Cloncurry Shire Council

Local Disaster Management Plan (LDMP)

V3 October 2021

FOREWORD

Mayor Gregory Campbell – Chair, CSC LDMG

The Cloncurry Shire is not immune to disasters. Whilst these types of events are infrequent, we cannot afford to be complacent. Disaster events have the potential to significantly affect our communities and disrupt our infrastructure, our economy and our environment.

The importance of having effective and coordinated disaster management arrangements in place cannot be underestimated. When disasters occur, local government has primary responsibility for managing disaster events within its boundaries.

The Cloncurry Shire Council (CSC) through the work of the Local Disaster Management Group (LDMG) has adopted an all-hazards approach to disaster management and takes a proactive role in the Prevention, Preparedness, Response and Recovery (PPRR) phases.

The key to effective disaster response and recovery is the preparation and resilience of the community, and the willingness of individuals to work together for the benefit of the community. We must draw on the collective knowledge, skills and capacity of our community. Effective disaster management requires a collaborative approach with responsibilities shared by individuals, families, communities, businesses and all levels of government.

This Local Disaster Management Plan (LDMP) aims to provide the Cloncurry Shire community with a robust multi-agency framework to ensure there is an effective and coordinated response to a disaster event, and to facilitate a speedy return to a safe and secure environment as soon as possible after that event.

To remain effective, our LDMP must be a dynamic, risk-based document that is subject to continuous review, ensuring its content reflects current legislation, Cloncurry Shire's risk profile, and learning from disaster events both within and outside of our Shire.

ENDORSEMENT

This LDMP was approved by the CSC LDMG on 5 October 2021 and recommended for adoption by Cloncurry Shire Council.

Mayor Greg Campbell

Chair, Local Disaster Management Group

Date: 5 October 2021

In accordance with a resolution on 12 October 2021 this Local Disaster Management Plan (LDMP) is endorsed for distribution by Cloncurry Shire Council.

Philip Keirle - Chief Executive Officer

Local Disaster Coordinator, Cloncurry Shire Council

Date: 12 October 2021

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GLOSSARY OF TERMS & ACRONYMS

A Disaster Management glossary of terms and acronyms is published as part of the Prevention, Preparedness, Response and Recovery Disaster Management Guideline

A Disaster Management Lexicon is also provided by the Office of the Inspector General Emergency Management (IGEM).

The following acronyms are not contained in the links above but are used by CSC in their disaster management arrangements:

ACRONYM	MEANING
AEMI	Australian Emergency Management Institute
AHD	Australian Height Datum
AIIMS	Australasian Inter-service Incident Management System
ARI	Annual Recurrence Interval
CDO	Counter Disaster Operations
DRFA	Disaster Recovery Funding Arrangements (formerly known as NDRRA)
EAP	(Dam) Emergency Action Plan
GIS	Geographic Information System
IMT	Incident Management Team
LGA	Local Government Area
QAS	Queensland Ambulance Service
QDMA	Queensland Disaster Management Arrangements
QFES	Queensland Fire and Emergency Services
SES	State Emergency Service – QFES
RFB	Rural Fire Brigade - QFES
RFS	Rural Fire Service - QFES
CSC	Cloncurry Shire Council
SMEACS	Situation, Mission, Execution, Administration, Coordination, Safety
WHO	World Health Organisation

DOCUMENT CONTROL

Amendment Control

This LDMP is a controlled document. The controlled copy is held by the CSC LDMG Local Disaster Coordinator (LDC). The LDC may approve inconsequential amendments to the LDMP. Any changes to the intent of the document must be endorsed by the LDMG and adopted by CSC. The plan is intended to be a 'live' document. All suggested amendments should be forwarded to:

Local Disaster Coordinator
Cloncurry Shire Council
PO Box 3
Cloncurry, QLD 4824
Email: council@cloncurry.qld.gov.au

Record of Amendments

Issue Date	Version	Outline of Revisions / Reason for Change
30/10/2017	1	Initial plan for adoption by LDMG and Council
26/11/2019	2	Minor updates throughout – updated version for adoption.
12/10/2021	3	Substantial updates throughout. Updated version for adoption by LDMG and Council.

Review Requirements

CSC must review the effectiveness of this LDMP at least once a year. In addition, CSC may review or renew the plan whenever they consider it appropriate. The LDMP and associated Sub Plans will be reviewed following any activation of the plans or following any exercises to test the effectiveness of the plans.

This LDMP will be subject to the external annual assessment process developed by the Office of the IGEM in accordance with *section 16C(b)* of the *Disaster Management Act 2003* (the Act).

Distribution

The level of circulation of the LDMP and all Sub Plans will be determined by the LDMG. As a minimum this will include all members and advisors of the LDMG and the District Disaster Coordinator (DDC). Other key stakeholders will be determined by CSC.

In accordance with *section 60 of the Act*, the LDMP is available for inspection, free of charge to the public from:

- CSC Website
- CSC Libraries and Administration Buildings

SECTION 1: ADMINISTRATION & GOVERNANCE

1.1 Authority to Plan

The *Disaster Management Act 2003* (the Act) and the *Disaster Management Regulation 2014* (the Regulation) forms the legislative basis for disaster management within all levels of government and Queensland's Disaster Management Arrangements (QDMA).

The preparation of this LDMP and all associated Sub Plans has been undertaken in accordance with *sections 57 and 58 of the Act*, to provide for effective disaster management in the Cloncurry Shire Council area. This LDMP is consistent with Queensland's Disaster Management Standards and PPRR Disaster Management Guidelines.

The authorising environment for disaster management documents is detailed in Figure 1 below.

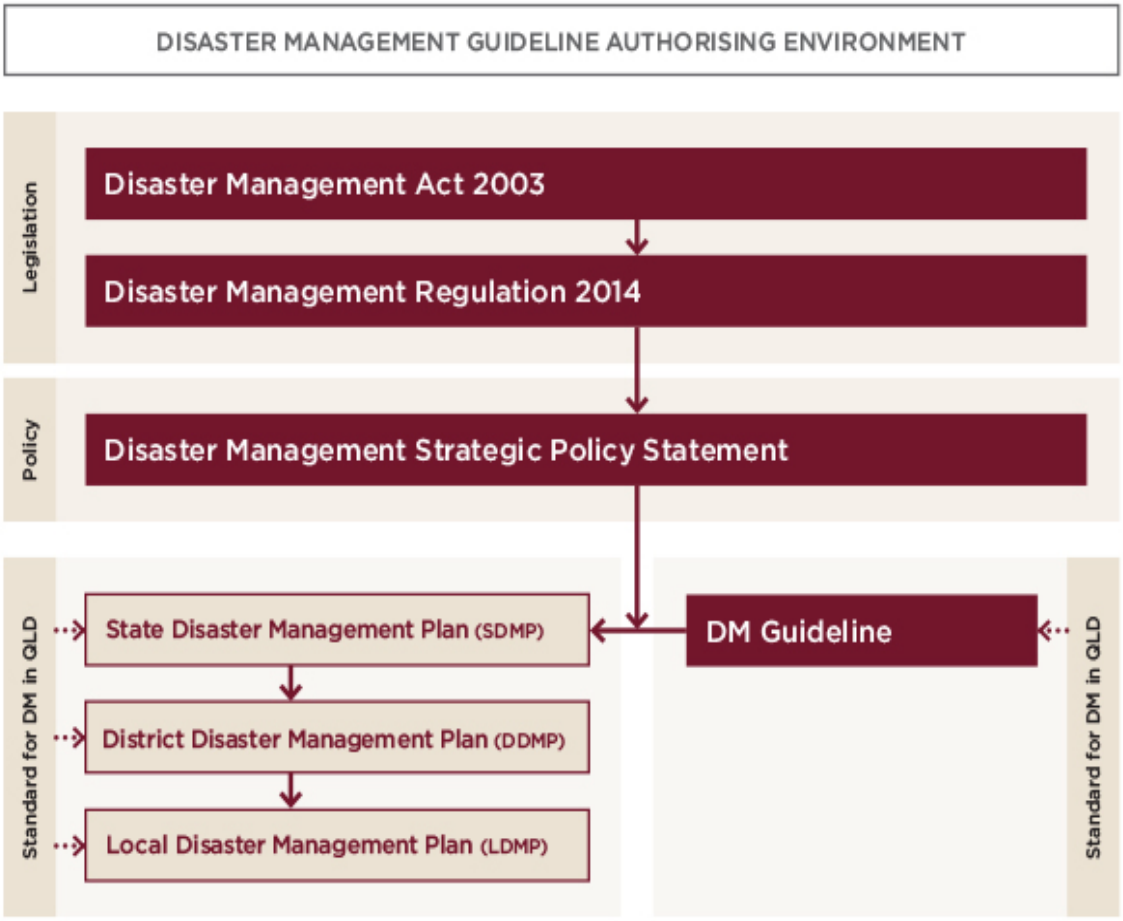

Figure 1: Disaster Management Authorising Environment

1.2 Aim & Objectives

The overall aim of this LDMP is to detail the arrangements that, where possible, prevent or minimise the impact of disasters or major emergencies on communities of the Cloncurry Shire. The primary focus is to ensure the safety and welfare of our community as well as other people who may work in, or visit, our Shire. The key objectives are to:

- Provide a framework for the implementation of effective disaster management strategies and arrangements across the four phases of Prevention, Preparedness, Response and Recovery (PPRR) within the CSC local government area (LGA)
- Describe the disaster management structure for the LDMG, the member organisations and their role and responsibilities for the coordination of multi-agency responses
- Understand the likely effects of natural and non-natural hazards that may impact the community, infrastructure, economy and environment of the area
- Planning for those hazards to preserve human life, protect critical infrastructure and property, protect livelihoods and the economy and safeguard the environment
- Providing practical information to build community resilience and better assist the community in preparing for, responding to and recovering from disaster events.
- Ensuring that residual risks are identified and escalated to the District Disaster Management Group (DDMG).

1.3 Structure of the LDMP

1.3.1 Local Disaster Management Plan

This LDMP is an overarching document that details the structure, management arrangements and governance provisions which underpin the process of disaster management in the Cloncurry Shire. It provides an overview of the arrangements in place for dealing with disasters and set out the role of the LDMG and the community from the initial notification through the various stages of response and recovery until the disaster event is finalised. The LDMP is designed to be flexible so it can be adapted to any disaster event affecting the Shire to ensure an integrated, coordinated and timely response.

1.3.2 LDMP Sub Plans

The LDMP is complemented by a number of Sub Plans which are designed to expand on information contained in the LDMP by providing detailed information for the activation and operation of key capabilities. Sub Plans are designed to integrate seamlessly with the LDMP but can be used on a stand-alone basis as required. The following Sub Plans exist:

- Activation of the Local Disaster Coordination Centre
- Evacuation
- Financial Management
- Logistics
- Public Health
- Public Information & Warnings

1.3.3 Hazard Specific Plans

Hazard specific disaster plans are developed by assigned lead agencies to address particular hazards. Examples of hazard specific plans for the CSC LDMG include:

- Dam Emergency Action Plans (EAP's)

- Cloncurry Shire Bushfire Risk Mitigation Plan (BRMP)

1.3.4 Operational Plans

Operational plans are plans developed and utilised during the response and recovery phases. Examples include the Incident Action Plan and event-specific Recovery Plans.

1.4 Queensland Disaster Management Arrangements (QDMA)

QDMA is based on a tiered system of committees at local government, disaster district, and state government levels and recognises that the Commonwealth Government may be requested to provide support to the State.

Local Government underpins the QDMA as the frontline of disaster management and has primary responsibility for managing events in their local government area. CSC is ideally suited to manage disaster events at the community level, based on its understanding of local social, environmental and economic issues, and knowledge of the Shire's infrastructure. During a disaster, local government provides initial support to the affected community until its resources are fully committed. Additional support from the State, and ultimately the Commonwealth is then requested if needed. Further information is available here.

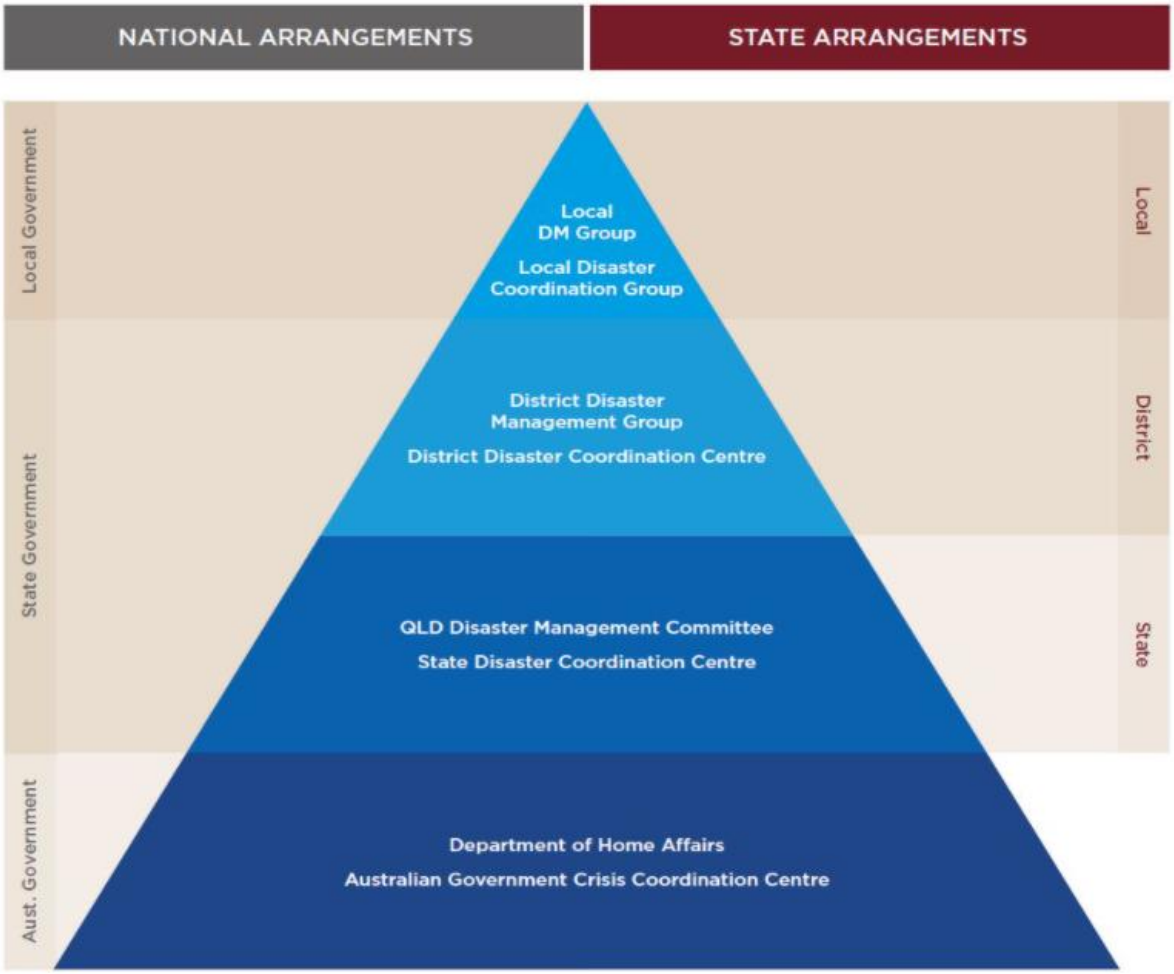

Figure 2: QDMA Triangle
(The Australian Government Crisis Coordination Centre is now called the National Situation Room)

1.5 Disaster Management Strategic Policy Statement

This LDMP is consistent with the Disaster Management Strategic Policy Statement which informs the Queensland Government's strategic approach to keeping people safe and making communities more resilient to disaster risks and impacts.

The LDMG takes a flexible and scalable approach to disaster management which provides for the reduction of risk and the enhancement of community resilience whilst ensuring effective response and recovery capabilities

1.6 Disaster Management Guiding Principles

In accordance with *section 4A(b) of the Act*, all events, whether natural or caused by human activity, should be managed in accordance with the Strategic Policy Statement, the State Disaster Management Plan (SDMP) and any relevant disaster management guidelines. The Act identifies four key principles which guide disaster management in Queensland:

1.6.1 Comprehensive approach

The comprehensive approach to disaster management comprises the four PPRR phases. This approach ensures a balance between the reduction of risk and the enhancement of community resilience, while ensuring effective response and recovery capabilities.

The four phases of PPRR are not linear, nor are they independent of the others. They overlap and support each other as shown in Figure 3. For example, recovery activities are likely to begin during the response phase and mitigation strategies may be considered during the recovery phase.

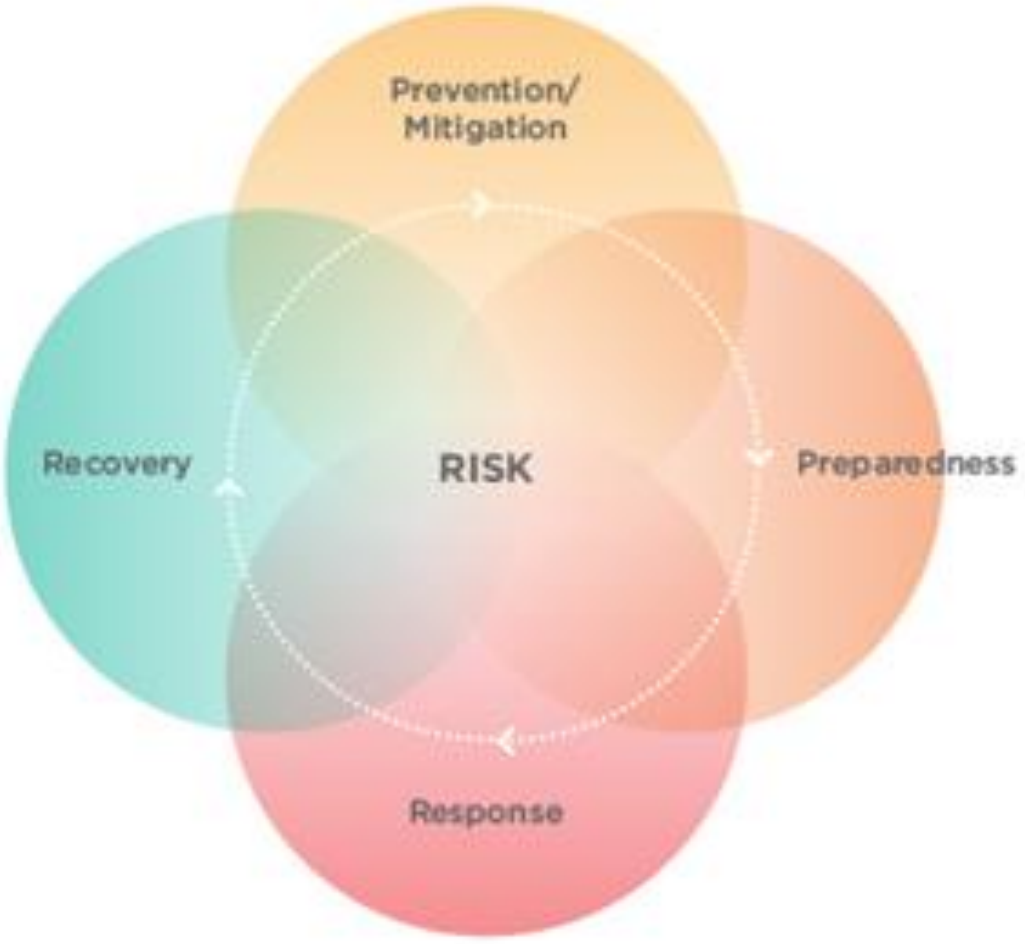

Figure 3: Comprehensive Approach to Disaster Management

1.6.2 All-hazards approach

The all-hazards approach assumes that the functions and activities used to manage one event are likely to be applicable to a range of events, whether natural or caused by human activity.

1.6.3 Local disaster management capability

Local level capability is recognised as the frontline for disaster management, primarily due to the benefits of localised knowledge and networks.

1.6.4 Support by District and State groups

The Act establishes a District Disaster Management Group (DDMG) for each of the 22 districts in Queensland, to provide support when required or requested by a LDMG. The LDMG is located in the Mount Isa Disaster District. The Chair and LDC are appointed as members of the DDMG. A District Disaster Management Plan (DDMP) is available.

The Queensland Disaster Management Committee (QDMC) can provide additional support and assistance when required or requested by a DDMG. The State Disaster Management Plan (SDMP) provides a framework for response and recovery operations.

1.7 IGEM Emergency Management Assurance Framework

Part 1A of the Act establishes the IGEM and Office of the IGEM. The priority for the Office of the IGEM is to facilitate improvements to Queensland's disaster management arrangements to enable confidence in the system and enhance public safety outcomes. The functions of the Office of the IGEM are detailed in *section 16C of the Act.*

The Emergency Management Assurance Framework (EMAF), developed by the Office of the IGEM in partnership with disaster management practitioners, provides the foundation for guiding and supporting the continuous improvement of entities' programs across all phases of disaster management. The EMAF also provides the structure and mechanism for reviewing and assessing the effectiveness of disaster management arrangements. The EMAF is comprised of Principles, the Standard for Disaster Management in Queensland (the Standard) and Assurance Activities.

1.8 Linkages to CSC Corporate Plan

Strategic linkages to Disaster Management are included in the CSC Corporate Plan 2016-2021 under Strategic Direction 5: Effective and Inclusive Governance (5.1.2 Review and implement Disaster Management Plan).

SECTION 2: LOCAL DISASTER MANAGEMENT GROUP (LDMG)

2.1 Role of Local Government

The Act details a range of functions and responsibilities for local government to ensure that it meets its statutory obligations. *Section 80 of the Act* requires local government to undertake the following functions:

a) To ensure it has a disaster response capability

b) To approve its local disaster management plan

c) To ensure information about an event or a disaster in its area is promptly given to the DDC for the district in which its area is situated

d) To perform other functions given to the local government under the Act.

In addition to these functions, *Section 29 of the Act* specifies that local government must establish a LDMG for the local government's area – refer 2.3.

2.2 Establishment of LDMG

LDMGs are established under *section 29 of the Act* by local governments to support and coordinate disaster management activities for their respective LGAs. A Terms of Reference document is available.

LDMG responsibilities are outlined in Manual M.1.030

2.3 Functions of the LDMG

The following functions of the LDMG are prescribed under *Section 30 of the Act:*

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

2.4 Business & Meetings of LDMG

In accordance with *section 38 of the Act*, the LDMG will conduct its business, including meetings as prescribed by the Regulation. Ordinary meetings are scheduled every six months and extraordinary meetings will be convened as required. Quorum (50% +1 of membership) must be achieved for decisions of the LDMG to be valid. Traditionally, meetings are scheduled by the LDC prior to the wet season to ensure all preparations are complete and post season to identify learnings from any activations. Minutes are forwarded to all members of the LDMG and to the DDMG.

2.5 LDMG Operational Decision-Making Capability

The LDMG Chair and LDC are authorised to make initial operational response coordination decisions on behalf of the full LDMG to initiate the disaster management arrangements and whilst acting in accordance with LDMG approved plans and procedures. The Chair and LDC have an exclusively operational response coordination function, which will not, at any time, replace the policy decision-making role of the full LDMG.

2.6 Core Member & Advisory Roles & Responsibilities of the LDMG

The following table details the membership and responsibilities of the LDMG as appointed in accordance with *Sections 33 and 34 of the Act*. All members have the necessary expertise or experience to assist the group undertake and meet its legislative requirements. Membership of the group includes any person acting in the capacity of an appointed member using a DM13 form. The LDC shall notify the DDMG and the SDCC of the CSC LDMG membership. Changes to the Chair or LDC will trigger an immediate notification to the DDMG and the SDCC.

Membership and contact details for each member is maintained in the restricted LDMG Emergency Contact List. Any organisations not represented on the CSC LDMG can be accessed via the DDMG.

Table 1: Cloncurry LDMG Membership

AGENCY	POSITION	STATUS	RESPONSIBILITIES
LDMG ADMINISTRATION **Cloncurry Shire Council**	LDMG Chair – Mayor	**Core Member**	• To chair LDMG meetings and to provide the primary link between the LDMG and Council • To manage and coordinate the business of the group, to ensure, as far as practicable, that the group performs, its functions, to report regularly to the relevant district group, and the chief executive of the department, about the performance by the Local Group of its functions.
	LDMG Deputy Chair – Deputy Mayor	Deputy	• Provide advice and support to the Chair and LDMG • To chair LDMG Meetings in the absence of the Chair • Provide a link between the LDMG and Council • To participate in the issuing of public information and warnings.
	Local Disaster Coordinator – Chief Executive Officer	**Core Member**	• To coordinate disaster operations for the Local Group, report regularly to the Local Group about disaster operations, to ensure, as far as practicable, that any strategic decisions of the Local Group about disaster operations are implemented. • Provide advice and support to the Chair and Local Group. • To activate the LDMP and LDCC when required.
	Deputy Local Disaster Coordinator – Director of Infrastructure and Environment	Deputy	• To undertake the functions of the LDC in the LDC's absence. Provide advice and support to the Chair, LDC and Local Group.

	Local Recovery Coordinator – Director Community Development	Advisor	• To undertake the functions of the Local Recovery Coordinator. • To coordinate community support during disaster operations for the Local Group. • Lead and coordinate recovery operations reporting regularly to the Local Recovery Group about recovery operations, to ensure, as far as practicable, that any strategic decisions of the Local Group about recovery operations are implemented. • Provide advice and support to the Chair and Local Group. • To activate the Recovery Group and develop an event specific recovery plan when required.
Cloncurry Shire Council	Chief Executive Officer	**Core Member**	• Provide a link between the LDMG and Council.
	Disaster Management Support Officer	Advisor	• Support to the Local Disaster Coordinator
	Media & Public Relations Officer	Advisor	• Preparation and dissemination of public information and warnings during an event Responsibilities identified in Public Information and Warnings Sub Plan.
	Manager Planning & Environment	Advisor	• Supervise the Environmental Health Compliance Officer and any other EHO's assigned to Council for an event. • Responsibilities identified in Public Health and Evacuation Sub Plans.
Queensland Police Service	Officer in Charge – Cloncurry Police	**Core Member**	• Refer to pg. 94 of the State Disaster Management Plan • Liaison between the agency and the LDMG.
	Disaster Management Support Officer	Advisor	
	Officer in Charge – Dajarra	Advisor	

Queensland Fire & Emergency Services (Fire & Rescue, Rural Fire Service, State Emergency Service and Emergency Management)	Emergency Management Coordinator	**Core Member**	• Refer to pg. 90 and 91 of the State Disaster Management Plan • Liaison between the agency and the LDMG.
	SES Local Controller / Rural Fire Inspector / QFES Fire & Rescue Auxiliary Captain	Advisor	
Queensland Ambulance Service	Officer in Charge – Cloncurry	**Core Member**	• Refer to pg. 89 of the State Disaster Management Plan • Liaison between the agency and the LDMG.
Queensland Health	Director of Nursing (DON) Cloncurry Hospital	**Core Member**	• Refer to pg. 92 and 93 of the State Disaster Management Plan • Liaison between the agency and the LDMG.
Queensland Government	Principal Cloncurry State School, Department of Education	Advisor	• Refer to pg. 75 of the State Disaster Management Plan • Liaison between agency and the LDMG.
	Department of Agriculture & Fisheries	Advisor	• Refer to pg. 73 of the State Disaster Management Plan • Liaison between agency and the LDMG.

	Department of Transport & Main Roads / Roadtek	Advisor	Refer to pg. 87 of the State Disaster Management Plan • Liaison between agency and the LDMG.
Telstra	Account Executive	Advisor	• Primary agency for the management and maintenance of the telecommunications network across all providers • Liaison between agency and the LDMG.
Energy Queensland / Ergon Energy	Work Group Leader	Advisor	• Primary agency for providing, maintaining and restoring power supplies • Provide advice to the LDMG on power supply issues • Provide safety information to consumers • Liaison between the agency and the LDMG
SunWater	Area Operations Manager	Advisor	• Liaison between the agency and the LDMG.
Mines Inspectorate	Area Operations Manager	Advisor	• Liaison between the agency and the LDMG.
Mining Representative(s) • Glencore / Ernest Henry • MMG / Dugald River • South 32 / Cannington • Round Oak Minerals	Operations Manager	Advisor	• Liaison between the agency and the LDMG.

2.7 Authority of CSC LDMG Members & Advisors

The members and advisors of the CSC LDMG should have:

- The authority to commit their respective organisation to the LDMG's decisions
- The ability to effectively navigate their respective organisations to seek approval for the commitment of their organisation resources
- A sound understanding of the QDMA and this LDMP.

2.8 Structure of the CSC LDMG

The structure of the LDMG is depicted in Figure 4 below. Further information on the Recovery Group and associated Subgroups can be found at Section 7.

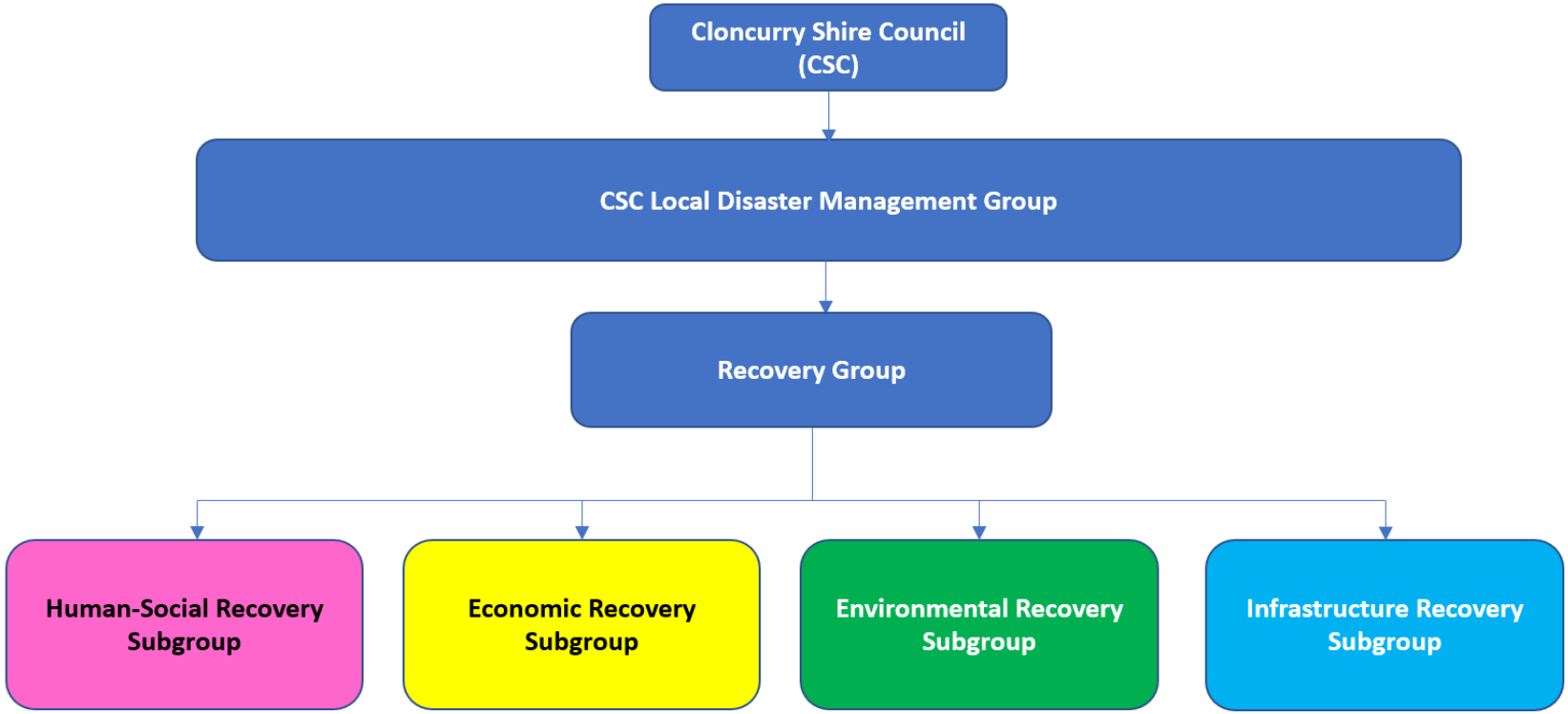

Figure 4: Structure of the CSC LDMG

2.8.1 LDMG Recovery Group & Subgroups

A single overarching Recovery Group may be formed. Alternatively, the LDMG Recovery Group may decide to activate one or more of its Recovery Subgroups as follows:

Human-Social Recovery Subgroup
The key function is to address the human-social recovery aspects of a disaster. A Terms of Reference is available.

Economic Recovery Subgroup
The key function is to address the economic recovery aspects of a disaster. A Terms of Reference is available.

Environmental Recovery Subgroup
The key function is to address the environmental recovery aspects of a disaster. A Terms of Reference is available.

Infrastructure Recovery Subgroup
The key function is to address the infrastructure recovery aspects of a disaster. A Terms of Reference is available.

The Chair of the LDMG may establish additional temporary or permanent Subgroups where needed to manage the business of the LDMG.

2.9 Training & Exercises

In an effort to provide an effective training program, the LDMG works closely with QFES to provide a coordinated program of training from the Queensland Disaster Management Training Framework (QDMTF) which outlines the core training courses and inductions relevant to the key disaster management stakeholders to support the effective performance of their role. Exercises will be used to help review the effectiveness of the LDMP. Exercising can take many forms from simple discussion type exercises to full scale operations.

The implementation and delivery of training and exercises are critical elements in the continuous improvement of disaster management capacity building which occurs across all phases of PPRR.

2.10 Post Event Processes

Following any exercises or disaster events that affect the Shire, the CSC LDMG will ensure debriefing is undertaken and that a post-incident report is developed for Council which clearly articulates any lessons identified for the future.

2.11 Continuous Improvement

The LDMG is committed to the practice of continuous improvement which involves disaster management processes and arrangements being regularly evaluated and improved to ensure they remain relevant, efficient, effective and flexible.

SECTION 3: DISASTER RISK MANAGEMENT

3.1 Risk Based Planning

Disaster Risk Management is a critical element of all phases of PPRR. In Queensland risk-based planning occurs through the completion of the Queensland Emergency Risk Management Framework (QERMF) risk assessment process. The QERMF will eventually replace the existing Natural Disaster Risk Management Study that was completed in 2002. The existing study contains an overview of the methodology used to identify and evaluate the source and possible consequences of risk, and the likelihood that those consequences will occur. It also identifies the vulnerability of people, social structures, buildings, lifelines, critical facilities, economy, employment and other elements as well as risk treatments and management options to enable CSC to address vulnerabilities and build community resilience.

3.2 Community Profile

An understanding of the community profile and the risks that underline potential hazards enhances the development of robust disaster management plans and thereby reduces the impact of disasters and community vulnerability.

3.2.1 Environment

Geography

Affectionately known as the "Curry", Cloncurry is a rural shire area located in the heart of North West Queensland on the Flinders Highway, approximately 118km east of Mount Isa, 400km south of the Gulf of Carpentaria and 783km west of Townsville. The Shire covers an area of 48,112km2.

Cloncurry is the administrative seat for the Cloncurry Shire Council and the gateway to North West Queensland. Cloncurry Shire also includes the smaller communities of Dajarra, Kajabbi and Duchess.

The area is bounded by the Boulia Shire Council in the south, the Carpentaria Shire Council in the north, Mount Isa City to the west and McKinlay Shire to the east. Good working relationships exist with all neighbouring Shires – refer Figure 1.

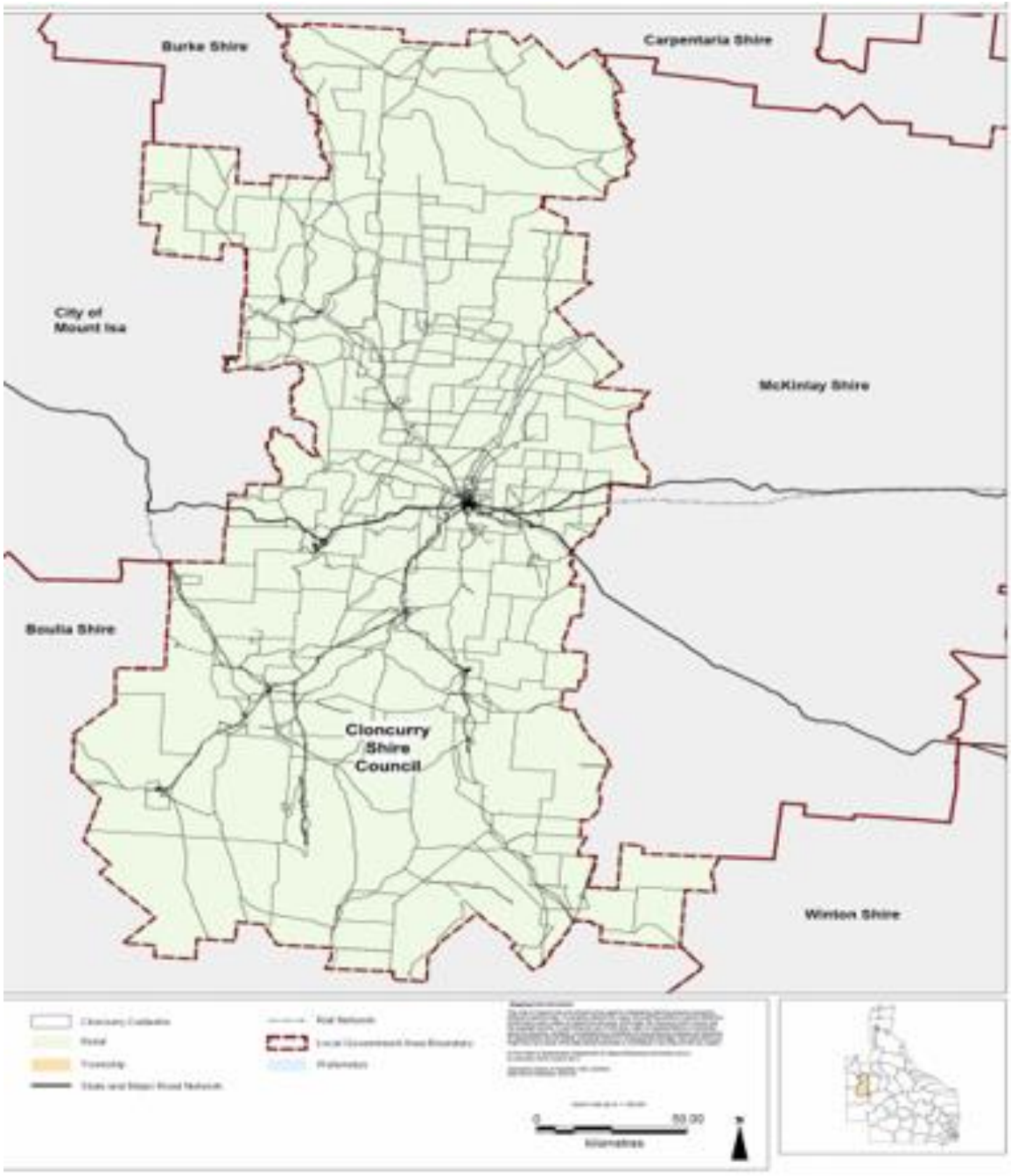

Figure 5: Cloncurry Shire,
(Extract from Cloncurry Shire Planning Scheme 2016 Local Government Area Context Map)

Landscape

Cloncurry is nestled on a series of hills adjacent to the Cloncurry River. The area to the south and west is undulating to rugged hills and to the north and east the country is generally flat and undulating. The area is generally sparsely vegetated, criss-crossed with broken gullies and rocky outcrops.

The Shire has a number of river systems and major tributaries, which form part of the Diamantina, Flinders, Georgina and Leichardt drainage basins, as highlighted in Figure 2 below. Major tributaries include the Cloncurry River, the Corella River, the Fullarton River and the Hamilton River.

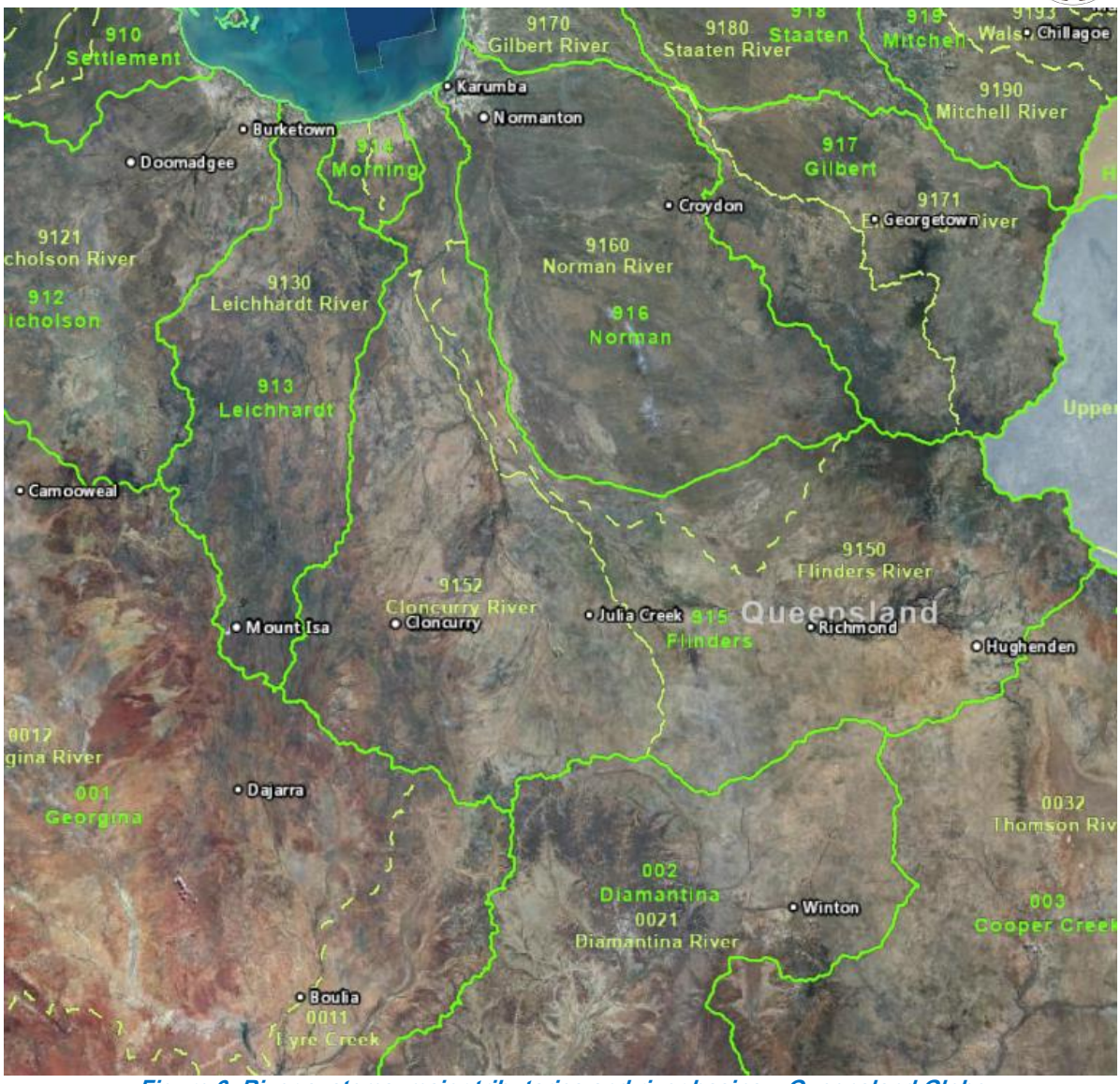

Figure 6: River systems, major tributaries and river basins – Queensland Globe

Climate and Weather

The Cloncurry Shire has a subtropical, semi-arid, hot climate. The weather is predominantly dry with daily average temperatures in the range of 19 to 33.4 degrees Celsius. The highest recently recorded high temperature was 46.9 on 1 December 2006. Anecdotal evidence suggests temperatures have reached as high as 53.1 degrees Celsius. Extended periods of heatwave conditions occur.

Seasonal rain is experienced during the warmer months (November to April) with an average annual rainfall of 495 mm. The highest recorded annual rainfall was 996.8mm in 1999. Historical data exists for just over 30 years due to the monitoring station at Cloncurry having only been in place since 1988.

3.2.2 Human-Social

Population

The Cloncurry Shire Council Estimated Resident Population for 2019 was 3,047 with a population density of 0.06 persons per square kilometre. The main permanent population is distributed as follows:

- Cloncurry: (approx. 2719)
- Dajarra: (approx. 191)
- Duchess: (approx. 23)
- Kajabbi (approx. 10)

Mine sites, large stations and settlements can host large and fluctuating numbers of both permanent and temporary residents.

Population growth assumptions from the Cloncurry Shire Planning Scheme indicate that the population could grow to 3,844 by 2031.

At the 2019 census, 57.4% of the Cloncurry Shire population identified as male and 42.6% as female. This is a higher proportion of males than Queensland's 49.4%. The median age in the Shire was 36.4 years old, compared to 37.4 in Queensland. Children aged 0-14 years made up 20% of the population, people aged 65 years and over made up 9.8% of the population and the remaining 70.2% of the population were aged between 15 and 64 years old. The largest represented age group was 30- to 34-year-olds.

The shire is an access point for travelling west to the Northern Territory, North to the Gulf area and tourists continuing south to the channel country. The Shire sees an influx of tourists during the cooler months of the year.

Cultural Diversity

The original inhabitants of the Cloncurry Sire Council area are the Kalkadoon, Mitakoodi and Pitta Pitta Aboriginal people. At the 2016 Census, 22.8% of the population of the Cloncurry Shire identified as being of Aboriginal or Torres Strait Islander descent.

At the 2016 Census, 76.4% of people in the Cloncurry Shire indicated they were born in Australia. The most common other countries of birth were New Zealand, England, Philippines, India and Sri Lanka.

At the time of the 2016 Census, 81.9% of people spoke only English at home. Other languages spoken at home included Tagalog, Sinhalese, Mandarin, Punjabi and Filipino.

Households

Of the households counted in the Cloncurry Shire at the 2016 Census, 63.9% were family households, 31.4% were lone person households and 4.7% group households. Family households include couple families with children, couple families without children and one parent families.

Dwellings

There were 923 private dwellings in the Cloncurry Shire at the 2016 Census. Of these, 79% were separate, detached houses, 2.2% were semi-detached row, terrace or town houses, 9.2% were flats, units or apartments and 6.7% were other dwellings such as caravans, tents, sheds etc.

At the 2016 Census, 24.5% of private dwellings in the Cloncurry Shire were owned outright, compared with 28.5% in Queensland and 31% in Australia. A further 16.8% of Cloncurry households were purchasing their house with a mortgage. The median monthly mortgage repayment in the Shire was $1,510, lower than the Queensland monthly repayment of $1,733.

At the 2016 Census, 52.2% of households in Cloncurry Shire were renting, compared with 34.2% for Queensland and 30.9% for Australia. The median weekly rental payment for Cloncurry was $150 per week, compared with a $330 average for Queensland.

Socioeconomics

The Australian Bureau of Statistics Index of Relative Socio-economic Disadvantage (IRSD) is an index that summarises the relative disadvantage of a range of economic and social conditions of people and households within an area. The variables used in determining the index include indicators such as the percentage of population who are on low income, are unemployed, without internet, have no/low educational attainment, undertake low skilled employment, have health conditions, no personal transport, poor English, or are one parent families. A low score is indicative of relatively greater general disadvantage in the population when compared with other areas.

In 2016, the Cloncurry Shire LGA received a relative disadvantage score of 958. When compared to all Queensland LGAs, this score placed Cloncurry Shire in the 54th percentile, meaning the level of relative disadvantage was representative of the State's median.

Vulnerable Persons

People aged 65 years and over make up only 9.8% of the Cloncurry Shire population. Elderly and infirm individuals and others who may be highly vulnerable to the impacts of disasters in the Cloncurry Shire Council community (e.g., dialysis, etc.), are minimal and these individuals are generally known to care providers.

In 2016, 52 people (or 1.72% of the population) reported needing assistance with core activities due to disability. Twenty-five of these persons were aged over 70 years and over, eleven of them were under 14 years old and the remaining sixteen were aged 15 to 69 years.

There is a 10-bed aged care facility located at Cloncurry Hospital.

Community Preparedness and Capacity

Residents of the Cloncurry Shire are resilient and accustomed to the regular isolation that accompanies the wet season in the area. The community is essentially regarded as having the capacity to respond to and recover from most predictable hazard situations. The pragmatic and practical rural values in the community engender a significant degree of self-reliance, which brings stability, capability and sustainability.

Emergency Services

Table 2: Emergency Services within Cloncurry Shire

Emergency Services	Locations
Queensland Police Service	Police stations located at Cloncurry and Dajarra.
Queensland Ambulance Service	QAS Station located at Cloncurry.
Queensland Fire & Emergency Services (Fire & Rescue)	Auxiliary Fire and Rescue Station located at Cloncurry.
Queensland Fire & Emergency Services (Rural Fire)	Rural Fire Service maintains brigades at Cloncurry, Dajarra and Duchess. Area Office is located at Mt Isa, and Area Training is delivered out of Charters Towers.
Queensland Fire & Emergency Services (SES)	SES facilities and depots are located at Cloncurry and Dajarra.

Medical Facilities

The Cloncurry Hospital is a rural multi-purpose health facility with 15 beds. It provides primary and secondary healthcare services including an emergency department service.

Primary Health Care

The co-ordination of primary health care delivery in Cloncurry Shire is undertaken by the North West Hospital and Health Service from Mt Isa. The Ramsey Street General Practice is the only GP in Cloncurry and there is a Community Health Centre based at Dajarra.

A Health Services Directory for Cloncurry Shire is available at:
https://www.cloncurry.qld.gov.au/directory/1/community-directory/category/2

Education

Cloncurry is home to a number of education and training services from pre-school to TAFE. Further detail can be found here:
https://www.cloncurry.qld.gov.au/directory/1/community-directory/category/5

Social Support

There are a variety of government and not-for-profit social support services available in Cloncurry Shire providing a range of essential and specialist health, hospital and medical facilities, education and family services and community facilities. Most/all of these are incorporated in the directory, found:
https://www.cloncurry.qld.gov.au/community/home

Recreation

The Cloncurry Recreation Grounds hosts a large array of local sporting organisations throughout the year. The facility encompasses a skate park, netball courts, tennis courts, soccer fields, football oval, gym, activity hall and toilets, shower and bar facilities. Cloncurry Shire Council is currently undergoing Stage 2 of the Recreation Grounds Redevelopment which will see the facility undergo major changes for the benefit of the Cloncurry community.

Annual Community Events

Community events can support preparation and recovery activities. The Cloncurry Shire hosts several annual community events that celebrate outback life including:

- Cloncurry & District Annual Show - June
- Cloncurry Stockman's Challenge- July
- Quamby Rodeo - July
- Cloncurry Merry Muster (Rodeo) - August
- Dajarra Camp draft, Gymkhana and Rodeo- September
- Cloncurry Beat the Heat Festival – September
- Cloncurry & District Race Club Meetings – throughout the year

3.2.3 Economy

The Cloncurry Shire is rich in minerals and relies on mining, agriculture, transport and tourism services for its economic viability. Strategically located, with established transport infrastructure, access to major transport routes, and land available for commercial and industrial purposes, the area has potential for future development and growth. Refer to the Cloncurry Shire Council Economic Development Strategy 2019-24.

Workforce

At the 2016 Census, 52.6% of the Cloncurry Shire population reported being in the labour force. Of these, 75.2% were employed full time, 14.2% were employed part-time and 4.7% were unemployed. The median weekly income for people aged 15 years and over was $1022, significantly higher than the Queensland weekly median of $660.

The top industries of employment were copper ore mining, beef cattle farming, local government administration and road freight transport. The most common occupations included machinery operators and drivers, technicians and trades workers, labourers and professionals.
Of people aged 15 and over in 2016, 14.6% reported having completed Year 12 as their highest level of educational attainment, 19% had completed a Certificate III or IV, 5.2% had completed an Advanced Diploma or Diploma and 11.1% had a bachelor degree level or above qualification.

Mining

Cloncurry was founded on the discovery of copper in 1867 and continues to centre around this resource. In addition to copper, the area is mined for zinc, gold, and other mineral deposits and rare earth elements in open cut, underground and sub level mining operations.

Existing operational mines, include Ernest Henry, Dugald River, Osborne, Phosphate Hill, the Great Australia Mine and associated ore sources, and Cannington. These mines have varying remaining lifespans and new operations are being investigated for feasibility.

In addition to being the main employment provider, the mining industry supports the provision of other services in the Shire, including transport, construction and accommodation, and several of the mines in the area partner with the community to deliver community events, and grants to improve social outcomes within the community.

Agriculture

The Shire has large tracts of highly productive pastoral land, used primarily for grazing beef cattle.

With approximately 300,000 head of cattle passing through the area annually, the Cloncurry Saleyards is the second-largest cattle handling facility in Queensland. Incorporating livestock inspection and dipping, this facility is pivotal in maintaining Queensland's tick-free and control zones.

The viability of various crops, including bio-fuel cropping, is being investigated in partnership with the Department of Agriculture and Fisheries (DAF) and the Mt Isa to Townsville Economic Development Zone (MITEZ).

Transport

Cloncurry is in a strategic location, connecting broader regional destinations of Townsville, Mt Isa, and the Gulf of Carpentaria, and intersecting major transport routes between the capital cities Brisbane and Darwin. Accessible by road, rail and air, Cloncurry is a vital link between regional economies, capital cities, and export markets.

As industries in the area rely heavily on transport, there are various companies providing logistic and specialised haulage services in the Shire.

Tourism

The Cloncurry Shire Council Tourism Strategy identifies the vision for tourism in the Cloncurry Shire. Although tourism is not the main industry, the area boasts a vast landscape, abundant wildlife, rich history and friendly locals. There are a number of attractions including:

- Chinaman Creek Dam
- Cloncurry Lookout
- The John Flynn Place Museum and Art Gallery in tribute to the service and founder of the Royal Flying Doctor Service;
- Cloncurry Unearthed Museum including Burke and Wills water bottle, gem and mineral display and aboriginal artifacts;
- Mary Kathleen, the deserted mining town; and
- The Heritage Walk

More tourist information can be found in on the Experience Cloncurry website.

There is an abundance of accommodation available in Cloncurry reflective of the fly-in fly-out employment opportunities and its location between regional centres.

Retail

The Cloncurry business district provides residents with access to essential shopping requirements, such as food and groceries, baked goods, hardware and general items, vehicles services, fuel and dining and takeaway food. Some commodities are purchased from outside the area.

3.2.4 Infrastructure & Essential Services

Road

Cloncurry is accessed by the following State and National roads, with council roads connecting other locations within the Cloncurry Shire:

Table 3: State and National Roads within Cloncurry Shire

Highway	Direction	Connects to	Flood Risk
Landsborough Highway	South east	Winton, Longreach, Roma, Brisbane (A2), and Rockhampton (A4).	Previous outages up to 7 days
Barkly Highway	West	Mt Isa (A2), Northern Territory (A2, A87, National Route1), Southern Australia (A2, A87)	Q50 rainfall specification
Flinders Highway	East	Townsville, Townsville Port, East Coast of Australia (A6)	Previous outages up to 7 days
Burke Development Road	North	Fourways, Gulf, Kurumba Port (National Route 83)	Previous outages up to 7 days
Wills Development Road	East-West at Northern end of Shire	Julia Creek - Burketown (78A)	
Cloncurry to Duchess Road	South West	Duchess, Dajarra (7708)	Previous outages up to 7 days

There are several key national routes that intersect Cloncurry, including the important Brisbane to Darwin route (Landsborough through Barkly Highway), and the Mt Isa to Townsville route (Barkly to Flinders Highway) that are used to ship to and through Cloncurry. The Burke Development Road is an important cattle transport route, and intersects with the Will Development Road (also known as the Beef Road), and further north to Normanton and Karumba Port, a cattle export port and general cargo port (as well as a return to lead and zinc export). Given the major industries within Cloncurry that rely on transport, the road network is critical.

The road transport network comprises 100km of sealed roads and 75km of unsealed roads owned and maintained by the Department of Transport and Main Roads (DTMR). Additionally, Cloncurry Shire owns and maintains 1054.61km of sealed roads and 201.24km of unsealed roads.

In Cloncurry, the Sheaffe Street bridge over Coppermine Creek is subject to flooding, preventing road access to the residential and industrial area on the southern side of Coppermine Creek. The Phillips Street crossing of the Anabranch is also susceptible to floodwater damage. The prolonged loss of road access is a major impact that flooding has on the community of Kajabbi.

CSC website maintains updates on local road conditions and closures on the website at https://www.cloncurry.qld.gov.au/council/stay-connected/road-conditions, and is moving to an interactive online map system for road closures in 2021 utilising the Guardian IMS Road Closure system at the Cloncurry Dashboard.

There is limited public transport within Cloncurry, with most residents relying on private transport to travel. There is however public transport from Cloncurry to major city centres and a community bus available for hire from Council for schools, not-for profit community groups and local businesses to support programs and activities which benefit the community.

Air

Table 4: CSC operated airfields within Cloncurry Shire

Airport	Location	Type	Runways
Cloncurry Airport Code: CNJ YCCY	Sir Hudson Fysh Drive Latitude: -20.668600 | 20 40.116005 S | S20 40 06 Longitude: 140.503998 | 140 30.239868 E | E140 30 14 Field Elevation: 616 ft/188 m MSL	Regional airport	Runway 12/30 2,000 x 30 m Paved, lighted Runway 06/24 1,157 x 18 m Paved, not lighted
Dajarra Airport Code: DJR YDAJ	Latitude: -21.708300 | 21 42.497978 S | S21 42 29 Longitude: 139.533005 | 139 31.980286 E | E139 31 58 Field Elevation: 335 ft/102 m MSL	Local airport - light traffic	Runway (gated road surface) 1,138 m
Kajabbi Airstrip Code: YKAJ	Latitude: -20.033300 | 20 1.998024 S | S20 01 59 Longitude: 140.033005 | 140 1.980286 E | E140 01 58	Local airport - light traffic	Runway (gated road surface) 700 m

The largest airport in the Shire, the Cloncurry Airport, is currently a Civil Aviation Safety Authority (CASA) certified aerodrome that is owned and managed by Cloncurry Shire Council. Operating 5 days a week, it offers both passenger flights to Townsville and Mt Isa and fly-in fly-out charters to local mining sites. Recent refurbishments have improved check-in, baggage claim, drop off, security, toilets and other facilities.

Details of private airstrips in the Shire are available within Guardian IMS.

The Cloncurry Airport and other airstrips in the Shire are susceptible to pavement damage from ingress of water and may be impacted by other hazards identified in section 3.3 Hazards. Closure of the airport for any length of time could have a negative impact on medical services via the Royal Flying Doctor Service, on mining operations, and possibly delay disaster response and recovery efforts.

Rail

The Inlander Train, operated by Queensland Rail, offers twice weekly passenger transit, Townsville - Mt Isa, stopping at Cloncurry.

Freight trains also service Cloncurry on the Townsville – Mt Isa line.

Gas

The Carpentaria Gas Pipeline transmits natural gas between Ballera and Mt Isa. Natural gas is the primary fuel source for some of the mining operation's substantial power generation, including Phosphate Hill and Cannington, and is the primary source of fuel for Diamantina Power Station.

Bottled LPG is available to consumers.

Electricity

While some mining operations create power from natural gas and diesel for their own consumption, most of North-West Queensland's energy requirements are supplied by the Diamantina Power Station (DPS). Based in Mount Isa, DPS is a modern, high efficiency power station comprising 242-megawatt power generation from combined cycle gas turbines. Gas is supplied by the Carpentaria Gas Pipeline.

Power was previously provided through the Mt Isa Mica Creek Power Station, which went into cold storage in early 2021.

Electricity supply is vulnerable to external influences such as weather conditions or third-party events causing supply interruptions.

Water

Cloncurry Shire is committed to supplying safe, reliable drinking water to consumers.

The Cloncurry water supply system is comprised of multiple raw water supply sources, one treatment plant, reservoirs, pump stations, and 50km of water mains, with approximately 1,503 water connections.

The water network is capable of delivering up to 9 megalitres of water per day, with an approximate demand of 3-4ML per day.

Water is extracted from Lake Julius water supply pipeline, the Cloncurry River Wells, or Chinaman Creek Dam in accordance with licence allocations and prevailing river levels, dam storage and weather conditions. Water is piped to Council's Phillips Street Water Treatment Plant where treatment is altered depending on the source of water. The water pressure is boosted before being distributed to the town supply network. Sometimes potable water appears dirty due to presence of trace elements or a sudden flow increase or direction change.

In addition to this potable water supply, Council also provides non-potable supplies to Kajabbi (1.5km of water main) and Dajarra (4.9km of water main

Permanent water conservation measures in place in Cloncurry, with Level 1 or higher restrictions likely for most of the year. At times, greater than Level 1 restrictions are imposed.

During severe weather events, flood water may infiltrate the reticulated supply or high turbidity might result in boil water notices for extended periods of time. Power is required to support water distribution and treatment. Extended power failures will lead to a loss of reticulated water supply.

Waste

CSC operates two landfills both within 5km of Cloncurry as depicted in Figure 7. The General Waste Facility which accepts putrescible waste and a number of other materials such as green waste, metal

and white goods, waste oils and construction and demolition waste. The Regulated Waste Facility accepts dead animals, asbestos and contaminated soils.

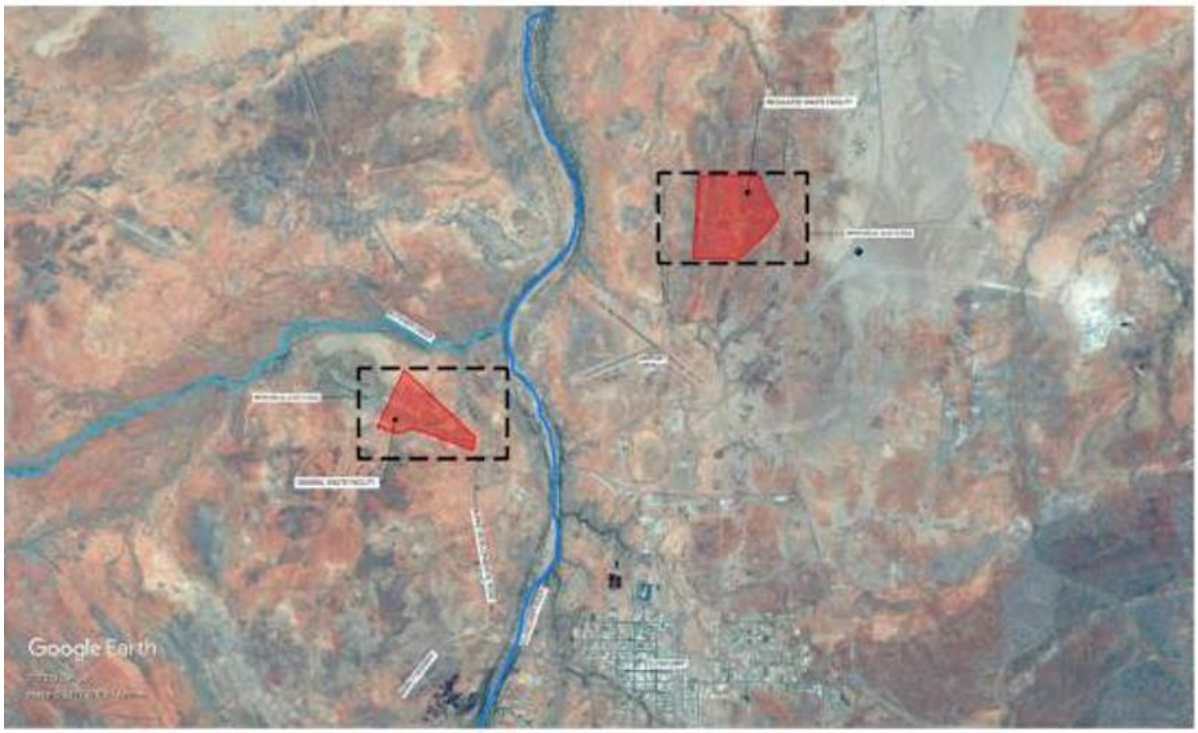

Figure 7: Landfill locations in Cloncurry Shire

Wastewater

Cloncurry Shire is committed to the collection and treatment of domestic sewerage and commercial and industrial trade waste. Across the Cloncurry Shire, there is a mixture of sewage and septic systems.

Council provides partial treatment

The Council provides a limited sewerage system with associated treatment plant/s and pump stations to approximately 1500 residential properties in Cloncurry and 72 residential properties in Dajarra. Some of the treated effluent is reused to irrigate public spaces and the bio-fuel cropping trial.

Properties with on-site sewerage treatment and disposal systems (e.g., Septic Tanks) need to arrange for pump-outs on a periodic basis. Council provides this service twice a week. There is an RV Sanitary Dump Point in Cloncurry, however fees and conditions may apply.

Referable Dams

There are 3 referable dams located within the Cloncurry Shire Council LGA:

- Corella Dam
- Chinaman Creek Dam
- Rifle Creek Dam

There are other referable dams in neighbouring areas that may impact on the Cloncurry Shire. Refer to the hazards section at **3.3 Hazards** for further detail.

Data & Communications

Similar to other regional areas of Queensland, landline and mobile voice communications services are predominantly provided by Telstra and Optus. Coverage is comparatively sparce and predominantly around the more populated areas of the Shire. Fixed line, Wi-Fi and Mobile internet data services are available through a range of service providers, including via the National Broadband Network (NBN). However, in the 2016 census, 25.4% of dwellings reported that they did not access internet from home off any device, including from computer, mobile, tablet or other device. Some towns and communities in the shire have limited or no mobile / internet service. In recent years funding has been sought to address some mobile blackspots.

Two Way Radio

There is a network of two-way radio transmission from Cloncurry which provides reliable service to the Shire, including local coverage on some mining sites.

Cloncurry Shire Council operates a UHF network to assist with the operation of its assets. Many of the mines (and some of the stations) within the area also operate UHF networks.

Key Community Facilities

Throughout the Shire there are a number of key community facilities and large public spaces including:

- Community Precinct with indoor and outdoor function areas, kitchen, and bar facilities
- Parks and recreation grounds, swimming pool, golf course, equestrian and racecourse centre
- Gallery, museums, library, churches, heritage listed buildings, shire hall
- St Andrew's Garden Settlement
- Airport
- Hospital
- Abattoir and saleyards
- Cemetery

Proposed Future Township Development

The Town Planning Scheme supports the area's current trajectory, with a focus on sustainable use and protection of the Shire's resources, including its agricultural, landscape, mining and heritage assets.

Mining development is expected to continue resulting in moderate growth in infrastructure and housing over the next 5 years. The Shire's mineral deposits will be appropriately managed to ensure that these finite natural resources can be sustainably extracted into the future.

The Cloncurry Shire Council lists details of its current and future projects on its website: https://www.cloncurry.qld.gov.au/development/council-projects

3.3 Hazards

There are a number of natural and non-natural hazard events which may impact the Cloncurry area. The most prominent of these are outlined below.

3.3.1 Natural Hazards

Severe Storms and Tropical Cyclones

The Cloncurry Shire has been frequently impacted by severe storms, including dust storms, monsoonal depressions and occasionally by tornadoes and tropical cyclones. Most likely to occur between October and April, such storms can bring lightning, hail, dust, destructive winds, high rainfall and flooding. Cloncurry is also prone to strong isolated wind corridors that can produce damaging winds without

warning. The risk of homes and other buildings sustaining damage can be high due to the age of structures. Each weather event has the potential to cause destruction to property, livestock and the environment while putting lives and livelihoods at risk. It is possible for such storms to cause disruption, damage or loss to power and telecommunication networks, water and sewerage treatment plants, road and supply networks and/or other essential services and businesses. There is the potential for both evacuation and the isolation of communities as a result of these weather events. Refer to the Hazard Risk Context information for Severe Thunderstorms.

Flooding

The Cloncurry Shire is prone to both slow onset and flash flooding, especially during the wet season from October to April. The most severe event in recent history was in 1974. Localised rainfall, heavy rainfall in the surrounding catchment areas, monsoonal troughs and/or cyclonic influences in the Gulf of Carpentaria can result in flooding in the area. A flood height of the Cloncurry River at Cloncurry of over 3m is classified as a minor flood, over 5m is moderate and over 7m is a major flood. At a flood height of 7.5m the town of Cloncurry will be severely flood affected. It is probable for minor flooding to occur every substantial wet season, moderate flooding to occur once every 2.3 years and major flooding to occur once every 6.5 years. The probability of flood heights above 7.5m is once every 8.6 years. Flooding in the Shire can escalate quickly, be wide-spread, comparatively long-lasting due to the vast flat topography, and result in rapid flow of the Cloncurry River.

Given the size of the Shire and the lack of rainfall measuring capability, many of the flood predictions rely on local knowledge and unofficial rainfall measurements. People that live in the flood inundation areas of rivers and creeks are at direct risk. There are approximately 120 people at risk in a major flood of the Cloncurry River with the main areas of impact being on the southern and western sides of Cloncurry. In Dajarra, approximately 32 people are at risk in a major flood of Carbine Creek. The prolonged loss of road access is a major impact of flooding on the community of Kajabbi.

Flood waters, can pose several risks such as: risks to public health, including drowning; inundation and damage to property, possessions, critical infrastructure and the environment; losses to livestock and crops; loss of income; disruption and damage to road and rail networks, critical supply chains, businesses and industry; isolation of individuals and major agricultural activities and the potential for large scale evacuation. . The area can become cut off for periods of time. The area's major agricultural industry; cattle, is particularly vulnerable to the effects of flooding, including livestock drowning, exposure to elements, isolation, and infrastructure damage, with associated socio-economic impacts. Refer to the Hazard Risk Context information for Flooding.

Both the Cloncurry Shire Town Planning Scheme and the Queensland Flood Mapping Program have identified numerous locations within the Shire that are at risk of flooding.

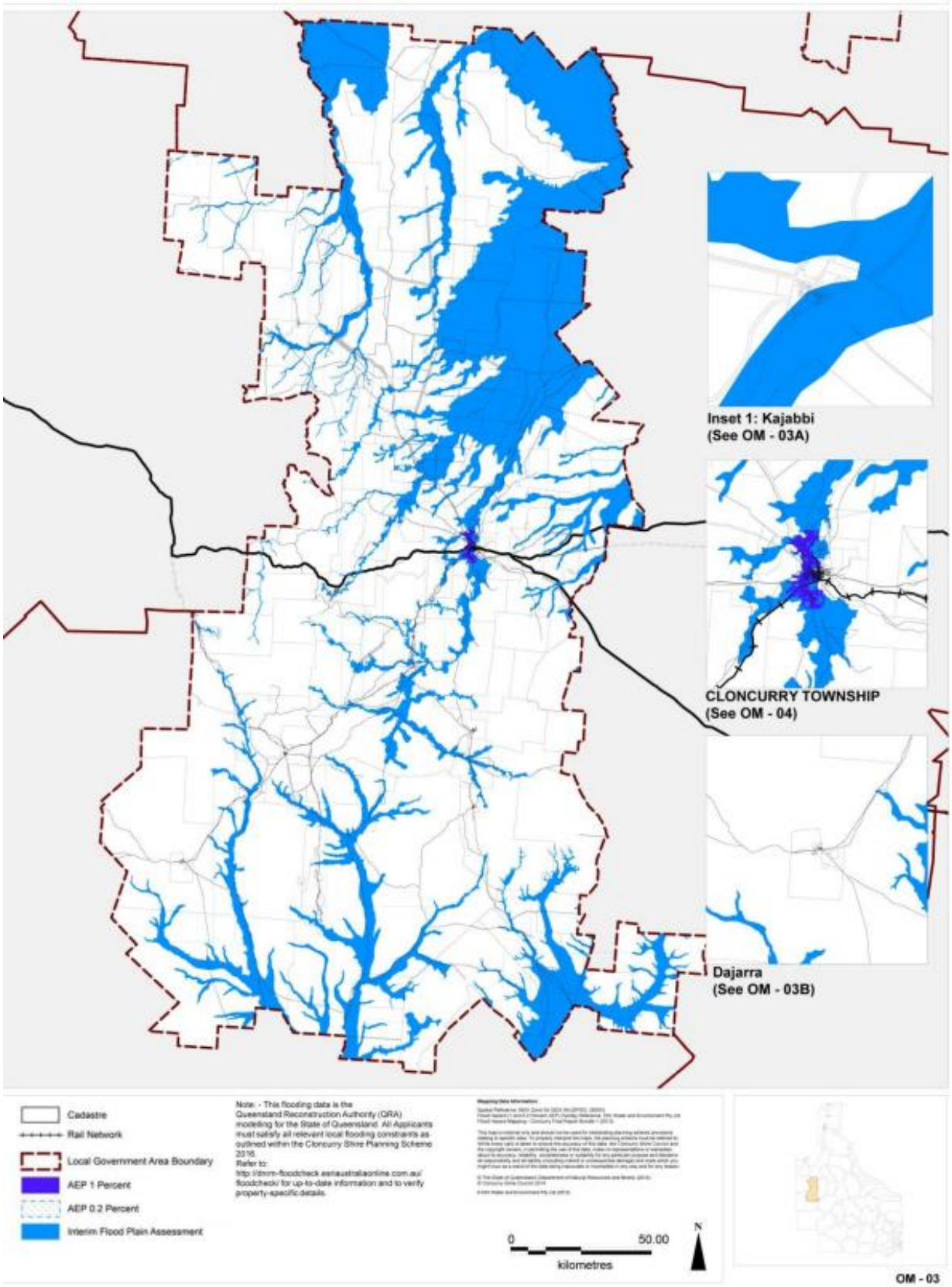

Figure 8: Flood Risk for Cloncurry Shire

Bushfire

The threat of bushfire is a seasonal risk, typically occurring from July until the start of the wet season. The threat fluctuates from low to high potential intensity, with some very isolated very height potential areas within Cloncurry Shire, and is dependent upon variables such as temperature, humidity, wind direction, rainfall, vegetation growth, topography and existing fuel load. While bushfires can be accidentally started or caused by deliberate acts of arson, the frequency of dry electrical storms within the Shire heightens the risk of starting by lightning strike.

Both State-wide mapping of Bushfire Prone Areas, and the Cloncurry Town Planning scheme identify areas of bushfire risk within the Shire. State-wide mapping also identifies some areas of Cloncurry Shire as also being Grass Fire Prone Areas.

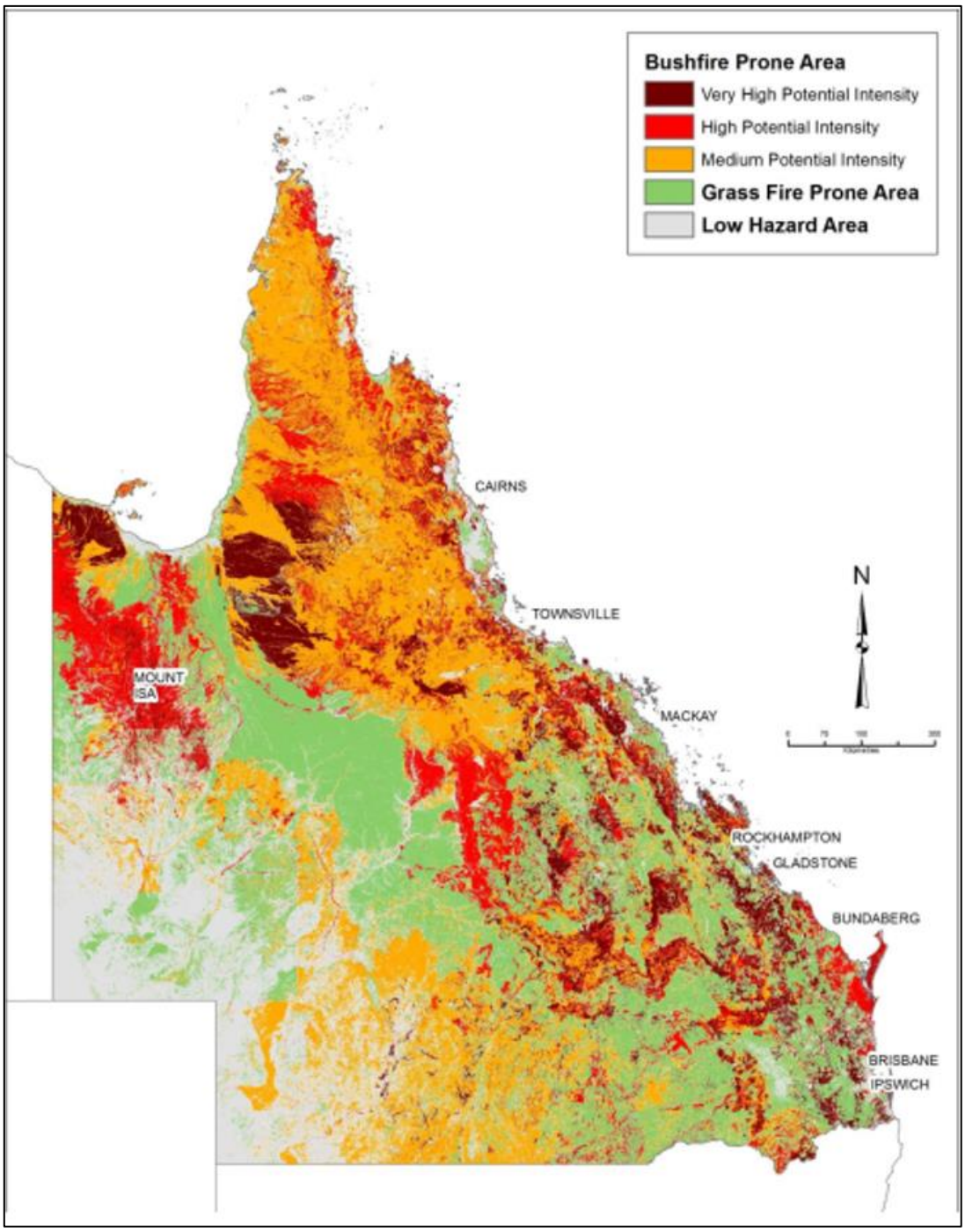

Figure 9: Statewide Mapping of Bushfire Prone Areas

The State wide mapping of Bushfire Prone Areas is reproduced within Guardian IMS. The mapping below is extracted from the Guardian IMS system and shows that significant proportions of the Shire are exposed to medium bushfire intensity risk.

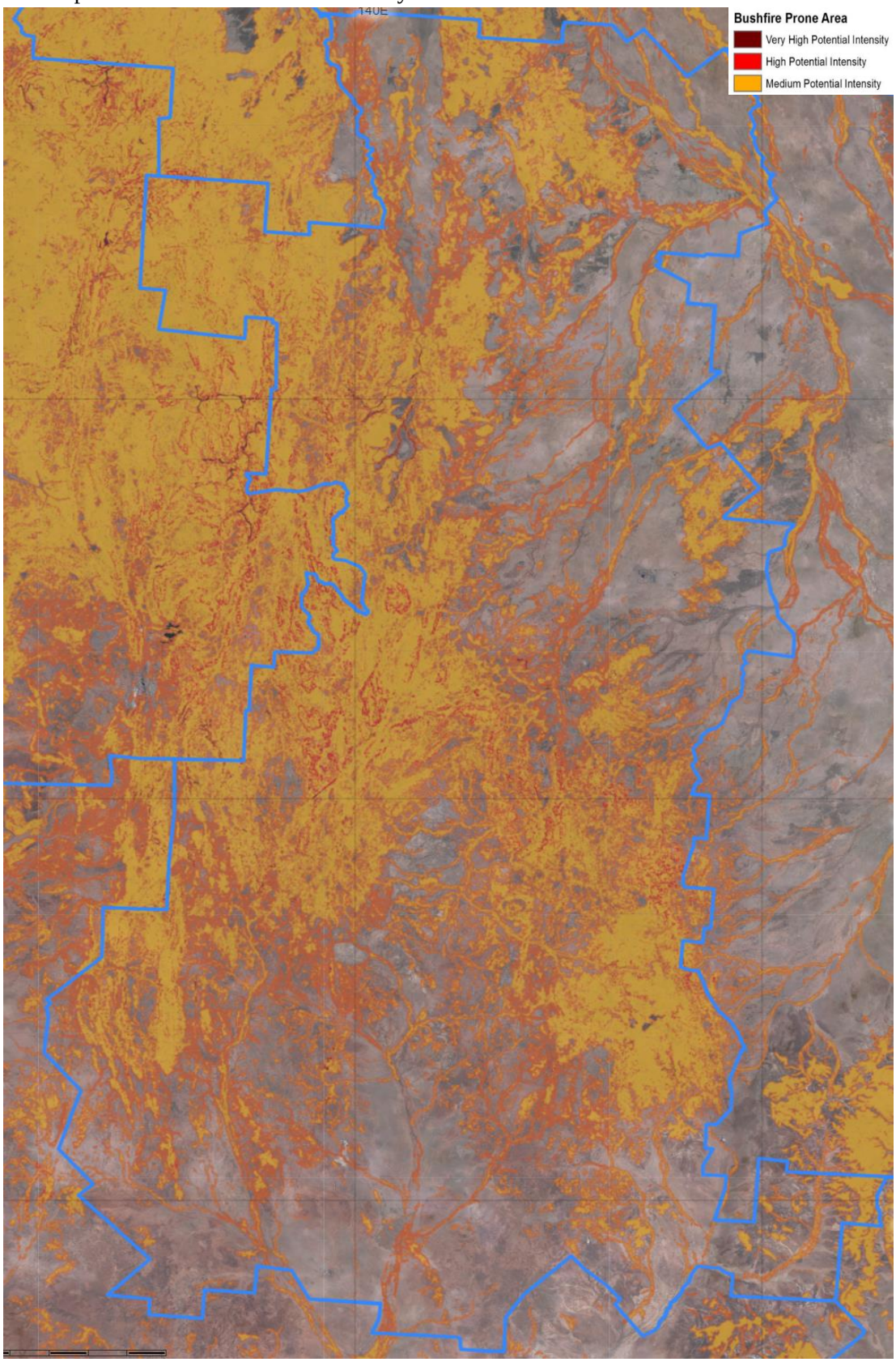

Figure 10: Bushfire Prone Areas for Cloncurry Shire

When viewed within Guardian IMS at higher resolution, there are also isolated pockets of the Shire with high and very high bushfire intensity risk (e.g., Corella Park Road, Gleeson Road, Rifle Creek Dam, etc.).

Wildfire risk in Cloncurry is spread across the shire, with some areas having bushfire and most areas having a grassfire risk.

Bushfire risk each season is dependent on vegetation growth, including fuel load and fuel type. Medium intensity bushfire vulnerable areas include the large town common, Coppermine Creek around Sheaffe Street, Chinaman Creek Dam and unprepared semi-rural properties on the outskirts of, and within Cloncurry. Shire.

People who live on the fringes of grasslands and adjacent to overgrown creeks are at risk. Residents of Cloncurry may be affected by smoke and embers from nearby bushfires and there are a number of properties that might be directly affected by bushfire that may be required to evacuate their homes. Refer to the Hazard Risk Context information for Bushfire.

Bushfire mitigation is important as Cloncurry Shire's medium, high and very high bushfire intensity areas have the potential to support a significant bushfire. Bushfires in these areas have the potential to get out of control and put residences and adjoining properties at risk due to high to extreme levels of flame attack, radiant heat and ember attack as a result of high potentially hazardous vegetation, fuel loads, slope and severe fire weather.

Bushfires are potentially harmful to people, property and livestock through flame attack, radiant heat exposure, ember attack, wind attack, smoke hazard and convective heat exposure. Bushfire impacts can include possible injury or death to people, animals and livestock; loss, disruption or damage to property, buildings, critical infrastructure, essential services, businesses, agriculture and vegetation; blocked road and supply networks; loss of income; isolation of communities; and potential for evacuation. Fighting fires can pose additional hazards and concerns due to conditions, terrain, difficult access and water scarcity.

Heatwaves

The Cloncurry Shire is vulnerable to severe and long-lasting heat waves. In the last 200 years, severe and extreme heatwaves have taken more lives than any other natural hazard in Australia (BoM, 2013). The National Heatwave Forecasting and Assessment Service is a Bureau of Meteorology (BoM) product, which operates from the start of November to the end of March. It provides warning of unusually hot conditions allowing government, emergency services and communities' time to adopt measures to reduce the impact.

During the summer of 2018/19, Cloncurry recorded 43 consecutive days of 40 degrees Celsius or above. Studies have been done on future heatwave risk assessment based on multiple temperature warming scenarios, and it is likely that Cloncurry will face a warmer and more heatwave-prone future. This is a growing threat to Cloncurry.

HWAt	Temperature of heatwave amplitude (°C)	31.8	32.4	33.0	34.0	35.0
Hot Days	Days >35°C	91	112	152	185	213
Hot Nights	Nights >20°C	159	192	224	259	295

MOUNT ISA						
Index	Heatwave Index	Reference	2030	2050	2070	2090
HWF	Heatwave frequency (%)	1.6%	3.1%	7.2%	14.7%	22.8%
HWD	Heatwave duration (days)	4	3	7	15	29
HWMt	Temperature of heatwave magnitude (°C)	34.3	34.6	35.0	35.5	36.1
HWAt	Temperature of heatwave amplitude (°C)	34.8	35.3	36.0	37.0	38.2
Hot Days	Days >35°C	148	168	203	223	267
Hot Nights	Nights >20°C	177	203	228	254	284

LONGREACH						
Index	Heatwave Index	Reference	2030	2050	2070	2090

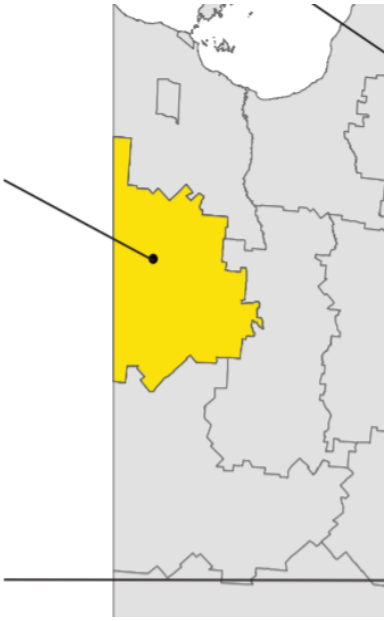

Figure 10: Potential Future Heatwave Frequency for Mt Isa Region

Droughts

A drought is a long, dry period when there is not enough water to meet people's needs. Droughts are extreme climatic events that can have long-lasting effects on people, crops, animals and the economy. Cloncurry has been deemed 'not drought declared' since May 2016.This status is reviewed annually by the Local Drought Committee taking into consideration extent of rainfall deficiency, pasture and water availability, frequency of supplementary feeding and stock condition. Drought is not considered a disaster in Queensland and is not managed using the QDMA. A Drought Relief Assistance Scheme for Primary Producers is available through the State.

Landslides

A landslide is the movement of a mass of rock, debris or earth down a slope due to forces of gravity overcoming the slope's stability. Landslides can be triggered by both natural causes, such as rainfall saturation, erosion or earthquakes, or by human activity, including slope modification, interference with natural drainage, removal of vegetation or mining activities. Cloncurry's risk factors include its hilly terrain, rainfall and mining operations. The area has experienced rock falls and washouts in the past, predominantly following rain and on roadsides where vegetation has been removed.

Mining can increase the risk of landslides due to human interference with natural slope, drainage, and vegetation. Additionally, blasting techniques and other operations which cause underground vibrations can trigger a landslide. Given the area's mining dominance, combined with rainfall, such threats should be considered.

Landslides can cause injury or death; damage property, buildings, roads, railways, pipelines, communication networks, agricultural land and the environment; interfere with supplies; and isolate communities. While some landslides can be slow, sudden, rapid events are the most dangerous due to lack of warning and force of impact.

Earthquakes

Geoscience Australia mapping shows the Cloncurry area as having a comparatively low chance of experiencing a severely damaging earthquake. Vulnerability to such events is partially due to this rarity: earthquakes are unexpected, can cause panic, disrupt lifelines, damage infrastructure and buildings that are not designed to withstand such events, and pose risk to mining operations and personnel. Given this vulnerability, it is prudent to maintain a situational awareness of the threat, and its possible consequences. Refer to the Hazard Risk Context information for Earthquakes.

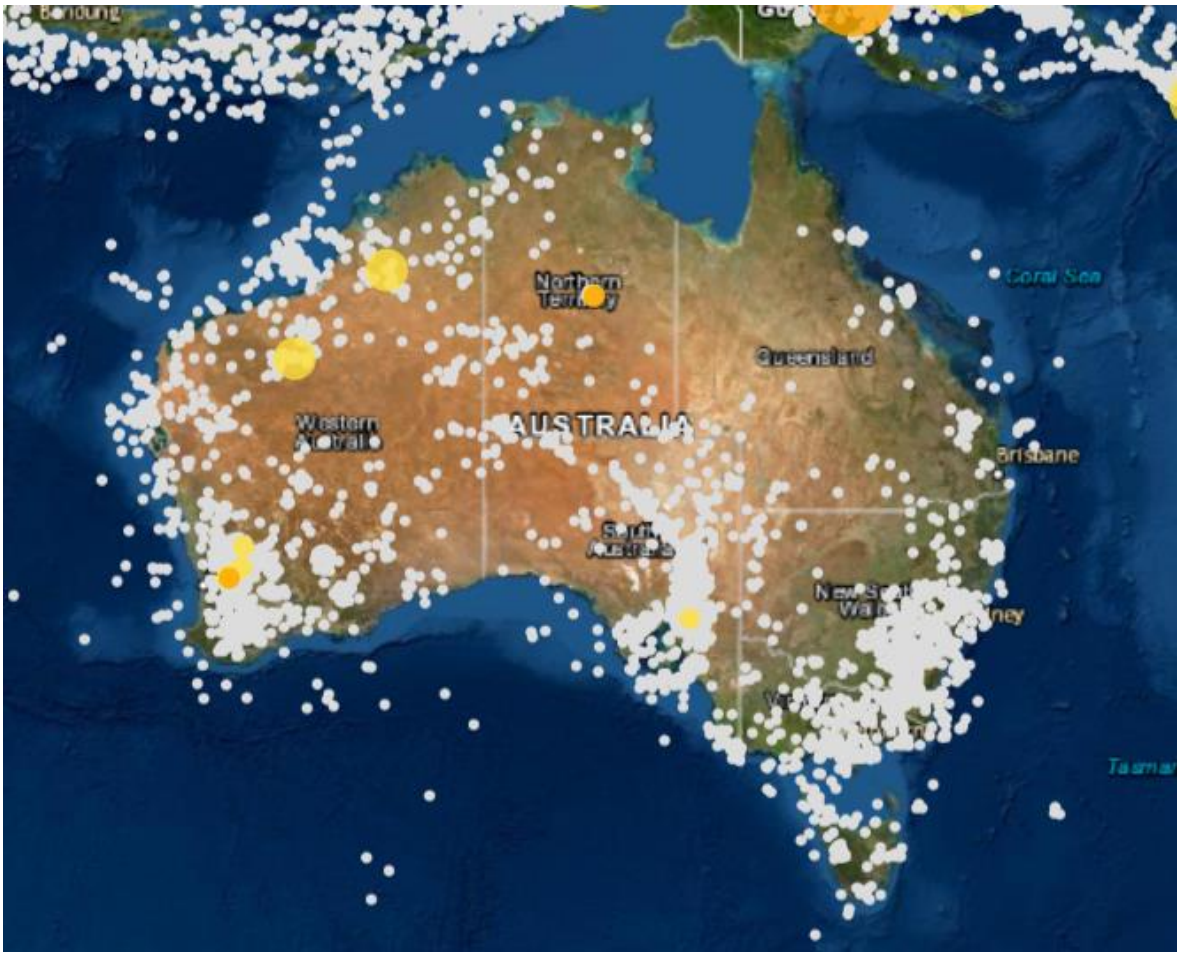

Figure 11: Geoscience Australia Earthquake Mapping for previous 10 years

Climate change

Climate change will likely exacerbate the frequency and severity of natural hazard events. The Queensland Government publication, Climate Change in the North West Queensland Shire, indicates that the Shire can expect to be increasingly affected by higher temperatures, hotter and more frequent hot days, harsher fire weather, and more intense downpours. Adaptative measures should be considered to manage future climate risks.

3.2.2 Non-natural Hazards

Transport Incident / Hazardous Materials / Dangerous Goods

Cloncurry Shire is a transport hub, being at the crossroads of National Highways and state roads. Mining and agricultural activity increases the transport flow in and around Cloncurry Shire.

Both of the main industries (by employment) in the Shire employ hazardous materials within their operations (e.g. explosives and chemicals for mining and chemicals for agriculture). Transport accidents involving hazardous materials have occurred several times in the last decade, with both road and rail incidents occurring.

Transport accidents can claim lives, livelihoods, and have significant impacts on property and the environment. Should hazardous materials (HAZMAT) be involved, the potential for people not directly involved in the accident to be at risk can be high, with some hazardous materials requiring up to a 1000m evacuation zone.

Accidents on major routes (especially those involving HAZMAT) can also disrupt those routes and supply chains for lengthy periods.

The Australian Dangerous Goods Code sets out the requirements for transporting dangerous goods by road or rail and the Department of Transport and Main Roads administers this through licensing.

Queensland Fire and Emergency Services (QFES) is the responsible lead agency for operations management of a Chemical / HAZMAT incident. However, QFES is likely to need assistance from CSC and other members of the LDMG (QPS, QAS etc.) to assist with a major incident.

Infectious Disease Outbreak

Infectious disease is a broad term covering a range of different diseases that can be spread, directly or indirectly, from one person to another. A pandemic is a disease outbreak that occurs worldwide when a new strain of easily transmitted virus emerges to which no-one is immune. In recent times, at least three pandemics have posed a threat to Australia. The avian influenza outbreak in 2003, the swine flu influenza in 2009 and the coronavirus COVID-19 pandemic. Such outbreaks can challenge or overwhelm the health system, can involve the isolation and quarantine of large numbers of people for a protracted period, and may result in large numbers of fatalities or people with serious illness.

Animal Diseases

The social, economic and environmental consequences of an infectious disease outbreak in animals could be catastrophic to the Cloncurry Shire. Although Australia is currently free of many of the world's worst animal diseases including Foot-and-mouth disease, Bovine Spongiform Encephalopathy (BSE) and African Swine Fever, it has recently been threatened by other diseases, such as Equine Influenza, Avian Influenza, Australian Bat Lyssavirus, Anthrax and Hendra Virus. Foot-and-Mouth disease has been identified as the single biggest threat to Queensland's livestock industry. Such an outbreak could cause serious and prolonged social and economic impacts to primary producers, supply chain businesses, transporters and other industries such as food and tourism.
Some diseases, known as Zoonoses, can spread from animals to humans.

Pests, Weeds & Plant Diseases

With farming the predominant industry in Cloncurry, and property size averaging 55,000 ha, pest and disease management is a critical challenge. Pests, weeds and plant diseases have the potential to damage natural environment eco-systems, increase fire risk and infrastructure maintenance costs, reduce productivity and profitability, limit the long-term sustainability of the State's agricultural and natural resources and potentially affect human health and peoples' livelihoods. The Cloncurry Shire Area Biosecurity Plan 2019-2023 provides strategic direction for the control of invasive biosecurity matter and weeds declared under local laws.

Vector Borne Disease

Vectors are living organisms that spread infectious diseases from one host to another. Many vectors are bloodsucking insects (e.g., mosquitoes, ticks, sandflies, etc.) which ingest disease-producing microorganisms during a blood meal from an infected human or animal host and then inject it into a new host during a later blood meal. Some vectors may transmit pathogens through other bodily fluids. With the combination of climate change, increasing globalisation, international travel and transport of goods, disease vectors have moved across boundaries into new territories. A major health threat globally, some vector-borne diseases are notifiable under the Public Health Act 2005.

Referable Dams

Within the Cloncurry Shire there are three referable dams whose failure would put 2 or more people at risk:

Chinaman Creek Dam is located to the southwest of the Cloncurry Township on Chinaman Creek, a tributary of the Cloncurry River and upstream of Cloncurry township. Constructed in 1993, the 13.5m high concrete gravity dam is owned and operated by Cloncurry Shire Council and supplies both town water and recreational activities for Cloncurry residents. The EAP has calculated a maximum incremental PAR of 197 for a Probable Maximum Flood (PMF) event at the dam coupled with a 2% AEP (Q50) event in the Cloncurry River. The PAR does not account for transient visitors who must also be considered. During the flooding of March 1997, the fuse plug washed out resulting in a loss of water storage and increased floodwaters in the Cloncurry River. The dams fuse plug is designed to wash away in a 1% AEP (Q100) flood event.

Corella Dam is located on the Corella River, west of the Cloncurry township and south of the Barkly Highway. The concrete faced (gunite) rockfill dam was built in the 1950's to provide town water for the now abandoned Mary Kathleen Uranium Mine. Owned by the State and managed by Department of Resources, it is now a popular recreation and camping area for locals and visitors as well as water supply for stock. The access road to Corella Dam is crossed by an auxiliary spillway of the dam, and this must not be crossed when in flow. There is an EAP in place which estimates the Population at Risk (PAR) to be between 10-24 persons, with campers and downstream homesteads most at risk.

Chinaman Creek Dam is located upstream to the southwest of the Cloncurry Township on Chinaman Creek. Constructed in 1993, the 13.5m high concrete gravity dam is owned and operated by Cloncurry Shire Council and supplies both town water and recreational activities for Cloncurry residents. The EAP has calculated a maximum incremental PAR of 197 for a Probable Maximum Flood (PMF) event at the dam coupled with a 2% AEP (Q50) event in the Cloncurry River. The PAR does not account for transient visitors who must also be considered. During the flooding of March 1997, the fuse plug washed

out resulting in a loss of water storage and increased floodwaters in the Cloncurry River. The dams fuse plug is designed to wash away in a 1% AEP (Q100) flood event.

Rifle Creek Dam is located 28km south east of Mt Isa and 98km west / south west of Cloncurry, on the border of Cloncurry Shire with Mt Isa City and Boulia Shire. Originally built in 1929 and upgraded in 1950 and 2015, the concrete gravity/arch dam is owned and operated by Glencore Mount Isa Mines. The Dam provides one of two cooling water supplies to Diamantina Power Station while also supplying stock water to downstream properties. The EAP calculates the PAR to be 698 persons, almost all of which reside in the Mt Isa City Council Local Government Area, along the Leichhardt River.

In addition to the above, failure of referable dams in the surrounding areas could exacerbate flooding in the Cloncurry area, including Leichhardt River Dam, Julius Dam, and East Leichhardt Dam.

There are also a number of hazardous waste dams and storage facilities in the Cloncurry Shire, including Tick Hill Tailings Storage, Phosphate Hill Gypsum Stack, Phosphate Hill Slimes Dam, Osborne Mine Tailings Storage (x 2), Osborne Mine Reclaim Water Storage (x 2), Ernest Henry Mine Tailings Storage, Dugald River Tailings Storage, Selwyn Mine Heap Leach Storage, Selwyn Mine Tailings Dams (x 2) and Great Australian Copper Mine Pregnant Ponds. Mine operators are responsible for the care and maintenance of these dams. These could pose environmental and health risks to the Shire. For example, on two occasions during flooding in the last 12 years, acid water was released from the pregnant ponds of the Great Australian Copper Mine into the flooded Copper Mine Creek.

Failure or disruption of essential services

The failure of critical infrastructure which provides essential services such as water, wastewater, waste management, power, information and communication, would have varied, widespread implications. There is the potential for a "ripple effect", where the failure of one essential service may lead to progressive failures of other essential services – e.g., loss of power could potentially lead to loss of communications, loss of reticulated water supply, loss of sewage treatment capability, etc. It is important to note that it is possible that any infrastructure failure affecting the area, could likely have State-wide and possibly national consequences, resulting in a lack of external support capacity to assist in recovery activities. In addition to the human-social and economic impacts, any loss of essential services can impede the ability to respond to an event locally.

Mining Incident

Due to the mining industry's dominance in the Shire, an incident at any mining site could have wide-reaching socio-economic and environmental implications for the surrounding areas. Mining operations and the corresponding critical supply chain network could be vulnerable to hazards listed above, including flooding, severe storms, heatwaves, infectious diseases and disruption of essential services, as well as a cohort of risks synonymous with mining, such as collapse, underground fires, explosions, loss of ventilation, contaminated atmospheres and inrush. In addition, mining's necessity for the storage and transport of hazardous chemicals can pose risks both onsite and while in transit. Many of the mines play an active role in the disaster response and recovery efforts of the Cloncurry Shire.

Other Major Incidents

Major or unusual incidents could occur in any number of settings and are difficult to foresee or predict. Such events have the potential to happen quickly with little to no warning and could potentially require a protracted response by LDMG agencies. Some examples include a structural collapse, a critical incident at a mine site, a release of hazardous or toxic materials, a mass casualty event, an act of terrorism or the risk of space debris entering the atmosphere. It is important to consider the likelihood

and severity of these types of hazards and their impacts on people, infrastructure, the local economy and the environment, in addition to the Shire's ability and resources to respond to such events.

It is important to be aware of events happening in other areas which may impact the Cloncurry area, particularly given its pivotal location intersecting major transport routes between capital cities and broader regional destinations. Additionally, cooler months and certain local events see a larger influx of people from outside the Shire which may impact the response to the above hazards.

3.4 Residual Risks

The LDMG recognises its treatment options will not always be adequate and residual risk will remain. Residual risks are the risks which remain after the LDMG has applied the risk mitigation strategies within their capacity, but those strategies have not sufficiently reduced or eliminated the risk.

The following is a list of identified risks that are not within the capacity of the LDMG to address and are therefore deemed to be Residual Risks to be escalated to the DDMG. This list is not exhaustive and further residual risks will likely emerge as the QERMF is further advanced.

Table 5: Residual Risks that may be escalated to the DDMG

Issue	Current Capacity	Residual Risk
Evacuation of entire community	Capacity exists to manage small evacuations of short duration. Resources will be severely stretched if large numbers or an entire community needs to be evacuated.	Request to District for assistance
Multiple houses inundated and / or damaged resulting in long term housing needs	Capacity exists to open Evacuation Centres or use commercial accommodation for short duration events. Limited capacity exists for longer term events where multiple properties have been damaged.	Request to District for assistance
Multi-casualty events	Limited capacity exists within the Shire to respond to events with multiple fatalities or multiple serious injuries.	Request to District for assistance
Asbestos contamination from damaged buildings	The community has limited personnel trained in or equipped for asbestos removal. External expertise will be required.	Request to District for assistance
Managing multiple Evacuation Centre Facilities	Limited capacity exists to manage and staff evacuation centres. No capacity exists to manage multiple evacuation centres concurrently.	Request to District for assistance
Various Public Health Risks	The Shire has one EH/CO. In a major event, professional EH/CO assistance will be required for a range of public health/environmental health issues.	Request to District for assistance
Exotic animal diseases	Limited capacity exists to manage an exotic animal disease. Assistance will be required to manage and control outbreaks.	Request to District for assistance

Staffing	The Shire lack the quantity of staff and / or specialised skill sets that may be required during an event.	Request to District for assistance

SECTION 4: PREVENTION

4.1 Prevention

Prevention includes those measures to eliminate, mitigate or reduce the likelihood of a disaster event occurring, or to reduce the severity of an event should it eventuate.

Hazard mitigation is the action taken in advance of a disaster, aimed at eliminating or reducing the impact on communities, the economy, infrastructure and the environment.

The implementation of appropriate and targeted mitigation initiatives can offer more sustainable cost savings to communities and government in the event of a disaster and result in safer, more resilient and sustainable communities.

4.2 Land Use Planning

Land use planning in areas that are exposed to natural hazards can significantly reduce disaster risk, the impact of hazards should they arise and enhance the resilience of existing and future communities. Regulating the use and development of land is a key strategy to avoid risk to life, property and environmental systems and reduce damage and disruption to the community within the Cloncurry Shire.

The Cloncurry Shire Planning Scheme 2016 provides a framework under the Sustainable Planning Act 2009 for managing development within the Shire over the next 10-20 years. The Planning Scheme uses a series of overlays as a means of influencing development to mitigate or reduce the effects of hazards:

- Bushfire Hazard Overlay
- Flood Hazard Overlay
- Landslide Hazard Overlay

4.3 Building Codes, Regulations and Legislation

The application of building codes and building use regulations aims to ensure that buildings and infrastructure are designed and constructed to standards that reduce the likelihood of damage and injury in an event. Standards and codes should be referred to and enforced particularly for the design and construction of major infrastructure and components of essential services.

4.4 Design Improvements

Design improvements to infrastructure or services can be engineered to provide a greater level of resilience. Design improvements can be applied to new infrastructure or to harden existing infrastructure or when considering betterment works during the reconstruction phase. Ensuring the reliability of critical infrastructure and services supports the communities social and economic wellbeing.

4.5 Hazard Reduction

Each agency of the LDMG is responsible for implementing appropriate hazard reduction programs for risks under their control. As an example, QFES, CSC and various landowners undertake an annual hazard reduction program for bushfires. This includes a program of fuel reduction and back-burning, maintenance and development of fire breaks and CSC plays an active role on the Fire Management Committee which provides strategic fire mitigation programs, operational preparedness and response, risk identification and hazard reduction burning for the Cloncurry Shire.

4.6 Continuous Improvement

The practice of continuous improvement involves disaster management processes and arrangements being regularly evaluated and improved to ensure they remain fit for purpose, efficient, effective and flexible.

SECTION 5: PREPARATION

5.1 LDMG Preparedness & Capacity Building

Effective disaster response and recovery activities begin with preparedness and awareness-raising activities that are conducted on an ongoing basis, in advance of any potential disaster to ensure that if an event occurs, communities, resources and services are able to cope with its effects.

LDMG preparedness relates to having arrangements in place to ensure that, should a disaster occur, all the resources and services which are needed to cope with the effects can be efficiently mobilised and deployed.

Capacity building occurs across the phases of prevention and preparation and is built through activities that ensure ongoing improvement of the disaster management arrangements. The implementation and delivery of LDMG meetings, workshops and training, and exercises are critical elements in the continuous improvement of disaster management capacity building.

5.2 Community Preparedness & Capacity Building

Section 30 of the Act requires the LDMG to ensure that the community is aware of ways of mitigating the adverse effects of an event and preparing for, responding to and recovering from a disaster.

The LDMG recognises that local knowledge is invaluable to the disaster planning process and that the community plays a key role in contributing to its own safety. The LDMG advocates that everyone can prepare for disasters in ways that can reduce the impact on your home, family, friends, pets and you. Being prepared in advance can make emergencies less stressful and save precious time.

LDMG community education and awareness programs focus on creating resilient communities. Resilient communities are those that understand the risks they face, how to prepare themselves, their home and their community for the possibility of a disaster event to minimise impacts, can adapt to the circumstances, recover quickly and emerge stronger than their pre-disaster state.

5.2.1 Queensland Strategy for Disaster Resilience

Queensland is the most disaster impacted state in Australia. By necessity, Queenslanders are renowned for their resilience and ability to adapt, with a strong community spirit that supports those in need to withstand and recover from disasters.

The preparedness and resilience of individuals and communities is a shared responsibility of all sectors, including all levels of government, business, NGOs and individuals. Disaster resilience is significantly increased by proactive planning and preparation for the protection of life, property and the environment through an awareness of hazards, associated risks and local disaster management arrangements.

The Queensland Strategy for Disaster Resilience is the guiding instrument for realising the vision to make Queensland the most disaster resilient state in Australia and is underpinned by four key objectives:

- Queenslanders understand their disaster risk
- Strengthened disaster risk management
- Queenslanders are invested in disaster risk reduction
- Continuous improvement in disaster preparedness.

5.2.2 Get Ready Queensland Initiative

The LDMG supports and promotes the annual Get Ready Program in the Cloncurry Shire. The Get Ready program is aimed at empowering individuals and the community to understand their local risks and take pre-emptive action to prepare themselves, their families, homes and businesses in the event of disaster. The Get Ready Queensland program promotes three steps to Get Ready:

Step 1: Have an Emergency & Evacuation Plan

The first step in being prepared is to have a Get Ready Plan. An emergency and evacuation plan will ensure everyone in your household knows exactly what to do if the worst happens. It is designed to keep you and your household members connected and safe in the event you become separated and/or you lose mobile phone connectivity.

You will need to consider the hazards that could affect your home and neighbourhood. Depending on where you live, there may be some obvious ones like bushfires or severe storms.

Consider also the possible resulting effects of a disaster such as extended power outages, disruption to transport services and the potential for your home and/or community becoming isolated for a period of time. Think about where you might go if you weren't able to go home, or you had to leave home because of a disaster.

Know where to get information before, during and after a disaster:

1. Listen to local radio – ABC Radio is the national carrier, and the local broadcaster is ABC North West Queensland 567 AM. You can also listen to Triple J on 105.7 FM or local radio stations 4LM 693 AM and / or Vision Radio Network 87.6 FM for updates during an event.

2. Follow rolling updates on the Disaster Dashboard

3. Follow updates from Council's social media: Cloncurry Shire Council Facebook Page and Cloncurry Local Disaster Management Group Facebook Page

4. Weather and warning updates: Bureau of Meteorology (Queensland)

You might want to involve your neighbours in developing your plan - neighbours who are elderly or have special needs may need your assistance. It is important to take the time to get to know your neighbours so that during a disaster and times of need your community is prepared to help each other. Do not forget to consider what you will do with your pets and animals.

You can complete your own tailored household emergency and evacuation plan online at: https://www.getready.qld.gov.au/plan.

Step 2: Pack your Emergency Kit

Disasters can cause major disruptions to essential services like power, gas and water, and access to supermarkets and pharmacies for crucial supplies. Pulling together supplies and preparing your household emergency and evacuation kits early is the second step you need to take to Get Ready.

A household emergency kit contains items you may need if you have to stay in your home when essential services have been cut off and an evacuation kit includes the additional items you may need if you have to evacuate your home. These kits should be stored in an easy to reach place which is known to all family members.

A comprehensive list of items is available at: https://www.getready.qld.gov.au/get-prepared/3-steps-get-ready/step-2-pack-your-emergency-kit

Step 3: Make sure you're covered

Since 2011, Queensland has been hit by more than 70 significant natural disasters. Many people have found out too late that they did not have enough home and contents insurance cover for their property and assets. Regardless of whether you are a home owner or a renter, this can be extremely costly and stressful. Step 3 to Get Ready, wherever you live in Queensland, is to make sure your home and contents insurance cover is enough to cover the cost of rebuilding your home and or replacing your contents or possessions.

5.3 Disaster Dashboard

The CSC Disaster Dashboard provides a one-stop shop site for the community to access BoM weather warnings, up-to-date information on road conditions, power outages, emergency contacts as well as links to other useful disaster related information and our social media sites.

SECTION 6: RESPONSE STRATEGY

6.1 Activation of LDMG

Timely activation of the LDMG is critical. The LDMG will activate in response to an actual or threatened disaster event which will likely have significant community consequences and requires a coordinated response and / or recovery effort.

The decision to activate is based upon defined triggers and the perceived level of threat.

The authority to activate the LDMG is at the discretion of the LDMG Chairperson based on the nature and scale of the event. The LDMG Chairperson will consult with the full membership where time permits.

6.2 Activation Criteria

The disaster management system at a local level, involving the LDMG, may be activated for any number of reasons. The following decision criteria should be employed (if yes is answered to any of the following the LDMG should be activated):

- Is there a perceived need relative to an impending hazard impact which requires multi-agency coordination?
- Has there been a request from a response agency, to provide resource support and coordination in support of operations?
- Has there has been a request / direction from the DDC to activate the LDMG?
- Has there been a sudden impact event which requires involvement of the LDMG in one or more phases of PPRR?

6.3 Activation of LDMP & Sub Plans

The LDMP will be activated automatically whenever the LDMG activates. The LDC is responsible for activating approved Sub Plans as required by the nature and circumstances of the event.

6.4 Notification Flowchart

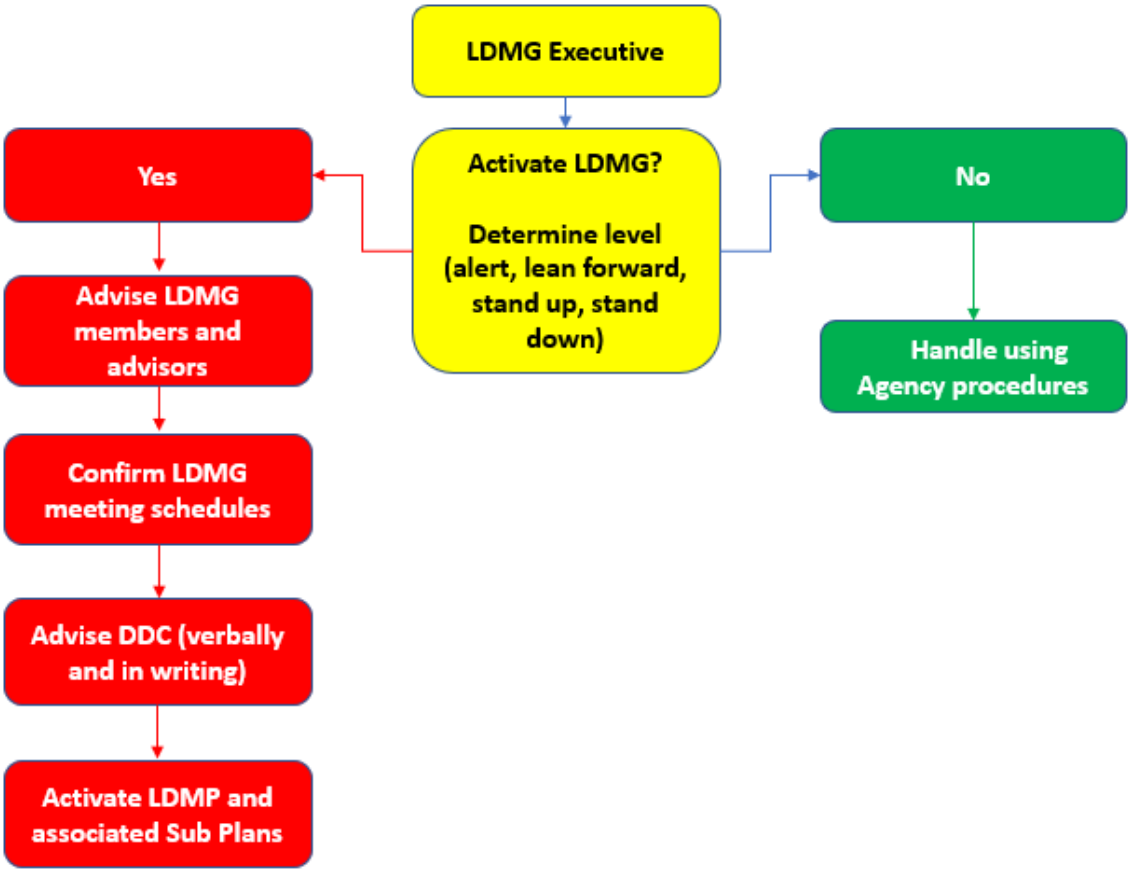

Figure 12: Notification Flowchart

6.5 Notification Process

The LDMG Chairperson & LDC will maintain situational awareness in relation to events that have the potential to require the activation of the disaster management system.

When a decision is made to activate the LDMG, the appropriate activation level will be determined and communicated to LDMG members.

The initial LDMG meeting will be scheduled, and further meetings agreed where necessary.

The DDC will be advised verbally and in writing that the LDMG has activated.

This LDMP will be automatically invoked and the LDC will invoke associated Sub Plans as required by the nature and scale of the event.

6.6 Activation Levels

Table 6: LDMG Activation Levels

	Triggers	Actions	Communications
ALERT	A heightened level of vigilance due to the possibility of an event.	Monitor situation closely – watching brief. Initial advice to all stakeholders. Refer LDC Checklist.	Chair and LDC communicating remotely.
LEAN FORWARD	Operational state prior to 'stand up'. Heightened level of situational awareness and a state of operational readiness.	Ensure relevant facilities are set up and rosters developed as required (LDCC, Evacuation Centres, etc.). Formal briefing of LDMG. Public information and warnings initiated Refer LDC Checklist	Chair, LDC and LDMG members on mobile and monitoring email remotely. Ad-hoc reporting.
STAND UP	Threat is imminent. Community has been or will be impacted. Resources are mobilised, personnel are activated and operational activities commence.	Activate staff and facilities as needed (LDCC, Evacuation Centres, etc.). Manage disaster operations.	Formal SITREP reporting.
STAND DOWN	Transition from responding to an event back to normal core business and/or recovery operations.	Implement plan to transition to recovery. Debriefing and identification of lessons.	FINAL response SITREP to DDC.

6.7 Response Priorities

The response phase involves 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.

The following priorities apply to any response:

- Preservation of life
- Protection of critical infrastructure and property
- Safeguard the economy
- Protect the environment.

6.8 Response Principles

The LDMG will:

- Activate early to prepare and to plan for the response and coordination of disaster operations
- Work closely with the responsible lead agency and the DDMG to manage and coordinate disaster operations
- Provide warnings, alerts and public information early and consistently to the community or those who need it
- Ensure disaster operations and response activities are coordinated
- Ensure resources are accessed and used effectively
- Provide support to meet community needs
- Provide situational reporting.

6.8.1 Responsible Lead Agencies

The LDMG will ensure the responsible lead agency is supported by the disaster management system during their response to an event. The responsible lead agencies for each hazard can be found in the State Disaster Management Plan – refer pg. 47-50.

6.9 Disaster Declaration

In accordance with *Section 64(1) of the Act*, the DDC may declare a disaster situation for the district, or a part of the district if satisfied that a disaster has happened, is happening or is likely to happen or it is necessary, or reasonably likely, for the DDC or a declared disaster officer to exercise declared disaster powers to prevent or minimise:

- Loss of human life
- Illness or injury to humans
- Property loss or damage

- Damage to the environment

Before declaring a disaster situation, the DDC is to take reasonable steps to consult with each local government in, or partly in, the proposed declared area. As outlined in *Section 75 to 78 of the Act*, the declaration confers extra powers on particular groups to perform actions, give directions and control movements within the declared area.

It is important to note that the declaration of a disaster situation relates to the situational requirement for additional powers and is not linked to the activation of particular disaster management groups under the QDMA or the activation of disaster financial assistance arrangements. All three actions are independent processes and are not interlinked or conditional. The declaration of a disaster situation does not impact the requirements of a local government under the Act to manage disaster operations in their area.

6.10 Guardian Information Management System (IMS)

Guardian IMS is an electronic workflow for managing disaster events. The spatially integrated solution holds plans and preparation documents, creates a chronological record of events and a fully auditable trail of actions, as well as details on the allocation and management of tasks, bulletins, evacuation centres, road closures and reports using MS Word templates.

6.10.1 Situation Reports (SITREPS)

Situation Reports (SITREPS) will need to be prepared on a regular basis. SITREPS will be created and stored within Guardian IMS so they are accessible to all LDMG agencies.

6.11 Activation of the Local Disaster Coordination Centre (LDCC)

The LDCC is where the multi-agency response to the event is coordinated from. The primary LDCC is located at the CSC offices at 38-46 Daintree Street, Cloncurry. For further information refer to the Activation and Operation of the LDCC Sub Plan.

6.12 Public Information & Warnings

When an event is imminent, it is essential the public are warned of the danger and provided with information about the event and advice on recommended actions. The key objective is to deliver accurate, clear, timely information and advice to the public, so they feel confident, safe and well informed and are aware of any recommended actions. Refer Public Information & Warnings Sub Plan.

6.13 Evacuation

The safety of residents is the primary driver for evacuation. Evacuation carries risks to both those being evacuated and to emergency personnel managing the evacuation. Consideration must be given to the risks associated with the conduct of any evacuation. Under some circumstances, sheltering in place may provide greater levels of safety for the community. For further information refer to the Evacuation Sub Plan.

6.14 Financial Management

Operational expenditure needs to be tracked using work order numbers established specifically for the event. At the conclusion of the disaster event, all expenditure needs to be finalised. Invoices need to be collated; payments made, and Disaster Recovery Funding Arrangements (DRFA) claims need to be completed - refer to Financial Management Sub Plan.

6.15 Public Health

A major disaster event may cause significant disruption to the community. Water supplies, sewage treatment, refuse disposal, and access to safe food may be compromised – refer to Public Health Sub Plan.

6.16 Emergency Logistics & Resupply

Timely acquisition and deployment of services and supplies is critical to the efficient response to and recovery from a disaster event. When all local resources have been exhausted or are inadequate, requests for assistance outside the CSC area shall be directed to the DDC. All external assistance requests shall be coordinated by the LDC on behalf of the CSC LDMG – refer Emergency Logistics & Resupply Sub Plan.

6.17 Impact Assessment

Following the impact of a disaster, measures will need to be implemented to undertake impact assessments to determine the extent of the area affected, damage to homes, infrastructure and essential services and the level of hardship being experienced in the community. QFES have a responsibility for undertaking rapid damage assessment of structures impacted. However, all agencies are able to contribute to impact assessment through operational reporting (i.e., dam owners will report on storage levels, QPS will report on missing people, Queensland Health will report on people requiring hospitalisation / medical treatment, CSC will report on damage to water infrastructure).

6.18 Simple Tips for Community

During disaster events, it is important to keep calm to help manage fear and to think clearly. It is also important to remember that someone may need your help and that you may also need help. You also need to seek reliable information about what is happening and advice from emergency services.

If you have prepared well, the emergency plans will kick in and you, your family and neighbours will be in a position to see out the disaster event. When it comes to any disaster, preparation is the key.

There are some simple things you can do during a disaster event to protect your family and home.

1. Activate your Household Emergency Plan and get your Emergency Kit
2. During severe storms, stay inside and well clear of windows, doors or other openings.
3. Shelter in the safest part of your house (internal room, hallway, built-in wardrobe or cellar).
4. Avoid using electrical appliances where possible.
5. If outdoors, seek immediate shelter in a solid, enclosed space.
6. If driving, turn on your hazard lights and pull over in an area away from trees, power lines, drains and waterways.
5. Stay tuned to local radio –ABC Radio is the national carrier, and the local broadcaster is ABC North West Queensland 567 AM. You can also listen to Triple J on 105.7 FM or local radio stations 4LM 693 AM and / or Vision Radio Network 87.6 FM for updates during an event.
7. Follow rolling updates on the Disaster Dashboard
8. Follow updates from Council's social media: Facebook
9. Follow weather and warning updates: Bureau of Meteorology

SECTION 7: RECOVERY STRATEGY

7.1 Definition of Recovery

In accordance with the Queensland Recovery Plan, disaster recovery is defined as the coordinated process of supporting disaster-affected communities' psychosocial (emotional and social), and physical well-being; reconstruction of physical infrastructure; and economic and environmental restoration (including regeneration of the natural environment, associated infrastructure and heritage sites and structures and the management of pollution and contamination).

7.2 Context for Recovery

The need for recovery may arise from a range of natural and non-natural disaster events, often providing an opportunity to rebuild a stronger, more resilient community.

Recovery begins shortly after the response phase has begun and the impact has been identified. Recovery can be a long, challenging and complex process and is often considered the most resource intensive and protracted element within the context of the PPRR framework.

Recovery is not a retrospective process, but a process that focuses on building a recovered community. Whilst funded recovery programs under the joint Commonwealth/Queensland funded Disaster Recovery Funding Arrangements have a two-year life span, it is recognised that the time it takes for a community to be recovered will vary based on the impact of the event and the individuals in the community.

7.3 Appointment of Local Recovery Coordinator

An appropriately qualified and authorised person has been appointed by the CEO of CSC as the Local Recovery Coordinator (LRC) to coordinate and facilitate local recovery operations. The LRC and the LDC should liaise regularly to ensure that response operations support the recovery effort and the LRC has good situational awareness to ensure their disaster recovery planning is relevant to the community. Indicative duties of the LRC include:

- Liaising with functional lead agency representatives at the local and district levels
- Liaising with the District Disaster Management Group (DDMG)
- Working with identified agencies and the community to develop the local event-specific recovery plan
- Coordinating the short to medium-term recovery to address the immediate effects of the disaster and develop longer-term measures as appropriate
- Ensuring the local event-specific recovery plan addresses all relevant functional areas of recovery – human and social, economic, environment, building, and roads and transport
- Performing the role of conduit between community and government
- Developing and implementing effective strategies for community participation and partnership in the recovery process
- Providing advice to state government on the needs and responses of the affected individuals, communities and other sectors

- Undertaking a post-operation debrief and providing a final report to the LDMG at the conclusion of recovery operations

- Providing or delegating the responsibility for ongoing recovery reporting on the progress of the event-specific recovery plan.

7.4 Activation of LDMG Recovery Group

During the response phase, the LDMG will consider the impact of the disaster. If the event is of sufficient magnitude, the LDMG may decide to activate its Recovery Group.

The Recovery Group is likely to be activated in the following circumstances:

- An event where significant loss or damage is sustained impacting the community, economy, environment and / or the infrastructure of the CSC area.

- An event that creates significant disruption to the communities' connectedness or overwhelms local resources or the capacity of the community to cope or recover independently.

- An event that the LDMG determines has ongoing impacts and requires a coordinated and collaborative multi-agency approach to recovery.

- If requested to activate by the DDMG.

When activated, the LDMG Recovery Group will be chaired by a Councillor of CSC and will be responsible for coordinating recovery activities and ensuring recovery efforts are effectively implemented across the Shire. A Terms of Reference is available that can be adapted to the specific circumstances of the event.

7.5 Activation Levels, Triggers & Communications

Recovery activation levels follow closely behind the response activation levels. This means that recovery actions are triggered early in the event cycle, before the disaster has occurred. The table below identifies the recovery activation levels, triggers and communications.

Table 7: Recovery Activation Levels, Triggers and Communications

Response Alert		Triggers	Actions	Communications
Response Lean Forward	Recovery Alert	• 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	• LDC and LRC maintain communication. • LRC and Recovery Group members on mobile remotely
Response Stand Up	Recovery Lean Forward	• Response phase at 'stand up' level of activation • LDCC assesses event impact and determines if Recovery Group is needed. • 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 • Recovery Group and Subgroup structures finalised along with reporting requirements.	• LRC and Recovery Group members on mobile and monitoring email remotely • Recovery Group will commence meeting for planning purposes. • More regular reporting as required by the LRC and by the Disaster District and QDMC. • Community engagement and communication strategy developed.

Response Stand Down	**Recovery Stand Up**	• Immediate relief arrangements continue • Response phase moves to 'stand down' level of activation. • Medium term recovery commences. • LRG arrangements are finalised. Community returns to normal activities with ongoing support as required.	• Recovery Group activated at LDCC or alternate location • Recovery plan activated • Community information strategy employed • Participate in response debrief • Transition arrangements from 'response and recovery' to 'recovery' activated including handover from LDC to LRC • Action plans for five functions of recovery continue • Community information strategies continue	• LRC and LRG members involved in medium term recovery continue as required • Functional lead agencies report to LRC/ LRG as required
	Recovery Stand Down	• Recovery Group arrangements are finalised, • Community returns to normal activities with ongoing long term recovery support provided as required under pre-agreed arrangements and processes.	• 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 Recovery Group members resume standard business arrangements.

7.6 Recovery Group Membership

The Local Recovery Group (LRG) may be comprised of the following members. Membership will be tailored for each event:

Table 8: Local Recovery Group Membership

Recovery Group Position	Organisation
Chairperson	Councillor, CSC
Local Recovery Coordinator	Manager Planning & Environment
Secretariat	Business Support Officer, Operations and Maintenance
Core Members	Chair & Coordinator of Human-Social Recovery Subgroup Chair & Coordinator of Economic Recovery Subgroup Chair & Coordinator of Infrastructure Recovery Subgroup Chair & Coordinator of Environment Recovery Subgroup
Supporting Members / Advisors	Department of Communities, Housing & Digital Economy Department of State Development, Infrastructure, Local Government and Planning Department of Environment & Science Department of Transport & Main Roads Department of Energy & Public Works National Relief and Recovery Agency Queensland Reconstruction Authority

7.7 Functional Lines of Recovery

Depending on the nature of the disaster, one or more of these five functional lines of recovery may be the focus of recovery operations. The responsible State Lead Agencies identified below will be invited to participate in the LDMG Recovery Group which will consider all five functional lines of recovery when planning and undertaking recovery operations:

Table 9: Functional Lines of Recovery and Lead Agencies

Functional line of recovery	Description	State Lead Agency
Human and Social recovery	Focuses on supporting the emotional, social, physical and psychological health and wellbeing of individuals, families and communities following a disaster.	Department of Communities, Disabilities & Seniors
Economic recovery	Focuses on rectifying the direct and indirect impacts on the economy as a result of a disaster.	Department of State Development, Infrastructure, Local Government & Planning

Building recovery	Focuses on rectifying damage and disruption which inhibits the capacity of essential services and the building sector, including housing, accommodation, education and health facilities.	Department of Energy & Public Works
Environmental recovery	Focuses on rectifying the impacts on the natural environment as a direct result of a disaster or through a secondary impact or consequence. Impacts to the environment may include damage or loss of flora and fauna, poor air quality, reduced water quality, land degradation and contamination, as well as cultural and built heritage listed place issues.	Department of Environment & Science
Roads and Transport recovery	Focuses on rectifying the effects of a disaster on transport networks, including road, rail, aviation and maritime normally result in difficulty accessing communities and disruption to critical supply chains (both in and out of the impacted area). Restoration of these networks, or the identification of alternatives, is a priority in disaster recovery.	Department of Transport & Main Roads

7.8 Recovery Subgroups

Often a disaster will be of such a scale that all functions need to be addressed to effect recovery. To assist with managing capacity and resourcing issues and to reflect other areas of infrastructure that CSC is responsible for i.e., water, wastewater, waste, etc., the CSC LDMG Recovery Group will likely organise itself with four Functional Recovery Subgroups to address the five lines of recovery as follows:

- Human-social
- Economic
- Infrastructure
- Environmental

This structure is depicted in [section 2.8] of this plan. Which Subgroups are established, will depend wholly upon the scale of the event and the complexity of the recovery effort.

7.9 Proposed Recovery Subgroup Membership

This table is to be used as a guide and membership tailored to each event.

Table 10: Proposed Recovery Subgroup Membership

Supporting Member Agencies (may be modified depending on disaster)				
	HUMAN & SOCIAL	**ECONOMIC**	**ENVIRONMENT**	**INFRASTRUCTURE**
Chairperson	Councillor Community Services	Councillor Finance Services	Councillor Waste Management	Councillor Roads and / or Councillor Water & Sewerage
Local Government Officers	• Coordinator • Administrator • Others • Community Development Officers • Director of Corporate Services	• Director Corporate Services • General Manager Tourism • Manager Finance & Admin	• Manager Water & Waste • Director of Engineering	• Director of Engineering • Engineer • Works Program Manager • Works Coordinator
State Government	• DCDSS (Functional lead agency) • DCYJMA • QHealth • QPS • QFES • QRA • DSDSATSIP • Department of Education	• DSDILGP (Functional lead agency) • DRDMW • Queensland Treasury • DAF • DTIS • QRA • QRIDA	• DES (Functional lead agency) • DAF • DRDMW • QHealth • Department of Resources • DSDSATSIP • QRA • DSDILGP • DTMR	• DEPW (Functional lead agency) • DTMR (Functional lead agency) • DSDILGP • Department of Education • DCHDE • QRA
Non-government / Business representatives	• Australian Red Cross • GIVIT • Uniting Care • St Vincent de Paul • Local community and welfare groups • RSPCA (companion animals) • Insurance Council of Australia • Queensland Services Industry Alliance • LGAQ	• Insurance Council of Australia • Chamber of commerce • Primary producer groups • Industry representatives • Tourism Tropical North QLD • Outback Queensland Tourism Association • Agforce • Queensland Farmers Federation • Telstra • NWROC	• Natural Resource Management bodies • Environment and conservation organisations • Wildlife and animal protection groups • Traditional owners • River Improvement Trusts • Rural and primary producers • Mining industry • Water and waste service providers	• Queensland Building and Construction Commission • Insurance Council of Australia • Utility owners/ operators • Private infrastructure Owners • Ergon • Telstra • Transport operators • NWROC

	• Volunteering Queensland • NWROC		• Chemical and hazardous substance advisors.	

7.10 National principles

The LDMG Recovery Groups will use the National Principles for Disaster Recovery to guide recovery planning, approach, decision-making and efforts. The principles are:

Table 11: National Principles for Disaster Recovery

Principle	Definition
Understand the context	Successful recovery is based on an understanding of the community context, with each community having its own history, values and dynamics.
Recognise complexity	Successful recovery is responsive to the complex and dynamic nature of both emergencies and the community.
Use community-led approaches	Successful recovery is locally led, community-centred, responsive and flexible, engaging with community and supporting them to move forward.
Coordinate all activities	Successful recovery requires a planned, coordinated and adaptive approach, between community and partner agencies, based on continuing assessment of impacts and needs.
Communicate effectively	Successful recovery is built on effective communication between the affected community and other partners.
Recognise and build capacity	Successful recovery recognises, supports, and builds on individual, community and organisational capacity and resilience.

7.11 Queensland Government Role & responsibilities

The Queensland Recovery Plan – refer pg. 14-20 identifies the role and responsibilities of the DDMG and numerous State government stakeholders in recovery operations as follows:

- Queensland Disaster Management Committee (QDMC)
- Minister
- Leadership Board Sub-committee (recovery)
- State Recovery Policy & Planning Coordinator
- State Recovery Coordinator
- State Functional Recovery Groups
- Queensland Reconstruction Authority

7.12 Recovery Phases

The disaster recovery process can generally be categorised into three phases (immediate, short-to-medium term recovery and long-term recovery). The phases of recovery are depicted in Figure 10 below.

Figure 13: Phases of recovery

An indication of likely activities being undertaken at each of the three recovery stages is identified below:

7.12.1 Stage 1: Immediate recovery (post-impact relief and emergency)

Immediate recovery aims to address and support the immediate needs of individuals, businesses and the community affected by an event. This phase of recovery is challenging as it often coincides simultaneously with response operations. It is the period after a disaster when initial "relief" services are offered to the affected community whilst the full recovery framework is established. It is also the period when detailed recovery planning, including damage and needs analysis is undertaken.

The likely recovery activities conducted during this phase include:

- Impact and needs assessments commenced
- Provision of Evacuation Centres
- Provision of assistance to meet basic human needs
- Restoration of power, water and communication commenced
- Emergency funding, shelter, clothing and food distribution
- Roads re-open
- Psychological first aid, and personal support provided
- Consideration of Recovery Hubs

7.12.2 Stage 2: Short-to-medium term recovery (re-establishment, rehabilitation and reconstruction)

This phase of recovery continues the coordinated process of supporting affected communities in the reconstruction of physical infrastructure, re-establishment of the economy and rehabilitation of the environment. During this phase, support for the emotional, social, and physical wellbeing of those

affected continues. The recovery activities at this stage will assist the affected community to return to a state of normality, although the community may experience significant change resulting from the event.

The likely recovery activities conducted during this phase include:

- Impact and needs assessments finalised.
- Essential service repaired and restored.
- Key transport routes are operational.
- Roads repairs underway.
- Supply chains are returning to normal.
- Schools reopen.
- Funding to support recovery identified.
- Insurance assessments underway.
- Community support mechanisms operational.
- Community development programs underway to reunite community.
- Environmental restoration and biosecurity programs identified and underway.
- Support for business is available.
- Development of exit strategies.

7.12.3 Stage 3: Long-term recovery (restoration, rebuilding, reshaping and sustainability)

Long-term recovery is characterised by the ongoing restoration and rebuilding of physical infrastructure, restoration of the economy and of the environment, and reshaping to support sustainability of recovery measures in the longer term. During the transition phase, specialist recovery workers leave affected communities and systems start to wind down as normal community development and business-as-usual processes return. Long term recovery may last many months and in some cases many years after the event.

The likely recovery activities conducted during this phase include:

- Assets are restored, improved and operational.
- Rebuilding phase finalised.
- Longer term psycho-social support strategies for individuals, families and communities are established and operational.
- Event anniversaries are acknowledged appropriately.
- Key milestone achievements are acknowledged and celebrated.
- Exit strategies are implemented.

7.13 Event Specific Recovery Plan

The Queensland Reconstruction Authority have developed a process to develop an event-specific Local Recovery Plan. The methodology, action plan template and the 'plan on a page' Local Recovery Plan template can be found here: https://www.qra.qld.gov.au/our-work/recovery-hub/recovery-templates

The Local Recovery Coordinator is responsible for working with the LDMG Recovery Group (where activated) to develop the plan and then for obtaining endorsement for the event-specific recovery plan from the LDMG. If developed, an event-specific Recovery Plan should be adopted by CSC. Following adoption, the plan should be uploaded to the Council website and promoted to the local community on a regular basis.

7.14 Recovery Hubs

Recovery Hubs are established to provide a range of services to facilitate recovery including welfare, support, financial and emotional recovery services. Recovery Hubs are typically managed by the Department of Communities, Disability Services and Seniors.