform the QDMC, DDMGs and local governments about the preparation of disaster management plans, matters to be included in disaster management plans and other appropriate matters about the operation of a DDMG or LDMG.

Hazard	A source of potential harm, or a situation with a potential to cause loss (<i>Emergency</i>
Hazaru	Management Australia, 2004).
Incident	Day-to-day occurrence which is responded to by a single response agency, or in
meident	cooperation with other response agencies.
Lean Forward	An operational state prior to "stand up" characterised by a heightened level of
Lean Forward	situational awareness of a disaster event (either current or impending) and a state
	of operational readiness. Disaster coordination centres are on standby; prepared
	but not activated.
Level of Risk	Expression of the severity of a risk derived from consideration of likelihood the
Level of Risk	event will occur and the potential consequence that may arise.
Likelihood	An expression of how likely it is that a specific hazard will occur within a given
	time frame. It is used as a qualitative description of probability or frequency.
Local Disaster	A person appointed under the under the <i>Disaster Management Act 2003</i> who is
Coordinator (LDC)	responsible for the coordination of disaster operations for the Local Disaster
	Management Group.
Local Disaster	The group established under the under the Disaster Management Act 2003 to
Management Group	manage disaster planning and operations on behalf of the local government.
(LDMG)	
Local Disaster	A plan that documents arrangements to manage disaster planning and operations
Management Plan	within the local government area of responsibility.
Mitigation	Measures taken in advance of a disaster, aimed at decreasing or eliminating its
	impact on society and the environment (Australian Emergency Management
	Glossary, 1998).
Planning	Process of developing arrangements for coordinating a response and establishing
	priorities, duties, roles and responsibilities of different individuals and
	organisations, including an actual state of preparedness.
Post-disaster	Addresses performance during and the risks revealed by a disaster event in order
Assessment	to improve future development of mitigation measures. Post-disaster assessment
	forms part of continuous improvement of the whole system (Adapted from COAG,
	Natural Disasters in Australia: Reforming mitigation, relief and recovery
	arrangements: 2002)
Preparedness	Measures to ensure that, should an emergency occur, communities, resources, and
	services are capable of coping with the effects (Australian Emergency Management
	Glossary, 1998).
Prevention	Measures to eliminate or reduce the incidence or severity of emergencies
	(Australian Emergency Management Glossary, 1998).
Primary Agency	An agency allocated responsibility to prepare for and respond to a specific hazard
	based on their legislated and/or technical capability and authority.
Queensland	Whole-of-government arrangements to ensure the collaborative and effective
Disaster	coordination of planning, services, information and resources for comprehensive
Management	disaster management.

Arrangements				
(QDMA)				
Queensland	Queensland peak body responsible for the development of disaster management			
Disaster	policy and coordination of resources necessary to ensure that all steps are taken to			
Management	plan for and counter the effects of disasters within the State.			
Committee (QDMC)				
Reconstruction	Actions taken to re-establish a community after a period of rehabilitation			
	subsequent to a disaster. Actions would include construction of permanent			
	housing, restoration of all services and complete resumption of the pre-disaster			
	state (<i>Australian Emergency Management Glossary, 1998</i>).			
Recovery	The taking of preventative measures to recover from an event, including action			
,	taken to support disaster-affected communities in the reconstruction of			
	infrastructure, the restoration of emotional, social, economic and physical			
	wellbeing, and the restoration of the environment (<i>Disaster Management Act,</i>			
	<i>2003</i>).			
Rehabilitation	The operations and decisions taken after a disaster, with a view to restoring a			
	stricken community to its former living conditions, whilst encouraging and			
	facilitating the necessary adjustments to the changes caused by the disaster			
	(Australian Emergency Management Glossary, 1998).			
Relief	The provision of immediate shelter, life support and human needs of persons			
	affected by or responding to, an emergency.			
Residual Risk	The risk remaining after risk treatment. Residual risk can contain unidentified risk.			
Residual risk can be known as "retained risk" (AS/NZS ISO 31000:20009 F				
	Management - Principles and guidelines).			
Response	Measures taken in anticipation of, during, and immediately after an emergency to			
	ensure its effects are minimised (Australian Emergency Management Glossary,			
	1998).			
Risk	The effect of uncertainty on objectives (<i>ISO Guide 73:2009 Risk management</i> –			
	Vocabulary)			
Risk Control	That part of risk management which involves the provision of policies, standards			
	and procedures to eliminate, avoid or minimise adverse risks facing a community			
Risk Identification	The process of finding, recognising and describing risks (ISO Guide 73:2009 Risk			
	management - Vocabulary)			
Risk Management	Coordinated activities to direct and control a community or organisation with			
.	regard to risk (<i>Adapted from ISO Guide 73:2009 Risk management - Vocabulary</i>)			
Risk Management	The systematic application of management policies, procedures and practices to			
Process	the activities of communicating, consulting, establishing the content and			
	identifying, analysing, evaluating, treating, monitoring and reviewing risk (<i>ISO</i>			
	TACHERTHAN ANALYSHIM CTAIMACHM LICACHM THOUSEDING AND ILCUMIN LEVICTURE IN THE CONTRACT			
Risk Reduction	Guide 73:2009 Risk management - Vocabulary) Risk treatments that deal with negative consequences (ISO Guide 73:2009 Risk			

Risk Register	A list of risk statements describing sources of risk and elements at risk with			
	assigned consequences, likelihoods and levels of risk.			
Risk Transfer	Shifting the responsibility or burden for loss to another party through legislation,			
	contract, insurance or other means. Risk transfer can also refer to shifting a			
	physical risk or part thereof, elsewhere.			
Risk Treatment	A process to modify risk. Risk treatment can involve avoiding the risk by deciding			
	not to start or continue with the activity that gives rise to the risk; taking or			
	increasing the risk in order to pursue an opportunity; removing the risk course;			
	changing the likelihood; changing the consequences; sharing the risk with another			
	party or parties; and retaining the risk by informed decision (ISO Guide 73:2009			
	Risk management - Vocabulary)			
Risk Treatment	Measures contained within mitigation, preparedness, response and recovery			
Options (Strategies)	programs that aim to eliminate or drastically reduce the level of risk.			
Review	To inspect officially and in a formal, systematic way so as to ensure the currency,			
	relevance and accuracy of plans, arrangements and associated documents			
Serious Disruption	Serious disruption means:			
	loss of human life or illness or injury to humans; or			
	widespread or severe property loss or damage; or			
	widespread or severe damage to the environment;			
	(Disaster Management Act 2003, S13 (2)).			
Stand Down	Transition from responding to an event back to normal core business and/or			
	recovery operations. There is no longer a requirement to respond to the event and			
	the threat is no longer present.			
Stand Up	The operational state following "lean forward" whereby resources are mobilised,			
	personnel are activated and operational activities commenced. Disaster			
	coordination centres are activated.			
State Disaster	A person appointed under the <i>Disaster Management Act 2003</i> who is responsible			
Coordinator	for the coordination of disaster response operations for the State Disaster			
	Management Group.			
State Disaster	A planning tool for disaster managers which provides an overview of Queensland's			
Management Plan	disaster management arrangements, including agency roles and responsibilities.			
State Recovery	A person appointed under the <i>Disaster Management Act 2003</i> who is responsible			
Coordinator	for the coordination of disaster recovery operations for the State Disaster			
	Management Group.			
Vulnerability	The conditions predetermined by physical, social, economic and environmental			
	factors or processes, which increase the susceptibility of a community to the			
	impact of hazards (National Emergency Risk Assessment Guidelines)			
Warning	Dissemination to the public of messages signalling imminent hazards, which may			
-	include advice on protective measures.			

Annexure B - Abbreviations Used in Disaster Management

ADF	Australian Defence Force			
AWS	Autsralian Warning System			
ВоМ	Bureau of Meteorology			
CASP	Crisis Appreciation and Strategic Planning			
COAG	Council of Australian Governments			
CSMAC	Community Services Ministers' Advisory Council			
DCS	Department of Community Safety			
DDC	District Disaster Coordinator			
DDCC	District Disaster Coordination Centre			
DDMG	District Disaster Management Group			
DDMP	District Disaster Management Plan			
DH	Department of Housing			
DEPW	Department of Energy and Public Works			
DM	Disaster Management			
DM Portal	Queensland Disaster Management Portal			
DNRM	Department of Natural Resources and Mines			
DRA	Disaster Relief Australia			
DRFA	Disaster Recovery Funding Arrangements (formerly NDRRA)			
DTATIPCA	Department of Treaty, Aboriginal and Torres Strait Islander			
	Partnerships, Communities and the Arts.			
EMA	Emergency Management Australia			
EMAF	Emergency Management Assurance Framework			
EPA	Environmental Protection Agency			
FCP	Forward Command Post			
GIS	Geographic Information System			
GIVIT	GIVIT			
Guidelines	Disaster Management Planning Guidelines			
HazMat	Hazardous Materials (in the context of emergency response)			
IGEM	Inspector-General of Emergency Management			
IMT	Incident Management Team			
LDC	Local Disaster Coordinator			
LDCC	Local Disaster Coordination Centre			
LDMG	Local Disaster Management Group			
LDMP	Local Disaster Management Plan			
LRC	Local Recovery Coordinator			
LRRG	Local Recovery & Resilience Group			
MSQ	Department of Transport & Main Roads - Maritime Safety Queensland			
NDRP	Natural Disaster Resilience Program			
NDRMSP	Natural Disaster Risk Management Studies Program			

QAS Queensland Ambulance Service QCCAP Queensland Coastal Contingency Action Plan QDMA Queensland Disaster Management Arrangements QDMC Queensland Disaster Management Committee QDMTF Quuensland Disaster Management Training Framework QERMF Queensland Emergency Risk Management Framework QFES Queensland Fire and Emergency Services QPS Queensland Police Service Q-Rail Queensland Rail SC3 State Crisis and Communications Centre SDC State Disaster Coordinator SDC State Disaster Coordinator SDCC State Disaster Coordination Group SDMC State Disaster Mitigation Committee SDMP State Disaster Management Plan SDRA State Disaster Management SES STS State Emergency Service SESC State Emergency Service SESC State Emergency Warning System SITREP Situation Report SOPS Standard Derating Procedures SPF Disaster Management Strategic Policy Framework SRC State Recovery Gorup the Act Disaster Management Strategic Policy Framework TCC Townsville City Council TCC ERG Townsville City Council Emergency Response Group TDDC Townsville District Disaster Coordination Centre TDDMG Townsville District Disaster Coordination Centre TDDMG Townsville District Disaster Coordination Centre TDDMG Townsville District Disaster Coordination Centre TLDMG Townsville Local Disaster Coordination Centre TLDMG Townsville Local Disaster Management Group TLDCC Townsville District Disaster Coordination Centre TLDMG Townsville Local Disaster Coordination Centre TLDMG Townsville Local Disaster Coordination Centre TLDMG Townsville Local Disaster Management Group TLDMC Townsville Local Disaster Management Han TMR Transport and Main Roads TRS Tropical Regional Services (Queensland H	PPRR	Prevention, Preparedness, Response, Recovery
QDMA Queensland Disaster Management Arrangements QDMC Queensland Disaster Management Committee QDMTF Quuensland Disaster Management Training Framework QERMF Queensland Emergency Risk Management Framework QFES Queensland Fire and Emergency Services QPS Queensland Rail SC3 Queensland Rail SC3 State Disaster Coordinator SDC State Disaster Coordinator SDC State Disaster Coordination Centre SDCG State Disaster Coordination Group SDMC State Disaster Management Plan SDMP State Disaster Management Plan SDRA State Emergency Service SES State Emergency Service SESC State Emergency Service SESC State Emergency Warning System SITREP Situation Report SOPs Standard Operating Procedures SPF Disaster Management Strategic Policy Framework SRC State Recovery Coordinator SRG State Recovery Group the Minister The Minister for Police and Community S	QAS	Queensland Ambulance Service
QDMC Queensland Disaster Management Committee QDMTF Quuensland Disaster Management Training Framework QERMF Queensland Emergency Risk Management Framework QFES Queensland Fire and Emergency Services QPS Queensland Police Service Q-Rail Queensland Rail SC3 State Crisis and Communications Centre SDC State Disaster Coordinator SDCC State Disaster Coordination Group SDMC State Disaster Coordination Group SDMC State Disaster Management Plan SDMP State Disaster Management Plan SDRA State Disaster Relief Arrangements SES State Emergency Service SESC State Emergency And Security Council SEWS Standard Emergency Warning System SITREP Situation Report SOPs Standard Operating Procedures SPF Disaster Management Strategic Policy Framework SRC State Recovery Coordinator SRG State Recovery Group the Act Disaster Management Act 2003 the Minister <th< td=""><td>QCCAP</td><td>Queensland Coastal Contingency Action Plan</td></th<>	QCCAP	Queensland Coastal Contingency Action Plan
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QERMF Queensland Emergency Risk Management Framework QFES Queensland Fire and Emergency Services QPS Queensland Police Service Q-Rail Queensland Rail SC3 State Disaster Coordinator SDC State Disaster Coordination Centre SDCG State Disaster Coordination Group SDMC State Disaster Mitigation Committee SDMP State Disaster Management Plan SDRA State Disaster Relief Arrangements SES State Emergency Service SESC State Emergency Warning System SITREP Situation Report SOPS Standard Emergency Warning System SITREP Situation Report SOPS Standard Operating Procedures SPF Disaster Management Strategic Policy Framework SRC State Recovery Coordinator SRG State Recovery Group the Act Disaster Management Act 2003 the Minister The Minister for Police and Community Safety TCC Townsville City Council TCC Townsville District Disaster Management Grou	QDMC	Queensland Disaster Management Committee
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QPS Queensland Police Service Q-Rail Queensland Rail SC3 State Crisis and Communications Centre SDC State Disaster Coordination Centre SDCG State Disaster Mordination Group SDMC State Disaster Mitigation Committee SDMP State Disaster Management Plan SDRA State Disaster Relief Arrangements SES State Emergency Service SES State Emergency Service SESC State Emergency Warning System SITREP Situation Report SOPS Standard Emergency Warning System SITREP Situation Report SOPS Standard Operating Procedures SPF Disaster Management Strategic Policy Framework SRC State Recovery Coordinator SRC State Recovery Group the Act Disaster Management Act 2003 the Minister The Minister for Police and Community Safety TCC Townsville City Council TCC ERG Townsville City Council Emergency Response Group TDDC Townsville District Disaster Coordination <td>QERMF</td> <td>Queensland Emergency Risk Management Framework</td>	QERMF	Queensland Emergency Risk Management Framework
Q-Rail Queensland Rail SC3 State Crisis and Communications Centre SDC State Disaster Coordinator SDCC State Disaster Coordination Centre SDCG State Disaster Coordination Group SDMC State Disaster Mitigation Committee SDMP State Disaster Management Plan SDRA State Disaster Relief Arrangements SES State Emergency Service SESC State Emergency Service SESC State Emergency Warning System SITREP Situation Report SOPS Standard Operating Procedures SPF Disaster Management Strategic Policy Framework SRC State Recovery Coordinator SRG State Recovery Group the Act Disaster Management Act 2003 the Minister The Minister for Police and Community Safety TCC Townsville City Council TCC ERG Townsville District Disaster Coordinator TDDC Townsville District Disaster Coordinator TDDCC Townsville District Disaster Coordination Centre TDDMG Townsville District Disaster Coordination Centre TLDMG Townsville Local Disaster Management Group TLDMC Townsville Local Disaster Management Plan TMR Transport and Main Roads TRS Tropical Regional Services (Queensland Health) WRR Water & Resourec Recovery VNQ Volunteering North Queensland	QFES	Queensland Fire and Emergency Services
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SDC State Disaster Coordinator SDCC State Disaster Coordination Centre SDCG State Disaster Coordination Group SDMC State Disaster Mitigation Committee SDMP State Disaster Management Plan SDRA State Disaster Relief Arrangements SES State Emergency Service SESC State Emergency and Security Council SEWS Standard Emergency Warning System SITREP Situation Report SOPs Standard Operating Procedures SPF Disaster Management Strategic Policy Framework SRC State Recovery Coordinator SRG State Recovery Group the Act Disaster Management Act 2003 the Minister The Minister for Police and Community Safety TCC Townsville City Council TCC ERG Townsville District Disaster Coordinator TDDC Townsville District Disaster Coordinator TDDC Townsville District Disaster Coordination Centre TDDMG Townsville District Disaster Management Group TLDCC Townsville Local Disaster Management Group TLDCC Townsville Local Disaster Management Group TLDMG Townsville Local Disaster Management Group TLDMG Townsville Local Disaster Management Group TLDMP Townsville Local Disaster Management Flan TMR Transport and Main Roads TRS Tropical Regional Services (Queensland Health) WRR Water & Resourec Recovery VNQ Volunteering North Queensland	Q-Rail	Queensland Rail
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SDCG State Disaster Coordination Group SDMC State Disaster Mitigation Committee SDMP State Disaster Management Plan SDRA State Disaster Relief Arrangements SES State Emergency Service SESC State Emergency and Security Council SEWS Standard Emergency Warning System SITREP Situation Report SOPs Standard Operating Procedures SPF Disaster Management Strategic Policy Framework SRC State Recovery Coordinator SRG State Recovery Group the Act Disaster Management Act 2003 the Minister The Minister for Police and Community Safety TCC Townsville City Council Emergency Response Group TDDC Townsville District Disaster Coordinator TDDCC Townsville District Disaster Coordination Centre TDDMG Townsville District Disaster Management Group TLDCC Townsville Local Disaster Management Group TLDCC Townsville Local Disaster Management Plan TMR Transport and Main Roads TRS Tropical Regional Services (Queensland Health) WRR Water & Resourec Recovery VNQ Volunteering North Queensland	SDC	State Disaster Coordinator
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WRR Water & Resourec Recovery VNQ Volunteering North Queensland	TMR	Transport and Main Roads
VNQ Volunteering North Queensland	TRS	Tropical Regional Services (Queensland Health)
-	WRR	Water & Resourec Recovery
XO Executive Officer	VNQ	Volunteering North Queensland
	XO	Executive Officer

Annexure C – Townsville Local Disaster Management Group Contact List

This page has been intentionally left blank as it contains personal information as defined under the *Information Privacy Act 2009*.

Annexure D - Hazard Studies in Townsville Area

Studies have been undertaken for many years by the Thuringowa City Council and Townsville City Council – now amalgamated to Townsville City Council by the State Government as of 15 March 2008. These are listed as follows:

Study		Location	
Townsville Bushfire Hazard Mapping: Analysis of Bushfire	1999	Document available for inspection or purchase. Contact the Customer Service	
Susceptibility Based on Vegetation Type and Slope		Centre by phoning 13 48 10 or email enquiries@townsville.qld.gov.au.	
Thuringowa Urban Stormwater Management Report	1999	www.townsville.qld.gov.au	
Townsville Landslide Hazard Zonation Study	2001	Document available for inspection or purchase. Contact the Customer Service	
Townsville Landside Hazard Zonation Study		Centre by phoning 13 48 10 or email enquiries@townsville.qld.gov.au .	
Bluewater Creek Management Study Incorporating Flood	2001	Document available for inspection or purchase. Contact the Customer Service	
Study	2001	Centre by phoning 13 48 10 or email enquiries@townsville.qld.gov.au .	
Black River Geomorphological and Stabilisation Study	2002	www.townsville.qld.gov.au	
Townsville Steep Slope Study	2002	Document available for inspection or purchase. Contact the Customer Service	
Townsville Steep Slope Study	2002	Centre by phoning 13 48 10 or email enquiries@townsville.qld.gov.au .	
Townsville (Castle Hill) Steep Slope Risk Assessment	2004	04 <u>www.townsville.qld.gov.au</u>	
Ross River Dam Upgrade Risk Analysis and Consequence Analysis		Document available for inspection or purchase. Contact the Customer Service	
		Centre by phoning 13 48 10 or email enquiries@townsville.qld.gov.au.	
Townsville Regional Flood Hazard Assessment Study		Document available for inspection or purchase. Contact the Customer Service	
Townsville Regional Flood Hazard Assessment Study	2005	Centre by phoning 13 48 10 or email enquiries@townsville.qld.gov.au.	
Townsville & Thuringowa Tropical Cyclone Surge Wave	2006	Document available for inspection or purchase. Contact the Customer Service	
Impacts and Inundation Study		Centre by phoning 13 48 10 or email enquiries@townsville.qld.gov.au .	
Earthquake Risk Assessment of Townsville City		Document available for inspection or purchase. Contact the Customer Service	
Laitiiquake kisk Assessifient of Townsville City	2006	Centre by phoning 13 48 10 or email enquiries@townsville.qld.gov.au .	
Townsville and Thuringowa Storm Tide Study	2007	www.townsville.qld.gov.au	
Alligator Creek Flood Study	2008	Document available for inspection or purchase. Contact the Customer Service	
Alligator creek riood study	2000	Centre by phoning 13 48 10 or email enquiries@townsville.qld.gov.au .	

Study	Year	Location	
Garbutt Drainage Investigation	2008	Document available for inspection or purchase. Contact the Customer Service	
darbutt bramage investigation		Centre by phoning 13 48 10 or email enquiries@townsville.qld.gov.au.	
Townsville City Natural Disaster Risk Management Study		Document available for inspection or purchase. Contact the Customer Service	
Townsville City Natural Disaster Risk Management Study	2009	Centre by phoning 13 48 10 or email enquiries@townsville.qld.gov.au .	
Tropical Cyclone Charlotte Study	2009	www.townsville.qld.gov.au	
Earthquake Risk Assessment of Townsville City	2010	Document available for inspection or purchase. Contact the Customer Service	
Lartinguake Kisk Assessment of Townsville City	2010	Centre by phoning 13 48 10 or email enquiries@townsville.qld.gov.au .	
Natural Disaster Risk Management Study: Bushfire Hazard	2010	Document available for inspection or purchase. Contact the Customer Service	
Study	2010	Centre by phoning 13 48 10 or email enquiries@townsville.qld.gov.au	
Landslide Hazard Study	2010	Document available for inspection or purchase. Contact the Customer Service	
Landshac Hazara Study	2010	Centre by phoning 13 48 10 or email enquiries@townsville.qld.gov.au .	
Thuringowa All Hazards Risk Management Study	2010	Document available for inspection or purchase. Contact the Customer Service	
	2010	Centre by phoning 13 48 10 or email enquiries@townsville.qld.gov.au .	
Bohle Plains Flood Planning Study	2010	www.townsville.qld.gov.au	
Horseshoe Bay Flood Study	2011	www.townsville.qld.gov.au	
North Ward Flood Study	2011	www.townsville.qld.gov.au	
Upper Bohle Plains Flood Study	2011	www.townsville.qld.gov.au	
Little Bohle River Flood Study	2011	www.townsville.qld.gov.au	
Ross Creek Flood Study	2013	www.townsville.qld.gov.au	
Bluewater Creek Flood Study	2013	www.townsville.qld.gov.au	
Ross River Flood Study	2013	www.townsville.qld.gov.au	
Althaus Creek Flood Study	2014	www.townsville.qld.gov.au	
Upper and Middle Bohle Flood Study		www.townsville.qld.gov.au	
Lower Bohle/Stony Creek Flood Study		www.townsville.qld.gov.au	
Captains Creek Flood Study		www.townsville.qld.gov.au	
Black River Flood Study	2014	www.townsville.qld.gov.au	
Louisa Creek Flood Study	2014	www.townsville.qld.gov.au	
Gordon Creek Flood Study	2014	www.townsville.qld.gov.au	

Study	Year	Location
Douglas and Annandale Flood Study		www.townsville.qld.gov.au
Eastern Alligator Creek Flood Study	2016	www.townsville.qld.gov.au

Annexure E – Local Levels of Activation for Response Arrangements

	Triggers	Actions	Communications
Alert	Awareness of a hazard that has the potential to affect the local government area	 Hazard & risks identified Information sharing with warning agency LDC contacts LDMG members Initial advice to all stakeholders 	Chair and LDC on mobile remotely
Lean Forward	 There is a likelihood that threat may affect local government area Threat is quantified but may not yet be imminent Need for public awareness LDMG is now to manage the event 	 LDC conduct analysis of predictions Chair and LDC on watching brief Confirm level & potential of threat Check all contact details Commence cost capturing Conduct meeting with available LDMG Council staff prepare for operations Determine trigger point to Stand Up Prepare LDCC for operations Establish regular communications with warning agency First briefing core members of LDMG LDC advises DDC of Lean Forward & establishes regular contact Warning orders to response agencies Public information & warning initiated 	 Chair, LDC and LDMG members on mobile and monitoring email remotely Ad-hoc reporting
Stand Up	 Threat is imminent Community will be or has been impacted Need for coordination in LDCC Requests for support received by LDMG agencies or to the LDCC The response requires coordination 	 Meeting of LDMG Core Group LDCC activated, if required Rosters for LDCC planned & implemented Commence operational plans Local government shifts to disaster operations LDMG takes full control SOPs activated Core group of LDMG located in LDCC Commence SITREPs to DDMG Distribute contact details DDMG advised of potential requests for support 	 LDCC contact through established land lines and generic email addresses Chair, LDC and LDMG members present at LDCC, on established land lines and/or mobiles, monitoring emails
Stand Down	 No requirement for coordinated response Community has returned to normal function Recovery taking place 	 Final checks for outstanding requests Implement plan to transition to recovery Debrief of staff in LDCC Debrief with LDMG members Consolidate financial records Hand over to Recovery Coordinator for reporting Return to local government core business Final situation report sent to DDMG 	LDMG members not involved in recovery operations resume standard business and after hours contact arrangements

Annexure F – Local Levels of Activation for Recovery Arrangements

Response Alert				
Resp		Triggers	Actions	Communications
Response Lean Forward	Response phase at 'lean forward' level of activation		 Appointment of LRC as appropriate Potential actions and risks identified Information sharing commences LRC in contact with LDCC/LDC Initial advice to all recovery stakeholders 	LRC and LRG members on mobile remotely
Response Stand Up	Recovery Lean Forward	 Response phase at 'stand up' level of activation Immediate relief arrangements are required during response phase 	 Monitoring of response arrangements Analysis of hazard impact or potential impact Relief and recovery planning commences Deployments for immediate relief commenced by recovery functional agencies 	 LRC and LRG members on mobile and monitoring email remotely Ad hoc reporting
Resi	Stand Up	 Immediate relief arrangements continue 	 LRG activated at LDCC or alternate location Recovery plan activated Deployments for immediate relief response Action plans for four functions of recovery activated as required Community information strategy employed 	 LRC and LRG members present at LDCC or alternate location, on established land lines and/or mobiles, monitoring emails
Response Stand Down	Recovery Stand Up	 Response phase moves to 'stand down' level of activation. Medium term recovery commences. 	 Participate in response debrief Transition arrangements from 'response and recovery' to 'recovery' activated including handover from LDC to LRC Action plans for four functions of recovery continue Community information strategies continue 	 LRC and LRG members involved in medium term recovery continue as required Regular reporting to LDMG/LDC
	Recovery Stand Down	LRG arrangements are finalised. Community returns to normal activities with ongoing support as required.	 Consolidate financial records Reporting requirements finalised Participate in recovery debrief Participate in post event debrief Post event review and evaluation Long term recovery arrangements transferred to functional lead agencies Return to core business 	 LRC and LRG members resume standard business and after hours contact arrangements Functional lead agencies report to LRC/LRG as required