

Richmond Shire Local Disaster Management Plan

September 2013

(Incl. Disaster Management and Other Legislation Amendment Bill 2010)



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 a number of 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.

Endorsement

This plan is endorsed by the chair of the Local Disaster Management Group



Date 17 September 2013

Cr. John Wharton AM CHAIR Richmond Local Disaster Management Group

This plan has been agreed to and accepted by the Richmond Shire Council on 17 September 2013 through resolution.

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

The plan is endorsed for distribution by the Richmond Shire Council.

Cr. John Wharton AM MAYOR Richmond Shire Council

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Document Control

Amendment Control

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

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

The LDC may approve inconsequential amendments to this document. Any changes to the intent of the document must be approved and endorsed by the Richmond Shire Council.

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

Amendment Register

This plan must reflect the changes in the Richmond community. As such, it will undergo changes as the community and Shire develops over time.

Changes to this plan are to be submitted to the CEO of the Richmond Shire Council and to the Local Disaster Management Group for inclusion in the plan.

Amendment		Plan Updated	
No / Ref	Issue Date	Inserted by	Date
		Michelle Clarke & Amy Russell	4/11/2011
		Michelle Clarke & Amy Russell	28/11/2011
		Michelle Clarke	17/2/2012
		Clinton Weber	6/03/2012
		Amy Russell	22/03/2012
		Amy Russell	23/03/2012
		Wayne Preedy & Amy Russell	16/04/2013

Distribution

This plan has been distributed in accordance with the distribution list at Annexure A.

Administration and Governance

Authority to Plan

The Disaster Management Act 2003 (DM Act) requires comprehensive disaster management plans to be developed. Richmond Shire Council has complied with this since the introduction of the State Disaster Management Organisation Act 1975 for the provision of emergency planning and response for the local community.

This plan is prepared for the Richmond Shire (RSC) under the provision of Section 57 of the *Disaster Management Act 2003*, and replaces the former Local Government Disaster Management Plan.

This Plan is prepared under the provisions of the *Disaster Management Act* 2003, Section 57 (1).

- (1) A local government must prepare a plan (a "local disaster management plan") for disaster management in the local government's area.
- (2) The plan must include provision for the following—
 - (a) the State group's strategic policy framework for disaster management for the State, and the local government's policies for disaster management;
 - (b) the roles and responsibilities of entities involved in disaster operations and disaster management in the area;
 - (c) the coordination of disaster operations and activities relating to disaster management performed by the entities mentioned in paragraph (b);
 - (d) events that are likely to happen in the area;
 - (e) strategies and priorities for disaster management for the area;
 - (f) the matters stated in the disaster management guidelines as matters to be included in the plan;
 - (g) other matters about disaster management in the area the local government considers appropriate.

Purpose

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

The purpose of the Richmond Shire Local Disaster Management Plan is to address the disaster management needs of the Richmond Shire. This will be achieved by:

- (i) Ensuring that community risks related to events are effectively managed;
- (ii) Ensuring that risks requiring District level support are identified and communicated to the District Level;
- (iii) Ensuring that Local Government and Local Groups comply with their disaster management obligations under the *Disaster Management Act 2003*; and other purposes related to disaster management the Local Government determines.

Objectives

The objective of the Richmond Shire Council Local Disaster Management Plan is to facilitate the implementation of effective and efficient disaster management strategies and arrangements including:

• the development, review and assessment of effective disaster management for the local government area including arrangements for mitigating, preventing, preparing for, responding to and recovering from a disaster (see below)

- compliance with the State Disaster Management Group's (SDMG) Strategic Policy Framework;
 the State Disaster Management Plan; the Local Disaster Management Guidelines; and any other
 Guidelines relevant to local level disaster management and disaster operations
- the development, implementation and monitoring of priorities for disaster management for the local government area.

Prevention

Address and provide prevention strategies for disaster management of the Richmond Shire through mitigation and education.

The plan aims to identify community awareness programs that will assist the community in preparing for a disaster event.

Preparedness

Address and provide preparedness strategies for disaster management of the Richmond Shire through mitigation and education.

The plan aims to identify community awareness programs that will assist the community in preparing for a disaster event.

Response

Address and provide response strategies for disaster management of the Richmond Shire.

Recovery

Address and provide recovery strategies for disaster management of the Richmond Shire.

The plan ensures that community risks relating to disaster events or events that affect the wellbeing of the community are identified and effectively managed.

The plan is to detail the arrangements and responsibilities between response agencies, supporting government and non-government organisations.

The objective of the plan is to ensure that risks requiring District level support are identified and communicated to District level.

Strategic Policy Framework

Disaster management and disaster operations in the Richmond Shire local government area are consistent with the *Disaster Management Strategic Policy Framework*. This is achieved by applying the elements of the Strategic Policy Framework.

Research

Richmond Shire has been pro-active in undertaking studies into disaster risks within our Shire.

Richmond Shire has used specialist services to conduct studies into disaster risks within our Shire. This includes the Flood Mapping Study of Richmond conducted by Engeny in late 2011.

Policy and Governance

The Richmond Shire Local Disaster Management Group will ensure that the Shire's responsibilities under the *Disaster Management Act 2003* are executed in full. The Shire is committed to the values of the disaster management strategic framework.

Risk Assessment

Richmond Shire Council will continue to implement best practice risk assessment and management practices in the Shire and will comply with current risk management standards (ISO 31000:2009).

Mitigation

A detailed Mitigation Plan was developed as an outcome of the Natural Disaster Risk Management Study conducted by EMQ & RSC 2006 .

Preparedness

The Richmond LDMG meets quarterly throughout the year and undertakes regular training and exercises. The Richmond SES is well-resourced and supported by Council.

Response

The Richmond LDMG has activated previously as a result of flooding in the Shire which isolated rural properties. The Richmond LDMG has well-established procedures for managing flooding type events of isolating rural properties and intermediate road closures of the Flinders highway due to flodding. Other types of disaster are exercised to ensure a suitable response is provided when the time comes.

Relief and Recovery

The Richmond LDMG Recovery Plan, (Annexure M) is based on the four pillars of economic, social, infrastructure and environment.

Post-Disaster Assessment

The Richmond LDMG is developing its Post-Disaster Assessment capabilities. The assessment will include using the QFRS Rapid Damage Assessment Teams, Council, and other local agency staff.

LG Policy for Disaster Management

The Richmond Shire and the Local Disaster Management Group will ensure that the Shire's responsibilities under the *Disaster Management Act 2003* are executed in full. The Shire is committed to the values of the disaster management strategic framework:

- Protecting health, safety, quality of life and economic vitality.
- Building and maintaining partnerships and collaboration across all levels of government, community and industry, in all aspects of disaster management.
- Protecting our natural and built environment.
- Respecting the diversity of Queensland communities.
- Ensuring accountability and transparency of the Queensland disaster management arrangements.

The Local Government Act 2009 provides for a local government to prepare long term Community Plans. The Richmond Shire adopted the Community Plan 2022 in December 2011 and the "Our Community" section on page 14 therein contains a strategy under the heading of "Safety" as follows:-

"Work with the community to ensure greater involvement in personal property safety issues and encourage people to look out for each other and make safety a whole of community issue."

Integration with Council's Corporate Planning Processes

Risk and Emergency Management Strategies are identified in Richmond Shire Council's Corporate Plan 2013 - 2018 and Operational Plan 2013 - 2014.

The Corporate Plan considers local and regional issues.

The focus of Council's Disaster Management Program, as required by the *Disaster Management Act* 2003, is on minimising the effects of hazards on our local and regional community, by ensuring a coordinated approach within the community. This process requires the development and maintenance of planning partnerships at local and state levels.

Council will continue to liaise with emergency service providers regarding resource planning and provision, and will strive to build resilience and capacity in our communities to manage natural or manmade adversity.

The Community Strategic Goal within the Corporate Plan contains a strategic outcome and action as follows:-

- 1.5 Efficient disaster management across the Shire.
- 1.5.1 Ensure the Local Disaster Management Plan is current and operational in line with legislative requirements.
- 1.5.2 Ensure Council's organisational response to natural disasters minimise the impact and effect on the Community
- 1.5.3 Build resilience and capacity in our communities to manage natural or man-made adversity.

Scope

This plan details the arrangements necessary to undertake disaster management within the Richmond Shire local government area. This includes the townships and properties of:

- Richmond
- Maxwelton

Disaster Management Priorities

- Build community resilience
- Protect and preserve life
- Protect infrastructure
- Manage information
- Coordinate recovery

Review and Renew Plan

Under the *Disaster Management Act 2003*, local governments are required to 'review the effectiveness of the plan at least once a year'. 'Review' will be taken to mean a process that incorporates:

- Assessment of changes in hazards;
- Progress on the mitigation strategy (and therefore changes to exposure/risk);
- Changes in community context (population, demography, socio-economic indicators);
- Lessons identified from exercises, training or previous events.

This annual review process will be conducted in conjunction with EMQ. Changes to the plan will be approved by Richmond Shire Council and endorsed by the Richmond LDMG.

This plan will also be reviewed under the following circumstances:

- Following activation of the LDMG in response to an event;
- Following significant changes to the planning environment including changes in threats or the community;
- In response to changes in the planning guidelines; or
- In any other circumstance where the Chairman believes a review is warranted.

Local Disaster Management Group

Establishment

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

Section 30 of the Disaster Management Act 2003 details the functions of the LDMG as follows:

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

Authority to Activate the Group

The group may be activated by the Chair of the local group should the Chair believe that a threat is significant enough to warrant activation. The level of activation will be determined by the Chair after consultation with the Local Disaster Coordinator, taking into account the likelihood and possible impact of the threat. The group may also be activated by the District Disaster Coordinator (DDC).

Activation of the group will occur independently of activation of NDRRA. The decision to activate will be based on threat rather than financial implications.

Once the group is activated, situation reports will be compiled and submitted to the district group at a frequency determined by the district group.

Whilst there may be no requirement for the entire group to be in attendance at a coordination centre, the Local Disaster Coordinator is to ensure that the entire group is kept informed of the situation and actions of the group.

The group will stand down only after the decision to cease activity has been made by the Chairman and the DDC. Once the group has stood down, a final situation report will be compiled and sent to the district group.

Membership

LDMG Core Group Members

AGENCY	MEMBER
Chair	Mayor, Richmond Shire Council.
	In the absence of the Mayor, the councillor identified as
	the Deputy Chair shall assume the role of Chair
Local Disaster Coordinator (LDC)	Chief Executive Officer (CEO), Richmond Shire Council.
	In the absence of the CEO, the person appointed as the
	acting CEO shall assume the role of LDC
Director of Works	Director of Works, Richmond Shire Council
Emergency Management Queensland	Area Director
(EMQ)	
State Emergency Service (SES)	Richmond Local Controller
Queensland Police Service (QPS)	Officer in Charge, Richmond Station
Richmond Health Service	Director of Nursing (DON)

Membership of the group shall mean and include the person acting in the capacity of any of the above members or the delegate of the member as the case may be. The delegate must have the authority to commit resources from parent body.

Details of membership of the Local Disaster Management Group, including addresses and contact numbers are contained in (Annexure B) to this plan.

LDMG Specialist Advisors

The following members, whilst not regarded as "core" members of the LDMG, may be called upon to give specialist advice about the role and capabilities that their organisation may be able to provide to the LDMG:-

AGENCY*	MEMBER
Richmond Shire Council	Deputy Mayor
Richmond Shire Council	Environmental Health Officer
Richmond Shire Council	Overseer
Richmond Shire Council	Town Service Supervisor
Richmond Shire Council	Human Resources Manager
Richmond Shire Council – Community Care	Aged Care Coordinator
Queensland Fire & Rescue Service (QFRS)	Officer In Charge
TELSTRA	Local Representative
Ergon Energy	Area Operations Manager
Airport	Airport Reporting Officer
Aurizon	Representative
Department of Forestry and Fisheries	Local Representative
(Biosecurity)	
QGAP	Manager
QCWA	Local Representative
Australian Red Cross	Local Representative
Lions Club	Local Representative
Richmond State School	Principal
Essential Services	Water & Sewerage Office of the Richmond Shire

^{*} Or any other agency the Chair of the LDMG may invite to the group.

Contact details for the members are held separately to this document and **are not to be released to members of the public**. Contact details will be checked by the LDC of the LDMG at least once per annum.

All members of the LDMG will receive induction training. All members of the LDMG and their deputies will be appointed in writing by the Chair.

Section 3-37) of the Disaster Management Act 2003 specify -

33 Membership

- (1) A local group consists of the persons appointed as members of the group by the relevant local government for the group.
- (2) At least 1 person appointed under subsection (1) must be a person nominated by the chief executive of the department.
- (3) At least 1 person appointed under subsection (1) must be a councillor of a local government.
- (4) The relevant local government for a local group may appoint a person as a member only if satisfied the person has the necessary expertise or experience to be a member.

34 Chairman and deputy Chairman of local group

- (1) The relevant local government for a local group is to appoint—
 - (a) a member of the group as the Chairman of the group; and
 - (b) a member of the group as the deputy Chairman of the group.
- (2) The member appointed as the Chairman must be a councillor of the local government.
- Functions of Chairman of local group. The Chairman of a local group has the following functions:
 - (a) to manage and coordinate the business of the group;
 - (b) to ensure, as far as practicable, that the group performs its functions;
 - (c) to report regularly to the relevant district group, and the chief executive of the department, about the performance by the local group of its functions.

35 Local disaster coordinator

- (1) The Chairman of the local group must, after consulting with the chief executive, appoint the chief executive officer or an employee of the relevant local government as a local disaster coordinator of the group.
- (2) The Chairman of the local group may appoint a person mentioned in subsection (1) as a local disaster coordinator of the group only if satisfied the person has the necessary expertise or experience to be a local disaster coordinator.
- (3) The appointment under subsection (2) must be in writing and may only be revoked in writing.
- Functions of local disaster coordinator. The local disaster coordinator has the following functions
 - (a) to coordinate disaster operations for the local group;
 - (b) to report regularly to the local group about disaster operations;
 - (c) to ensure, as far as practicable, that any strategic decisions of the local group about disaster operations are implemented.
- Notice about membership of local group. The relevant local government for a local group must, at least once a year, give written notice of the members of the group to—
 - (a) the executive officer of the State group; and
 - (b) the Chairman for the disaster district in which the local group is situated.

Appointment of representative to District Group

The Richmond Shire Mayor is appointed as a member of the Townsville DDMG.

Notification of membership to State Group

The LDC of the LDMG shall notify the State Disaster Management Group and District Disaster Management Group of the LDMG membership once per annum. Changes to the executive membership will be forwarded to the state and district groups as they occur.

Roles and Responsibilities

The following organisations have accepted responsibility as lead agencies for operations associated with each hazard.

Hazard	Lead Agency
Cyclone	Richmond Shire Council
Flooding	Richmond Shire Council
Earthquake	Richmond Shire Council
Fires - Urban/Rural	QFRS - Urban and Rural Operations
Accidents - Road/Aircraft / Boating	Queensland Police Service
Accident - Rail	Queensland Transport (Queensland Rail)
Hazardous Material Incident	Queensland Police Service
Water Contamination	Richmond Shire Council
Medical Pandemics & Epidemics	Queensland Health Department
Exotic Animal & Plant Disease	Biosecurity Queensland

The LDC is responsible for the administration of the group. The following administrative tasks are to be undertaken by the group:

- Keep minutes of meetings;
- Maintain contact lists;
- Maintain membership lists;
- Update local disaster management plan;
- Register correspondence;
- Prepare reports (as listed below);
- Financial management; and
- · Conduct meetings.

Procedures for the management of information in a disaster situation are detailed in Annexure N LDCC SOP and Duty Statements. The LDMG uses Council's 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 in the LDCC is adequately managed.

Public Health

Throughout the year, Richmond Shire Council is responsible for public health. During emergencies, the managers of each Council department ensure that the following functions are provided:

- Safe and adequate water supply emergency power backup is provided at all Council facilities. Testing of water supplies is undertaken to ensure that no contamination has occurred. Residents are advised to conserve water.
- Safe and adequate food supply Environmental Health Officer inspects food premises to ensure compliance with food safety standards.
- Emergency power backup is provided at Council's sewerage depot. In the event of treatment plant failure, the LDMG would seek assistance from the DDMG for provision of emergency ablution facilities.
- Refuse and waste disposal landfill facilities are located in the community of Richmond. Normal refuse disposal services continue until prevented by loss of access. Services are resumed as soon as access is reinstated.

 Vermin and vector control – Council monitors vector breeding areas prior to and during events and undertakes control where necessary as soon as waters recede and access is available.
 Vermin control is addressed on an 'as needed' basis.

- Infectious disease control Council works with Queensland Health as incidents occur.
 Queensland Health is a core member to the LDMG.
- Guidance on personal hygiene requirements Council has prepared fact sheets on personal hygiene that are distributed to the community as required. Supplies of detergent and hand sanitiser are supplied for distribution at evacuation centres or as required.
- Disposal of dead stock and animals Council organises burial of dead animals on site, if possible, or at the landfill, depending on the type of event.
- Disinfection of buildings and premises Supplies of disinfectant is available for use and distribution as required.

Roles and Responsibilities for the following identified natural and non-natural hazards are detailed below:

Hazard

Cyclone/Severe Storms
Flood
Earthquakes
Fire
Exotic Animal and Plant Diseases
Transport Accidents
Hazardous Materials Incidents
Pandemics and Epidemics
Water Contamination

The roles and responsibilities of the involved organisations for each event are listed in the operational register below.

Cyclones / Severe Storms / Flooding / Earthquake

Lead Agency	Supporting Organisations	Roles and Responsibilities
Richmond Shire Council Contacts:		Collection of local flood warnings and information
Mayor/Deputy Mayor CEO/LDC		 Protection and maintenance of water and sewerage services
Director of Works		Clearing of debris
Works Coordinator		 Assessment and safety of damaged buildings
Environmental Health Officer		 Preservation of public health including disposal of refuse and waste and distribution of disinfectant for flood clean-up
		 Provision of labour and equipment. Setting up of barricades, detours, etc for road flooding or closure
		 Contact Area Director EMQ and DDC with situation reports
		Advise on local effects of flooding
		 Provision of sandbag fill for flood protection
		Aerodrome clearance and control
		 Provision of flood information service during flood event
		 Production and issue of media releases

Protracted Operations (External resupply for community)

A Richmond Shire Liaison Officer will be appointed to perform the following tasks:

- Collection of food order requirements from all traders, including copy of orders, supplier contact numbers, weights, etc;
- Collation of above information to LDCC for relay to DDC;
- Provision of personnel to assist in operations of the LDCC; and
- Assistance and coordination of any local welfare arrangements.

Lead Agency	Supporting Organisations	Roles and Responsibilities
	State Emergency Service Contacts: Local Controller / Deputy Controller	 Assist in conduct of evacuation Rescue of trapped or stranded persons Flood boat operations Provision of emergency communications Temporary repairs to damaged buildings Provision of labour and equipment Debris clearance
		 Traffic control as required Provision of short term welfare arrangements Provision of emergency lighting Provision of Liaison Officers for LDCC Assist community to protect household assets pre-flood event
	Qld Police Service Contact: Officer in Charge	 Control and conduct of evacuation Control of essential traffic routes Security of damaged or evacuated premises Security at evacuation centres Coordinate road closures
	Qld Ambulance Service (vehicle held at Hospital – manned by Hospital staff) Contact: Director of Nursing	 Treatment and transport of casualties Medical treatment Assist with evacuation of special needs medical cases.
	Richmond Health Service Contact: Director of Nursing	 Treatment of casualties Provide accommodation for special needs medical cases
	Ergon Energy Contact: Area Operations Manager - Richmond	 Coordinate priority list with LDMG for electricity restoration Restoration of electricity supplies to essential services Restoration of supply to residential areas Provide alternative power generation to essential customers
	Telstra Contact: Local representative	 Coordinate priority list with LDMG for restoration of telecommunications Restoration of Telstra facilities and services Provide temporary emergency mobile network (Sat COW)

Lead Agency Supporting Organisations Roles and Responsibilities Qld Fire & Rescue Service Provision of labour and equipment **Contact**: Officer in Charge Assist in conduct of evacuation Provision of Swift Water Rescue personnel Debris clearance **Bureau of Meteorology** Issue of warnings **Contact**: Officer in Charge Technical advice and projected flood levels (evacuation orders are based on these projections)

Fires - Urban / Rural

Lead Agency	Supporting Organisations	Roles and Responsibilities
Qld Fire & Rescue Service/Rural Operations		Control fires
Contact: Officer in Charge		
	Qld Police Service	Evacuation
	Contact: Officer in Charge	Traffic and crowd control
		Security
	State Emergency Service	Labour
	Contact: Local Controller /	Supply lighting and communications
	Deputy Controller	Provisions of welfare support as required
	Richmond Shire Council	Supply of barricades
	Contact: Local Disaster	Maintenance of water supplies
	Coordinator	Supply plant and equipment (ensure QFRS understand hire/loan arrangement if NDRRA not activated)
	Qld Ambulance Service (vehicle held at Hospital – manned by Hospital staff)	Treatment and transport of casualties as required
	Contact: Director of Nursing	
	Ergon Energy <u>Contact</u> : Area Operations Manager – Richmond	Control of power supply

Exotic Animal and Plant Disease

Lead Agency	Supporting Organisations	Roles and Responsibilities
Department of Agriculture, Fisheries and Forestry Contact: Officer in Charge		Stock/plant movement controlQuarantine measures
	Qld Police Service Contact: Officer in Charge	Traffic control, roadblocks and diversions and other assistance as required
	State Emergency Service Contact: Local Controller / Deputy Controller	 Provision of field HQ facilities Provision of emergency communications, labour and equipment Provision of welfare support as required
	Government Medical Officer Contact: Officer in Charge	Assistance as required
	Richmond Shire Council Contact: LDC	Labour and equipment as required (ensure DAFF understand hire/loan arrangement if NDRRA not activated)
	Qld Fire and Rescue Service Contact: Officer in Charge	Fire safety on carcass burningOther assistance as required

Road Accidents, Aircraft Accidents, Boating Accidents

Road Accidents

Lead Agency	Supporting Organisations	Roles and Responsibilities
Qld Police Service Contact: Officer in Charge	Oupporting Organisations	 Control of the accident scene Control of essential traffic routes for transportation of casualties Crowd control Notification of other supporting organisations
	Qld Fire & Rescue Service Contact: Officer in Charge	Control of rescue Extrication of trapped persons
	State Emergency Service Contact: Local Controller / Deputy Controller	 Labour Provision of welfare support as required Support Rescue operations Traffic control
	Qld Ambulance Service (vehicle held at Hospital – manned by Hospital staff) Contact: Director of Nursing	Initial treatment and transport of casualties
	Richmond Health Service Contact: Director of Nursing	Treatment of casualties
	Richmond Shire Council Contact: LDC	Provision of equipment as required
	Ergon Energy Contact: Area Operations Manager - Richmond	Control of electricity where necessary

• Aircraft Accident

Lead Agency	Supporting Organisations	Roles and Responsibilities
Qld Police Service (Until arrival of Australian Safety Bureau or Civil Aviation Safety Authority or DDAAFS) Contact: Officer in Charge	ATSB (civil) DDAAFS (military)	 On-site coordination Evacuation of persons if required Security of specific areas for public protection and investigation purposes Crowd control Coordination of search operations Investigations into cause of any aircraft accident
	Contact: Officer in Charge Qld Ambulance Service (vehicle held at Hospital – manned by Hospital staff) Contact: Director of Nursing Richmond Health Service Contact: Director of Nursing	Initial treatment of casualties Transport and evacuation of casualties Treatment of casualties
	State Emergency Service Contact: Local Controller / Deputy Controller	 Assist evacuating trapped persons Provision of emergency communications and lighting Provision of labour and equipment Search operations Provision of welfare support as required
	Richmond Shire Council Contact: LDC Queensland Fire Service Contact: Officer in Charge	Supply of equipment Control of rescue operations for trapped or stranded persons when fire ground is declared.
		 fire ground is declared Control of fires Extrication of trapped persons Safety of persons in relation to fire

Boating Accident

Lead Agency	Supporting Organisations	Roles and Responsibilities
Qld Police Service Contact: Officer in Charge	Richmond Shire Council Contact: LDC	On site control Evacuation of persons if required Security of specific areas for the protection of the public Provision of equipment for containment and clean up operations
	State Emergency Service Contact: Local Controller / Deputy Controller	 Supply of emergency communications, labour and equipment Provision of welfare support as required

Lead Agency	Supporting Organisations	Roles and Responsibilities		
	Qld Ambulance Service (vehicle held at Hospital – manned by Hospital staff) Contact: Director of Nursing	 Initial treatment of casualties Transport and evacuation of casualties 		
	Richmond Health Service Contact: Director of Nursing	Treatment of casualties		
	Bureau of Meteorology Contact: Officer in Charge	Weather information		

Hazardous Material / Industrial Accidents

Lead Agency	Supporting Organisations	Roles and Responsibilities
Qld Police Service Contact: Officer in Charge		 On site control Evacuation of persons if required Control of essential traffic routes Security of specific areas for the protection of the public Crowd control
	Queensland Fire Service Contact: Officer in Charge	 Extrication of trapped persons Control of fires Notification to appropriate emergency response agency - Chem Unit Brisbane
	Richmond Shire Council Contact: LDC	Provision of equipment for containment and clean up operations
	Qld Ambulance Service (vehicle held at Hospital – manned by Hospital staff) Contact: Director of Nursing	Treatment and transport of casualties
	Richmond Health Service Contact: Director of Nursing	Treatment of casualties
	State Emergency Service Contact: Local Controller / Deputy Controller	 Supply of emergency communications, labour and equipment Provision of welfare support as required
	Bureau of Meteorology Contact: Officer in Charge	Weather information and wind direction

Epidemics / Pandemics

Lead Agency	Supporting Organisations	Roles and Responsibilities
Queensland Health Contact: Officer in Charge		Assistance as required
	Qld Police Service Contact: Officer In Charge	Assistance as required
	Richmond Health Service Contact: Director of Nursing	Assistance as required
	Qld Ambulance Service (vehicle held at Hospital – manned by Hospital staff) Contact: Director of Nursing	Assistance as required
	State Emergency Service Contact: Local Controller / Deputy Controller	Assistance as required
	Richmond Shire Council Contact: LDC	Labour and equipment as required (refer NDRRA)

Water Supply Contamination

Lead Agency	Supporting Organisations	Roles and Responsibilities
Richmond Shire Council Contact: LDC		Source alternative supplyRemediate contaminated supplyIssue media releases
	Richmond Health Service Contact: Director of Nursing	Assistance as required
	Qld Police Service Contact: Officer in Charge	Assistance as required
	Qld Ambulance Service (vehicle held at Hospital – manned by Hospital staff) Contact: Director of Nursing	Assistance as required
	State Emergency Service Contact: Local Controller / Deputy Controller	Assistance as required

Meetings

The Richmond Shire Local Disaster Management Group will meet:

- Under normal circumstances quarterly each year; and
- Under emergency/disaster conditions at the request of the Chair or LDC of the Richmond Shire LDMG or their delegate or at the request of the DDC.

The quorum for LDMG meetings is equal to half of the core group plus one.

Reporting

The LDC of the Richmond LDMG is responsible for the administrative and reporting obligations of the group. The following reporting must be undertaken by the group:

Report	Submitted to	Frequency	Format
Meeting minutes	DDMG	Following each meeting	Council minutes
LDMG Report	rt DDMG/SDMG Annually		Issued by SDMG
LDMG Membership	DDMG/SDMG	Annually	With above
Situation Reports	DDMG	As negotiated	As issued
Activation Report	DDMG	As required	Email or phone call

9

Disaster Risk Assessment

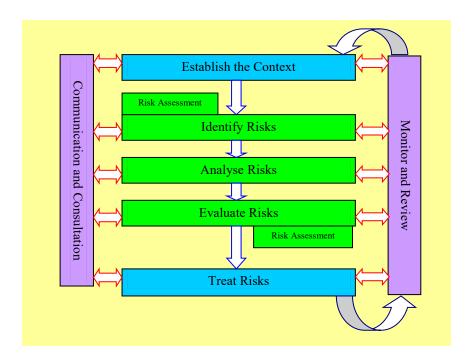
The Natural Disaster Risk Study 2006 (Annexure H) considered the assessment of risk through consideration of the level of impact of risk (consequence) and the likelihood that the event would arise (likelihood).

Risks were considered in the context of the effect of economic loss on the community and its ability to respond in the short to medium term. Consideration was also given to the likelihood of risk escalation and frequency of events as well as the political implications of actions and responses. For the purpose of the Natural Disaster Risk Study, risks were considered within the following sub-categories:

- Social environment (People)
- Built Environment
- Natural Environment

Richmond Shire Council will continue to implement best practice risk assessment and management practices in the shire. Council will comply with current risk management standards (ISO 31000:2009) in order to achieve:

- A more rigorous basis for decision making and planning;
- Better identification of threats;
- Value from uncertainty and variability;
- Pro-active rather then re-active management;
- More effective allocation of resources:
- Improved incident management and reduction in loss and cost of risk;
- Improved community confidence and trust;
- Improved compliance with relevant legislation; and
- Better corporate governance.



Community Context

Geography



Above map reflects the geographic distribution of the Townsville and Mount Isa Disaster Districts

The Richmond Shire is a Rural Remote Shire located approximately half way between Townsville and Mount Isa, or 500 kms west of Townsville. With a Shire 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.

River Systems

The major river system in the Shire is the Flinders River.

Flinders River Flood Risk

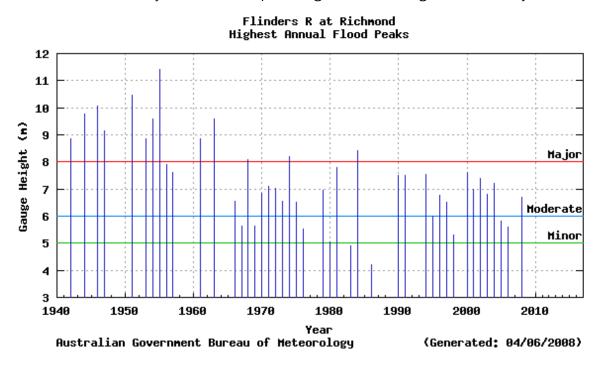
The Flinders River catchment is located in north west Queensland and drains an area of approximately 109,000 square kilometres. The river rises in the Great Dividing Range, 110 kilometres northeast of Hughenden and flows initially in a westerly direction towards Julia Creek, before flowing north to the 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 Natural Resources and Mines (www.dnrm.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 information for the Flinders Rivers is well documented. The towns of Hughenden, Richmond and Cloncurry have extensive peak height records dating back some 50 years.



Population and Demographics:

ESTIMATED RESIDENT POPULATION

As at 30 June 2010, the estimated resident population of Richmond Shire Local Government Area (LGA) was 951 persons, or 0.0 per cent of the state's population. The average annual growth rate in Richmond Shire LGA between 2005 and 2010 was -1.1 per cent, compared with 2.5 per cent for the state.

Table 1 Estimated resident population by local government area, Richmond Shire, 2005, 2009 and 2010p

	Estimated resid	Average annual growth rate			
Local government area	2005	2009	2010p	2005– 2010p (a)	2009– 2010p
		— number —		%	%
Richmond (S)	1,006	962	951	-1.1	-1.1
Queensland	3,994,858	4,424,767	4,513,850	2.5	2.0
Region as % of Qld	0.0	0.0	0.0		

p = preliminary .. = not applicable

C = City S = Shire R = Regional Council T = Town AC = Aboriginal Council IC = Island Council

(a) Average annual growth rate.

Note: Based on ASGC 2011.

Data for local government areas (2011) are derived from concorded population-based statistical local area data (ASGC 2006).

Source: Australian Bureau of Statistics, Regional Population Growth, Australia, 2009-10, cat. no. 3218.0 and unpublished data

POPULATION BY AGE

In the Richmond Shire Local Government Area (LGA) as at 30 June 2010, 25.2 per cent of persons were aged 0 to 14 years, 62.5 per cent were aged 15 to 64 years and 12.3 per cent were aged 65 years and over (see following table).

Table 2 Estimated resident population by age, by local government area, Richmond Shire, 30 June 2010p

	Population by age									
Local government area	0–14		0–14 15–24		25-44		45-64	45-64		
	number	%	number	%	number	%	number	%	number	%
Richmond (S)	240	25.2	96	10.1	264	27.8	234	24.6	117	12.3
Queensland	901,542	20.0	644,985	14.3	1,278,876	28.3	1,121,066	24.8	567,381	12.6
Region as % of Qld	0.0		0.0		0.0		0.0		0.0	

p = preliminary .. = not applicable

C = City S = Shire R = Regional Council T = Town AC = Aboriginal Council IC = Island Council

Note: Based on ASGC 2011.

Data for local government areas (2011) are derived from concorded population-based statistical local area data (ASGC 2006)

Source: Australian Bureau of Statistics, Population by Age and Sex, Regions of Australia, 2010, cat. no. 3235.0

POPULATION PROJECTIONS

As at 30 June 2031, the population for Richmond Shire Local Government Area (LGA) is projected to be 971 persons. This will account for 0.0 per cent of Queensland's total population at this time.

The population for Richmond Shire LGA is projected to increase by an average annual growth rate of 0.2 per cent over the 20-year period between 2011 and 2031. In comparison, Queensland is projected to have an average annual growth rate of 1.8 per cent over the same period.

Table 5 Projected population (a) by local government area, Richmond Shire, 2011 to 2031

		Projected po	pulation as at	30 June		Average annual growth rate
Local government area	2011	2016	2021	2026	2031	2011 to 2031
	— number —				%	
Richmond (S)	938	943	950	960	971	0.2
Queensland	4,611,491	5,092,858	5,588,618	6,090,548	6,592,858	1.8
Region as % of Qld	0.0	0.0	0.0	0.0	0.0	

. . = not applicable

C = City S = Shire R = Regional Council T = Town AC = Aboriginal Council IC = Island Council

(a) Data are based on a medium series.

Note: Based on ASGC 2011.

Source: Queensland Government Population Projections, 2011 edition

The Shire also sees an influx of approximately 15,000 visitors annually, as it is on the Overlanders Way tourist route between Townsville on the East Coast (via Charters Towers and Hughenden) and Mt Isa (via Julia Creek and Cloncurry) and the Northern Territory to the West. Richmond is also part of Australia's Dinosaur Trail that links with Winton and Hughenden.

Economics and Industry:

At the time of the 2006 Census, Agriculture, Forestry and Fishing was the largest industry of employment for Richmond Shire Local Government Area (LGA) usual residents, with 184 persons or 39.8 per cent of the region's employed labour force. Other industries with relatively large numbers of employed persons included Public Administration and Safety (52 persons or 11.3 per cent) and Transport, Postal and Warehousing (35 persons or 7.6per cent)..

All major businesses/industry are located within the Richmond township area.

Critical Infrastructure and Essential Services:

Power

The town of Richmond and it's outlying rural properties are connected to grid power via an overhead transmission line from Townsville. Power supply is sourced from power stations based in Rockhampton and Gladstone (Ergon). There is a flood-free power Switching Station in Richmond.

Water

Water supply is drawn from a series of underground bores. The water is then distributed via an electric-powered reticulation system throughout the town.

Sewerage

The Richmond Town wastewater is collected via a reticulation system and treated by an imhoff tank and lagoon treatment system. The Sewerage Treatment plant does not require power; Pump stations have

auxiliary power and mobile generators are available. The remainder of the dwellings outside the township have individual onsite wastewater treatment plants consisting of septic tanks.

Communications

The telecommunications network is owned and operated by Telstra. The network is underground within the township and is linked to the main network via fibre optic cable, and microwave radio towers. Broadcast TV services are provided in the township by 7 Central, Imparja, ABC and SBS. Radio services are provided by the ABC and rebel FM and Network Ten.

Transport

The Croydon Road to the North is inaccessible for approximately 2 months of the year mainly due to the Stalwell River – Cambridge Crossing and further river crossings in the Croydon Shire. The Flinders Highway to the east is inaccessible for a number of days approx. 3-4 times a year. Flinders Highway to the west can become inaccessible for up to four days approximately 3 -4 times during the year. The Richmond to Winton Road to the South is inaccessible after rain due to the black soil component. Richmond may also become isolated if the Flinders Highway is cut at the Burdekin River Macrossan Bridge to the East and Boundary Creek to the West. As the Flinders Highway forms part of the major transport route from East to West, many towns and a number of Shires may be affected.

As with the roads, so the Richmond Shire area of the rail line forms part of the major rail line from East to West (QRail Passenger and QRail Freight) and it is susceptible to being cut by major flooding. Again, this can have far-reaching impacts on towns along the line, including Richmond. Richmond is also serviced by Greyhound Bus Services.

Richmond has a sealed and lit 1524 metre air strip with auto homing devices and sealed access to and from town. The airstrip is capable of handling Hercules aircraft and is located on the outskirts of town. Even without isolation Richmond may not receive transport supplies as many transport companies will not service Richmond if they cannot get through to Mount Isa or have an alternative route to Mount Isa via Winton and McKinlay.

Health

The Richmond Hospital is a Queensland Health facility located in Gallagher's Drive, Richmond. The hospital has the following facilities:

- 10 beds
- High dependency unit (2 persons)
- X ray facilities
- Dispensary
- Consultation rooms
- Morgue (2 person)
- An auxiliary power supply

The Royal Flying Doctor Service also services the community in times of medical emergency. There is a Queensland Ambulance Service vehicle based in Richmond at the Hospital. Medical staff based in Richmond include Director of Nursing (DoN), 1 doctor, 1 nursing administrator, nursing staff and 2 Wardens.

Minor medical evacuations have been actioned in the past via local helicopter suppliers through the LDMG. Major medical evacuations in times of isolation or inaccessibility would be carried out by Emergency Services rescue helicopter.

Emergency Services

A State Emergency Service headquarters is located in Richmond, with approximately 13 active members and use of a vehicle equipped for general rescue, as well as a flood boat and 2 trailers.

An Auxiliary Fire Service operates 5 members from the fire station in Richmond that is equipped for urban fire fighting.

A number of Rural Fire Brigades are located around the shire with limited equipment for bushfire fighting and varying numbers of volunteers.

Police services are located in Richmond, with two officers stationed here.

Government buildings, facilities and services

Richmond Shire Council offices, State Emergency Service local headquarters, Queensland Fire and Rescue Service brigade headquarters, Queensland Police Service local station, Queensland Health facilities, Telstra, Ergon and Queensland Education are all located in Richmond.

Government Buildings, Facilities and Services

Richmond Shire contains the following Government buildings, facilities and services:-

<u>Agency</u>	<u>Facilities</u>	<u>Services</u>
Richmond Shire Council	Shire Chambers and Offices 50 Goldring Street Richmond	Local Government
Richmond Shire Council	Works Deport Crawford Street	Local Government
State Government	Police Station 5 River Avenue Halifax	Police
State Government	Court House Goldring Street Richmond	Legal
State Government	Police Station Goldring Street Richmond	Police
State Government	Ambulance - based at Richmond Health Centre	Ambulance
State Government	Fire Station Goldring Street Richmond	Fire and Rescue
State Government	SES Shed Simpson Street Richmond	Fire and Rescue
State Government	Richmond Health Centre Gallaghers Drive Richmor	id Health
State Government	Richmond State School, Crawford Street, Richmond	d Education

Richmond Shire Council Office, State Emergency Service local headquarters, Queensland Fire and Rescue Service brigade headquarters, Queensland Police Service local station, Queensland Health facilities and Ergon are all located in Richmond.

Public Buildings, Spaces and Events

- Civic Centre, Goldring Street, Richmond
- RSL Hall, Goldring Street, Richmond
- Racecourse
- Richmond Showgrounds
- Rodeo Grounds (Showgrounds)
- Lakeview Caravan Park, Goldring Street
- · RV Friendly Park, Hillier Street Richmond
- Richmond Swimming Pool, Goldring Street, Richmond
- Lake Fred Tritton, via Gallaghers Drive, Richmond
- Charlie Wehlow Oval, Middleton Street, Richmond
- Richmond Early Education Centre, Crawford Street, Richmond
- Richmond Outside School Hours Care, Crawford Street, Richmond
- Public Toilets—:
 - Jack Brown Lions Park, Goldring Street, Richmond
 - Lake Fred Tritton, via Gallaghers Drive, Richmond
 - Bobby Murray park, Goldring Street, Richmond
 - Kronosaurus Korner, Goldring Street, Richmond
 - Fossicking Sites, Croydon Road, Richmond Shire
 - Maxwelton Rest Stop, Flinders Highway, Richmond Shire
- Kronosaurus Korner, Goldring Street, Richmond
- Richmond Library, Goldring Street, Richmond

Richmond Shire contains the following public buildings, spaces and events where people congregate:-

Building/Space/Event Use Frequency Location Shire Hall (300 person capacity) 50 Goldring Street Richmond Throughout year Throughout year Showgrounds (400 person capacity) Saleyard Road, Richmond Rodeo Grounds (400 person capacity) Saleyard Road, Richmond Throughout year Richmond HACC Hall (50 person capacity) Carter Street, Richmond Throughout year Richmond Swimming Pool Goldring Street, Richmond Throughout year Crawford Street, Richmond Richmond Tennis Courts Throughout year Richmond Fishing Classic Lake Fred Tritton October each year Charlie Wehlow Oval Middleton Street, Richmond Throughout year Fossil Festival **Goldring Street** May - biannually Richmond Races Racecourse Throughout year December each year Carols by Candlelight Jack Brown Lions Park Australia Day Celebrations Charlie Wehlow Oval January each year Richmond Library Goldring Street Throughout year Richmond Early Education Centre Crawford Street, Richmond Throughout year Richmond State School Crawford Street, Richmond Throughout year **Outside School Hours Care** Crawford Street, Richmond Throughout year Richmond Campdraft Racecourse, Richmond September each year October Moon Festival Mary McKillop House, Richmond October each year Pony Club / Horse Sports Pony Club Grounds, Richmond Throughout year **Bobby Murray Park** Goldring Street, Richmond Throughout year Jack Brown Lions park Goldring Street, Richmond Throughout year via Gallaghers Drive, Richmond Lake Fred Tritton Throughout year Kronosaurus Korner Goldring Street, Richmond Throughout year

Community Support Agencies

Annexure I contain a list of community support agencies which provide information or support to community wellbeing during and after the impact of a disaster. The LDMG will liaise with representatives from the support agencies prior to, during, and after a disaster to ensure that their special needs and information requirements are met.

The LDMG will provide copies of Minutes of Meetings to the community support agencies and as the need arises will liaise on a one on one basis for post impact information regarding the needs of the affected community.

Vulnerable Persons

On an annual basis, and if the need arises, the LDC will brief the following agencies:

- Richmond Shire Council Community Care;
- Check with Director of Nursing, Richmond Health Service (e.g. dialysis patients).

In the event of activating, the LDMG will engage with the above groups to ensure that the needs of vulnerable community members are considered.

Hazards

Hazardous Sites

Bulk fuel storage held by the Council is sufficient to last for approximately six weeks of normal consumption for council use only. Other bulk fuel storage is available from Hawkins Transport and Malpass Enterprises. The supply of fuel may be affected by flooding preventing access to the town of Richmond and outlying properties.

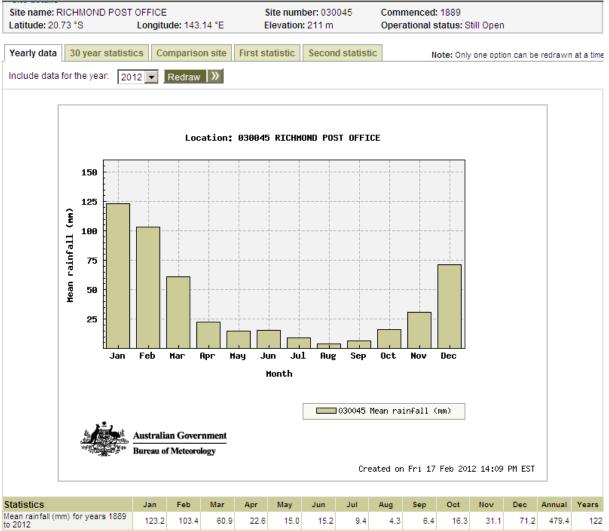
The Flinders Highway is the major link east and west of the township. Large quantities of hazardous materials are transported on the Flinders Highway and by rail on the Greater Northern Rail Line that extends from Townsville to Mount Isa.

Other

A health pandemic could affect the community resulting in a strain on existing services. Community education and strategies to prevent the spread of infection would require implementation in conjunction with Queensland Health.

Climate

The Richmond Shire has two (2) distinct climate seasons which are a wet season (December to April), with an average of 400-500 mm of rainfall per annum, and a dry season (May to November), with an average minimum temperature of 15 deg Celsius and average maximum temperature of 33 deg Celsius.



The Richmond Shire is fortunate not to have a severe risk from Natural Hazards. However, that does not mean that there are no natural hazard risks in the Shire.

There is an ever-present risk of severe weather (storms, thunder, hail and wind damage), and flooding in the summer months.

There is also a rare chance of an earthquake devastating parts of the area from which the consequences could be high.

2009 was one of the first major flood events since the 1980's and resulted in properties being isolated for a period of up to ten weeks. Storm damage has also occurred in isolated patches over the last few years, the most recent occurring in December 2011.

The Shire was drought declared from 2005-2008 and again in 2013.

Drought disrupts cropping programs, reduces breeding stock, and threatens permanent erosion of the capital and resource base of farming enterprises. Declining productivity affects rural Australia and the national economy. The risk of serious environmental damage, particularly through vegetation loss and soil erosion, has long term implications for the sustainability of our agricultural industries. Bushfires and dust storms often increase during dry times.

The LDMG stays informed utilizing the Bureau of Meteorology website www.bom.gov.au including long range forecasts and predicted rain fall as a management tool during the wet season.

Flooding

Flooding is generally considered the temporary inundation of land by water that overtops from natural or artificial watercourses. The Shire is experienced in understanding the behaviour of flood waters in regards to durations and heights.

A Defined Flood Event (DFE) is generally the flood event adopted by Council to manage development in the Shire. Generally most building infrastructure is constructed above the Q100 level or 1% annual recurrence interval.

Flooding has the potential to cause the greatest threat to the area and

strict adherence to town planning controls on residential, commercial, and industrial development should ensure that the effect of flooding in the community is minor or limited as much as possible.

A Flood Mitigation Study was completed in 2012 to further inform Council and the community.

Major flooding has the potential to cause the greatest economic harm to the area. The community, however, must be acquainted with the risk they face and understand the warnings and their significance to them.

Flash flooding in the local streams within the Shire has the potential to affect those properties backing onto the streams, and to cause damage and temporary closures to the local road network.

The Bureau of Meteorology operates a flood warning system for the Flinders River based on a rainfall and river height observations network. The network consists of a number of volunteer rainfall and river height observers who forward observations by telephone when the initial flood height has been exceeded at their station, as well as automatic telephone telemetry stations at Richmond, Cloncurry and Walkers Bend, which are operated by the department of Natural Resources and Mines. Additional flood markers on the Flinders River at Marathon in the Flinders Shire, Molesworth in Richmond Shire and Alick Creek in the McKinlay Shire installed in 2012 and will provide additional information to the LDMG and community.

The Bureau's Flood Warning Centre issues Flood Warnings and River Height Bulletins for the Gulf Rivers,

including the Flinders River, during flood events. Qualitative flood forecasts are issued when moderate flood levels are likely to be exceeded.

Local River Events - Flinders River

Severe Storms

Thunderstorms can be accompanied by severe wind, hail and lightning and the BoM thunder day map would suggest that up to 25 thunderstorms may occur in the area in any one year. The event is random and can cause structural and crop damage.

Severe wind can result in damage over a wide area of the Shire with the potential to cause structural damage.

Buildings that have not been built to the wind code and those that are not shielded by other buildings, eg, those in rural or semi rural

to buildings. Roads may be temporarily blocked by fallen trees and by flash flooding.

areas are at greater risk. Fallen trees and branches pose a significant risk to power, communication and



Past Experience in Richmond Shire

The major impacts of storms previously experienced in Richmond Shire are likely to be from strong winds causing trees to fall and take down power lines. The other major impact of storms previously experienced in Richmond Shire is lightning strikes and specifically damage to electricity supply infrastructure as a result.

Secondary Hazards

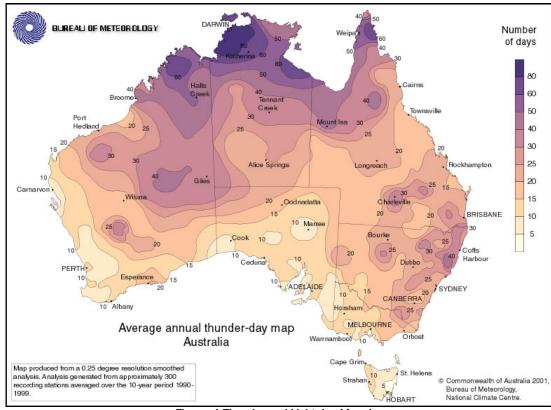
Typical damage that occurs from these events include:-

- Disruption of power supply (and therefore water supply).
- Flash flooding.
- Damage to houses and other items such as cars from hail, flying debris and falling trees.
- Injury or death to people.
- Lightning strikes.

As a result of the above impacts a wide range of secondary hazards can occur, which include:-

- Fire from lightning strikes;
- Loss of sewerage and water supply causing secondary health hazards;
- Traffic accidents due to immediate impacts; and
- Inundation of low-level road crossings throughout Richmond Shire creating a traffic hazard.

The following figures show lightning strike density and annual thunder days.



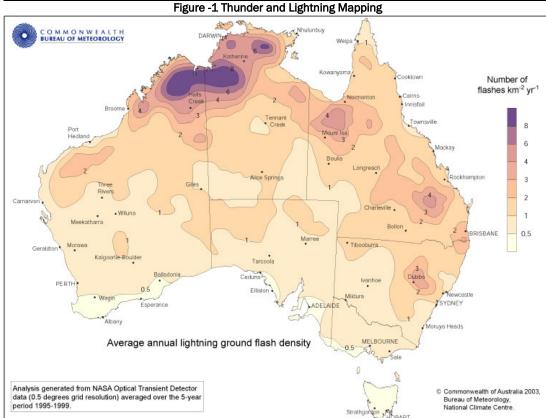


Figure -1 indicates that while Richmond Shire is exposed to the affects of storms, the lightning ground flash density is only in the order of 1-2 flashes per square km per year. This is considered low given the relatively high incidence of 'thunder days' experienced (in the order of 3 per year).

-

Tropical Cyclones

Cyclonic Winds

Tropical cyclones pose a significant risk to the communities of Queensland. Obviously the areas at highest/greatest risk are those closest to the coast which can incur flash flooding, wind damage and considerable structural damage from falling trees and scour along the coastal strip due to high energy waves, strong currents, storm surge and storm tide.

Tropical cyclones typically occur during the period between December and March.

Three components make up a tropical cyclone hazard – strong winds, very heavy and intense rainfall and ocean effects. The destructive force of a tropical cyclone is usually expressed in relation to the maximum strength of the winds it generates, which in turn is a function of the central pressure of the system. The rainfall intensity varies considerably and usually reaches it peak after the tropical low system has degenerated into a rain depression as it loses its intensity over land.

A five scale system, as shown in the table below, is used by the BoM to classify tropical cyclones in Australia.

Table Error! No text of specified style in document.-1 Cyclone Categories

Category	Maximum V (km/hr)	Vind Gust	Potential Damage
1	<125		Minor
2	125 - 170		Moderate
3	170 - 225		Major
4	225 - 280		Devastating
5	>280		Extreme

A tropical cyclone is an intense low-pressure weather system that in the southern hemisphere has winds circulating in a clockwise direction around the central eye. Once a tropical cyclone system reaches a category 3 and above, it is upgraded to a severe tropical cyclone and can exhibit average wind speeds in excess of 120km/hr with accompanying short bursts of wind up to 50% stronger than the average.

Cyclonic Wind and Rain

The wind damage will vary because of the varying intensity of the wind and the actual location. Topographical influences relate to terrain roughness (fields, trees houses etc), shielding from adjacent structures or objects, and the influence of ground slope.

Heavy rainfall associated with a tropical cyclone is generally in bands and occurs after the tropical cyclone has made landfall. The rainfall bands fall into three categories – the first is associated with the wall of the eye of the tropical cyclone and can be up to 50 km from the centre, the second are the spiral bands that can spread out to several hundred kilometres from the eye and produce torrential rain, and the third is peripheral interaction with other weather systems that can produce heavy rains. This latter phenomenon means that the Richmond Shire can experience heavy rainfall from a tropical cyclone that is some distance away, and this is a very important factor in consideration of flooding impacts.

The structure of a tropical cyclone consists of the eye which is between 20 to 50 km in diameter and usually contains clear skies and light winds; the eye wall usually made up of cumulonimbus cloud which can contain high winds; and rain bands which can extend out to 1000km in diameter. The heaviest rain and strongest winds are usually associated with the eye wall and occur to the left of the direction of motion of the system. For example, a tropical cyclone heading toward Richmond Shire from the east will generate easterly winds to the north of the eye and westerly winds to the south of the eye.

Secondary Hazards

Tropical cyclones have the capacity to seriously affect services such as power due to strong winds and debris impact, severely damaging buildings, power lines and substations. In Richmond Shire these effects also threaten the town's water supply. Tropical cyclones induce considerable rain, which leads to flooding, and damage due to fallen trees.

Richmond Shire Tropical Cyclone History - Previous 10 years

with trees down in yards.

Table 2 provides a summary of tropical cyclone events, which have impacted on Richmond Shire.

Tropical
Cyclone
Name and
Date

Yasi
2011

Crossed the coast near Tully and Cardwell without serious injuries or loss of life but caused significant damage at Tully and Hull Heads and Cardwell due to wind and storm tide. Structural damage occurred to many buildings in Hinchinbrook Shire with most sustaining minor (roof) damage however about 150 suffered major damage. Many trees were uprooted, crop loss and moderate to major flooding occurred in the Herbert River.

In Richmond we experienced strong winds and minor structure damage

Table 2 Richmond Shire Tropical Cyclone History

Earthquakes

The Australian continent is distant from the boundary between the Australian and Pacific plates. The boundary between these plates contains a narrow band of earthquake activity that passes through Papua New Guinea, the South West Pacific countries and New Zealand. Southeast Queensland is situated more than 1500 km from this plate boundary. Nonetheless, strong earthquakes have occurred in Australia.

Although damaging earthquakes are relatively rare in Australia, the high impact of individual events on the community ranks them as a costly natural hazard. Recent figures put the historical cost of earthquakes in context. The Bureau of Transport Economics (2000) has estimated that the direct cost of disasters to the Australian community in the period 1967 – 1999 was about \$37.3 billion, or an average of \$1.13 billion per year. Of this total, floods contributed about 28%, severe storms about 25%, tropical cyclones about 24%, and earthquakes about 13%.

The size of an earthquake is expressed in terms of the Richter magnitude, which is logarithmic scale and is designated by ML. The energy released by an earthquake varies enormously with an increase in magnitude of 1 unit equivalent to an increase in energy release of 33 times, eg an earthquake with a Richter magnitude of 6 releases about 33 times more energy than one with a magnitude of 5, and similarly about 1000 times more than a magnitude 4.

The Modified Mercalli Intensity scale is also used regularly as it is easily understood. This scale describes the strength of the shaking by categorising the effects of an earthquake through damage to buildings, disruption of ground conditions and the reactions of people and animals.

With increasing urbanisation and reliance on power, water and telecommunications lifelines, communities are becoming increasingly vulnerable to the impact of earthquakes.

Richmond Shire Earthquake History

The following figures show historical earthquakes in the Far North Queensland and surrounding areas.

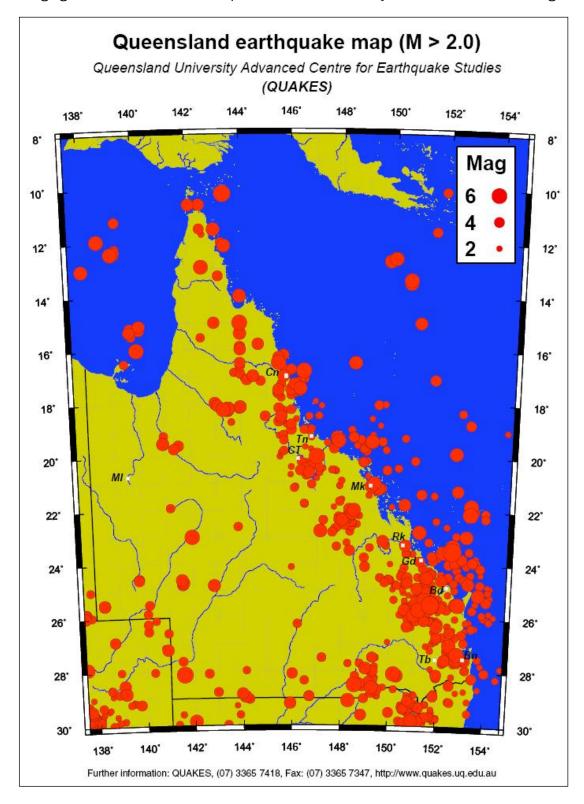


Figure -2 Earthquakes recorded in North Queensland - Source - Geoscience Australia

The above map shows all recorded earthquakes (with magnitudes greater than 2 Richter Scale).during the period 1866 - June 2000. Most earthquakes shown on the map were recorded since 1977 when seismographs started to be installed around the State's large dams. It should also be noted that there is only a limited network of monitoring devices available to record this seismic activity. The above map indicates that no significant earthquakes have been recorded within the vicinity of Ingham and all seismic zoning has a very low acceleration coefficient of less than 0.1 m/sec².

-

Secondary Hazards

In the event of a significant earthquake in the vicinity of Richmond Shire, all lifelines will be affected to varying degrees. Landslide are other potential secondary hazards associated with earthquake events. These are extremely unlikely to occur in the Richmond Shire.

Landslides

A landslide is the movement of a mass of rock, debris or earth down a slope. Whilst the causes of slope movement can be quite complex, all landslides have two things in common - they are the result of failure of part of the soil and rock materials that make up the hill slope and they are driven by gravity. They can vary in size from a single boulder in a rock fall or topple to tens of millions of cubic metres of material in a debris avalanche.

Landslides can be caused in a number of ways. These include saturation of slope material from rainfall or seepage; vibrations caused by earthquakes; undercutting of cliffs by waves; or by human activity. Certainly the most common trigger for landslides is an episode of intense rainfall coupled with human activity.

Whilst landslides in Richmond Shire are expected to be a minor problem it should be noted that in Australia, 52 landslides are known to have caused injury or death during the period 1842-2000. At least 84 people have been killed and 87 injured. The events which caused death varied from topple, or fall of a single rock, to a spectacular debris flow. Some were the result of human activity, while others were naturally occurring events.

Because of the scarcity of readily available data, it is not possible to estimate the total economic loss due to landslides, but most of the loss has resulted from damage to infrastructure such as roads, railways and water and sewerage systems.

Given that the topography of Richmond Shire Figure 6 is relatively low lying the probability of such an event occurring is considered to be low.

The most likely impacts of any landslide event in Richmond Shire are temporary road closures caused by localised embankment failures.

Secondary Hazards

Power, water and communication lines generally follow access roads and hence are liable to damage if a landslide occurs in the vicinity of the Flinders Highway.

Bushfires

Bushfires can occur in the area. The vegetation and tree growth in the Shire must be assessed and the Rural Fire Authority Risk map 'ground truthed' before embarking on the development of appropriate town planning controls.

The greatest risk is to timber structures, including infrastructure, in the rural and rural residential areas and those elements of infrastructure that are susceptible to heat generated by fire. Lives may be at risk if people are caught in the open in a fire, especially the volunteer fire fighters.

Secondary Hazards

A secondary hazard is the affect that smoke from these fires has on wildlife and chronic sufferers of respiratory or allergic ailments, road visibility and the loss of public utility services such as power.

Risk Assessment

A Natural Disasters Risk Management Study 2007-2008 (Appendix) was completed with funding under the Natural Disaster Mitigation Program (NDMP). The results of this study are regarded as still being current. The findings of this study were that the following hazards are considered to be a risk to the Richmond Shire.

Hazard Analysis & Risk Assessment

Part A - Risk Description - Flooding

	HAZARD - Flooding				
VULNERABLE ELEMENTS	RISK	CONSEQUENCE			
People	A large part of Richmond Shire may be directly affected by flooding. Some buildings may be flooded above floor level. People washed away in their vehicles. People isolated. People may become ill after entering sewage-contaminated waters.	People may be killed (drowned). People may be injured. People may need to be evacuated, fed and accommodated. Food drops may be required. Emergency evacuations may be required. Increased numbers being admitted to hospital with gastro-intestinal or wound infections.			
Buildings	Water may enter some buildings and dwellings above floor level.	Furniture and fittings may be damaged or contaminated. Structures maybe damaged. Services (such as Council ops, hospital etc) may be disrupted.			
Environment	Extensive environmental damage may be experienced. Sewage pollution due to pump station failure	Water quality issues. Potential contamination of water pipelines, tanks and bores. Erosion damage may alter watercourses. Damage to marine ecosystems by sediment and pollutants.			
Business	There is a risk of water damage to business operations in Richmond Shire	Loss of income. High repair costs.			
Lifelines	Roads may be cut. Airport may be isolated. Sewerage pump stations may be inundated. Loss of or disruption to Telstra exchanges Electrical sub-stations isolated.	Roads may be damaged and travel restricted. Passenger, freight & air rescue services disrupted. Loss of communications and power. Loss of water supply. Loss of power.			
Critical Facilities	Critical facilities may be damaged.	Hospital may operate at reduced capacity. Food stores may be isolated/damaged. Fuel supply may be at threat.			

Risk Register Form A9

Part A – Risk Description – Tropical Cyclone and Severe Storms

	HAZARD – Tropical Cyclones & Severe Storms including Storm Surge			
VULNERABLE ELEMENTS	RISK	CONSEQUENCE		
People	All people in the Richmond Shire are exposed to the risk of a severe storm. Tropical cyclones will be different being rare, but can cause more damage.	People's dwellings maybe damaged. Insurance costs may rise. People may be injured. People may be killed. People may require evacuation and shelter. People may not return to town. Older people in affected areas that do not have transport will need assistance.		
Buildings	All buildings in Richmond Shire are at risk from extreme winds.	Homes may be damaged. Personal effects damaged. Some services may be disrupted. Significant damage may be caused due to airborne debris.		
Environment	Fallen trees and damaged foliage will require extensive management.	Some flora & fauna may be lost. Likely to regenerate though.		
Business	Business may suffer a prolonged disruption in a severe cyclonic event.	Loss of normal services including access to food and fuel supplies. People not able to return to work for an extended period after the event. Damage to buildings and stock may occur. Potential impacts on tourism and local businesses. People may not return to live in Richmond Shire impacting local economy. Critical lifelines may be cut preventing restocking.		
Lifelines	Overhead power lines will be damaged and associated flow on affects to other lifelines. Risk of fuel supply being cut off. Telstra exchanges isolated or inundated. Roads will be cut off due to flooding and fallen trees. Water supply contaminated/not functional. Sewer system failure. Loss of radio communication Loss of TV reception	Electric power will be lost in some areas. Telecommunications disrupted. Water and sewerage systems may fail due to power outages. Major road network affected by road closures limiting ingress and egress. Health risks associated with loss of water supply, sewerage failures and environmental contamination. Loss of radio communication would hamper disaster preparation and clean up. Loss of TV has minor consequences – loss of reception is a frequent occurrence in Richmond Shire		
Critical Facilities	Critical facilities may be disrupted by the loss of lifelines.	Hospital and emergency services may be disrupted due to loss of power and other services. Shelters may be destroyed in tropical cyclone or inundated. Restriction of food, water and fuel supplies.		

Risk Register

Form A9-3

Part A - Risk Description - Earthquakes

	HAZARD – Earthquakes				
VULNERABLE ELEMENTS	RISK	CONSEQUENCE			
People	All people in Richmond Shire are at risk from earthquake, which would be a very rare occurrence.	People may need to be evacuated. Some may be injured.			
		Some may be killed.			
Buildings	All buildings in the Richmond Shire are at some risk in an earthquake.	People may be homeless and displaced. Services will be disrupted.			
Environment	Damage to the environment may occur due to sewage loss and landslides.	Watercourses may be contaminated. Landslides may be triggered.			
Business	Businesses may be affected in some way by an earthquake if not directly, indirectly.	Businesses may close. Jobs may be lost. Richmond Shire may suffer some economic damage.			
Lifelines	Loss of any or all lifelines could be caused in the short term after an earthquake. Those services, which are attached to vulnerable structures, such as the water tower, may be damaged. Communications infrastructure may be damaged.	The following services may fail – Power, Communications, water supply, and sewerage. Road and access may be cut if bridges fail or significantly damaged in an event. Loss of water supply.			
Critical Facilities	Any or all-critical facilities could be seriously affected.	Hospital and emergency services could be rendered inoperative. Fuel and bulk food storage damaged. Nominated shelter buildings damaged.			

Form A9-4

Risk Register

Part A - Risk Description - Landslides

HAZARD - Landslides				
VULNERABLE ELEMENTS	RISK	CONSEQUENCE		
People	A small number of people may be at risk of landslide	Possible injury or death		
Buildings	A small number of buildings are at limited risk from landslide. Some commercial enterprises and houses at the southern and northern boundaries of the shire may be vulnerable.	Homes and commercial businesses may be damaged.		
Environment	No significant environmental damage is anticipated.			
Business	There is no apparent significant risk to business.			
Lifelines	No apparent risk to any lifelines except peripheral roads, power and	Some roads in Richmond Shire may be cut off and parts of town temporally isolated.		
	communications.	Temporary loss of power and communications.		
Critical	No significant risks to critical facilities	Electric power may be lost in some areas.		
Facilities	identified	Telecommunications disrupted.		
		Water and sewerage systems may fail due to power outages.		
		Major road network affected by road closures limiting ingress and egress.		

Risk Register

Form A9-5

Part A - Risk Description - Bushfires

HAZARD – Bushfires				
VULNERABLE ELEMENTS	RISK	CONSEQUENCE		
People	There is a low risk of property damage due to bushfire.	People may be injured if they venture into the fire area.		
	A large event may result in evacuation due to smoke. People (children and elderly in particular) may have breathing difficulties during uncontrolled bushfires/burn-offs.	Some people may need to be evacuated. People may suffer respiratory problems.		
Buildings	Some buildings in areas adjacent to fringing bushland maybe at risk if the separation zone is not adequately maintained	Possibility of some property damage leaving people homeless.		
Environment	Fires will destroy flora and fauna in the short term and their habitat. Smoke will pollute the air.	Topsoil will be subject to scour when it rains. Runoff from fire-affected areas pollutes rivers and streams by increasing sediment load and suspended solids.		
Business	Some businesses may be affected by bushfire.	Short-term loss or reduction in income for directly affected groups. Short-term impact on Richmond Shire economy.		
Lifelines	Lifelines (power mainly) only at minor risk if separation from adjacent bush areas is not adequately maintained.	Loss of electricity supply and subsequent impact on sewerage pump stations, bores and water supply. Disruption to communications.		
Critical Facilities	No critical facilities are at significant risk.			

Risk Profiling - Scales for Likelihood, Consequences and Risks

Risks were assessed using the following indicators.

Table 1 Likelihood (or probability) parameters

	Likelihood			
Level	Descriptor	Description		
Α	Almost Certain	This event is expected to occur. 1:1		
В	Likely	This event will probably occur. 1:10		
С	Possible	The event should occur at some time. 1:50		
D	Unlikely	The event could occur at some time. 1:100		
Е	Rare	The event may occur only in exceptional circumstances. 1:500		

The following parameters have been developed from guidelines set out in 'Disaster Risk Management' (Zamecka and Buchanan 1999). Consideration has also been given to recommendations from risk studies undertaken by the Centre for Advanced Engineering, University of Canterbury, Christchurch, New Zealand and definitions in the Australian Standard.

Table -2 Consequence (or impact) parameters

Consequence			
Level	Descriptor	Description	
1	Insignificant	No fatalities; no injuries; low financial loss; little disruption to community; no measurable impact on environment.	
2	Minor	Small number of injuries; no fatalities; first aid treatment required; some displacement of people (very short period of time e.g. 24 hours); some personal support required; some damage; some disruption (short period of time); small impact on environment with no lasting effects; some financial loss.	
3	Moderate	Medical treatment required; no fatalities; some hospitalisation; displacement of people (very short period of time e.g. 24 hours); personal support satisfied through local arrangements; localised damage which is rectified by routine arrangements; normal community functioning with come inconvenience; some impact on environment with no long term effect; significant financial loss.	
4	Major	Extensive injuries; fatalities; significant hospitalisation; large number displaced (more than 24 hours duration); external resources required for personal support; significant damage that requires external resources; community only partially functioning; some services unavailable; some impact on environment with long term effects; significant financial loss – some financial assistance required.	
5	Catastrophic	Large number of severe injuries; extended and large numbers requiring hospitalisation; general and widespread displacement for extended duration; significant fatalities; extensive personal support; extensive damage; community unable to function without significant support; significant impact on environment and/or permanent damage; huge financial loss – unable to function without significant support.	

Table -3 Risk Table

Level	Descriptor	Description
Ε	Extreme Risk	Immediate action required
Н	High Risk	Senior management attention required
М	Moderate Risk	Management responsibility must be specified
L	Low Risk	Manage by routine procedures

-

Table -4 Consequences table

	Consequence				
Likelihood	1 Insignificant	2 Minor	3 Moderate	4 Major	5 Catastrophic
A Almost Certain	М	Н	Е	Е	Е
B Likely	М	Н	Н	Е	Е
C Possible	L	М	Н	Е	Е
D Unlikely	L	L	М	Н	E
E Rare	L	L	М	Н	Н

Consequence Summary

Е	Manage Risk	
Н	Manage Risk	
M	Conditional	
L	Accept Risk	

NOTE – The Consequences Table above differs slightly from the Queensland Disaster Management Guidelines based on consultation and workshop reviews during the study process. This risk profile is considered to better apply to the circumstances of Richmond Shire and better reflects guidelines in AS/NZS 4360: Risk Management. The differences are:-

Almost certain events with insignificant consequences are considered Moderate risk, not High.

Table -5 Proposed risk priorities

Risk Rating	Risk Priority
Extreme	Тор
High	Medium
Moderate	Low
Low	Not a priority

The matrix detailed above is applied to the risks and is contained in Annexure H, All Natural Hazards Disaster Risk Management.

Risk Treatment

Mitigation Strategy

A detailed Mitigation Plan has been developed as an outcome of the Natural Disaster Risk Management Study conducted by LGIS in 2010-11. The Mitigation Plan is attached as part of the Natural Disaster Risk Management Study 2010-11 in Appendix G of this report. Mitigation Plan

Response Strategy

Assessment of disaster response capability

The Richmond Shire rural community is experienced in coping with flood events, which can occur during the wet season. Both the Council and the local SES have personnel who are experienced in dealing with the effects of flooding, including preparation prior to the flood event to minimise risk to life and property, dissemination of flood information to the public during the event, resupply to isolated rural properties, clean up, and restoration of public assets damaged by flood waters.

To date, the community has not suffered significant property loss or loss of life as a result of cyclones or severe storms. Cyclone Yasi in 2011 and the mini-tornado of 2011 tested the ability of the LDMG and emergency services. Fortunately, the Richmond Shire was spared significant damage to life and property.

The Richmond Shire Council has access to personnel and equipment to deal with the majority of events that threaten the shire. Widespread damage or multiple events would require the resources of the shire to be supplemented by the Townsville District Disaster Management Group (DDMG).

Richmond Shire Council has the resources to provide assistance to neighbouring shires only if the Richmond Shire is not affected at the time. The resources needed to manage an event in the Shire would detract from Council's abilities to continue many of its normal functions for the duration of the incident.

Richmond Shire Council has predominantly activated for flooding in the past. In the event of an incident with little or no warning and widespread damage, e.g. an earthquake, local emergency response agencies would be quickly overwhelmed. In this event, additional resources would be requested from Townsville, approximately 400ks to the East.

During major or prolonged flooding, the LDMG may need to request a resupply of essential goods from the Townsville DDMG for townships and rural properties within the shire's area of responsibility.

In the event of activating, the LDMG will engage with the above groups and post information to the Guardian information management system to ensure that reporting to and from those agencies is accurately recorded and, as a result, the needs of vulnerable community members are considered.

Resupply

The LDC and the majority of the core group of the LDMG have undertaken resupply training. If extraordinary resupply is required within the Richmond LDMG area, the Area Director of EMQ would be requested to oversee resupply activities in accordance with the Queensland Resupply Guidelines.

Some areas of the Shire are subject to isolation as a result of flooding and may require resupply of essential items. A resupply sub-plan will be developed in the next 12 months.

The LDMG/Council advises rural properties and township residents to prepare for a period of isolation prior to the properties/towns becoming isolated. The advice issued by the LDMG after activation is

normally in a public notice, which is distributed through the usual distribution network. If resupply becomes necessary, information is provided to the affected persons/properties via telephone, fax, email, internet postings, retailers and suppliers in accordance with resupply guidelines.

Requests for resupply will be recorded in the Guardian information management system and processed by the LDCC.

Response Capability

Table 1 provides an assessment of current capability and possible assistance that may be requested through the DDMG as identified through an examination of current arrangements. This is referenced in the *Disaster Management Act 2003* in Section 30(1)(d). Measurement of response capability may be achieved through operational activation or by the conduct of exercises.

Table 1 - Response Capability Assessment and Action Plan

Date	Туре	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

Planning Assumptions

The Richmond Shire has the capability to manage events that occur in the Shire on a regular basis. These include minor to moderate flooding, fires with minimal structural damage and short duration storms. Larger scale events in the Shire, or multiple events, would require the support of outside agencies.

The Shire has the capacity to effect small scale evacuations, however larger scale evacuation with prolonged shelter phases would require assistance from outside of the Shire.

While the Shire has access to a range of services, it recognises the limitations within these services.

Events that would be beyond the capacity of the Shire include, but are not limited to:

- Flash flooding of significant numbers of dwellings;
- Earthquake with multiple structural failures;
- Exotic animal disease;
- Events that require long term housing for evacuated persons; and
- Events with multiple fatalities or multiple serious injuries.

Operational Planning

The Concept of Operations (COO) for the Richmond Local Disaster Management Group is available from the LDMG. The COO details the stages of activation of the group and the roles of personnel in the coordination centre. Within the COO program, there are a large number of operational plans. These plans detail activities that should be undertaken during different phases or actions of the response.

Management of Residual Risks

Throughout the risk management process there will be residual risks. These are the risks to the Shire that cannot be reduced within the capacity of the Shire.

For the Richmond Shire there will be two main residual risks:

- <u>Staffing</u> it is recognised that the Shire may lack the personnel or specialised skill sets that may be required during an event in the initial stages. These identified residual risks will be referred to the Townsville DDMG for inclusion in the District Disaster Management Plan.
- <u>Engineering</u> in order to remove or significantly reduce certain risks, modification
 of assets through engineering will be required. As an example, in order to floodproof the highway to Townsville, all bridges and roads must be constructed above
 Q₁₀₀. Residual risk will remain where these engineering modifications are not
 cost effective for the risk posed. This residual risk will be accepted by the Shire.

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The following table details the residual risks of the Richmond Shire.

Risk	Treatment option/s	Reason for not undertaking option/s	Accept Risk Why does the Shire accept this risk?	Refer Risk to DDMG What is the Shire asking of the DDMG?
There is a risk that the health staff and facilities would be unable to manage multiple injuries following an event.	Request that QH increase the size and capability of the facility.	Not justifiable given the population of the Shire and the proximity to Townsville.		The LDMG will require additional medical staff and equipment from the health service district through the DDMG.
There is a risk that all agencies including the local government would be unable to manage response to a large event.	Each agency could increase their operating capacity.	Not required for normal day to day operations.	Expect help to be provided from other areas.	The LDMG will request additional resources through the DDMG.

Capacity Building

Community Education

The Richmond Shire Council will ensure that public education material in relation to floods, storms and emergency procedures is available at the Shire Administration building.

Prior to the onset of the traditional wet season, additional public education will be undertaken by EMQ and the QFRS. This education will be targeted towards school-aged children.

During flood and other events, the Council will work closely with the media to ensure that the condition of roads in the Shire is widely disseminated. This aims to assist in reducing the number of persons becoming stranded in the town and on roads in the Shire.

Warnings of natural disasters, e.g. cyclones, floods, etc, will be issued in the first instance to the Richmond Shire LDMG LDC and Chairman, the SES Local Controller and media agencies from the appropriate warning agency.

Warnings and Alerts - Public Information and Warnings

Council will use all available alerts to inform the community, SEWS, SMS, local radio.

Distribution

Upon implementation of this Plan, all public warnings will be distributed through the LDCC upon recommendation of the lead agency and on the authorisation of the Chairman of the LDMG or their delegate.

The LDMG will decide the appropriate means of delivering warnings to Shire residents, depending upon local conditions, e.g. evacuation to safe housing, etc. The LDMG has access to facsimile and email details for all electronic and print media in the North Queensland area. The LDMG also utilises the Richmond Shire Council web site and a dedicated Facebook page will be established to communicate with the community.

Full use is also made of local radio, commercial radio and television broadcasts. The Richmond Shire LDMG has a protocol that allows radio stations to issue the latest public warning.

Expected Warning Timelines

Hazard	Warning Notice	Expected Timeline
Cyclone	Issued by BoM	As per BoM guidelines
Earthquakes	Not applicable	Not applicable
Exotic Animal and Plant	Issued by relevant agency	As per relevant agency
Diseases		guidelines
Flood	Issued by BoM and	As per BoM guidelines. RSC
	Richmond Shire Flood	issues Flinders River
	Reporting Service	warnings when Flinders
		River exceeds 7.0m at
		Marathon Bridge.
Fire	Issued by QFRS	As per QFRS guidelines

Hazard	Warning Notice	Expected Timeline
Hazardous Materials	Issued by QFRS	As per QFRS guidelines
Incidents		
Pandemics and Epidemics	Issued by Queensland	As per Queensland Health
	Health	guidelines
Transport Accidents	Not applicable	Not applicable
Tropical Storms	Issued by BoM	As per BoM guidelines
Water Contamination	Issued by Richmond Shire	When contamination is
	Council	suspected and until
		contamination has been
		confirmed or eliminated.

Training & Exercises

Disaster management training and exercises will be conducted throughout the year. Prior to the onset of the wet season, the Chair and LDC of the LDMG will ensure that the members are confident in their roles within the group.

Richmond Shire Council may experience staff turnover throughout the year, so the Chair and LDC of the LDMG will ensure that, as new members join the group, they will be trained in their roles.

The LDC of the LDMG will work with EMQ to identify training and exercise shortfalls of the group. The LDC maintains a register of training undertaken by the LDMG core group members and Council's specialist advisory personnel.

A report will be prepared on an annual basis by the LDMG, detailing the training and exercises undertaken. The plan will be exercised on an annual basis via planned exercise or activation. EMQ - Area Director will notify LDC and keep updated on current members training.

Post-Disaster Assessment

After each disaster event and exercise, the LDMG conducts a hot debrief meeting immediately after the event to evaluate its performance and whether the Local Disaster Management Plan is still relevant. From a post operational report suggested improvements are noted and implemented where practicable.

The LDMG work with EMQ to incorporate into its Local Disaster Management Plan the requirement to undertake and/or fund post-event surveys & studies from which to accurately assess the consequences (physical, economic, personal) of all significant hazard impacts.

Response Strategy

Warning Notification and Dissemination

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

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

The Richmond Shire Council LDMG will be notified by telephone and or email and may also receive notification from internal agency central offices.

A number of agencies will also receive warnings directly from the Bureau of Meteorology. Full use is also made of local radio, commercial radio and television broadcasts. The Richmond Shire LDMG has a protocol that allows radio stations to issue the latest public warning.

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

Warnings of natural disasters, e.g. cyclones, floods, etc, will be issued in the first instance to the Richmond Shire LDMG LDC and Chair, the SES Local Controller and media agencies from the appropriate warning agency.

In summary, each of the members of the Richmond LDMG is responsible for notifying their agency or group of any warnings of relevance. See Annexure F.

Activation

Following consultation with the Chair of the LDMG, the LDC is responsible for activating the LDMG. This would generally occur following consultation with the DDC.

The local levels of response activation and associated triggers, actions and communications are outlined at Annexure F.

The group may be activated by the Chair or the LDC of the local group should they believe that a threat is significant enough to warrant activation. The level of activation will be determined by the Chair or LDC, taking into account the likelihood and possible impact of the threat. The group may also be activated by the District Disaster Coordinator (DDC).

Activation of the group will occur independently of activation of NDRRA. The decision to activate will be based on threat rather than financial implications.

Once the group is activated, situation reports will be compiled and submitted to the district group at a frequency determined by the district group and agreed to by the local group.

Whilst there may be no requirement for the entire group to be in attendance at a LDMG meeting, the Chair or LDC is to ensure that the entire group is kept informed of the situation and actions of the group.

The group will stand down only after the decision to cease activity has been made by the Chair or LDC, and communicated to the DDC. Once the group has stood down, a final situation report will be compiled and sent to the district group.

Expected Warning Timelines

Hazard	Warning Notice	Expected Timeline
Cyclone	Issued by BoM	As per BoM guidelines
Earthquakes	Not applicable	Not applicable
Exotic Animal and Plant	Issued by relevant agency	As per relevant agency
Diseases		guidelines
Flood	Issued by BoM and	As per BoM guidelines. RSC
	Richmond Shire Flood	issues Flinders River
	Reporting Service	warnings when Flinders
		River exceeds 7.0m at
		Marathon Bridge.
Fire	Issued by QFRS	As per QFRS guidelines
Hazardous Materials	Issued by QFRS	As per QFRS guidelines
Incidents		
Pandemics and Epidemics	Issued by Queensland	As per Queensland Health
	Health	guidelines
Transport Accidents	Not applicable	Not applicable
Tropical Storms	Issued by BoM	As per BoM guidelines
Water Contamination	Issued by Richmond Shire	When contamination is
	Council	suspected and until
		contamination has been
		confirmed or eliminated.

Local Disaster Coordination Centre

The Richmond LDCC is located in the Richmond Shire office 50 Goldring Street, Richmond. The alternative LDCC is located at the Richmond Police Station or any other location deemed suitable by the LDMG as the LDCC equipment is totally relocatable.

Operational Reporting

The LDC of the Richmond LDMG is responsible for the administrative and reporting obligations of the group. The following reporting must be undertaken by the group:

Report:	Submitted to:	Frequency:	Format:
Meeting minutes	DDMG/SDMG	Following each meeting	Council minutes
LDMG Report	DDMG/SDMG	Annually	Issued by SDMG
LDMG Membership	DDMG/SDMG	Annually	With above
Situation Reports	DDMG	As negotiated	As issued
Activation Report	DDMG	As required	Issued by DDMG

Financial Management

Authorisation for expenditure of funds during an event is in accordance with Council's financial management policies including NDRRA, SDRA guidelines.

Expenditure limits are as per Council's Financial Delegations Register.

For each event, specific cost centres are established for emergent works expenditure and counter disaster operations in accordance with NDRRA guidelines. For NDRRA restoration works, project folders containing relevant information for each road/project are created to assist in the preparation of submissions to the relevant funding body for approval. For urgent projects, a separate project number is allocated for costing purposes to enable works to commence prior to official approval.

The LDC is provided with the authority to use the Richmond Shire Council Purchase Order System in the LDCC. This system is to be used to obtain services, equipment and requirements to permit the Centre to function effectively.

Use of this system will include:

- Purchase/hire of equipment;
- Purchase of stationery, office and cleaning supplies, etc.;
- Hire of specialised personnel/organisations, such as security, cleaning, etc.;
- Supply of food and refreshments for LDCC staff during extended operations;
- Any other costs or expenditure required for the function of the LDCC.

Each purchase order must be identified as Richmond Shire LDMG.

Media Management

Media arrangements are as follows:

- No television, radio or press media personnel are to be allowed into the LDCC during operations;
- A Media Liaison Officer will be appointed and will organise media briefings in an area apart from the LDCC;
- All media releases are to be authorised by the Chair;
- The Media Liaison Officer will advise the Chair of any deadlines and times of interviews and reports.

Logistics Support

When support is required from the District, the LDMG will issue a Request for Assistance (RFA). The RFA form and procedure is included in Annexure L of this plan.

Offers of assistance are recorded in Council's file management system - Infoxpert, and are accessed as required via tasking logs reported in Infoxpert.

Disaster Declaration

When the DDC declares a disaster situation, the 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.

Resupply

The LDC and the majority of the core group of the LDMG have undertaken resupply training. If extraordinary resupply is required within the Richmond LDMG area, the Area Director of EMQ would be requested to oversee resupply activities in accordance with the Queensland Resupply Guidelines.

The LDMG advises at risk land holders to prepare for a period of isolation prior to their properties becoming isolated. The advice issued by the LDMG after activation is normally in a public notice, which is distributed through the usual distribution network. If resupply becomes necessary, information is provided to the communities via area wardens, retailers and suppliers in accordance with resupply guidelines.

Requests for resupply will be recorded and processed by the LDCC.

Hazard Specific Arrangements

Hazard specific arrangements are outlined in the Roles & Responsibilities section of this plan.

Recovery Strategy

Recovery Sub Plan

The Community Recovery Sub Plan in Annexure M provides a framework for the coordination of recovery operations within the local government area and is supported by the procedures outlined in the *Queensland Recovery Guidelines*.

Local Disaster Management Sub Plans

- Community Recovery Annexure M
- Evacuation Evacuation Centre Management draft
- Health draft
- Operational Checklists
- Aerodrome Emergency Plan Note that as the aerodrome is unlicensed there is no mandatory requirement from CASA to have a plan but there may be a duty of care to have a plan commensurate with the scale of operations at the aerodrome. Plan currently in draft
- LDCC SOP & Duty Statements draft
- MOU with Red Cross
- MOU with NQ Councils draft
- MOA between Richmond Shire Council and EMQ
- Department of Communities
- Cyclone Shelter

Annexure Index

- A. Distribution List
- B. LDMG Contact List
- C. Risk Register
- D. Risk Treatment Plan
- E. Risk Evaluation
- F. Levels of Activation for Response Arrangements
- G. Levels of Activation for Recovery Arrangements
- H. Natural Disaster Mitigation Program (NDMP), Natural Disaster Risk
 Management Studies Program (NDRMSP), All Natural Hazards Risk
 Management 2008
- I. Community Support Agencies
- J. Evacuation Sub Plan
- K. RFA form and procedure
- L. Request for Assistance (RFA) form and procedure
- M. Community Recovery Sub Plan
- N. Standard Operating Procedure LDCC
- O. Resupply Plan
- P. Public Health Plan
- Q. Evacuation Centre Management Plan
- R. Aerodrome Emergency Plan

Annexure A

Distribution List

Organisation:	Title:	Copy Number:
State Emergency Service	Local Controller	1
Richmond Police	Officer in Charge	2
Townsville Police	COMCO	3
Richmond Fire & Rescue Service	Officer in Charge	4
Richmond Health Centre	Director of Nursing	5
Richmond Doctor's Surgery	Doctor	6
Ergon Energy	Team Leader	7
Telstra	Regional Manager	8
Emergency Management Queensland	Area Director, Townsville	9
Emergency Management Queensland	Disaster Management Officer	10
Telstra	Team Manager	11
Richmond Shire Council	LDMG Chairman	12
Richmond Shire Council	Local Disaster Coordinator	13
Richmond Shire Council	www.richmond.qld.gov.au	14
Richmond Shire Council	File copy	15
Qld Parks & Wildlife Service	Senior Ranger	16
Richmond Aerodrome	Aerodrome Reporting Officer	17
Richmond State School	Principal	18
Richmond Early Education Centre	Director	19
Richmond Outside School Hours Care	Coordinator	20
Richmond Aged Care Centre	Coordinator	21

Annexure B

AGENCY	MEMBER			
Chair	Mayor, Richmond Shire Council.			
	In the absence of the Mayor, the councillor			
	identified as the Deputy Chair shall assume the			
	role of Chair			
Local Disaster Coordinator (LDC)	Chief Executive Officer (CEO), Richmond Shire			
	Council.			
	In the absence of the CEO, the person appointed			
	as the acting CEO shall assume the role of LDC			
Director of Works	Director of Works, Richmond Shire Council			
Emergency Management	Area Director			
Queensland (EMQ)				
State Emergency Service (SES)	Richmond Local Controller			
Queensland Police Service (QPS)	Officer in Charge, Richmond Station			
Richmond Health Service	Director of Nursing (DON)			

Richmond Shire Council Local Risk Register

	Risk Identification (Local level risks only)					
Risk No. Risk Statement Source Impact Category Prevention/Preparedness Controls Recovery/Respons						

Richmond Shire Council Risk Treatment Plan

		Risk Analysis				
Risk No	Level of Existing PP Controls	Level of Existing RR Controls	Consequence	Likelihood	Risk	Confidence Level

Richmond Shire Council Risk Evaluation

			Risk Evaluation	า		
Risk No	Tolerability	Treatment Strategies	Residual Consequence	Residual Likelihood	Residual Risk	Further Action

Local Levels of Activation for Response Arrangements

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

Local Levels of Activation for Recovery Arrangements

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

Natural Disaster Mitigation Program (NDMP) and the Natural Disaster Risk

Management Studies Program (NDRMSP) and All Natural Hazards Risk Management

2008

	Annexu		
ommunity Support Agencies			
Red Cross			
	Annexur		

Annexure L
RFA Form and Procedure



Standard Operating Procedures - LDCC

- S. Public Health Plan
- T. Evacuation Centre Management Plan
- U. Aerodrome Emergency Plan

Resupply Procedures - LDCC

Public Health Plan

Evacuation Centre Management Plan

Aerodrome Emergency Plan