RICHMOND SHIRE COUNCIL

LATE AGENDA

FOR

ORDINARY MEETING
TUESDAY 05 DECEMBER 2023
COMMENCING AT 8:00AM

Item 2. Reports for Consideration – Office of the Chief Executive Officer

Item 2.9 Local Disaster Management Plan

EXECUTIVE SUMMARY
The Local Disaster Management Plan was adopted at the 04 December 2023 LDMG Meeting. The Plan needs to be endorsed by Richmond Shire Council.

OFFICER'S RECOMMENDATION
That Council: *endorse the Local Disaster Management Plan.*

Budget & Resource Implications
N/A

Background
The Local Disaster Management Plan was adopted at the 04 December 2023 LDMG Meeting.

The Plan is required to be endorsed by Richmond Shire Council to be able to finalise it.

Consultation (Internal/External)
Internal: Richmond LDMG

Attachments
Attachment A - Plan

Report prepared by **Tiana Grant (Executive Assistant)**

Richmond Local Disaster Management Plan

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Foreword

Foreword from the Chair of the Local Disaster Management Group

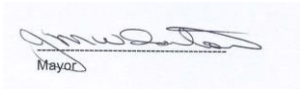
As most of us are aware, November to April is the period when severe storms and flooding may be active in North West Queensland. Depending on the severity of such storms, widespread destruction from wind and water inundation may occur. Flooding may also isolate many properties and the township of Richmond.

Richmond Shire Council has been pro-active over many years and has undertaken disaster mitigation and natural disaster mitigation studies to assist us in preventing, preparing for, responding to and recovering from events, including severe storms, bush fires and natural disasters that may impact on our community.

This disaster management plan is the document that formalises our practices and assists our Local Disaster Management Group in dealing with events. The plan should be used by the community as a valuable resource to assist in your own planning and actions in the event of a disaster.

Please help us to help you. It is important to remember that Richmond Shire Council does not have certified shelters available for use during a severe storm and you should pre-arrange your self-evacuation in preparation, should the authorities recommend evacuation.

Disaster updates are available on our local community radio ABC, and more information is available on Council's website. Finally, if you require assistance in the event of a natural disaster, please call the SES hotline 132500. Note that in life threatening emergencies, the 000 number should still be used.



Cr John Wharton
Mayor
Richmond Shire Council.

Contents

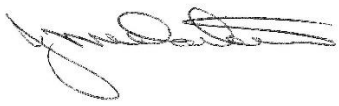
Administration and Governance

Endorsement

This Local Disaster Management Plan (LDMP) has been developed for the Richmond Local Government Area (LGA) and subsequently approved by the Richmond Local Disaster Management Group (LDMG). When the LDMG approves the LDMP, it is considered to be live.

Peter Bennett
Local Disaster Coordinator
LDMG

Date: 18.01.2022



Cr. John Wharton
Chair
LDMG

Date: 18.01.2022

The functions of the local government were advised in accordance with the Disaster Management Act (DM Act) (s 80). This plan was formally adopted by the Richmond Shire Council at the Council Meeting held on Tuesday 18 January 2022 through resolution.

Cr. John Wharton

Mayor

Richmond Shire Council

Date: 18.01.2022

Consultation, Review and Plan Effectiveness

An initial draft will be developed and reviewed in consultation with the LDMG Chair, Local Disaster Coordinator (LDC) and Queensland Fire and Emergency Services (QFES) Emergency Management Coordinator (EMC). This plan will be further developed with consultation, review and feedback from the entire LDMG and associated Disaster Management (DM) stakeholders.

In accordance with the Act (S 59), the LDMP and any associated Sub Plans must be reviewed when the local government considers appropriate, such as but not limited to:

- A change in the LGA risk.
- A change in the LGA community.
- Direction from the LDMG or feedback from an external review/report.

The local government must review the effectiveness of the plan at least annually, methods to achieve this can be such as but not limited to:

- A disaster event/s.
- Scheduled exercise (desktop or physical).
- Workgroups.
- Training.
- Debriefs after disaster operations (Response or Recovery).
- Direction by the LDMG or external review.

Document Control

The LDMP is a controlled document. The controller of the document is the Richmond Shire Council Chief Executive Officer (CEO) being the LDMG, LDC. Any proposed amendments to this plan are be forwarded in writing to the CEO/LDC unless advised otherwise:

The Local Disaster Coordinator
Richmond Local Disaster Management Group
Richmond Shire Council
P O Box 18
RICHMOND QLD 4822
Email: ceo@richmond.qld.gov.au

Approval of amendments

The LDC may approve minor amendments to this document, such as grammatical or name changes. Any changes above minor amendments or involving process or intent of the document must be approved by the Richmond LDMG. This may require feedback from lead or primary agencies.

Amendment Table

This amendment table must record all changes above minor amendments.

Amendment		Plan Updated	
Serial	Type	Inserted by	Date
1		Michelle Clarke & Amy Russell	4/11/2011
2		Michelle Clarke & Amy Russell	28/11/2011
3		Michelle Clarke	17/2/2012
4		Clinton Weber	6/03/2012

5		Amy Russell	22/03/2012
6		Amy Russell	23/03/2012
7		Wayne Preedy & Amy Russell	16/04/2013
8		Peter Bennett & Judy Norton	18/04/2017
9	Major review	Andy Pethybridge, Peter Bennett & Angela Henry	Dec 2020
10	Review due to legislation changes, such as but not limited to IGEM Standard, National Situation Room, community engagement for disaster resilience, risk references.	Andy Pethybridge & Angela Henry	Dec 2021
11	Update to Queensland Recovery Plan and IGEM Standard links. Continuous improvement additions and Recovery Group Review.	Andy Pethybridge & Cherkerra Messer	Mar 2022
12	Update to links, Recovery Plan, Recovery Guidelines, Recovery Group, LGA Profiles report data, Richmond Road Reports and Cameras, Fire Information such as Australian Fire Danger Rating System (AFDRS) and Fire Danager Ratings (FDR).	Andy Pethybridge & Tiana Grant	Dec 2023

Distribution and LDMP Location

This plan will be available on websites such as the Richmond Shire Council (www.richmond.qld.gov.au) and Queensland Government Disaster Management/Our Partners (www.disaster.qld.gov.au). A hard copy will be available through the LDC. The LDMG will be advised of the LDMP and any updates.

References

To assist with disaster management, the primary references are such as but not limited to:

- Queensland Disaster Management website – www.disaster.qld.gov.au
- Queensland Police website – www.police.qld.gov.au
- Queensland Reconstruction Authority (QRA) website – www.qra.qld.gov.au
- Queensland Government Inspector-General Emergency Management – www.igem.qld.gov.au
- The following are available through the Queensland Disaster Management website:
    - Disaster Management Act 2003
    - Disaster Management Regulation 2014
    - Queensland Disaster Management 2016 Strategic Policy Statement
    - State Disaster Management Plan:
        - Queensland Recovery Plan (Sub Plan to the State Disaster Management Plan).
        - Queensland Bushfire Plan (Sub Plan to the State Disaster Management Plan).
    - Townsville District Disaster Management Plan

- Queensland Prevention, Preparedness, Response and Recovery Disaster Management Guidelines.

Authority to Plan and Policy

The Disaster Management Act 2003 (DM Act) and the Disaster Management Regulation 2014 (the Regulation) form the legislative basis for disaster management. The DM Act (s57) requires a plan for disaster management in the LGA. This plan is prepared in accordance with the disaster management authorising environment as detailed in Figure 1. The documents are such as but not limited to:

- Queensland Disaster Management 2016 Strategic Policy Statement in accordance with the DM Act (s18(a) and 49(2)(a)) forms the strategic policy framework for disaster management:
    - Objectives:
        - Strive to safeguard people, property and the environment from disaster impacts.
        - Empower and support local communities to manage disaster risks, respond to events and be more resilient.
    - Strategies:
        - Ensure disaster operation capabilities are responsive and effective
        - Build capacity, skills and knowledge to enable adaptation to changing environments
        - Effectively collaborate and share responsibilities for disaster management across all levels of government, industry and communities
        - Effectively communicate to engage all stakeholders in disaster management
        - Incorporate risk-based planning into disaster management decision making
        - Continuously improve disaster management through implementation of innovation, research and lessons learned
- State Disaster Management Plan, in accordance with the DM Act (s 49), supports the LDMP.
- District Disaster Management Plan, in accordance with the DM Act (s 53), supports the LDMP.
- Queensland Prevention, Preparedness, Response and Recovery Disaster Management Guidelines, in accordance with the DM Act (s 63).
- Inspector-General Emergency Management, Emergency Management Assurance Framework (EMAF), (www.igem.qld.gov.au) in particular the disaster management standard in accordance with the DM Act (s16N(1)). This assists with entities responsible for disaster management in the State in relation to the undertaking of disaster management.

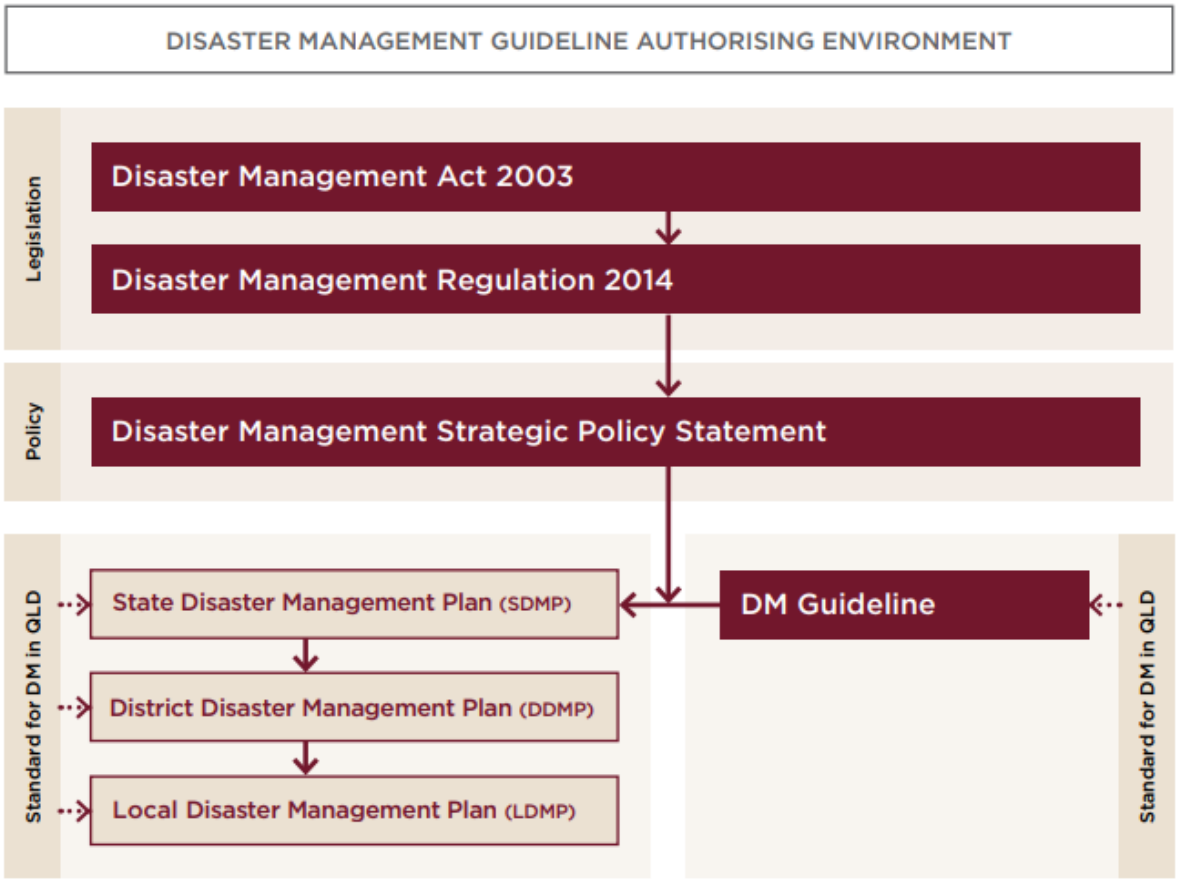


Figure 1 – Disaster management documents authorising environment.

Emergency Management Assurance Framework (EMAF)

The LDMG considers the intent of the EMAF and the Standard for Disaster Management in Queensland (the Standard) to optimise disaster management in the LGA. The EMAF incorporates the Standard, good practice attributes, assurance activities and principles.

The Standard, incorporates shared responsibilities that are considered with indicators and accountabilities (governance, doctrine, people, enablers and continuous improvement) that strive to meet outcomes. The EMAF, the Standard and shared responsibilities with outcomes are detail in Figure 3-5 respectively and further information is available at Queensland Government, Inspector-General Emergency Management (IGEM) (www.igem.qld.gov.au).

Figure 3 – EMAF.

Figure 4 – The Standard.

Shared responsibilities

The shared responsibilities, and the outcomes that align to them are listed below. Details, including the accountabilities and their criteria and indicators for each outcome, can be found on the following pages.

Shared responsibilities	Outcomes	
Managing risk	**Outcome 1**	There is a shared understanding of risks for all relevant hazards
	Outcome 2	Risk is managed to reduce the impact of disasters on the community
Planning and plans	**Outcome 3**	There is a shared understanding of how the impact of disasters will be managed and coordinated
	Outcome 4	Plans outline and detail how the impact of disasters on the community will be reduced
Community engagement	**Outcome 5**	Entities proactively and openly engage with communities
	Outcome 6	The community makes informed choices about disaster management, and acts on them
Capability integration	**Outcome 7**	Resources are prioritised and shared with those who need them, when they need them
	Outcome 8	Entities develop integrated capabilities and shared capacity to reduce the impact of disasters on the community
Operations	**Outcome 9**	Response operations minimise the negative impacts of an event on the community and provide the support needed for recovery
	Outcome 10	Relief operations minimise the negative impacts of an event on the community and provide the support needed for recovery
	Outcome 11	Recovery operations minimise the negative impacts of an event on the community and provide the support needed for recovery
Collaboration and coordination	**Outcome 12**	Entities proactively work together in a cooperative environment to achieve better results for the community
	Outcome 13	A collaborative culture exists within disaster management
Common language	**Outcome 14**	Common language is used by all entities within Queensland's disaster management arrangements

Figure 5 – Shared responsibilities with outcomes.

Purpose of plan

This plan details the arrangements within the Richmond LGA to assist with the prevention/mitigation, preparedness, response and recovery. Prior to, during and after a likely or known disaster event/s. This will consider an all hazard approach. The disaster management with authorised, relevant and appropriate stakeholders is important with consideration of risks and application of relevant disaster management plans and support. The disaster operations are detailed in Figure 6, that includes response and recovery.

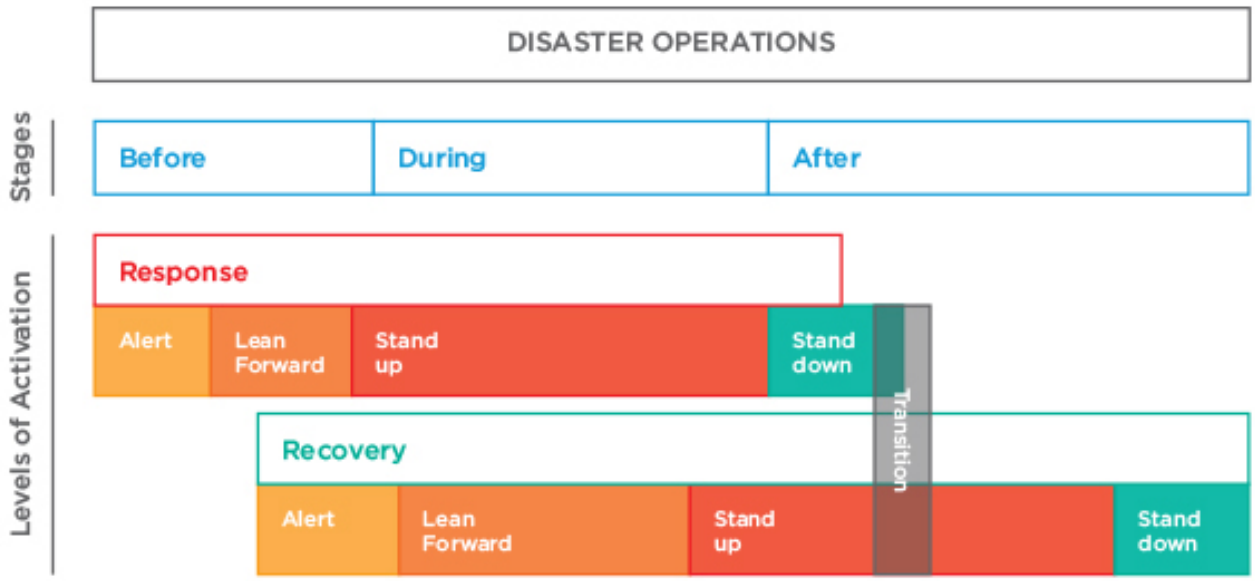


Figure 6 – Disaster operations.

Guiding Principles

All events, whether natural or caused by human activity, should be managed in accordance with any relevant disaster management policy.

Under section the DM Act (s4A), disaster management in Queensland is based on four principles:

- Comprehensive approach.
- All hazards approach.
- Local disaster management capability.
- Support by the state group and district groups to local governments.

Comprehensive approach

The comprehensive approach to disaster management as detailed in Figure 7, comprises four phases in the Queensland Prevention, Preparedness, Response and Recovery Disaster Management Guidelines, known as PPRR Guidelines. They are a balance between reduction/mitigation of risk, enhancement of community resilience, whilst providing effective response and recovery capabilities:

- Prevention/Mitigation, such as a reduction of a known or expected risks.
- Preparedness, through training, exercises, workgroups and development of plans.
- Response, for an event that may involve triggers.
- Recovery as the result of an event, if evidence indicates.

Figure 7 – Comprehensive approach.

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.

Hazard and associated primary agencies

It is important to understand the identified hazard, associated primary/lead agencies and respective plans, that are detailed in Figure 8.

Hazard	Plan	Primary agency
Animal and plant disease	• Australian Veterinary Emergency Plan (AUSVETPLAN) • Australian Aquatic Veterinary Emergency Plan (AQUAVETPLAN) • Australian Emergency Plant Pest Response Plan (PLANTPLAN) • Biosecurity Emergency Operations Manual	Department of Agriculture and Fisheries (DAF)
Biological (human related)	• State of Queensland Multi-Agency Response to Chemical, Biological & Radiological Incidents	Queensland Health
Radiological	• State of Queensland Multi-Agency Response to Chemical, Biological & Radiological Incidents	Queensland Health
Bushfire	• Wildfire Mitigation and Readiness Plans	Queensland Fire and Emergency Services (QFES)
Chemical	• State of Queensland Multi-Agency Response to Chemical, Biological & Radiological Incidents	QFES
Heatwave	• Heatwave Response Plan	Queensland Health
Pandemic	• Pandemic Influenza Plan • Australian Health Management Plan for Pandemic Influenza	Queensland Health
Ship Sourced Pollution	• Queensland Coastal Contingency Action Plan (QCCAP)	Department of Transport and Main Roads (DTMR)
Terrorism	• Queensland Counter Terrorism Plan	Queensland Police Service (QPS)

Figure 8 – Identified hazards and associated primary agencies.

Disaster response functions and associated lead agencies

Disaster response functions and associated lead agencies are detailed in Figure 9. The respective disaster management plans are available through either the Queensland Disaster Management website or the respective agency. Further disaster management roles, responsibilities and networks as identified by each agency are detail in the State Disaster Management Plan, Appendix C.

Response Function	Description	Lead agency
Evacuation management	To safeguard the lives of community members it may be necessary for evacuations to occur. LDMGs will manage evacuations in their area of responsibility. Arrangements for evacuations both voluntary and directed will be outlined in the Local Disaster Management Plan.	Local Disaster Management Groups (LDMGs)
	Queensland uses the Australian Red Cross national database system: "Register. Find. Reunite." which assists in locating individuals and responding to enquiries regarding people who may be in a disaster affected area **register.redcross.org.au**[43]	Australian Red Cross
Search and rescue	During a disaster event the occurrence of rescue operations is likely to increase. Queensland Police Service will provide the overall coordination of multi-agency response to search and rescue incidents. Queensland Fire and Emergency Services (QFES) and Queensland Ambulance Service (QAS) will provide rescue assistance across a range of emergency situations.	Queensland Police Service (QPS)
Public health, mental health and medical services	Public health management and emergency medical response during a disaster event is described in the Queensland Health Disaster and Emergency Incident Plan: **www.health.qld.gov.au/public-health/disaster**[44] The response structure aligns with Queensland's disaster management arrangements in establishing that matters are to be responded to at the local level by the relevant Hospital and Health Services (HHS) and request for state assistance escalated via the district level or the State Health Emergency Coordination Centre (SHECC).	Queensland Health
Mass casualty management	A mass casualty event is an incident or event where the location, number, severity or type of live casualties requires extraordinary resources. Mass casualty management includes: • treatment of injured • transport and reception of injured • provision of health and medical services • provision of clinical recovery services. Queensland Health is the responsible agency for the provision of an integrated response to mass casualty management. The Mass Casualty Sub-plan annexed in the Queensland Health Disaster Plan describes these responsibilities in further detail and is linked to the national AUSTRAUMAPLAN.	Queensland Health
Mass fatality management (including victim identification)	Mass fatality management: In cases of mass fatalities, Queensland Health and QPS have joint responsibility for: • management of deceased, including coordination of transport and victim identification • notification of, and liaison with, next of kin • liaison with and support to the State Coroner.	Queensland Health QPS
	Victim identification: QPS is responsible for the provision of disaster victim identification services, part of which may require the establishment of a temporary human remains holding area.	QPS

Response Function	Description	Lead agency
Emergency medical retrieval	Emergency medical retrieval covers a primary response to an incident in a pre-hospital situation. A primary response may involve road ambulance, aeromedical and specialist vehicles. Queensland Health, through a collaborative arrangement between the Queensland Ambulance Service and Retrieval Services Queensland, will coordinate emergency medical retrieval.	Queensland Health
Temporary emergency accommodation	For people displaced from their homes by an event, LDMGs and the Department of Housing and Public Works, work together to provide temporary emergency accommodation solutions. The arrangements are outlined in the Temporary Emergency Accommodation Sub-plan. Where local capacity has been exhausted, DHPW can assist LDMGs by providing temporary accommodation advice and solutions for government disaster response and / or recovery workers.	LDMGs Department of Housing and Public Works (DHPW)
Emergency supply	Emergency supply is the acquisition and management of emergency supplies and services in support of displaced persons during disaster operations. Emergency supply can include: • resource support in the establishment of forward command posts, community recovery centres and / or disease control centres including furniture, equipment and materials • resource support for community evacuation centres including: furniture, bedding materials, health and hygiene products • bottled and bulk potable water supplies • temporary structures (i.e. marquee and portable ablution facilities) • small plant and equipment hire services. To support local economies affected by disasters, every effort should be made to exhaust local supplier networks before requesting assistance from outside the impacted area. Where local capacity is exhausted, QFES coordinates the acquisition and management of emergency supplies, through the State Disaster Coordination Centre (SDCC) when activated, or through the SDCC Watch Desk outside activation periods. Agencies are to use their own internal acquisition / supply and support resource capability before requesting further support. The acquisition of specialist resources requiring a permit, licence or specific technical knowledge is the responsibility of the respective agency.	QFES
Resupply	When communities, properties or individuals are isolated for an extended period from their normal sources of food and basic commodities, support will be provided, dependent upon the respective circumstances. The entity isolated will determine the responsible agency / group. Therefore, multiple lead agencies are identified for this function.	QFES LDMGs QPS
Damage assessments	QFES undertakes damage assessments to gather information about the number of homes and other buildings damaged and the nature of the damage, post impact. QRA may provide support for this activity and may also support local governments with assessment of damage to infrastructure which may be subject to claims under the **Natural Disaster Relief and Recovery Arrangements** (NDRRA).	QFES

Response Function	Description	Lead agency
Reticulated water supply and dam safety **Energy infrastructure (electricity, gas and liquid fuels)**	The Queensland Government undertakes a policy and regulatory role in partnership with energy and water supply partners across the state. Contacts for emergency information are available from the **Department of Natural resources, Mines and Energy**[45]	Department of Natural Resources, Mines and Energy (DNRME)
Telecommunications industry engagement	Department of Housing and Public Works provides the coordination of advice from telecommunication carriers in relation to outages and restoration progress.	DHPW
Transport systems	Once a disaster is declared, a district disaster coordinator or declared disaster officer has the power to close affected roads to traffic. Support to close roads will be provided by Department of Transport and Main Roads and local government.	Traffic management: QPS Road recovery: DTMR
Building and engineering services	DHPW coordinates and delivers the building and engineering services required for most government building assets (such as local schools and police stations). In addition, and where local capacity has been exhausted, DHPW can assist LDMGs by sourcing additional building and engineering services.	DHPW
ICT infrastructure	DHPW maintains and restores critical government ICT infrastructure.	DHPW
Human and social recovery	Local governments and disaster management groups may be required to determine the immediate relief needs of persons displaced or severely affected by an event. Where identified recovery needs of affected Queenslanders cannot be met by the capacity of local community services, requests for immediate human and social recovery support may be escalated via LDMGs and District Disaster Management Groups (DDMGs) for state agency assistance. Department of Communities, Disability Services and Seniors may support recovery hubs to provide initial grants payments for personal hardship assistance, psychological first aid and access to a range of support and information services to enable community transition into post-event recovery.	Department of Communities, Disability Services and Seniors (DCDSS)

Figure 9 – Disaster response functions and associated lead agencies.

Local disaster management capability

Local knowledge and networks ensure that local level capability and contextualisation is recognised as the frontline for disaster management. Section 4A(c) of the Act states that local governments are primarily responsible for managing events in their LGA. This is managed through the Richmond LDMG. The current capability in the Richmond LGA that is likely to assist in disasters are:

- Council:
    - Conducts community engagement through council authorised website that have been proven and established communication links.
    - A list of plant and equipment that may be required is available through Richmond Shire Councils Financial Management System, SynergySoft. This list is reviewed at least annually and during an event availability is confirmed.
    - Preferred suppliers list is reviewed at least annually and details the likely local capability such as helicopter support. This is available through Richmond Shire Councils Records Management System, InfoXpert. The Records Officer or Chief Executive Officer are the contact and can be contacted on (07) 4719 3377 or 0438 685 224 out of hours.
    - Finance department to provide capability for the Disaster Funding support through QRA.
- QPS:

    - Qty 2 with QPS powers, qty 1 administrative support, one vehicle with surge capacity available from Charters Towers or Mount Isa.

- Queensland Fire and Emergency Services (QFES):
    - Emergency Management Coordinator (EMC)
    - State Emergency Service (SES):
        - Local Controller supported with vehicle and trailer.
        - Ability to accommodate general SES services.
        - A flood boat capability is available in Julie Creek or Flinders if needed.
        - Further resources can be requested if local resources are unavailable through calling 132 500.
    - Fire and Rescue Service (FRS):
        - Qty 3 personnel
        - Qty 1 Alpha appliance (fire truck)
        - Ability to attend all incidents a standard type 3 appliance, fire truck.
        - If required Swift Water Rescue capability may be allocated from Townsville or Mount Isa.
        - Chemical (HAZMAT) support may be available from Mounts Isa or Townsville.
    - Rural Fire Service (RFS):
        - Qty 13 brigades, predominately Primary Producer Brigades.
        - Qty 1 primary station
        - Qty 73 slip on units
        - Qty 4 trailers
        - Qty 1 appliance (truck)
        - Qty 175 volunteers
        - Qty 11 Fire Wardens
- Queensland Health Richmond has a Multi-Purpose Health Service is a 10 bed facility (4 bed long term, 6 acute beds) with a Medical Superintendent on call.
- Department of Agriculture and Fisheries (DAF) – Has staff contactable via telecommunications if required.

Support by district and state groups

To ensure the LDMG is able to effectively conduct disaster operations, the Queensland's Disaster Management Arrangements (QDMA) as detailed in Figure 10, are employed. The DM Act establishes a DDMG for each district, to provide support to LDMG, when required. The Richmond LDMG is part of the Townsville Disaster District. The Queensland Disaster Management Committee (QDMC) may provide additional support and assistance when required or requested by a DDMG and/or LGA/LDMG. Federal support may also be implemented, such as support from the Australian Defence Force (ADF) under Defence Assistance to Civil Community (DACC) protocols. Further information is available in the Defence Assistance to Civil Community (DACC) Categories Reference Guide – RG.1.210.

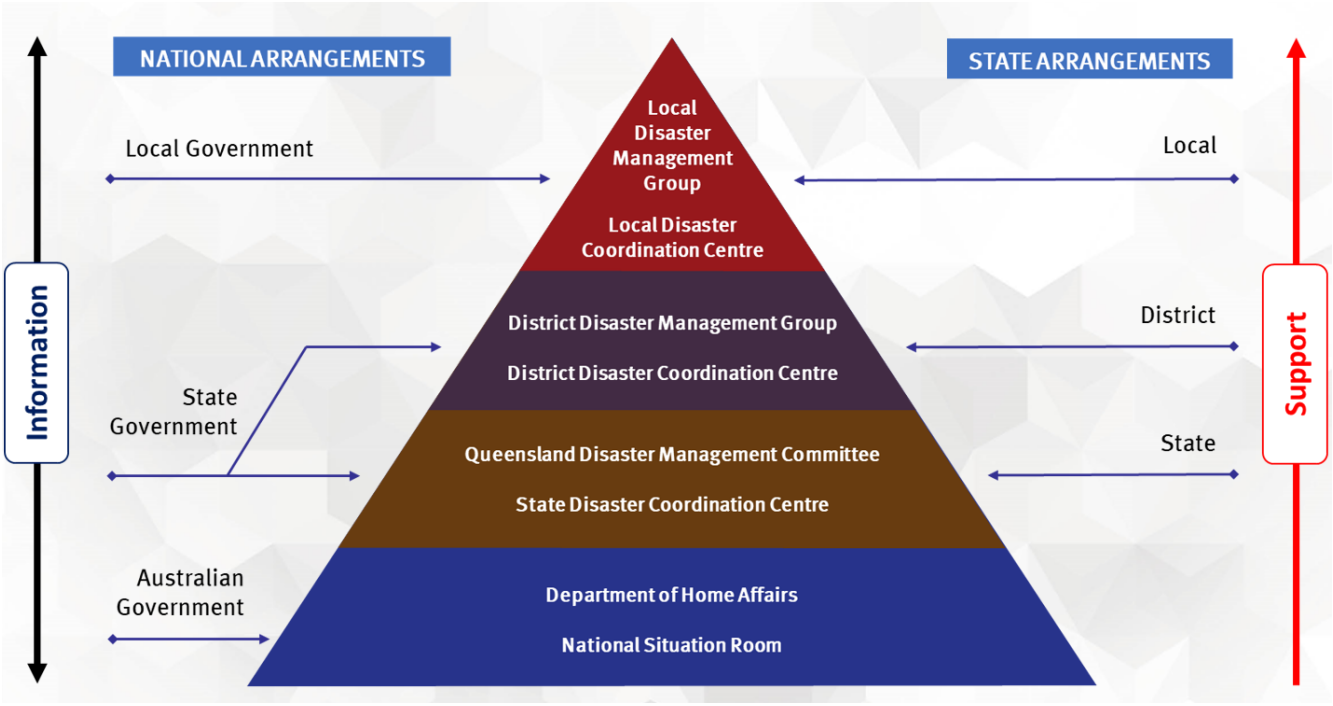


Figure 10 – QDMA.

Request For Assistance (RFA)

When all local resources have been exhausted a Request For Assistance (RFA) may be submitted to the DDMG/DDCC in accordance with the Request for Assistance Reference Guide – RG.1.196 and the RFA process detailed in Figure 11. The Reference Guides and process are available on the Queensland Disaster Management website (www.disaster.qld.gov.au).

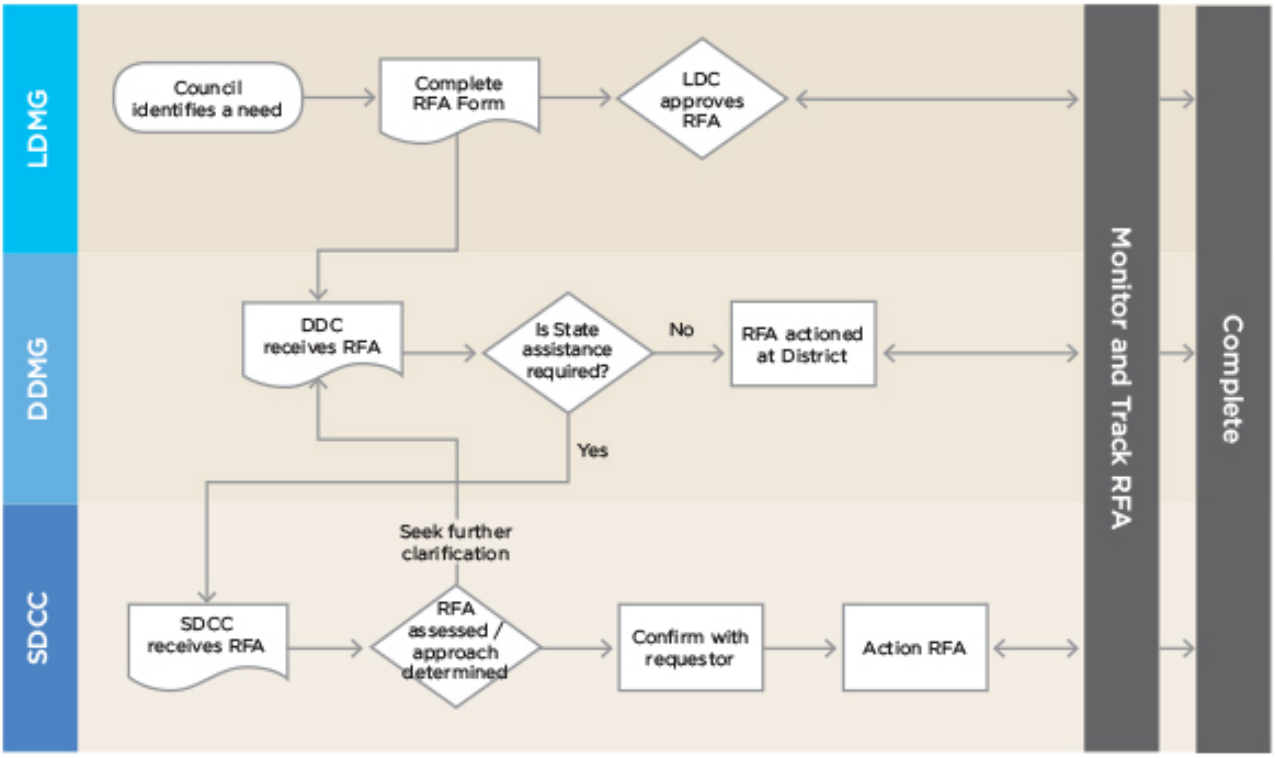


Figure 11 – RFA process.

LDMG

Membership for the LDMG is detailed in the Disaster Management Regulation 2014 (the Regulation) and DM Act. The LDMG Responsibilities Manual – M.1.030, is available on the Queensland Disaster Management website (www.disaster.qld.gov.au) that details the responsibilities and process for membership appointment to the LDMG. The membership categories are as follows:

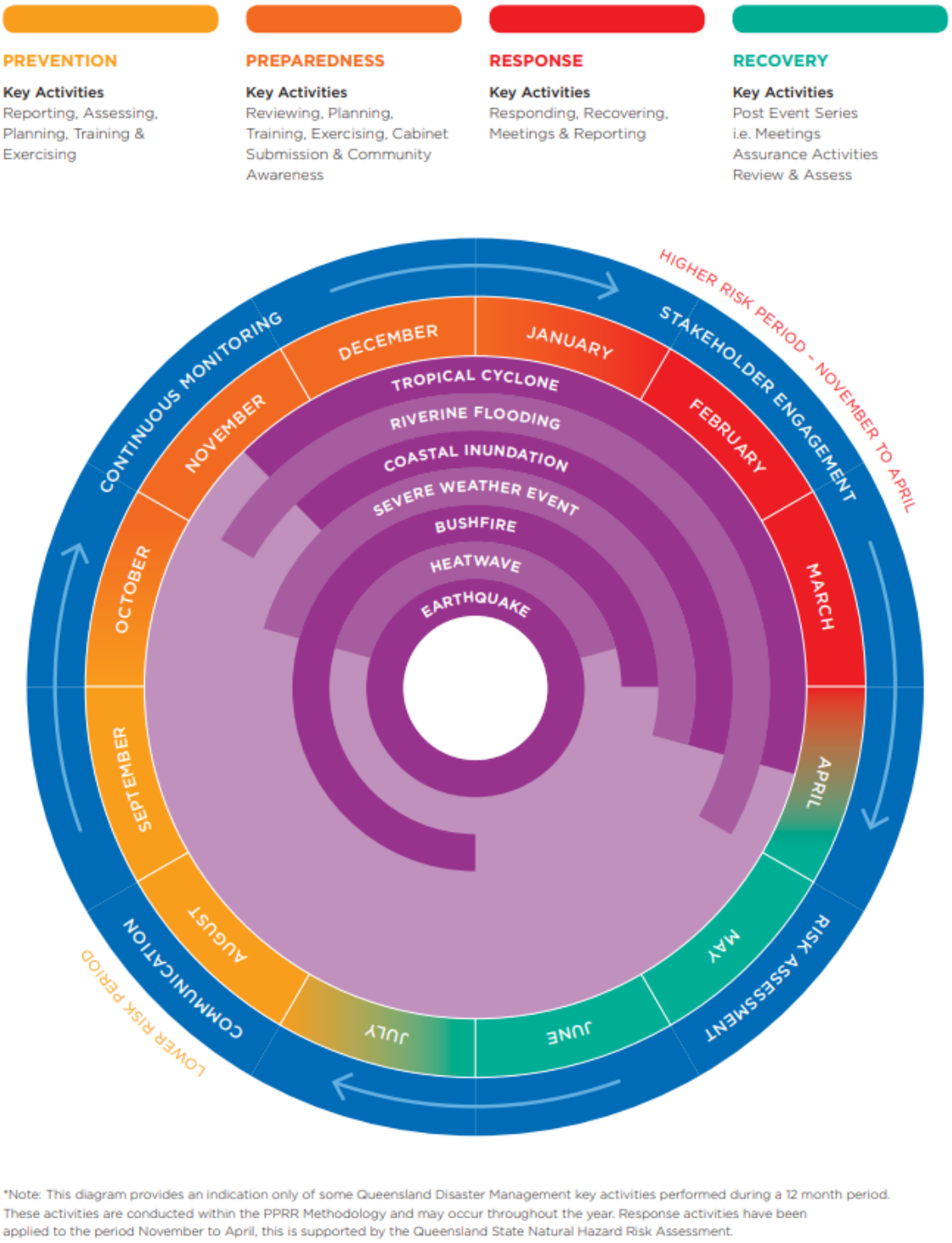
- Members (Chair, LDC, members), that have voting rights and legislative quorum requirements being one-half of members plus one the Regulation (s13).
- Advisors, that provide specific advice to the LDMG members, do not have voting rights or are required for quorum.
- Deputies, that may be required to conduct a role for a position as an alternate when the primary membership is not possible, for members they may be required to vote and fulfil quorum requirements as detailed in the Regulation (s 14).
- Essential service providers can be requested in accordance with the DM Act (s48A), such as but not limited to gas, electricity, telecommunications, water, sewerage. Essential service providers as consultants, have no voting right or quorum requirement.

It is recommended the membership be reviewed for currency and optimisation against LGA risks. Disaster management training compliance and timely membership amendments are recommended at times such as but not limited to:

- Quarterly review.
- On identification of a new hazards or event.
- When directed/advised (Chair, LDC and/or EMC).

Meeting frequency

The LDMG must meet as often as necessary to maintain adequate operations; however, at least once every 6 months in accordance with the Regulation (s12(1)). The disaster management activities calendar in Figure 12, may provide likely tasks over the year to assist with planning and operational tasks. Further information for the LDMG formation, members and functions is detailed in Figure 13. The LDMG is able to use the Council record system to control all records during a disaster and information is managed in accordance with Richmond Shire Council document management procedures. This ensures that document protection, confidentiality and disposal of information is adequately managed within policy and the Queensland Information Privacy Act 2009.



*Note: This diagram provides an indication only of some Queensland Disaster Management key activities performed during a 12 month period. These activities are conducted within the PPRR Methodology and may occur throughout the year. Response activities have been applied to the period November to April, this is supported by the Queensland State Natural Hazard Risk Assessment.

Figure 12 – Disaster management activities calendar.

Group	Local Disaster Management Group (LDMG)
Formation	A local government must establish an LDMG for the local government's area in accordance with the *Disaster Management Act 2003*. Local government areas are indicated in Schedule 1 of the **Disaster Management Regulation 2014**[7].
Members	• chaired by a councillor of the local government • members may be appointed by the relevant local government • members are to be appointed only if the relevant local government is satisfied the person has the necessary expertise or experience • the LDMG must include at least one person nominated by the Commissioner, Queensland Fire and Emergency Services (CQFES).
Functions	• Chair must appoint a Local Disaster Coordinator (LDC) to manage disaster operations for the area • Chair may appoint a Local Recovery Coordinator (LRC) in consultation with the State Recovery Policy and Planning Coordinator (SRPPC) to manage recovery at the local level, ideally not the same person as the LDC • Chair manages and coordinates the business of the group and ensures it performs its functions • ensure consistency between local disaster management operations and the **Queensland Disaster Management 2016 Strategic Policy Statement**[3] and other policies and procedures decided by the Queensland Disaster Management Committee (QDMC) • develop effective disaster management, and regularly review and assess disaster management • assist local government to prepare a disaster risk assessment and a Local Disaster Management Plan (LDMP) • identify and coordinate resources for disaster operations in the area • identify and provide advice to the district group about residual risks and support services required by the local group to facilitate disaster management and disaster operations • ensure community awareness about mitigating the adverse effect of an event and preparing for, responding to and recovering from a disaster • establish and review communications to ensure their effectiveness for use when a disaster happens • establish, when necessary, a recovery group.
Communications	To the relevant district group: • information about a disaster or recommendations on disaster operations • advice on residual risks and support services required by the local group • written notice of group members annually.

Figure 13 – LDMG formation, members and functions.

LDMG Membership is determined by the Chair with advice from the LDC and EMC. After the members are approved by the Chair, they are updated in the Disaster Management (DM) Learning Management System (LMS) by the EMC. The contact details are managed by the LDC and secretary in accordance with the Queensland Information privacy Act 2009.

The LDMG has representation on the Townsville DDMG. This Richmond DDMG Member is the Chair of the LDMG. The Deputy DDMG Member is the Deputy Chair of the LDMG, unless advised otherwise.

The Richmond LDMG/LGA is part of the Townsville Disaster District as detailed in Figure 14. The Townsville Disaster District comprises of Hinchinbrook, Palm Island, Townsville, Burdekin, Charters Towers, Flinders and Richmond. In addition to the Townsville Disaster District, Richmond has Etheridge, Croydon, McKinlay and Winton LGA on the Richmond LGA border.

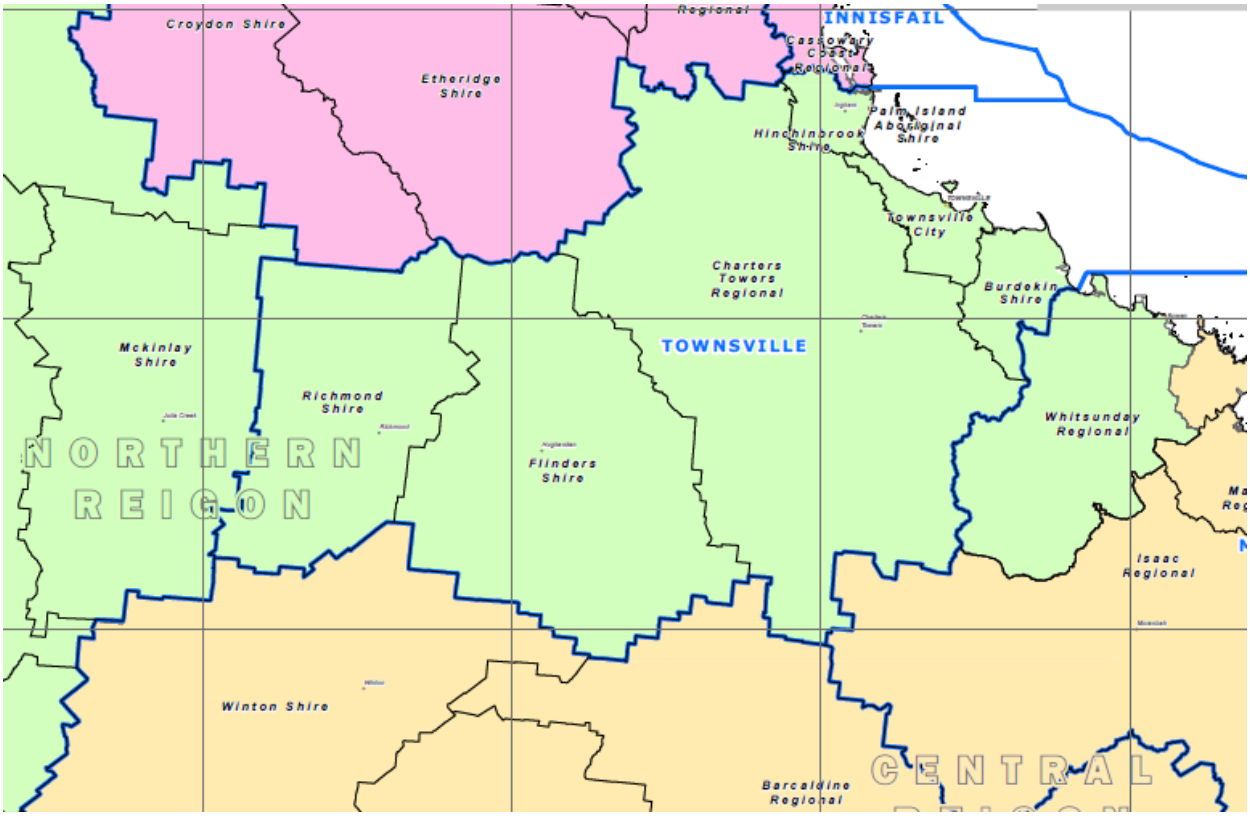


Figure 14 – Richmond LDMG/LGA and Townsville Disaster District.

Meeting location

The frequency of meetings will be coordinated by the Chair/LDC, generally broadcast by the secretary. Meetings can be conducted in person, video or telephone conference to meet the operational and legislative requirements. The location for LDMG meetings will be:

- **Primary** - Richmond Shire Council building at 65 Goldring Street Richmond.
- **Alternate -** Richmond Police Station at the intersection of Goldring and Clayton Street Richmond.
- In the event both locations are not available the LDMG (Chair or LDC) will advise.

Local Disaster Coordination Centre (LDCC)

When disaster related tasks and work in the LGA has increased, a LDCC may be established. This will be on direction of the Chair or LDC. The building locations will be the same as the LDMG meetings with any adjustments confirmed by the Chair or LDC. The LDCC intent is to operationalise the functions of the LDMG and provide control, coordination and situational awareness back to the LDMG. The operational capabilities likely within the LDCC are:

- Receive and manage information from the community and associated other sources.
- Coordinate local resources and information.
- Identify tasks where extra resources are needed.
- Disseminate information and Request for Assistance (RFA) to the District Disaster Coordination Centre (DDCC).
- Tasks as define by the LDMG, in particular planning, implementation of strategies and activities.

Reporting

The expected LDMG and LRG reporting is detailed in Figure 15. Additional reports may be requested.

Report:	Submitted to:	Frequency:	Format:
LDMG meeting minutes	LDMG/DDMG	Following each meeting	Minutes
LDMG Report	DDMG/EMC	Annually	As requested
LDMG Membership	DDMG/EMC	Annually	As requested
Situation Reports	DDMG/EMC	As negotiated	As requested
Activation Report	DDMG/EMC	As required	As requested
LRG minutes	LRG and/or DCDSS	After specific meeting	As requested
LDMG status	DDC/QDMC/EMC	End of each financial year	As requested, EMC may assist.
Disaster Management Plan Assessment	IGEM	Annually, generally by 31 Aug	As requested

Figure 15 – LDMG and LRG reports.

Continuous improvement

The LDMG has a culture of continuous improvement from learnings, good practice and innovation. This is achieved through the Queensland Disaster Management, Lesson Management Framework. The Lessons Management principles, process for developing and sharing lessons are detailed in Figure 16 and 17 respectively. Further information is available on Queensland Government Inspector-General Emergency Management website (www.igem.qld.gov.au). The opportunities and activities that have permitted continuous improvement are detailed in Figure 18.

Workgroups. A workgroup may be conducted to review strategies for identified areas of interest in disaster management. Processes that provide analysis such as but not limited to the following may assist:

- Strength (internal, positive factors), Weakness (internal, negative factors), Opportunities (external positive factors) and Threats (external, negative factors) (SWOT).
- People, Process, Organisation, Support, Technology and Training (PPOSTT) process.

Debriefs. A debrief must be conducted after a response or recovery event. This can be a hot debrief immediately after or a more formal post event debrief such as days to months afterwards. The outcomes of the debrief can assist with lessons management. An After Action Review (AAR) is another method that may assist.

Evaluations. The disaster management stakeholders and/or community may be involved with evaluations such as surveys, questionnaires and consultation to seek feedback. The outcomes of the feedback can assist with continuous improvements.

Principles of Lessons Management – Queensland Disaster Sector	Principles of Lessons Management – National[2]
• Promoting a learning culture across the sector. • Driving continuous and sustained improvement that advocates good practice. • Evidence based to inform future policy and decision-making. • Forward thinking and adaptable to changes in ideas and technology.	**Lessons Focussed** – Lessons management is focussed on activities that use learning opportunities to inform change and future improvement.
• Providing a safe environment that builds trust and encourages active participation. • Keeping people and communities at the centre. • Building the confidence and maturity of the sector over time.	**Inclusive** – Lessons management benefits from collaborative approaches and the involvement of relevant stakeholders during phases of the lessons cycle.
• Advancing the collaborative ability of the sector with a coordinated approach to lessons management. • Providing scalability for use at all levels of the sector.	**Consistent** – Lessons management uses consistent, scalable, sustainable processes, tools and themes to support stakeholders to contribute and enable trend analysis across events, organisations and jurisdictions.

Figure 16 – Lesson Management principles.

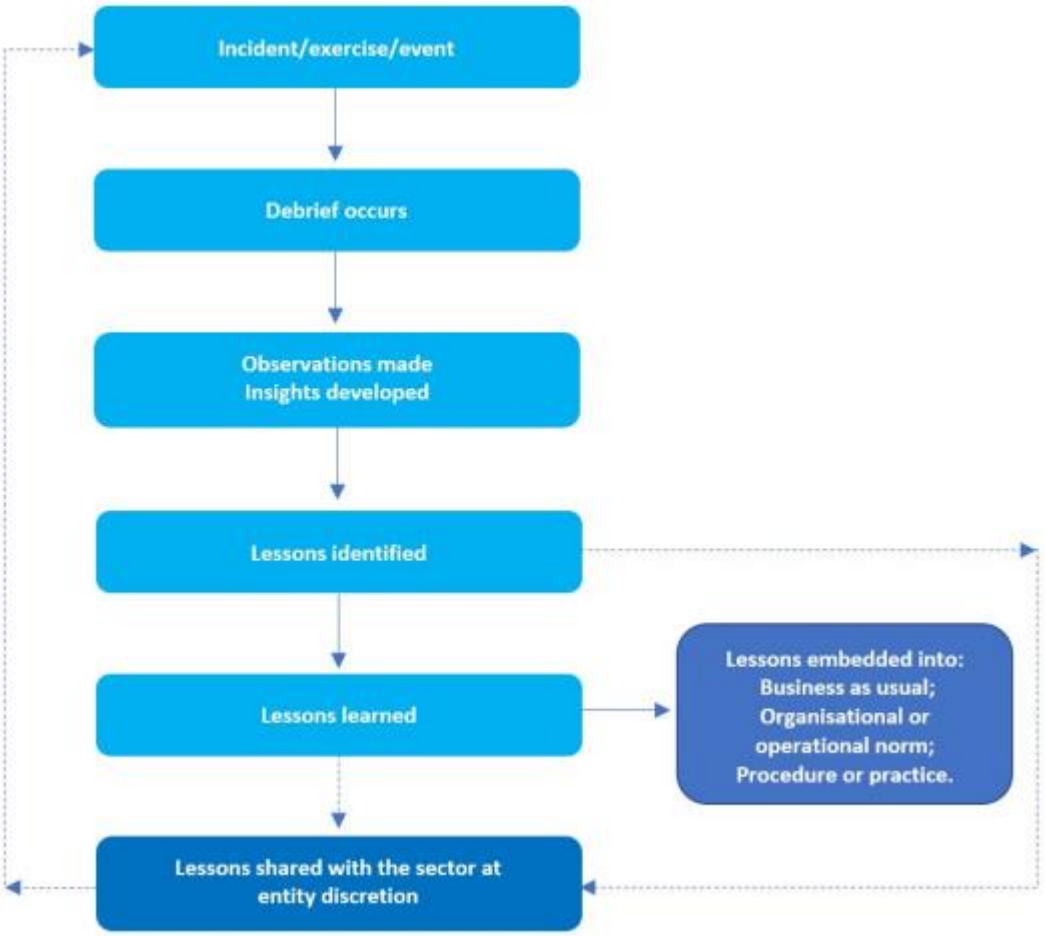


Figure 17 – Process for developing and sharing lessons.

Date	Type	Process	Participants	Specific lessons learnt	Opportunities for improvement (identify these in priority)	Action Plan (actions derived from lessons learnt)	Completion Date (for evaluation of implementation of Action Plan)
Jan-Feb 2009	Activation	Moderate & major flooding Shire area Cyclone Ellie	Richmond LDMG	Improved dissemination of public information through web, setting up coordination centre, public notices and customer service.	Procedure in Qld Disaster Management Arrangements to be followed	Development of Richmond Recovery Plan	March 2009
Dec 2010	Activation	Minor to moderate flooding Shire area	Richmond LDMG	How to run a coordination centre.	Diversion of 132 500 to Council's call centre.	Need for social Media	Dec 2012
Feb - Mar 2011	Activation	Cyclone Yasi & flooding	Richmond LDMG	Continuation of running a coordination centre.	Diversion of 132 500 to Council's call centre.	Need for social Media	Dec 2012
Oct 2012	Exercise	Good Neighbour	Townsville Disaster District, LDMG, DDMG & other agencies	Evacuation, interoperability of Guardian, DDMG support	Public awareness campaign for storm tide	Public education program – Cyclone Saturday, etc	Ongoing
Jan-Feb 2019	Activation	Northern Monsoon Severe	Richmond LDMG	Development of additional LDMG positions,	Optimised LDMG membership and disaster	N/A	Ongoing

Date	Type	Process	Participants	Specific lessons learnt	Opportunities for improvement (identify these in priority)	Action Plan (actions derived from lessons learnt)	Completion Date (for evaluation of implementation of Action Plan)
		Weather Event		development of recovery roles	management roles		
Mar 2020	Activation	Pandemic COVID-19	Richmond LDMG	Development of Sub Plan Pandemic COVID-19	Deeper level of capability awareness within the Richmond LGA to mitigate and/or manage potential outbreaks.	Sub Plan Pandemic approved. BCP reviewed and updated.	Ongoing
Mar 2021	Activation	State-wide lock down by Premier due to COVID-19	State and all LGA	PPE requirements to be able to abide by directions. Limited stock in Richmond, we were able to seek from Townsville.	Linking shortfalls to EMC before DDMG.	N/A	Ongoing
Dec 2021	Exercise	GALVANISE	Richmond LDMG	Fire and COVID related topics, that involved a practical phase at the Richmond Aerodrome.	Evaluation report tabled at following LDMG meeting	As per report	Ongoing
Mar 2022	Pandemic Sub Plan	Review and Updates	Richmond LDMG	Review after COVID to refine the sub plan	On direction from lead Agency QLD Health the plan was reviewed with current COVID protocols	As per sub plan amendment register	Ongoing
Mar 2022	Exercise	IMPART	Richmond LDMG	Explore disaster related risks and events over the next 12months. Review and discuss the communication strategy. Discuss workshop and emergency alert. Show case Situational Awareness Platform and Disaster Management Portal	Report tabled at the LDMG meeting 16.03.2022	As per report	Ongoing
Nov 2023	LDMP	Review and Updates	Richmond LDMG				
Dec 2023	Exercise	SKEDADDLE	Richmond LDMG	Explore El Nino, Fire and Wet season risks, Communication strategy, AWS and EA. Discuss Evacuation Centre requirements and workshop Civic Centre capabilities and shortfalls.	Report tabled at LDMG meeting (TBC)		

Figure 18 – Continuous improvement.

Concept of disaster management operations

The LDMG intent is to provide adequate, timely and efficient support to:

- Build and encourage community resilience through timely and authorised community engagement.
- Encourage and operationalise Business Continuity Plans (BCP), in particular linked to disaster management or operations.

- Foster local led support and solutions for local disasters.
- Seek the RFA process when all local resources are exhausted under the QDMA.
- Establish recovery when required.
- Develop a Continuous improvement culture through innovation and lessons management initiatives.

Disaster management training

In accordance with the DM Act (s 16A(c)) persons performing functions under the DM Act in relation to disaster operations must be appropriately trained. The Queensland Disaster Management Training Framework (QDMTF) provides the learning pathways as detailed on the Disaster Management website – Awareness and Training. The Queensland Fire and Emergency Services (QFES), EMC provides guidance and assists with training strategies.

Disaster risk assessment

A disaster risk assessment, can be conducted through a variety of methods. It is important to use current and evidence-based risk assessments to evaluate potential impacts of hazards, recognise areas of exposure and their vulnerabilities with effective community engagement. The residual risk is to be accepted, treated or managed that may include broadcasting awareness to the DDMG and/or adjacent LGA. The Risk Based Planning Manual – M.1.137 and Queensland Emergency Risk Management Framework (QERMF) Risk Assessment Process Handbook is available on the Queensland Disaster Management Website (www.disaster.qld.gov.au) that has further detail. The comprehensive disaster management planning approach is detailed in Figure 19.

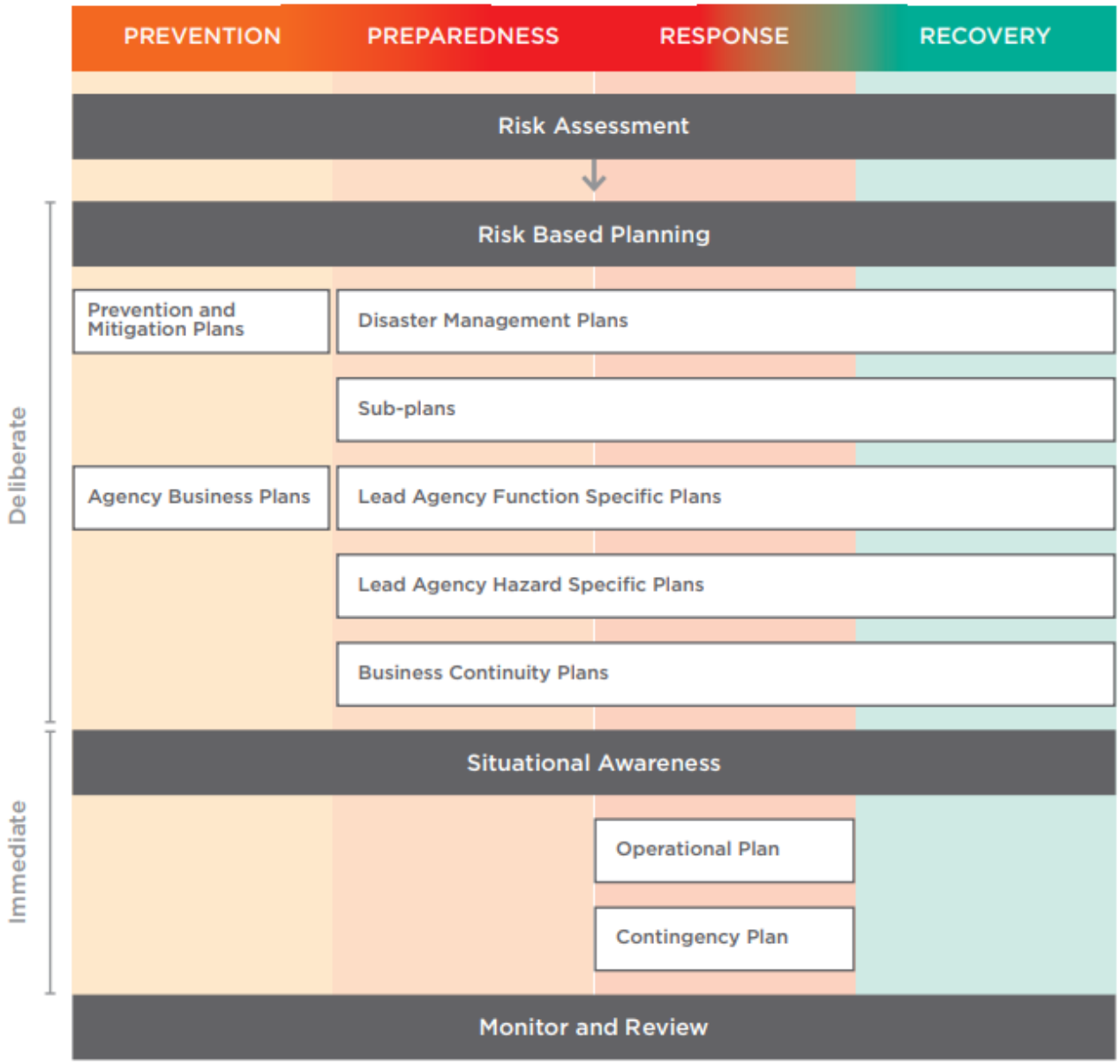


Figure 19 – Comprehensive disaster management planning approach.

References that can assist in disaster risk assessment are:

- ISO 31000:2018 Risk management – Principles and guidelines
- SA/SNZ HB 436.1: 2020 Risk management guidelines – companion to AS/NZS ISO 31000:2018
- SNZ AS/NZS IEC 31010 - Risk management – Risk assessment techniques
- AS/NZS 5050: 2020 - Managing disruption - related risk
- National Emergency Risk Assessment Guidelines (NERAG) (Australian Emergency Management Institute, 2020)

The Hazard risk wheel, QERMF and QERMF risk-based planning cycle is detailed at Figure 20 - 22 respectively. This may be used to assist with a likely awareness of risks and process.

Elements to consider in the Richmond LGA may include:

• Essential infrastructure:

- Power (High Voltage (HV) and Low Voltage (LV) transmission lines, circuit towers, sub-stations, generators).
- Communications (mobile towers, NBN infrastructure, phone lines).
- Water (reservoirs, water mains pipes, pump stations, sewerage treatment plants).
- Transport infrastructure (hubs such as airports, heliports).
- Fuel infrastructure (oil & gas pipelines, bulk fuel storage, oil & gas terminals).

• Access/resupply:

- Roads (National Highways, State controlled roads, LGA roads, Private strategic roads).
- Rail (freight, light and heavy rail).
- Air (domestic aerodromes, heliports, Defence resources).
- Maritime (ports, ferry terminals, river crossings).

• Community and social:

- Population centres (towns, remote communities and isolated areas)
- Demographics (vulnerable or at-risk persons, medically dependent people, young or elderly people, people from non-English speaking backgrounds).
- Social infrastructure (schools, youth centres, community centres).
- Centres of governance (town halls, council offices).
- Building stock (precode-1980 buildings, post-1980 building stock).
- Emergency shelters, places of refuge, surge capacity to support disaster events or recovery.
- Cultural elements (areas or objects of cultural or religious significance).

• Medical:

- Hospitals.
- Clinics.
- Aged care facilities.

• Significant industries:

- Heavy industry and manufacturing.
- Transport and logistics.
- Agriculture.
- Tourism.
- Local or other significant industries.

• Environmental:

- Local species and ecosystems.
- Areas of Ecological Significance (AES).

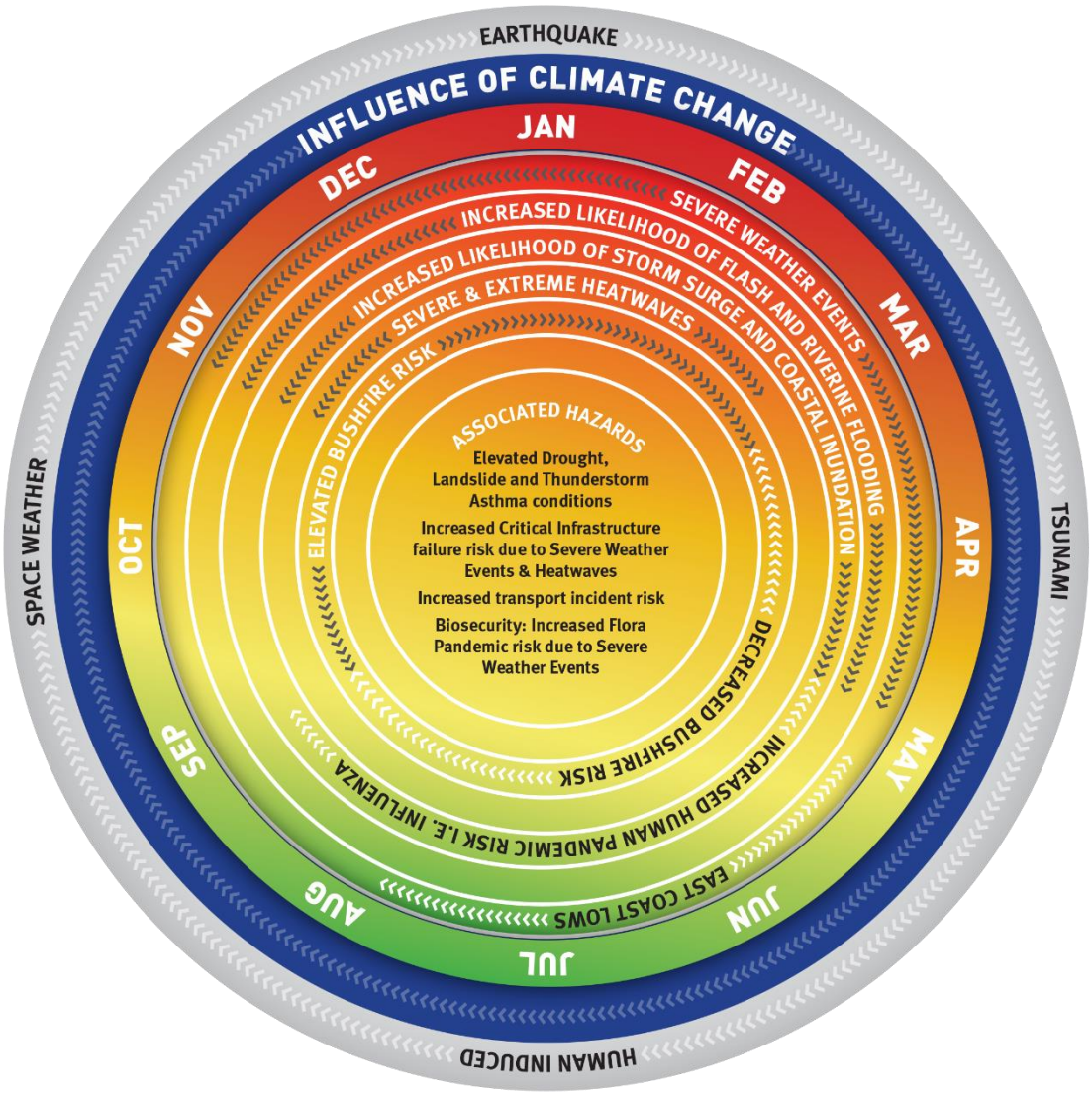


Figure 20 – Hazard risk wheel.

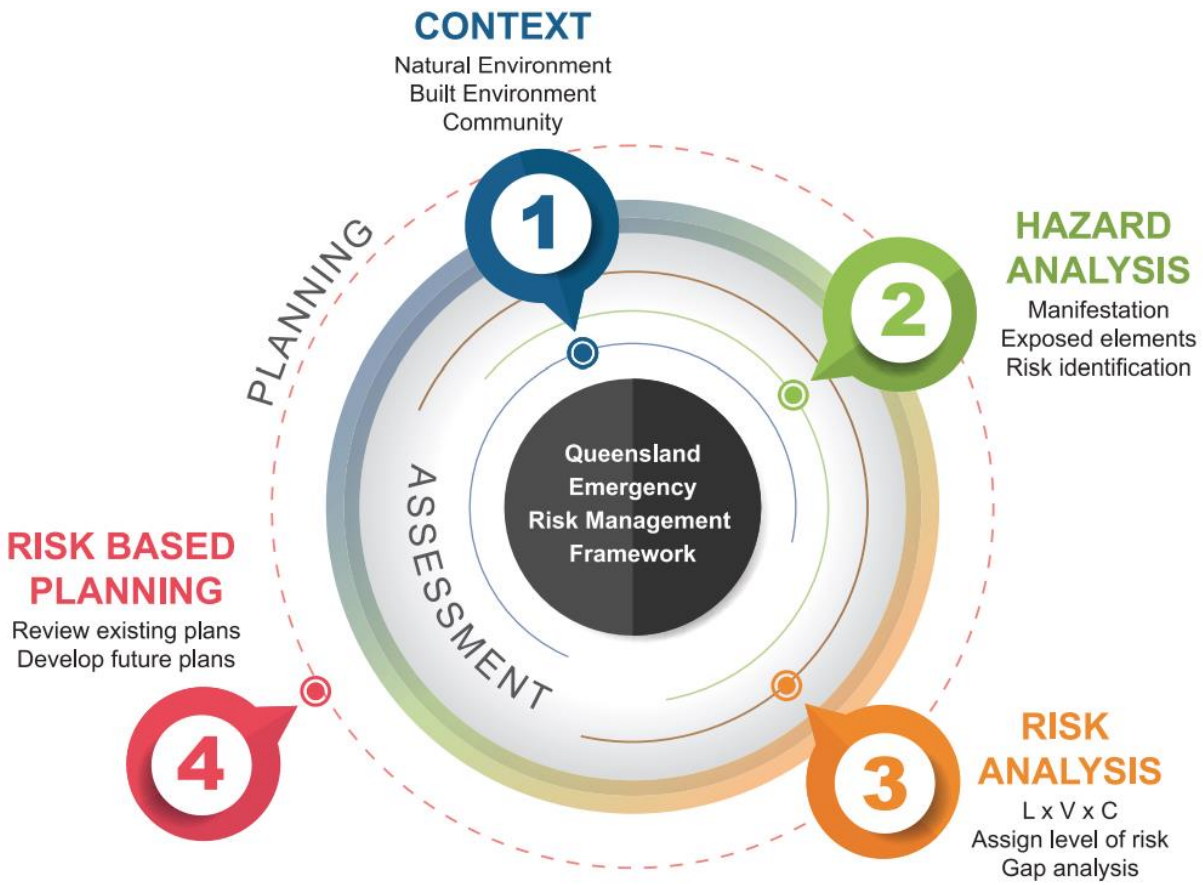


Figure 21 – Queensland Emergency Risk Management Framework (QERMF).

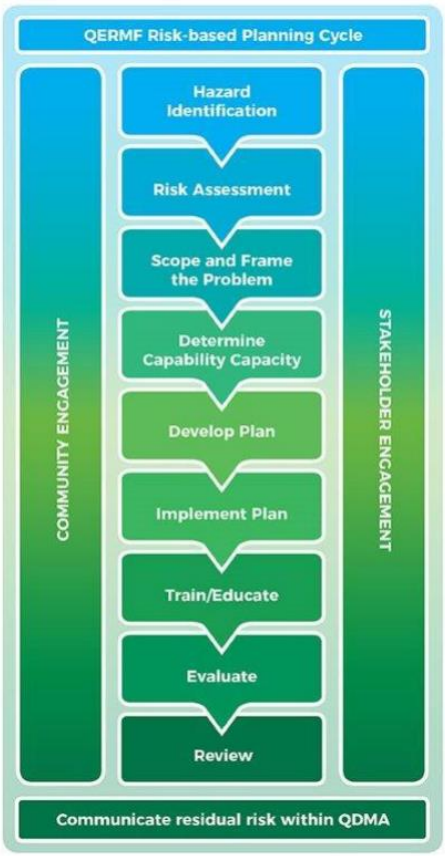


Figure 22 – QERMF risk-based planning cycle.

Risk related reports/assessments

State level disaster risk assessments are available on the Queensland Disaster Management website (www.disaster.qld.gov.au) / Risk (QERMF) / Assessments. The assessments can assist with information that may require contextualisation for the LGA. Some examples are such as but not limited to:

- State Disaster Risk Report (SDRR) 2023.
- State Natural Hazard Risk assessment 2007.
- State Heatwave Risk Assessment 2019.
- State Earthquake Risk Assessment 2019.
- Severe Wind Hazard Assessment Updated Oct 2022.
- North Queensland Monsoon Trough Technical Flood Report – January and February 2019 from the Bureau of Meteorology.

Probability of risk

Many options exist to assess probability of an event and risk. The QERMF probability table can be used to analyses likelihood of risks between Annual Exceedance Probability (AEP) and Average Recurrence Interval (ARI) as detailed in Figure 23.

Likelihood	Annual exceedence probability (AEP)	Average recurrence interval (ARI) (indicative)
Almost certain	63% per year or more	Less than 1 year
Likely	10% to <63% per year	1 to <10 years
Unlikely	1% to <10% per year	10 to <100 years
Rare	0.1% to <1% per year	100 to <1000 years
Very rare	0.01% to <0.1% per year	1000 to <10,000 years
Extremely rare	Less than 0.01% per year	10,000 years or more

Figure 23 – QERMF probability table, Likelihood Annual exceedance probability (AEP) and Average Recurrence Interval (ARI).

In consultation with the Australian Institute for Disaster Resilience, Geoscience Australia and the Queensland Reconstruction Authority, the likelihood table against a 50-year time frame may be used to assist as detailed in Figure 24.

Likelihood Table		
Historical Likelihood	**Likelihood Level**	**Definition**
Has occurred 3 or more times in the last year or at least each year over the last 5 years	**Almost Certain**	Almost certain to occur in most cases
Has occurred twice in the last 5 years	**Likely**	Likely chance of occurring in most cases
Has occurred twice in the last 10 years	**Possible**	Might occur in most cases
May occur, and has occurred once in the last 20 years	**Unlikely**	Not expected to occur in most cases
May only occur in exceptional circumstances or has occurred only once in the last 50 years or more	**Rare**	Will only occur in exceptional circumstances and has not occurred in most cases

Figure 24 – Likelihood table against 50-year time frame.

Community context and LGA

Geography

The Richmond LGA is a Rural Remote Shire located approximately halfway between Townsville and Mount Isa, or 500 kms west of Townsville. Population of approx 1000, the main employers include the Richmond Shire Council, Queensland Rail, Queensland Health and Queensland Education. The main industries in the Shire are beef and tourism industries. From April to October each year the town of Richmond's population can increase substantially due to visiting tourists. The township consists of residential houses, commercial and industrial premises and public infrastructure.

Richmond is situated on the south of the state's longest river, the Flinders, and is 216 metres above sea level on the border of the rolling downs country.

South of Richmond the open downs stretch away east, south and west covered by a thick body of Mitchell and Flinders Grasses. North of the Flinders River is a narrow belt of the same fertile country broken by belts of timber and limestone ridges. Further north-east, the black boulders of the basalt wall are visible and in the north-west the forest country stretches away to the Gulf. Richmond lies at latitude 20deg 41.9 min S and longitude 143deg 6.6min E and has a distinct wet and dry season.

The bulk of the Richmond Shire consists of Downs Country, fed by the Flinders River and its tributaries. There are extensive Mitchell and Flinders grass plains in the Shire and also some rugged rocky hills (the Gregory Range) in the far north of the Shire, and the Basalt Byway to the south-east, bordering the Flinders Shire.

The Shire consists of approximately 300 rural properties. The Shire is divided by the Flinders River. The three major crossings to the north of the Shire are the Flinders River Crossing on the Croydon Road, Villadale Road Crossing on the Flinders River and the Hulberts Bridge Crossing at Maxwelton on the Maxwelton Frontage Road. When inundated these three crossings cut access from the township of Richmond to approximately 150 properties. In the South of the Shire there are black soil plains. This renders a majority of properties inaccessible from the main arterial roads of the Flinders Highway and Winton Road. As a result the remaining 150 properties in the South may also become isolated from the township of Richmond during the wet season. The average annual rainfall assessed (1961 – 1990) is detailed in Figure 25. The 2019 annual rainfall compared to historical rainfall observations is detailed in Figure 26. This calculation included a significant severe weather event, the Northern Monsoon early 2019 that impact Richmond.

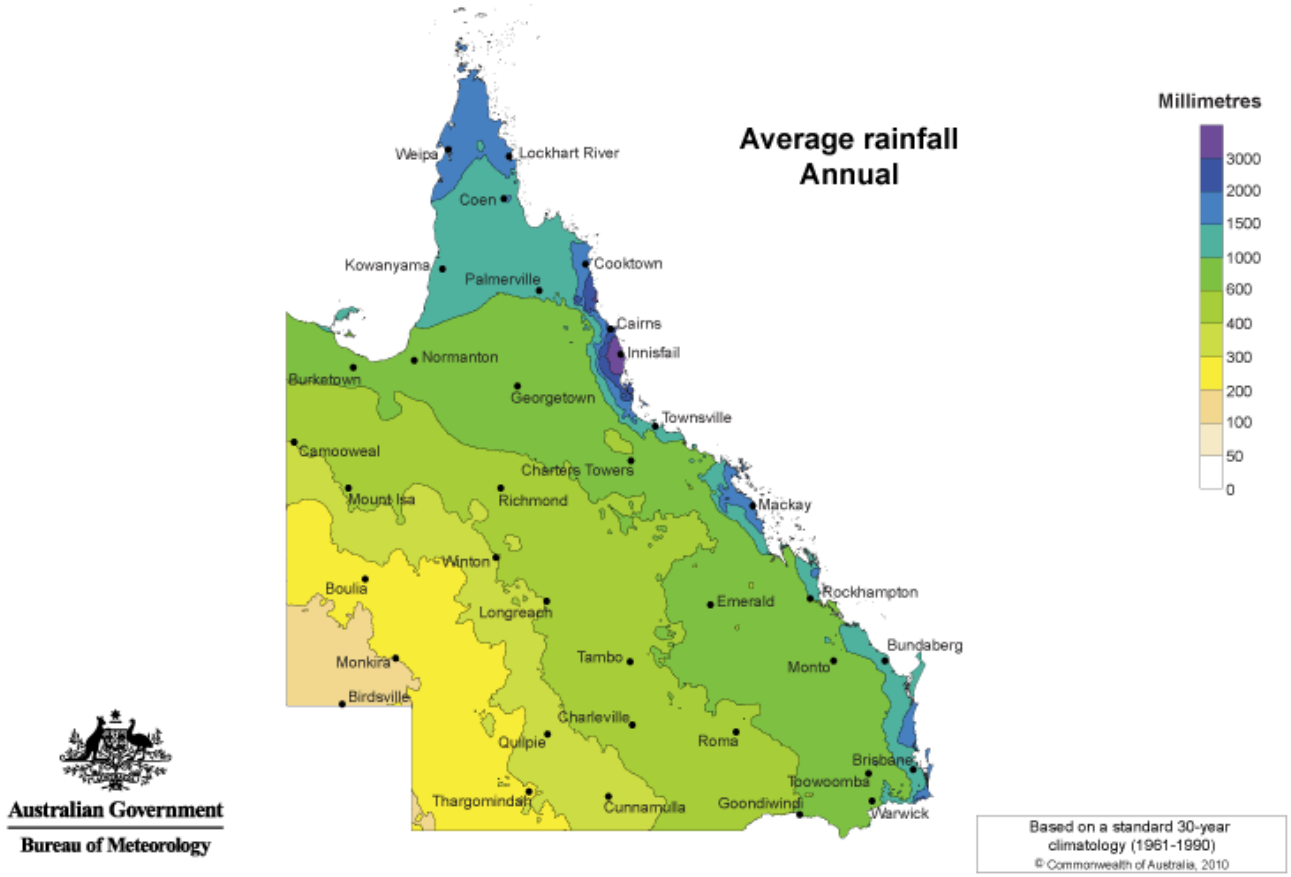


Figure 25 – Average annual rainfall (1961 – 1990).

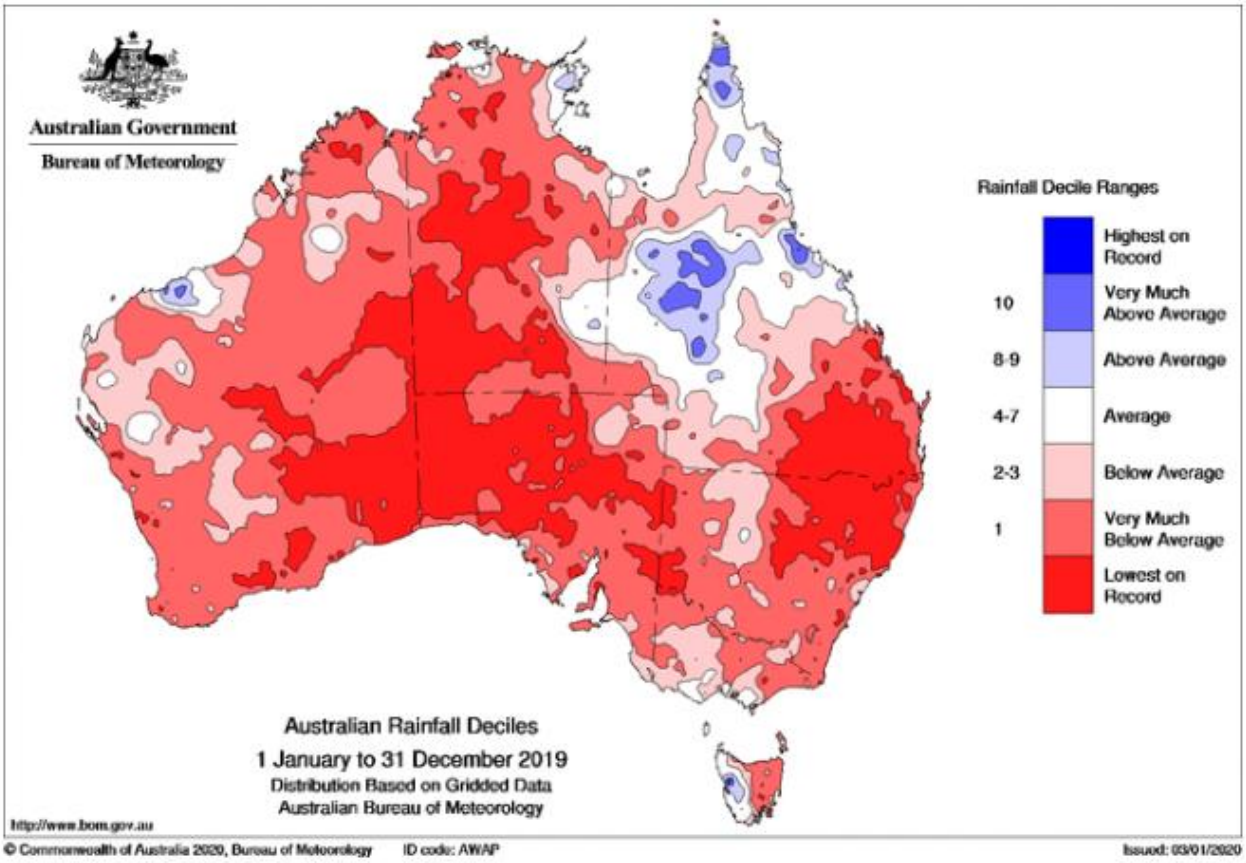


Figure 26 – 2019 annual rainfall compared to historical rainfall observations.

Demographics

The Richmond LGA comprises of the following community areas:

- Richmond
- Maxwelton
- Remote properties
- Likely isolated travelers/tourists

The Richmond LGA demographics, in accordance with the Geoscience Australia – Exposure Report Version 5, 2019. The demographics are detailed in Figure 27. The Queensland Regional Profiles are also available for current information from the Queensland Treasury – statistics.qpso.qld.gov.au/qld-regional-profiles. A report is in appendix A.

Demographic*	Event	QLD(Av)
Are all aged 65 or over	11.6%	15.9%
Includes persons aged 14 years and under	19.2%	25.7%
Includes an Indigenous person	8.4%	4.3%
Are a single parent family	5.6%	6.5%
Are in need of assistance for self-care activities	10.3%	10.3%
Include persons not proficient in English	0%	0.3%
Do not have access to a motor vehicle	4.7%	6.4%
No one has completed Year 12 or higher	28.9%	16%
Moved to the region in the last 1 year	9.9%	13.7%
Moved to the region in the last 5 years	26.3%	35.8%

Figure 27 – Demographics in the Richmond LGA.

Natural hazards

The Queensland State Natural Hazard Risk Assessment, defines Natural hazards as detailed in Figure 28.

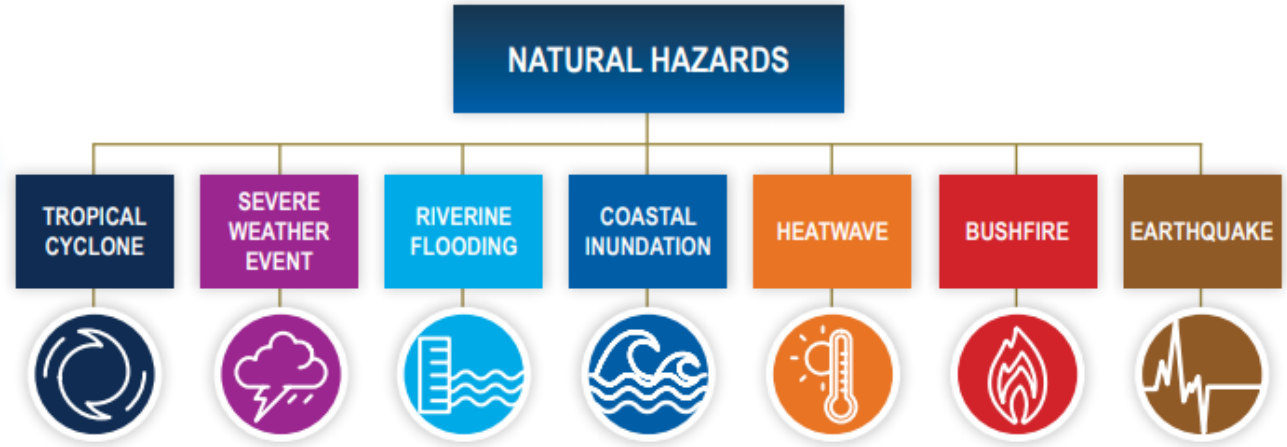


Figure 28 – Natural hazards.

Bureau of Meteorology (BOM) weather forecast districts

The Richmond LGA predominantly is within the Northern Goldfields and Upper Flinders BOM forecast districts. A Southern part of the LGA is within the Central West and a small North West area is within the Gulf Country. To the West out of the LGA is the North West BOM district. Figure 29 details the BOM forecast districts.

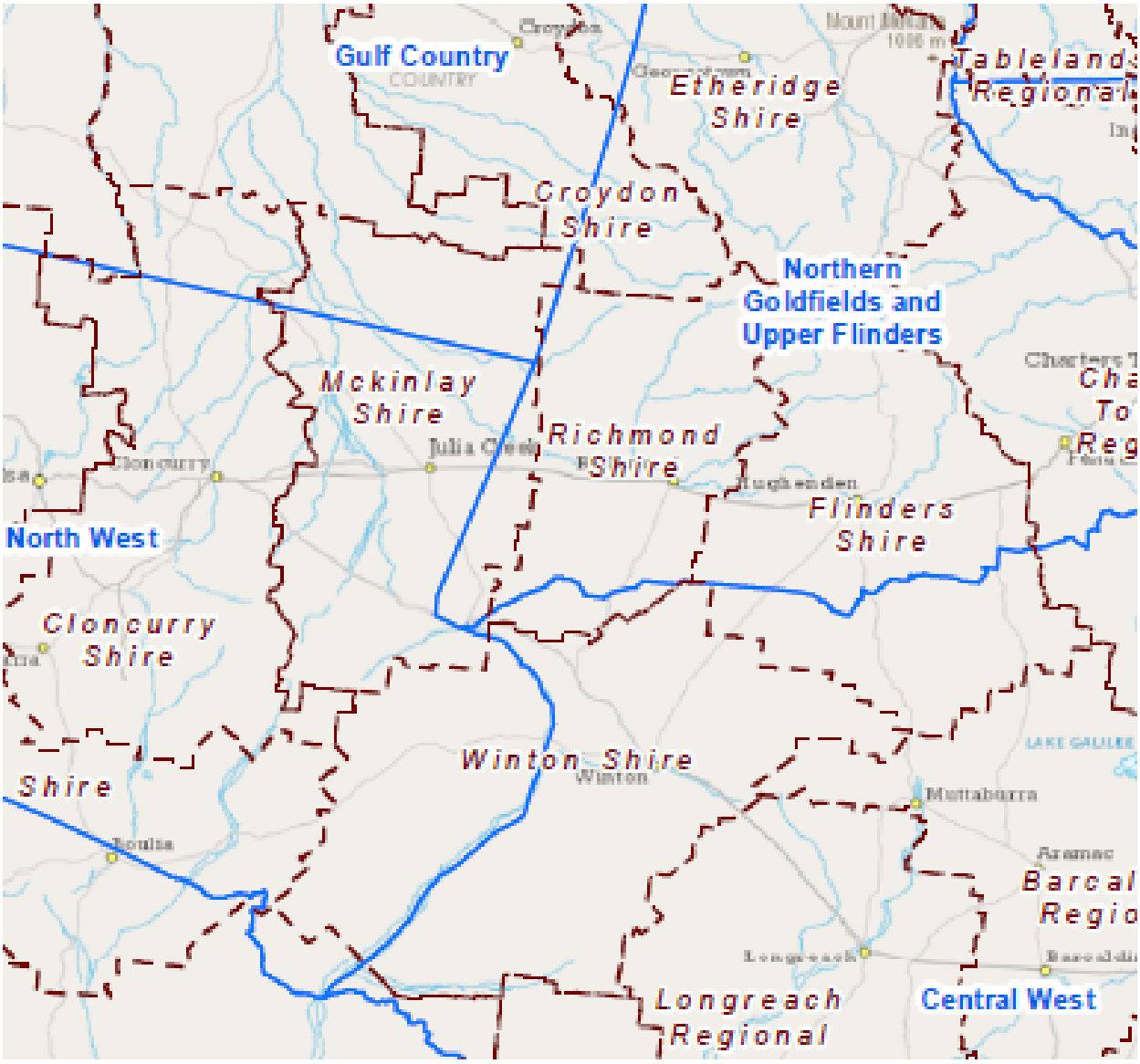


Figure 29 – Bureau of Meteorology (BOM) weather forecast districts.

River Systems

The major river system in the Shire is the Flinders River. A Flinders, Morning Basins, Flood Warning Network as at 30 Oct 20 is available on the BOM website. Figure 30, details part of this network in relation to the Richmond LGA.

Figure 30 – Flinders river flood warning network.

Flinders River Flood Risk

The Flinders River catchment is located in north west Queensland and drains an area of approximately 109,000 square kilometres. The river rises in the Great Dividing Range, 110 kilometres northeast of Hughenden and flows initially in a westerly direction towards Julia Creek, before flowing north to the vast savannah country downstream of Canobie. It passes through its delta and finally into the Gulf of Carpentaria, 25 kilometres west of Karumba. The Cloncurry and Corella Rivers, its major tributaries, enter the river from the southwest above Canobie. There are several towns in the catchment including Hughenden, Richmond, Julia Creek and Cloncurry.

Floods normally develop in the headwaters of the Flinders, Cloncurry and Corella Rivers. General heavy rainfall situations can develop from cyclonic influences in the Gulf of Carpentaria which cause widespread flooding, particularly in the lower reaches below Canobie.

The Richmond Shire Council has a number of uSee cameras located on its river and creek crossings that can be viewed at www.richmond.qld.gov.au – road conditions. The LDMG stay informed of river heights utilising the Bureau of Meteorology www.bom.gov.au and Department of Resources (www.resources.qld.gov.au) to assess the impact. Additional flood markers are proposed in a project funded under the Natural Disaster Resilience Program across the region.

Previous Flooding

Previous flood history for the Flinders River basin is well documented, with significant floods detailed in Figure 31. The towns of Hughenden, Richmond and Cloncurry have extensive peak height records. Detail of the

Flinders river at Richmond is detailed in Figure 32. During the 2019 Northern Monsoon several records in flood levels in the Richmond LGA were experienced as detailed in Figures 33 – 35.

Flinders river catchment assessment of the flood potential from BOM details:

- Major flooding requires a large-scale rainfall situation over the Flinders River catchment. The following can be used as a rough guide to the likelihood of flooding in the catchment:
- 100mm in 24 hours in isolated areas, with lesser rains of 50mm over more extensive areas will cause stream rises and the possibility of minor flooding. If similar rainfalls have been recorded in the previous 2-3 days, then moderate to major flooding may develop.
- 100mm in 24 hours will cause isolated flooding in the immediate area of the heavy rain.
- General 100mm or heavier falls in 24 hours over a wide area will most likely cause major flooding, particularly in the middle to lower reaches of the Flinders, Cloncurry and Corella Rivers.

Flood Event	Hughenden	Richmond	Cloncurry	Julia Creek	Walkers Bend
Feb 1944	3.66	9.75*	-	-	-
Jan 1946	5.03	10.06*	-	-	-
Jan 1951	2.90	10.47*	-	-	-
Mar 1955	2.90	11.43*	-	-	-
Jan/Feb 1974	2.05	8.47	7.26	5.43	15.67
Jan 1981	2.60	7.80	5.70	-	12.74
Jan 1984	2.10	8.40	4.80	3.16	11.95
Jan 1991	2.40	7.40	7.80	4.82	15.23
Feb 1991	3.90	7.50	4.85	3.85	11.57
Jan 2009	2.80	8.13	8.03	3.98	13.36
Feb 2009	2.90	8.21	7.79	-	15.06
Mar 2011	-	5.10	5.41	3.34	10.38
Jan 2016	-	-	3.33	-	11.17
Mar 2018	-	7.59	7.55	4.06	12.72
Feb 2019	3.60	9.38	6.67	5.03	17.12

Figure 31 – Flinders river basin, significant floods. * Note - early flood peaks in Richmond taken from a different site and are not directly relatable.

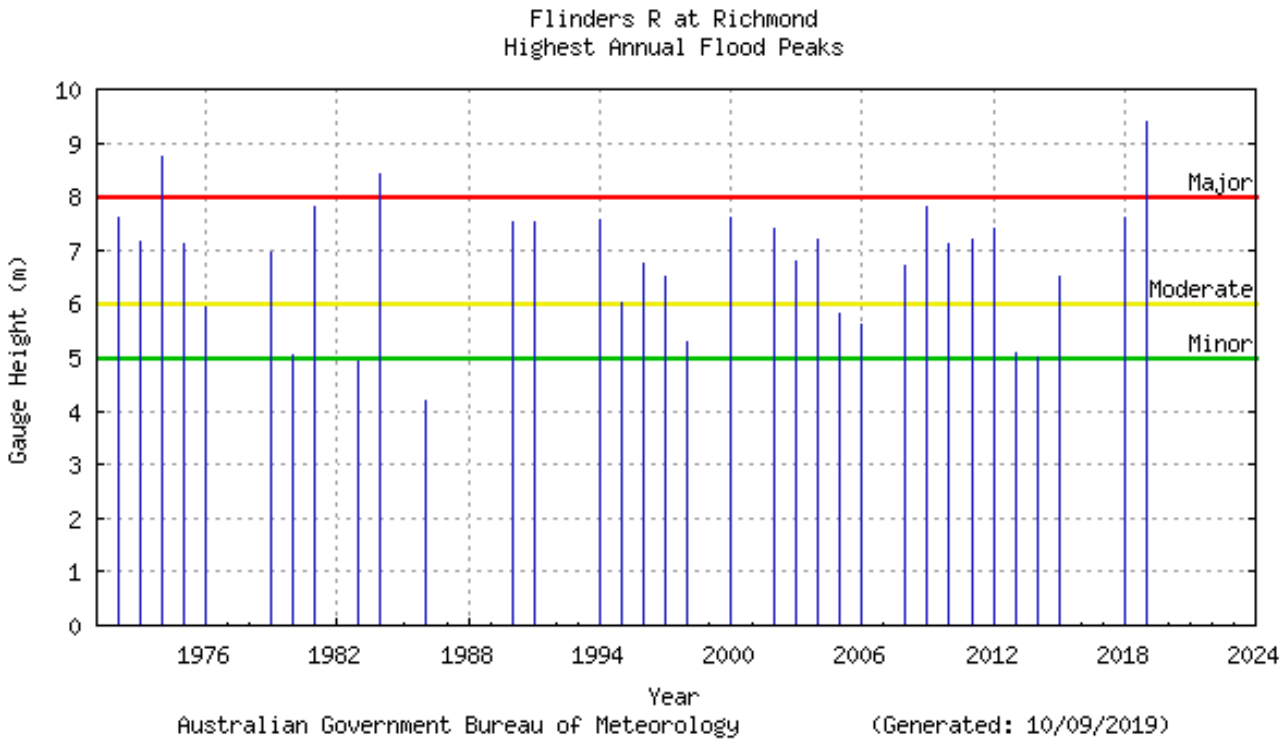


Figure 32 – Flinders river at Richmond highest annual flood peaks.

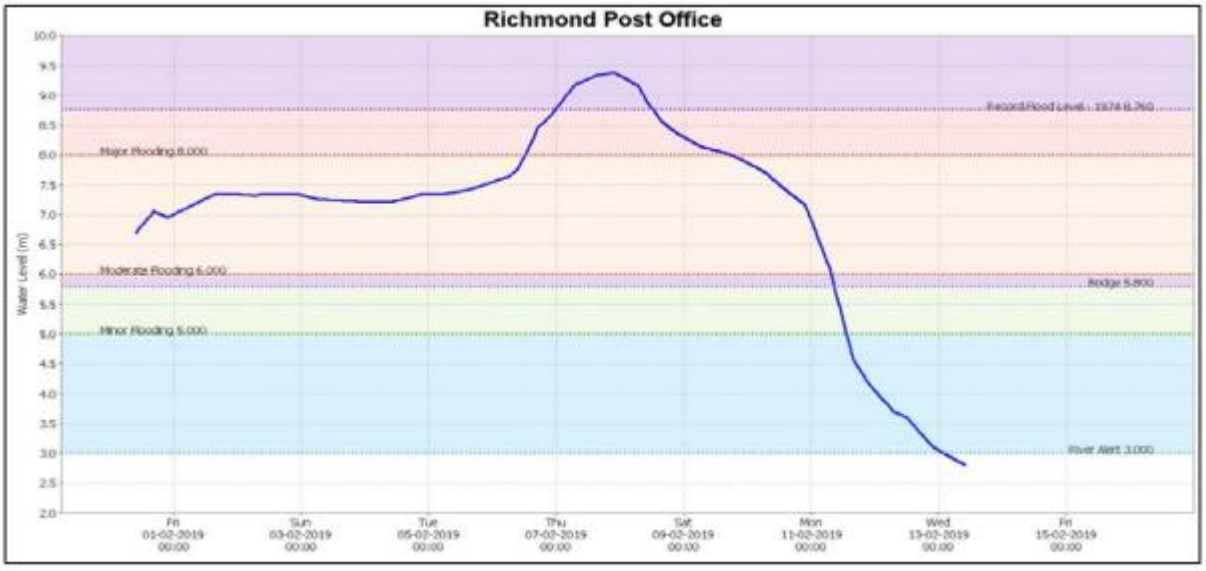


Figure 33 – Hydrography of the Flinders river at Richmond Post Office (manual station).

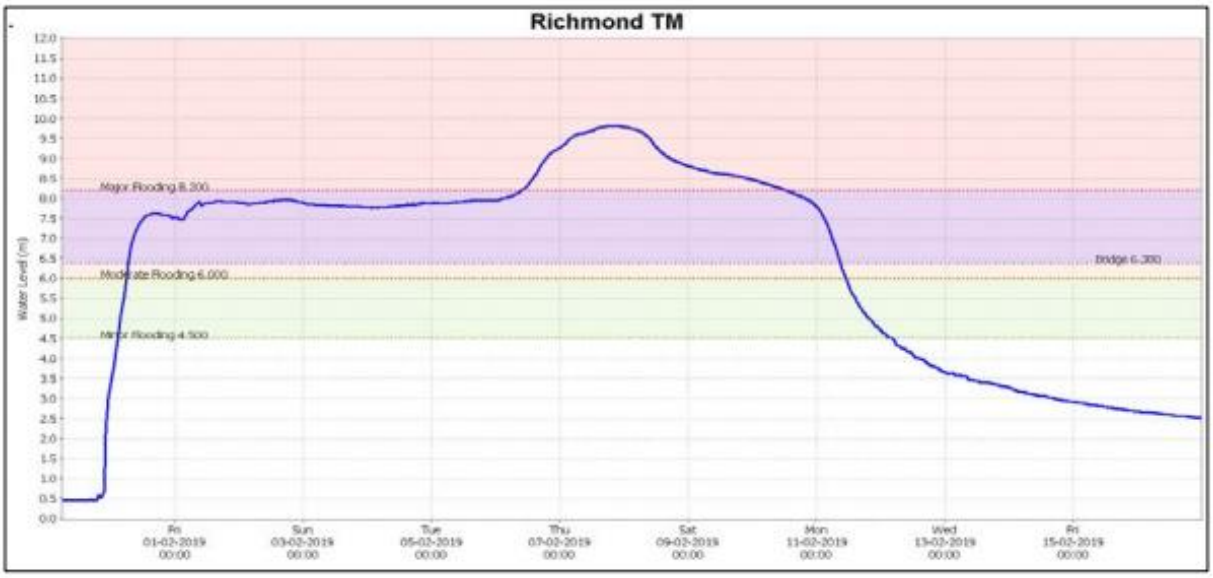


Figure 34 – Hydrography of the Flinders river at Richmond TM.

Station name	Height of Peak (m)	Date and Time of Recorded Peak	Flood Classification (m)			Flood class reached	Rank	Years of Record	Highest on record	
			Minor	Mod	Major				Ht (m)	Date
Richmond PO Manual	7.35	01/02/2019 03:00 PM	5	6	8	Moderate	2	130	7.59	Feb 2018
	9.38	01/02/2019 03:00 PM				Major	1		NEW RECORD	
Richmond TM	7.97	02/02/2019 04:00 PM	4.5	6	8.2	Moderate	10	47	8.76	Jan 1984
	9.81	07/02/2019 07:00 PM				Major	1		NEW RECORD	

Figure 35 – Flinders river catchment significant peak heights.

The flood classification at river height stations are as such:

- **Minor Flooding** - Causes inconvenience. Low-lying areas next to watercourses are inundated. Minor roads may be closed and low-level bridges submerged. In urban areas inundation may affect some backyards and buildings below the floor level as well as bicycle and pedestrian paths. In rural areas removal of stock and equipment may be required.
- **Moderate Flooding -** In addition to the above, the area of inundation is more substantial. Main traffic routes may be affected. Some buildings may be affected above the floor level. Evacuation of flood affected areas may be required. In rural areas removal of stock is required.
- **Major Flooding -** In addition to the above, extensive rural areas and/or urban areas are inundated. Many buildings may be affected above the floor level. Properties and towns are likely to be isolated and major rail and traffic routes closed. Evacuation of flood affected areas may be required. Utility services may be impacted.

The Flinders river at Richmond flood level classification is detail in Figure 36.

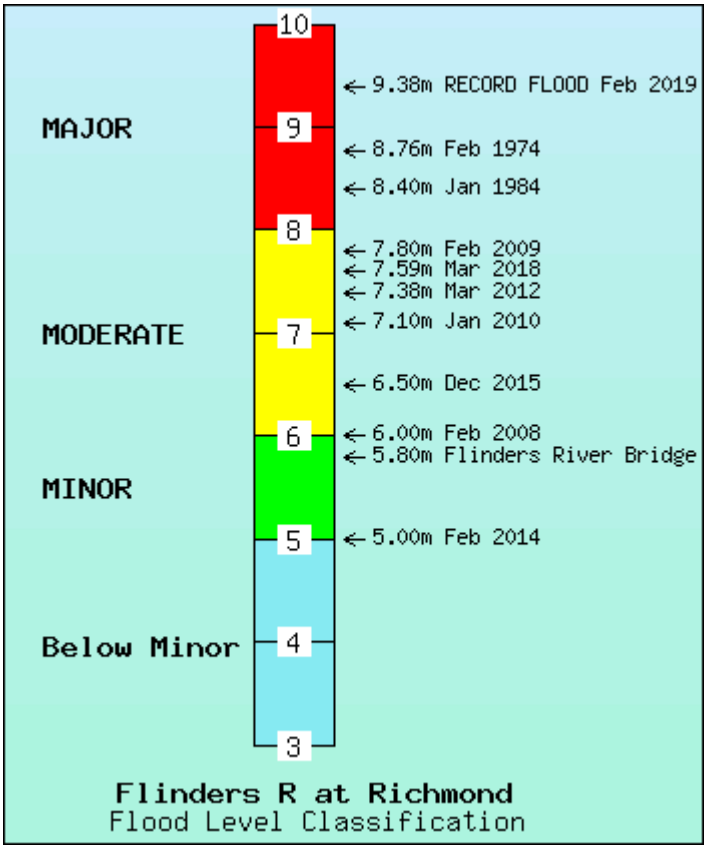


Figure 36 – Flinders river at Richmond flood level classification.

Tropical Cyclones

Tropical cyclones are low pressure systems that form over warm tropical waters. They typically form when the sea-surface temperature is above 26.5^{0}C. Tropical cyclones can continue for many days, even weeks, and may follow quite erratic paths. A cyclone will dissipate once it moves over land or over cooler oceans.

Impacts of tropical cyclones are predominately wind and rain. Figure 37 details the category, wind and typical effects that can extend a reasonable distance from the cyclone track.

Category	Maximum mean wind (km/h)	Typical strongest gusts (km/h)	Typical effects
1	63 - 88	‹ 125	Damaging winds. Negligible house damage. Damage to some crops, trees and caravans. Boats may drag moorings.
2	89 - 117	125 - 164	Destructive winds. Minor house damage. Significant damage to signs, trees and caravans. Heavy damage to some crops. Risk of power failure. Small craft may break moorings.
3	118 - 159	165 - 224	Very destructive winds. Some roof and structural damage. Some caravans destroyed. Power failures likely.
4	160 - 199	225 - 279	Significant roofing loss and structural damage. Many caravans destoyed and blown away. Dangerous airborne debris. Widespread power failures.
5	› 200	› 280	Extremely dangerous with widespread destruction.

Figure 37 – Tropical cyclone characteristics.

In accordance with the BOM analysis of cyclonic activity 1969 - 2019 in the LGA and within 200 km of the border are as detailed in Figure 38 and 39 respectively.

Within the LGA the highest category cyclone was two, on one occasion that is a rare occurrence. There had been four tropical lows that can provide significant rain fall, being a possible likelihood.

When considering a 200 km buffer out from the Richmond LGA boundary the results indicate:

- Highest category cyclone was a Category 3 on two occasions, being unlikely to rare.
- Total cyclones including a tropical low after a cyclone was on 21 occasions, that is likely to almost certain.

The broader history of tropical cyclones that have affected the Richmond LGA are limited involving outcomes of significant damage.

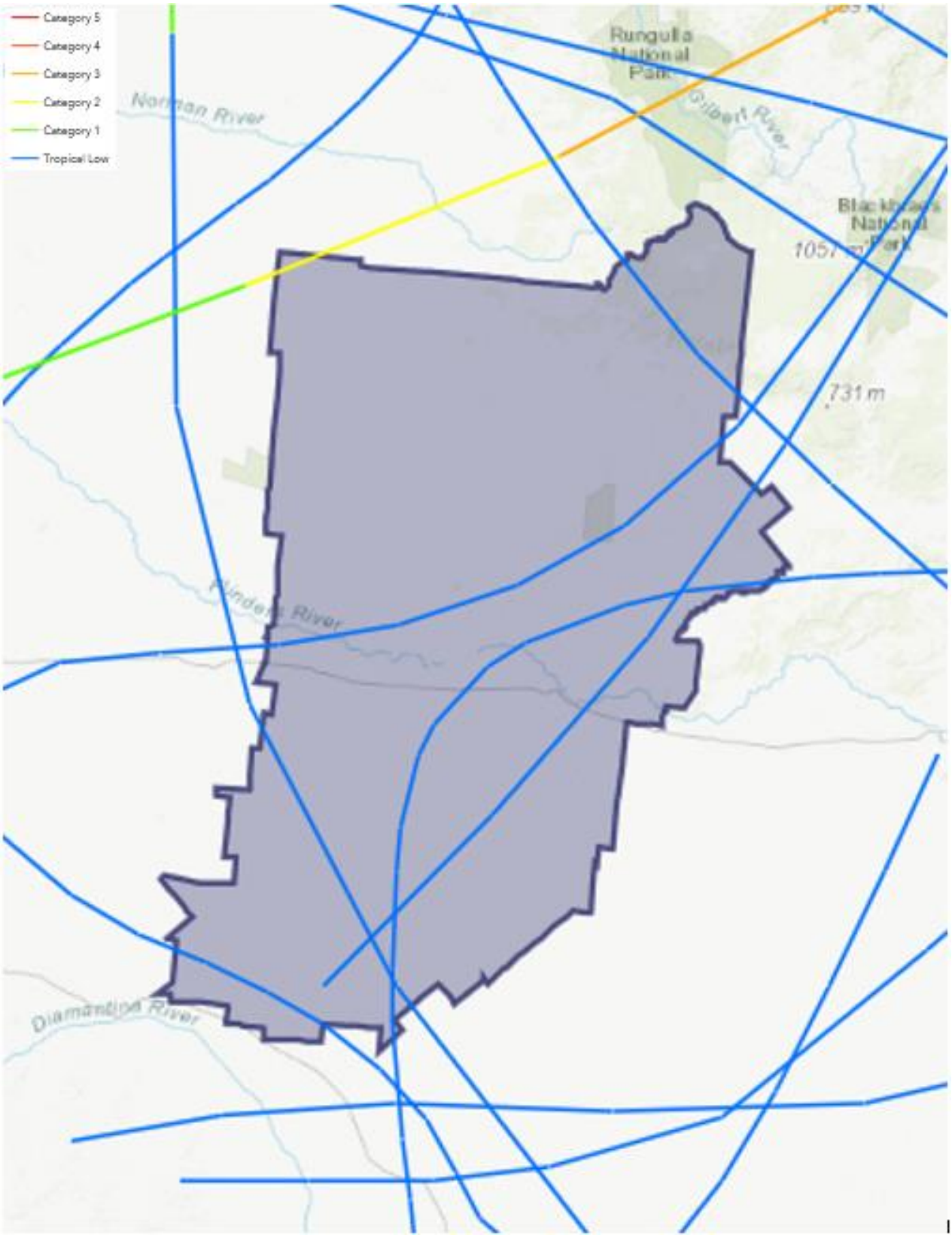


Figure 38 – Tropical cyclones, including the tropical low after a cyclone that has breached the LGA.

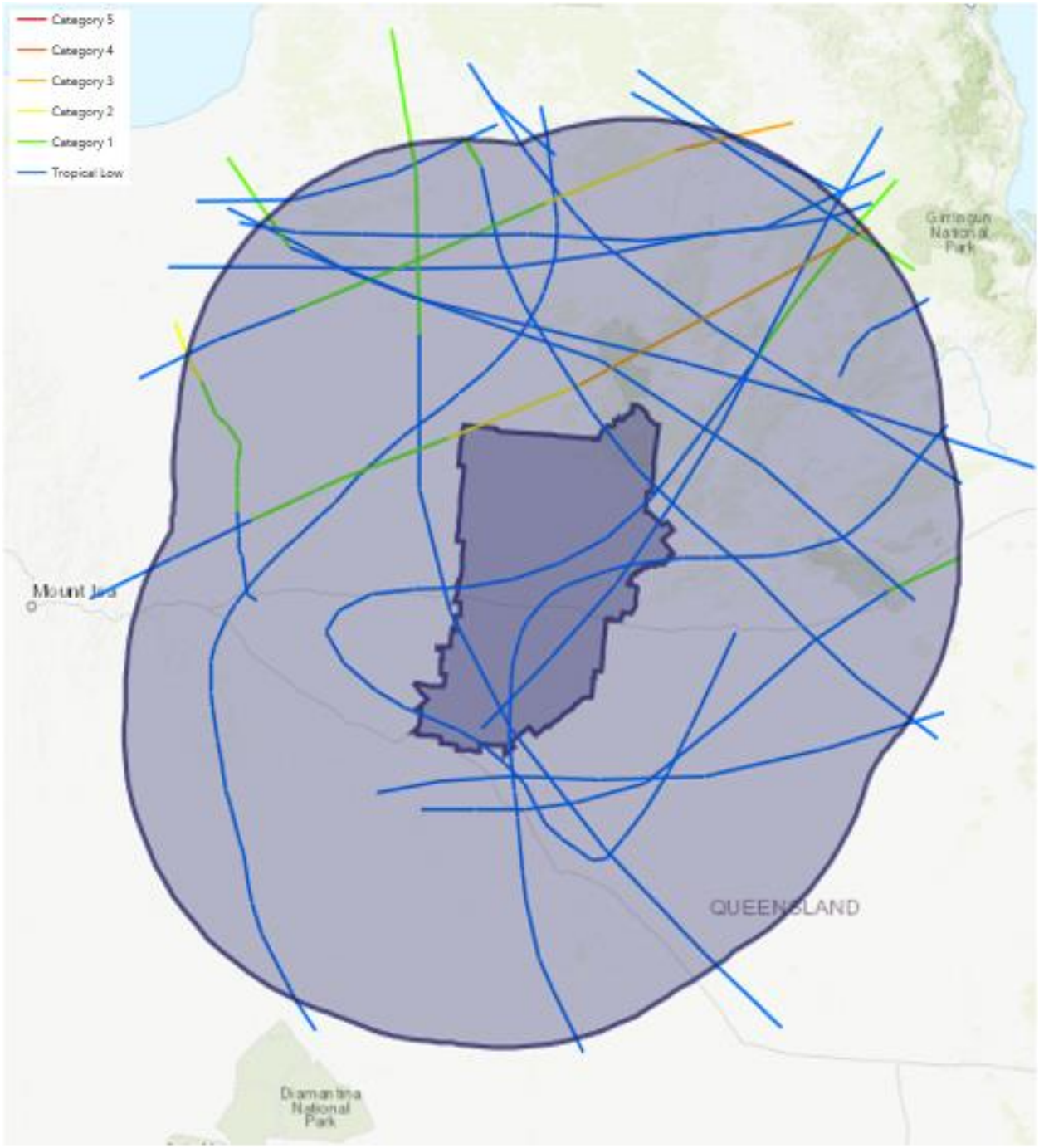


Figure 39 - Tropical cyclones, including the tropical low after a cyclone that has breached the LGA and a 200 km buffer from its boundary.

Bushfire

The bushfire history in Richmond LGA has previously impacted communities such as Woolgar (2010-2019), Saxby (2010-2019, Burleigh (2010 – 2015, as well as floodplains of the Flinders river system (2013-2015).

The bushfire and planned burns in areas such as the Flinders highway by organisations such as Department of Transport and Main Roads (DTMR) in association with Rural Fire Brigades, have contributed to the reduction of bushfire hazard. Cattle grazing has also contributed to the risk reduction.

The bushfire risk in the Richmond LGA historically is deemed low as, Figure 40 details the 2020 Potential bushfire risk to community and infrastructure by locality in the Richmond LGA. Figure 41 to 43 detail further information that is available in the Bushfire Risk Mitigation Plan (BRMP). The QFES RFS Area Director is the contact for any BRMP questions.

Locality Name	Number of buildings in Interface Zone	Potential Bushfire Risk to Community in Locality (High, Medium, Low)	Basis for Risk Assessment
Woolgar	67	Low	surrounded by well grazed grazing land
Burleigh	58	Low	surrounded by well grazed grazing land and fire breaks in place
Richmond	34	Low	surrounded by well grazed grazing land and fire breaks around critical infrastructure
Maxwelton	25	Low	surrounded by well grazed grazing land and fire breaks maintained
Cambridge	15	Low	surrounded by grazing land
Saxby	10	Low	surrounded by grazing land
Albion	7	Low	surrounded by grazing land

Figure 40 - 2020 Potential bushfire risk to community and infrastructure by locality in the Richmond LGA.

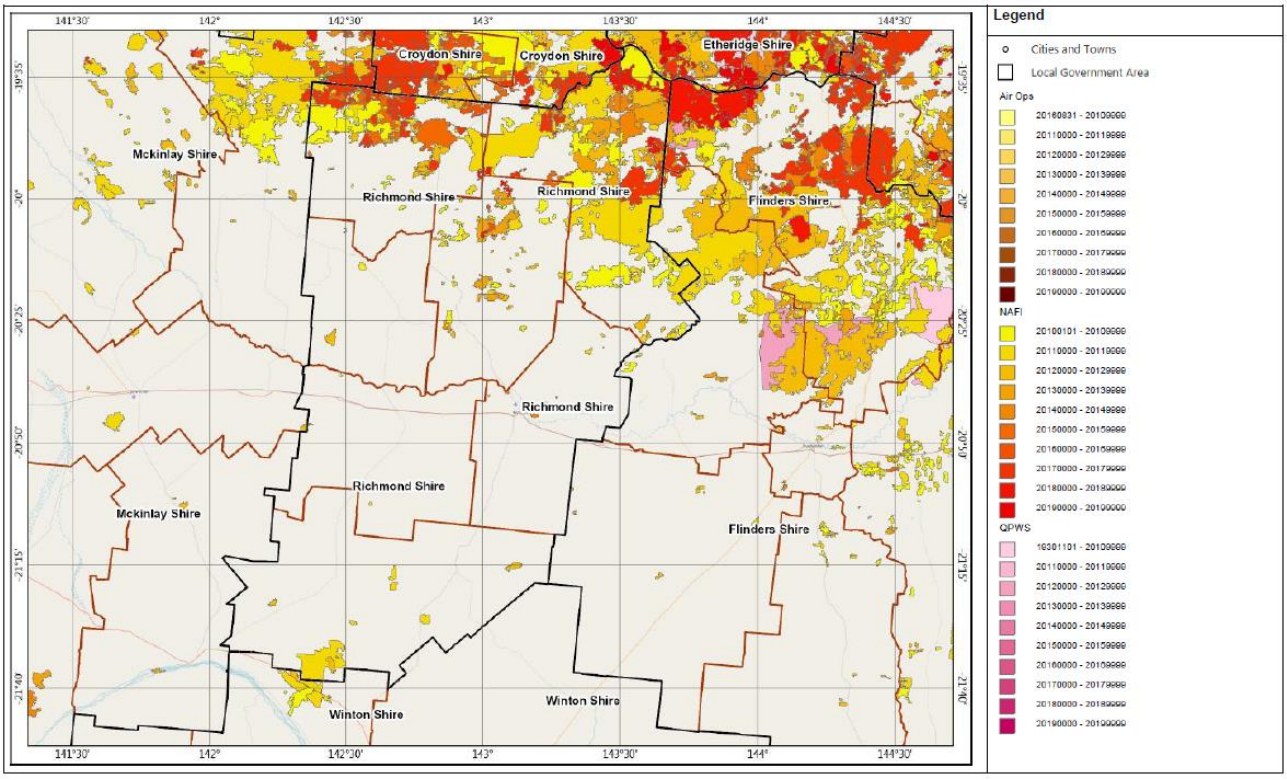


Figure 41 – Fire history in the Richmond LGA from 2020.

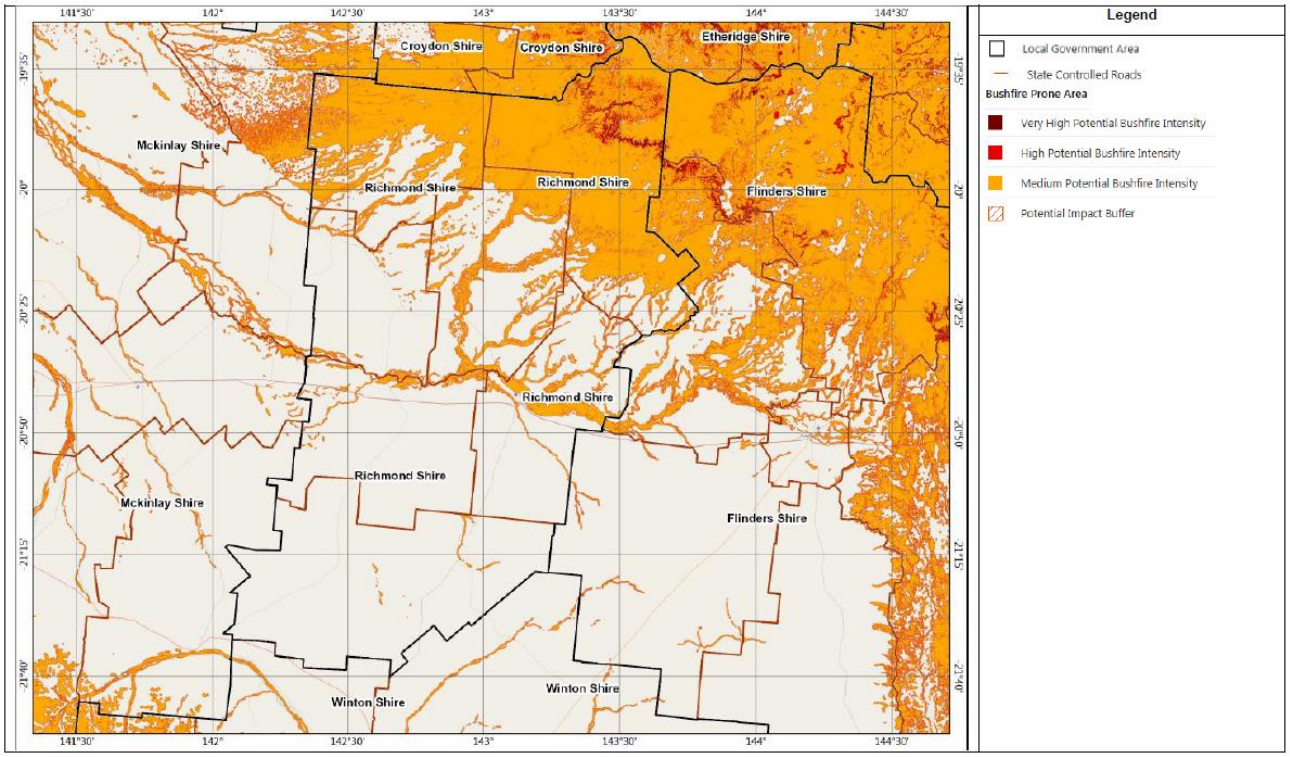


Figure 42 – Bushfire prone areas in the Richmond LGA as assessed 2020.

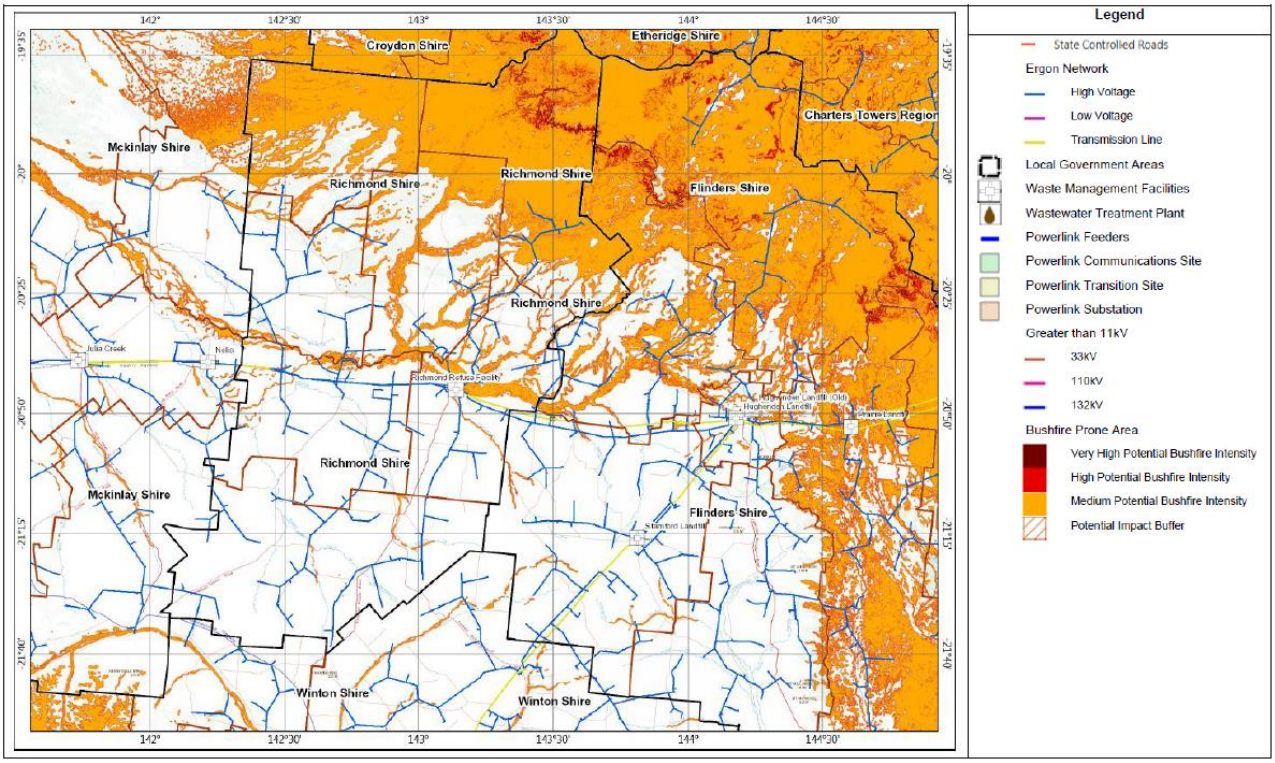


Figure 43 – Essential infrastructure exposure in the Richmond LGA as assessed 2020.

Bushfire Preparedness Level (BPL). To assist with situational awareness QFES determines BPL. The BPL are advised to the LDMG key stakeholders for awareness and further disseminations as deemed necessary. The BPL determination is a combination of quantitative and qualitative data as detailed in Figure 44. The BPL activation table is detailed in Figure 45 and can be used to assist the Richmond LGA with triggers for stakeholders that may be required to support Bushfire operations such as but not limited to Council and community resources (slip on firefighting units, graders, bulldozers and water truck). The bushfire preparedness zones are based on LGA boundaries as detailed in Figure 46.

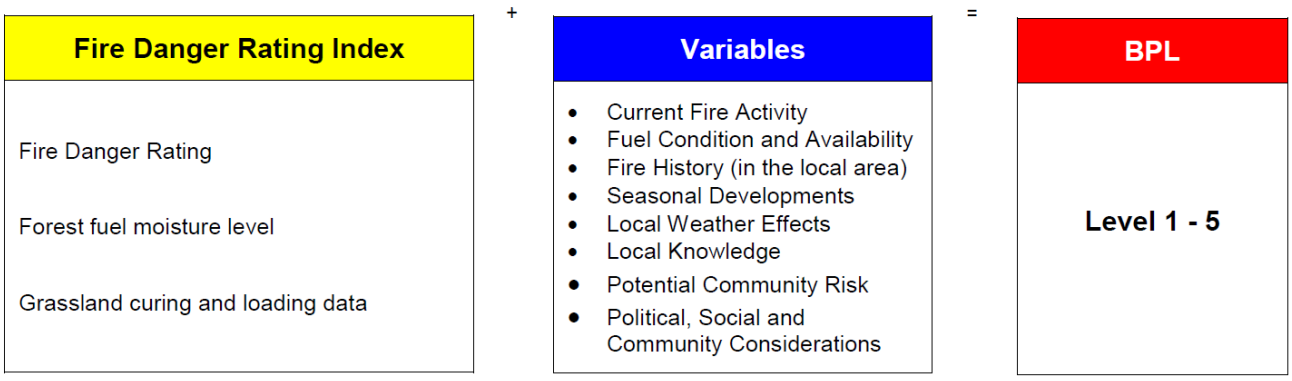
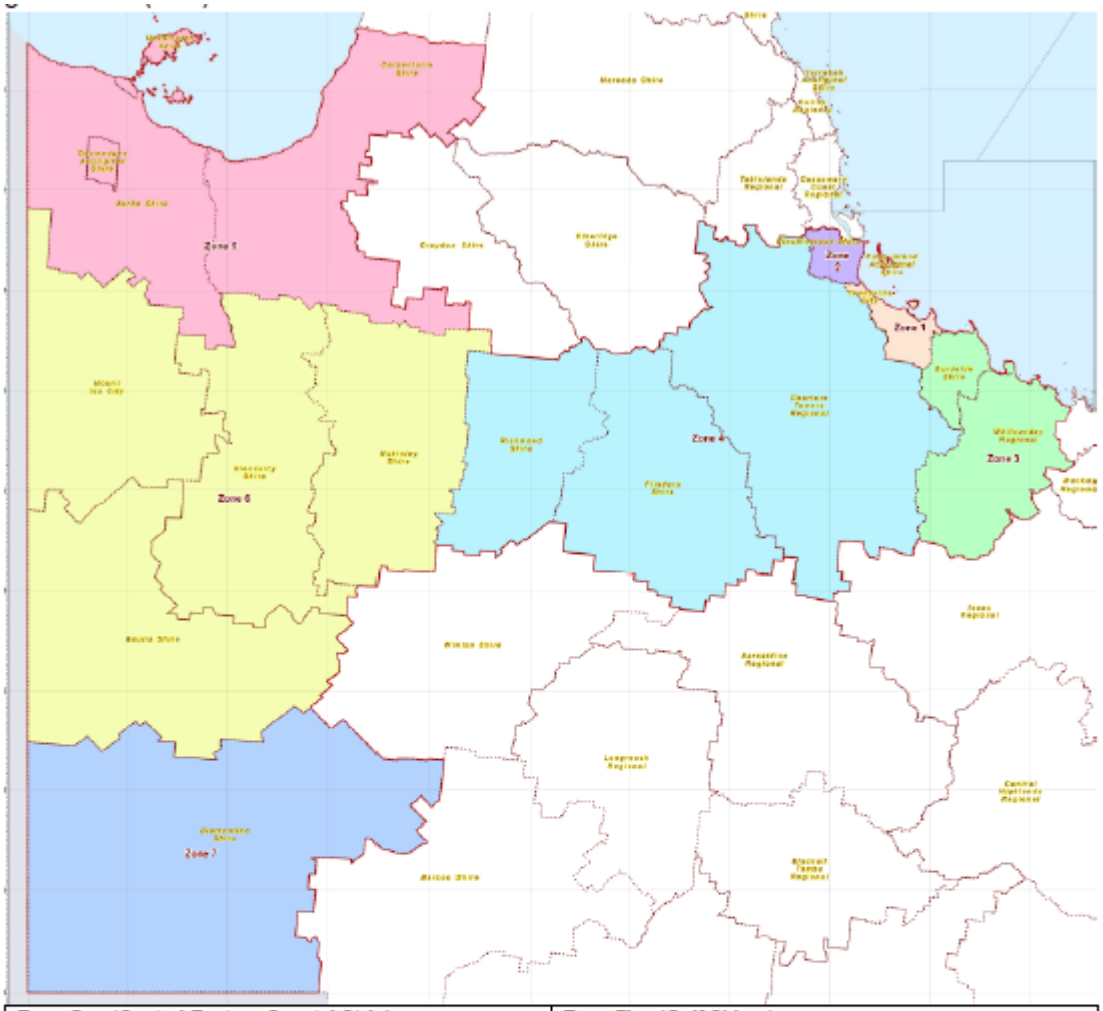


Figure 44 – Bushfire Preparedness Level (BPL) determination.

BPL	Staff & Agencies	Weight of Initial Attack*	Resources Prepared	Community Warnings***	Fire Permits+	ICC	ROC	SOC
5	Maximum staffing effort to be directed towards operational response	Maximise initial response	RFS stations crewed where possible Aux stations crewed where possible Permanent stations crewed	Issue community warning of increased fire danger	Consider recommending Declaration of State of Fire Emergency	Stand Up	Stand Up	Stand Up
4	Notify and activate relevant staff and agencies	Maximise initial response	Optimum resources staged where appropriate Roster additional FRS crews Aircraft staged	Issue Community Warnings	Implement Fire Bans	Stand Up	Stand Up	Stand Up
3	Notify relevant staff and agencies	Increase initial response Two pump/brigade response	Additional resources verified Consider additional FRS crews Aircraft on-call	Contact key stakeholders and consider issuing general Community Advice and Warnings	Consider Local Fire Permits Restrictions Consider local Fire Bans	I/C to determine Level of Activation	Lean Forward	Stand Up
2	Notify relevant staff	Normal response	Additional resources identified	Provide general Community Safety information and advice	Ensure Adequate Fire Permit Conditions	I/C to determine Level of Activation	Alert	Stand Up
1	Business as Usual							

Figure 45 – Bushfire Preparedness Level (BPL) activation table.



Zone One (Central Eastern Coastal Strip) Townsville City	**Zone Five (Gulf Shires)** Burke Shire Council Carpentaria Shire Councils Doomadgee Shire Council Mornington Shire Council McKinlay Shire Council
Zone Two (Northern Eastern Coastal Strip) Hinchinbrook Shire Council Palm Island Shire Council	**Zone Six (Western Area)** Mount Isa City Cloncurry Shire Council Boulia Shire Council
Zone Three (South Eastern Coastal Strip) Burdekin Shire Council Whitsunday Regional Council (only the former Bowen Shire)	**Zone Seven (South West Area)** Diamantina Shire Council
Zone Four (Central West Area) Charters Towers Regional Council Flinders Shire Council Richmond Shire Council	

Figure 46 – Bushfire Preparedness Level (BPL) zones.

Australian Fire Danager Rating System (AFDRS). The AFDRS is a Nationally consistent approach, that has Fire Danger Ratings (FDR). The FDR provides information to describe the potential level of danger should a bushfire start. Further information is detailed on the Queensland Fire and Emergency Services (QFES) website - https://www.qfes.qld.gov.au/prepare/bushfire/fire-danger-rating that is updated daily. The FDR is detailed in Figure 47. The FDR are allocated against BOM weather forecast districts as detailed in Figure 29, an example is detailed in Figure 48. The BOM Fire Weather Knowledge Centre has related weather information. The FDR indicators of potential danger can be used as trigger for action as such:

Moderate

Plan and Prepare

Most fires can be controlled

- Stay up to date and be ready to act if there is a fire.

High

Be Ready to Act

Fires can be dangerous

- Decide what you will do if a fire starts.
- There's a heightened risk. Be alert for fires in your area.
- If a fire starts, your life and property may be at risk. The safest option is to avoid bushfire risk areas.

Extreme

Take Action Now to protect your life and property

Fires will spread quickly and be extremely dangerous

- These are dangerous fire conditions.
- Check your bushfire plan and make sure your property is fire ready.
- If a fire starts, take immediate action.
- If you and your property are not prepared to the highest level, go to a safer location well before the fire impacts.
- Reconsider travel through bushfire risk areas.

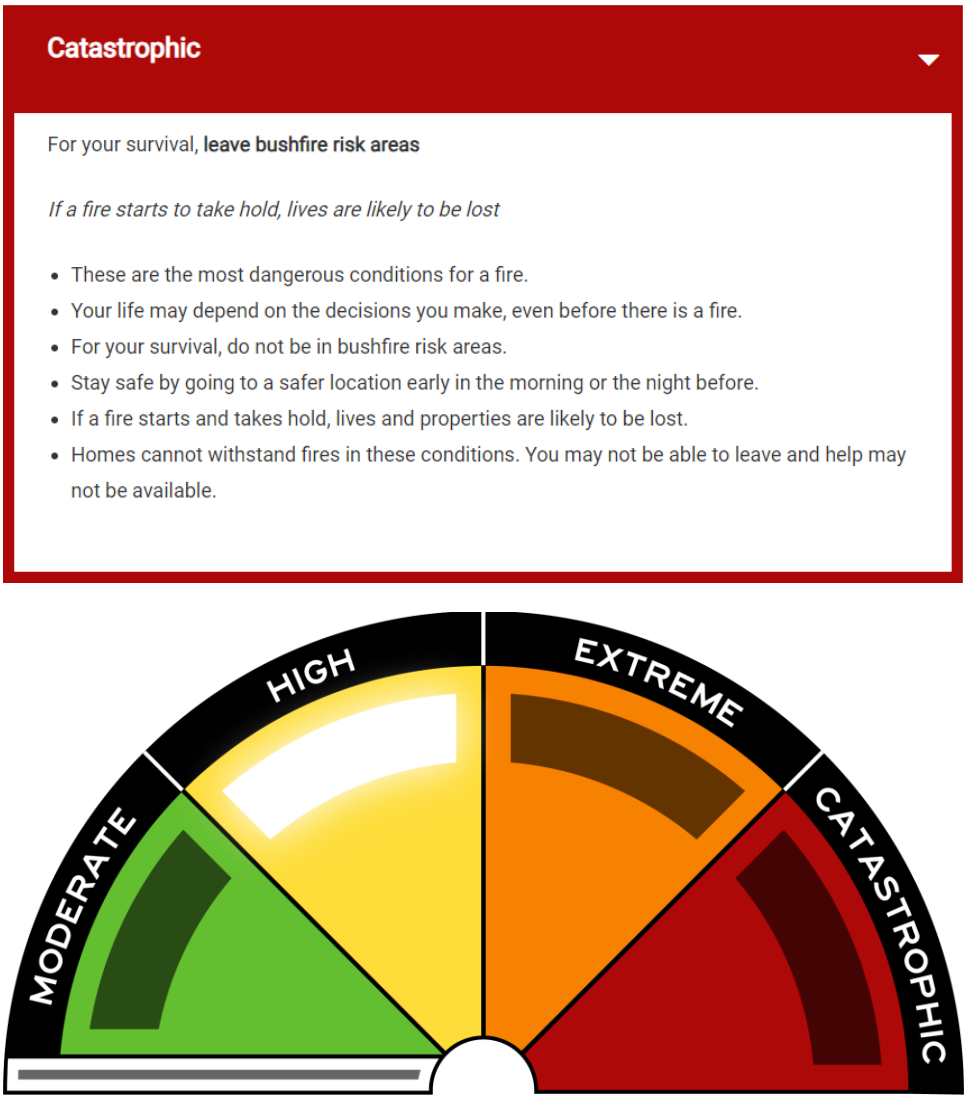


Figure 47 – Fire Danger Rating (FDR) in Australia.

Queensland Fire Danger Ratings

Issued at 4:00 pm EST on Thursday 23 November 2023.

District	Friday	Saturday	Sunday	Monday
Peninsula	Moderate 13	Moderate 12	No Rating 11	Moderate 12
Gulf Country	Moderate 13	Moderate 13	Moderate 12	Moderate 12
Northern Goldfields and Upper Flinders	Moderate 13	Moderate 13	Moderate 13	Moderate 13
North Tropical Coast and Tablelands	Moderate 13	Moderate 13	Moderate 12	Moderate 12
Herbert and Lower Burdekin	Moderate 13	Moderate 13	Moderate 12	Moderate 12
Central Coast and Whitsundays	Moderate 17	Moderate 15	Moderate 14	Moderate 17
Capricornia	Moderate 18	Moderate 16	Moderate 14	Moderate 15
Central Highlands and Coalfields	Moderate 17	Moderate 15	Moderate 12	Moderate 14
Central West	Moderate 15	Moderate 13	Moderate 13	Moderate 13
North West	Moderate 16	Moderate 14	Moderate 15	Moderate 14
Channel Country	Moderate 20	Moderate 16	Moderate 15	Moderate 15
Maranoa and Warrego	Moderate 15	Moderate 13	Moderate 15	Moderate 15
Darling Downs and Granite Belt	Moderate 18	Moderate 15	Moderate 16	Moderate 18
Wide Bay and Burnett	Moderate 16	Moderate 14	Moderate 12	Moderate 14
Southeast Coast	Moderate 15	Moderate 14	Moderate 12	Moderate 14

Code

Fire Danger Ratings (Fire Behaviour Index - FBI)	No Rating (< 12)	Moderate (12-23)	High (24-49)	Extreme (50-99)	Catastrophic (>= 100)

Notes

- For all weather information, visit the Bureau of Meteorology web page at www.bom.gov.au.
- For information on Fire Bans and how to Prepare. Act. Survive. Visit www.qfes.qld.gov.au.
- For all current bushfire warnings, visit www.qfes.qld.gov.au/Current-Incidents
- Note: On occasion Fire Danger Ratings may not adhere to FBI thresholds above due to agency discretion in setting FDRs.

Figure 48 – Example of Fire Danger Rating (FDR) in BOM weather forecasts.

Heatwave

The annual maximum temperature for Queensland is detailed in Figure 49. Queensland Heatwave risk assessment has been developed with stakeholders as defined in Figure 50. The heat wave intensity and potential community impact is detail in Figure 51.

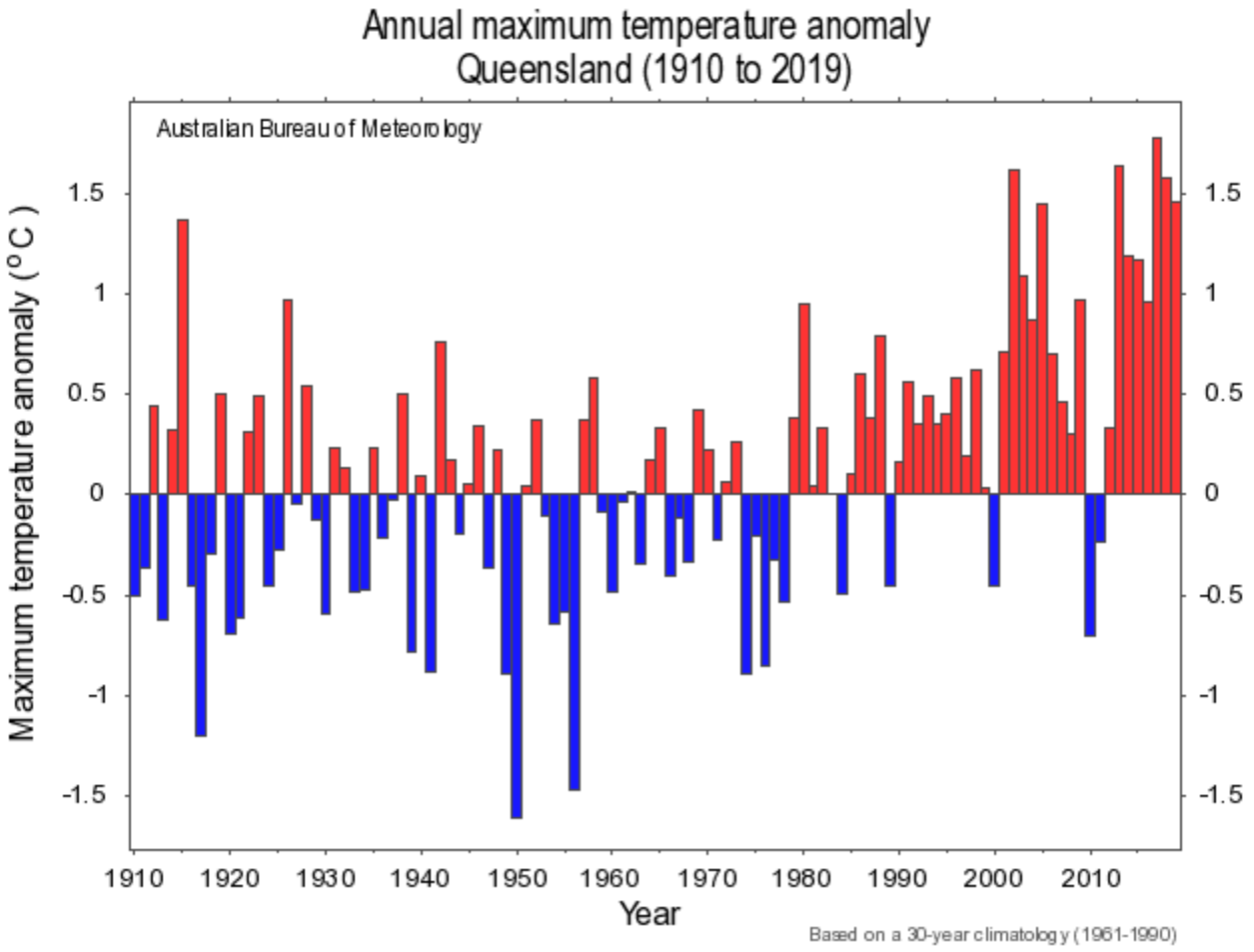


Figure 49 – Annual maximum temperature Queensland (1910 – 2019).

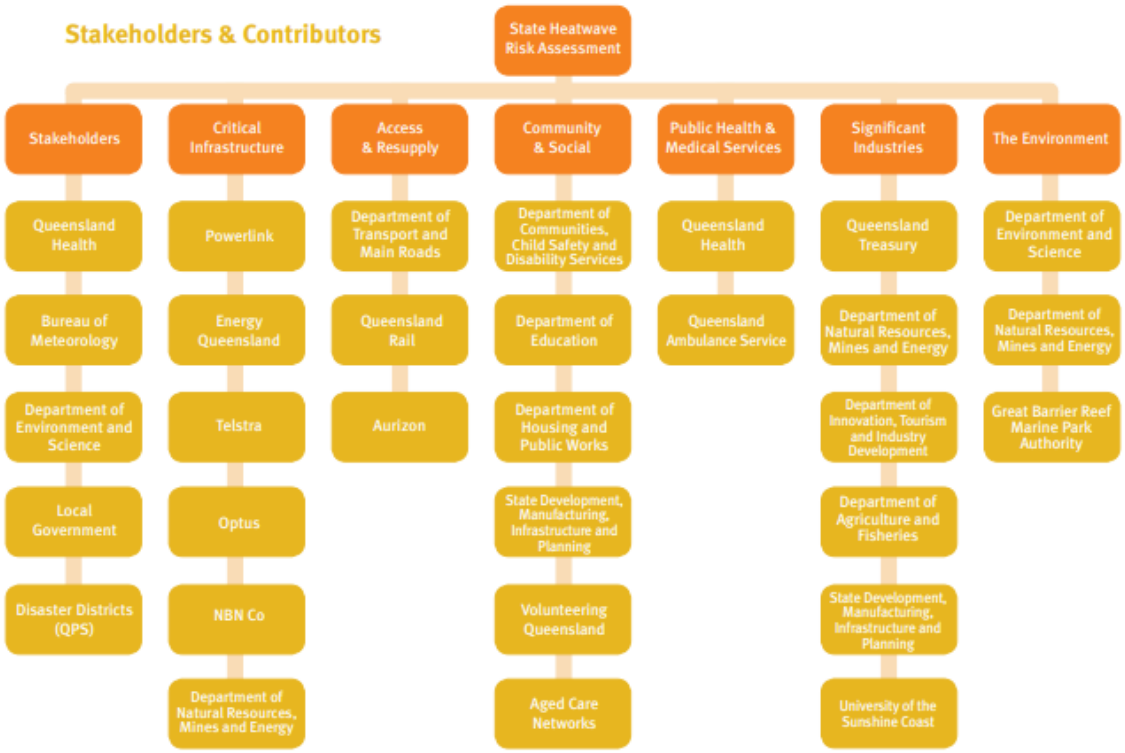


Figure 50 – State heatwave risk assessment stakeholders.

HEATWAVE INTENSITY	COLOUR CODE	POTENTIAL COMMUNITY IMPACT
Low intensity heatwave	Yellow	Most people expected to have adequate capacity to cope with this level of heat but begin to see health effects. Increased risk to vulnerable groups.
Severe heatwave	Orange	Increased morbidity and mortality for vulnerable groups, such as those over 65, pregnant women, babies and young children, and those with chronic illness (e.g. renal disease, ischaemic heart disease).
Extreme heatwave	Red	May impact normally reliable infrastructure, such as power and transport. Health risk for anyone who does not take precautions to keep cool, even those who are healthy.

Figure 51 – Heatwave intensity and potential community impact.

Heatwave projections from 1986 to 2090 have been calculated across multiple LGA in Queensland. The Etheridge LGA is likely to have similar trends to the Richmond LGA. Heatwave definitions are in Figure 52, with data projections for Etheridge in Figure 53.

UNDERSTANDING THE DATA		
Index	Heatwave Index	Definition
HWF	Heatwave frequency	Number of heatwave days relative to number of days in a year - i.e. [number of heatwave days/365] x 100 (%)
HWD	Heatwave duration	Number of days of the longest heatwave of the year (days)
HWMt	Temperature of heatwave magnitude	Average mean temperature (in °C) of all heatwave days across the year
HWAt	Temperature of heatwave amplitude	Average mean temperature (in °C) of the hottest heatwave days of the year
Hot Days	Days >35°C	Annual count of days with maximum temperature >35°C
Hot Nights	Nights >20°C	Annual count of nights with minimum temperature >20°C
Note: All figures represent an absolute change from the reference period (1986 to 2005) unless expressed in negative terms, based on RCP 8.5. Further information and guidance on the data represented within this infographic can be found at Appendix F.		

Figure 52 – Heatwave definitions.

ETHERIDGE						
Index	Heatwave Index	Reference	2030	2050	2070	2090
HWF	Heatwave frequency (%)	1.7%	2.9%	8.2%	19.5%	33.0%
HWD	Heatwave duration (days)	4	4	9	23	48
HWMt	Temperature of heatwave magnitude (°C)	31.4	31.8	32.1	32.6	33.0
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

Figure 53 – Heatwave projected data Etheridge LGA.

The locations that participated in heatwave projections are detailed in Figure 54. The Etheridge LGA that borders the Richmond LGA are likely to have similar results to that expected within the Richmond LGA. Figure 55 details definitions for the regional climate models, involve with heatwave projections across the State, with the 11 different climate model outcome predictions detailed in Figure 56. Further details are in the Queensland State Heatwave Risk Assessment.

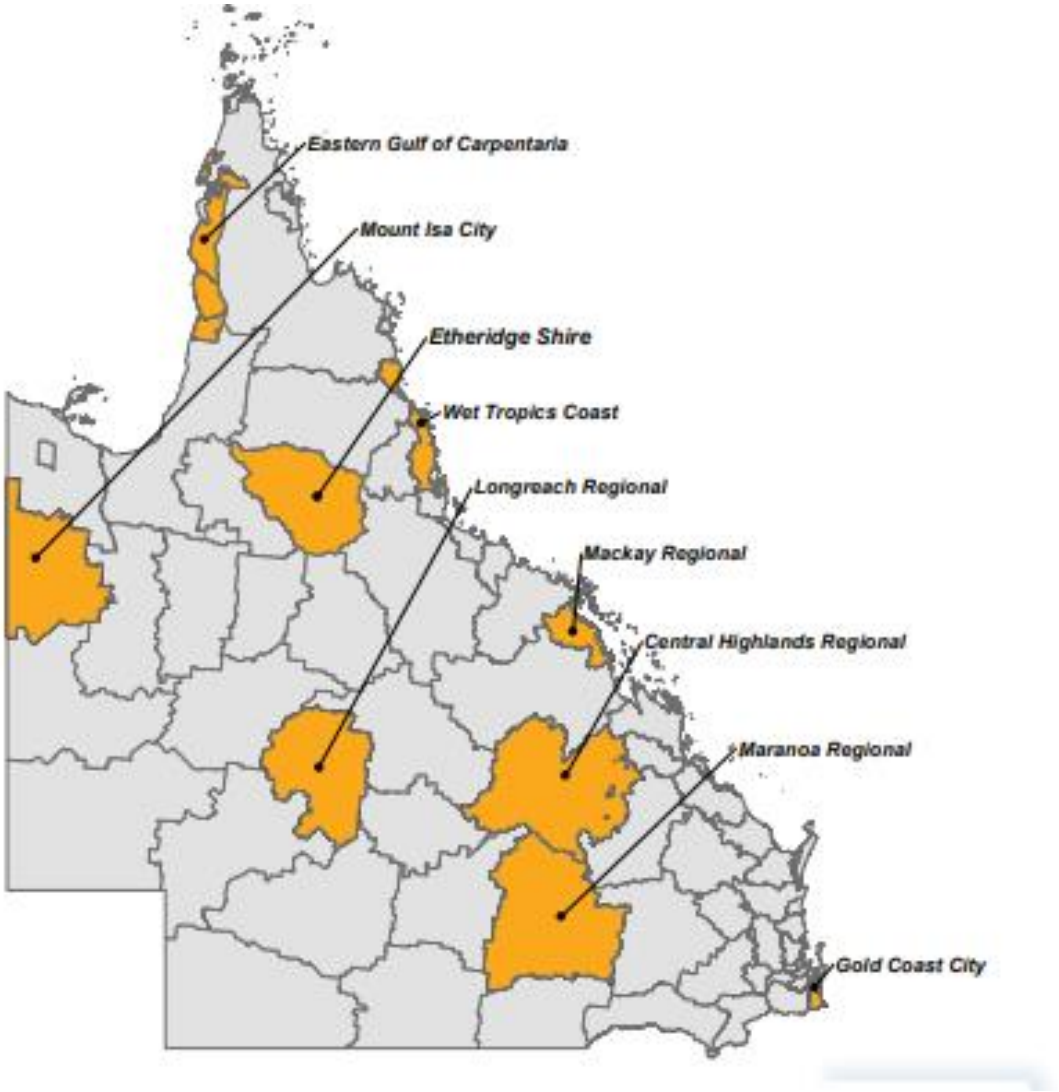


Figure 54 – Locations that participated in heatwave projections.

ACRONYM	HEATWAVE INDEX	DEFINITION
HWA	Heatwave amplitude	Amplitude of the hottest day of the hottest heatwave of the year, denoted by the maximum EHF of the heat-wave with highest mean EHF (˚C2)
HWAt	Temperature of heatwave amplitude	Average mean temperature (in ˚C) of the heatwave amplitude as per the above calculation.
HWM	Heatwave magnitude	Average magnitude of all heatwave days across the year, given by the average of all EHF higher than 1 (˚C2)
HWMt	Temperature of heatwave magnitude	Average mean temperature (in ˚C) of the heatwave magnitude as per the above calculation.
HWN	Heatwave number	Number of heatwave events throughout the year (number)
HWF	Heatwave frequency	Number of heatwave days relative to number of days in an year - i.e., (number of heatwave days/365)*100 (%)
HWD	Heatwave duration	Number of days of the longest heatwave of the year (days)
TX40	Number of days with maximum temperature above 40 ˚C	Number of days in a year with maximum temperature above 40 ˚C (days)

Figure 55 – Definitions for Regional climate models.

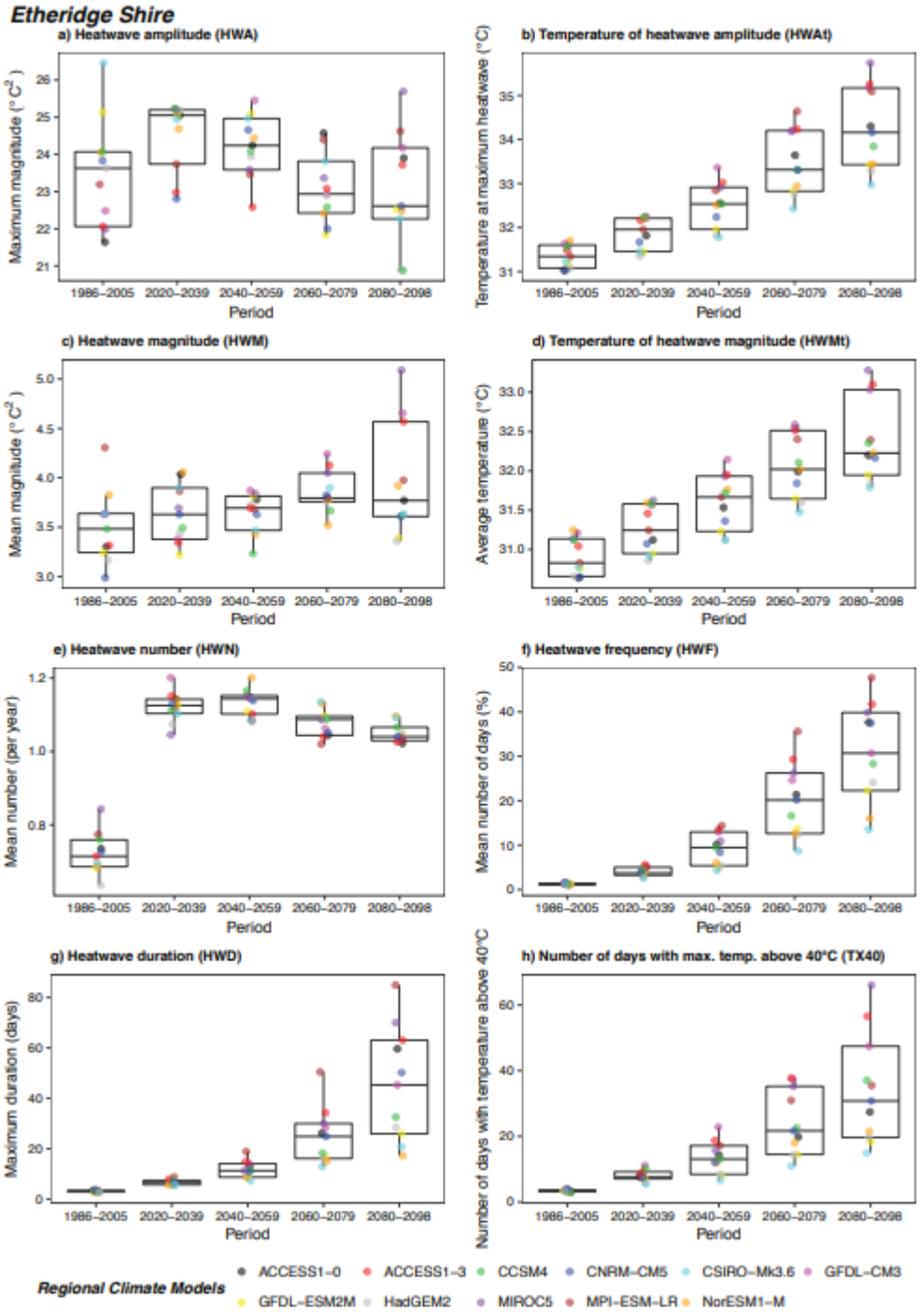


Figure 56 – Regional climate models against the Etheridge LGA.

Earthquakes

The Queensland State earthquake risk assessment details the earthquake moment magnitude and definition in Figure 57 and Queensland notable earthquakes 5.0 or above in Figure 58.

Moment Magnitude (Indicative only)	MM Intensity (Likely maximum)	Definition
1.2	II	MMII - felt by a few persons at rest indoors, especially by those on upper floors or otherwise favorably placed.
2.0	III	MMIII - felt indoors, but not identified as an earthquake by everyone. Vibrations may be likened to the passing of light traffic. It may be possible to estimate the duration, but not the direction. Hanging objects may swing slightly. Standing motorcars may rock slightly.
3.0	IV	MMIV - generally noticed indoors, but not outside. Very light sleepers may be awakened. Vibration may be likened to the passing of heavy traffic, or to the jolt of a heavy object falling or striking the building. Walls and frame of building are heard to creak. Doors and windows rattle. Glassware and crockery rattle. Liquids in open vessels may be slightly disturbed. Standing motorcars may rock, and the shock can be felt by their occupants.
4.0	V-VI	MMV - generally felt outside and by almost everyone indoors. Most sleepers awakened. A few people frightened. Direction of motion can be estimated. Small unstable objects are displaced or upset. Some glassware and crockery may be broken. Some windows crack. A few earthenware toilet fixtures crack. Hanging pictures move. Doors and shutters swing. Pendulum clocks stop, start or change rate. MMVI - felt by all. People and animals alarmed. Many run outside. Difficulty experienced in walking steadily. Slight damage to masonry D. Some plaster cracks or falls. Isolated cases of chimney damage. Windows and crockery broken. Objects fall from shelves and pictures from walls. Heavy furniture moves. Unstable furniture overturns. Small school bells ring. Trees and bushes shake or are heard to rustle. Material may be dislodged from existing slips, talus slopes, or slides.
5.0	VI-VII	MMVII - general alarm. Difficulty experienced in standing. Noticed by drivers of motorcars. Trees and bushes strongly shaken. Large bells ring. Masonry D cracked and damaged. A few instances of damage to Masonry C. Loose brickwork and tiles dislodged. Unbraced parapets and architectural ornaments may fall. Stone walls crack. Weak chimneys break, usually at the roof-line. Domestic water tanks burst. Concrete irrigation ditches damaged. Waves seen on ponds and lakes. Water made turbid by stirred-up mud. Small slips, and caving-in of sand and gravel banks.
6.0	VII-VIII	MMVIII - alarm may approach panic. Steering of motor cars affected. Masonry C damaged, with partial collapse. Masonry B damaged in some cases. Masonry A undamaged. Chimneys, factory stacks, monuments, towers, and elevated tanks twisted or brought down. Panel walls thrown out of frame structures. Some brick veneers damaged. Decayed wooden piles break. Frame houses not secured to the foundation may move. Cracks appear on steep slopes and in wet ground. Landslips in roadside cuttings and unsupported excavations. Some tree branches may be broken off.
7.0	VIII-IX	MMIX - general panic. Masonry D destroyed. Masonry C heavily damaged, sometimes collapsing completely. Masonry B seriously damaged. Frame structures racked and distorted. Damage to foundations general. Frame houses not secured to the foundations shift off. Brick veneers fall and expose frames. Cracking of the ground conspicuous. Minor damage to paths and roadways. Sand and mud ejected in alluviated areas, with the formation of earthquake fountains and sand craters. Underground pipes broken. Serious damage to reservoirs.

Figure 57 – Earthquake Modified Mercalli Intensity (MMI) and definition.

Date	Location	Magnitude	Depth
August 2016	Offshore north east of Bowen	5.8	7km
August 2015	Offshore east of Fraser Island	5.3	13km
July 2015	Offshore east of Fraser Island	5.4	13km
February 2015	Eidsvold, Bundaberg	5.2	13km
July 2011	Bowen, Mackay	5.3	7km
November 1978	Heron Island, Yeppoon	5.2	12km
December 1974	Offshore of Mackay	5.1	6km
June 1965	Tarewinnabar, Warwick	5.3	28km
June 1918	Lady Elliot Island, Gladstone	6.0	15km

Figure 58 – Queensland notable earthquakes 5.0 or greater.

The record of earthquake occurrence within Queensland since 1866 is detailed in Figure 59. This may not be an accurate reflection due to the location of settlement activity and placement of seismographs across Queensland, in particular for Central and West regions of Queensland.

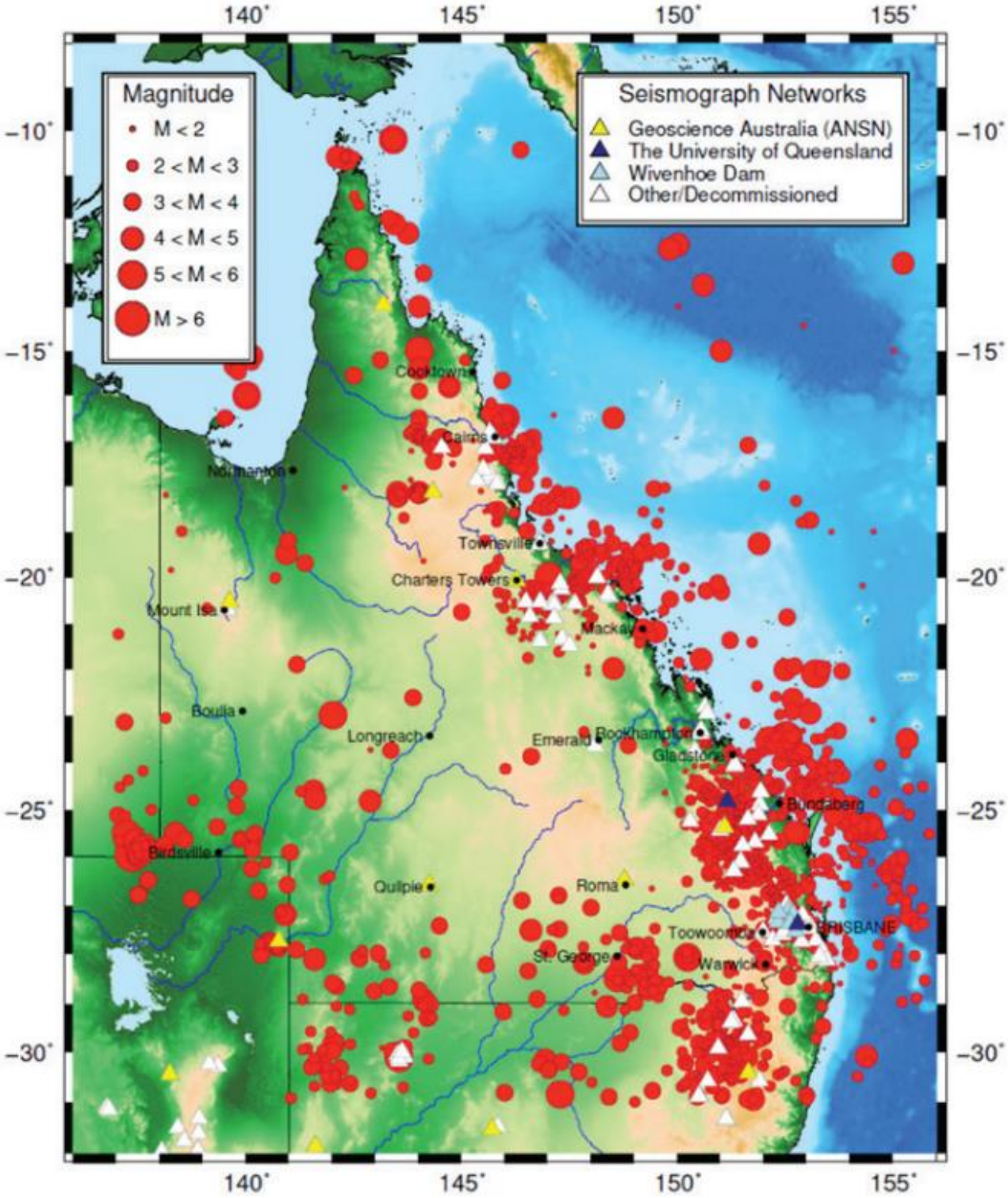


Figure 59 – Record of earthquake occurrence within Queensland since 1866 - 2019.

In the Richmond LGA there are two seismic (earthquake) zones Z029 and Z034 as detailed in Figure 60. The AEP when bench marked against a magnitude 6.05 may only be 0.07% (Z029) and 0.41% (Z034); however, over 30, 50 and 100 years the broader probability increases as detailed in Figure 61. The primary and secondary effects can be considered against known events such as Gladstone 1918 at 6.05 and Newcastle 1989 at 5.35. Further information can be requested through Geoscience Australia 1800 655 739 or earthquakes@ga.gov.au. The website Earthquakes.ga.gov.au is also available.

Figure 60 – Earthquake zones.

SOURCE ZONE OCCURRENCE DATA NSHA2018												
		MAGNITUDE			MAGNITUDE			MAGNITUDE			MAGNITUDE	
ZONE		5.35	6.05		5.35	6.05		5.35	6.05		5.35	6.05
Z001	AEP	0.13%	0.02%	30 YEARS	3.38%	0.53%	50 YEARS	6.27%	0.88%	100 YEARS	12.15%	1.76%
Z002		0.14%	0.02%		4.23%	0.59%		6.96%	0.98%		13.43%	1.96%
Z003		0.35%	0.06%		5.56%	0.78%		9.10%	1.30%		17.37%	2.58%
Z004		0.19%	0.03%		5.64%	0.79%		9.23%	1.32%		17.60%	2.61%
Z028		DATA UNAVAILABLE			DATA UNAVAILABLE			DATA UNAVAILABLE			DATA UNAVAILABLE	
Z029		0.53%	0.07%		14.66%	2.15%		23.21%	3.58%		41.03%	6.99%
Z030		0.03%	0.00%		0.82%	0.11%		1.36%	0.19%		2.70%	0.37%
Z034		2.18%	0.41%		48.36%	11.79%		66.76%	18.86%		88.95%	34.17%
Z035		0.29%	0.06%		8.25%	1.72%		13.36%	2.84%		24.94%	5.60%

Magnitude 5.35 equivalent to Newcastle 1989 Event. Magnitude 6.05 equivalent to Gladstone 1918 Event.
30 Years – Typical length of a mortgage in Queensland
50 Years – Land Use Planning Horizon
100 Years – Critical Infrastructure Build Horizon

Figure 61 – AEP and broader probability for earthquake zones.

Epidemic and Pandemic

In the event of epidemics and pandemics this will be conducted with the primary/lead agency. Animal related will be through Department of Agriculture and Fisheries (DAF) and human related with be through Queensland Health. Dependant on the event, both agencies may be required. The Queensland Government Queensland Whole-of-Government Pandemic Plan and the Richmond Sub Plan Pandemic (COVID-19) details further information.

Traffic accidents

The occurrence of traffic accidents within the Richmond LGA is likely as an incident managed by a lead agency over a major highway connecting Townsville to Mount Isa. The traffic comprises general to tourist and logistic runs that involve business resupply, cattle and chemical/product movement for the mining sector. The higher consequence to the community that would require a significant coordinated response that would involve a Disaster is unlikely to rare. This includes the consideration of chemical products being moved via rail or road. In the event of a traffic disaster the LDMG would assist the lead agencies.

Community disaster resilience and capacity building

Community engagement

Effective community engagement is the process of stakeholders working together to build resilience through collaborative action, shared capacity building and the development of strong relationships built on mutual trust and respect. Community engagement strategies are equally important during all phases prevent/mitigate, preparedness, response and recovery, to well inform the community and associated stakeholders to make the optimal decision.

The approaches to community engagement for disaster resilience at Figure 62, with further information in the Australian Disaster Resilience Handbook Collection – Community Engagement for Disaster Resilience. The principles are:

- **Place the community at the centre.** Effective community engagement is responsive, flexible and recognises the community as the central reference point for planning, implementing and measuring success in any engagement process. Inclusive, respectful and ethical relationships between engagement partners and the community must guide every stage of the engagement process.
- **Understand the context.** Effective community engagement requires partners to develop a strong understanding of the unique history, values, diversity, dynamics, strengths, priorities and needs of each community. It is also important to understand the environmental, political, or historical context that surrounds any hazard, emergency event or disaster.
- **Recognise complexity**. Effective community engagement considers the complex and dynamic nature of hazards, disaster risk and emergency events and the diverse identities, histories, composition, circumstances, strengths and needs of communities and community members. Because of this complexity, effective community engagement to build disaster resilience is an evolving process that requires ongoing investment.
- **Work in partnership.** Effective community engagement requires a planned and coordinated approach between the community and partners at every stage of the process. Potential issues arising from any imbalance in power, information or resources between the community and partners will be proactively managed during the process.
- **Communicate respectfully and inclusively.** Community engagement is built on effective communication between the community and partners that recognises the diverse strengths, needs, values and priorities of both community members and partners.

- **Recognise and build capability.** Effective community engagement recognises, supports and builds on individual, community and organisational capability and capacity to reduce disaster risk and increase resilience.

Who leads the process	Partner designs and delivers to community	Partner leads with community input	Community and partner work together	Community leads with partner support	Community designs and delivers
Basis of engagement	Partner provides community with information, options, solutions or services for a given situation or issue.	Partner provides leadership to community. Community provides input to the process.	Community and partner form a partnership. They co-design and develop options and solutions.	Community provides leadership to partner. Partner provides input to the process.	Community designs, decides and implements all actions. Minimal or no engagement necessary from any partner.
Stated or implied, contract between external partner and community	Partner understands the issue or situation, provides community with what they need and keeps community informed through the process.	Partner provides guidance, listens to community concerns and issues and takes them into account. Community input is considered necessary to ensure success.	Both community and partner bring expertise to the relationship. Mutual participation or collaboration contribute to success.	Community understands its own context and situation. Partner offers expertise and knowledge. This input is offered to support community-led action.	Community has a thorough understanding of its own context and situation and the hazards that may affect them. Community will ask for support when and if needed. External organisations may not be aware of projects at all.
Methods of engagement	• Meetings • Presentations • Information sessions • Training and seminars • Fact sheets • Brochures • Newsletters • Letter box drops • Door knocks • Online instruction videos or information • Traditional media • Social media	• Meetings • Seminars • Consultations • Online or analogue surveys • Partner-led workshops and focus groups • Partner-led projects • Traditional media • Social media	• Co-chaired committees and working groups • Deliberative, participative and co-led workshops and focus groups • Online collaborative spaces • Shared research projects • Collaborative community-based projects • Traditional media • Social media	• Meetings • Seminars • Consultations • Forums • Online or analogue surveys • Community-led workshops and focus groups • Community-led projects • Informal conversations • Traditional media • Social media	• Meetings • Presentations • Information sessions • Training and seminars • Fact sheets • Brochures • Newsletters • Letter box drops • Door knocks • Online instruction videos or information • Community-led working groups • Community-led projects • Traditional media • Social media
Examples of actions or activities that reflect methods	Briefings by specialists in disaster preparation, response or recovery. Information based public safety campaigns.	Partner-led planning and recovery focus groups and workshops. Partner-led surveys and feedback sessions.	Collaborative disaster planning and preparation projects. Joint working groups to implement particular projects.	Community-led planning processes, recovery committees, meetings and projects.	Community-led, resourced and implemented recovery processes and projects.
NB: Many of the methods of engagement can be either online, face to face, or both.					

Figure 62 – Approaches to community engagement for disaster resilience.

The Queensland Government arrangements for coordinating public information in a crisis, provides cross-government communication activities to assist in disaster events. The State Disaster Coordination Centre (SDCC) disseminates information to authorised LDMG key stakeholders (Chair, LDC). It is at the LDMG discretion if this information is sent to the wider LDMG and/or community. At times some of the information

may not be for media or community dissemination, but rather for timely situational awareness to assist with disaster management. The LDMG is assisted with the Richmond Shire Council Website to broadcast key authorised information for the LGA and subsequent community. If changes to the authorised LDMG key stakeholders is required for SDCC information, this can be actioned through the EMC.

Community engagement strategies may be conducted to assist in preparedness, prevention/mitigation, response and recovery updates, such as but not limited to:

- Get Ready initiatives.
- Volunteerism opportunities to support the community.
- Disaster management and hazard awareness campaigns.
- School education programs.
- Community meetings or workshops.
- Communication strategies through media email, paper, radio, TV to broadcast authorized information relative the community in the LGA.
- Evaluations seeking community and stakeholder feedback.

Prevention

Prevention and mitigation activities with improvement strategies are through studies, reports and assessments.

Government agencies responsible for specific prevention functions, that may be requested to assist the LDMG, are detail in Figure 63.

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

Figure 63 – Government agencies responsible for specific prevention functions.

Bushfire

An Area Fire Management Group (AFMG) is led by QFES and conducted annually with land holders/owners/management stakeholders to assess and agree on likely fire risks. Further details of the AFMG is detailed in Figure 64. The development of a Bushfire Risk Mitigation Plan (BRMP) provides situational awareness for fire risks. During Operation COOLBURN or Operation SESBANIA that identifies higher fire risk areas are coordinated and mitigated through hazard reduction burns, fire trail/breaks and/or community engagement. The LDMG is provided with the BRMP or advice with progressive updates from QFES. Historically the fire risk has been low in the Richmond LGA. The bushfire risk management and disaster management integration is detailed in Figure 65, further information is available in the Queensland Bushfire Plan, a Sub Plan to the State Disaster Management Plan.

AREA FIRE MANAGEMENT GROUP (AFMG)

FORMATION	Established by the Queensland Bushfire Plan
AREA OF RESPONSIBILITY	**Local Government Area** (In some instances an AFMG may cover multiple LGAs, upon approval from the Commissioner, QFES)
MEMBERS	• Chaired by Rural Fire Service, Area Director **Membership of AFMGs may consist of:** • Major landholders and land managers within the area • Government (local, state, Commonwealth) • Community groups involved in bushfire management • Industry groups • Any other entity or person deemed suitable by the AFMG.
FUNCTIONS	• Develop the BRMP for the relevant local government area/s • Provide a forum for stakeholders to discuss planning, preparedness, response and recovery strategies to the effects of bushfire • Provide the BRMP to the Local Disaster Management Group (LDMG) • Advise the LDMG of mitigation activities undertaken and residual risk • Provide a forum to foster interoperability during response • Provide strategic advice to the LDMG in the event of bushfire related activation.
COMMUNICATIONS	**To the relevant Regional Inter-Departmental Committee Bushfire:** • Provide plans and maps of bushfire mitigation activities • Any information which identifies areas of risk • Details of mitigation activities undertaken • Any information which identifies areas of residual risk • Issues requiring resolution. **To the LDMG:** • Report on mitigation activities undertaken • Report on areas of residual bushfire risk • Table the BRMP.

Figure 64 – AFMG construct.

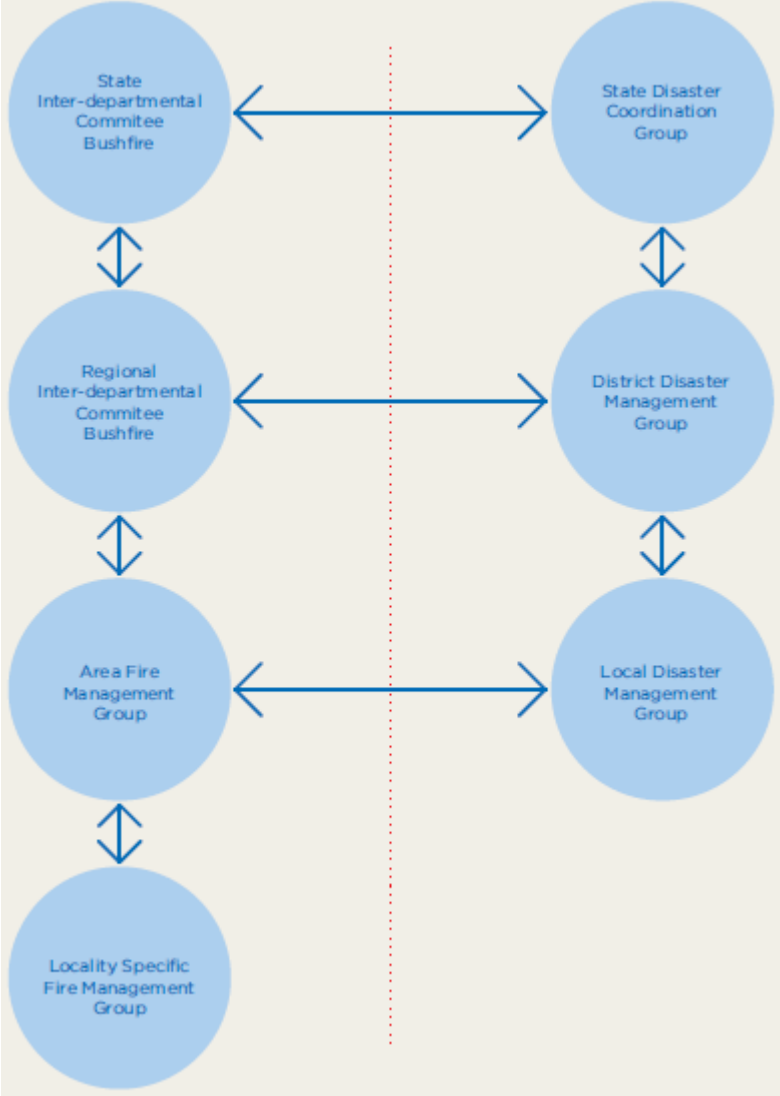


Figure 65 – Bushfire risk management and disaster management integration.

The bushfire lead and prevention functions are detailed in Figure 66.

LEAD	PREVENTION FUNCTIONS
Area Fire Management Group	• Assess the bushfire hazard in their area of responsibility • Develop the BRMP for the relevant local government area/s • Advise the LDMG of mitigation activities undertaken and residual risk
Department of Environment and Science (Queensland Parks and Wildlife Service)	• Conduct planned burns and other prevention activities on land it manages • Monitor bushfire risk and fire danger conditions across land it manages • Identify priority protection areas • Maintain road network and fire lines on its land
Department of Housing and Public Works	• Administer minimum standards for buildings in bushfire prone areas • *Building Act 1975* • Queensland Development Code • National Construction Code • Australian Standard AS 3959 – Construction of buildings in bushfire prone areas
Department of Natural Resources, Mines and Energy (DNRME)	• Managing underlying risk level relating to fire on DNRME land • Conduct planned burns and other prevention activities on land it manages • Monitor bushfire risk and fire danger conditions across land it manages
Department of Transport and Main Roads (DTMR)	• Manage bushfire risk within state-controlled road reserve • Manage closed rail corridors
HQ-Plantations	• Monitor bushfire risk across the Plantation Licence Area • Conduct planned burns and other prevention activities on Plantation Licence Area
Individual community members	• Understand bushfire risk in the environment • Undertake preparations to make their property less vulnerable to bushfires • Make decisions about their response in the event of a bushfire
Land Managers	• Identify bushfire risk on their property • Enact mitigation strategies

Local Disaster Management Group (LDMG)	• Coordinate bushfire risk-mitigation strategies for the local government area in consultation with the AFMG • Manage residual bushfire risk • Report residual bushfire risk to relevant DDMG, where appropriate
Local Government	• Administer local planning scheme • Administer building standard approvals and compliance • Conduct bushfire mitigation activities on land owned/managed by local government • Designate bushfire prone areas
Persons/Businesses who operate overhead electricity networks (Aurizon, Energy Queensland, Essential Energy, Powerlink, Queensland Rail, RTA Weipa)	• Assess and manage bushfire risk throughout their network • Develop and undertake bushfire mitigation activities
Queensland Fire & Emergency Services (QFES)	• Coordinate, plan and facilitate bushfire mitigation programs • Granting of Permit to Light Fire • Develop guidance material • Support the development of Bushfire Risk Mitigation Plans (through AFMGs) • Monitor bushfire risk in Queensland • Building fire safety
Queensland Treasury	• *Planning Act 2016* • State Planning Policy

Figure 66 – Bushfire lead and prevention functions.

Preparedness

Coordination and collaboration

The LDMG requires to coordinate and work in collaboration with group members and associated stakeholders. The members are likely to also be working within their own agency framework; however, it is important to ensure the LDMG is aware and provided situational awareness in relation to disaster management related tasks.

- LGA known resources such as but not limited to QAS (vehicle only), QPS, QH, QFES (FRS, RFS and SES) DAF and Ergon.
- Businesses and agencies are encouraged to consider risks within their respective Business Continuity Plan (BCP) or Business Continuity Management System (BCMS), that considers activities prior to during and after likely Disaster events.
- Management of likely or ad hoc external agencies and stakeholders in the LGA. Advisors or consultants will likely be called in based on the event if requested by the LDMG. It is important to ensure briefing of agencies is conducted prior to work I the LGA.
- The confirmation of equipment availability, conduct of maintenance checks and testing are encouraged with competent and qualified members. This is to ensure functionality is likely if required in an event. Equipment can be such as but limited to plant (trucks, graders, etc), generators, fuel, spare parts, consumables. Plant/equipment list is available within the Council by contacting the

Finance Department or the Chief Executive Officer. Phone (07) 4719 3377 or 0438 685 224 out of hours.

Response strategy

Activations will be conducted in accordance with the LDMP and associated triggers. When in doubt initial discussions between the Chair, LDC and/or EMC may be required before the wider LDMG is informed. The changes to activation levels are then decided by the LDMG with support from the lead/primary agency and associated DM stakeholders. The LDMG Activations table at Figure 67. The activation triggers are detailed in figure 68 and 69. Activation in response is when there is a need to:

- Monitor potential hazards or disaster operations
- Support or coordinate disaster operations being conducted by a designated lead agency.
- Coordinate resources in support of disaster response or recovery operations in the LGA.

Level of activation	Definition
Alert	A heightened level of vigilance and preparedness due to the possibility of an event in the area of responsibility. Some action may be required and the situation should be monitored by staff capable of assessing and preparing for the potential hazard.
Lean Forward	An operational state prior to 'Stand Up', characterised by a heightened level of situational awareness of a disaster event (either current or impending) and a state of operational readiness. Disaster coordination centres are on standby – prepared but not activated.
Stand Up	The operational state following 'Lean Forward' where resources are mobilised, personnel are activated and operational activities commenced. Disaster coordination centres are activated.
Stand Down	Transition from responding to an event back to normal core business and/or recovery operations. The event no longer requires a coordinated operational response.

Figure 67 – Activations table

	LOCAL		
	Triggers	**Actions**	**Communication**
Alert	• Awareness of a hazard that has the potential to affect the local government area and may require coordinated response	• Hazard and risks identified • Information sharing with warning agency • LDC contacts DDC • Initial advice to all stakeholders	• Chair and LDC available on agreed communication channels
Lean Forward	• There is a likelihood that hazard may affect local government area and may require coordinated response. • Hazard is quantified but may not yet be imminent • Need for public awareness • Event is to be managed locally	• Relevant Functional Lead Agency and LDC conduct analysis of predictions • Chair and LDC on watching brief • Confirm level & potential of hazard • Check all contact details • Commence cost capturing • LDMG conduct meetings as required • Council staff prepare for operations • Determine trigger point to stand up • Prepare LDCC for operations • Establish regular communications with warning agency • LDMG conduct briefings as required • LDC advises DDC of lean forward and establishes regular contact • Warning orders to response agencies • Public information and warning initiated	• Chair, LDC and LDMG members available on agreed communication channels • Ad-hoc reporting

Figure 68 – Activation triggers (Alert and Lean Forward)

	LOCAL		
	Triggers	**Actions**	**Communication**
Stand Up	• Hazard is imminent • Community will be or has been impacted • Need for coordination in LDCC • Requests for support received by LDMG agencies or to the LDCC • The response requires coordination	• Meeting of LDMG Core Group • LDCC activated • Rosters for LDCC planned and implemented • Commence operational plans • Local government shifts to disaster operations • LDMG takes full control • SOPs activated • Core group of LDMG located in LDCC as required • Commence SITREPs to DDMG • Distribute contact details • DDMG advised of potential requests for support	• LDCC contact through agreed communication channels • Chair, LDC and LDMG members present at LDCC, on agreed communication channels as required
Stand Down	• No requirement for coordinated response • Community has returned to normal function • Recovery taking place	• Final checks for outstanding requests • Implement plan to transition to recovery • Debrief of staff in LDCC • Debrief with LDMG members as required • Consolidate financial records • Hand over to Recovery Coordinator for reporting • Return to local government core business • Final situation report sent to DDMG	• LDMG members not involved in recovery operations resume standard business and after hours contact arrangements

Figure 69 – Activation triggers (Stand Up and Stand Down)

Authority to activate the LDMG

The LDMG initial activation is by the Chair if a threat is significant enough to warrant. The level of activation will be determined, with consideration for the likelihood and possible impact of the threat. The group may also be activated by the District Disaster Coordinator (DDC), in consultation with the Chair.

Declaration of Disaster Events and District Disaster Coordinator (DDC)

A DDC may request disaster declaration that is subject to approval from the Minister QFES. This may provide additional powers under (s77-78) of the DM Act. When the DDC declares a disaster situation, the Chair or LDC will ensure that this information is provided to all members of the LDMG.

If the situation warrants the directed evacuation of members of the public, the Chair or LDC of the LDMG will request a declaration of a disaster from the DDC.

The DDC may provide written direction to ensure the performance of the LDMG functions after consultation with the Chair of the LDMG. It is the responsibility of the LDMG to comply.

Communications and systems for information and warnings

The intent of the LDMG within the Richmond LGA is to employ timely, authorised and efficient communication systems and methods that are available on the Queensland Disaster Management website (www.disaster.qld.gov.au), the principles are further detailed in areas such as but not limited to:

- Queensland Emergency Alert Manual – M.1.174.
- Emergency Alert website (www.emergencyalert.gov.au)
- Queensland Standard Emergency Warning Signal (SEWS) Manual M.1.171.

In addition to external communication systems, the LDMG may also broadcast authorised information on the Richmond council website/Facebook, etc. for community engagement and awareness. Remote property owners are able to be contacted by VHF/HR radio and networks through the Richmond Council Customer Services. In the event of power and communication failure, notice boards located within the Richmond LGA may be used to ensure a multipronged approach to media dissemination, with local resources such as but not limited to QPS, QFES, DAF, RFDS etc. The use of innovative methods such as Visual Display Boards (VDB) are encouraged when available.

Media management during disasters must be appropriate, reliable and consistent. All LDMG associated broadcasts are to be authorised by the chair. Supporting agencies may also support the LDMG in a collaborate approach with messaging.

Evacuation and sheltering arrangements

An evacuation involves scalable approaches to planning and coordination for the movement of persons from an unsafe or potentially unsafe location and their eventual return. There are three methods of evacuation:

- Self-evacuation is initiated in the absence of official advice or warnings by the community.
- Voluntary evacuation is initiated by the LDMG with advice or warnings to the community, in particular for the at-risk population.
- Directed evacuation, otherwise known as compulsory evacuation requires the declaration of a disaster and direction from DDC or Declared Disaster Officers. The LDMG has no legislative powers and must request through the DDC if this is warranted and no declaration of a disaster is current in the LGA.

In the Richmond LGA, the likely arrangements are sheltering with family or friends. If the need requires within the LGA several building structures or businesses could be operationalised. The stages of evacuation are detailed in Figure 70. Further information is available in the Evacuation: Responsibilities, Arrangements and Management Manual .1.190 that is available on the Queensland Disaster Management website (www.disaster.qld.gov.au).

In the event of a large-scale evacuation or the request to host external evacuees from another LGA, the establishment of an Evacuation Centre may be required. To assist the following are available on the Queensland Disaster Management website, hard copies are available with the LDC.

- Queensland Evacuation Centre Management Handbook.
- Queensland Evacuation Centre Field Guide.
- Queensland Evacuation Centre Planning Toolkit.

Community Preparedness	Analysis risk and probabilities (likelihood/worst case scenario) of an event, ensure communities understand risk and evacuation zones (maps) and ensure approaches to evacuation are scalable and documented.
Decision to evacuate	Decision makers analyse event intelligence and make an assessment on the necessity to evacuate persons exposed to a range of hazards.
Warning[1]	Notification of event conditions and appropriate actions required are conveyed to the public.
Withdrawal	The movement of exposed persons from a dangerous or potentially dangerous area to a safer location.
Shelter	The provision of refuge and basic needs for evacuees in safer locations and evacuation facilities.
Return	The assessment of a disaster area and the planned, coordinated and managed safe and timely return of evacuees.

Figure 70 – Stages of evacuation.

Logistics

Logistic activities have three phases:

- Before the event.
- During the event.
- After the event.

General logistic categories are:

- Managing requests for assistance, offers of assistance and advice.
- Emergency supply.
- Council to Council arrangements.
- Resupply operations.

Emergency Supply

Emergency supply is the acquisition of and management of Emergency supplies and services in support of disaster operations such as but not limited to bedding, water and food that cannot be sourced locally. An example of an Emergency Supply Register is available on the Disaster Management website.

Resupply

Resupply may be required to provide essential items for impacted communities in accordance with the Queensland Resupply Manual – M.1.205 and submitted on the Queensland Resupply Request Form – F.1.206, that is available on the Disaster Management website (www.disaster.qld.gov.au). The three types of resupply are:

- Isolated communities.
- Isolated rural property.
- Stranded persons.

Financial arrangements

The activation of the LDMG does not relate to funding eligibility; however, increases the optimisation of support and opportunities for the LGA. Support and advice is available through the QRA Liaison Officer, QFES EMC and respective lead agency under the Queensland Disaster Relief and Recovery Guidelines from QRA or the Queensland Disaster Management website.

Offers of Assistance

The management of Offers of Assistance are conducted in accordance with the Managing Offers of Assistance Manual – M.1.202. and the Offer of assistance Policy, that are available on the Disaster Management website (www.disaster.qld.gov.au). Figure 71, details referral pathways. The categories of Offer of Assistance are:

- Financial.
- Volunteering.
- Goods and services.

Offer type	Partner organisation *Associated lead government organisation*
Financial	If the Department of the Premier and Cabinet has activated the Premier's Disaster Relief Appeal: Contact Smart Services Queensland on 13 QGOV (13 74 68) or 1300 300 768 *Department of the Premier and Cabinet*
	If the Department of the Premier and Cabinet has activated an appeal via donation to an NGO: Contact Smart Services Queensland on 13 QGOV (13 74 68) or 1300 300 768 *Department of the Premier and Cabinet*
	In all other circumstances, donations should be directed towards a reputable NGO or charity.
Volunteers	Contact Volunteering Queensland at https://volunteeringqld.org.au/services/emergency-volunteering *Department of Communities, Disability Services and Seniors*
Goods and services	Contact GIVIT at http://www.givit.org.au/ *Queensland Reconstruction Authority*
Corporate offers	Refer based on the type of offer (financial, volunteers, goods and services)

Figure 71 – Offers of Assistance Referral pathways.

Recovery strategy

The Richmond LDMG, operationalises the Local Recovery Group (LRG) to manage any local recovery if evidence indicates, as a result from an event. A Local Recovery Coordinator (LRC) has been established to assist in this process. All five Functional Recovery Groups (FRG)/Pillars are considered, reviewed and assessed if the need requires recovery support after an event. This would include any temporary FRG as advised by Queensland Reconstruction Authority (QRA). The Queensland Recovery Plan (Sub Plan to the State Disaster Management Plan) assists the LRG with recovery functions and the Local Recovery Planning Manual – M.1.136, documents are available on the Disaster Management website (www.disaster.qld.gov.au). An example LRG is detail in Annexure B and will be reviewed and adjusted as required to contextualise event specific recovery in the LGA. The LRG will be activated if a need has been confirmed from the affected LGA and/or community. Richmond recovery concept is detailed in Figure 72.

The authorised FRG are:

- Environmental
- Building
- Roads and Transport
- Human and Social
- Economic.
- Temporary FRG may be approved by QRA to meet the requirements of an event.

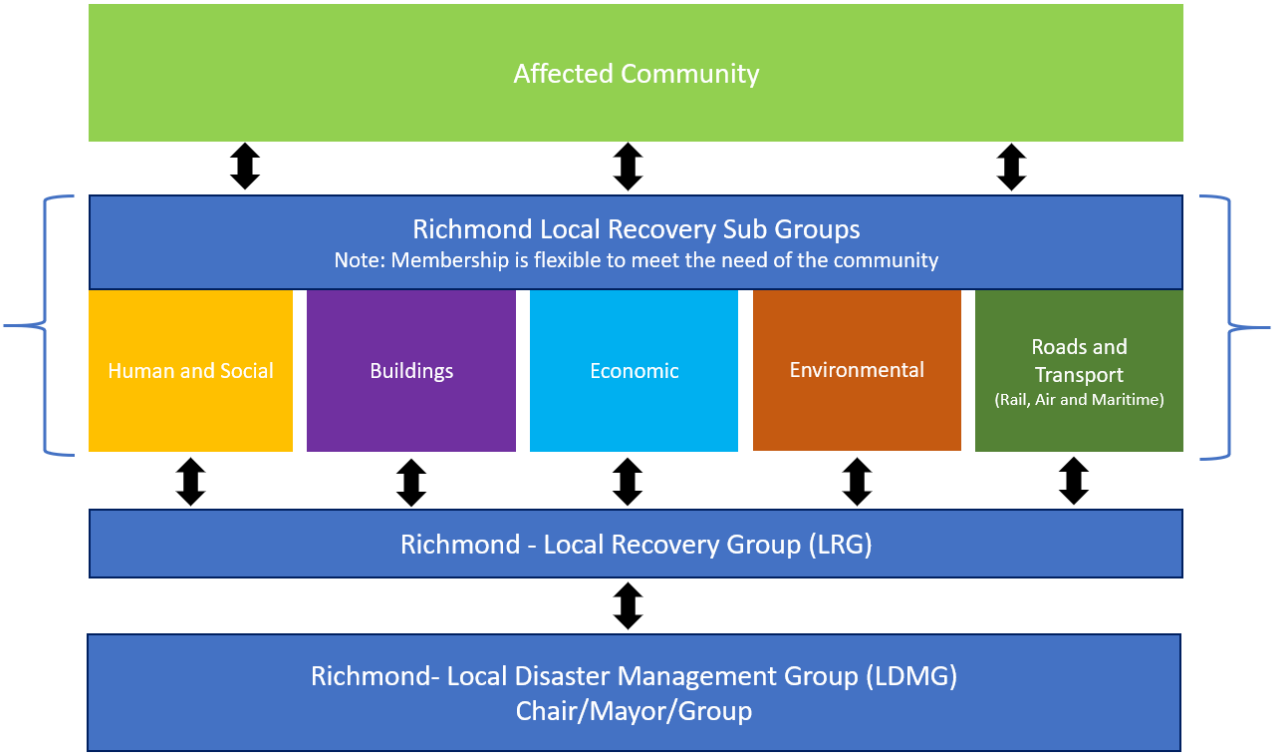


Figure 72 – Richmond recovery concept.

LDMG Sub Plans

- **Pandemic Sub Plan,** approved by LDMG 16 March 2022.