

#### **Coonamble Shire**

# Local Flood Emergency Sub Plan







# COONAMBLE SHIRE FLOOD EMERGENCY SUB PLAN

A Sub Plan of the Local Emergency Management Plan (EMPLAN)

**Volume 1 of the Coonamble Shire Flood Emergency Sub Plan** 

**Endorsed by the Coonamble Shire Emergency Management Committee** 

13 February 2024 Version 3.0

#### **AUTHORISATION**

The Coonamble Shire Flood Emergency Sub Plan is a sub plan of the Coonamble Shire Local Emergency Management Plan (EMPLAN). It has been prepared in accordance with the provisions of the *State Emergency Service Act 1989* (NSW) and is endorsed by the Local Emergency Management Committee in accordance with the provisions of the *State Emergency and Rescue Management Act 1989* (NSW).

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#### **VERSION HISTORY**

Version Number	Description	Date
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#### **AMENDMENT LIST**

Suggestions for amendments to this plan should be forwarded to:

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Amendments in the list below have been entered in this plan.

Amendment Number	Description	Updated by	Date

#### **DISTRIBUTION LIST**

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#### 1 OUTLINE AND SCOPE

#### 1.1 PURPOSE

1.1.1 The purpose of this plan is to set out the multi-agency arrangements for the emergency management of flooding in the Coonamble Shire Local Government Area (LGA).

#### 1.2 **AUTHORITY**

- 1.2.1 This plan is written and issued under the authority of the <u>State Emergency and Rescue Management Act 1989 (NSW)</u> ('SERM Act'), the <u>State Emergency Service Act 1989 (NSW)</u> ('SES Act') and the NSW State Emergency Management Plan (EMPLAN).
- 1.2.2 This plan is a sub plan to the Coonamble Shire Local Emergency Management Plan (EMPLAN) and is endorsed by the Coonamble Shire Emergency Management Committee (LEMC).

#### 1.3 ACTIVATION

- 1.3.1 This plan does not require activation. The arrangements set out in this plan are always active.
- 1.3.2 The Coonamble Shire Emergency Management Plan (EMPLAN) is active at all times in anticipation of the need to coordinate support and resources requested by combat agencies, including the NSW State Emergency Service (NSW SES).

#### 1.4 SCOPE

- 1.4.1 The area covered by this plan is the Coonamble Shire LGA. The Coonamble Shire LGA and its principal towns, villages, rivers and creeks are shown in Appendix A.
- 1.4.2 The council area is in the NSW SES Western Zone and for emergency management purposes, is part of the Central West Emergency Management Region.
- 1.4.3 The plan sets out the Coonamble Shire level emergency management arrangements for prevention, preparation, response and initial recovery for flooding in the Coonamble Shire LGA.
- 1.4.4 In this plan a flood is defined as a relatively high water level which overtops the natural or artificial banks in any part of a stream, river, estuary, lake or dam and/or local overland flooding associated with drainage before entering a watercourse and/or coastal inundation resulting from super-elevated sea levels and/or waves (including tsunami) overtopping coastline defences.
- 1.4.5 This plan outlines the local level arrangements for the management of downstream consequences of flooding due to dam failure, however it does not cover the management of flooding of an underground mine by inrush or other cause, which should be covered by the Mine Emergency Sub Plan for the respective mine.

#### 1.5 GOALS

- 1.5.1 The primary goals for flood emergency management in NSW are:
  - a. Protection and preservation of life.
  - b. Establishment and operation of flood warning systems.
  - c. Issuing of community information and community warnings.
  - d. Coordination of evacuation and welfare of affected communities.
  - e. Protection of critical infrastructure and community assets essential to community survival during an emergency incident.
  - f. Protection of residential property.
  - g. Protection of assets and infrastructure that support individual and community financial sustainability and aid assisting a community to recover from an incident.
  - h. Protection of the environment and conservation values considering the cultural, biodiversity and social values of the environment.

#### 1.6 KEY PRINCIPLES

- 1.6.1 The protection and preservation of human life (including the lives of responders and the community) is the highest priority.
- 1.6.2 Evacuation is the primary response strategy for people impacted by flooding.

#### 1.7 ROLES AND RESPONSIBILITIES

- 1.7.1 General responsibilities of emergency service organisations and Functional Areas are set out in the NSW State EMPLAN and NSW State Flood Sub Plan.
- 1.7.2 Specific roles and responsibilities for agencies, Functional Areas and organisations in relation to flooding within Coonamble Shire are detailed within this plan, Appendix B and Appendix C.
- 1.7.3 Any agency with agreed responsibilities in this plan which are temporarily unable or no longer able to fulfil their responsibilities in response operations must, as soon as possible, notify:
  - a. The NSW SES Incident Controller (for local or zone level responsibilities during response operations).
  - b. The NSW SES Zone Duty Commander and/or the NSW SES Western Zone Office (for regional level responsibilities outside of response operations).

#### 1.8 PLAN MAINTENANCE AND REVIEW

- 1.8.1 The NSW SES will maintain the currency of this plan by:
  - Ensuring that all supporting emergency services and Functional Areas, organisations and officers mentioned in it are aware of their roles and responsibilities.
  - b. Conduct a minimum of one exercise every five years or within two years of the plan being reviewed.

- c. Reviewing the contents of the plan:
  - When there are changes which alter agreed plan arrangements.
  - When changes to land use strategic plans and policies increase the population at risk.
  - After a flood including recommendations from after action reviews, reports or inquiries.
  - As determined by the NSW SES Commissioner.
- d. The plan is to be reviewed no less frequently than every five years or after a significant flood event.

#### 1.9 SUPPLEMENTARY DOCUMENTS

- 1.9.1 Supplementary and supporting material of the Local Flood Emergency Sub Plan is maintained on the NSW SES website at: https://www.ses.nsw.gov.au/about-us/flood-storm-and-tsunami-plans/ including:
  - a. Flood Plan Glossary.
  - b. NSW SES Dam Failure Notification Flowchart.
  - c. NSW SES Resupply Flowchart.

#### 2 OVERVIEW OF NSW FLOOD HAZARD AND RISK

#### 2.1 THE FLOOD THREAT

2.1.1 The NSW SES maintains information on the nature of flooding and effects of flooding on the community in the Coonamble Shire LGA.

#### 3 PREVENTION/ MITIGATION

#### 3.1 INTRODUCTION

3.1.1 The Floodplain Risk Management Manual outlines the NSW Government's Flood Prone Land Policy which details the framework for managing flood prone land in New South Wales. Incorporation of floodplain risk management into land use planning is one of the key means to limit the exposure to flood risks to our communities and help build long term resilience to future flood events.

#### 3.2 LAND USE PLANNING

3.2.1 **Strategy:** Effective land use planning is a key focus for minimising the impacts of flooding. NSW SES will work with land use planning and consent authorities to inform and influence the consideration of the risks arising from flood, storm and tsunami to prevent the creation of intolerable impacts of these hazards on the community.

#### **Actions:**

a. The NSW SES will provide strategic input about land use planning matters which have or will create significant flood risk to life and/or property due to flooding.

b. The NSW SES will provide responses to land use planning proposal referrals that have or will create significant flood risk to life and/or property due to flooding.

#### 3.3 FLOODPLAIN RISK MANAGEMENT

3.3.1 **Strategy**: Advocate for consideration of emergency management in decision making to reduce risks to the existing community and minimise the growth in future, continuing and residual risk due to development through input to the floodplain management program.

#### Actions:

- a. The NSW SES will provide coordinated and consistent emergency management advice to councils and other agencies in relation to the management of land that is subject to flooding.
- b. The NSW SES will provide advice, support, technical resources and training for NSW SES representatives to contribute effectively on local Floodplain Risk Management Committees.

#### 4 PREPARATION

#### 4.1 INTRODUCTION

4.1.1 Preparation includes arrangements or plans to deal with an emergency or the effects of an emergency.

#### 4.2 FLOOD EMERGENCY PLANNING

4.2.1 Strategy: NSW SES develop, review and maintain Flood Emergency Sub Plans.

#### Actions:

- a. Develop and review this NSW SES Local Flood Emergency Sub Plan as required. Local Flood Emergency Sub Plans outline the specific arrangements for management of flood events within an LGA and may include cross boundary arrangements.
- b. Review plans as per Section 1.8.
- 4.2.2 Local EMPLAN Consequence Management Guides (CMGs) for flood are not required for communities covered by NSW SES Local Flood Emergency Sub Plans however may be utilised in place of Local Flood Emergency Sub Plans if agreed to by the NSW SES.

#### 4.3 FLOOD INTELLIGENCE SYSTEMS

4.3.1 **Strategy**: The NSW SES develop and maintain a flood intelligence system to identify flood behaviour, its impact on the community and required response actions.

- a. Gather and assess flood information for the full range of flood types and severities.
- b. Collect, collate, and assess information on the characteristics of communities at risk and the potential effects of flooding on communities at risk.

c. Share flood intelligence information with supporting agencies.

#### 4.4 DEVELOPMENT OF WARNING SYSTEMS

4.4.1 **Strategy**: Develop, maintain and prepare systems for the provision of flood warnings and associated warning services.

#### Actions:

- a. All levels of government work in partnership to develop and maintain flood warning infrastructure.
- b. The NSW SES maintains a list of the requirements for flood warnings for flood gauges in NSW (including flood classifications, warning times required and key statistics) and can be found in the supplementary document to the NSW State Flood Plan (see Section 1.9).
- c. The NSW SES will recommend new warning services and changes to warning alert levels for gauges to the NSW and ACT Flood Warning Consultative Committee.
- d. The State Government, in partnership with Local Government, is responsible for developing and maintaining flash flood warning systems for local catchments where required.
- e. The NSW SES maintains a dedicated dam failure hotline and procedures to ensure priority dissemination of dam failure warnings.
- f. The NSW SES develops and maintains warning and flood information products by:
  - Utilising flood intelligence data.
  - Developing warning and flood information products.
  - Continuously reviewing warning and flood information products.
  - Consulting with affected communities, key stakeholders, Dam Safety NSW and the NSW and ACT Flood Warning Consultative Committee and maintains Operational Readiness.
  - Participating in the development of public information and warning systems.
- g. Gauge owners adequately maintain flood warning gauges and systems, including those identified in the 'Service Level Specification' maintained by the Bureau of Meteorology (Bureau) and those identified in the 'Provision and Requirements for Flood Warning in New South Wales' maintained by the NSW SES.

#### 4.5 BRIEFING, TRAINING AND EXERCISING

4.5.1 **Strategy**: Ensure the NSW SES, supporting agencies, Functional Areas and the community are prepared and familiar with the strategies and arrangements within the Flood Emergency Sub Plan and supporting documents.

#### **Actions:**

a. The NSW SES will consult stakeholders throughout the development of plans.

- b. The NSW SES will inform stakeholders of content changes after revisions.
- c. The NSW SES will ensure their facilities and resources are maintained and operationally ready.
- d. The NSW SES will train personnel for their expected flood operation roles.
- e. The NSW SES will regularly brief stakeholders on the exercise arrangements contained in the NSW Flood Emergency Sub Plan.

#### 4.6 COMMUNITY RESILIENCE TO FLOODING

4.6.1 **Strategy**: The NSW SES provides and maintains a flexible volunteer workforce to support community resilience.

#### Actions:

- a. Ensure ongoing recruitment and training of a diverse range of volunteers.
- b. Ensure pre-planning to facilitate the management of spontaneous volunteers and community members during a flood.
- 4.6.2 **Strategy**: The NSW SES works with individuals, communities, businesses and government agencies to build flood resilience.

#### Actions:

- a. Partners with and engage communities to understand and manage the risks associated with floods, including providing business continuity guidance (NSW SES Business FloodSafe), family preparedness (NSW SES Home FloodSafe) and other engagement strategies.
- b. The NSW SES will collate, assess and disseminate flood information to the community.
- c. Collaborate with individuals, businesses, government agencies and communities when developing flood intelligence, preparedness and response information.
- d. Plan for floods collaboratively with communities through community and stakeholder participation and engagement.
- e. Collaborate with community sector and recognise the needs of individuals within communities who have an increased susceptibility during floods.

#### 5 RESPONSE

#### 5.1 INTRODUCTION

- 5.1.1 Flood response operations will begin:
  - a. On receipt of a Bureau Severe Weather Warning or Thunderstorm Warning that includes heavy rain or storm surge; or
  - b. On the receipt of a Bureau Flood Watch or Flood Warning; or
  - c. On receipt warnings for flash flood; or
  - d. On receipt of a dam failure alert; or

e. When other evidence leads to an expectation of flooding.

#### 5.2 INCIDENT MANAGEMENT ARRANGEMENTS

5.2.1 Strategy: Maintain effective control of flood operations across NSW.

#### Actions:

- a. The NSW SES uses the Australasian Inter-service Incident Management System (AIIMS) to manage the flood response.
- b. Control of flood response will be at the lowest effective level and may be scaled to suit the incident.
- c. The NSW SES State Controller (or delegate) will appoint Incident Controllers and establish Incident Control Centres (see NSW SES facilities on map in Appendix A).
- d. The NSW SES Incident Controller, in consultation with participating supporting emergency services and Functional Areas will determine the appropriate breakdown of an Area of Operations into Divisions and/or Sectors in accordance with the principles of AIIMS.
- 5.2.2 **Strategy**: Maintain Incident Control Centre(s).

#### Actions:

- a. The NSW SES will operate Incident Control Centre(s) as required.
- b. The NSW SES Incident Control Centre(s) will:
  - Control resources from the NSW SES and coordinate resources of supporting emergency services and Functional Areas.
  - Manage incident tasking and ensure they are actioned in a timely manner.
  - Undertake response planning and determine future resourcing requirements.
  - Coordinate information flow, including warnings, public information and social media.
- 5.2.3 **Strategy**: Provide effective liaison between the NSW SES and supporting agencies or Functional Areas in accordance with the local EMPLAN.

- Supporting emergency services and Functional Areas should provide Liaison Officers to NSW SES Incident Control Centre(s) and/or Emergency Operation Centres as required.
- b. The NSW SES will provide Liaison Officer(s) to Emergency Operations Centres as required.
- c. Where possible Emergency Operation Centres are to be co-located with NSW SES Incident Control Centres for Flood Emergency Response.
- 5.2.4 **Strategy**: Coordinate resources and logistics support to ensure operational effectiveness.

#### Actions:

- a. The NSW SES Incident Controller will notify agencies of potential access issues between locations, for the consideration of pre-deploying of resources.
- b. The NSW SES may request resources and logistics support directly from a supporting emergency service or Functional Area.
- c. Wherever possible, supporting organisations are to provide their own logistic support in consultation with the NSW SES where appropriate.
- d. The NSW SES Incident Controller will control air support operations and may utilise supporting agencies in the management of aircraft.

#### 5.3 USE OF INFORMATION AND COLLECTION OF INTELLIGENCE

5.3.1 **Strategy**: Ensure flood information is effectively utilised, communicated and collected during and post a flood.

#### Actions:

- a. Information relating to the consequences of flooding, response strategies, situational awareness and operational updates will be distributed by the NSW SES to supporting emergency services and Functional Areas listed under this plan.
- b. All supporting emergency services and Functional Areas and Council will accurately record and report information relevant to their activities and any real time flood information (including road closure information) to the NSW SES Incident Controller. This may be in the form of a combined Emergency Operations Centre (EOC) report, or direct from agencies where an EOC has not been established.
- c. The NSW SES may establish and operate a Joint Intelligence Unit to coordinate the collection, collation, interpretation, mapping, actioning and dissemination of information.
- d. Reconnaissance, mapping, damage assessments, intelligence validation and post flood evaluation will be coordinated by the NSW SES. This may occur post impact and continue into the recovery phase.
- e. NSW SES may request the Engineering Services Functional Area to assist with the gathering of flood intelligence including (not limited to) maximum flood extents, peak flood heights, recording major flood damage at key high velocity locations and preparation of the after-flood report.
- 5.3.2 **Strategy**: Ensure flood intelligence is incorporated into operational decision-making.

**Action**: The NSW SES will use flood intelligence, official forecasts, warnings, and flood scenario products to undertake an assessment of the predicted impact of a flood and to inform operational decision-making.

#### 5.4 PROVISION OF INFORMATION AND WARNINGS TO THE COMMUNITY

5.4.1 **Strategy**: Timely and effective warnings are distributed to the community.

- a. The Bureau issues public weather and flood warning products before and during a flood. These may include:
  - Severe Thunderstorm Warnings Detailed Issued for all capital cities and surrounding areas when individual severe thunderstorms are within range of the capital city radars.
  - Severe Thunderstorm Warnings Broad-based Issued for the entire Australian state or territories affected highlighting broad areas where severe storms may occur within the next 3 hours.
  - Severe Weather Warnings with reference to heavy rainfall and/or storm surge.
  - Flood Watches.
  - Flood Warnings.
- b. NSW SES Incident Controllers will issue the following NSW SES flood Warnings aligning to the Australian Warning System.
  - Advice
  - Watch and Act
  - Emergency Warning
- c. The NSW SES liaises with the Bureau to discuss the development of flood warnings as required.
- d. The NSW SES provides alerts and deliver flood information to affected communities using a combination of public information.
- e. The NSW SES may request supporting agencies redistribute NSW SES alerts and information, including through the provision of doorknocking teams.
- f. Road closure information will be provided to the community through the following agencies/methods:
  - Local Government websites.
  - Transport for NSW 'Live Traffic' website: www.livetraffic.com or 'Transport InfoLine': 131 500. VMS messaging on roadways may also be used to advise motorists.
- g. The Public Information and Inquiry Centre will be established by NSW Police Force where required to provide information regarding evacuees and emergency information. Contact details will be broadcast once the centre is established.
- h. The Disaster Welfare Assistance Line will be established by the Disaster Welfare Services Functional Area where required to provide information on welfare services and assistance. Assistance line contact details will be broadcast once Disaster Welfare services commence.

#### 5.5 PROTECTION OF PROPERTY

**Strategy**: Coordinate the protection of property from destruction or damage arising from floods.

**Action**: The NSW SES, supporting agencies, and community volunteers will assist the community (where resources are available, feasible and safe to do so) in:

- a. The protection of properties including critical infrastructure through flood protection systems (e.g. sandbagging) to minimise entry of water into buildings.
- b. The raising or moving of household furniture and commercial stock/equipment.

#### 5.6 ROAD AND TRAFFIC CONTROL

5.6.1 **Strategy**: Coordinate the closing and re-opening of flood affected roads.

#### Actions:

- a. Coonamble Shire Council will coordinate the closure and reopening of council managed roads once inspections have been carried out by the relevant authority.
- b. Transport for NSW will coordinate the closure and reopening of the state road network.
- c. The NSW Police Force may close and re-open roads but will normally only do so (if the Coonamble Shire Council or Transport for NSW have not already acted and if public safety requires such action.
- d. The NSW SES will assist with erecting road closure signs and barriers when time and resources permit.
- 5.6.2 **Strategy**: Coordinate traffic control measures in flood affected areas.
  - a. The NSW SES Incident Controller may direct the imposition of traffic control measures into flood affected areas in accordance with the provisions of the State Emergency Service Act, 1989 and the State Emergency Rescue Management Act, 1989.
  - b. The NSW SES Incident Controller may request the Local Emergency Operations Controller provide suitable personnel to assist with traffic coordination.

#### 5.7 PROTECTION OF ESSENTIAL SERVICES

- 5.7.1 Local and Region EMPLANs contain infrastructure inventories.
- 5.7.2 **Strategy**: Minimise disruption to the community by ensuring protection of infrastructure and supply of essential energy, utility services and lifelines.

#### Actions:

a. The Transport Services Functional Area is to coordinate the provision of information about the assessment and restoration of transport network infrastructure.

- b. The Energy and Utility Services Functional Area is to coordinate the assessment and restoration of essential energy and utility services (not including telecommunications).
- c. The Telecommunications Services Functional Area is to coordinate the assessment and restoration of telecommunications and the Public Safety Network.
- d. The Engineering Services Functional Area is to:
  - Coordinate the assessment and restoration of critical public buildings for example hospitals.
  - Assessment and operation of flood protection levees.
  - Protection of property.
  - Construction and repair of levees.
  - Dam safety assessment and dam stability.
  - Water supply and sewerage operations.
  - Other critical infrastructure.
- e. The Functional Areas and Coonamble Shire will keep the NSW SES informed of the status of utilities and infrastructure.

#### 5.8 EVACUATION

- 5.8.1 Evacuation is the NSW SES' primary response strategy for managing the population at risk of flooding.
- 5.8.2 **Strategy**: Conduct planning to ensure all evacuation constraints are considered.

- a. Evacuations will take place when there is a risk to public safety. Circumstances may include:
  - Evacuation of people when their homes or businesses are likely to flood.
  - Evacuation of people who are unsuited to living in isolated circumstances, due to flood water closing access.
  - Evacuation of people where essential energy and/or utility services are likely to fail or where buildings have been or may be made uninhabitable.
- b. The NSW SES will consider the following in evacuation decisions:
  - Duration of evacuation.
  - Characteristics of the community.
  - Numbers requiring evacuation.
  - Availability of evacuation routes and transport.
  - The ability for existing levees or other flood protection works to fulfil their intended function.
  - Time available for evacuation.

- Evacuee management requirements.
- Resources and delivery of evacuation information.
- Length of isolation.
- c. NSW SES Incident Controllers, planning and intelligence officers will carefully consider the risks involved in conducting evacuations.
- d. All evacuation decisions will be made as per the current NSW SES policies and procedures, and consistent with the NSW Evacuation Management Guidelines.
- e. Potential Evacuation Centres are located in the Local EMPLAN.
- f. The NSW Police Force will coordinate the provision of overall security for evacuated areas.
- 5.8.3 **Strategy**: Evacuate people pre-emptively from dangerous or potentially dangerous places and or locations created by the flood hazard to safe locations away from the hazard.
  - a. The NSW SES will control and coordinate the evacuation of affected communities.
  - b. The NSW SES Commissioner (or delegate) will warn communities to prepare for a possible evacuation, where circumstances allow such lead time.
  - c. The NSW SES Commissioner (or delegate) will order any necessary evacuations and provide information to the community about when and how to evacuate.
  - d. Support to evacuation operations may be requested from other emergency services and supporting agencies using arrangements in the local EMPLAN and supporting plans.
  - e. The Health Services Functional Area will coordinate the evacuation of hospitals, health centres and aged care facilities (including nursing homes) in consultation with the NSW SES and the Welfare Services Functional Area.
  - f. School administration offices (government and private) will coordinate the evacuation of schools in consultation with the NSW SES and the Welfare Services Functional Area, if not already closed.
  - g. Caravan Park proprietors will inform the NSW SES Incident Controller when caravan park evacuations have been completed.
  - h. People who are reluctant or refuse to comply with any Emergency Warning will be referred to the NSW Police Force.

#### 5.9 EVACUEE MANAGEMENT AND WELFARE

- 5.9.1 Research and experience in flood operations shows that most evacuees go to family, friends and commercial accommodation outside the impact area.
- 5.9.2 **Strategy**: Maintain the welfare of communities and individuals affected by the impact of a flood.

#### Actions:

a. The NSW SES will provide initial welfare for evacuees where required but will hand the responsibility over to the Welfare Services Functional Area as soon as

- possible. The NSW SES will brief the Welfare Services Functional Area at the earliest opportunity regarding the level of assistance required.
- b. The Welfare Services Functional Area will manage evacuation centres for affected residents and travellers in accordance with the Welfare Services Functional Area Supporting Plan.
- c. Schools administration (government and private) will manage the safety of students directly affected by flooding and will work with the NSW SES in the temporary closure of schools and will coordinate with the NSW SES, Transport and Welfare Services Functional Areas in the management of school evacuees.
- d. Disaster Victim Registration will be controlled and coordinated by the NSW Police Force with the assistance of the NSW SES and the Welfare Services Functional Area.
- e. The NSW SES will provide details of all residents assisted in evacuations to the Welfare Services Functional Area as early as possible.
- f. Where the expected remaining number of evacuees and the duration of evacuation is assessed to be beyond the capability and capacity of the established evacuation centre arrangements the State Emergency Operations Controller (SEOCON) may establish Major Evacuation Centres or Mass Care facilities.
- g. The decision to establish Major Evacuation Centres or Mass Care Facilities will be made by the NSW SES and SEOCON in consultation with members of the State Emergency Management Committee (SEMC).
- 5.9.3 **Strategy**: Coordinate available and accessible health services for flood affected communities.

**Action**: The provision of environmental health advice, assessment of public health risks and coordination of immediate mental health support will be provided by the Health Services Functional Area.

5.9.4 **Strategy**: Maintain the welfare of animals impacted by a flood.

#### Actions:

- a. The Agriculture and Animal Services Functional Area will coordinate the welfare of livestock, pets, companion animals and wildlife including support to primary producers, animal holding establishments and community members.
- b. The Agriculture and Animal Services Functional Area role will coordinate the evacuation, emergency care and assessment of animals, the humane destruction and disposal of affected animals, and the supply of emergency fodder and water (with aerial support where necessary).

#### 5.10 FLOOD RESCUE

5.10.1 **Strategy**: Control and coordinate flood rescue of people and domestic animals.

#### Actions:

a. The NSW SES will perform flood rescue, where training and equipment is suitable and where a risk assessment has indicated that the risk to rescuers is acceptable.

- b. Flood rescue operations will be conducted in accordance with the State Rescue Board NSW State Rescue Policy which sets out the framework, governance, responsibilities and requirements for the management and conduct of flood rescue in NSW.
- c. The NSW SES may request other supporting emergency services to undertake flood rescues on behalf of the NSW SES. Agencies must be authorised/accredited to undertake flood rescue operations in accordance with State Rescue Board requirements, as prescribed by the NSW SES. Supporting emergency services must supply information regarding rescues performed to the NSW SES. Notification arrangements with the NSW Police Force are outlined in the State Rescue Board NSW State Rescue Policy.
- d. Rescue agencies will conduct rescue of domestic small and large animals as per the State Rescue Board NSW State Rescue Policy (and may include large animal rescue of family horses and cows at a residence or property). The rescue of livestock (which includes commercial animals found on farming and breeding enterprises) will be coordinated through the Animal and Agriculture Services Functional Area.

#### 5.11 RESUPPLY

5.11.1 **Strategy**: Coordinate resupply to towns and villages isolated by flooding to minimise disruption to the community.

- a. The NSW SES will advise communities and businesses if flood predictions indicate that areas are likely to become isolated, and indicative timeframes where possible.
- b. Retailers should be advised to ensure sufficient stock is available for the duration of the flood.
- c. When isolation occurs, the NSW SES will establish loading points where retailers can instruct suppliers to deliver goods.
- d. The NSW SES will endeavour to support the delivery of mail to isolated communities but may not be able to do so according to normal Australia Post timetables.
- e. The NSW SES will assist hospitals with resupply of linen and other consumables where able.
- f. The NSW SES may request resupply assistance from supporting agencies.
- g. The NSW SES may conduct resupply operations as per the designated resupply plan for the event.
- h. Where additional supplies are required Engineering Services Functional Area be requested to coordinate the supply of goods and services in response to and recovery from the emergency.

5.11.2 **Strategy**: Coordinate resupply to rural properties isolated by flooding.

#### Actions:

- a. When requested, the NSW SES will establish a resupply schedule and coordinate the resupply for isolated rural properties.
- b. The NSW SES will provide local suppliers with designated loading points. Resupply items are to be packaged by the supplier.
- c. Isolated households unable to afford resupply items will be referred to the Welfare Services Functional Area for assistance.

#### 5.12 RETURN

5.12.1 **Strategy**: Coordinate the safe return of communities to flood affected areas when the immediate danger to life and property has passed.

#### Actions:

- a. The NSW SES Incident Controller will determine when it is safe to progressively return in consultation with the relevant Emergency Operations Controller and supporting agencies considering the ongoing risk to public safety.
- b. The NSW SES Incident Controller will specify the level of access to affected communities as the following:
  - Not suitable for access; or
  - Limited access by emergency services and response agencies; or
  - Limited access by residents and/or business operators; or
  - Full access.
- c. The NSW SES Incident Controller will issue an Advice Warning advising "Reduced Threat: Return with Caution" when the immediate danger to life and property has passed for areas.
- d. The NSW SES will facilitate the return of evacuees to their homes.

#### 5.13 END OF RESPONSE OPERATIONS

5.13.1 **Strategy**: Conclude response operations.

- a. Response operations will conclude when:
  - There is a reduced likelihood of additional flooding within the Area of Operation and flood waters have receded.
  - All requests for assistance related to the flood have been completed.
  - The need for warning and evacuation no longer exist.
  - There is no further likelihood of rescuing people.
  - Resupply is no longer required (resupply operations may occur concurrently with the recovery phase).

- Response to fire and hazardous material incidents have concluded (not including subsequent clean-up of contaminated sites).
- All affected areas have had an 'Reduced Threat: Return with Caution' issued.

#### 5.14 POST IMPACT ACTIONS

5.14.1 **Strategy**: Learnings from the event are used to inform recovery and future events.

#### Actions:

- a. The NSW SES will continue to engage with communities after significant floods through convening one or more community forums, workshops or other opportunities to provide communities a chance to provide feedback, address any concerns and provide input into the recovery process. These will typically include other agencies such as the Bureau, the Welfare Services Functional Area and Coonamble Shire Council representatives.
- b. The NSW SES will conduct After Action Reviews, at the conclusion of response operations, which will involve all stakeholders. Findings will be shared and incorporated into improved disaster resilience planning.
- c. NSW SES will provide information and data throughout the emergency response to inform community recovery. A report will be developed at the request of the SERCON at the conclusion of the response within an area. Should a response summary report be required it will include the following:
  - The emergency action plan in place at conclusion of the response emphasising any continuing activities including community meetings/ engagement activities.
  - Resources allocated to the emergency response and associated exit strategies.
  - Details of any areas or situations with potential to re-escalate the emergency.
  - A recommendation for the conclusion of the NSW SES as lead agency to transition to the NSW Reconstruction Authority as the lead agency for recovery.
  - Any actions that are incomplete or outstanding.
  - Damage assessment data and Information obtained throughout the response phase which will further support the long-term recovery of communities.
- d. The NSW SES will undertake/coordinate a comprehensive review of intelligence and plans following significant flood events.
- 5.14.2 **Strategy:** Participate in post flood data collection analysis.

**Actions:** The NSW SES works with relevant stakeholders and Coonamble Shire Council on post flood data collection analysis including review of flood intelligence where necessary.

#### 6 RECOVERY OPERATIONS

#### 6.1 INTRODUCTION

- 6.1.1 Recovery is the process of returning an affected community to its proper level of functioning after an emergency. It will generally commence simultaneously with the response phase.
- 6.1.2 Recovery operations will be initiated and conducted as outlined in the NSW State EMPLAN and as further detailed in the NSW Recovery Supporting Plan.

#### 6.2 NSW SES RECOVERY ROLE

6.2.1 **Strategy**: The NSW SES will support recovery operations and established Recovery Committees.

#### 6.2.2 **Actions**:

- a. The NSW SES will provide representation to Recovery Committees as required and may have an ongoing role in the recovery phase.
- b. The NSW SES roles on Recovery Committees may include providing information about any continuing response, guidance on mitigation strategies and general advice and assistance to the committee as a subject matter specialist and or expert.
- c. The NSW SES will provide information to the NSW Reconstruction Authority to support applications to Treasury for Natural Disaster Relief and Recovery Arrangements.
- d. The NSW SES, in conjunction with a Recovery Committee, will provide a service to support the information needs of a community immediately following a flood.
- e. The NSW SES and where required supporting agencies will assist with clean-up operations after floods, where possible when resources and personnel permit.
- f. The NSW SES may coordinate immediate relief in collaboration with SEOCON and State Emergency Recovery Controller (SERCON).

#### **7** ABBREVIATIONS

For a full list of abbreviations refer to the NSW State Flood Plan – Abbreviations.

#### 8 GLOSSARY

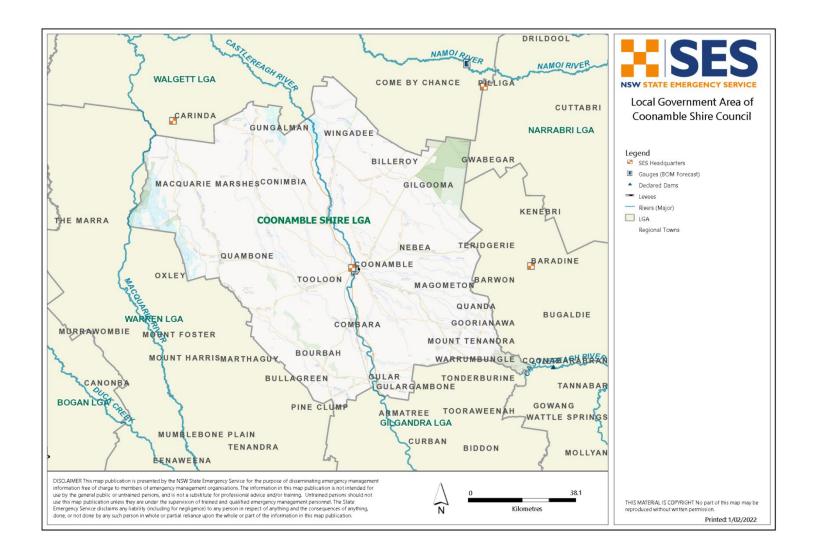
Common emergency service terminology can be found within the Australian Disaster Resilience Glossary.

Readers should refer to EMPLAN Annex 9 – Definitions.

Refer to the NSW State Flood Plan for a complete glossary of terminology used throughout this plan and within NSW SES Flood Plans.

For a full list of definitions refer to the Supporting Document - State Flood Plan Glossary <a href="https://www.ses.nsw.gov.au/media/2650/glossary.pdf">https://www.ses.nsw.gov.au/media/2650/glossary.pdf</a>

#### 9 Appendix A – Map of Coonamble Shire Council Area



#### 10 Appendix B – Roles and Responsibilities

AGENCY	RESPONSIBILITIES
NSW State Emergency	The NSW SES is the designated Combat Agency for floods, storms and tsunami
Service	and controls response operations. The NSW SES roles and responsibilities in relation to floods are outlined in the <a href="NSW State Flood Emergency Sub Plan.">NSW State Flood Emergency Sub Plan.</a>

AGENCY	RESPONSIBILITIES
Agriculture and Animal Services Functional Area	The roles and responsibilities for the Agriculture and Animal Services are outlined in the Agriculture and Animal Services Supporting Plan and NSW State Flood Plan.
Australian Government Bureau of Meteorology	The roles and responsibilities for the Australian Government Bureau of Meteorology (Bureau) are outlined in the NSW State Flood Plan.
Caravan Park Proprietor(s)	Prepare a flood emergency plan for the caravan park.
	• Ensure that owners and occupiers of movable dwellings are aware that the caravan park is flood liable by providing a written notice to occupiers taking up residence and displaying this notice and emergency management arrangement within the park.
	• Ensure that owners and occupiers of movable dwellings are aware that if they are expecting to be absent for extended periods, they should:
	<ul> <li>Provide the manager of the caravan park with a contact address and telephone number in case of an emergency.</li> <li>Leave any movable dwelling in a condition allowing it to be relocated in an emergency (i.e.: should ensure that the wheels, axles and draw bar of the caravans are not removed and are maintained in proper working order).</li> </ul>
	Ensure that occupiers are informed of Flood Information. At this time, occupiers should be advised to:
	<ul> <li>Ensure that they have spare batteries for their radios.</li> <li>Listen to a local radio station for updated flood information.</li> <li>Prepare for evacuation and movable dwelling (cabins) relocation.</li> </ul>
	Ensure that owners and occupiers of caravans are aware of what they must do to facilitate evacuation and movable dwelling relocation when flooding occurs.
	<ul> <li>Coordinate the evacuation of people and the relocation of movable dwellings when floods are rising and their return when flood waters have subsided. Movable dwellings will be relocated back to the caravan park(s) by owners or by vehicles and drivers arranged by the park managers.</li> </ul>

AGENCY	RESPONSIBILITIES
	Secure any movable dwellings that are not able to be relocated to prevent floatation.
	<ul> <li>Inform the NSW SES of the progress of evacuation and/or movable dwellings relocation operations and of any need for assistance in the conduct of these tasks.</li> </ul>
Childcare Centres and Preschools	<ul> <li>When notified of possible flooding or isolation, childcare centres and preschools should:</li> </ul>
	<ul> <li>Liaise with the NSW SES and arrange for the early release of children whose travel arrangements are likely to be disrupted by flooding and/or road closures.</li> <li>Assist with coordinating the evacuation of preschools and childcare centres.</li> </ul>
Coonamble Shire Council	Preparedness
	Establish and maintain floodplain and coastal risk management committees and ensure that key agencies are represented.
	• Develop and implement floodplain risk management plans in accordance with the NSW Government's Flood Prone Land Policy and the Floodplain Risk Management Manual.
	<ul> <li>Provide levee studies, flood studies and floodplain management studies to the NSW SES.</li> </ul>
	<ul> <li>Maintain council-owned flood warning networks and flood mitigation works.</li> </ul>
	• Participate in NSW SES-led flood emergency planning meetings, to assist in the preparation of Flood Sub Plans.
	Maintain a plant and equipment resource list for the council area.
	Contribute to community engagement activities.
	Response
	• Subject to the availability of council resources, assist the NSW SES with flood operations including:
	<ul> <li>Traffic management on council managed roads.</li> <li>Provision of assistance to the NSW SES (plant, equipment and personnel where able and requested).</li> <li>Property protection tasks including sandbagging.</li> <li>Assist with the removal of caravans from caravan parks.</li> <li>Warning and/or evacuation of residents and other people in flood liable areas.</li> <li>Provision of back-up radio communications.</li> <li>Resupply of isolated properties.</li> <li>Technical advice on the impacts of flooding.</li> </ul>

AGENCY	RESPONSIBILITIES
	<ul> <li>Close and reopen council roads (and other roads nominated by agreement with Transport for NSW) and advise the NSW SES, NSW Police Force and people who contact the council for road information.</li> <li>Assist NSW SES to provide filled sandbags and filling facilities to residents and business in areas which flooding is expected.</li> </ul>
	Assist with making facilities available for domestic pets and companion animals of evacuees during evacuations.
	Operate flood mitigation works including critical structures such as detention basins and levees and advise the NSW SES regarding their operation.
	Manage and protect council-owned infrastructure facilities during floods.
	Provide advice to the NSW SES and the Health Services Functional Area during floods about key council managed infrastructure such as sewerage treatment and water supply.
	Advise the Environmental Protection Authority of any sewerage overflow caused by flooding.
	Work with the NSW SES and NSW Department of Planning and Environment to collect flood related data during and after flood events.
	Recovery
	Provide for the management of health hazards associated with flooding including removing debris and waste.
	Ensure premises are fit and safe for reoccupation and assess any need for demolition.
	Provide services, assistance and advice to State Government in accordance with the State Recovery Plan.
Dams Safety NSW	The roles and responsibilities for Dams Safety NSW (formerly NSW Dam Safety Committee) are outlined in the NSW State Flood Plan.
Department of Defence	Arrangements for Defence Assistance to the Civil Community are detailed within the State EMPLAN (section 448).
Energy and Utilities Services	The roles and responsibilities for the Energy and Utilities Services are
Functional Area	outlined in the Energy and Utility Services Supporting Plan (EUSPLAN).  Roles and responsibilities in addition to the supporting plan are:
	Assist the NSW SES with identification of infrastructure at risk of flood
	damage where resources are available.
	Facilitate local utility service distribution providers (electricity, gas, water, wastewater) to:

AGENCY	RESPONSIBILITIES
	<ul> <li>Provide advice to the NSW SES of any need to disconnect power/gas/water/wastewater supplies or of any timetable for reconnection.</li> <li>Advise the NSW SES of any hazards from utility services during flooding and coastal erosion/inundation.</li> <li>Advise the public with regard to electrical hazards during flooding and coastal erosion/inundation, and to the availability or otherwise of the electricity supply.</li> <li>Clear or make safe any hazard caused by power lines or electricity distribution equipment.</li> <li>Reconnect customers' electrical/ gas/ water/wastewater installations, when certified safe to do so and as conditions allow.</li> <li>Assist the NSW SES to identify infrastructure at risk of flooding for incorporation into planning and intelligence.</li> </ul>
Engineering Services	The roles and responsibilities for the Engineering Services Functional Area
Functional Area	are outlined in the Engineering Services Supporting Plan and NSW State Flood Plan.
Environmental Services Functional Area	The roles and responsibilities for the Environmental Services Functional Area are outlined in the Environmental Services (ENVIROPLAN) Supporting Plan.
Floodplain Management Australia	The roles and responsibilities for Floodplain Management Australia are outlined in the NSW State Flood Plan.
Fire and Rescue NSW	The roles and responsibilities for Fire and Rescue NSW are outlined in the NSW State Flood Plan.
Forestry Corporation of NSW	The roles and responsibilities for Forestry Corporation of NSW are outlined in the NSW State Flood Plan.
Health Services Functional Area	The roles and responsibilities for the Health Services Functional Area are outlined in the Health Services (HEALTHPLAN) Supporting Plan and NSW State Flood Plan.
Local Emergency Operations Controller (LEOCON)	<ul> <li>Monitor flood operations.</li> <li>If requested, coordinate support for the NSW SES Incident Controller.</li> </ul>
Local Emergency Management Officer (LEMO)	If requested by the NSW SES Incident Controller, advise appropriate agencies and officers of the start of response operations.
Manly Hydraulics Laboratory (MHL)	The roles and responsibilities for Manly Hydraulic Laboratory are outlined in the NSW State Flood Plan.
Marine Rescue NSW	The roles and responsibilities for Marine Rescue NSW are outlined in the NSW State Flood Plan.
NSW Ambulance	The roles and responsibilities for NSW Ambulance are outlined in the Health Services (HEALTHPLAN) Supporting Plan and NSW State Flood Plan.

AGENCY	RESPONSIBILITIES
NSW Department of Education, Association of Independent Schools of NSW, and National Catholic Education Commission	The roles and responsibilities for NSW Department of Education, Association of Independent Schools of NSW, and National Catholic Education Commission are outlined in the NSW State Flood Plan.
NSW Department of Planning and Environment (Environment and Heritage Group)	The roles and responsibilities for NSW Department of Planning and Environment (Environment and Heritage Group) are outlined in the NSW State Flood Plan (referred to as DPIE EES).
NSW Department of Planning and Environment (Water)	The roles and responsibilities for NSW Department of Planning and Environment (Water) are outlined in the NSW State Flood Plan.
NSW Food Authority	The roles and responsibilities for the NSW Food Authority are outlined in the Food Safety Emergency Sub Plan.
NSW National Parks and Wildlife Services	The roles and responsibilities for NSW National Parks and Wildlife Services are outlined in the NSW State Flood Plan.
NSW Police Force	The roles and responsibilities for the NSW Police Force are outlined in the NSW State Flood Plan.
NSW Reconstruction Authority	The roles and responsibilities for the NSW Reconstruction Authority are outlined in the NSW State Flood Plan.
NSW Rural Fire Service	The roles and responsibilities for the NSW Rural Fire Service are outlined in the NSW State Flood Plan.
Owners of Declared Dams within or upstream of the LGA	The roles and responsibilities for owners of declared dams are outlined in the NSW State Flood Plan.
Public Information Services Functional Area	The roles and responsibilities for the Public Information Services Functional Area are outlined in the Public Information Services Supporting Plan and NSW State Flood. Plan.
State Emergency Operations Controller (SEOCON)	The roles and responsibilities for the SEOCON/SEOC are outlined in the NSW State Flood Plan.
Surf Life Saving NSW	The roles and responsibilities for Surf Life Saving NSW are outlined in the NSW State Flood Plan.
Telecommunications Services Functional Area	The roles and responsibilities for the Telecommunications Services Functional Area are outlined in the Telecommunications Services (TELCOPLAN) Supporting Plan.
Transport for NSW	<ul> <li>Transport for NSW coordinates information on road conditions for emergency services access.</li> <li>Transport for NSW coordinates the management of the road network across all modes of transport.</li> </ul>

AGENCY	RESPONSIBILITIES
	Transport for NSW in conjunction will assist NSW SES with the evacuation of at-risk communities by maintaining access and egress routes.
	Assist the NSW SES with the communication of flood warnings and information provision to the public through Live Traffic and Social Media according to the VMS protocols and procedures.
	Assist the NSW SES with identification of road infrastructure at risk of flooding.
Transport Services	The roles and responsibilities for the Transport Services Functional Area
Functional Area	are outlined in the Transport Services Functional Area Supporting Plan and NSW State Flood Plan.
VRA Rescue NSW	The roles and responsibilities for VRA Rescue NSW are outlined in the NSW State Flood Plan.
Water NSW	The roles and responsibilities for Water NSW are outlined in the NSW State Flood Plan.
Welfare Services Functional Area	The roles and responsibilities for the Welfare Services Functional Area are outlined in the Welfare Services Functional Area Supporting Plan and NSW State Flood Plan.

### 11 Appendix C – Community Specific Roles and Responsibilities

Community Members	Preparedness
	Understand the potential risk and impact of flooding.
	Prepare homes and property to reduce the impact of flooding.
	Understand warnings and other triggers for action and the safest actions to take in a flood.
	<ul> <li>Households, institutions and businesses develop plans to manage flood risks, sharing and practicing this with family, friends, employees and neighbours.</li> </ul>
	Have an emergency kit.
	Be involved in local emergency planning processes.
	Recovery
	<ul> <li>Assist with community clean-up if required and able to do so.</li> <li>Participate in After Action Reviews if required.</li> </ul>
Private Companies or	Grain Corp (Coonamble)
Other Organisations	Assist with the provision of;  • Sandbagging.
	Earthmoving Equipment.
	Personnel.
Service and Sporting Clubs	Coonamble Football Club
	Assist with;
	Sandbagging.
	Door Knocking.
Aboriginal Organisations or Groups	Act as the point of contact between the NSW SES and the Coonamble Aboriginal community.
	Inform the NSW SES Unit Commander about flood conditions and response needs.
	Disseminate flood information, including flood and evacuation warnings, to the Coonamble Aboriginal community.
Name of Farmer or Flood Warning Networks	Mowlma Creek Farmer Network
	Provide flood information to the NSW SES Unit Commander.
	Distribute flood warnings and flood information provided by the NSW SES Incident Controller.



## HAZARD AND RISK IN COONAMBLE SHIRE

**Volume 2 of the Coonamble Shire Local Flood Plan** 

Last Update: April 2000



#### ANNEX A - THE FLOOD THREAT

#### The River Basin

1. Most of the Coonamble Shire Council area is drained by the Castlereagh River, though the western portion lies within the catchment areas of the Macquarie River and Marthaguy Creek and a small area in the north-east drains to Baradine Creek. All these streams are within the Barwon-Darling river system. Almost all of the council area is flat and low-lying. The watercourses flow only intermittently and while most flooding tends to be of nuisance value, some very severe floods have been experienced.

#### The Castlereagh River

- 2. The Castlereagh River rises on the rugged eastern slopes of the main section of the Warrumbungle Ranges, in the Coonabarabran and Gilgandra Council areas, at elevations of over 1,000 metres. The river flows initially in an easterly and then southerly direction though broken, hilly country, but near the town of Gilgandra the relief of the valley flattens considerably into a broad, flat plain. Major tributaries in the upper reaches include Baby, Terrawinda and Ulinda creeks (in the Coonabarabran Council area) and Binnia, Butheroo and Merrygoen creeks (in the Coolah Council area). In the Gilgandra Council area the principal tributaries are Yarragrin, Wallumburrawang (Breelong), Terrabile, Ranters, Tooraweenah and Gulargambone creeks, the last of which enters the river within the Coonamble Council area.
- 3. The river system within the Coonamble Council area is complex, with numerous tributary and effluent creeks including Baronne, Warrena, Oaky, Magometon, Noonbar, Gunyilla, Merrimbah, Teridgerie (Terembowa), Nedgera, Eurimie and Mowlma creeks. Except for Eurimie, Nedgera and Mowmla creeks, these streams rise on the western slopes of the Warrumbungle Ranges and drain extensive lowland areas before joining the main river.
- 4. The main effluent creeks are Nedgera Creek (which takes overflows from the main river upstream of the town of Coonamble), Eurimie Creek (an anabranch which leaves the river at the town) and Mowlma Creek which leaves below it. All are complex watercourses with their own tributary and anabranch channels. Flood waters also flow east from the river at `the 9 Mile', 14 km upstream of Coonamble, and join Warrena Creek. Warrena Creek enters the river at Coonamble itself.

#### Marthaguy and Other Creeks and The Macquarie River

5. Marthaguy Creek rises near Balladoran in the Gilgandra Council area and flows north beside the Newell Highway, west beside the Oxley Highway and then north again, roughly parallel to the Warren-Quambone-Carinda road. Throughout its course this creek and its tributaries (Merrigal, Bullagreen, Wemabung and Boothaguy creeks) flow

through near-flat territory. The Marthaguy joins the Macquarie River in the Walgett Council area. For a short reach the Macquarie River forms the boundary of the Coonamble Council area with the Warren Council area. In this area the river flows through the Macquarie Marshes, a large wetland area.

6. The far north-eastern portion of the council area is drained by Baradine Creek, a tributary of the Namoi River.

#### **Weather Systems and Flooding**

- 7. Most of the council area averages between 450 and 500 mm of rain annually, but totals rise to more than 700 mm outside the council area in the Warrumbungle Ranges, which produces an important orographic effect. The summer months, particularly January and February, tend to be the wettest, with the period between November and March regularly receiving more than half the annual rainfall. The majority of the floods to have reached or exceeded the 'moderate flood' level of 4.9 metres at Coonamble since 1950 have occurred in the months between October and April. Heavy rains can occur at other times of year, however.
- 8. Flooding in the council area usually results from one of three main mechanisms. These are:
  - a. **Cyclonic Depressions.** Cylclonic depressions forming troughs extending from northern Australia and directing northerly streams of moist, unstable air into northern and central western NSW. Such systems, which occur during the warmer months, frequently produce intense short-period rainfalls leading to flooding. The flood of February 1955 was of this origin, as were most of the other serious flood events on the Castlereagh River.
  - b. **Low-pressure Troughs.** Well-developed low-pressure troughs associated with depressions well to the south of the council area. Sequences of such troughs can produce high rainfall totals over a period of weeks, with falls being less intense than those experienced in summer and the floods generally being less severe. Such sequences tend to occur in the winter months.
  - c. Convective Thunderstorms. High-intensity, short-duration convective thunderstorms bringing very heavy rain and causing local runoff, 'flash' flooding on minor tributaries and the surcharging of artificial drainage systems in built-up areas. Such storms are largely confined to the late spring, summer and early autumn months and do not create main-stream flooding.

#### **Characteristics of Flooding**

- 9. Upstream of the town of Gilgandra the Castlereagh River is typified by rapid rises and falls, relatively short warning times when flooding occurs, and relatively high-velocity flood flows.
- 10. Downstream of Gilgandra the grade of the stream flattens considerably and there is a progressive reduction in the waterway area of the main channel, especially downstream of Gulargambone, with a consequent lowering of flow velocities and channel capacity.

On this reach the river is 'perched', its banks being higher in elevation than the adjacent land. Warning times are much longer.

- 11. Within the Coonamble Shire area the river is `perched', the natural levees on its banks being higher in elevation than the adjacent land. Overbank flows inundate very large areas and contribute to flooding on Nedgera, Warrena, Marthaguy and other creeks. Flood waters in Warrena Creek and other creeks can also back up because of high flows on the main river. Equally, the Barwon River can hold up flows on the Castlereagh, lengthening the duration of inundation in the northern part of the council area.
- 12. In significant flood events within the council area, the northern portion is virtually completely flood-bound with all tributary streams and anabranches active. Durations of inundation are long, and flows travel very slowly. Inundation is usually shallow, and the direction of overland flow can be strongly influenced by the condition of crops and pastures, fence lines and local flood mitigation works carried out by farmers. A common occurrence if there is a vegetation build-up south of Coonamble is for the river to break out at 'the 9 Mile' and flow to Warrena Creek. When there is less grass, the break is at Eurimie Creek near Pages Terrace within Coonamble itself.
- 13. Flooding at Gulargambone can occur from the Castlereagh River and/or from Gulargambone and Muramain creeks.
- 14. Flow times on the river from Binnaway to Gilgandra are generally of the order of 25 hours and from Gilgandra to Coonamble about 20-26 hours. Flows from Coonamble to the river's confluence with the Macquarie River take about 3-7 days. Particularly in the more severe events, however, flow times could be markedly **shorter** than these. It has been estimated that in the 1% AEP (Annual Exceedance Probability) event, flow times from Binnaway to Gilgandra could be about 8 hours. In such a flood, travel times below Gilgandra would also be much faster than is normally experienced.

#### **Flood History**

- 15. The highest floods recorded at Coonamble since European settlement were in 1950 and 1955, when both sides of the town suffered severe inundation. Other significant floods occurred in 1874, 1890, 1920, 1921, 1969, 1971, 1973, 1974, 1976 and 1990. Note that there were several significant events between 1969 and 1976 but that there has been little flooding since; largely because of drought conditions, which applied for much of the 1980s and 1990s. However, a significant flood did occur in 1990.
- 16. The table on the next page summarises the available flood information, as estimated for the present Castlereagh River gauge at Coonamble for the 1950 and 1955 events and those since 1960 which exceeded the moderate flood level of 4.9m. Some data for the town's Warrena Creek gauge is also provided. The correlation of peak heights at the two gauges is not perfect, but in general terms it can be assumed that the more serious the flooding is on the Castlereagh River the more serious it will be on Warrena Creek.

#### Significant Floods at Coonamble

Event	Castlereagh River		AEP (%)	ARI (years)	Warrena Creek Peak Height (metres)
	Peak Height (metres)	Discharge (ML/day)			
1950 (Nov)	5.71	NA	0.5	200	NA
1955 (Feb)	5.65	NA	1.3	76	NA
1969 (Oct)	5.48	69,200	6.5	15	3.68
1971 (Feb)	5.53	73,900	3.3	30	4.26
1973 (Oct)	5.31	63,900	12.8	8	4.04
1974 (Jan)	5.44	69,800	9.7	10	4.72
1976 (Jan)	4.95	52,600	19.2	5	3.92
1990 (Apr)	5.10	58,900	16.0	6	NA
1998 (Jul)	5.29	Not known	12.8	8	NA

Figure 1 - Significant Floods Recorded At Coonamble

**Note:** A flood of a particular AEP has that percentage chance of occurring in any one year. In addition, the percentage value corresponds with the Average Recurrence Interval (ARI) which is the **average** length of time which is estimated to elapse between floods of a given magnitude or hither. A 1% AEP flood, for example, will be experienced **on average** once in a 100-year period. In a **particular** 100-year period it could occur on several occasions or not at all.

#### Flood Mitigation

- 17. The most significant flood mitigation device in the council area is the levee, which protects the eastern portion of Coonamble from flooding. This structure, which was completed in 1976, is seven km long and constitutes a near-complete ring along the eastern bank of the river and the western bank of the creek. It was constructed of earth, with two reinforced concrete retaining wall sections, to a design level defined by a combination of the 1974 flood on Warrena Creek and the 1955 flood on the main river plus 0.6 metres freeboard. The levee is up to 5m in height above natural ground level, grading into the high bank of the river between the Council Chambers and a point just north of Taloon Street.
- 18. Since construction, the levee has suffered some settlement, cracks have developed in its upper portions, some slopes have eroded and evidence has accumulated of poor compaction in the lower levels. The consequence of these defects is that the levee might not hold out those floods against which it was designed to provide protection.

- 19. A recent audit suggests that the levee could fail at a flood height well below the existing crest level. The Imminent Failure Level (IFL) could be reached in a flood rising to about 5.4 metres at the Castlereagh Bridge gauge and 4.4 metres on the Warrena Creek gauge. Such a flood is believed to have an AEP of approximately 13% and represents the once-in-9-years flood event on the Castlereagh River at Coonamble. It is possible that any failure would occur at **higher** levels than those quoted here. However, it appears to be unlikely that the levee would remain intact until a flood reached the heights at which overtopping occurred (5.9 metres on the Castlereagh Bridge gauge and 5.2 metres on the Warrena Creek gauge). Were overtopping to occur from the Castlereagh River, it would be expected to begin in the vicinity of the hospital.
- 20. During the flood of July/August 1998, the levee experienced significant seepage at the corner of Macquarie and Castlereagh Streets, which caused about 5cm slumpage. Nine aged occupants of the nearby Towrie Units were evacuated as a precaution and temporary repairs were done using 450 tonnes of road base and gravel. Levels were taken to determine the levee freeboard during the flood and the results are shown in the table below:

Location	RL	Description	Above Peak
Caravan Park	181.700	Station 38	
	180.955	Flood Peak (5.3m)	
	181.846	Top of Levee	0.891m
Advance Energy	181.282	Station 50	
	180.664	Flood Peak	
	181.350	Top of Levee	0.686m
Tooloon Street West	181.300	Station 56	
	180.217	Flood Peak	
	180.932	Top of Levee	0.715m
Castlereagh Street North	180.293	Station 72	
	180.077	End of Concrete Levee	0.762m
	179.315	Flood Peak	
	179.862	Top Levee between gates	0.547m
	179.507	Floor level of Towrie Units	0.192m
Tuggy Pennell's	179.854	Station 81	

Location	RL	Description	Above Peak
	179.069	Flood Peak	
	179.850	Top of Levee	0.781m
Namoi Street North	179.953	Station 1	
	178.618	Flood Peak	
	179.436	Top of Levee	0.818m
Nebea Street East	179.854	Station 81	
	179.850	Top of Levee	
	178.924	Flood Peak at Grays	0.926m
	179.306	Floor level at Grays	0.544m
	178.811	Flood Peak at Pickerings	1.039m
	179.055	Floor level at Pickerings	0.795m

Figure 2 - Jul/Aug 98 Flood Peak - Levee Height Comparisons

21. Work has begun to design appropriate remedial action for the levee, but such action will take some time to complete once work actually begins.

#### **Extreme Floods**

- 22. The worst floods ever experienced in the Coonamble Council area in living memory should not be regarded as the most severe which can occur there. **Worse floods than have been seen by present residents are possible.** Such floods will be rare, but they may reach **considerably** greater heights than have previously been experienced. In addition, they would be likely to be both faster to rise and more dangerous in terms of depth and velocity than previous events.
- 23. No calculation of the gauge heights that would be reached by floods of PMF (Probable Maximum Flood) proportions has been made for locations within the council area.

ANNEX B TO COONAMBLE FLOOD PLAN DATED JANUARY 2000

## ANNEX B - EFFECTS OF FLOODING ON THE COMMUNITY

#### General

1. Substantial areas within the Coonamble Council area can be affected by flooding, whether by being cut off from road access or by inundation of property or buildings. Much of the flooding is of nuisance value, but on occasions floods can be severe enough to cause substantial damage to farm operations (including crop, stock and fence losses) and to necessitate evacuation from dwellings. Many roads can be cut, including in the more severe events the Castlereagh Highway, and especially in the north of the council area farm households could be isolated for some days or weeks. Flood impacts on Coonamble, the villages and the road network are described below.

#### Coonamble

- 2. Coonamble (1996 census population 2,754) was periodically flooded severely from the Castlereagh River and Warrena Creek before the building of its protective levee in 1976. The eastern portion was inundated from Warrena Creek, which carries flows from its own large catchment as well as water from the break-out of the main river 14 kilometres south of the town. About 100 dwellings were affected in 1974, and flood depths of up to 1.2 metres were experienced near Warrena Creek. In 1950 and 1955, about half of the town was inundated, some dwellings to depths of more than a metre over their floorboards.
- 3. The system of concrete and earthen levees now provides some protection of the built-up area, which was inundated in the past. Were overtopping or failure of this levee to occur, the consequences would be very severe flooding, probably with high velocities near any overtopping or failure points. All of eastern Coonamble would be inundated. Much of the western portion of the town could be inundated as well.
- 4. The western side of the town has no levee, but the river has come close to breaking out opposite the hospital near Reid Street and earthen banks have had to be built at low points on the banks to contain it.
- 5. Coonamble's airport has not yet been flooded but could be flood liable in extreme events. Access from the town, two kilometres to the north-east, could be lost as a result of break-outs in such floods but the all-weather road normally allows unrestricted access. The airport has an all-weather (hard-topped) strip.
- 6. Flooding to the east of the town can extend for three kilometres.

- 7. Some of the older farmhouses outside the town have their own levees but the newer ones tend not to have such protection. South of the town a number of new dwellings on 100-acre blocks and between the Castlereagh River and the Castlereagh Highway are flood liable and may have to be sandbagged.
- 8. **Flood Intelligence Coonamble Gauge.** The Coonamble SES maintains a <u>detailed</u> flood intelligence card for the Coonamble gauge (AWRC Number 420005). An <u>abridged</u> version of the card giving a brief description of the possible effects that may occur at various heights is shown below:

Height (Metres)	Consequences
1.00	Coonamble Shire Council to close stormwater floodgate No 2.
1.5	Coonamble Shire Council to close stormwater floodgate No 6.
	Mowlma Creek commences to flow out of the Castlereagh River.
2.0	Extensive rural inundation of low-lying areas along Mowlma Creek. Issue warning to "Beanbah", "Dumossa" and "Trewilga" to move livestock and pumps.
2.5	Coonamble Shire Council to close stormwater floodgates No 1, 4, 5 and 7.
3.0	Coonamble Shire Council to close stormwater floodgate No 3.
3.5	Castlereagh River breaks out at the Tahrone Bridge (about 31 km NNW of
	Coonamble). This normally puts about 0.25 metres of water over the
	Wingadee Road. This is an all-weather road and usually remains "Open with extreme caution".
4.0	Water from Mowlma Creek crosses the Beanbah road (SR15) near the Bean
	Bah turn-off. This is an access road for property owners and if it closes there
	are no alternative routes.
4.27	Peak height 7 April 1999.
4.45	Castlereagh River breaks out at "the Cutting" and commences to flow into Eurimie Creek and over the Pages Terrace causeway.
4.50	Water continues to flow from the break-out at "the Cutting" and flows towards the Wingadee Street causeway. The Pages Terrace and Wingadee Street causeways may close at any time after this height.
5.00	Water breaks out of the Castlereagh River at the River end of Nebea Street and commences to flow west along Nebea Street. It then spreads out and commences to flow towards the western end of Yuma Street.
5.10	Water starts to break out over the east and west banks of the Castlereagh River about 14 km south of Coonamble at "Nine Pines".
	Water from the east bank break-out flows across the Castlereagh Hwy then
	cross country towards the north into the Warrana Creek and spreads cross a
	wide area. Livestock and machinery will need to be moved from this area.
	Castlereagh Hwy may close at anytime from this height due to debris across
	the road and the wide expanse of flood water which makes the ill defined.
	The hwy normally remains open to emergency vehicles.
	Water from the western break-out flows cross country in a north-west

Height (Metres)	Consequences
	direction and joins up with local creeks and runoff to inundates large expanses of land in the western part of the shire.
	The Castlereagh Hwy to Walgett is normally closed to light traffic at several crossings between 18 km and 50 km north of Coonamble.
	Coonamble to Carinda and Coonamble to Baradine roads may close at any
	height from this point on.
5.29	Peak height 29 July 1998.
5.40	Peak height 9 January 1974. During this flood, approximately 100 families were affected by flooding and many needed to be evacuated. The main area affected was the eastern portion of town in the areas closest to the Warrana Creek where flood depths reached 1.2 metres. This was before the construction of the current levee and the Warrana Creek Weir.
	Estimated IFL of the levee.
5.50	About 25 houses in the area east of Limerick Street and to the north as far as Conimbia Creek at risk.
5.53	Peak height 2 February 1971.
5.65	Peak height 25 February 1955.
5.90	Crest height of the levee. Overtopping should occur vicinity of the hospital.

Figure 3 - Flood Intelligence for Coonamble

#### Gulargambone

- 9. Gulargambone (1996 census population 490) was flooded severely in 1955, three quarters of the town being inundated, but the village has not been inundated on other occasions. Flood depths of up to a metre were recorded in 1955, with most streets inundated and extensive damage between Yoolundry Street and the Castlereagh River including the main street (Bourbah Street). Areas east of Mendooran Street were also flooded. About 50 families had to be evacuated to the school.
- 10. **Flood Intelligence Gulargambone Gauge.** The Coonamble SES maintains a <u>detailed</u> flood intelligence card for the Coonamble gauge (AWRC Number 10168). An <u>abridged</u> version of the card giving a brief description of the possible effects that may occur at various heights is shown below:

Height	Consequences
(Metres)	
2.10	22 March 1999. The Gulargambone Creek backed up and put water over the
	deck of the 'Railway Bridge' closing the Gulargambone to Quambone road.
3.40	Road to the Gulargambone Railway Station closed.
3.51	Peak height 1976.
5.05	Peak height 1974.
5.79	Peak height 1971.
7.00	Water may break out near Bourban Street and start to inundate the area
	between the Castlereagh River and Yoolundry Street.

Height	Consequences		
(Metres)			
8.50	Peak height 1955. The flood of 1955 caused extensive damages in Gulargambone, particularly in the area between Yoolundry Street and the		
	Castlereagh River on the western side where houses were inundated by depths up to one metre. Streets affected were Yoolundry, Coonamble, Armitree, Yalcogrin, Munnell and Bourban.		

Figure 4 - Flood Intelligence for Gulargambone

#### Quambone

11. Quambone can be affected by Merri Merri Creek and a local tributary depression, though usually for only short periods. A small number of houses could be inundated in severe events.

#### **Rural Areas**

12. Downstream of Gilgandra, the country flattens out and much of the Castlereagh River is perched, which means that overbank flows are able to inundate large tracts of land. During major flooding, much of the rural land within the Coonamble Shire is inundated and a large number of properties are isolated; particularly on the western side of the river. Flooding upstream of Coonamble can last for up to 3 or 4 days whereas flood waters can remain for considerably longer periods downstream. Even though the rural residents are generally accustomed to the conditions associated with flooding and prepare for it, they can be caught off guard due to the reduced warning times and the fact that many of the dirt roads close at short notice. Therefore, there are potential resupply problems as well as the need to affect medical evacuations or respond to medical emergencies on isolated properties during periods of flooding. Furthermore, there are also problems associated with the need for livestock removal, fodder distribution and the health of stranded livestock. Other problems include the scouring of pastures and the degradation of the road system. The Castlereagh Valley is shown in Map 2.

#### **Transport Disruption and Isolation**

13. **Roads.** Most roads within the council area, including the Castlereagh Highway, are prone to closure as a result of flooding. Closure often lasts for two to three days or, in severe events, a week, and in past events severe damage has been caused rendering roads impassable for some time after the flood. The following table indicates which roads can be affected.

Road	Usual Point(s) of Closure	Comments/Implications	
Coonamble – Gilgandra (Castlereagh Highway)	Various, including Gulargambone Creek and "The 9 Mile", 14 km south of Coonamble.	Back-up from the river to Gulargambone Creek can close bridge, and flows from minor creeks can cause short-term closures.	

Road	Usual Point(s) of Closure	Comments/Implications
		A flood more frequent than the 20% AEP event could cut the highway at "The 9 Mile".
Coonamble-Walgett (Castlereagh Hwy)	Many; most stretches can be inundated	Coonamble cut off from Walgett for several days (weeks if Walgett has severe flooding).
Coonamble-Pilliga	Teridgerie Creek crossing	Black soil sections can be closed by heavy rain.
Coonamble-Quambone	Several gully and floodway crossings, including Euronne Gully (10 km west of Coonamble).	Black soil sections closed by heavy rain. When this road and the Quambone- Carinda road are closed, the only access to Quambone is via Warren.
Coonamble-Carinda	Eurimie Creek, 6 km NW of Coonamble, and other locations.	Black soil road.
Coonamble-Baradine	Teridgerie Creek bridge.	All weather road; has had 300 mm water covering it and been closed for 2 days.
Gulargambone-Quambone road	At low-level bridge over Castlereagh River at Gulargambone.	Black soil road.
Quambone-Carinda	Various low points.	Black soil road; can be cut for long periods.
Castlereagh Highway- Come by Chance	Various low points.	Black soil road; can be cut for long periods.

Figure 5 - Road Closures

14. **Railway.** The Coonamble-Dubbo railway line has frequently been subject to closure as a result of washaways during floods. This happened in 1955, 1971 and 1974. The railway line cannot be guaranteed to last longer than the main roads, and if the roads are closed air resupply is likely to be necessary.



# SES RESPONSE ARRANGEMENTS FOR COONAMBLE SHIRE

**Volume 3 of the Coonamble Shire Local Flood Plan** 

Last Update: April 2000



ANNEX C TO COONAMBLE FLOOD PLAN DATED JANUARY 2000

# ANNEX C - GAUGES MONITORED BY COONAMBLE SES

Station	AWRC	Stream	Flood	Classif	fication	Type
	No		Min	Mod	Maj	
Mendooran *	420004	Castlereagh River	2.4	5.0	9.0	Manual
Gilgandra *	420001	Castlereagh River	5.0	6.4	7.9	Manual
Gulargambone	10168	Castlereagh River				Manual
Coonamble *	420005	Castlereagh River	N/A	4.9	5.2	Manual
Near Coonamble	420014	Magometon Creek				Manual
Warrana	420015	Warrena Creek				Telemetric
Collie	10097	Marthaguy Creek				Manual
Quambone	421062	Marthaguy Creek				Manual

#### Note:

1. The Bureau of Meteorology provides flood warnings for the gauges marked with an asterisk (\*).

ANNEX D TO COONAMBLE FLOOD PLAN DATED JANUARY 2000

# ANNEX D - DISSEMINATION OF SES FLOOD BULLETINS

The Macquarie SES Division Headquarters distributes SES Flood Bulletins and other flood related information (including Flood Warnings) to the following regional media outlets:

#### **Television Stations:**

Station	Location
WIN	Dubbo
Prime	Dubbo
Capital	Dubbo
ABC	Sydney

#### **Radio Stations:**

Station	Location
2DU	Dubbo
NOW FM	Moree
2WEB	Bourke
2 WAR FM	Coonamble
2 CR (ABC)	Orange

#### **Newspapers:**

Name	Location
Coonamble Times	Coonamble
Daily Liberal	Dubbo

#### **Other Agencies:**

- Orana Police District Headquarters; Dubbo.
- Australia Post; Dubbo.
- RTA; Dubbo.
- NRMA; Dubbo.
- NSW Ambulance Coordination Centre; Dubbo.
- NSW Fire Brigades; Dubbo.

- Rural Fire Service; Castlereagh Region, Narrabri.
- Coonamble Shire Council.
- Coonamble SES.

#### **Local Dissemination**

The Coonamble SES Local Controller arranges further dissemination of SES Flood Bulletins to other organisations within the council area (including agencies listed in Part 1 of this plan) and provides additional information on flooding.

### ANNEX E - EVACUATION ARRANGEMENTS FOR THE COONAMBLE SHIRE

#### **Situation**

- 1. For most floods in the Coonamble Shire, no evacuations are necessary. However, serious floods may require some evacuations from Coonamble, Gulargambone, Quambone or outlying rural properties.
- 2. It is possible that Gulargambone could require significant evacuations as the result of a major flood from between 7.0 and 8.5 metres on the Gulargambone gauge. In an extreme event, it is possible that Gulargambone would have to be evacuated in its entirety.
- 3. The biggest threat within the Coonamble Shire is the failure of the protective levee at Coonamble. Should it fail or be overtopped, a large part of the south-eastern side of town could be at risk of being inundated and up to 100 dwellings may have to be evacuated.
- 4. At river heights of 5.5 metres and above; the area bounded by the Castlereagh River, Limerick Street and Conimbia Street would be progressively inundated and up to 25 dwellings may have to be evacuated.

#### Aim

5. The aim of this document is to detail the evacuation arrangements during flooding within the Coonamble Shire.

#### Execution

#### **General Outline**

- 6. During floods, evacuations will be controlled by the Coonamble SES Local Controller (or, at the Local Controller's request, the LEOCON) and conducted in four phases:
  - a. Phase 1 Warning.
  - b. Phase 2 Withdrawal.
  - c. Phase 3 Shelter.
  - d. Phase 4 Return.

#### The Decision to Evacuate

- 7. **Responsibility.** Responsibility for issuing any general evacuation order during flooding rests with the Coonamble SES Local Controller who exercises his/her authority in accordance with Section 22(1) of The State Emergency Service Act 1989. However, the decision to evacuate would normally be taken after consultation with the:
  - a. Coonamble LEOCON;
  - b. Coonamble LEMO;
  - c. Director of Works Services, Coonamble;
  - d. Mayor, Coonamble Shire; and
  - e. Macquarie SES Division Controller.
- 8. Where possible, evacuation will be carried out before inundation occurs.
- 9. **Self-Evacuation.** Some residents may make their own decision to evacuate earlier and move to alternative accommodation using their own transport. It is important that such evacuees inform the NSW Police or the SES of their evacuation and their temporary address.

#### 10. Evacuation Triggers.

- a. Levee Failure Coonamble. The most likely event to trigger the decision to undertake a large-scale evacuation in Coonamble would be evidence of a possible failure or overtopping of the levee. As the result of a recent levee audit, the IFL of the levee was set at 5.4 metres (in relation to the Coonamble gauge) and 4.4 metres on the Coonamble (Warrena Creek) gauge. During the flood of August 1998 the levee leaked before the river peaked at 5.3 metres. The main leakage occurred at the corner of Castlereagh and Macquarie Streets. Several aged occupants of the nearby Towrie Units were evacuated as a precaution and the Coonamble Shire Council carried out temporary repairs. The Coonamble levee is shown in Map 3.
- b. **Over the Bank Flooding Coonamble.** At about 5.5 metres and above, approximately 25 houses located in the area bounded by Calga, Limerick and Conimbia Streets in Coonamble may experience over the floor flooding and have to be evacuated.
- c. Over the Bank Flooding Gulargambone. The most likely event to cause a large-scale evacuation in Gulargambone would be when the Castlereagh River reaches 7.0 metres at the Gulargambone gauge. From this height to 8.5 metres (1955) a number of houses in the area between the Castlereagh River and Yoolundry Street may be inundated. In 1955 about 50 families had to be evacuated to the school. The area at risk of flooding is shown in Map 4.

#### **Phase 1 - Warning**

- 11. **Evacuation Warnings.** On the receipt of flood warnings predicting peak heights of 5.0 metres and above at the Coonamble gauge; the Coonamble SES Local Controller will consult with the aforementioned appointments to determine the level of the threat and the need to consider evacuations. As soon as possible after the decision to evacuate is made, the Coonamble SES Local Controller will issue evacuation warnings to the 'at risk' residents. The warnings will be as accurate as possible and contain a high level of certainty about the events taking place and the protective measures people should take.
- 12. **Content of Evacuation Warnings.** A guide to the content of evacuation warning messages is at Annex F. These are disseminated via:
  - a. public address systems from Police and other emergency service vehicles,
  - b. door-knocks by Police and other emergency service personnel,
  - c. telephone,
  - d. two-way radio,
  - e. direct access to Radio 2 WAR,
  - f. the radio and TV stations listed in Annex D, and/or
  - g. SES Flood Bulletins.

#### Phase 2 – Withdrawal

- 13. **Introduction.** Withdrawal involves the actual removal of the community/individuals from dangerous or potentially dangerous areas to safer areas.
- 14. **Control.** Evacuations will be controlled by the SES Local Controller (or, at the Local Controller's request, the LEOCON) and conducted by SES, Police, Council, Rural Fire Service and NSW Fire Brigade personnel.
- 15. **Movement.** Evacuees are to be moved using their own transport where possible. The Coonamble SES Local Controller will arrange transport for those people without their own vehicles. Bus companies are listed in the Coonamble DISPLAN.
- 16. **Evacuation Routes.** As a leveed town, Coonamble is in a situation in which the normal evacuation routes are usually lost before the threat of levee failure or overtopping is apparent. Coonamble can become completely isolated by road when the river reaches 5.1 metres on the Coonamble gauge whereas the IFL of the Coonamble levee is currently set at 5.4 metres. In the unlikely event that the levee was to fail, about 100 (plus) houses in the south-eastern side of town would have to be initially evacuated to evacuation centres established in the non-affected areas of the town.

#### 17. Large Scale Evacuations.

- a. **Gulargambone and Quambone.** Arrangements for large-scale evacuations from Gulargambone and Quambone will depend upon the situation at Coonamble. Normally, evacuees from these areas will be evacuated into Coonamble. Because of road closures this will have to be conducted utilising helicopters. In the event that Coonamble is unable to accommodate the evacuees, they will be staged into Coonamble then moved by fixed wing aircraft to Dubbo.
- b. **Coonamble.** In the unlikely event that large-scale evacuations from Coonamble were required, evacuees would be staged through evacuation centres and moved to Dubbo by fixed wing aircraft.
- 18. **Special Needs Groups.** Special needs groups are listed in the Coonamble DISPLAN.
- 19. **Doorknocking.** Field teams conducting doorknocks will record and report back the following information back to the Operations Centre:
  - a. Addresses and locations of houses doorknocked and/or evacuated.
  - b. The number of occupants.
  - c. Details of support required (such as transport, medical evacuation, assistance to secure house and/or property and raise or move belongings).
  - d. Details of residents who refuse to comply with the evacuation order.
- 20. **Refusal to Evacuate.** Field teams should not waste time dealing with people who are reluctant or refuse to comply with the evacuation order. These cases should be referred to the LEOCON who will arrange for Police to visit them.
- 21. **Security.** The NSW Police will provide security for evacuated premises.
- 22. Helicopter Landing Pads (LPs).
  - a. Coonamble. Besides the airport, suitable LPs in Coonamble are at the:
    - showground (S30° 58' 05.1" E148° 23' 13.1");
    - sportsground (S30° 57' 37.9" E148° 23' 30.5"); and
    - racecourse cricket ground (S30° 57' 01.0" E148o 22' 19.5").
- 23. **Airport.** Access to the Coonamble airport remains open during all but extreme floods. The airport is capable of handling commercial and military aircraft up to, and including, the Hercules C130.

#### Phase 3 - Shelter

- 24. **Evacuation Centres.** The purpose of evacuation centres is to meet the immediate needs of victims. Evacuees will be advised to go to or be taken to the nearest accessible evacuation centre, which may be initially be established at the direction of the Coonamble SES Local Controller but managed as soon as possible by the Department of Community Services. Any of the following sites may be used as evacuation centres:
  - a. Coonamble:
    - Coonamble Public School, Bertram Street.
    - St. Bernard's School, Tooloon Street.
    - Coonamble High School, Aberford Street.
    - Coonamble RSL Club, Aberford Street.
    - Coonamble Bowling Club, Aberford Street.
    - Coonamble Golf Club, Caswell Street Coonamble.
  - b. Gulargambone:
    - Gulargambone Central School, Yalcogrin Street.
    - Gulargambone Memorial Hall, Bourbah Street.
    - Gulargambone Sportsground, Munnell Street.
    - Gulargambone Bowling Club, Coonamble Street.
    - Gulargambone Golf Club, Muraiman Street.
  - c. Ouambone:
    - Quambone Public School, Mungie Street.
    - Quambone Memorial Hall, Mungie Street.
    - Quambone Medical Centre.
- 25. **Facilities Available.** Details of the capacities, contacts and facilities available at each of the above centres are listed in the Coonamble DISPLAN.
- 26. Action on Arrival. On arrival, evacuees will be:
  - a. registered as a disaster victim;
  - b. medically checked, if necessary; and

- c. provided with their immediate welfare needs.
- 27. **Registration.** NSW Police will ensure that all evacuees are registered on arrival at the designated evacuation centres and details of the registrations are to be sent to the Orana Police District Headquarters by the quickest means available.
- 28. **Support Provided At Evacuation Centres.** The expected duration of the evacuation will dictate the need for and level of facilities and support at the evacuation centres. If evacuations are expected to be of a short duration, evacuees may be provided with short-term accommodation at the centres. However, if they are expected to last for longer than 24 hours, evacuees will be encouraged to go to alternative accommodation or stay with friends where possible. Alternatively, accommodation will be arranged for them in hotels, motels or by billetting.

#### Phase 4 - Return

- 29. Once it is considered safe to do so, the Coonamble SES Local Controller will authorise the return of evacuees to their normal or alternative place of residence. This decision will be made after consulting with the LEOCON, Director of Works, LEMO, Mayor, DOCS and Macquarie SES Division Controller.
- 30. The return will be controlled by the Coonamble SES Local Controller and may be conducted, at his/her request, by DOCS (DWS).

## ANNEX F - TEMPLATE EVACUATION WARNING MESSAGE FOR COONAMBLE

## WITH THE STIEST OF COOT WINTED

#### **Authorised By:**

**Date/Time of Issue:** 

The Bureau of Meteorology has predicted a flood level of [ ] metres at Coonamble at [ ] (time). This means that [ ] (describe areas) may be inundated.

It is recommended that you prepare to evacuate/for evacuation within the next [ ] hours. If you leave it later, the roads may be congested or closed.

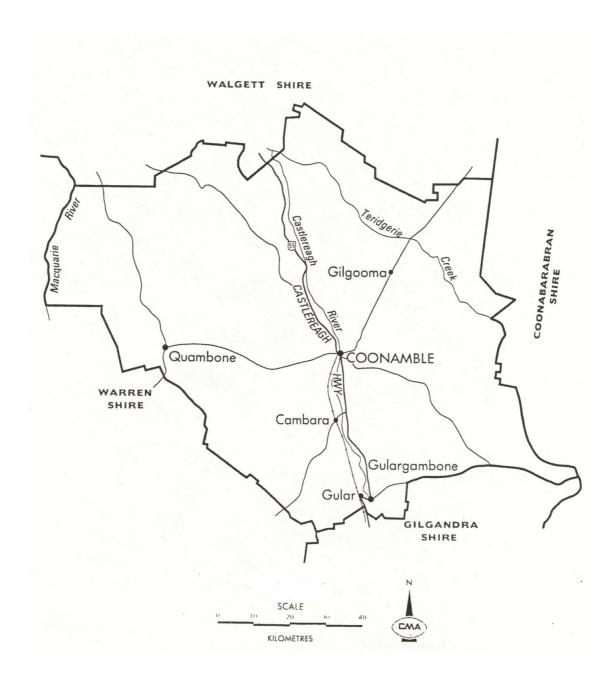
To prepare for evacuation, you should:

- Raise belongings by placing them on tables, beds and benches. Put electrical items on top. Some items may be able to be placed in ceilings.
- Gather medicines, personal and financial documents and mementos together to take with you.
- Listen to radio stations [ ] for further information and to confirm this warning.
- If possible, check to see whether your neighbours need help.
- Make arrangements for care of pets or companion animals.

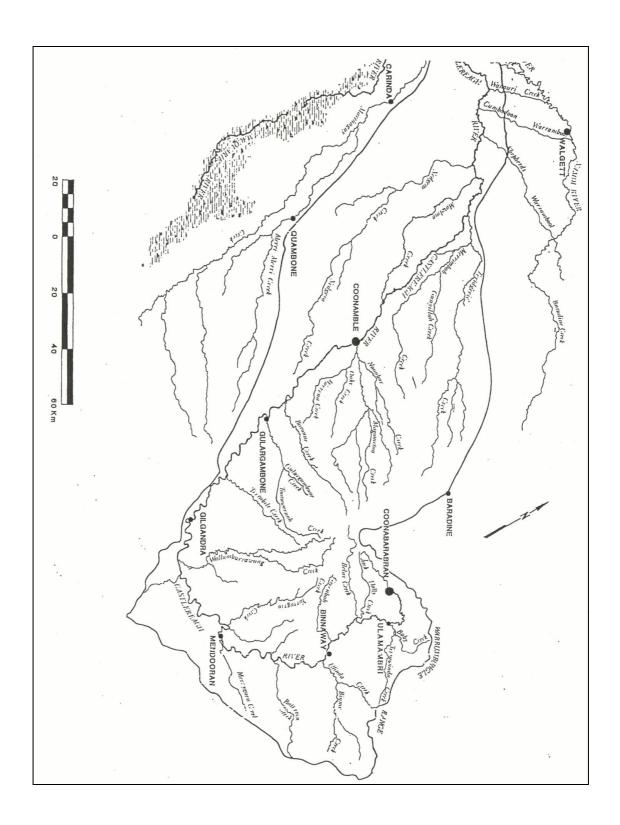
#### If evacuation is necessary:

- Turn off the electricity, gas and water.
- Take three days' supply of clothes with you.
- If you have a car, drive to the evacuation centre at [ ] (specify route if appropriate).
- If you don't have a car, buses will operate on normal routes. Special transport can also be provided on request if necessary, telephone [ ].
- So that you can be accounted for, it is important that you register at the evacuation centre.
- After registering, you may go to the house of a friend or relative. Alternatively, accommodation will be arranged for you.
- The Police will provide security for your property while you are away.

## MAP 1 – COONAMBLE SHIRE



## MAP 2 – THE CASTLEREAGH VALLEY



#### MAP 3 - COONAMBLE LEVEE



# MAP 4 – APPROXIMATE FLOOD EXTENT AT GULARGAMBONE (1955)

