

DISPLAN 2012



BALLINA SHIRE LOCAL DISASTER PLAN



Ballina Shire – Local Disaster Plan DISPLAN 2012

Authority

The Ballina Shire Local Disaster Plan (DISPLAN) has been prepared by the Ballina Shire Local Emergency Management Committee in accordance with the State Emergency and Rescue Management Act, 1989, Section 29 (1).

Approved

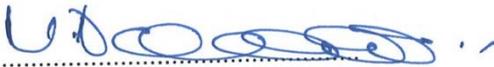


.....
Chairperson

Ballina Shire Local Emergency Management Committee

Dated: 1 August 2012

Endorsed



.....
Chairperson

North Coast District Emergency Management Committee

Dated: 1 August 2012

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DOCUMENT DISTRIBUTION AND AMENDMENTS

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The Manager Support Operations is responsible for the distribution of the Ballina Shire Local Disaster Plan (DISPLAN) according to the distribution list below.

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Fire Captain, Fire & Rescue NSW (Alstonville Fire Station)	17
Local Controller, SES	18
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Director of Nursing, Ballina Hospital Health Services	20
Operations Captain, Ballina Jet Boat Surf Rescue	21
Search & Rescue Co-ordinator, Marine Rescue	22
Traffic Operations Manager, RMS Northern Region	23
Area Manager, Essential Energy	24
Officer In Charge, Telstra	25
Manager, NSW Dept of Primary Industries	26
Manager (Case Works - Child Protection), DOCS - Ballina	27
Youth Councillor, Ballina Youth Centre	28

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Adjoining Local Emergency Committees

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Amendments

Suggested amendments or additions to the contents of this plan are to be forwarded in writing to:

The Chairperson
 Ballina Shire Local Emergency Management Committee
 PO Box 450
 BALLINA NSW 2478

Amendments will be issued to holders of controlled copies of the DISPLAN and recorded in the table below:

Edition Number: 3					
Amendment No	Date	Page (s)	Description	Prepared By	Authorised By

DEFINITIONS

NOTE: The definitions used in this plan are sourced from the State Emergency and Rescue Management Act 1989 (as amended), other New South Wales legislation, and The Macquarie Dictionary (Second Edition, 1991). Where possible, the reference is identified as part of the definition (SERM Act i.e. The State Emergency and Rescue Act 1989, as amended).

Agency

Means a government agency or a non-government agency. (Source: SERM Act)

Agency Controller

In this plan means the operational head of the agency, identified in this plan as the combat agency, which has command of the resources of the particular agency.

Combat Agency

Means the agency identified in the State Disaster Plan as the agency primarily responsible for responding to a particular emergency.

Command

In this plan means the direction of members and resources of an agency/organisation in the performance of the agency/organisation's roles and tasks. Authority to command is established by legislation or by agreement with the agency/organisation. Command relates to agencies/organisations only, and operates vertically within the agency/organisation. (Source: NSW DISPLAN).

Control

Means the overall direction of activities, agencies or individuals concerned. (Source: SERM Act). Control operates horizontally across all agencies/organisations, functions and individuals. Situations are controlled.

Coordination

Means the bringing together of agencies and individuals to ensure effective emergency or rescue management, but does not include the control of agencies and individuals by direction. (Source: SERM Act).

Disaster

Means an occurrence, whether or not due to natural causes, that causes loss of life, injury, distress or danger of persons, or loss of, or damage to, property. (Source: SERM Act).

Disaster Welfare

- a) The provision of immediate and continuing care of disaster affected persons who may be threatened, distressed, disadvantaged, homeless or evacuated
- b) The maintenance of health and well being of such persons with all available community resources until their rehabilitation is achieved.

DISPLAN

In this plan means the Ballina Shire Local Disaster Plan. The object of the DISPLAN is to ensure the coordinated preparation for, response to and recovery from emergencies by all agencies having responsibilities and functions in emergencies.

District

In this plan means the North Coast Emergency Management District and includes the local government areas of Tweed, Byron, Ballina, Lismore, Kyogle, Richmond Valley, Clarence Valley, Mid North Coast Councils and Lord Howe Island.

District Emergency Management Committee (DEMC)

In this plan means, the District Emergency Management Committee constituted under the State Emergency Management Act, 1989 (as amended) which is responsible for the preparation and maintenance of plans in relation to the prevention of, preparation for, response to and recovery from emergencies in the District, including the District DISPLAN. In the exercise of its functions, this committee is responsible to the State Emergency Management Committee (SEMC). (Source: SERM Act)

District Emergency Management Officer (DEMO)

Means the person, appointed under the Act, to act as Executive Officer to the DEMC and Staff Officer (Emergency Management) to the DEOCON.

District Emergency Operations Centre (DEOC)

Means a facility, established at District level, from which the control of the District level emergency operations and coordination of resources is affected.

District Emergency Operations Controller (DEOCON)

In this plan means the Region Commander of Police appointed by the Commissioner of Police, as the District Emergency Operations Controller for the North Coast Emergency Management District.

Emergency

Means an emergency due to an actual or imminent occurrence (such as fire, flood, storm, earthquake, explosion, accident, epidemic or warlike action) which:

- a) endangers, or threatens to endanger, the safety or health of persons in the State; or
- b) destroys or damages, or threatens to destroy or damage, any property in the State;

being an emergency which requires a significant and co-ordinated response.

For the purposes of the definition of emergency, property in the State includes any part of the environment of the State.

Accordingly, a reference in the Act to:

- a) threats or danger to property includes a reference to threats or danger to the environment and,
- b) the protection of property includes a reference to the protection of the environment.

(Source: SERM Act)

Emergency Officer

Means the Director General of the SES or a person appointed as an Emergency Officer under Section 15 of the State Emergency Service Act. A person may be appointed as an Emergency Officer even if not a member of the State Emergency Service. (Source: SERM Act)

Emergency Operations Centre (EOC)

Means a centre, established at State, District or Local level, as a centre of communication and as a centre for the coordination of operations and support during an emergency.

(Source: SERM Act)

Emergency Risk Management

In this plan means the process approved by the State Emergency Management committee and published in the NSW Implementation Guide for Emergency Management Committees.

Emergency Risk Management Strategy

Identifies the level of risk across Ballina Council area from natural, technological and biological hazards and establishes strategies which the responsible agencies, organisations

and where possible, in conjunction with the community and stakeholders will implement to manage, where appropriate and reasonable to do so, the risks identified.

Emergency Services Officer

Means a Police Officer, an Ambulance officer of or above Station Officer, an officer of the NSW Fire Brigades of or above the position of station commander, an officer of the SES of or above the position of unit controller, or a divisional Executive Officer of the Director, Operations of that Service, a member of the Rural Fire Service of or above the position of deputy captain, or a District Emergency Management Officer. (Source: SERM Act)

Emergency Services Organisation

Means the NSW Police, NSW Fire Brigades, Rural Fire Service, Ambulance Service, State Emergency Service, Volunteer Rescue Association or any other agency which manages or controls an accredited rescue unit. (Source: SERM Act)

Evacuation / Assembly Centre

Means a facility / area / centre to which persons are directed to go immediately upon being evacuated from their homes / locale where they may stay for a short time before returning to their homes, or proceeding to a Welfare Centre for a longer stay, or to have their longer term needs met. An evacuation / assembly centre may also be the venue for the disaster victim registration, triage and / or the meeting of immediate needs of evacuated persons.

Functional Area

In this plan means a category of services involved in preparations for an emergency, including the following:

1. Agriculture and Animal Services;
2. Communication Services;
3. Energy and Utilities;
4. Environmental Services;
5. Health Services;
6. Public Information Services;
7. Transport Services; and
8. Welfare Services.

Functional Area Coordinator

In this plan means the nominated Coordinator of a Functional Area, tasked to coordinate the provision of Functional Areal support and resources for emergency response and initial recovery operations, which, by agreement of participating organisations within the functional area, has the authority to commit the resources of those agencies, see NSW Displan.

Government Agency

Means:

- a) A government department or administrative office as defined in the Public Sector Management Act 1988;
- b) A public authority, being a body (whether incorporated or not) established by or under an Act for a public purpose other than:
 1. The Legislative Council or Legislative Assembly or a committee of either or both of these bodies: or
 2. A court or other judicial tribunal;
- c) The NSW Police
- d) A local government council or other local authority; or
- e) A member or officer of an agency referred to in paragraphs a)-d) or any other person in the service of the Crown which ahs statutory functions; other than:
 - I. The Governor, the Lieutenant-Governor of the Administrator of the State;
 - II. A Minister of the Crown
 - III. A Member of the Legislative Council or Legislative Assembly or and officer of that Council or Assembly; or
 - IV. A judicial officer. (Source: SERM Act)

Hazard

Mans a potential or existing condition that may cause harm to people or damage to property or the environment. (Source: NSW Displan)

Hazardous Material

Anything that, when produced, stored, moved or otherwise dealt with without adequate safeguards to prevent it from escaping, may cause injury or death or damage to property [Source: NSW Fire Brigades Act 1989 (as amended)].

Hazardous Materials Incident

Means any spillage or escape of gas, liquid, solid or substance during its manufacture, use, handling, transport or storage in sufficient quantity to endanger, or threaten to endanger, the

health or safety of any persons, or damage or destroy, or threaten to damage or destroy any property or the environment; including fires that involve, or may involve hazardous materials, and fires that have the potential to, or are causing pollution. Such an incident may be land based, or occur on or in the inland waters or the state waters of New South Wales. [Source: Hazardous Materials Major Incident and Emergency Sub-Plan (HAZMAT PLAN 1/12/93)]

Incident

Means a localised event, either accidental or deliberate, which may result in injury or death or damage to property which requires normal response from a combat agency. An incident becomes an emergency when the resources of the combat agency are sufficient to deal with the incident, and outside resources are desirable or required. Those resources now require coordination.

Incident Controller

In this plan means the Combat agency officer responsible for overall control and strategic direction of a localised event, where the incident is within the combat agency's designated area of responsibility and which requires normal response from that combat agency.

NOTE: other NSW legislation also provides for definition of an Incident Controller which has different meanings within the specific legislation - eg Rural Fires Act 1997 (as amended).

Liaison Officer (LO)

Means a person, nominated or appointed by an organisation or functional area, to represent that organisation or functional area at a control centre, emergency operations centre or coordination centre. A liaison officer maintains communications with and conveys directions / requests to their organisation or functional area, and provides advice on the status, capabilities, actions and requirements of their organisation or functional area.

Local Area

In this plan means the local government area of the Ballina Shire Council.

Local Emergency Management Committee (LEMC)

Means the committee constituted under the State Emergency and Rescue Management Act, 1989 (as amended), for each local government area, and is responsible for the preparation of plans in relation to the prevention of, preparation for, response to and recovery from emergencies in the local government area (Local DISPLAN) for which it is constituted. In the exercise of its functions, any such Committee is responsible to the relevant District Emergency Management Committee. (Source: SERM Act)

Local Emergency Management Officer (LEMO)

Means the person appointed by Council under the Act to act as Executive Officer to the LEMC and the LEOCON for emergencies affecting that particular local area (The appointee may also be Chair person of the LEMC).

Local Emergency Operations Centre (LEOC)

Means the centre established at the Local Area level as a centre of communications during an emergency.

Local Emergency Operations Controller (LEOCON)

Means a Police Officer appointed by the District Emergency Operations Controller as the Local Emergency Operations Controller for the Local Government Area. (Source: SERM Act)

Local Government Area

Means a Council within the meaning of the Local Government Act, 1993, or combination of local government areas as referred to in Section 27 of the State Emergency and Rescue Management Act, 1989 (as amended).

Logistics

Means the range of operational activities concerned with supply, handling, transportation and distribution of materials. Also applicable to the transportation of people. (Source: NSW DISPLAN)

Minister

Means the Minister for Emergency Services.

Mitigation

Means the measures taken in advance of, or after, a disaster aimed at decreasing or eliminating its impact on society and environment. (Source COAG Review into Natural Disasters in Australia, August 2002)

Natural Disaster

In this plan means a serious disruption to a community or region, caused by the impact of a naturally occurring rapid onset event that threatens or causes death, injury or damage to property or the environment and which requires significant and coordinated multi-agency and community response. Such serious disruption can be caused by any one, or a combination

of the following natural hazards: bushfire; earthquake; flood; storm; cyclone; storm surge; landslide; tsunami; meteorite strike or tornado. (Source: COAG Review into Natural Disasters in Australia, August 2011)

Non Government Agency

Means a voluntary organisation or any other private individual or body, other than a government agency. (Source: SERM Act)

Participating Organisation

In this plan means the Government Departments, statutory authorities, volunteer organisations and other agencies who have wither given formal notice to Agency Controllers of Functional Area Coordinators, or have acknowledged to the LEMC that they are prepared to participate in emergency management response and initial recovery operations under the direction of the Controller of a combat agency, or Coordinator of a Functional Area, with the levels of resources or support as appropriate to the emergency operation.

Plan

In this plan means a step by step sequence for the conduct of a single or series of connected emergency operations to be carried out simultaneously or in succession. It is usually based upon stated assumptions and is a promulgated record of a previously agreed set of roles, responsibilities, functions, actions and management arrangements. The designated 'plan' is usually used in preparing for emergency operations well in advance. A plan must be put into effect at a prescribed time, or on signal, and then becomes the basis of the emergency operation for that emergency operation.

Preparation

In relation to an emergency includes arrangements or plans to deal with an emergency or the effects of an emergency. (Source: SERM Act)

Prevention

In relation to an emergency includes the identification of hazards, the assessment of threats to life and property and the taking of measures to reduce potential loss to life and property. (Source: SERM Act)

Public Awareness

The process of informing the community as to the nature of the hazard and actions needed to save lives and property prior to the even of disaster. (Source: COAG Review into Natural Disasters in Australia, August 2002)

Recovery

In relation to an emergency means the process of returning an affected community to its normal level of functioning following an emergency, (SERM Act), and includes the welfare of affected persons as well as the physical reconstruction of the community.

It can be defined in two separate stages:

Initial Recovery - recovery operations to satisfy personal and community needs, and to restore services to the level where the continuing process can be managed by local government and the normal responsible agencies.

Long Term Recovery / Reconstruction - recovery, reconstruction and rehabilitation measures are subject to separate arrangements as mentioned in Part 7 of this plan.

Rescue

Means the safe removal of persons or domestic animals from actual or threatened danger of physical harm. (Source: SERM Act)

Rescue Unit

Means a unit (comprising a group of persons) which carries out rescue operations for the protection of the public or a section of the public. (Source: SERM Act)

Response

In relation to an emergency includes the process of combating an emergency and providing immediate relief for persons affected by an emergency. (Source: SERM Act)

Risk

A concept used to describe the likelihood of harmful consequences arising from the interaction of hazards, communities and the environment. (Source: COAG Review into Natural Disasters in Australia, August 2002)

Risk Assessment

The process used to determine risk management priorities by evaluating and comparing the level of risk against predetermined standards, target risk levels or other criteria. (Source: COAG Review into Natural Disasters in Australia, August 2002)

Risk Management

The systemic application of management policies, procedures and practices to the tasks of identifying, analysing, evaluating, treating and monitoring risk. (Source: COAG Review into Natural Disasters in Australia, August 2002)

Roads Authority

Means officers of the Roads and Maritime Service and Council authorised under the Roads Act 1993.

Section 44 Appointee

In this plan means the person appointed by the Commissioner, Rural Fire Service to take charge of fire fighting operations for a particular bush fire or within a particular Council area, or areas.

Site Controller

A police officer appointed by and subject to the direction of an emergency operations controller to be responsible for determining the site, establishing site control and controlling on the ground response to an emergency. Until the Emergency Controller appoints a Site Controller, the Senior Police Officer will assume control.

Standby State

Means the process of gradually increasing LEOC personnel and equipment resource levels to deal with an increase in activities.

State Emergency Operations Controller (SEOCN)

Means the person appointed by the governor, on the recommendation of the Minister, responsible for, in the event of an emergency affecting more than one district, controlling the allocation of resources in response to the emergency. The State Emergency Operations Controller is to establish and control a State Emergency Operations Centre. (SERM Act)

State Emergency

Means a state of emergency declared by the Premier under Section 33(1) of the State Emergency & Rescue Management Act, 1989 (as amended). (Source SERM Act)

NOTE: other NSW legislation also provides for a declaration of an emergency, which have different meanings and different authorities within the specific legislation - The Essential Services Act, 1988; Dam Safety Act, 1978 and Rural Fire Act 1997 (as amended).

Sub Plan

In this plan means an action plan required for a specific hazard, critical task or special event. It is prepared when the management arrangements necessary to deal with the effects of the hazard, or the critical tasks or special event differ for the general coordination arrangements set out in the main or supporting plans for the area. (Source: NSW DISPLAN)

Supporting Organisation

In this plan means the Government Departments, statutory authorities, volunteer organisations and other specialist agencies who have indicated they are to participate and provide specialist support resources to a Combat Agency Controller or Functional Area Controller during emergency operations.

Supporting Plan

In this plan means a plan prepared by an agency / organisation or functional area, which describes the support which is to be provided to the controlling or coordinating authority during emergency operations. It is an action plan which describes how the agency / organisation or functional area is to be coordinated in order to fulfil the roles and responsibilities allocated.

Victim

Means a sufferer from any destructive, injurious, or adverse action or agency. [Macquarie Dictionary - Second Edition]. In this plan it means a person adversely affected by an emergency.

Vulnerability

The degree of susceptibility and resilience of the community and environment to hazards. (Source: COAG Review into Natural Disasters in Australia, August 2002)

Welfare Centre

Means any centre established to provide welfare services to disaster victims. It may be Evacuation Centre, Disaster Relief / Recovery Centre, Welfare Assembly Centre. One Stop Relief Centre and Accommodation Centre.

ABBREVIATIONS

ADF	Australian Defence Force
ADFLO	Australian Defence Force Liaison Officer
ADRA	Adventist Development and Relief Agency
AQIS	Australian Quarantine Inspection Service
ARTC	Australian Rail Track Corporation
BCA	Building Code of Australia
BSC	Ballina Shire Council
CBD	Central Business District
COAG	Council of Australian Governments
DA	Development Application
DACC	Defence Assistance to the Civil Community
DCP	Development Control Plan
DEMC	District Emergency Management Committee
DEMO	District Emergency Management Officer
DEOCON	District Emergency Operations Controller
DISPLAN	Disaster Plan
DoCS	Department of Community Services
DPI	Department of Primary Industry
EMA	Emergency Management Australia
EOC	Emergency Operations Centre
EOCON	Emergency Operations Controller
ERMS	Emergency Risk Management Strategy
ESO	Emergency Services Officer
FA	Functional Area
F&RNSW	Fire & Rescue NSW
HSFAC	Health Services Functional Area Coordinator
HAZMAT	Hazardous Material
LEMC	Local Emergency Management Committee
LEMO	Local Emergency Management Officer
LEP	Local Environment Plan
LEOC	Local Emergency Operations Centre
LEOCON	Local Emergency Operations Controller
LEPRA (Act)	Law Enforcement (Powers and Responsibilities) (Act 2005)
LGA	Local Government Area
LO	Liaison Officer
LPG	Liquefied Petroleum Gas
NNSWHN	Northern NSW Health Network
NPWS	National Parks and Wildlife Service
NR	Nature Reserve

NSWRFS	NSW Rural Fire Service
NSWWS	NSW Welfare Services
MRNSW	Marine Rescue NSW
RMS	Roads & Maritime Services
SCA	State Conservation Area
SEMC	State Emergency Management Committee
SEOCON	State Emergency Operations Controller
SERCON	State Emergency Recovery Controller
SERM (Act)	State Emergency and Rescue Management (Act 1989 (as amended))
SES	State Emergency Service
SEWS	Standard Emergency Warning Signal
SOG	Standing Operating Guide
SOP	Standing Operating Procedure
SRB	State Rescue Board
USAR	Urban Search and Rescue Boards
VRA	Volunteer Rescue Association
WIRES	Wildlife Information and Education Service

LEGISLATIVE FRAMEWORK

The Constitution

Under the Australian Constitution the State Government is responsible for the protection of lives and property of its residents while the Commonwealth Government provides guidance and support for the states to develop the required capacity to respond and provide practical / physical assistance if the states request assistance.

NSW Legislation

To meet its responsibilities, NSW has enacted the State Emergency and Rescue Management (SERM) Act 1989. This provides the basis for emergency management in NSW. The Act provides the Emergency Management structure in NSW as follows:



NSW State Disaster Plan

This plan details emergency preparedness, response and recovery arrangements for NSW. It ensures a co-ordinated response to emergencies by all agencies having responsibilities and functions in emergencies.

NSW Recovery Plan

This plan supports the NSW State Disaster Plan. It outlines the strategic intent, responsibilities, authorities and the mechanisms for disaster recovery in NSW. It is supported by a suite of guidelines that outline the operational objectives and the range of activities that may be associated with recovery operations. The recovery plan, together with the guidelines, allow for the developed and implementation of a planned recovery following a natural disaster or other emergency.

Local Level

Ballina Shire Council has a Local Emergency Management Committee (LEMC) constituted under the SERM Act.

As shown above, the LEMC is responsible to the District Emergency Management Committee.

The LEMC is also responsible for the preparation of plans in relation to the prevention of, preparation for, response to and recovery from an emergency in the Council area.

INTRODUCTION

Purpose

- a) This plan details arrangements that prevent or mitigate, prepare for, respond to and recover from emergencies within the Ballina Shire. It covers arrangements where:
 - i) a combat agency is in control
 - ii) a combat agency is in control and support is coordinated by the Local Emergency Operations Controller (LEOCON)
 - iii) there are emergency operations for which there is no combat agency
 - iv) operations where a combat agency has passed control to the Local Emergency Operations Controller
 - v) operations at District or State level where the Local Emergency Operations Controller continues to co-ordinate local level operations
- b) The arrangements detailed in this plan apply to emergency operations conducted by the Local Emergency Operations Controller or the relevant combat agency.

Objectives

The objectives of the Ballina Shire Local Disaster Plan are to:

- a) Details responsibilities for prevention and mitigation strategies
- b) Details roles and responsibilities in preparation for, response to and recovery from emergencies
- c) Set out the control, coordination and liaison arrangements at Local level
- d) Details activation and alerting arrangements
- e) Detail arrangements for the acquisition and coordination of resources
- f) Details public warning systems and responsibility for implementation
- g) Details public information arrangements and public education responsibilities
- h) Details arrangements for the review, testing, evaluation and maintenance of this plan
- i) Details reporting before, during and after an operation including:
 - i) Information and intelligence flow during an incident or emergency
 - ii) Arrangements for LEOCON report to the District Emergency Operations Controller (DEOCON)
 - iii) Responsibilities for the preparation of post emergency reports

Scope

The plan describes the arrangement at Local level to effectively and efficiently prevent, prepare for, response to and recover from emergencies and also provides policy direction for the preparation of Sub-plans and Supporting Plans.

Planning Assumptions

- a) Arrangements detailed in this plan are based on the assumption that the resources upon which the plan relies are available when required.
- b) The effectiveness of arrangements detailed in this plan are dependent upon all involved agencies preparing, testing and maintaining appropriate internal instructions and / or standing operating procedures.

Principles

The Ballina Shire Local DISPLAN is based on the following principles:

- a) Responsibility for prevention / mitigation, preparedness, response and recovery rests initially at the local level. If local agencies and available resources cannot cope they are augmented by those at District, State or Commonwealth levels.
- b) Control of emergency response and recovery is conducted at the lowest effective level.
- c) Combat agencies may deploy their own resources from outside the affected local area or district if they are needed. The LEOCON shall be informed when Out of Area Resources are brought in or when local resources are deployed to other areas.
- d) The Local Emergency Operations Controller (LEOCON) is responsible, when requested by a combat agency, to co-ordinate all or part of the support resources needed.
- e) The LEOCON would not normally assume control from a combat agency unless the situation can no longer be contained. Where necessary, this should be done after consultation with the DEOCON and agreement of the combat agency and the appropriate level of control,
- f) Emergency prevention / mitigation, preparedness, response and recovery should be conducted with all agencies carrying out their normal functions wherever possible.
- g) Planning at a Local level is to be based on the SEMC Emergency Risk Management Process.

Area Covered by This Plan

The Ballina Shire covers much of the lower Richmond River Valley incorporating a large portion of rural area consisting of river flats and coastal foreshores as well as red soil plateau making up most of the western portion of the Shire. The urban centres of Ballina, Alstonville

/ Wollongbar and Lennox Head contain the majority of the Shire's population. The small villages of Wardell, Tintenbar and Newrybar also provide a concentration of population.

The Pacific Highway traverses the Shire on a north south axis and carries a vast amount of district and interstate traffic. Heavy transports and large passenger vehicles travel the highway giving cause for concern. The Richmond River also traverses the Shire and forms an estuary at Ballina. The river activity is expanding in both commercial and social usage which provides a significant accident potential.

Ballina Bryon Gateway Airport is located adjacent to Southern Cross Industrial Estate and provides regular jet services to Sydney and Melbourne.

The attached map shows the Shire boundary and significant population centres and geographic features.



Ballina Shire Local Government Area

PART 1 - RISK ASSESSMENT

The Australian Standard AS/NZA 4360.2004 defines Risk as “a chance of something happening that will have an impact upon objectives. It is measured in terms of consequence and likelihood”

The hazards in the following table will be assessed at the local level and have considerable reason or means to occur. Evidence is based on actual events or anecdotal evidence for emergency incidents which would require a significant and coordinated response.

Details of all possible hazards / source of risk can be found in the attached extract from the Ballina Shire Council Emergency Risk Management Strategy, see **APPENDIX A**.

Natural	Combat Agency
Cyclone / East Coast Low	SES, BSC Local Flood Plan
Coastal Erosion	SES
Bush Fire	NSWRFS, BSC Bush Fire MP, NPWS
Flood / Storm Surge	SES, BSC Local Flood Plan
Severe Storm	SES, BSC Local Flood Plan
Tsunami	SES, NSW State Tsunami Sub-Plan
Technological	
Bridge Collapse	LEOCON / BSC
Explosion	NSWF&R coordinating with RFS
Hazardous Materials	NSW Fire & Rescue
Infrastructure Power Failure	LEOCON / BSC
Infrastructure Sewerage Failure	LEOCON / BSC
Infrastructure Water Failure	LEOCON / BSC / Rous Water
Transport Accident - Air	NSW Police
Transport Accident - Road	NSW Police
Fire Industrial	NSW Fire & Rescue
Biological	
Risks of Communicable Diseases for humans and animals will be assessed at the State level and local arrangements implemented to support state strategies	Humans - NSW Health Animals - NSW DPI

PART 2 - ROLES AND RESPONSIBILITIES

The opportunity is taken in this part of the DISPLAN to outline the roles and functions of the various committees / organisations associated with emergency management.

Local Emergency Management Committee (LEMC)

As shown under the Legislation Framework section of this plan Ballina Shire Council has established a Local Emergency Management Committee (LEMC) that is responsible for particular functions associated with emergency management.

Details of the LEMC management framework are contained in **APPENDIX B**

The functions of the LEMC are summarised below:

- a) To prepare, maintain and review Disaster Plans and Sub plans in relation to the prevention of, preparation for, response to and recovery from emergencies.
- b) To identify, evaluate and monitor hazards, sources of risk, and threats to life and property, and where appropriate recommend specific hazard management guidelines.
- c) To establish and review appropriate emergency management structures at Local Level.
- d) To identify resources both within and outside the District and make plans for the allocation and coordination of the use of those resources during incidents and emergencies.
- e) To establish and review systems for use in the control and coordination of emergency operations.
- f) To establish communication networks within and between Functional Area, Emergency Services and Local Government organisations.
- g) To disseminate educational material on established emergency management policies and procedures.
- h) To arrange and conduct exercises and to periodically test emergency plans.
- i) To produce standing orders and instructions and standard operating procedures relative to Local emergency management plans and arrangements.
- j) To arrange for graduated warnings of emergencies to the public.
- k) To assist the District Emergency Management Committee and Local Emergency Operations Controller as required.

Local Emergency Operation Controller (LEOCON)

- a) Monitor operations controlled by combat agencies.
- b) Maintain liaison with combat agency and support organisations.

- c) Coordinate support and control the allocation of resources to combat agency-controlled operations when required by the combat agency.
- d) Control operations when there is no designated combat agency.
- e) In consultation with the DEOCON and combat agency, assume control of the operation from the combat agency if the situation can no longer be contained.
- f) Advise and activate appropriate Emergency Service Organisations and Functional Areas.
- g) Activate and staff the Local Emergency Operations Centre in accordance with the LEOC Standing Operating procedures.
- h) Ensure the District Emergency Operations Controller is kept appraised of the situation. As necessary, request "out of local area" resources through the District Emergency Operations Controller

Local Emergency Management Officer (LEMO)

- a) Provide executive support to the LEMC.
- b) Act as Executive Officer to the LEOCON.
- c) Act as liaison officer of Ballina Shire Council.
- d) Assist the LEOCON to establish and maintain the LEOC.
- e) Maintain a directory of contacts within the Council.
- f) Co-ordinate emergency management public education programs, which are not the responsibility of a combat agency.
- g) Collate a comprehensive resource register and media directory (Councils, emergency Service and Functional Areas).
- h) Provide executive support at the LEOC when activated.
- i) Co-ordinate arrangements for a central debrief following operations and prepare a consolidated report on the operation, in consultation with the LEOCON.
- j) Ensure that adequate "back-up" arrangements are made to cover any period of absence and that the LEOCON is advised of the absence or intended absence of the LEMO.

Liaison Officer (LO)

On activation of the Ballina Shire Local emergency Operations Centre (LEOC) or as directed by the LEOCON, Agencies and Functional Area Coordinators are to be requested to provide a Liaison Officer from agencies as deemed necessary. Liaison Officers must:

- a) Have the authority or capacity to commit the resources of the agency or functional area they represent / co-ordinate,
- b) Maintain and operate communication links with their own control / coordination centres,

- c) Provide accurate and timely advice to the LEOCON, and other staff on the situation, capabilities, characteristics of their agency or functional area, and forecast requirements,
- d) Keep the LEOCON and the LEOC staff informed of actions taken, and the requirements of their organisation or functional area,
- e) Convey the LEOCON's directions / instructions to their organisations, as soon as possible.

Stakeholder Agencies

The following organisations have been identified by the NSW State DISPLAN and/or local emergency planning documentation as the agencies primarily responsible for controlling operations to combat the hazards / emergencies listed below:

SOURCE OF RISK	AGENCY OR EOCON RESPONSIBLE FOR CONTROL AND INITIAL RECOVERY
Earthquake	Appropriate EOCON under DISPLAN arrangements
Exotic Animal or Plant Disease	NSW Department of Primary Industries (DPI)
Fires - Rural (Bush, Grass and other fires within Rural Fire Districts as prescribed in the Rural Fires Act 1997)	Incident Controller or Officer appointed by the Commissioner, Rural Fire Service, or in accordance with a Bush Fire Management Committee Plan or Operations or Mutual Aid Agreement.
Fires - urban (within Fire Districts proclaimed under the provisions of the Fire Brigades Act)	Fire & Rescue NSW Brigade Incident Controller, or in accordance with a Bush Fire Management Committee Plan of Operations or Mutual Aid Agreement.
Flood - Flash	NSW State Emergency Service
Flood - Riverine	NSW State Emergency Service
Hazardous Materials Emergency (Including Transport related Hazmat emergencies)	Fire & Rescue NSW - rendering safe and clean up operations that are land based including inland and coastal waterways other than State Waters. Roads and Maritime Services - rendering safe and clean up of State Waters Operations. Dept Environment and Heritage - scientific support, enforcement and legislative requirements. NNSWHN Public Health Unit - Provide advice and health warnings in the event of persons being affected by the hazardous material.
Human Health - Infectious Diseases affecting humans	Northern NSW Local Health District
Major Structure Collapse	NSW Police (overall control) Fire & Rescue NSW Brigade (provide and control USAR task force)

Marine Oil and / or Chemical Spill	Roads & Maritime Services - State Waters
Significant Infrastructure Failure/ Damage	Appropriate EOCON under DISPLAN arrangements depending on type of infrastructure affected
Storm and Tempest	NSW State Emergency Service
Tidal Inundation	NSW State Emergency Service
Transport Accident - Air	Appropriate EOCON under DISPLAN arrangements
Transport Accident - Road	Appropriate EOCON under DISPLAN arrangements
Tsunami	NSW State Emergency Service
Water Supply Contamination	Appropriate EOCON under DISPLAN arrangements. NNSWHN Public Health Unit - provide advice and health warnings in the event of persons being affected by the hazardous material.

Agency Roles and Responsibilities

At a State level certain Agencies have been appointed as Functional Area Coordinators by the State Emergency Management Committee. Their role is to control the activities and coordinate the resources associated with their respective Functional Areas as summaries below. Volunteer and specialist organisations are also listed.

Ambulance Service of NSW

- a) Provide pre-hospital care and transport for the sick and injured.
- b) Provide and / or assume responsibility for transport of designated Health Service teams and their equipment to the sites of incidents or emergencies, receiving hospitals or emergency medical facilities when so requested by the Health Services Functional Area Coordinator.
- c) Provide coordinated communications for all health systems involved in emergency responses.
- d) As determined by the State Rescue Board, provide accredited "rescue units" including Special Casualty Access Teams (SCAT).
- e) Provide, when requested, an Ambulance Liaison Officer with communications to the Local Emergency Operations Centre.
- f) Provide, when necessary and Ambulance Liaison Officer to the Police Site Controller.

Fire & Rescue NSW

- a) The designated Combat Agency for taking all practicable measures for preventing and extinguishing fires and protecting and saving life and property in case of fire in any fire district.
- b) Is the designated Combat Agency for land based hazardous materials including incidents and emergencies within New South Wales, specifically for taking all practicable measures:
 - i) for protecting and saving life and property endangered by hazardous material incidents
 - ii) for confining or ending such an incident
 - iii) for rendering the site of such an incident safe
- c) Provide fire control services by:
 - i) dealing with outbreaks of fire and the rescue of persons in fire endangered areas
 - ii) taking such measures as may be practicable to prevent the outbreak of fires
 - iii) on land, dealing with the escape of hazardous materials or a situation which involves the imminent danger of such an escape
- d) As determined by the State Rescue Board, provide accredited "rescue units".
- e) Assist in any other response or initial recovery operations for which the Fire Brigades' training and equipment is suitable, for example, the provision of emergency water supplies and pumping equipment.
- f) Provide a liaison officer to the Local Emergency Operations Centre or Combat Agency Operations Centre as appropriate.
- g) Inform the LEOCON of the existence of serious incidents.

NSW Police Force

- a) Overall responsibility for conduct of operations as a result of an incident or emergency.
- b) Is the designated Combat Agency for search and rescue incidents.
- c) As necessary, control and coordinate the evacuation of victims from the area affected by the emergency.
- d) Maintain law and order, protect life and property, and provide assistance and support to a Combat Agency, Functional Areas, and other Organisations as required. This may include:
 - i) reconnaissance of the area affected by the emergency
 - ii) traffic control and crowd control
 - iii) access and egress route security and control
 - iv) identifying the dead and injured, and notifying next of kin
 - v) establishing temporary mortuaries

- vi) maintaining the security of property
- vii) operation of a public enquiry centre capable of provided general information on incidents and emergencies to members of the public
- e) Respond accredited "rescue units" to general and specialist rescue incidents, and control and coordinate rescue operations.
- f) As determined by the State Rescue Board, provide accredited "rescue units".
- g) Manage Disaster Victim Registration, and a disaster victim enquiry system capable of:
 - i) providing a Disaster Victim Registration system for victims of emergencies
 - ii) managing a disaster victim enquiry centre capable of providing relatives and close friends with basic details on the location and safety of victims of emergencies occurring within New South Wales
 - iii) Managing a similar disaster victim enquiry service when the National Registration and Inquiry System (NRIS) is activated in relation to emergencies in other States and Territories
- h) Assist the effective conduct of emergency response and recovery operations by coordinating the release of official and current information to the media and public about the emergency, including measurers being undertaken or planned. This may include:
 - i) Establishing a Media Information Centre, arranging media conferences on behalf of the LEOCON and, when appropriate, arranging access by journalists to the area affected by the emergency.
 - ii) Preparing and issuing official messages to the public for broadcast by the media [preceded by the Standard emergency Warning Signal (SEWS)]
- i) Provide a liaison officer to the Local Emergency Operations Centre or Combat Agency Operations Centre as appropriate.

Rural Fire Service

- a) Act as combat agency for fire in all areas of Ballina Shire not covered by Fire & Rescue NSW.
- b) Provide fire control services by:
 - i) dealing with outbreaks of fire and the rescue of persons in fire-endangered areas.
 - ii) take such measure as may be practicable to prevent the outbreak of bush fires.
- c) At the request of, and under the control of either the relevant combat agency or Emergency Operations Controller, assist in any other response or recovery operations for which the Rural Fire Services' training and equipment is suitable.
- d) Provide a liaison offer to the Local Emergency Operations Centre when requested by the Local Emergency Operations Controller.

- e) Provide an LO to the Local Emergency Operations Centre or Combat Agency Operations Centre as appropriate.
- f) Inform the LEOCON of serious or potentially serious incidents.

State Emergency Service

- a) Act as combat agency for floods, storm and tempest incidents and emergencies.
- b) Is the designated Combat Agency for dealing with floods, and to coordinate the rescue, evacuation and welfare of affected communities.
- c) Is the designated Combat Agency for damage control for tsunamis, storms and tempests (including coastal erosion for storm activity) and to coordinate the evacuation and welfare of affected communities.
- d) As determined by the State Rescue Board, provide accredited "rescue units".
- e) Assist, at their request, the Police, Fire Brigades, Bush Fire Brigades and Ambulance Service in dealing with incidents or emergencies.
- f) Assist in any other emergency management preventions, preparedness, response or recovery operations, including emergency management training.
- g) Provide a liaison officer to the Local Emergency Operations Centre or Combat Agency Operations Centre as appropriate.
- h) Inform the LEOCON of serious or potentially serious incidents.

NSW Department of Primary Industries – Agriculture and Animals

- a) Is the designated Combat Agency for exotic animal diseases operations and other animal health emergencies. This includes implementing procedures in conjunction with State and National authorities, for the eradication or control of exotic animal diseases, including:
 - i) detection, diagnosis, risk assessment and surveillance of the disease
 - ii) destruction and disposal of infected animals, plants and produces as required
 - iii) disinfection of contaminated areas, buildings and vehicles
 - iv) programs for vector control, for example, insect and feral animal control
 - v) quarantine controls for the movement of persons, animals and plants
 - vi) provision of adequate trained staff to ensure quarantine requirements are observed.
- b) Provide immediate animal care services and continuing rehabilitation assistance to primary producers, including:
 - i) assessment of injured stock
 - ii) disposal of carcasses
 - iii) assessment of rural property losses and damage buildings, fences, crops, equipment and fodder

- iv) coordination of the supply and distribution of emergency fodder supplies and other materials
- v) administration of financial assistance to victims
- vi) assistance to primary producers suffering emergency induced traumas, in conjunction with the Department of Community Services
- c) With support of Participating and Supporting Organisations, provide animal care services for wildlife, for domestic animals, and for companion pets of victims evacuated from an area affected by an emergency
- d) Planning for response and initial recovery operations for agricultural emergencies, and advising on animal care, veterinary public health, and plant disease control measures.
- e) Provide a liaison officer to the Local Emergency Operations Centre or Combat Agency Operations Centre as appropriate.
- f) Inform the LEOCON of serious or potentially serious incidents.

Communication Services

This is a State level functional area managed by the Department of Public Works.

Communication services are not established at district or local level. DEMO's have direct links to TELSTRA and these arrangements provide a mechanism to deal with associated communication issues.

Electricity Services (Essential Energy)

- a) Coordinate (in conjunction with the Engineering Functional Area) the establishment of electrical power either temporarily or permanently as required.
- b) Ensure individual feeders are restored with priority given to those supplying critical infrastructure - Hospitals; Sewer and Waste Water Treatment plants.
- c) Provide emergency Services Liaison Officer representation on the Ballina Shire Local Emergency Management Committee
- d) Provide a Liaison Officer to the Ballina Shire Local Emergency Operations Centre when requested by the LEOCON.

Engineering Services (NSW Department of Public Works)

- a) Coordinate all engineering resources associated with emergency response and initial recovery operations, including:
 - i) clearance and re-establishment of roads and bridges
 - ii) demolition and shoring up of buildings
 - iii) removal of debris

- iv) establishment of electrical power, water, sewerage and gas services, either temporarily or permanently as required
 - v) construction of levees to control flooding
 - vi) maintenance of essential services and
 - vii) other related matters.
- b) Provide Engineering Services support to a Combat Agency, and other Functional Areas or Organisations involved in the emergency.
 - c) Co-ordinate resources required for hazardous materials clean up operations.
 - d) Provide a liaison officer to the Local Emergency Operations Centre or Combat Agency Operations Centre as appropriate.

Environmental Services (NSW Office of Environment & Heritage)

- a) Protect the environment during emergency response and recovery operations.
- b) Co-ordinate scientific support for the on site controller during operations to combat the pollution of the sea and inland waters within NSW.
- c) Advice and co-ordinate scientific support to the NSW Fire Brigades during land base hazardous material incidents and emergency response operations.
- d) Provide specialist policy, engineering and scientific advice to councils and the SES on flood related matters including assistance with:
 - i) the identification of flood problems
 - ii) the preparation of Floodplain Management Plans and flood mitigation schemes.
- e) Advise other combat agencies on environmentally sound and legal practices for the disposal of wastes or contaminated materials resulting from an emergency.
- f) Assist the combat agency to coordinate the clean up operations in emergencies involving hazardous materials.
- g) Close and evacuate at risk camping grounds in National Parks managed areas.
- h) Provide a liaison officer to the Local Emergency Operations Centre or Combat Agency Operations Centre as appropriate.

Health Services (Northern NSW Local Health District)

- a) Is the designated Combat Agency for all health emergencies.
- b) Co-ordinate and control the mobilisation of all medical / hospital responses to emergencies when this plan is activated. This includes ambulance, medical, mental and public health services and involves:
 - i) coordinated hospital and medical services for the management of large numbers of casualties resulting from an emergency or disaster.

- ii) the provision of field hospital medical teams to manage casualties in the field. This may be prior to, or as an alternative to later transport to hospital.
 - iii) the mobilisation of health resources to emergency site or sites and the initiation of prioritised patient management.
 - iv) the provision of mental health services (counselling) to victims, emergency workers, and the communities affected by emergencies / disasters.
 - v) provision of medical and mental health services to welfare centres.
 - vi) provision of public health services to undertake diseases surveillance, provide advice on and investigation of public health risks to the affected community in an emergency / disaster.
- c) Provide a liaison officer to the Local Emergency Operations Centre or Combat Agency Operations Centre as appropriate.

Ballina Shire Council

- a) Administrative
- b) Chairs the Local Emergency management Committee and provides executive support to that Committee.
- c) Engineering / Environment (Coordinator - Group Manager Civil Services, Ballina Shire Council)
- d) Provides engineering support to combat agencies in construction of levees, debris clearing and traffic control.
- e) Provides support to emergency services and functional groups within the scope of its ability.
- f) Co-ordinates support from other engineering supporting agencies.
- g) Co-ordinates the provision of transport support as required by emergency services and functional areas.
- h) Responsible for local road network

Welfare Services

- a) In accordance with the State Disaster Welfare Plan, mobilises and co-ordinates local welfare resources.

Marine Rescue NSW - Ballina

- a) Act as Search and Rescue control centre to link between rescue resources in any particular marine rescue incident.
- b) Maintain liaison with trawler operators and SLSC to ensure effective marine rescue response arrangements are in place.

- c) Maintain marine rescue watch to enable the marine rescue plan to be implemented when required.
- d) Under the control of the relevant combat agency or Emergency Operations Controller, assist in any other response or recovery operations for which the organisation's training and equipment is suitable.
- e) Provide a liaison officer to the Local Emergency Operations Centre or Combat Agency Operations Centre as appropriate.

Roads & Maritime Services

- a) Responsible for the Pacific and Bruxner Highways
- b) Assist combat agencies with traffic control and clean up and ensure highways are trafficable as soon as possible.
- c) Maintain and operate road conditions / closure advisory service.
- d) Designated combat agency for State Waters based marine Oil or Chemical Spill from ships and shipping incidents that could lead to an oil or chemical spill. The agency takes all practicable measures for:
 - i) confining or ending such and incident
 - ii) rendering the site of such and incident safe; and
 - iii) site clean up operations
- e) Under the control of the relevant combat agency or Emergency Operations Controller, may assist in response or recovery operations for which the agency's training and equipment is suitable and available.
- f) Provide a liaison officer to the District Emergency Operations Centre when requested by the District Emergency Operations Controller.

Northern Rivers Westpac Lifesaver Rescue Helicopter Service

- a) Under the coordination of the Ambulance Service, provides a medial evacuation, transport and retrieval service for sick and injured persons.
- b) At the request of the relevant combat agency or Emergency Operations Controller, assist in any other response or recovery operations for which the Services' training and equipment is suitable.
- c) Provide aerial support for search and / or rescue operations

Surf Life Saving NSW

- a) Under the control of the relevant Combat Agency or LEOCON, assist in any other response or recovery operations for which the organisation's training and equipment is suitable.

- b) Provide a liaison officer to the LEOC when requested by the LEOCON.

Ballina Jet Boat Surf Rescue

- a) Provide rescue resources when requested for marine incidents involving surf and / or bar conditions or in the lower reaches of the Richmond River and other coastal areas.
- b) Assist, on their request, other emergency services in dealing with incidents and emergencies.

Defence Forces

- a) Provide support in accordance with policy and procedures contained in Australian Defence Force instructions for assistance to the civil community.

It should be noted that except in instances where immediate action is necessary to save human life, alleviate suffering, prevent extensive loss of animal life or serious loss of damage to property, assistance from the ADF will only be arranged by the State Operations Controller through the Natural Disasters Organisations.

Sub – Plans & Supporting Plans

In addition to the ERMS the DISPLAN is linked to a cross section of the internal and external plans as listed below that support emergency management in the Ballina Shire area.

- Ballina Local Flood Plan - Ballina Shire SES
- Bushfire Plan - Ballina Shire Rural Fire Service
- Ballina Aerodrome Emergency Procedures Plan
- Ballina Shire Coastline Emergency Action Subplan for Coastal Erosion
- State Disaster Welfare Plan
- Northern Rivers Marine Oil Spill Contingency Plan
- NSW HEALTHPLAN
- Northern NSW LHD HEALTHPLAN
- Ballina District Hospital HEALTHPLAN
- District and State level plans as appropriate

The next section of the DISPLAN focuses on Emergency Management Concepts including the comprehensive approach that embraces Prevention / Mitigation Preparation, Response and Recovery. A definition of each heading can be found in the Definitions section of the plan.

PART 3 - PREVENTION / MITIGATION

The aim of this part of the DISPLAN is the elimination or reduction of the level of risk or severity of an emergency.

Responsibilities and Strategies

- a) The Local Emergency Risk Management Committee is responsible, using an emergency risk management process, to identify prevention or mitigation options, to refer these options and recommendations to the appropriate agency, and to monitor outcomes.
- b) Ballina Shire Council is responsible for the Emergency Risk Management Strategy that was prepared in accordance with the Australian / New Zealand Standard 4360.2004, Emergency Risk Management Guidelines, the Local Government Act 1993, State Emergency Rescue Management Act 1989 and incorporated recommendations from the Councils of Australian Government
- c) Responsibility for the development and implementation of prevention and mitigation strategies rests with the agencies, organisations and / or committees as detailed below:

Agency Responsibilities and Strategies

SOURCE OF RISK	AGENCY / COMMITTEE RESPONSIBLE	MITIGATION / PREVENTION STRATEGIES
FLOOD, STORM SURGE, EAST COAST LOW, CYCLONE	Ballina Shire Council State Emergency Service	<ul style="list-style-type: none"> • Preparation, ongoing monitoring and reviewing of a Community Services Directory. • Community Education / Awareness campaigns where appropriate • Audible Warning system / mechanism where reasonable and appropriate • Road Closures (Pacific & Bruxner Hwy) and Evacuation Plan/s • Conduct Annual Exercise (Multi-agency) as part of the review process and to test the Emergency Operations Centre operational effectiveness and personnel • Review of existing Plans and Arrangements and monitor to ensure currency.

<p>BUSH FIRE, PEAT FIRE</p>	<p>Ballina Shire Council NSW Rural Fire Service National Parks State Forests Office of Environment & Heritage</p>	<ul style="list-style-type: none"> • Community Education program on how to prepare and protect themselves - refer to F&R NSW and NSW RFS • Hazard reduction program approvals - refer to RFS • Communications plan with schools (Community Liaison person - agency based) • Review of Existing Plans and arrangements and monitor to ensue currency • Ongoing training to ensure Combatant personnel are suitably trained and equipped to respond to this type of event • Support personnel / agencies are trained to an appropriate level to provided effective support • Preparation, ongoing monitoring and reviewing of a Community Services Directory
<p>TSUNAMI</p>	<p>Ballina Shire Council State Emergency Service</p>	<ul style="list-style-type: none"> • Develop a Tsunami Warning Plan - including communications matrix • Develop a Tsunami Warning education workshop for the community and emergency services personnel • Development of a Recovery and Rehabilitation plan in consultation with the relevant agencies and organisations.
<p>COASTAL EROSION</p>	<p>Ballina Shire Council State Emergency Service</p>	<ul style="list-style-type: none"> • Refer to Ballina Coastline Interim Measures and Actions plan, DCP 17, pending completion of Coastline Management Study and Coastline Management Plan
<p>EXPLOSION</p>	<p>Ballina Shire Council Fire and Rescue NSW WorkCover NSW</p>	<ul style="list-style-type: none"> • Develop and conduct discussion / tabletop exercise based on this type of incident to further identify manageability issues and to assist in development and / or review of existing plans and arrangements • Conduct an exercise as part of

		the Review process and to test the Emergency Operations Centre operational effectiveness and capacity of services and agencies to manage.
HAZARDOUS MATERIALS	Fire and Rescue NSW Roads and Maritime Services WorkCover NSW	<ul style="list-style-type: none"> • Conduct and exercise as part of the Review process and to test the Emergency Operations Centre operational effectiveness and capacity of services and agencies to manage • Development of a Road Closure & Evacuation Plan specific to the Industrial Complex • Review of Existing Plan and Arrangements and monitor to ensure currency • Ongoing training to ensure Combatant personnel are suitably trained and equipped to respond to this type of event.
POWER FAILURE	Essential Energy	<ul style="list-style-type: none"> • Awareness programme on Business Continuity to be facilitated by Essential Energy for businesses
SEWERAGE FAILURE	Ballina Shire Council	<ul style="list-style-type: none"> • Full assessment of the Waste Water Treatment Plant and associated infrastructure to determine extent of any upgrades required or other measures to be implemented to mitigate the risk
WATER FAILURE	Ballina Shire Council	<ul style="list-style-type: none"> • Ongoing monitoring and review (ie Communication) with Rous Water • Identification of emergency water supply sources and emergency contact arrangements in place

<p>TRANSPORT ACCIDENT - AIR</p>	<p>Ballina Shire Council</p>	<ul style="list-style-type: none"> • Ongoing testing and review of the Ballina Airport Emergency Plan • Conduct annual exercise at the airport in accordance with regulations, Aerodrome Manual and Airport Emergency Plan
<p>TRANSPORT ACCIDENT - ROAD</p>	<p>Ballina Shire Council NSW Police Roads and Maritime Services</p>	<ul style="list-style-type: none"> • Conduct a Tabletop exercise as part of the Review process and to test the Emergency Operations Centre operational effectiveness and personnel • Identification of suitable detour routes as part of a Road Closure Plan • Ongoing training to ensure combatant personnel are suitably trained and equipped to respond to this type of event
<p>INDUSTRIAL FIRE</p>	<p>Fire & Rescue NSW</p>	<ul style="list-style-type: none"> • Develop and conduct discussion / tabletop exercise based on this type of incident to further identify manageability issues and to assist in development and / or review of existing plans and arrangements. • Design and Development of Road Closure and Evacuation Plan for industrial area • Ongoing review and monitor of existing Plans and Arrangements to ensure currency • Ongoing training to ensure Combatant personnel are suitably trained and equipped to respond to this type of event

PART 4 – PREPAREDNESS

The aim of this part of the DISPLAN is to enhance the capacity of communities to cope with the consequences of an emergency.

Key issues including public education, emergency risk management, contact details, identifying neighbourhood safer places, vulnerable groups and arrangements to warn the community are addressed.

Public Education

The LEMO is responsible for the co-ordination of the public information and education program using the following mediums:

- Local Weekly Newspaper (Northern Star Newspaper, Advocate Newspaper, Northern Rivers Echo)
- ABC Radio
- Radio 2LM and ZZZ
- Radio 2NCR FM
- Radio Station Paradise FM
- Public display in Council Buildings
- Liaison with Schools
- Ballina Council and Agency Websites
- Television Networks

Existing Plans

The Ballina Shire Emergency Risk Management Strategy (ERMS) identifies the Hazards and Source of Risk for Ballina Shire and addresses Vulnerability and Resilience issues associated with the broader community, see **APPENDIX A & APPENDIX D**.

Other existing plans that are relevant to emergency management are mentioned through out the Plan.

Neighbourhood Safer Places

In preparing for an emergency a number of Neighbourhood Safer Places (NSPs) have been identified throughout the Council area.

An NSP is a place of last resort for people during a bush fire. It is usually an identified building or space within the community that can provide a higher level of protection from the

immediate life threatening effects of a bush fire. These are risks involved in moving to a NSP and sheltering in them cannot be considered completely safe. They are places of last resort in emergencies only.

Limitation of an NSP include no catering for pets, emergency services not always present, no meals or special needs catering and they may not provide shelter from the elements such as flying embers.

The following NSPs have been identified in the Ballina Shire Local Government Area:

West Ballina Rugby ground	Open space	Kalinga Street, West Ballina
Williams Reserve	Open Space	Park Lane, Lennox Head
Wardell Hall	Building	Richmond Street, Wardell
Southern Cross Public School	Building	Chickiba Drive, East Ballina
Ballina Airport Terminal	Building	Southern Cross Drive, Ballina
Xavier Catholic College	Building	Redford Drive, Skennars Head
Wardell Public School	Building	Richmond Street, Wardell
Emmanuel Anglican College	Building	Horizon Drive, West Ballina
Ballina Golf Course	Building	Jameson Avenue, East Ballina
McLeans Ridges Hall	Building	Cnr Cowlong Road & McLeans Ridges Road, McLeans Ridge
Pop Dennison Park	Open Space	Compton Drive, East Ballina

Vulnerable Groups / Evacuations

Members of the community residing in certain locations are considered to be vulnerable during an emergency incident. This may be linked to their age demographic, mobility or access limitations during particular incidents.

A list of groups considered to be potentially vulnerable to an emergency incident is included as **APPENDIX D**.

In addition to the list appearing in the Appendix the following examples highlight the varying nature of impacts on vulnerable communities throughout the council area:

a) Floods

Flash flooding has occurred in the Teven and Uralba Valleys following torrential rain in the catchments of the west of the Shire. Little warning is available due to the steep terrain and

the relatively short distance between the catchment areas and the affected communities of Teven and Uralba or indeed the western residential and commercial areas of nearby Ballina.

In the event of major flooding in the main Richmond and Wilson Rivers catchments, wide scale inundation of valuable farm land as well as rural villages and dwellings can occur.

The land on which much of Ballina is built is less than one metre above 'mean high tide levels' and therefore would be 'at risk' should major flooding coincide with any unusual tide effects from a cyclone or similar weather event.

Adequate warning of major flooding should provide time for an orderly evacuation of the flood-affected communities within the Shire.

Cabbage Tree Island Aboriginal Reserve – Major flood events rendering the Island sewerage system inoperable could lead to widespread illnesses developing in this community.

Coupled with the isolation of the area by floodwaters it is desirable that all personnel be relocated until a clearance is obtained from Ballina Shire Council that the public utilities are back in operation.

Bus transport will be provided to WELFARE CENTRES in Ballina for all residents requiring temporary housing.

Registration of all residents is essential and should be co-ordinated through the Island Management Council.

The Department of Human Services will co-ordinate the evacuation and subsequent relief arrangements.

It is expected that any other areas will require evacuation of more than the odd individual family unit as a result of major river flooding. In such cases, arrangements will normally be made by Department of Human Services for such persons involved to be temporarily housed in Motels.

b) Storm Surge

In the event of widespread inundation due to Storm surge, Cyclone and/or Flood combination, sections of Ballina and West Ballina evacuation routes to the north, west and south will be severely limited.

Refuge areas in East Ballina together with any unaffected high ground in the main town area will need to be brought into use.

The Southern Cross Primary and Secondary School complex, together with the Golf Club and other large buildings will provide temporary shelter for a large number of those affected.

c) Bushfire

Bushfires occur fairly regularly in the heath land areas to the north and west of Lennox Head and west of Wardell. These fires can pose a significant threat to adjacent communities such as Lennox Head, East Ballina and Wardell. An added problem here is the risk to nearby valuable sugar cane.

d) Hazardous Materials Emergencies

Any accident involving transported hazardous materials, particularly in built-up urban areas, could pose significant management problems including containment; rescue (if necessary); possible evacuation of nearby residents; and environmental damage.

Spatial Information and Mapping Systems (SIMS)

Council has access to the SIMS electronic mapping system that provides detailed information about places and people that can be utilised when preparing for and during an emergency. For example, the system provides the location of buildings / facilities and an estimate of how many people may be inside should there be an evacuation.

An added benefit is that the relevant data can be integrated with councils existing electronic mapping system

Resource and Contact Directories

In preparing for an emergency at a local level, each Emergency Service Controller, Functional Area Co-ordinator and other organisations involved are responsible for the development, maintenance, dissemination and review of up to date resource and contact directories, relevant to their operational requirements.

The Ballina Shire Local Emergency Management Officer is to ensure that up to date resource and contact directories, relevant to the LEOCON's multi agency emergency management operation requirements are development, maintained, disseminated and reviewed.

A contact directory is provided in **APPENDIX C**

Training and Exercise Schedule

A training exercise will be developed and conducted every two years to test the efficiency and effectiveness of the DISPLAN arrangements. In cases where an actual operation eventuates during the year, the training exercise will be postponed to the following year (see Part 7, Review).

Actual operations will be followed by a debrief and review of procedure to identify shortfalls or improvements that can be made to the Plan. Any recommendations will be referred to the LEMC for consideration and possible inclusion in the Plan.

Local Emergency Operations Centre (LEOC)

The LEOC is an established facility for the co-ordination of operations, communication and support during an emergency.

- a) The LEOCON is responsible for controlling the LEOC.
- b) Ballina Shire Council has accepted responsibility for:
 - i) establishing and maintaining a LEOC for the Ballina LGA
 - ii) ensuring that sufficient adequately trained Council personnel are available to staff the LEOC when required
 - iii) maintaining a contact directory of LEOC staff
 - iv) providing appropriate training for LEOC staff
 - v) preparing and maintaining Standing Operating Procedures for the LEOC
 - vi) ensuring Liaison Officers and their Assistants, required at the LEOC, are to be drawn from relevant participating and supporting agencies.

Standard Operating Procedures for the LEOC

Operational Control, coordination and planning relationships are detailed in the endorsed Ballina Shire Council LEOC Standing Operating Procedures that are kept separate to this document.

Catastrophic Fire Events

In accordance with SERM Act and associated policies Emergency Operations Centres will be open / activated during forecast Catastrophic Fire Weather Events.

Location of Emergency Operations Centres

The primary LEOC is the WASTE CENTRE, Ballina.

The alternate LEOC will be at the POLICE STATION, River Street, Ballina.

Combat Agency Control & Coordination Centres

Combat Agencies are responsible for the establishment of Control & Coordination Centres as shown in the table below.

COMBAT AGENCIES' CONTROL & COORDINATION CENTRES	
FLOOD	SES Ballina Headquarters Industrial Estate Angels Beach Drive BALLINA 2478
BUSHFIRE	Fire Control Centre 70 / 90 Station Street Murwillumbah 2482
FUNCTIONAL AREA CONTROL CO-ORDINATION CENTRES	
WELFARE COMMUNICATIONS ENGINEERING ENVIRONMENT/HEALTH TRANSPORT	District Office, Tamar Street, Ballina Local EOC Council Offices Council Offices Local EOC
COUNCIL DEPOT	Ballina Industrial Estate

Evacuation Centres

The Police if requested by the Combat Agency Controller, Section 44 (Rural Fires Act) Incident Controller, LEOCON or DEOCON will conduct the evacuations of persons to the selected Evacuation Centre. Police are to advise the Welfare Functional Area Co-ordinator of the selected Evacuation Centres.

Assembly areas and Evacuation centres that may be used in an emergency are detailed in the Local Disaster Welfare Plan.

The LEMO is to assess nominated Evacuation Centres on a regular basis to ensure their suitability.

Welfare Services are responsible for:

- arranging staffing for the Centres in time to receive evacuees
- provided welfare support services
- address longer term accommodation arrangements

Out of Area Assistance

Apart from Combat Agencies deploying their own resources from outside the affected local area, all other requests for “out of area” resources are to be made through the District Emergency Operations Controller.

Helicopter Landing Areas

Landing areas for rescue helicopters will be influenced by the prevailing circumstance at the time of the emergency.

Areas identified for regular helicopter landings include Lighthouse Beach, Ballina Byron Gateway Airport and suitable sporting grounds located throughout Ballina Shire Council.

PART 5 - RESPONSE ARRANGEMENTS

The aim of this part of the DISPLAN is to ensure the immediate consequences of an emergency are minimised.

Steps taken to respond to an emergency and provide information about welfare and relief arrangements for the impacted community are outlined in this part of the plan.

Command Control & Coordination

The LEOCON and Combat Agencies have certain roles and functions when responding to an emergency and these are summarised below:

Local Emergency Operations Controller (LEOCON)

A senior Police Officer is appointed as the Local Emergency Operations Controller (LEOCON) for the overall direction, control and co-ordination of emergency response and recovery measures for Ballina Shire.

The senior police officer within Ballina Shire is appointed as the deputy LEOCON by the District Emergency Operations Controller (referred to as the DEOCON) being the Commander Northern Police Region. (See details of Ballina Police Station in the Contact Directory – **APPENDIX C**)

Operation Controlled by the LEOCON

Emergency Operations controlled by the LEOCON are those where:

- a) The LEOCON is designated in a plan as the controller of a specific operation
- b) The LEOCON automatically assumes control for operations where there is not designated or identified Combat Agency
- c) The LEOCON is requested by the Combat Agency to assume control, with the approval of the Combat Agency head and the Minister for Emergency Services
- d) The LEOCON controls the operation and coordination of resources with the individual agencies to command their own resources and carry out tasks as directed.

Emergency Operations Centres

Details of the Emergency Operations Centres are contained in the previous Section of this Plan.

Agency Responsibilities

The following organisations have been identified in the DISPLAN as the agencies primarily responsible for responding to and controlling particular hazards/emergencies as follows:

HAZARDS/EMERGENCY	AGENCY	OPERATING PROCEDURES
SEARCH & RESCUE	NSW Police Force	SOP's
FIRE (URBAN)	Fire & Rescue NSW (Ballina and Alstonville)	SOG's
FIRE (RURAL)	Rural Fire Service	Local Plan
HAZMAT INCIDENT	Fire & Rescue NSW	SOP's
FLOOD	NSW State Emergency Service	Local Plan
STORM & TEMPEST	NSW State Emergency Service	Local Plan
ANIMAL HEALTH EMERGENCIES	Agriculture & Animal Services Functional Area	State & District Plans
MARINE RESCUE	NSW Police, Marine Rescue	SOP's
Human Health	NNSW Local Health District	Local/District & State Plans

Operations Managed by Combat Agencies

Without limiting the authority to Combat Agency Controllers, Combat Agency operations may be managed in the following ways:

- The responsible Combat Agency Controller controls the operation which requires no support resources other than the Combat Agency resources: or
- The responsible Combat Agency Controller:
 - i) Controls the operation; and
 - ii) Coordinates pre-planned support from other agencies; and
 - iii) Ensures that the LEOCON is kept aware of these operations or
- The responsible combat Agency Controller retains overall control of the operation and can request the LEOCON to:
 - i) Coordinate the external support services specified by the Combat Agency Controller
 - ii) Manage part of the operation to meet the requirements of the Combat Agency Controller (eg evacuation operations)

- Combat agencies may deploy additional resources from outside the area and call other organisations as detailed in this plan.
- The LEOCON will monitor these operations and be prepared to co-ordinate support, if required, by the combat agency and will provide a LIAISON OFFICER to the combat agency's operation centre.
- Combat Agencies may request additional resources to be co-ordinated by the LEOCON.
- The LEOCON will assume control of operations where there is not obvious combat agency.
- The LEOCON will not normally assume control of an operation from a combat agency unless the situation can no longer be contained and then only after consultation with that combat agency.

Management of Road and Traffic Incidents

Refer to Memorandum of Understanding between the key organisations – see Appendix D

Information Management and Intelligence

- a) During Combat Agency managed operations the relevant Combat Agency Controller is responsible for the passage of public information to the community and the media, and for operational information and intelligence to the LEOCON.
- b) The Combat Agency Controller is also responsible for:
 - i) The passage of operational information and intelligence to and from all involved agencies, using combat agency control centres as the collection and distribution point
 - ii) The passage of public information to the community
 - iii) The release of regular media releases
 - iv) Ensuring the LEOCON is kept informed of developments through regular situation reports and briefings.

Rescue Operations

Rescue arrangements detailed in this Plan are subject to the provisions of the State Rescue Policy and the command structure of the NSW Police, except when an operation is controlled by an Emergency Operations Controller.

Displan Activation

The arrangements in this Plan are activated by the LEOCON and for emergency situations where:

- a combat agency is in control and the LEOCON is monitoring the situation, or

- the Commissioner of the NSW Rural Fire Service takes charge under Section 44 of the Rural Fires Act 1997 to coordinate bush fire fighting
- the SES Local controller is conducting:-
 - storm or tsunami damage control incidents and emergencies, or
 - flood incident and emergency operations in accordance with the Ballina Shire Local flood Plan
 - a combat agency is in control and requires support from the LEOCON, or
 - a combat agency has passed control to the LEOCON, or
 - there is no combat agency
 - the LEOCON believes that an emergency has means to occur or has occurred
 - directed by the DECON

The arrangements detailed in this plan do not need to be specifically activated by the LEOCON as they are in effect at all times.

The arrangements herein will apply during operations whether under the control of the LEOCON or the COMBAT AGENCY

The plan is automatically activated for flood, storm and tempest incidents and emergencies, including coordination of evacuees and welfare of affected communities.

In the case of Bush Fires, operations will be controlled by the appointee under the Rural Fires Act 1997, and for flood, storm and tsunami incidents and emergencies under the control of the SES Controller.

Resources are to be mobilised as follows, bearing in mind that prevailing circumstances have the potential to influence the staged implementation.

For example, the nature of the incident and time constraints could result in the Alert and Standby stages being bypassed.

Impact Assessment / Reporting Arrangements

The LEOCON and Combat Agencies are responsible for preparing an initial Impact Assessment & situation report for the DECON. This is passed to SEOC, SEOCON & SERCON.

Assessment of the extent of damage, impact on the community and the potential need for a longer-term recovery process should take place as soon as practicable.

The Impact Assessment is continually updated as information becomes available from ESO's, FA's, Council etc.

The Impact Assessment includes recommendations regarding the level of recovery required. The LEMC is required to endorse recommendations and this advice is forwarded to the DEOCON, SEDC, SEOCON & SERCON.

The SERCON will consider the LEOCONS & LEMC recommendations along with other data and determine if formal recovery operations are established. This could be a Recovery Committee, a Recovery Coordinator and /or Recovery Centres at Local and /or district level dependent on the type and scale of impact.

Recovery Operations are coordinated by the MPES using the arrangements contained in the State Recovery Plan. In the first instance, the LEMC may reconvene as an initial Local Recovery Committee under the chair of the Mayor, General Manager or Public Identity.

Ballina Shire Council is responsible for advising MPES of community infrastructure impacts and damage. This may result in the Minister for Emergency Services making a National Disaster Declaration for the LGA

General Evacuations

Evacuation of persons or animals from an area of danger or potential danger is a possible strategy in combating the impact from any particular hazard.

Decision to Evacuate

The decision to evacuate persons or animals is not one that should be taken lightly. During evacuations there are many tasks that need to be carried out by a number of different organisations. This necessitates a coordinated approach to ensure that all evacuees' needs

are met. In some circumstances, it may be more appropriate for people to remain in their homes and take other measures to ensure their safety.

The requirement to evacuate or stay put will ideally be identified during the planning process and be included in the organisation's sub plans or standing operating procedures as necessary.

The organisation with the authority to order an evacuation is to ensure that the community is informed, through a public education program, of the proposed evacuation strategies.

The controller of an emergency will determine the need for evacuation. Early identification of evacuation as a possible strategy during a response operation may allow time for the controller to brief the LEOCON, LEMO and /or LEMC.

At the first available opportunity the LEOCON will advise the DEOCON in order that the District FACs may be alerted.

In the event that evacuation of an area may become necessary as a result of an emergency, the Combat Agency and/or the LEOCON will consult with the Welfare Co-ordinator to select appropriate evacuation centres from the list of available/suitable locations.

The evacuation order must be clear and issued by the relevant individuals or organisations with the appropriate authority to order evacuations in certain circumstances.

Notification and Warnings

When a significant incident occurs, which is the responsibility of one of the Combat Agencies, the relevant Agency will notify the LEOCON, DEMO, other emergency services and appropriate Functional Area Co-ordinators (See Contract Directory, **APPENDIX C** attached).

Detailed arrangements for such warnings including those for vulnerable communities will be found in the supporting Local Flood Plan and Rural Fire Service Bush Fire Sub-Plans.

The relevant Combat Agency Controllers are to advise the LEOCON whenever an event occurs which may:

- escalate to a local level emergency operation and require LEOCON support or
- be controlled by the LEOCON

The LEOCON is responsible for advising the DEOCON of developing situations.

The LEOCON and Combat Agency Controllers are responsible to ensure that arrangements are made for appropriate warnings and for the passage of information to the public.

Responsibilities for providing warnings to the community, the LEOCON, Agencies and Functional Areas are detailed in the following matrix:

SOURCE OF RISK	AGENCY RESPONSIBLE	WARNING PROVIDED
Bush, Peat & Grass Fire	Bureau of Meteorology NSW Rural Fire Service	<ul style="list-style-type: none"> ▪ General fire weather advice to the wider community via regional electronic and print media. ▪ Specific warnings and Total Fire Ban advice to the community, LEOCON, relevant Emergency Services and Functional Area representatives.
Communicable Disease - Animals	NSW DPI LEOCON	<ul style="list-style-type: none"> ▪ Warnings to the community and LEOCON ▪ Warnings to relevant agencies specific to exotic disease outbreaks and restricted areas
Communicable Disease - Humans	Northern NSW Health Network	<ul style="list-style-type: none"> ▪ Warnings and information to the community on outbreak and infection control practices. ▪ Warnings to the LEOCON and relevant agencies specific to outbreaks and restricted areas.

Cyclone / East Coast Low Tsunami Flood (Riverine & Flash Flood) Severe Storm Storm Surge / Heavy Swell	Bureau of Meteorology	<ul style="list-style-type: none"> General severe weather advices, flood warnings and flood watches to the wider community via regional electronic and print media.
	Ballina Shire Council State Emergency Service	<ul style="list-style-type: none"> Pump and Stock Warnings, Local Flood Advices, Flood Bulletins, Flood Height Broadcasts and Evacuation Warnings to: Flood affected communities via electronic media The LEOCON Relevant agencies, Functional Areas and Council
	Ballina Shire Council	<ul style="list-style-type: none"> Dissemination of information via media to the general public Dissemination of information to emergency services
Hazardous Materials	Police, LEOCON or DEOCON (on behalf of HAZMAT Controller)	<ul style="list-style-type: none"> Evacuation warnings Public Safety directions and warnings related to spillages
	Northern NSW Health Network	<ul style="list-style-type: none"> Provide health warnings in the event of person being affected by hazardous materials
Power Failure	Essential Energy	<ul style="list-style-type: none"> General advice and warnings to the community Specific advice to the LEOCON and relevant functional agencies
Sewerage Failure	Ballina Shire Council	<ul style="list-style-type: none"> General advice and warnings to the community Specific advice to the LEOCON and relevant functional agencies
Water Failure	Ballina Shire Council	<ul style="list-style-type: none"> Erection of water signs at sites of contaminated water Warnings to the wider community via electronic print media

	Rous Water	<ul style="list-style-type: none"> ▪ Erection of water signs at sites of contaminated water ▪ Warnings to the wider community via electronic print media ▪ Specific advice to the LEOCN and relevant functional agencies
Other Warnings	LEOCON	<ul style="list-style-type: none"> ▪ General and Evacuation Warnings to affected communities and relevant agencies and Functional Area representatives

Public Warnings

- a) If time permits emergency warnings will be broadcast over the following media as appropriate and in accordance with DEMC Standing Operating Procedures for dissemination of warnings via the electronic media:
 - i) AM Radio, 2LM (900) and ABC (738)
 - ii) FM Radio Stations ZZZ (100.9) and Bay FM (99.9)
 - iii) Television Networks
 - iv) Ballina Council and Agency Websites
- b) Emergency Warning Signal (SEWS)
- c) If time permits appropriate personnel will deliver evacuation warnings through a door knock operation and mobile public address systems.

Standard Emergency Warning Signal (SEWS)

- a) The broadcast of safety information to the public in an emergency will enable the community to take appropriate actions to protect life and property. The Standard Emergency Warning Signal (SEWS) will alert the public to messages about things they can do to reduce potential loss of life and property.
- b) SEWS is only to be used to warn the public when they need to take some urgent and immediate action in order to reduce the potential for loss of life or property from emergencies.
- c) The purpose of SEWS is to:
 - i) Alert the community via radio or television that an official emergency announcement concerning an actual or potential emergency, is about to be made.
 - ii) Alert the community at large, via a public address system, to an important official emergency announcement.

Authority to Use SEWS

- a) Only the LEOCON or Local Combat Agency Controllers are authorised to use SEWS for the above purposes.

Procedure for the Use of SEWS

- a) Requests to the media to broadcast SEWS will be confirmed by facsimile
- b) The SEMC is responsible for issuing the SEWS signal to the electronic media annually.

Communications

It will be the responsibility of the Combat Agency or services within the Functional Area to provide and maintain adequate communications between their operations centre and the local EOC.

The existing telephones and facsimile equipment in the primary or alternate EOC will be used to co-ordinate support to a combat agency or to control an emergency.

If telephone and facsimile services become overloaded, additional lines and services will be provided under pre-existing arrangements with TELSTRA for the duration of the emergency.

Media Management

During Combat Agency managed operations the relevant agency is responsible for the passage of public information to the community and the media while providing operational information and intelligence to the LEOCONs and all involved agencies.

The combat Agency Controller may request the LEOCON to assume responsibility for the passage of all or certain classes of operational information and intelligence between the LEOCON and / or agencies involved.

During operations controlled by the LEOCON, the LEOCON is also responsible for;

- the passage of operational information and intelligence to and from all involved agencies, using the LEOC as the collection and distribution point
- the passage of public information to the community
- the release of regular media releases
- ensuring the DEOCON is kept informed of developments and forecast support needs

Liaison Officer

- a) Liaison Officers are to be appointed by Police, Emergency Services and Functional Areas.
- b) For operations controlled by the LEOCON, Emergency Services Liaison Officers are to deploy to the LEOC. Functional Area Liaison Officers are to remain on call.
- c) For operations controlled by a Combat Agency, the other Emergency Service Liaison Officers are to deploy to the Combat Agency Operations Centre. Functional Area Liaison Officers are to remain on call.
- d) Liaison Officers will advise the appropriate Controller on the status of their organization, including resources. They are to have the authority to deploy the resources of their parent organizations at the request of the Controller.
- e) Liaison Officers must be able to provide communications to their own organizations.
- f) The LEMO (Co-ordinator of Council Resources) will always deploy to the controlling Operations Centre.

Information Gathering

Existing resources deployed by combat Agencies (Police, SES, and Rural Fire Services) will form the basis of an information gathering network and may be used for this purpose irrespective of the nature of the emergency.

Where there is a need for additional information about a special event or locality, the Local Emergency Operations controller may deploy a reconnaissance team consisting of representatives of Police, combat Agencies and appropriate Functional Areas to assess the effects and magnitude of the emergency and/or the appropriateness of the response.

Logistic Support

- a) Whenever possible, normal procedures are to be used for the acquisition of goods and services.
- b) Council resources are available and will be co-ordinated by the LEMO.
- c) Combat Agencies are responsible for their logistic support. Should they require assistance it may be co-ordinated by the LEOCON.
- d) Local Resource Registers will be maintained by the LEMO for each Emergency Service and Functional Area.

Emergency Funding

- a) Combat Agencies and the Disaster Welfare Service have their own systems for emergency funding, which are to be used.

- b) Other Departments and Authorities within Functional Areas are to meet the costs of the support they provide.

Stand Down & Debrief Stages

Stand down will be authorised by the Local Emergency Operations Controller after consideration and consultation with all emergency services involved in the operation.

The LEOCON will authorise a written message to all services indicating that operations in connection with that operation will cease at the time included in the message.

This advice will be either passed to each Liaison Officer at the EOC or forwarded to the Emergency Service or Functional Area co-ordination centre for their information and necessary action.

Each Emergency Service or Functional Area Co-ordinator is to acknowledge receipt of the STAND DOWN message from the LEOCON.

A debrief involving all organizations involved in an emergency operation will be held within seven days of such operation. This debrief will address all issues involving response, management, and co-ordination of effort in dealing with that emergency. The extent of the debrief will not, however, be limited only to the above should circumstances warrant.

It is expected that individual organizations will conduct their own operational critiques of their own performance and consequently any such issues would not be raised at the formal debrief.

Counselling – Team members and public should have available to them through the Northern NSW Health Network:

- Immediate (24 hours) counselling;
- Long term counselling – Critical Incident Stress Management

Upon completion of the formal debrief a copy of the report prepared by the LEOCON of the operation and including the debrief shall be forwarded to the District Emergency Operations Controller, and to the Local Emergency Management Committee.

PART 6 – RECOVERY

The aim of this component of the DISPLAN is to outline the measures which support individuals and communities affected by an emergency.

The NSW State Disaster Plan details emergency preparedness, response and recovery arrangements of NSW. It ensures a coordinated response to emergencies by all agencies having responsibilities and functions in emergencies.

Supporting the NSW State Disaster Plan is the NSW Recovery Plan which outlines the strategic intent, responsibilities, authorities and the mechanisms for disaster recovery in NSW. It is supported by a suite of guidelines that include operational objectives and activities associated with recovery operations that underpin the development and implementation of a planned recovery following a natural disaster or other emergency.

Planning for Recovery

The LEMC is responsible for recovery planning, which is to be undertaken in accordance with the relevant State and District sub plans and supporting plans mentioned above.

It is essential that the need for recovery operations is assessed and planned during the earliest stages of an emergency response operation. The LEOCON is responsible to ensure that this occurs.

Recovery Coordinators

Recovery Coordinators will be appointed where there is a need for a structured recovery operation. They are the public face of the recovery operation , providing leadership to the recovery Committee and coordinating the recovery effort in accordance with agreed recovery plans.

Recovery Committee

The Recovery Committee is the strategic decision making body for the recovery. It provides visible and strong leadership and has a key role in restoring confidence.

Recovery Centres

Recovery centres may be established to support service provision to the community. The decision to establish a recovery centre will be made by the SERCON in consultation with the SEOCON and DEOCON.

PART 7 - REVIEW

Reviewing, Testing, Evaluating and Maintaining the Plan

- a) The LEOCON is to ensure that this DISPLAN is reviewed, tested and evaluated.
- b) This DISPLAN is to be reviewed by the Local Emergency Management Committee:
 - i) After each local emergency situation
 - ii) After each exercise to test the DISPLAN (or part thereof)
 - iii) If deficiencies are identified
 - iv) At least once every five years
 - v) As roles and responsibilities of agencies change due to legislative changes
- c) The LEOCON is to ensure that this DISPLAN is tested through the conduct of an exercise every two years to:
 - i) Ensure all participants are familiar with the contents of the plan
 - ii) Test specific aspects of the DISPLAN
 - iii) Test Standing Operating Procedures associated with the DISPLAN

Security of Information

- a) Displans, Sub plans and Supporting Plans are public documents. They are not however, to contain contact details or locations of operation centres, evacuation centres or recovery centres, unless these are essential to the effectiveness of the plan.
- b) Contact details or locations of operation centres, evacuation centres or recovery centres are restricted in the distribution of this plan.

APPENDIX

- Appendix A** Extracts from the Ballina Shire Council Emergency Risk Management Strategy (Section 6.4 Hazard Description Matrix Tables, Section 7.6 Summary of Risk Assessment, Proposed Treatment and Priority)
- Appendix B** Local Emergency Management Committee Framework
- Appendix C** Ballina Local Emergency Management Committee Contact Directory / Emergency Services
- Appendix D** Vulnerable Groups
- Appendix E** MOU - Management of Road and Traffic Incidents

Appendix A

Extracts from Ballina Shire Emergency Risk Management Strategy

HAZARDS / SOURCES OF RISK IDENTIFIED FOR BALLINA SHIRE

The Working group considered all hazards and conducted an initial risk assessment on each included above for Ballina Shire before identifying only those which are considered to require a significant and coordinated multi agency response. These hazards are listed in the table below.

These hazards identified for the Ballina Local Government Area will be assessed at the Local level and have considerable reason or means to occur. Evidence is based on actual events or anecdotal evidence for emergency incidents which would require a significant and coordinated response

TABLE - HAZARDS IDENTIFIED REQUIRING A SIGNIFICANT AND COORDINATED RESPONSE WITHIN BALLINA SHIRE

Natural	Technological	Biological
Cyclone/ East Coast Low	Bridge Collapse	Risks of Communicable Diseases for humans and animals will be assessed at the State level and local arrangements implemented to support State strategies.
Coastal Erosion	Explosion	
Bush Fire	Hazardous Materials	
Flood/Storm Surge	Infrastructure Power Failure	
Severe Storm	Infrastructure Sewerage Failure	
Tsunami	Infrastructure Water Failure	
	Transport Accident – Air	
	Transport Accident – Road	
	Fire Industrial	

HAZARD DESCRIPTION

The following 16 Tables (Table 6.3.1 to 6.3.16) describe the hazards identified for Ballina Shire Council. The tables present characteristics such as frequency, history, extent, intensity, speed of onset and duration. Information has been compiled from historical records, anecdotal evidence, studies where available and the collective experience of local agencies.

HAZARD DESCRIPTION MATRIX TABLES

Table - East Coast Low (Cyclone)

East Coast Low (Cyclone)	FACTOR	ANALYSIS	PLANNING IMPLICATIONS
	Cause, Characteristics and Effects	Tropical Cyclones develop over very warm tropical waters from pre-existing tropical weather disturbances. They have relatively long life cycles, of the order of up to about two weeks. Weather systems originating as tropical cyclones in the Coral Sea or the Gulf of Carpentaria do sometimes affect New South Wales bringing very strong winds, flooding rains, very high seas and storm surges. High seas and storm surges may cause erosion of sand dunes and in severe cases may expose landward areas to sea water inundation. [Source: State Storm Plan]	
	Frequency	Seasonal	A capability will be necessary for seasonal phasing of planning, training and exercising. Public education will need more intensity immediately prior to the season.
	Duration	1 day – a week	Dependent on the characteristic of the Low, the event may last 1 day (ie. Characteristic of a cyclone) where significant effects are experienced, or up to a week if the Low is slow to move away.
	Speed of Onset	Gradual build up	Due to their quick development and short life cycle, warnings issued for East Coast Lows will usually have less lead time than their tropical counterparts.
	Scope	Affects large areas	East Coast Lows affect large portions of the Northern Rivers Emergency Management District.
	Intensity	Moderate to severe	East Coast Lows experienced in the past vary in intensity, however the region has experienced lows equivalent to a Category 1 and 2 Cyclone. Cyclone 'Nancy' 3rd February 1990 'Violet' 7th March 1995 'Yali' 26th March 1998 – 1974 (Cyclone) off Brisbane. March 2001 – Low with wind strength characteristic of a Category 2 Cyclone. The Ballina local government area experiences the effects of East Coast Lows (low depressions). However, such Lows have, in recent years, brought gale force winds and have been the equivalent of Category 1 and Category 2 cyclones. [Source: State Storm Plan]
	Predictability	High	Monitoring undertaken by the Bureau of Meteorology (BoM) is able to determine with a high degree of accuracy day, time and location of impact.
	Forewarning	6 – 24 Hours	Due to their quick development and short life cycle, warnings issued for East Coast Lows will usually have less lead time than their tropical counterparts [Source: State Storm Plan]
	Manageability	Mitigation measures	Naturally occurring.

Table - Coastal Erosion

Coastal Erosion	FACTOR	ANALYSIS	PLANNING IMPLICATIONS
	Cause, Characteristics and Effects	Erosion of the foreshore can occur as result of short term storm demand and/or longer term shoreline recession. Often these influences occur together and are difficult to separate. During major storm events, high waves and elevated water levels lead to rapid erosion of the upper beach and dune. The short term storm demand for a single storm or a series of closely spaced storms has been assessed as typically around 200m ³ /m in terms of the beach/dune erosion quantity above mean sea level(MSL). The actual recession distance is dependent on the height of the dune and the status of the beach / nearshore profile with respect to recent erosion or accretion in the form of a beach berm. For a beach with a dune crest height of 6m above MSL and little or no berm, this equates to a recession distance of about 35m. The beaches of Ballina Shire are also subject to potential longer term trends of recession to varying degrees as a result of differentials in the rate of longshore transport and the predicted impacts of climate change including sea level rise. The highest rates of long term recession of between 0.3 and 0.7m/yr have been assessed for the southern and central sections of Lennox [Source: Ballina Coastline Management Study and Management Plan]	
	Frequency	Continuous /Seasonal	Coastal erosion is occurring all the time, however the annual storm season which occurs primarily between October and March influences the degree of coastal erosion which may occur at any given time. East Coast Lows also may significantly influence coastal erosion.
	Duration	Short term to Long Term	While impacts of coastal erosion range from short term to longer term, duration can be described as continuous.
	Speed of Onset	Variable	Coastal Erosion may occur quickly or be more gradual, largely influenced by the abovementioned factors.
	Scope	Coastal areas	Ballina Shire Council has 10 Beaches: Seven Mile, Boulder, Sharps, Angela, Shelly, Lighthouse, South Ballina, Beswicks, Robins and Patches. Coastal areas of Lennox Head would also be impacted.
	Intensity	Short to Long Term	Short Term Beach Erosion - Landward limit of the active beach zone due to severe storms or a series of storms in succession. Long Term Shoreline Recession - Long term average rate of shoreline recession (or accretion). Source: <i>Ballina Coastline Management Study and Management Plan</i>]
	Predictability	High	Monitoring of coastal areas, dunal systems, modelling and the Ballina Coastline Management Study allows high predictability and identification of vulnerable areas.
	Forewarning	High	Through monitoring and further studies.
	Manageability	Mitigation measures	Naturally occurring. Monitoring, mitigation where possible and studies, such as the Ballina Coastline Management Study and Management Plan.

Table - Flood

Flood	FACTOR	ANALYSIS	PLANNING IMPLICATIONS
	Cause, Characteristics and Effects	Flooding may be defined, in an emergency management context, as an overflowing or influx of water from its normal confines onto land not usually submerged and which as a consequence threatens human life, property or activity. In the New South Wales context there are four potential mechanisms which may cause flooding: Heavy Rainfall, Storm Surge, Tsunami and Dam Failure. Floods occur frequently in New South Wales. In terms of average annual dollar damage to infrastructure, property and production, and probably also in terms of deaths and injuries to human beings, flooding constitutes the most serious natural hazard faced by the community in this state.	
	Frequency	Frequently	There are many different types and origins of flood-producing weather systems and different parts of the state are affected by different kinds of storm activity in different seasons of the year. The state's flood-producing mechanisms are complex and there is no single clear-cut flood season. Rather, different regions have general tendencies towards flooding at particular times of the year. As a rule, the northern parts of the state have more frequent flooding during the summer and autumn months. The Ballina LGA has experienced a number of significant floods. They have been managed with support of other services. Since March 1974.
	Duration	1 – 10 Days	Generally duration is between 1 – 3 Response downtime during peak of storm, cyclone (east coast low) time immediately following main event required to carry out initial assessment
	Speed of Onset	Gradual to 1 hour (flash flooding)	Flash flooding occurs in the Teven Valley and in the 1980s residents had to be evacuated and the School and a bridge at the Teven Golf Course were both washed away.
	Scope	Could affect large numbers of the population – majority of LGA.	Flooding impacts a large portion of the Ballina Shire Local Government area and the Communities of Teven, Cabbage Tree Island and others in low lying areas are adversely impacted. External assistance may be an early requirement Depends on assessment of damage resource capability and availability and numbers of requests for assistance
	Intensity	Minor to severe	Potential for loss of life, a variety of injuries is more likely. Short term accommodation of some may be necessary for residents with severe damage to their homes. Also short term accommodation for stranded travellers. [Short term: 1-2 days]
	Predictability	Adequate through Historical records climatology and meteorological observation	Monitoring undertaken by the Bureau of Meteorology (BoM) and the State Emergency Service within a local context, is able to determine with a moderate degree of accuracy river height predictions, however this is heavily influenced by the weather conditions. Severe weather warnings issued by BoM - times can vary
	Forewarning	12 hours plus	TV crawlers Radio announcements Websites for mass notification of vulnerable areas such as caravan parks, marina's, schools hospital, Nursing homes Loud speakers from vehicles door to door Telephone tree in isolated communities SEWS Warning
	Manageability	Nil	Emphasis should be on effective preparedness and response planning mitigation measures will be an important part in cyclonic situations Education of the community

Table - Storm Surge Flooding

Storm Surge Flooding	FACTOR	ANALYSIS	PLANNING IMPLICATIONS
	Cause, Characteristics and Effects	Whilst there are some similarities with mainstream flooding, the destructive forces accompanying a major storm surge event mean the attendant risk to life and limb and potential for structural damage can be expected to be substantially greater.	
	Frequency	Rare	Actual occurrence is rare but storm surge warnings issued by BoM resulting from an East Coast Low (Cyclone).
	Duration	Unknown	Difficult to determine, could be tidal.
	Speed of Onset	Gradual	Normally on the tide.
	Scope	Coastal low lying areas	Could affect large numbers of the population. Low lying areas along coast and waterways throughout Ballina to Wardell and Tiven potentially.
	Intensity	Minor to severe	Such systems may cause flooding of low-lying areas and erosion which may damage property and dunal systems. Potential for loss of life, a variety of injuries is more likely. Short term accommodation of some may be necessary for residents with severe damage inundation to their homes. Also short term accommodation for stranded travellers if roads cut.
	Predictability	Moderate	Surge height cannot be predicted with any certainty and areas likely to be affected cannot be clearly identified in advance.
	Forewarning	Approximately 2 hours	Warnings of unusually large waves and storm surges are issued for the NSW coastline when onshore waves in the surf zone are expected to reach at least 5 metres within the next 24 hours or a storm surge of 0.5 metres or greater is anticipated. [Source: State Storm Plan]
	Manageability	Nil	Emphasis should be on effective preparedness and response planning mitigation measures will be an important part in surge management Education of the community

Table - Severe Storm

Severe Storm	FACTOR	ANALYSIS	PLANNING IMPLICATIONS
	Cause, Characteristics and Effects	Severe storms can be divided into two types, severe thunderstorms and land gales. By definition, Severe thunderstorms produce flash flooding or damaging hailstones (> 2cm diameter), or destructive wind gusts (90kph +) or tornadoes, or intense lightening, or a combination of any of the above. Thunderstorms develop when dense cold air overlies less dense, warm, moist air, resulting in strong upward currents and conversion of heat energy into wind and electrical potential. When the atmosphere is especially unstable and windflow can provide the most efficient input of energy to the cloud, a severe thunderstorm develops. [Source: Emergency Management Australia]	
	Frequency	Seasonal Mostly between October and March Occurs at anytime.	Every year the Northern Rivers area experiences a storm season. The Ballina local government area experiences severe thunder and wind storms. In January 2001 Casino (87 klms west of Ballina) was impacted by what has been described as a 'Supercell' which caused much damage and destruction; Dunoon "tornado" 2007, Lismore severe storm causing significant damage to buildings.
	Duration	Variable – 30 minutes plus	Severe storms can last anywhere from 15 to 30 minutes upwards to 1 or 2 hours. The more severe storms tend to be short in duration with greater impacts.
	Speed of Onset	Gradual	Storms can usually be observed building over a period of hours, however conditions in the days preceding influence their development.
	Scope	Localised	Severe storms are very localised events, not usually affecting wide areas (ie. Parts of the local government area).
	Intensity	Variable	There is potential for loss of life, however varying severity of injuries is more likely. Evacuations are unlikely, however relocation of some people may be necessary if their homes are badly damaged. Statistically, lightning poses a greater threat to individuals than most other natural hazards. On average, it causes 5 to 10 deaths and over 100 injuries in Australia each year. Deaths and injuries also occur when boats are hit by thunderstorm squalls, trees or limbs fall, buildings are damaged, or debris is hurled about in high winds and causing more physical damage (including vehicles, buildings and crops) than any other natural hazard. [Source: Emergency Management Australia].
	Predictability	High	Adequate through historical records, climatology and meteorological observations. Forecasts are able to be made days in advance determining the likelihood of thunderstorms developing.
	Forewarning	1 – 8 hours	TV crawlers Radio announcements, Internet. Severe Thunderstorm warnings are issued in a timely manner wherever possible.
	Manageability	Mitigation Measures	Emphasis should be on effective preparedness and response planning, mitigation measures will be an important part in severe storm situations and Education of the community.

Table - Bush Fire

Bush Fire	FACTOR	ANALYSIS	PLANNING IMPLICATIONS
	Cause, Characteristics and Effects	The start of normal fire seasons coincides with strong south west to north west winds which often prevail during late winter and spring (Aug/Sep). The majority of serious bush fires occur from this period until the onset of summer rains, which normally start from December and continue through to Autumn. Longer fire seasons are experienced when summer rainfall is lower than normal, with the bush fire season extending through summer to early autumn. Serious bush fires have occurred late in the season under dry summer conditions. Dangerous bush fire seasons are most commonly associated with two or more of the following factors in combination: Occurrence of an extended drought period; lower than average rainfall through winter, persistent SW to NW winds in late winter/early spring, prolific fuel occurrence from strong growing seasons the previous summer and spring/summer thunderstorm activity in dry years. [Source: Ballina Bush Fire Risk Management Plan, 2001]	
	Frequency	Variable	Ballina Council is considered generally to be an area of moderate to major fire risk, with significant fires generally occurring on a five year repeat cycle. The Bush Fire Danger Period extends from 1 September ~ 30 March each year unless otherwise advertised. During the past 10 years, there have been a number of Bush Fire Emergencies declared throughout the Ballina Local Government area.
	Duration	1 – 3 weeks	Major campaigns are normally a minimum of one (1) week and upwards to 2 or 3 weeks. This timeframe is heavily influenced by a number of factors. Resource requirements, weather conditions, topography, assets at risk etc. This type of campaign fire in the Ballina LGA is unlikely.
	Speed of Onset	Variable	Speed of Onset within the context of progression of fire (rate of spread) is influenced by vegetation type and distribution, moisture levels, temperature, wind speed and direction, topography etc. Bush fire ignition is instant.
	Scope	Variable	Bush fires can be relatively localised only burning over several hundred hectares to 1,000s of hectares. Refer to Bush Fire Hazard Map which shows areas deemed as bush fire prone land.
	Intensity	Variable	Low intensity to wildfire which produces vast amounts of radiant heat, windy to gale conditions, crown fires (burning across tree tops) and fire storms.
	Predictability	Moderate	Bush fire prone land maps have been developed to indicate those areas most likely to experience bush fire and there is an annual bush fire danger period during which time, the risk of ignition increases.
	Forewarning	Variable	Dependent on bush fire behaviour, warning to a community may be reduced from several days (possible impact) to hours (almost certain impact).
	Manageability	Mitigation Measures	Emphasis should be on effective preparedness and response planning, mitigation measures will be an important part and Education of the community.

Table - Tsunami

Tsunami	FACTOR	ANALYSIS	PLANNING IMPLICATIONS
	Cause, Characteristics and Effects	Tsunamis are seismic sea waves. Their name is a Japanese word meaning 'harbour waves'. They are often incorrectly called 'tidal waves' (rare events linked to tides). A tsunami is a series of travelling ocean waves of extremely long length and period. They are caused by under-sea events like earthquakes, landslides and volcanic eruptions; or by other natural events such as ocean meteorite impacts, or large landslides into bays or lakes. (The effect in a lake is known as a 'seiche'). A tsunami is like the effect of a stone landing in a pond. Waves radiate out in ever-widening circles. As a tsunami crosses a deep ocean, length from crest to crest may be 150 km but the height may be under a metre, unfelt by ships nor seen from the air, and may reach speeds up to 1,000 km/h. The waves' energy extends from deep ocean floor to surface. As tsunamis enter shallow water near coastlines, wave speeds drop as energy is compressed into much shorter distances. Wave heights increase dramatically up to 40 metres, threatening life and property, as they strike the shore with devastating force. Between multiple waves, which may vary in size, sea-level may actually drop well below normal. Great destruction may arise even though the tsunami may have been caused thousands of kilometres away.	
	Frequency	Rare	On average, a tsunami is recorded in Australia every two years, but most are too small to be seen by people. The tsunami threat to Australia varies from 'low' for most of our coastline to 'medium' along the northern half of WA. However a history of a major tsunami is a rare event.
	Duration	Variable	Focus on recovery.
	Speed of Onset	Variable	Largely dependent on the location of the seismic event (ie. Distance from Australia and direction).
	Scope	East Coast of Australia	A tsunami of major proportions, such as the 2004 Boxing Day tsunami could be expected to impact large parts of the east coast of Australia. The warning issued in 2007 had coastal communities from far north Queensland south to Sydney on alert.
	Intensity	Variable	On average, a tsunami is recorded in Australia every two years, but most are too small to be seen by people. The tsunami threat to Australia varies from 'low' for most of our coastline to 'medium' along the northern half of WA.
	Predictability	Low	While it is possible to determine whether a tsunami may occur as a result of a seismic event, it is very difficult to determine the size of the tsunami as was the case in Australia in 2007.
	Forewarning	Variable	Tsunamis generated in distant locations will generally give people enough time to move to higher ground. For locally-generated tsunamis, where you might feel the ground shake, you may only have a few minutes to move to higher ground.
	Manageability	Nil	Monitoring and ongoing research.

Table - Bridge Collapse

Bridge Collapse	FACTOR	ANALYSIS	PLANNING IMPLICATIONS
	Cause, Characteristics and Effects	Catastrophic collapse would be expected to be the result of collision by vehicle/ship and a resulting fire. Effects may be loss of life/injury or community disruption due to closure of transport routes for significant period.	
	Frequency	Rare	
	Duration	Variable	Dependent on structural damage and/or total or partial loss of bridge. Depends upon extent of damage and availability of alternate routes.
	Speed of Onset	Gradual to Spontaneous	Potential for a bridge collapse may be identified during another event (eg. Flood) and as such could be deemed gradual, however spontaneous collapse is the greater risk.
	Scope	Site specific	
	Intensity	Variable	
	Predictability	High	With the exception of a road accident occurring on the structure, it is possible to predict which bridges are at risk of collapse caused by flooding, bush fire or reduced structural integrity.
	Forewarning	Variable	Dependent on the type of event impacting the Bridge. There may be no warning of such an incident.
	Manageability	High	Through ongoing monitoring and maintenance programmes as well as a bridge replacement programme. During and immediately following an event (eg. Flood, bush fire) inspections carried out on Bridges located within the impact zone can be assessed for structural integrity to determine if any risk of collapse exists.

Table - Hazardous Materials

Hazardous Materials	FACTOR	ANALYSIS	PLANNING IMPLICATIONS
	Cause, Characteristics and Effects		Hazardous materials are defined as ‘anything that, when produced, stored, moved, used or otherwise dealt with without adequate safeguards to prevent it from escaping, may cause injury or death or damage to life, property or the environment (Fire Brigades Act 1989). Causes can range from road transport incidents through to industrial and even residential incidents. Each sort of incident has its own unique characteristics and has to be dealt with accordingly. The effects depend on the substance and the scale of the incident, whether it be a minor spill in a backyard to a major spill involving heavy transport on a highway with contamination to nearby waterways.
	Frequency	Variable	An average of 1 hazardous materials incident / month (usually road transport). Most incidents had already occurred and all had the potential to become a larger incident.
	Duration	Variable	This is largely dependent on the type of Hazardous Material involved and could be of relatively short duration (ie. several hours) to a more protracted event (ie. Greater than 5 hours), sometime extending over days.
	Speed of Onset	Variable	Dependent on the type of substance involved.
	Scope	Variable	Standard Operating Procedures will dictate any exclusion zones and any need for temporary relocation or evacuation. The number of people etc., potentially affected may only be determined when an event occurs.
	Intensity	Variable	Dependent on the type, volume and amount of substance involved. Whether it occurs in open space or heavily populated areas.
	Predictability	Low	While Regulations and other monitoring programmes are in place to reduce this type of event occurring, it is impossible to predict when or where a hazardous material emergency will occur. Certainly with the Pacific Highway traversing the regional centre of Ballina and the heavy vehicle transport which occurs, it still cannot be determined “where” an event may occur or when, this also applies to industrial areas.
	Forewarning	Variable	Hazmat incidents can be classified as ‘actual’ or ‘impending’ incidents. An actual incident is one that has occurred (i.e. a fuel tanker roll over) which has no forewarning. An impending incident is one that has the ability to escalate to a larger incident (i.e. a fractured container of material with a slow leak that could ruptured and cause a large spill). A constant monitoring of these types of situations will give some forewarning.
	Manageability	High	Focus should be on Response and Recovery, however Regulatory bodies need to ensure that policing of compliance by businesses and transport industry is occurring and identify any gaps to improve same to reduce risk to the greater community.

Table - Infrastructure Power Failure

Infrastructure Power Failure	FACTOR	ANALYSIS	PLANNING IMPLICATIONS
	Cause, Characteristics and Effects	The cause of a major power failure may result for a variety of reasons. Lightning strike, cyclone (east coast low), severe storms, sabotage, infrastructure inadequacies, accident etc. A major power failure might occur as a result of an event outside of the Ballina Shire area but will impact parts of or the entire population of the Ballina Shire local government area and in some instances, a large portion of the Northern River area. A prolonged power failure could result in loss of perishable stock for businesses, impact tourism, certainly the residents, especially those with medical conditions reliant on power. A major fail can have dire implications for water and sewerage services.	
	Frequency	Rare	In terms of a prolonged major power outage, this is rare, however power failure occurs on a regular basis.
	Duration	Variable	Dependent on the cause of the failure, this type of event may last only an hour up to several days. Such was the case in the 2001 Severe Hail storm in Casino where the power was lost for a minimum of 18 hours and up to 72 hours.
	Speed of Onset	Instant	A power failure occurs instantly. Power one second, none the next.
	Scope	Variable	Dependent on where the fail occurs will depend on which areas are impacted or if the entire Ballina LGA is affected.
	Intensity	Low	Such an event does not impact with the intensity of other sources of risk such as a storm, explosion etc. The intensity is felt following the fail and this will vary.
	Predictability	Moderate	While it cannot be determined exactly when a power failure might occur, events such as severe storms, east coast lows etc., enable assumptions to be made that it is quite possible a power failure will occur.
	Forewarning	Nil	No warning.
	Manageability	High	Regular monitoring and maintenance of infrastructure, highly trained and qualified personnel to deal with any issues/concerns.

Table - Infrastructure Water Failure

Infrastructure Water Failure	FACTOR	ANALYSIS	PLANNING IMPLICATIONS
	Cause, Characteristics and Effects	Water failure can occur as a result of many and varied reasons. A severe storm resulting a prolonged power failure can have a domino effect, resulting in a water failure. Contamination of the water supply could result in the infrastructure being shut down, deliberate act of sabotage or the infrastructure itself could fail. Such an event could impact parts of or the entire urban population (ie. Those with reticulated water supply). Critical services and facilities such as hospitals and other care facilities are at risk as too is tourism and the commercial sector which relies heavily on a potable water source for the business.	
	Frequency	Rare	A major water failure has been assessed as rare. While it has occurred historically, the majority of events have been minor.
	Duration	Variable	Dependent on the cause of the fail. Hours to days.
	Speed of Onset	Variable	Dependent on the source of risk (ie. Severe storm, deliberate sabotage, algae bloom etc).
	Scope	Variable	It may be that only a portion of the Ballina LGA would be impacted. Certainly those in rural areas where there is no reticulated water supply would be free of any impacts.
	Intensity	High	The impact could potentially be experienced across the entire Ballina Shire LGA.
	Predictability	Variable	Through While it cannot be determined exactly when a water failure might occur, events such as severe storms, east coast lows etc., enable assumptions to be made that it is quite possible a power failure will occur and subsequently impact to water supply.
	Forewarning	Variable	Dependent on what is the cause. Events such as an algae bloom would enable the ability to forewarn of any potential 'shut down' of the water supply if the bloom threatened the source.
	Manageability	High	Regular monitoring and maintenance of infrastructure, testing of water supply by suitably trained and qualified personnel to deal with any issues/concerns. Ongoing improvement to infrastructure.

Table - Sewerage Failure

Sewerage Failure	FACTOR	ANALYSIS	PLANNING IMPLICATIONS
	Cause, Characteristics and Effects	Sewerage failure can occur as a result of many and varied reasons. A severe storm resulting a prolonged power failure can have a domino effect, resulting in a sewerage treatment plant (STP) failure. Deliberate act of sabotage or the infrastructure itself could fail. Such an event could impact parts of or the entire urban population. Critical services and facilities such as hospitals and other care facilities are at risk as too is tourism and the commercial sector if a major fail should occur.	
	Frequency	Rare	A major sewer failure has been assessed as rare. While it has occurred historically, the majority of events have been minor.
	Duration	Variable	Dependent on the cause of the fail. Hours to days.
	Speed of Onset	Variable	Dependent on the source of risk (ie Severe storm, deliberate sabotage, equipment failure).
	Scope	Variable	It may be that only a portion of the Ballina LGA would be impacted. Certainly those in rural areas where there is no reticulated sewerage system would be free from any impacts.
	Intensity	High	The impact and disruption could potentially be experienced across the entire Ballina Shire LGA.
	Predictability	Variable	Though while it cannot be determined exactly when a sewage failure might occur, events such as severe storms, east coast lows etc, enable assumption sot be made that it is quite possible a power failure will occur and subsequently impact the sewage system.
	Forewarning	Variable	Dependent on what is the cause.
	Manageability	High	Regular monitoring and maintenance of infrastructure, testing of treatment process by suitably trained and qualified personnel to deal with any issues/concerns. Ongoing improvement to infrastructure.

Table - Transport Accident - Road

Transport Accident - Road	FACTOR	ANALYSIS	PLANNING IMPLICATIONS
	Cause, Characteristics and Effects	Usually caused by driver fatigue, speed, road conditions, other drivers actions. Typically 1 or more semi trailers or b doubles involved on highway location. Effects will depend of number and types of vehicles involved, cargo being transported, size of the incident area and location (Main highway, local roads). Transport accidents such as those experienced at Kempsey and Cowper where Passenger Coach buses were involved would be significant and protracted.	
	Frequency	About 1/ month.	
	Duration	Hours or days	Clean up of site by emergency services and salvage crews could take from several hours to days. Many incidents involving heavy transport usually become hazardous materials incidents due to the types of cargo carried.
	Speed of Onset	Instant	No comment.
	Scope	Variable	Depend on impact, number of vehicles and loads carried. Closing a highway or evacuating a residential area due to hazmat will have a big impact.
	Intensity	Variable	Closing a highway or evacuating a residential area due to hazmat will have a big impact.
	Predictability	Nil	It is impossible to predict such an event, however large volumes of heavy transport through area combined with speed and road conditions almost guarantee regular incidents. Certain times of the year such as Christmas, Easter holidays are higher risk periods.
	Forewarning	Nil	No comment.
	Manageability	Moderate	Focus on driver education, media campaigns, and Police operations. Highway upgrades occurring are assisting to reduce the likelihood of a major road transport accident, however significantly more work is needed.

Table - Transport Accident - Air

Transport Accident - Air	FACTOR	ANALYSIS	PLANNING IMPLICATIONS
	Cause, Characteristics and Effects	Mechanical failure, weather conditions, pilot error. Characteristics will vary. Effects will depend on size of aircraft, persons carried and location of accident.	
	Frequency	Rare	No major incidents but a few minor (1 / year)
	Duration	Variable	Depends on size of aircraft and impact
	Speed of Onset	Fast	Usually fast unless pilots are able to give warning of fault
	Scope	Variable	This may be site specific (runway) or spread over considerable area. Emergency services have standard operating procedures and the Ballina Airport has an emergency response plan.
	Intensity	Variable	Depends on size of aircraft and impact. Quantity of fuel and passengers carried.
	Predictability	Nil	This type of event cannot be predicted.
	Forewarning	Low	Maybe forewarning of mechanical failure prior to landing
	Manageability	High	Pre incident plans by emergency services, Emergency response plan for airport, Emergency Exercises to ensure personnel are suitably trained, equipment is adequate and to identify any other issues that need attention/resolution.

Table - Explosion

Explosion	FACTOR	ANALYSIS	PLANNING IMPLICATIONS
	Cause, Characteristics and Effects	Usually brought about by an explosive mixture of fuel and air being ignited. Characteristics will depending on what was the fuel type and quantity. Effects will depend on the intensity of the explosion and the proximity to other buildings etc	
	Frequency	Rare	About 1 / year. Have only been minor incidents with small quantities of fuel
	Duration	Variable	Explosion is usually instantaneous but resulting damage and debris will require possibly many hours to render safe.
	Speed of Onset	Rapid	No comment.
	Scope	Variable	The area impacted is influenced by the type of substance involved and amount. SOPs for exclusion zones depending on incident type and identified dangers.
	Intensity	Variable	Depends of fuel amount and size.
	Predictability	Nil	Unpredictable
	Forewarning	Nil to Low	Usually no forewarning, however an explosion may result from another primary event and in this instance, there may be forewarning.
	Manageability	High	Pre incidents plans for identified risk (Gas bulk storage, fuel stations, silos, etc)

Table - Industrial Fire

Industrial Fire	FACTOR	ANALYSIS	PLANNING IMPLICATIONS
	Cause, Characteristics and Effects	Industrial fires occur in warehouses, businesses and manufacturing plants usually located in an area specifically set aside for industry. Causes can be from poor maintenance, industrial accident or human error. Only common characteristic is that buildings are usually large in size and in close proximity to each other. Effects will be dependant on the fuel load within the building and if the fire can be contained to the building of origin.	
	Frequency	Avg. 1pa	About 1 / year. (Depends on financial viability of business versus insurance payout).
	Duration	Variable	Depends on size of fire, fuel, access etc. From less than 1 hour to more than 5 hours.
	Speed of Onset	Variable	Depends on type and quantity of fuel load in building
	Scope	Variable	SOPs will dictate any exclusion zones depending on building contents.
	Intensity	Variable	Depends on type and quantity of fuel load in building
	Predictability	Nil to Low	Unpredictable. Pre incident planning helps identify high risk buildings.
	Forewarning	Nil	Usually no forewarning
	Manageability	High	Pre incident plans to identify risks. Focus on protecting nearby properties as a priority.

ELEMENTS AT RISK

The workgroup considered, for each of the hazards identified, the elements at risk, being:

People
Lifelines and Infrastructure
Environment

Property and Assets
Animals and Stock
Socioeconomic

The results are summarised in the following table 6.4.1:

Element at Risk	PEOPLE						PROPERTY & ASSETS			LIFELINES and INFRASTRUCTURE					ANIMALS STOCK &					ENVIRONMENT				SOCIECONOMIC					
	Life	Health	Psychological	Evacuation (incl. Medivac)	Displaced	Isolated	Damage	Destruction	Looting	Road Networks	Utilities	Emergency Services	Essential Services	Key Facilities	Injury	Life	Isolation	Evacuation	Health	Long Term damage	Med. Term Damage	Short Term Damage	Destruction	Loss of job	Business closure	Business Recovery	Tourism	Social networks	Financial hardship
<i>Elements are most likely to be impacted in the following ways by the hazards listed.</i>																													
Hazard																													
<i>Cyclone (low)</i>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X		X	X	X	X
<i>Flood /Storm Surge</i>	X	X		X	X	X	X	X	X		X		X			X	X	X			X			X		X	X	X	X
<i>Severe Storm</i>	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							X	X	X		X	X	X	X
<i>Coastal Erosion</i>							X	X												X			X				X		
<i>Bush Fire</i>	X	X	X	X	X	X	X	X		X	X		X	X	X	X	X	X	X	X	X	X	X	X		X	X		X
<i>Bridge Collapse</i>	X	X	X		X	X		X				X	X									X							
<i>Trans. Accident Air</i>	X	X	X	X	X		X	X		X	X	X	X	X							X								
<i>Trans. Accident Road</i>	X	X	X	X	X					X	X																		
<i>Power Failure</i>	X	X		X		X			X		X	X	X	X												X			
<i>Sewerage Failure</i>		X		X	X		X			X	X		X				X	X			X					X	X		
<i>Water Failure</i>	X	X								X	X	X	X					X								X	X		X
<i>Explosion</i>	X	X	X	X	X		X	X		X	X	X	X	X	X	X		X			X	X		X	X	X			X
<i>Industrial Fire</i>	X	X	X	X	X		X	X		X	X		X									X		X	X	X			X
<i>Hazardous Materials</i>	X	X		X	X		X			X	X	X	X	X	X	X		X	X		X								

SUMMARY OF RISK ASSESSMENT, PROPOSED TREATMENT AND PRIORITY

NOTE: The treatments proposed do not introduce any new risks.

Hazard/ Source of Risk	Element at Risk	Summary Statement	Proposed Treatment	Priority
FLOOD Storm Surge, East Coast Low / Cyclone RISK LEVEL High - Extreme	A. People	The risk assessment study revealed that People are most at risk of becoming isolated or requiring medium to longer term emergency accommodation. The Ballina Island CBD and immediate surrounds are at greatest risk to inundation of flood waters due to the area being low lying. There is a risk of injury or loss of life. Emotional and psychological impacts are also considered a risk.	1. Preparation, ongoing monitoring and reviewing of a Community Services Directory. 2. Community Education/Awareness campaigns where appropriate 3. Audible Warning system/mechanism where reasonable and appropriate 4. Road Closures(Pacific & Bruxner Hwy) and Evacuation Plan/s 5. Conduct Annual Exercise (multi-agency) as part of the Review process and to test the Emergency Operations Centre operational effectiveness and personnel 6. Review of existing Plans and Arrangements and monitor to ensure currency.	2 – A,D
	B. Property Economic	Property is considered to be at a High risk of inundation of flood waters which would damage and/or destroy dependent on the intensity of the event. The CBD is at risk and businesses would be expected to suffer stock losses and other internal damage. Temporary Business closures or permanent would potentially have an impact on employment and certainly it could be expected that there would be a significant downturn in Tourism. Certainly individuals and families in lower income brackets would be at risk of being under insured or not having insurance.		1 – A, C
	C. Animals/Stock	A low risk exists for domestic animals and stock requiring relocation or evacuation with owners.		1 – A, D
	D. Lifelines and Infrastructure (Built environment)	The assessment revealed that a High risk is present for Lifelines (ie. Public transport, social networks, meeting places such as parks, community halls, medical and health services) and Infrastructure. The road network being damaged and/or destroyed, water and sewerage services. Energy and communications are also at risk, but are considered low.		1 – A
	E. Environment (natural)	A low risk exists for the natural environment with the most vulnerable being the coast (erosion) however this is not in every occurrence.		2 - A
				1 – A,B,C,D,E

Hazard/ Source of Risk	Element at Risk	Summary Statement	Proposed Treatment	Priority
BUSH FIRE And PEAT FIRE RISK LEVEL Moderate	A. People	The assessment of Bushfire and Peat Fires, in consultation with the NSW Rural Fire Service revealed that people are most at risk of becoming affected by smoke (increased risk for those with respiratory conditions). Peat Fires produce pungent smoke which may affect large numbers of people residing within 5klm of the fire. Most affected are again, those with respiratory conditions. Evacuation may be necessary or temporary relocation for areas most affected, however it cannot be determined until an event is occurring which communities are at risk. Detailed information on Bush Fire risk can be found in the <i>Bush Fire Risk Management Plan</i>	7. Community Education program on how to prepare and protect themselves - refer to NSWFB and NSW RFS 8. Hazard reduction program approvals - refer to RFS 9. Communications plan with schools (Community Liaison person - agency based).	1 – A, B, C 2 – A,B,C,D,E 1 – A
	B. Property Economic	The risk of property (dwellings, vehicles) being damaged or destroyed from impacts of ember attack or fire front.	(6) Review of Existing Plans and arrangements and monitor to ensure currency.	2 – A,B,C,D,E
	C. Animals/Stock	A low risk was identified – relocation of stock may be necessary and domestic animals which may be evacuated with their owners and to koala and other native animals.	10. Ongoing training to ensure Combatant personnel are suitably trained and equipped to respond to this type of event.	2 – A,B,C,D,E
	D. Lifelines and Infrastructure (Built environment)	The assessment revealed that there is potential for a power outage to occur caused by burnt power lines or poles – in terms of the Ballina Local Government area this would have a minor impact as the power loss would not be Shire wide. In a large scale event, the road network is at risk of being closed for a short period of time (less than 4 hours) but again, subject to the nature of the event and weather conditions, which has a strong influence on bush fires. The assessment also revealed a low risk to telecommunication.	11. Support personnel/agencies are trained to an appropriate level to provided effective support. (1)Preparation, ongoing monitoring and reviewing of a Community Services Directory	1 – A,B,C,D,E 2 – A,B,C,D,E
	E. Environment (natural)	The natural environment is considered to be at low risk from the impacts of a bush or peat fire. There is an identified risk of koala habitat being damaged and some nature reserves. However the ability of these systems/habitats to regenerate following a bush fire was considered as part of the assessment.		

Hazard/ Source of Risk	Element at Risk	Summary Statement	Proposed Treatment	Priority
TSUNAMI RISK LEVEL High	A. People	While a direct impact of a Tsunami like the 2004 Indonesian Tsunami would be catastrophic, the proposed treatments relate to a Warning, risks highlighted from the 2007 tsunami warning. Schools and/or childcare centres closing, leaving children vulnerable. Uncertainty within the community and confusion, also complete disregard of the warning. A Tsunami impacting (based on 2004 – Indonesia) would be catastrophic with mass casualties.	12. Develop a Tsunami Warning Plan – including communications matrix 13. Develop a Tsunami Warning education workshops for the community and emergency services personnel.	1 – A, B 1 – A, B
	B. Property Economic	A Warning can impact the economy with businesses closing up during this period, tourists deciding to leave the area, however this is seen as a low risk. An impact would be catastrophic.	14. Development of a Recovery and Rehabilitation plan in consultation with the relevant agencies and organisations.	1 – A,B,C,D,E
	C. Animals/Stock	There is no risk to animals or stock as a result of a warning, however a direct impact would be catastrophic.		
	D. Lifelines and Infrastructure (Built environment)	There is no risk as a result of a warning, however a direct impact would be catastrophic.		
	E. Environment (natural)	There is no risk as a result of a warning, however a direct impact would be catastrophic.		

Hazard/ Source of Risk	Element at Risk	Summary Statement	Proposed Treatment	Priority
COASTAL EROSION RISK LEVEL Extreme	A. People	The risk assessment revealed that the Community of Lennox Head is at most risk from the impacts of Coastal Erosion. Homes that may be lost as result would require emergency accommodation and other assistance to those community members impacted. A full study has been undertaken and full details are available in the <i>Ballina Coastline Hazard Definition Study</i> .	15. Refer to Ballina Coastline Interim Measures and Actions plan, DCP 17, pending completion of Coastline Management Study and Coastline Management Plan.	1-A,B,D
	B. Property Economic	There would be an impact to businesses directly affected by the erosion, potential loss of income from tourists (short term). There is also the risk of increased unemployment.		
	C. Animals/Stock	A low risk was identified – evacuation, relocation of domestic animals with their owners.		
	D. Lifelines and Infrastructure (Built environment)	There is a moderate risk to services being disrupted and/or damaged as a result of coastal erosion.		
	E. Environment (natural)	As the title of the source of risk depicts, the coastal area is at greatest risk. Refer to the <i>Ballina Coastline Hazard Definition Study</i> .		

Hazard/ Source of Risk	Element at Risk	Summary Statement	Proposed Treatment	Priority
TRANSPORT ACCIDENT - AIR RISK LEVEL High	A. People	Life is identified as being at High risk from this type of event as a result of injury, psychological trauma and loss of life.	16. Ongoing testing and review of the Ballina Airport Emergency Plan. 17. Conduct annual exercise at the airport in accordance with regulations, Aerodrome Manual and Airport Emergency Plan	1 – A,C,E 1 – A,C, E
	B. Property Economic	No risk was identified to property or assets on the assumption that the most likely site for a transport air accident would be the Ballina Airport. This will be revised at each review period.		
	C. Animals/Stock	No risk identified.		
	D. Lifelines and Infrastructure (Built environment)	A moderate risk was identified with the possibility of power being disrupted for a short time.		
	E. Environment (natural)	There is a low risk of contaminants such as oil, aviation fuel entering natural drains and stormwater.		

Hazard/ Source of Risk	Element at Risk	Summary Statement	Proposed Treatment	Priority
TRANSPORT ACCIDENT - ROAD RISK LEVEL Extreme	A. People	This type of emergency has been assessed on anecdotal evidence as there has not been a major transport road accident. A case study of Cowper and Kempsey Bus Crashes were undertaken to identify areas of vulnerability and to determine manageability systems and mitigation measures. There is a high risk of loss of life, injury, psychological trauma for both those directly impacted and responders, media, as well as the wider community.	18. (5) Conduct a Tabletop exercise as part of the Review process and to test the Emergency Operations Centre operational effectiveness and personnel.	1 – A, D, E
	B. Property Economic	No risk to property and/or assets identified at the time this study was conducted.	19. Identification of suitable detour routes as part of a Road Closure Plan.	2 – A, D
	C. Animals/Stock	No risk has been identified to animals/stock with the exception of the incident involving a stock transporter.	(10) Ongoing training to ensure Combatant personnel are suitably trained and equipped to respond to this type of event.	1 – A, D, E
	D. Lifelines and Infrastructure (Built environment)	The assessment identified that there would be an impact to the local road network (road closures, detours) as well as a lower risk of power being lost (only to a part of the Ballina community, dependent on site of accident).		
	E. Environment (natural)	The risk of contaminants or pollutants (eg. fuel) entering the stormwater drainage system or waterways.		

Hazard/ Source of Risk	Element at Risk	Summary Statement	Proposed Treatment	Priority
HAZARDOUS MATERIALS RISK LEVEL High	A. People	Dependent on the nature and the scope of the event, it was identified that people would require either evacuation or temporary relocation. It was also identified that there is a risk of inhalation or contact with hazardous substances. The most likely location would be the Industrial complex or a point on the Highway which traverses Ballina.	(5) Conduct an exercise as part of the Review process and to test the Emergency Operations Centre operational effectiveness and capacity of services and agencies to manage.	2 – A,B,D,E
	B. Property Economic	There is a low risk to property and a moderate risk to the economy with short term impacts due to isolation of an area and/or road closures.	20. Development of a Road Closure & Evacuation Plan specific to the Industrial Complex.	1 – A,B,D,E
	C. Animals/Stock	No risk was identified within the context of this study - ie. Requiring a significant and coordinated response for animal welfare issues.	(6) Review of Existing Plans and Arrangements and monitor to ensure currency.	
	D. Lifelines and Infrastructure (Built environment)	A moderate risk exists for property and a low risk to the economy of the Ballina area. It was identified that Ballina Hospital has a low risk of a forced closure should contaminated casualties present at Accident and Emergency. This risk is subject to the type of hazardous material involved. It is identified that this type of emergency, certainly on the Highway would result with road closures (up to 12 hours)	(10) Ongoing training to ensure Combatant personnel are suitably trained and equipped to respond to this type of event.	2 – A,B,D,E 1-A,B,D,E
	E. Environment (natural)	The risk of contaminants entering waterways is identified as low when existing plans and arrangements are considered. There is a greater risk of contaminants entering the atmosphere which is more difficult to suppress and manage.		

Hazard/ Source of Risk	Element at Risk	Summary Statement	Proposed Treatment	Priority
EXPLOSION RISK LEVEL Moderate	A. People	Injury and loss of life has been identified as being at greatest risk – those caught within the blast zone. There is a high risk of temporary relocation of residents and/or evacuation of commercial sectors falling within a 500 metre	21. (6) Develop and conduct discussion/tabletop exercise based on this type of incident to further identify manageability issues and to assist in development and/or review of existing plans and arrangements. (5) Conduct an exercise as part of the Review process and to test the Emergency Operations Centre operational effectiveness and capacity of services and agencies to manage.	1 – A,B,C,D,E 1-A,B,C, D, E
	B. Property Economic	Property in close proximity was identified as being at high risk from this type of event being damaged (ranging from extensive – close to or within blast zone, to minor)		
	C. Animals/Stock	There is a low risk to animals/pets (primarily domestic and companion) being evacuated or temporarily relocated with their owners.		
	D. Lifelines and Infrastructure (Built environment)	The source of the explosion may not necessarily be a fixed structure such as service station, storage facility but could be caused by a major accident. A high risk has been identified of prolonged power outage in localities of Ballina Shire up to 12 hours or more with a risk of educational/medical facilities being damaged if within the blast zone, loss of emergency services facilities and risk of the local road network being impacted.		
	E. Environment (natural)	A moderate risk was identified with the main manageability issue being to prevent contaminants entering the stormwater and natural water courses.		

Hazard/ Source of Risk	Element at Risk	Summary Statement	Proposed Treatment	Priority
INDUSTRIAL FIRE RISK LEVEL High	A. People	The assessment revealed that this type of event, while having a likelihood rating of possible given that the means and opportunity exists, is still considered to be highly unlikely (ie. An event requiring a significant and coordinated response as per definition). People are at risk of injury, loss of life and of short term evacuation and/or temporary relocation and/or displacement – certainly where route to airport is impacted by road closure.	(21) Develop and conduct discussion/tabletop exercise based on this type of incident to further identify manageability issues and to assist in development and/or review of existing plans and arrangements.	1 – A,B,D,E
	B. Property Economic	Property directly impacted by such an event. Economic impacts would be considered, on a whole to the Ballina LGA, to be minor to moderate, however this is influenced by the type of industry impacted and its economic importance to the Ballina LGA. There is a risk of employment loss and financial hardship.	22. Design and Development of Road Closure and Evacuation Plan for Industrial area.	2 – A,B,D,E
	C. Animals/Stock	No risk was identified to animals or stock as a result of this type of event.	(6) Ongoing review and monitor of existing Plans and Arrangements to ensure currency.	1-A,B,D,E
	D. Lifelines and Infrastructure (Built environment)	This type of event has the potential to impact through power loss in a major industrial fire. Potential to impact water and sewer services, however only if power cut is unable to be isolated to the immediate and surrounds of the incident site.	(10) Ongoing training to ensure Combatant personnel are suitably trained and equipped to respond to this type of event.	1-A,B,D,E
	E. Environment (natural)	There is a low risk to the environment given existing plans, arrangements and regulatory controls which would minimise and/or prevent the escape of contaminants/toxins into stormwater and water ways. There is a higher risk of toxic fumes entering the atmosphere. Dependent on nature of materials involved in this type of event.		

Hazard/ Source of Risk	Element at Risk	Summary Statement	Proposed Treatment	Priority
POWER FAILURE RISK LEVEL Moderate	A. People	The assessment identified that there is a low risk to people as this type of event having a prolonged timeframe would be rare taking into account existing plans and arrangements.	23. Awareness programme on Business Continuity to be facilitated by Country Energy for businesses.	2 –A,B,C
	B. Property Economic	The highest risk is the loss of perishable stock which would have a short term economic impact on the ability to trade, however this is only where commercial sector businesses and wholesale suppliers have emergency back up power source, or business continuity plans which also include adequate insurance coverage.		
	C. Animals/Stock	No risk was identified to property at the time this study was undertaken.		
	D. Lifelines and Infrastructure (Built environment)	There is a low risk of increase of break ins and looting during a prolonged power outage and a manageability issued identified was having the necessary resources to patrol the commercial and industrial sectors as a priority.		
	E. Environment (natural)	A low risk to the environment was identified and the main source of risk would come from the sewerage treatment plant and infrastructure failing in a prolonged outage.		

Hazard/ Source of Risk	Element at Risk	Summary Statement	Proposed Treatment	Priority
SEWERAGE FAILURE RISK LEVEL High	A. People	The assessment identified there is a low risk of people being impacted by potential health risk due to surcharging/overflow through contaminants entering the estuary system and/or of people coming into contact with raw sewage due to surcharging/overflow of sewer junctions in residential and commercial sectors.	24. Full assessment of the Sewerage Treatment Plant and associated infrastructure to determine extent of any upgrades required or other measures to be implemented to mitigate the risk.	1 – B,D,E
	B. Property Economic	No risk to property and assets were identified at the time this study was undertaken. A low risk to the economy was identified (ie. Downturn in tourism spending during clean up) however this is anticipated to be short term.		
	C. Animals/Stock	No risk to animals/stock were identified at the time this study was undertaken.		
	D. Lifelines and Infrastructure (Built environment)	The infrastructure itself is the main risk with the task of being able to supply emergency power to maintain pumps and the ability to restore operations within a reasonable timeframe.		
	E. Environment (natural)	A risk of sewerage overflowing into waterways and beaches was identified as well as risk of marine and birdlife being impacted due to overflow into estuary system and the ability to recover same.		

Hazard/ Source of Risk	Element at Risk	Summary Statement	Proposed Treatment	Priority
WATER FAILURE RISK LEVEL Moderate	A. People	The water to Ballina Shire LGA is supplied by Rous Water. There is a low risk of a major fail where people would be put at risk, up to approximately 46,000 people if fail exceeds 12 hours. There is a much lower risk of people suffering dehydration if failure occurs on days of extreme temperatures if emergency domestic water supply cannot be provided or significant delays occur. Most at risk would be the very young (infants) and the elderly.	25. Ongoing monitor and review (ie. Communication) with Rous Water. 26. Identification of emergency water supply sources and emergency contact arrangements in place.	2 – A,D 1 – A,D
	B. Property Economic	No risk was identified to property at the time this study was undertaken.		
	C. Animals/Stock	No risk was identified to animals/stock at the time this study was undertaken.		
	D. Lifelines and Infrastructure (Built environment)	<p>The assessment identified that there is a risk of the Sewerage Treatment Plant being impacted through the ability to treat the biological processes of the sewerage treatment plant within 24-48 hours.</p> <p>Emergency Services are at risk of being impacted (eg. Fire fighting provisions) as well as Hospitals being impacted - those procedures, areas reliant on water.</p> <p>The ability to provide bulk water for fire fighting operations.</p> <p>The main manageability issue is the ability to provide emergency water supply to these essential services.</p>		
	E. Environment (natural)	No risk was identified to environment at the time this study was undertaken – except where the sewerage treatment plant fails (see Sewerage Failure).		

Appendix B

Local Emergency Management Committee Framework

Appendix B - LEMC Management Framework

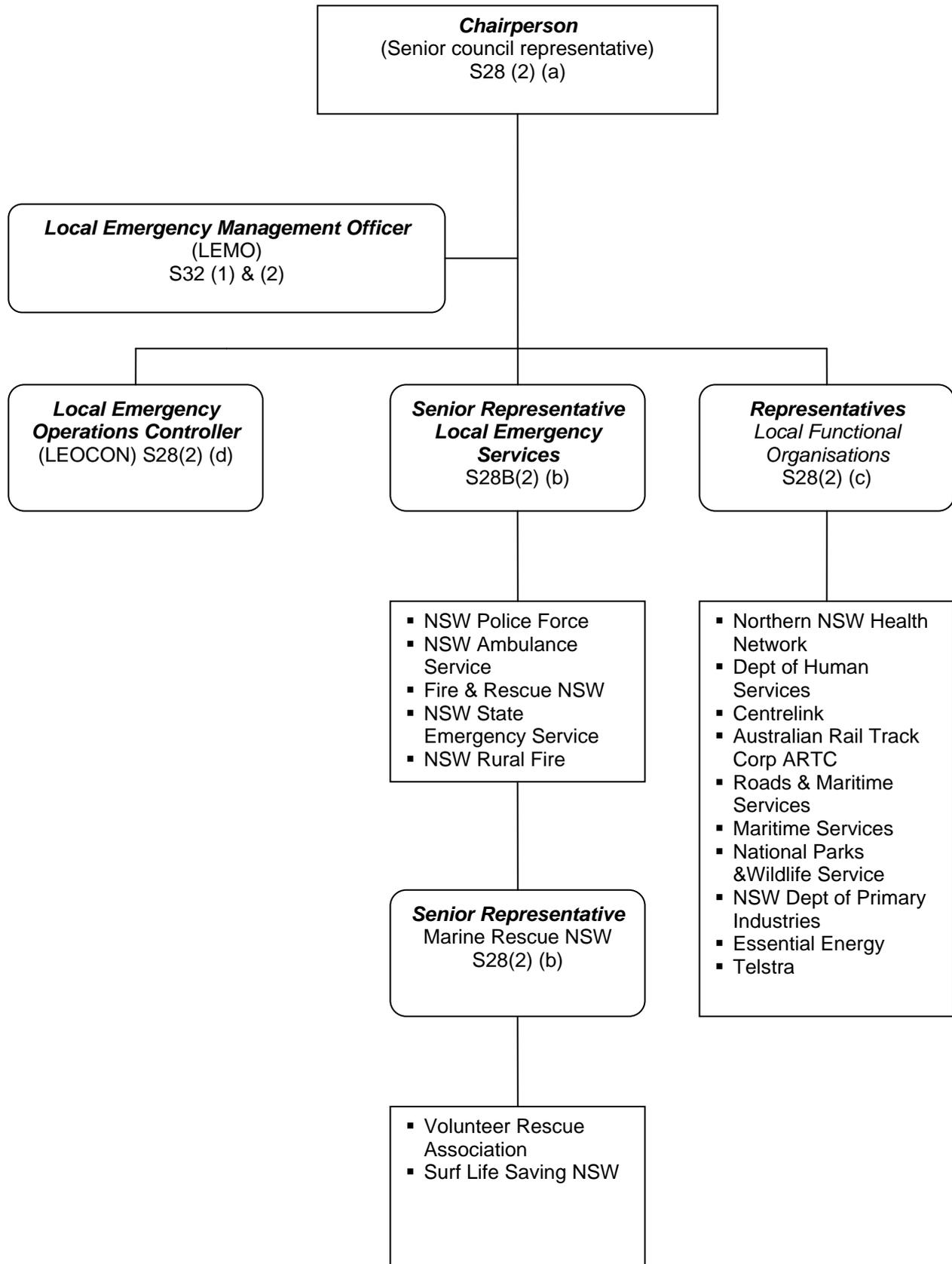
The State Emergency and Rescue Management Act of 1989 requires each Local Government area within NSW to establish a Local Emergency Management Committee. Each LEMC in NSW is to consist of the following:

1. A senior representative of the council of the relevant local government area nominated by that council, who is to be the Chairperson of the Committee and who has the authority of the council to co-ordinate the use of the council's resources in the prevention of, preparation for, response to and recovery from emergencies.
2. A senior representative of each emergency services organisation operating in the relevant local government area.
3. Representatives of such organisations providing services in functional areas in the relevant local government area as the council of that area may from time to time determine.
4. The Local Emergency Operations Controller for the relevant local government area who is appointed by the District Emergency Operations Controller must be a police officer stationed within the district and has experience in emergency management.

As provided in S29 (1) of the SERM Act the LEMC is responsible "for the preparation of plans in relation to the prevention of, preparation for, response to and recovery from emergencies in the local government area for which it is constituted."

The Emergency Risk Management Framework is designed to assist and build on the existing plans and arrangements in place provided by Local Government and combat agencies as set out in the SERM Act. Further, it aims to identify and analyse risks which the Local Emergency Management Committee may not have considered.

The following Ballina Shire Local Emergency Management Committee Framework is reflective of the State Emergency and Rescue Management Act 1989 S28(1) to (7).



Appendix C

Contact Directory

Ballina Local Emergency Management Committee Contact Directory

Ballina Shire Council				
NAME	Title	Organisation	Address	Phone/Fax/Email
Cr David Wright	Mayor	Ballina Shire Council	1/74 Hellyar Road WOLLONGBAR NSW 2477	02 6628 1059 (H) 0415 965 403 (M) davidwright@ballina.nsw.gov.au
Mr John Truman	Civil Services Group Manager LEMO	Ballina Shire Council	PO Box 450 BALLINA NSW 2478	02 6686 1256 (W) 0414 365 408 (M) 02 6686 9514 (F) 02 6686 8546 (AH) johntruman@ballina.nsw.gov.au
Mr Tony Partridge	Manager Support Operations Relief LEMO	Ballina Shire Council	PO Box 450 BALLINA NSW 2478	02 6686 1236 (W) 0429 825 071 (M) 02 6686 9514 (F) 02 (AH) tonyp@ballina.nsw.gov.au
Mrs Kerri Watts alternative Mrs Rachael Jenner	Manager Health & Environment Environmental Health Officer	Ballina Shire Council	PO Box 450 BALLINA NSW 2478	02 6686 1265 (W) 0414 192 311 (M) 02 6681 1375 (F) kerriw@ballina.nsw.gov.au 02 6686 1264 (W) 0416 209 738 (M) rachaelj@ballina.nsw.gov.au
Emergency Services				
NAME	Title	Organisation	Address	Phone/Fax/Email
Peter Mair	Regional Emergency Management Officer (REMO)	North Coast Emergency Management Region	PO Box 33 LISMORE NSW 2480	02 6626 0724 (W) 0418 869 385 (M) 02 6626 0721 (F) mair1pet@police.nsw.gov.au
Insp. Bill McKenna	Local Emergency Operation Controller (LEMCON)	NSW Police Service Ballina Police Station	River Street BALLINA NSW 2478	02 6681 8699 (W) 0409 728 442 (M) 02 6681 8605 (F) mcke1wil@police.nsw.gov.au
Mr Ward McIndoe Mr Ian Murphy	Station Officer Station Officer	NSW Ambulance Service	Cherry Street BALLINA NSW 2478	131 233 (W) 0414 677 930 (M) 02 6686 5744 (F) 02 6686 9567 (AH) rmcindoe@ambulance.nsw.gov.au 0409 249 539 (M) 02 6681 5357 (W) imurphy@ambulance.nsw.gov.au

Emergency Services

NAME	Title	Organisation	Address	Phone/Fax/Email
Mr Glen Eady	Brunswick Valley District Inspector	(Mullumbimby, Byron Bay, Ballina & Evans Head)		02 6681 1102 (W) 02 6681 1089 (F) 0411 259 735 (M) geady@ambulance.nsw.gov.au
Superintendent Greg Lewis	Zone Commander RN2	Fire & Rescue NSW Zone Office	2/37-41 Cherry Street BALLINA NSW 2480	02 6681 1847 (W) 0419 694 256 (M) 02 6686 2959 (F) Greg.Lewis@fire.nsw.gov.au
Inspector Gary White	Duty Commander	Fire & Rescue NSW Zone Office	2/37-41 Cherry Street BALLINA NSW 2480	02 66811 847 (W) 0418 251 338 (M) 02 66862 959 (F) gary.white@fire.nsw.gov.au
Capt Dennis Henry	Fire Captain	Fire & Rescue NSW Ballina Fire Station	60 Crane Street BALLINA NSW 2478	02 6686 2038 (W) 0414 904 912 (M) 02 6681 3519 (F) dennis.henry@fire.nsw.gov.au
Inspector Phil Sheedy	Duty Commander	Fire & Rescue NSW Zone Office	2/37-41 Cherry Street BALLINA NSW 2480	02 6681 1847 (W) 0417 784 375 (M) 02 6686 2959 (F) philip.sheedy@fire.nsw.gov.au
Mr Gerry Burnage	Local Controller	State Emergency Service	27 Henderson Drive LENNOX HEAD NSW 2478	0414 863 724 (M) 02 6626 8655 (HQ) 02 6687 7801 (AH) 02 6686 7529 (F) gerald.burnage@member.ses.nsw.gov.au gerry.burnage@bigpond.com bal.ops@ses.nsw.gov.au
Mr Charles Nicholson	Deputy	State Emergency Service		0400 260 346 (M)
Alternate: Mr Barry Green	Deputy Local Controller	State Emergency Service		(M) (AH) 0400 381 573 (M) bal.ops@ses.nsw.gov.au
After Hours Duty Officer		State Emergency Service		0427 102 068
SES	Emergency	Assistance		132 500 SES EMERGENCY No
Ms Kaylene Jones	Region Controller	State Emergency Service	7 Lancaster Drive GOONELLABAH NSW 2480	0427 903 077 (M) kaylene.jones@one.ses.nsw.gov.au
Mr Wayne Pettit	Deputy Region Controller	NSW SES		0499 079 336 (M) wayne.pettit@ses.nsw.gov.au

Emergency Services (continued)

NAME	Title	Organisation	Address	Phone/Fax/Email
Inspector Bob Wilcox	Operations Officer	Rural Fire Service	PO Box 219 MULLUMBIMBY NSW 2482	02 6671 5500 (W) 0428 666 965 (M) 02 6684 3959 (F) 02 6681 1988 FIRELINE 24 Hr bob.wilcox@rfs.nsw.gov.au
Mr Peter Jeffree Alternate: ?????	Director of Nursing	Ballina Hospital Health Services	Cherry Street BALLINA NSW 2478	02 66862 111 (W) 0477 326 599 (M) 02 6686 6731 (F) peter.jeffree@ncahs.health.nsw.gov.au (W)
Mr Mark Puglisi Alternate Mr Gary Murphy	Operations Captain President	Ballina Jet Boat Surf Rescue	PO Box 818 BALLINA NSW 2478	02 6689 1244 (W) 0407 664 537 (M) 02 (F) 02 6686 2504 (AH) pugl2mar@police.nsw.gov.au 02 6660 0262 (W) 0427 666 267 (M) 02 6662 4946 (F) 02 6681 6368 (H) Gary.John.Murphy@lismore.nsw.gov.au
Mr John Donoghue Alternate: Lorraine Leuckel	Commander Deputy Commander	Marine Rescue Ballina	PO Box 476 BALLINA NSW 2478	02 6681 4700 (BASE) 24 HRS 0423 396 720 (M) 02 6681 4365 (F) uc.ballina@marinerescuensw.com.au 02 6686 6979 () 0407 082 523 (M) duc.ballina@marinerescuensw.com.au
Mr Bernard Utteridge	Lifesaving Officer	Surf Life Saving NSW	PO Box 307 BELROSE NSW 2085	13 78 73 SLS Emergency 02 9471 8067 (W) emergencymanagement@surflifesaving.com.au
Mr Garry Meredith	Ballina/Richmond Duty Officer	Surf Life Saving Far North Coast	1 The Ridgeway CUMBALUM NSW 2478	02 6686 47875 (H) 0415 788 494 (M) Surf Rescue Emergency Response - 6681 6677 lifesaving@surflifesavingfnc.com emergency@surflifesavingfnc.com garrym@ballina.nsw.gov.au
Mr Scott McCartney	Northern NSW Lifeguard Coordinator	Australian Lifeguard Services (SLSNSW)	28 West Wyberba Street TUGAN QLD 4224	0405 579 342 (24 HRS) smccartney@australianlifeguards.com.au
Mr Mick Dall	Assistant State Inspector	Workcover	11 Grant Street BALLINA NSW 2478	02 6620 6904 (W) 0411 158 113 (M) michael.dall@workcover.nsw.gov.au

Government Agencies

NAME	Title	Organisation	Address	Phone/Fax/Email
Mr Michael Baldwin Alternate: Mr David Byrnes	Acting Traffic Operations Manager Traffic Coordinator	RMS Northern Region	PO Box 576 GRAFTON NSW 2460	02 6686 1832(W) 0411 129 400 (M) 02 6640 1304 (F) 02 6686 5572 (AH) Michael.BALDWIN@rms.nsw.gov.au 02 6640 1066 (W) 0419 634 038 (M) 0498 212 400 (AH) David.Byrnes@rms.nsw.gov.au
Mr John Nasser Mr Martin James	Area Manager Senior Resource Supervisor	Essential Energy Essential Energy	PO Box 54 BALLINA NSW 2478	02 6681 9154 (W) 0407 671 145 (M) 02 6681 9153 (F) 02 6685 4119 (AH) john.nasser@essentialenergy.com.au martin.james@essentialenergy.com.au
		Telstra	10-14 Racecourse Road BALLINA NSW 2478	02 6686 9368 (W) 02 6686 6330 (AH)
Mr Ben Riley	Regional Transport Coordinator	Ministry of Transport	PO Box 693 LISMORE NSW 2480	02 6621 9424 (W) 0419 685 385 (M) 02 6621 5527 (F) 02 6624 5508 (AH) ben.riley@transport.nsw.gov.au
Mr Stephen Morris Alternate: Mr Neil Hing	Biometrician Senior Biosecurity Officer	Dept of Primary Industries Local Land Services	1243 Bruxner Highway WOLLONGBAR NSW 2477 PO Box 16 LISMORE NSW 2480	02 6626 1216 (W) 0431 739 071 (M) 02 6629 3451 (AH) stephen.morris@dpi.nsw.gov.au 02 6621 2317 (W) 0402 000 762 (M) neil.hing@lls.nsw.gov.au
Ms Grace Breitreutz Alternate: Ms Leeanne Purdey	Manager Case Work – Child Protection	Family & Community Services	106-108 Tamar Street PO Box 132 BALLINA NSW 2478	02 6686 1936 (W) 0427 695 277 (M) 02 6681 4706(H) grace.breitreutz@facs.nsw.gov.au 0421 497 376 (M) 02 6686 1999 (W) Leeanne.Purdey@facs.nsw.gov.au
		Ballina Youth Centre	PO Box 623 BALLINA NSW 2478	02 6686 7776 (W) 02 6686 8693 (F)
Ms Rhonda Sly	Manager	Dept of Human Services Ballina	Tamar Street BALLINA NSW 2478	02 6626 8056 (W) 0429 565 092 (M) rhonda.sly@humanservices.gov.au

Aerodrome Services

NAME	Title	Organisation	Address	Phone/Fax/Email
Mr Neil Weatherson	Airport Manager	Ballina Shire Council	PO Box 450 BALLINA NSW 2478	02 6681 1858 (W) 0407 117 886 (M) 02 6681 1873 (F) 0407 117 886 (AH) neilw@ballina.nsw.gov.au
Mr Graeme Gordon	Airport Operations Manager	Ballina Shire Council	PO Box 450 BALLINA NSW 2478	02 6681 1858 (W) 0415 222 349 (M) 02 6681 1873 (F) 02 6628 3088 (AH) graemeg@ballina.nsw.gov.au
Mr Wayne Morrison	Inspector – Fire Station Manager (Ballina ARFF)	Airservices Australia	Ballina Airport	0437 450 829 (M) wayne.morrison@airservicesaustralia.com

Emigrant Creek Dam Catchment

NAME	Title	Organisation	Address	Phone/Fax/Email
Rous Water	Emigrant Creek	Emergency Spills		02 6626 6955 (W)

Red Cross Observer

NAME	Title	Organisation	Address	Phone/Fax/Email
Ms Kerrie Gray	Emergency Services Liaison Officer	Australian Red Cross	1/87 Tanamera Drive ALSTONVILLE NSW 2477	02 6628 3022 (H) 0429 151 112 (M) kezzagray@bigpond.com
Ms Heather Smith		Australian Red Cross	1 Brown Avenue ALSTONVILLE NSW 2477	02 6628 3472 (H) 0422 644 344 (M) bobheathersmith@gmail.com

Appendix D

Vulnerable Groups

Extract from Emergency Risk Management Strategy - Vulnerability & Resilience

VULNERABLE GROUPS

The occupants in the following locations are considered to be potentially vulnerable to an emergency incident. This may be due to their age, mobility or access to the location and may depend on the type and onset of a particular hazard. It is appropriate to ensure that at least annually, details in regard to each location are reviewed to ensure currency.

Hospitals		
Building	Address	Numbers
Ballina District Hospital	Cherry Street Ballina	6686 2111
Ballina Community Health	Cherry Street Ballina	6686 8977
Ballina Day Surgery	46 Tamar Street Ballina	6681 9999
Nursing Homes, Aged Care & Retirement Homes		
Ex-Services Home	7 Bentinck Street Ballina	6686 2383
St Andrews Village	59 Bentinck Street Ballina	6686 9138
Maranoa	Alstonville	6698 5700
Crowley Retirement Village	Cherry Street Ballina	6686 5090
Wardell Mercy Centre		6683 4642
Schools		
Emmanuel Anglican College	63 Horizon Drive Ballina	6681 5054
Richmond Christian College	7 Gallans Road Ballina	6686 7847
Alstonville High School	Cawley Close Alstonville	6628 5222
Alstonville Public School	58 Main Street Alstonville	6628 0775
Ballina High School	Burnett Street Ballina	6686 2133
Ballina Public School	Crane Street Ballina	6686 2205
Cabbage Tree Island Public School	Cabbage Tree Island, Wardell	6683 4251
Empire Vale Public School	River Drive Empire Vale	6683 4298
Fernleigh Public School	Fernleigh Road Fernleigh	6687 8267
Lennox Head Public School	Byron Street Lennox Head	6687 7230
Southern Cross School	Chickiba Drive, East Ballina	6686 0503
Teven Tintenbar School		6687 8210
Wardell Public School	Richmond Street Wardell	6686 4196
Wollongbar Public School	Simpson Avenue Wollongbar	6628 1302
St Josephs Primary School	11 Perry Street Alstonville	6628 1009
St Francis Xavier Primary School	Swift Street Ballina	6686 3370
Holy Family Primary School	40 Isabella Drive Skennars Head	6687 5311
Xavier Catholic College	2 Redford Drive Skennars Head	6687 6484
Biala Special School	78 Fox Street Ballina	6686 3395
Child Care Centres		

Ballina/Byron Family Day Care	75 Tamar Street Ballina	6686 7799
Ballina Kiddi Care Centre	109 Tamar Street Ballina	6686 8208
Ballina Fox Street Pre-School	Fox Street Ballina	6686 3340
Premier Early Learning Centre	2 South Street Alstonville	6628 3455
Alstonville Nestle In Child Care Centre	32 Wardell Road Alstonville	6628 1837
Alstonville Out of School Hours & Vacation Centre	Public School Main Street Alstonville	6628 0608
Alstonville Public School	Play Group Hall Main Street Alstonville	6628 0608
Seeds Early Learning Centre	58-62 Westland Drive, Ballina	6681 1122
Ballina Out of School Hours & Vacation Care	30 Swift Street Ballina	6681 1790
Emmanuel Anglican College Early Learning Centre	62 Horizon Drive Ballina	6681 5054
Good Start Early Learning & Day Care Centre	77 North Creek Road Lennox Head	6687 6355
Good Start Early Learning & Day Care Centre	38 Links Avenue East Ballina	6681 1633
Lennox Head Out of School Hours & Vacation Care	Byron Street Lennox Head	6687 4827
Rainbow Children's Centre	4 John Sharpe Street, East Ballina	6686 6621
River Street Children's Centre	12 River Street Ballina	6686 4615
Bright Horizons Child Care	Phoenix Park Teven Road Tintenbar	6687 8770
Wollongbar Community Pre School	Hall Court Wollongbar	6628 3800
Wollongbar Little Angels	3 Smiths Lane Wollongbar	6628 5127
Alstonville Baptist Community Pre School	108 Wardell Road Alstonville	6628 0040
Senior Citizens / Community Centres		
Ballina Dementia Care Harmony House	Treelands Crescent Ballina	6686 9829

Vulnerability & Resilience (Extract from Ballina Shire Council ERMS)

Definition

Resilience is the capacity of a group or organisation to withstand loss or damage or to recover from the impact of an emergency or disaster. Vulnerability is a broad measure of the susceptibility to suffer loss or damage.

The higher the resilience, the less likely damage may be, and the faster and more effective recovery is likely to be. Conversely, the higher the vulnerability, the more exposure there is to loss and damage (Source: Department of Human Services publication, Assessing Resilience and Vulnerability in the Context of Emergencies: Guidelines).

Vulnerability Assessment of the Elements at risk to include but not limited to:

- Proximity to the source or risk
- Mobility / Disability considerations
- Age / Income
- Culturally and Linguistically Diverse (CALD) Groups
- Access to resources before, during and following an event
- Knowledge / Awareness within Community of hazards / risks.

Purpose

The purpose of conducting a Resilience and Vulnerability assessment was to determine the strengths of particular areas, communities or groups, in terms of resources, skills, networks and community agencies. These strengths and local capabilities may be used and further developed to minimise the negative consequences of an emergency. Prevention and Preparedness activities, as well as recovery activities can be supported. By identifying the vulnerabilities of specific areas, prevention, preparedness, response and recovery activities may be managed. Resilience and vulnerability assessment is a necessary component of effective emergency management planning. However it is unlikely that any assessment, or community audit, will capture every potential need or identify every person who, in some circumstance, may be exposed to a risk or to the possibility of some loss (Source: Department of Human Services publication, Assessing Resilience and Vulnerability in the Context of Emergencies: Guidelines) P12.

The resilience and vulnerability assessment has been carried out to determine the following:

- Management Capacity
- Time and Opportunity (eg to undertake recovery activities)
- Physical capacity (eg support to others, machinery)

- Access to services (eg establishing transport systems, access to same, interpreters)
- Expertise (eg access to specialist services - tradespeople, financial counsellors)

Support

Personal support (eg outreach services, advisers and counsellors)

Community support (eg community development officers)

Who is Vulnerable?

Vulnerable groups are those who may have special needs during the response to and recovery following an event.

The groups listed below are generalisations. The list is not exhaustive, it attempts to broadly group areas of possible need within the Ballina Local Government Area.

The Aged (Particularly the Frail)

In terms of mobility and physical capacity. Note: The aged are not vulnerable just because they are elderly.

The Very Young

In terms of managing their own lives and recovery and in terms of understanding the event.

The Disabled (Intellectual, Psychiatric and Physical)

In terms of managing their own recovery and in getting access to information and resources.

The Poor or People with Limited Resources to Meet Essential Needs

In terms of having the financial and physical resources to achieve recovery or to protect them selves against loss through, for example insurance.

Non-English Speakers (NESB) / Culturally & Linguistically Diverse (CALD)

In terms of understanding the potential risks and in gaining access to information.

The Socially Isolated

In terms of having family or friends that can provide personal and physical support.

The Physically Isolated

In terms of having easy, cheap and fast access to resources, or in terms of being able to call on assistance from other members of the community or from agencies.

People Dependent of Technology Based Life Support Systems and Seriously Ill

In terms of being dependent on systems over which they have no control and in terms of already being in need and having a very low capacity to carry out protective or recovery activity.

Large Families and Single Parent Families

In terms of complex family needs and dynamics and increased costs for prevention and recovery. Single Parent Families in terms of having to manage a range of demands with limited support.

People with Limited Coping Capacity

In terms of low or reduced capacity to manage life events.

People with Inadequate Accommodation

In terms of being already in straitened circumstances and with existing high levels of need and support.

Those on Holiday (Australian), Particularly Those in Tents and Caravan Resorts

In terms of being absent from their own communities and resources.

People with Marginal Coping Capacity

People with limited coping capacity to deal with stress and disruption, with limited economic resources or who have previously experienced significant stress, trauma or loss in their lives. This group may already be on the margins of successful life management or day-to-day coping by loss, damage or threat to life, safety, property or income caused by an emergency or disaster, and the new disaster may disrupt them even more.

People Affected by an Emergency

In terms of need (medical, psychological, material etc) generated by the event.

ELEMENT	Who / What is Vulnerable	Comment	Actions to Increase Resilience (Existing or Proposed)
People and Social Environment	Aged	Ballina Shire has a higher than average proportion of its population comprised of older persons (aged over 65 years) relative to other local government areas in Australia. The number of older persons residing in Ballina Shire is anticipated to increase significantly over the forthcoming 20-year period. Older persons have higher rates of disability, social isolation and mobility constraints, which make them more vulnerable.	Community services such as 'Meals in Wheels' and 'Commonwealth Community Aged Care Packages' provide opportunities to reduce social isolation and provide physical and emotional support to seniors. These services also serve as potential point of contact and source of information regarding the personal circumstances of aged persons that might be useful to emergency service organisations. Council initiated community events such as Seniors Week and Heritage Week provide opportunities for people, including the aged, to engage in community activities and thus reduce social isolation. Appropriate housing remains a significant challenge going forward, particularly due to the anticipated increase in the number of older persons. The Review of the Ballina Local Environmental Plan (underway) will consider how the local planning framework might facilitate the provision of appropriate accessible and affordable housing for the elderly.
	Young	Young people often must rely on public transport and family for getting from place to place. The dispersed character of settlement in the region makes younger people vulnerable to this lack of mobility.	Emergency mass transport may help reduce the vulnerability of younger persons (and others that lack mobility) during emergencies. The high level of mobile phone use by younger persons may provide opportunities for contact and information dissemination during emergencies.
	The disabled (intellectual, psychiatric and physical) and people with limited coping capacity	The ABS defines a person as having a disability 'if he/she has a specified limitation, restriction or impairment, which has lasted, or is likely to last, for a least six months and which restricts and everyday activity'. The Ballina Shire LGA. Accessibility refers to more than just a person's ability to gain physical access to buildings. It	Ballina Shire Council through the Ballina Shire Access Reference Group has worked on improving the physical accessibility within our area. The Group is where council and community representatives meet to discuss issues of concern to residents who have a disability. The group also provides Council

		can also refer to having an inclusive policy that encourages people with a disability to participate fully in the community. The issue of accessibility was raised throughout the consultation phase of this plan.	with recommendations on disability access issues. Council is committed to ensuring all new developments comply with the regulations set down to meet the minimum standards of accessibility. A mobility map identifying access routes around the shire is available.
	Culturally and Linguistically Diverse (CALD)	In Ballina Shire there are residents from some 50 different countries. Data from the 2001 Census indicates that a total of 3,398 people or 9.6% of the total Ballina Shire population identified themselves as being born in a country other than Australia. By way of comparison the NSW percentage is 23%	See Appendix B
	The socially isolated	Social isolation can occur for various reasons, such as prejudice, disability, physical location and mobility constraints. Persons experiencing social isolation may include the elderly, person with disabilities, those living in rural areas, and stay at home parents with young children.	Council initiated community events and activities seek to reduce social isolation of residents by providing opportunities for social contact and the development of a 'sense of community.' The provision of appropriate meeting places such as parks and playgrounds and community centres can help reduce social isolation. Community Centres are situated at Wardell, Ballina and Lennox Head.
	The physically isolated	In terms of having easy, cheap and fast access to resources, or in terms of being able to call on assistance from other members of the community or from agencies. Accessibility refers to more than just a person's ability to gain physical access to buildings. It can also refer to having an inclusive policy that encourages people with a disability to participate fully in the community. The issue of accessibility was raised throughout the consultation phase of the Social Plan.	To the extent to which physical isolation may be a product of insufficient appropriate housing, the provision of appropriate housing may help reduce the physical isolation experienced by some residents.
People and Social Environment cont.	People dependant on technology-based life support systems and seriously ill	In terms of being dependent on systems over which they have no control and in terms of already being in need and having very low capacity to carry out protective or recovery	Community service organisations which support people dependant on technology-based life support systems and the seriously ill may provide a first point of call for

		activity.	emergency service organisations to provide advice and appropriate support during emergencies.
	People with inadequate accommodation	In terms of being already in straitened circumstances and with existing high levels of need and support. The housing needs of people vary and change as they move through different stages of their life cycle. Of the lone parent households in Ballina, 82% of these had a female as the parent. It is often very difficult for women with dependant children to access appropriate and affordable housing. The lack of rental history severely limits the opportunity for these women to access housing in the private rental market. An alternative for women who are lone parents would be to seek out accommodation through the Department of Housing. One of the difficulties identified in building connections in communities was the fact that many households need two incomes to cover the cost of housing. This diminishes the level of community involvement and does not allow for a great deal of interaction. This then brings about Social Isolation (Ballina Social Plan)	The Review of the Ballina Local Environmental Plan (underway) will consider how the local planning framework might facilitate the provision of appropriate, accessible and affordable housing. This will necessarily involve providing for a mixture of appropriate housing types to accommodate a broad range of household and family types.
	Those on Holiday (Australian), particularly those in tents and caravan resorts	In terms of being absent from their own communities and resources.	Emergency planning should include contingencies for the dissemination of information to holiday-goers, including to those occupying formal and informal camping grounds.
	People affected by an emergency	In terms of need (medical, psychological, material etc) generated by the event.	The Ballina Local DISPLAN, Northern Rivers DISPLAN and Plans and Policies developed and held by contributing agencies and organisations provide information on how to access such services and provision of same. Monitoring and reviewing these Plans, Policies and Procedures on a quarterly or annual basis against the demography of the Ballina LGA will ensure that any needs generated by an

			event are able to be met.
	Management Capacity	Time and Opportunity (eg to undertake recovery activities); Physical capacity (eg support to others, machinery); Access to services (eg establishing transport systems, access to same, interpreters) Expertise (eg access to specialist services - tradespeople, financial counsellors).	Access to transport for parents and their children has been identified as a significant issue. Many families are unable to access services due to limited public transport options. Stakeholders identified that many families find the cost and frequency of local transport services as being prohibitive in their attempts to access services (Ballina Social Plan).
	Large Families and Single Parent Families	In terms of complex family needs and dynamics and increased costs for prevention and recovery. Single Parent Families in terms of having to manage a range of demands with limited support.	Community events and facilities can provide support to vulnerable families by providing venues for social networking, education opportunities and accessing community services and information.
	Proximity to Hazards	In terms of living near or within bush fire prone areas, flood affected areas, proximity to industrial areas, under flight path or living in close proximity to and airport, bulk storage for hazardous materials, highways etc. Throughout the Ballina LGA there is a mix of commercial, residential and industrial areas which adjoin, as is the case in any urban centre. Those on low incomes and in public housing are generally found to be located closer to sources of potential risk and have limited management capacity or reduced ability to recover, therefore making them more vulnerable.	There are many plans currently in place to regulate, monitor and respond to sources of risk. To find more detailed information refer to the links contained at the end of this document for Emergency Services and other regulatory bodies. Further, community education is undertaken mainly with respect to naturally occurring hazards.
Infrastructure and Critical Services	Water Supply	Possible vulnerability from contamination of dams and reservoirs: vulnerability from lack of power to Rous Supply or major main breaks.	Water monitoring programmed reduces the vulnerability, providing opportunity for early identification of any contaminates. In addition, reservoirs are roofed and security fenced; there is the ability to cross feed from other reservoirs to allow isolation if required and to gravity feed for a period of time if power fails to pumps.
	Waste Water	Major vulnerability of system is to failure of power supply, due to limited storage in pumping	Power failures are managed by Council providing standby generator to keep all 115

		stations and waste water treatment plants. Management of pumping stations can minimise surcharges within urban areas, however can cause discharge of untreated sewage into river and estuary.	pump stations operational and to provide some level of treatment at treatment plants; Radio is used to advise residents to be sparing with water use or not flush toilet if blackout occurs.
	Road Networks	Can be vulnerable from damage by storm and flood, preventing access to services.	Focus needs to be on recovery. Council have emergency staff available for call out to reopen roads and arrange detours.
	Critical Bridges	Critical bridges in terms of main access and servicing the community. These exist on the Pacific Highway - Wardell, emigrant Creek, Fishery Creek and Canal Bridge. <ul style="list-style-type: none"> • Emigrant Creek Bridge • Duck Creek Bridge • Missingham Bridge • Prospect Bridge • Wardell Bridge • Canal Bridge 	Monitoring / Maintenance programmes ensure the structural integrity of bridges, in particular those considered critical. Emergency detour routes are provided for some closures where available; VMS signs are installed on Highway to give advance warning.
	Hospitals	In terms of becoming isolated, requiring quarantining or damage and destruction. Ballina Hospital is the major health / care facility in the Balling LGA.	Significant presence of medical providers in Ballina would be able to provide emergency treatment for some conditions. Ballina Hospital has contingencies to reduce vulnerability to its infrastructure and patients but to deal with those affected in the community from an external source of risk and who would require medical assistance.
Natural Environment	Coastal Zones	Dunal systems	Coastline Hazards definition study and interim Action Plans, plus LEP conditions limiting development in critical zones. Dune care groups carry out preventative maintenance works.
	Estuary / Wetlands	In terms of exposure to sources of risk (ie Proximity to industrial areas, factories etc) short, medium and long term damage Richmond River Estuary, North Creek Estuary, Tuckean Swamp, Lake Ainsworth, Prospect and Chickiba wetlands.	The Fisheries Management Act 1994 plus amendments covers all fisheries aspect, The SEPP 14 - Coastal wetlands covers SEPP 14 wetlands, The Threatened Species Conservation Act 1995 covers threatened species and EEc's, the Marine

			<p>Parks Act covers marine park areas, Protection of the Environment Operations Act all monitor exposure to sources of risk and regulate same to ensure risk is minimised or removed. Further, Ballina Shire Council has developed plans and policies relating to the various reserves and estuaries which they are responsible for.</p>
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Appendix E

MOU Management of Roads & Traffic Incidents



Memorandum of Understanding Management of Road and Traffic Incidents

between

Ambulance Service of New South Wales
Department of Environment, Climate Change and Water
Emergency Management New South Wales
New South Wales Fire Brigades
New South Wales Police Force
New South Wales Rural Fire Service
New South Wales State Emergency Service
Roads and Traffic Authority of New South Wales
Transport New South Wales

Version: 1,1

Date: 13 December 2010

1 Overview

1.1 Mission Statement

To ensure the optimum level of coordination and cooperation between agencies in relation to the management of traffic incidents.

1.2 Purpose

This MOU is:

- A statement of the participating agencies intent on traffic management of incidents.
- A context for the development of a multi-agency plans and protocols for the management of traffic incidents.

This MoU will complement and where required work within the existing NSW emergency management principles and arrangements (State Disaster Plan) and combat agency legislative authorities. This MoU does not replace existing emergency management arrangements.

1.3 Scope

This MOU applies to the following organisations:

- The New South Wales Police Force;
- Emergency Services, meaning the NSW Fire Brigades, Ambulance Service of NSW, NSW State Emergency Service and NSW Rural Fire Service.
- Transport NSW, Roads and Traffic Authority of NSW, Emergency Management NSW and the Department of Environment Climate Change and Water.

Incidents covered by this MoU are:

- Major traffic incidents on State Roads including National Highway and on defined priority roads (refer to Annexure A).
- Road and traffic incidents that require a significant and coordinated interagency response.
- Road and traffic incidents with the potential to have major consequences for the broader transport network.

The operating principles developed within this document may also be usefully extended as a guide to dealing with smaller incidents and/or regional roads.

This MoU does not apply to:

- Regional or local roads that are under council control.

1.4 Principles

- The preservation of life, property and the environment will always be given the highest priority at any incident.
- All agencies will endeavour to minimise any disruption to the broader traffic and transport networks through an effective response and resolution of traffic incidents:
- Initiate the Displan arrangements where a significant and coordinated response is required in response to an incident that endangers life, property and the environment.
- A Local, District or the State Emergency Management Controller should also use the principles and arrangements detailed in Displan in support of a significant and coordinated response.
- Investigation of serious motor vehicles collisions (fatal) will remain a priority and all organisations should consider this during the management of traffic.
- A review of this MoU will occur every 5 years or as required.

2 Road and Traffic Incident Management

2.1 Agency Roles

At the highest level, the roles of each agency in responding to road and traffic accidents and incidents are detailed in the:

- State Emergency and Rescue Management Act 1989;
- State Disaster Plan (Displan), Sub Plans and Supporting Plans;
- Agency specific legislation and regulations;
- State Rescue Policy

Broadly, the roles of the participating agencies in relation to traffic incidents may include:

- Police – Assume overall Site Control and lead the command, control and coordination arrangements until overall resolution and hand-back to the appropriate authorities.
- Fire Brigades – Act as Incident Controller for hazardous material incidents.
- RTA – Take responsibility for traffic management outside of the incidents inner perimeter.
- Ambulance – Provide pre-hospital care and transport for the sick and injured.
- State Emergency Service - Assist in response or recovery operations for which the Services' training and equipment is suitable and where the Service is not already significantly committed to its combat agency roles.
- Rural Fire Service - Assist in response or recovery operations for which the Services' training and equipment is suitable.
- Emergency Management NSW - Through the operation of the SEOC, provide incident notification to relevant stakeholders and coordinate actions determined by the State Emergency Operations Controller.
- Department of Environment, Climate Change and Water – assist with Hazmat, technical and scientific advice and once rendered safe, coordinate the cleanup of hazardous materials which pose a threat to the environment.
- Transport NSW – Overall coordination of traffic and transport management through the TMC.

The NSW Police Force, NSW Fire Brigades, the State Emergency Service, Rural Fire Service and the RTA can close roads in defined circumstances for safety or emergency reasons.

2.2 Joint exercises

All agencies will participate in one joint table-top and one joint operational exercise related to road and traffic incidents per year.

2.3 Incident Notifications

Prompt communication between all organisations is essential if a timely, effective and coordinated response is to occur.