

Cabonne Shire

Local Flood Emergency Sub Plan



CABONNE SHIRE FLOOD EMERGENCY SUB PLAN

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

Volume 1 of the Cabonne Shire Flood Emergency Sub Plan

Endorsed by the Cabonne Local Emergency Management Committee

28 February 2024

Version 3.0

AUTHORISATION

The Cabonne Shire Flood Emergency Sub Plan is a sub plan of the Cabonne 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)**.

Authorised

Signature:



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INSR. Ross Stevens

Date:

28/2/2024

Endorsed

Signature:



Chair, Local Emergency Management Committee

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28.2.2024.

VERSION HISTORY

Version Number	Description	Date
1.0	Cabonne Shire Local Flood Plan	April 2007
2.0	Cabonne Shire Local Flood Plan	April 2013

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

Available for general use and distribution on the NSW State Emergency Service website
www.ses.nsw.gov.au

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CONTENTS

CABONNE SHIRE FLOOD EMERGENCY SUB PLAN	1
AUTHORISATION	2
VERSION HISTORY	3
AMENDMENT LIST	3
DISTRIBUTION LIST	3
CONTENTS.....	4
1 OUTLINE AND SCOPE	6
1.1 Purpose.....	6
1.2 Authority.....	6
1.3 Activation.....	6
1.4 Scope	6
1.5 Goals	7
1.6 KEY PRINCIPLES.....	7
1.7 Roles and Responsibilities	7
1.8 Plan Maintenance and Review	7
1.9 Supplementary Documents	8
2 OVERVIEW OF NSW FLOOD HAZARD AND RISK	8
2.1 The Flood Threat.....	8
3 PREVENTION/ MITIGATION.....	8
3.1 Introduction.....	8
3.2 Land Use Planning	9
3.3 Floodplain Risk Management	9
4 PREPARATION	9
4.1 Introduction.....	9
4.2 Flood Emergency Planning	9
4.3 Flood Intelligence Systems	10
4.4 Development of Warning Systems	10
4.5 Briefing, training and exercising	11
4.6 Community Resilience to Flooding.....	11
5 RESPONSE	12
5.1 Introduction.....	12
5.2 Incident Management Arrangements	12
5.3 Use of Information and Collection of Intelligence	13
5.4 Provision of Information and Warnings to the Community.....	14

5.5	Protection of Property.....	15
5.6	Road and Traffic Control.....	15
5.7	Protection of Essential Services.....	16
5.8	Evacuation	16
5.9	Evacuee Management And Welfare.....	18
5.10	Flood Rescue	19
5.11	Resupply.....	19
5.12	Return	20
5.13	End of Response Operations.....	21
5.14	Post Impact Actions	21
6	RECOVERY OPERATIONS	22
6.1	Introduction.....	22
6.2	NSW SES Recovery Role.....	22
7	ABBREVIATIONS	23
8	GLOSSARY	23
9	APPENDIX A – MAP OF CABONNE SHIRE COUNCIL AREA.....	24
10	APPENDIX B – ROLES AND RESPONSIBILITIES.....	25
11	APPENDIX C – COMMUNITY SPECIFIC ROLES AND RESPONSIBILITIES	31

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 Cabonne Shire Local Government Area (LGA).

1.2 AUTHORITY

- 1.2.1 This plan is written and issued under the authority of the [State Emergency and Rescue Management Act 1989 \(NSW\)](#) ('SERM Act'), the [State Emergency Service Act 1989 \(NSW\)](#) ('SES Act') and the NSW State Emergency Management Plan (EMPLAN).
- 1.2.2 This plan is a sub plan to the Cabonne Shire Local Emergency Management Plan (EMPLAN) and is endorsed by the Local 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 Cabonne 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 Cabonne Shire LGA. The Cabonne 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 Cabonne Shire level emergency management arrangements for prevention, preparation, response, and initial recovery for flooding in the Cabonne 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 Cabonne 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:

- a. 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 Cabonne Shire LGA.
- 2.1.2 Declared dams in or upstream of the Cabonne Shire Local Government Area.

Dam Name	Owner	High Risk Dam
Borenore Creek Dam	Cabonne Shire Council	No
Cadia Tailings Dam	Newcrest Mining Limited	Yes
Cadia North Waste Dump Detention Basin	Newcrest Mining Limited	No
Cadia Southern Tailings Storage Facility	Newcrest Mining Limited	No
Cadiangullong Dam	Newcrest Mining Limited	No
Lake Canobolas Dam	Orange City Council	No
Molong Creek Dam	Cabonne Shire Council	No

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. The 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:** The 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 Plan 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.

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. Cabonne Shire Council has developed and maintains a flash flood warning system for the Molong Creek area.
- f. Dam Owners will provide Dam Emergency Plans (where required) and consult with the NSW SES on alert levels and messaging. Alert level definitions are listed in Dam Emergency Plans.
- g. The NSW SES maintains a dedicated dam failure hotline and procedures to ensure priority dissemination of dam failure warnings.
- h. 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.
- i. 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.

Actions:

- Supporting emergency services and Functional Areas should provide Liaison Officers to NSW SES Incident Control Centre(s) and/or Emergency Operation Centres as required.
- The NSW SES will provide Liaison Officer(s) to Emergency Operations Centres as required.
- 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:

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

- 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.
- 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 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.

Actions:

- 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. Dam Owners will utilise the Dam Emergency Plan to provide warnings and information to NSW SES and communities (where appropriate).
- c. NSW SES Incident Controllers will issue the following NSW SES Flood Warnings aligning to the Australian Warning System.
 - Advice
 - Watch and Act
 - Emergency Warning

- d. The NSW SES liaises with the Bureau to discuss the development of flood warnings as required.
- e. The NSW SES provides alerts and deliver flood information to affected communities using a combination of public information.
- f. The NSW SES may request supporting agencies redistribute NSW SES alerts and information, including through the provision of doorknocking teams.
- g. 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.
- h. 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.
- i. 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

5.5.1 **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. Cabonne 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 Cabonne 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 Cabonne 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.

Actions:

- 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 the 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. 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 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, the 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 (SEOCN) 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 SEOCIN 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.

Actions:

- 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.

Actions:

- 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 exists.
 - 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 Cabonne 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. The 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 State Emergency Recovery Controller (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 Cabonne 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 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 State Emergency Operations Controller (SEOCN) 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
<https://www.ses.nsw.gov.au/media/2650/glossary.pdf>

10 Appendix B – Roles and Responsibilities

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

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.
Cabonne Shire Council	<p>Preparedness</p> <ul style="list-style-type: none"> • 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. • Provide levee studies, flood studies and floodplain management studies to the NSW SES. • Maintain Dam Emergency Plans for the Borenore Creek and Molong Creek Dams and provide copies to NSW SES. • Provide information on the consequences of dam failure to NSW SES for incorporation into planning and flood intelligence. • Coordinate the development of warning services for catchments prone to flash flooding (small catchments), where appropriate. • Maintain council-owned flood warning networks and flood mitigation works. • 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. <p>Response</p> <ul style="list-style-type: none"> • Subject to the availability of council resources, assist the NSW SES with flood operations including: <ul style="list-style-type: none"> – Traffic management on council managed roads.

AGENCY	RESPONSIBILITIES
	<ul style="list-style-type: none"> – Provision of assistance to the NSW SES (plant, equipment, and personnel where able and requested). – Property protection tasks including sandbagging. – Assist with the removal of caravans from caravan parks. – Warning and/or evacuation of residents and other people in flood liable areas. – Provision of back-up radio communications. – Resupply of isolated properties. – Technical advice on the impacts of flooding. – 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. – Assist NSW SES to provide filled sandbags and filling facilities to residents and business in areas which flooding is expected. <ul style="list-style-type: none"> • 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. <p>Recovery</p> <ul style="list-style-type: none"> • 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.
Caravan Park Proprietor(s)	<ul style="list-style-type: none"> • 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

AGENCY	RESPONSIBILITIES
	<p>occupiers taking up residence and displaying this notice and emergency management arrangement within the park.</p> <ul style="list-style-type: none"> • Ensure that owners and occupiers of movable dwellings are aware that if they are expecting to be absent for extended periods, they should: <ul style="list-style-type: none"> – Provide the manager of the caravan park with a contact address and telephone number in case of an emergency. – 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). • Ensure that occupiers are informed of Flood Information. At this time, occupiers should be advised to: <ul style="list-style-type: none"> – Ensure that they have spare batteries for their radios. – Listen to a local radio station for updated flood information. – Prepare for evacuation and movable dwelling (cabins) relocation. • Ensure that owners and occupiers of caravans are aware of what they must do to facilitate evacuation and movable dwelling relocation when flooding occurs. • 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. • Secure any movable dwellings that are not able to be relocated to prevent floatation. • 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.
<p>Childcare Centres and Preschools</p>	<ul style="list-style-type: none"> • When notified of possible flooding or isolation, childcare centres and preschools should: <ul style="list-style-type: none"> – 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. – Assist with coordinating the evacuation of preschools and childcare centres.
<p>Dams Safety NSW</p>	<p>The roles and responsibilities for Dams Safety NSW (formerly NSW Dam Safety Committee) are outlined in the NSW State Flood Plan.</p>
<p>Department of Defence</p>	<p>Arrangements for Defence Assistance to the Civil Community are detailed within the State EMPLAN (section 448).</p>

AGENCY	RESPONSIBILITIES
Energy and Utilities Services Functional Area	<p>The roles and responsibilities for the Energy and Utilities Services are outlined in the Energy and Utility Services Supporting Plan (EUSPLAN).</p> <p>Roles and responsibilities in addition to the supporting plan are:</p> <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> – Provide advice to the NSW SES of any need to disconnect power/gas/water/wastewater supplies or of any timetable for reconnection. – Advise the NSW SES of any hazards from utility services during flooding and coastal erosion/inundation. – Advise the public with regard to electrical hazards during flooding and coastal erosion/inundation, and to the availability or otherwise of the electricity supply. – Clear or make safe any hazard caused by power lines or electricity distribution equipment. – Reconnect customers’ electrical/ gas/ water/wastewater installations, when certified safe to do so and as conditions allow. – Assist the NSW SES to identify infrastructure at risk of flooding for incorporation into planning and intelligence.
Engineering Services Functional Area	The roles and responsibilities for the Engineering Services Functional Area are outlined in the Engineering Services Supporting Plan and NSW State Flood Plan.
Environmental Services Functional Area	The roles and responsibilities for Environmental Services 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 style="list-style-type: none"> • Monitor flood operations. • If requested, coordinate support for the NSW SES Incident Controller.
Local Emergency Management Officer (LEMO)	<ul style="list-style-type: none"> • If requested by the NSW SES Incident Controller, advise appropriate agencies and officers of the start of response operations.

AGENCY	RESPONSIBILITIES
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.
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 (SEOCN)	The roles and responsibilities for the SEOCN/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.

AGENCY	RESPONSIBILITIES
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 style="list-style-type: none"> • Transport for NSW coordinates information on road conditions for emergency services access. • Transport for NSW coordinates the management of the road network across all modes of transport. • 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 Functional Area	The roles and responsibilities for the Transport Services 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

<p>Community Members</p>	<p>Preparedness</p> <ul style="list-style-type: none"> • 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. • Households, institutions, and businesses develop plans to manage flood risks, sharing and practicing this with family, friends, employees, and neighbours. • Have an emergency kit. • Be involved in local emergency planning processes. <p>Recovery</p> <ul style="list-style-type: none"> • Assist with community clean-up if required and able to do so. • Participate in After Action Reviews if required.
<p>Aboriginal Organisations or Groups</p>	<p>Orange Local Aboriginal Land Council.</p> <ul style="list-style-type: none"> • Act as the point of contact between the NSW SES and Aboriginal communities in Cabonne Shire. • Inform the NSW SES Incident Controller about flood conditions and response needs. • Disseminate flood information, including flood and evacuation warnings, to communities in Cabonne Shire.
<p>Name of Farmer or Flood Warning Networks</p>	<p>Belubula River landholders Association.</p> <ul style="list-style-type: none"> • Provide flood information to the NSW SES Canowindra Unit Commander. • Distribute flood warnings and flood information provided by the NSW SES Incident Controller.



HAZARD AND RISK IN CABONNE SHIRE

Volume 2 of the Cabonne Shire Local Flood Plan

Last Update: May 2018



AUTHORISATION

The Hazard and Risk in Cabonne Shire has been prepared by the NSW State Emergency Service (NSW SES) as part of a comprehensive planning process. The information contained herein has been compiled from the latest available technical studies.

Approved



NSW SES Central West Region Controller

Date: 28/05/2018.

Tabled at LEMC

5/6/18

Date:

CONTENTS

AUTHORISATION	1
CONTENTS	2
LIST OF TABLES	3
LIST OF FIGURES.....	3
VERSION LIST	4
AMENDMENT LIST	4
1 THE FLOOD THREAT	5
1.1 Landforms and River Systems	5
1.2 Storage Dams	7
1.3 Weather Systems and Flooding	9
1.4 Characteristics of Flooding.....	10
1.5 Flood History	11
1.6 Flood Mitigation Systems.....	13
1.7 Extreme Flooding	13
2 EFFECTS ON THE COMMUNITY.....	14
2.1 Community Profile	14
<i>SPECIFIC RISK AREAS - FLOOD.....</i>	<i>16</i>
2.2 Canowindra	16
2.3 Cargo	19
2.4 Cudal	21
2.5 Eugowra	23
2.6 Manildra.....	27
2.7 Cumnock	29
2.8 Molong.....	31
2.9 Yeoval.....	34
<i>ROAD CLOSURES AND ISOLATED COMMUNITIES.....</i>	<i>36</i>
2.10 Road Closures.....	36
2.11 Summary of isolated communities and properties.....	39
ANNEX 1: BELL RIVER & MOLONG CREEK SCHEMATIC	40
ANNEX 2: MACQUARIE RIVER UPPER BASIN SCHEMATIC.....	41
ANNEX 3: LACHLAN RIVER BASIN SCHEMATIC	42
ANNEX 4: FACILITIES AT RISK OF FLOODING AND/OR ISOLATION	43
MAP 1 - MACQUARIE RIVERBASIN	47
MAP 2 - LACHLAN RIVERBASIN	48
MAP 3 - CANOWINDRA TOWN MAP	49
MAP 4 - EUGOWRA TOWN MAP	50
MAP 5 - MOLONG TOWN MAP	51
LIST OF REFERENCES	52

LIST OF TABLES

Table 1: Prescribed Dams in Cabonne Shire LGA; summary of information about each storage.	7
Table 2: Indicative Flow Travel Time for the Mandagery Creek	10
Table 3: Indicative Flow Travel Time for the Belubula River (2)	10
Table 4: Indicative Flow Travel Time for Molong Creek	10
Table 5: Census of Housing and Population data (2011)	14
Table 6: Roads liable to flooding in Cabonne Shire LGA.	36

LIST OF FIGURES

Figure 1: Top 11 of 13 floods above major classification (9.0 metres) at the Eugowra Town gauge (412904)....	11
Figure 2: Top 11 of 12 floods above major classification (9.0 metres) at the Canowindra gauge (412009)	12
Figure 3: Floods above Major Classification (3.9m) at the Molong (Wellington St) Gauge (10456) – Moderate (3.3m), Major (3.9m)	12

VERSION LIST

The following table lists all previously approved versions of this Volume.

Description	Date
Cabonne Local Flood Plan – Annex A and B	April 2007

AMENDMENT LIST

Suggestions for amendments to this Volume should be forwarded to:

The NSW SES Cabonne Local Controller
 NSW State Emergency Service
 C/- Central West Region Headquarters
 79 Corporation Avenue
 BATHURST NSW 2795

Amendments promulgated in the amendments list below have been entered in this Volume.

Amendment Number	Description	Updated by	Date

Document Issue: V2-28032014

1 THE FLOOD THREAT

1.1 LANDFORMS AND RIVER SYSTEMS

- 1.1.1 The Cabonne Council area is drained by the tributaries of two major river systems, the Macquarie (Basin No 421) and the Lachlan (Basin No 412) (Maps 1 and 2). Most of the northern portion of the council area drains northward via the Little and Bell Rivers, Summerhill Creek and Lewis Ponds Creek, all of which join the Macquarie River outside the council's territory. The remainder drains in a westerly to south-westerly direction through the Belubula River and Mandagery Creek systems (1).
- 1.1.2 Most of the land within the Cabonne Council area is undulating or hilly, with extensive floodplain areas in the lower stretches of the creeks and rivers especially in the north and south-west. None of the council's territory is remote from the headwaters of its various streams, and flood warning times are characteristically short – that is, in the order of hours rather than days. Flood waters tend often to be deep and fast-moving and are usually quick both to rise and fall (1).
- 1.1.3 The **Little River** rises in the Curumbenya Range and the Noahs Ark Ridge at elevations between 550 and 700 metres and drains most of the north-western portion of the council area. Its major tributaries are the **Buckinbah** and **Sandy Creeks**, which meet at Yeoval. Floodplain development on these watercourses is limited within the Cabonne Council area (1).
- 1.1.4 The **Bell River** drains the central-northern portion of the Council area, its headwaters rising at over 800 metres elevation to the west and north of Orange. Its catchment area is separated from the Little River catchment by the Noahs Ark Ridge and from the Mandagery Creek catchment by the Macquarie range. Within the Cabonne Council area, the Bell's principal tributary is **Molong Creek** (sometimes known as Molong Rivulet), which flows through Molong and joins the main river 12 kilometres downstream of the town (1). The catchment area above Molong is 210 square kilometres, with tributaries including Heifer Station and Borenore Creeks which begin near Mount Canobolas (2).
- 1.1.5 The land to the east of the Mullion Range is rugged and is drained by the **Lewis Ponds Creek**. The major tributary of this creek is **Summerhill Creek**, the headwaters of which rise in the Orange and Blayney Council areas at elevations up to more than 1,100 metres in the Mt. Canobolas area. Tributaries of Summerhill Creek have been dammed to form the Gosling Creek and Spring Creek reservoirs and Summerhill Creek itself includes the Suma Park Reservoir (2).
- 1.1.6 The **Belubula River** rises outside the council area in the undulating country along the Orange-Blayney and Blayney-Bathurst council boundaries and in the Stringybark and Bugs ridges. Most of its headwaters are at elevations between 900 and 1,100 metres. The Belubula River flows west and south-west

to Carcoar Dam with a catchment area of 220 square kilometres. It is joined by Coombing, Cowriga and Flyers Creeks and the Mandurama Ponds within the Blayney Council area; **Panuara, Canomodine, Canangle and Nyrang Creeks** within Cabonne; and Jacks Creek form the Cowra Council area. In its upper and middle reaches the river flows through undulating and hilly country interspersed with only limited areas of alluvial floodplain. About 16 kilometres upstream of Canowindra the floodplain widens, and downstream of the town it is several kilometres wide. On this lower stretch, various creeks leave and re-join the main channel and numerous low levees and floodgates protect farmlands from relatively low-level flooding. Flood waters can be fast flowing during flood events. Periodically, floods overtop these levees and inundate large areas of rural lands. Upstream of Canowindra, flood flows can be dangerously fast (2).

- 1.1.7 The **Mandagery Creek** and its tributaries rise in the Curumbenya Range and Noahs Ark Ridge on the slopes of Mt. Canobolas. The main tributaries are the **Manildra, Boree, Bourimbla, Warree, Gillgilbury and Waterhole Creeks** and the system as a whole drains a catchment area of some 2,000 square kilometres (4). Mandagery Creek joins the Lachlan River about 18 kilometres downstream of Eugowra. Flooding of rural areas along the Mandagery Creek and its tributaries is common, and the town of Eugowra is especially flood liable. Flows there escape the main creek during floods and move down as floodways on either side. They can be dangerously fast-moving, with velocities of up to two metres per second having been recorded (1). **Puzzle Flat Creek** joins the Mandagery immediately downstream of Eugowra at Leaders Lagoon (1). Puzzle Flat Creek has a catchment area of 42 square kilometres, with its deeply incised headwaters originating in Nangar State Forest to the east of Eugowra (4).

1.2 STORAGE DAMS

1.2.1 Dam locations are shown on the Macquarie and Lachlan River Basin maps (Maps 1 and 2).

Lake Canobolas Dam

Table 1: Prescribed Dams in Cabonne Shire LGA; summary of information about each storage.

Lake Canobolas Dam (3)	
Owner / Operator	Orange City Council (adjacent Council)
Description of Dam	Consists of a composite dam made of a concrete arch section, two concrete gravity sections and an earthfill embankment section. It was built in 1918 as a water supply for Orange but has been used for recreational purposes since 1940. It has a maximum height of 13.2m above the streambed and a crest length of 285 metres. The spillway is an overfall type with concrete sections. The crest of the dam is RL894.44 metres AHD, and the full supply level is RL892.82 metres AHD (1). The original storage capacity of the dam was estimated to be 680 ML (FSL) but due to siltation this was revised after a 1982 survey to approximately 450 ML.
Location	It is located on Molong Creek about 7 kilometres west of Orange and about 15 kilometres upstream of Molong Dam. It has a catchment area of 21.5 km ² .
Communities Downstream	<p>"Somerton Park", which is about 1.5 kilometres downstream of Lake Canobolas, would be affected by a dam failure. No Dambreak Study to date has sufficiently evaluated the potential cascade dam failure scenario on Molong.</p> <p>Some houses in Molong would be affected by a dam break at Lake Canobolas that also triggered a dam break at Molong Creek Dam. However no inundation heights have been calculated (2).</p>
Monitoring System	No known monitoring system in place.
Warning System	A white, amber and red alert system is in place. No known warning system is in place for downstream residents and/or communities.
Warning Notification	<p>In the event of a white, amber or red notification being issued the Cabonne Local Controller and Central West Region Headquarters are both to be contacted immediately.</p> <p>Central West Region Headquarters will notify the Orange City Local Controller.</p>
Other	Due to the nature of the dam break there is a very short travel time to where it arrives at Somerton Park.

Borenore Creek Dam

Borenore Creek Dam (4)	
Owner / Operator	Cabonne Council
Description of Dam	It is a concrete gravity dam built in 1928 (and raised by 900mm in 1943 to its present level) to serve as the water supply for the town of Molong. The crest of the dam is RL 685.19 metres AHD. It has a maximum height of 17 metres above the streambed with a crest length of 123 metres and an overfall type spillway. The original storage capacity of the dam was estimated to be 325 ML (FSL) but due to siltation this was revised (in 1973) to approximately 230 ML.
Location	The dam is located on Borenore Creek approx. 16 kilometres south-east of Molong. The dam has a catchment of 22 km ² .
Communities Downstream	The low lying area of Molong town would be affected in the event of Dam failure.
Monitoring System	Cabonne Council monitors the dam water levels via a telemetry system.
Warning System	A white, amber and red alert system is in place. No known warning system is in place for downstream residents and/or communities.
Warning Notification	In the event of a white, amber or red notification being issued the Cabonne Local Controller and Central West Region Headquarters are both to be contacted immediately.
Other	Based on studies undertaken the travel time to Molong would be approximately 45 minutes.

Molong Creek Dam

Molong Creek Dam (5)	
Owner / Operator	Cabonne Council
Description of Dam	It is a concrete gravity dam built in 1986 to augment the water supply for Molong. The crest of the dam is RL 692.3 metres AHD. It has a maximum height of 16 metres above the streambed with a crest length of 103 metres and an uncontrolled ogee crest type spillway that is 80 metres wide. It has storage capacity of approximately 1000 ML (FSL).
Location	The dam is located on Molong Creek approx. 19 kilometres south-east of Molong and has a catchment area of some 72.6 km ² .
Communities Downstream	The low lying area of Molong town (up to 205 dwellings in a PMF and 75 in a sunny day failure) is at risk of inundation from a Dam failure.
Monitoring System	Cabonne Council monitors the dam water levels via a telemetry system.
Warning System	A white, amber and red alert system is in place. No known specific warning system is in place for downstream residents and/or communities.
Warning Notification	In the event of a white, amber or red notification being issued the Cabonne Local Controller and Central West Region Headquarters are both to be contacted immediately.
Other	Based on studies undertaken the travel time to Molong would be approximately 1 hour.

Cadiangullong Dam

Cadiangullong Dam (5)	
Owner / Operator	Cadia Holdings P/L
Description of Dam	It is a water storage facility for Newcrest Mining's Cadia Valley Operations. It is a concrete gravity dam constructed in 1997-98, with storage capacity of 4200 ML.
Location	Located on Cadiangullong Creek, a tributary of the Belubula River, approximately 25 kilometres south-west of Orange.
Communities Downstream	Farming and grazing land.
Monitoring System	Manual monitoring.
Warning System	White and Amber alerts are identified for this dam.
Warning Notification	In the event of a white, amber or red notification being issued the Cabonne Local Controller and Central West Region Headquarters are both to be contacted immediately.
Other	<p>Panuara Road is at risk of flooding in a dam failure.</p> <p>The rise in creek level would be 10.2m and 12.9 metres at this location for a sunny day and extreme flood failure scenario respectively. It is estimated that the flood wave would take 29 minutes to reach this location. Velocities can be extreme, reaching 11 metres per second in some locations.</p> <p>Cadia North Waste Dump Detention is located to the south east, offstream, with no known consequences of failure.</p>

1.3 WEATHER SYSTEMS AND FLOODING

- 1.3.1 Average rainfall within the Cabonne Council area varies from less than 600mm in the north-west to more than 800 millimetres in the east. Marked local variations occur as a result of terrain difference, with higher yearly totals on the peaks and ranges than in the valleys. Unusually wet years, with precipitation more than twice the long-term average have been recorded as have 24-hour falls of more than 75 millimetres (2).
- 1.3.2 Rainfall is distributed relatively evenly across the months of the year and floods can occur in any season with no one period dominant. The mechanisms causing floods, however, vary from season to season. In summer, low-pressure (cyclonic) troughs migrating southwards into NSW from northern parts of the continent can cause intense short-period rainfall leading to flooding. Such intrusions are not annual events, however, and summer flooding is sporadic. Winter floods tend to be the result of **sequences** of troughs associated with southern influences crossing the region from west to east. These rarely produce high daily falls but can bring substantial falls over longer periods (2).

- 1.3.3 Periodically, high-intensity, short-duration convective thunderstorms cause flooding over limited areas. These are summer events concentrated in the months between November and March. They may cause town and village drains to surcharge and may lead to short-term ('flash') flooding on small creeks. Such events rarely cause significant rises in the major streams, however (2).

1.4 CHARACTERISTICS OF FLOODING

- 1.4.1 The effects of flooding on Canowindra, Eugowra and Molong and other areas and villages in the Cabonne Shire Council LGA are described in the sections titled "Specific Risk Areas – Flood".
- 1.4.2 Table 2 and 3 summarises the travel time between locations on Mandagery Creek and the Belubula River respectively.

Table 2: Indicative Flow Travel Time for the Mandagery Creek

Locations	Travel Time
Manildra to 'Glenayr'	6 hours
Junction of Boree and Mandagery Creeks to 'Glenayr'	2 hours
'Glenayr' to Murga	2 hours
Toogong to 'Smithfield'	Between 10-12 hours
Murga to 'Smithfield'	Between 6-8 hours
Murga to Eugowra	Between 8-12 hours
'Island View' to Eugowra	Between 2-4 hours
'Smithfield' to Eugowra	Between 2-4 hours

Table 3: Indicative Flow Travel Time for the Belubula River (2)

Locations	Travel Time
Carcoar to the Needles	24-36 hours
Needles to Canowindra	5-8 hours
Cherry Tree Falls Bridge to Canowindra	2-4 hours

Table 4: Indicative Flow Travel Time for Molong Creek

Locations	Travel Time
Borenore Creek to Molong	Between 2-4 hours

1.5 FLOOD HISTORY

- 1.5.1 Detailed records of flooding within the Cabonne Shire Council area are few except for the towns of Canowindra and Eugowra. It is known, however, that flooding is irregular on all streams, with long virtually flood-free periods, separated by shorter periods of frequent and sometimes severe flooding (1).
- 1.5.2 In **Eugowra**, on the Mandagery Creek, flooding was common during the 1950's, the 1970's and the early 1990's, but rare during the 1960's and 1980's. The last significant flood occurred in early November 2005. On average, the creek breaks its banks within Eugowra about once every two and half years, but since records were first taken in 1950 the interval between such floods has been as long as 14 years (1). In August 1990, around 72 buildings (more than one quarter of the buildings in the town) experienced over-floor inundation – 25 to the west of the creek, which also includes the “Fat Lamb Hotel” and 47 to the east. Several others had flooding of yards and sheds. In November 2005 major flooding occurred inundating around twenty one residential properties and some businesses in low lying areas of the town (1). Flooding on Puzzle Flat Creek is also recorded, surcharging the creek's right bank and entering the eastern and southern parts of the town (4).

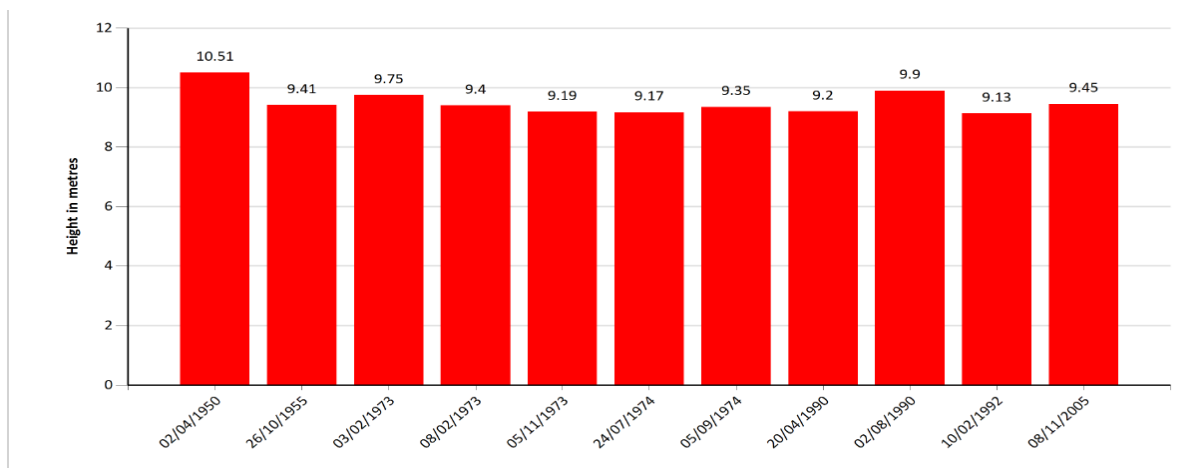


Figure 1: Top 11 of 13 floods above major classification (9.0 metres) at the Eugowra Town gauge (412904)

- 1.5.3 In **Canowindra**, flooding on the Belubula River can occur rapidly and frequently, as was evident in 2016, which saw several moderate flood peaks within a month. Major flood events occurred at Canowindra on the Belubula River in December 2010 and March 2012, when peaks of 5.66 and 5.8 metres respectively were measured at the Canowindra gauge (412009) (8).

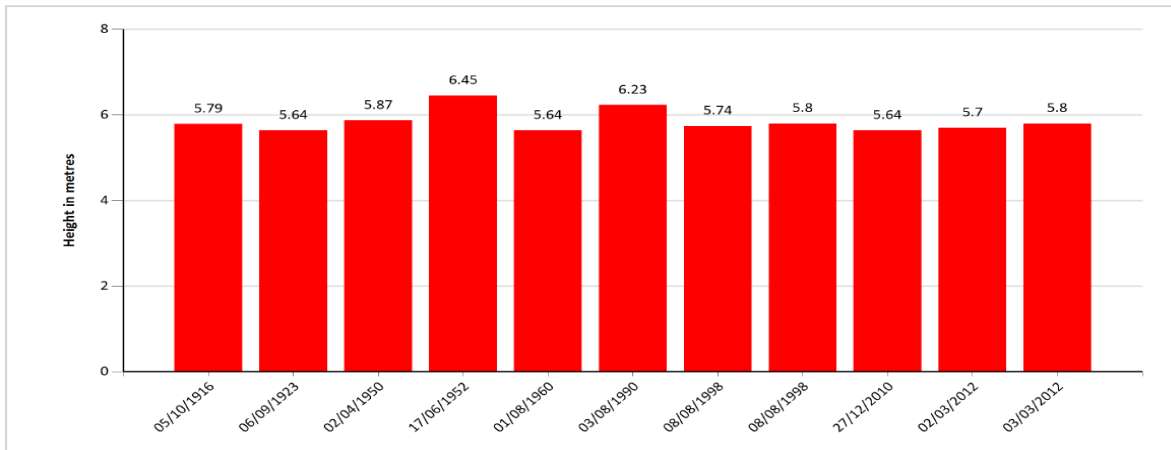


Figure 2: Top 11 of 12 floods above major classification (9.0 metres) at the Canowindra gauge (412009)

1.5.4 In **Molong**, a major flood event that occurred in November 2005 (which reached 6.5 metres at the Molong gauge and 4.7 metres at the Wellington Street gauge). This was the highest flood recorded at this location. In this event a total of twenty two houses were inundated. Ten houses were inundated with water crossing the area of the railway line flowing down the Mitchell Highway towards Bank Street flooding the Caravan Park, Police and Ambulance Stations. Stock needed to be raised in shops, with seven businesses being inundated causing significant damage and disruption (1). Other significant floods have been recorded in February 1928, March 1956, April 1990 and August 1990. The August and April 1990 floods reached 4.35 and 3.75 metres respectively. A rare thunderstorm was reported to have occurred on 20 March 1900 where 190 millimetres of rain fell in three hours (an estimated ARI of 10 000 years). No reports of consequences are available (2).

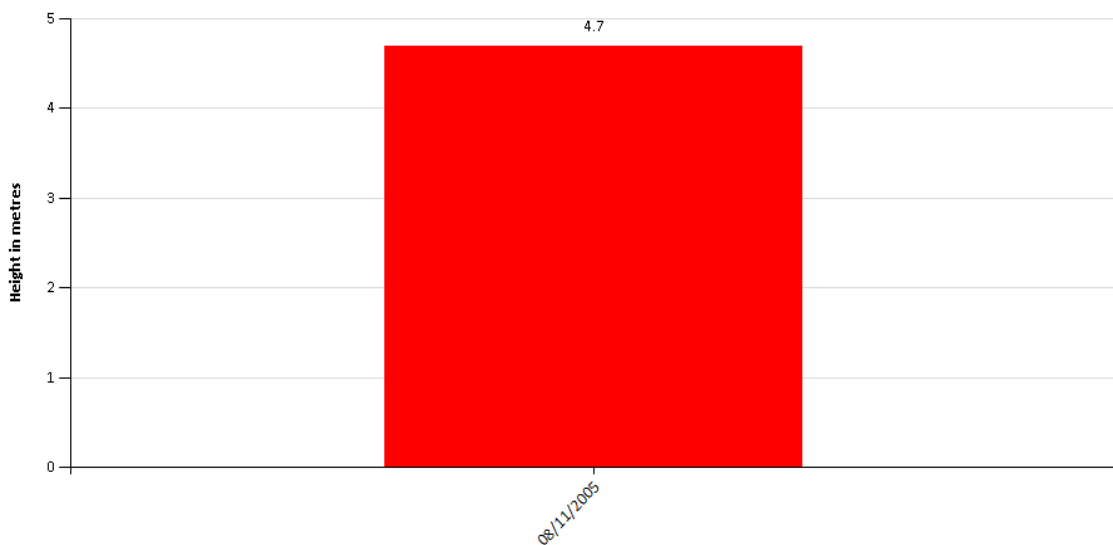


Figure 3: Floods above Major Classification (3.9m) at the Molong (Wellington St) Gauge (10456) – Moderate (3.3m), Major (3.9m)

1.6 FLOOD MITIGATION SYSTEMS

- 1.6.1 In Eugowra, levee banks constructed on Puzzle Flat Creek have reduced the frequency of flooding, although the banks could be overtopped in an extreme flood event. The levee does not cover the entire length of the northern bank and nuisance flooding could still occur in the eastern part of Eugowra.
- 1.6.2 There are a number of rural levees in the Canowindra area, built in the 1970's to protect riparian farmland from minor flood events. The levees protect the rural land up to a 10% AEP flood event (2).
- 1.6.3 Further details are listed in the section titled "Flood Mitigation Systems" within section 2.2.

1.7 EXTREME FLOODING

- 1.7.1 The worst floods ever recorded in the Cabonne Council area since European settlement should not be regarded as the most severe which can occur there. In all areas the flood record is short and incomplete, and worse floods than have been seen in recent times must be expected (1).
- 1.7.2 An estimate of the height of a 1% AEP event would be around 10.17 metres at Eugowra, 6.1 metres at Canowindra and 4.9 metres at Molong. Even more severe floods than this event are possible. No assessment of the height of the Probable Maximum Flood (PMF) has been made for Eugowra, but the 'once-in-5,000-years' flood has been assessed as discharging three times as much water as the 100-year event. In this very rare event the height at the gauge could be more than one metre greater than recorded in 1990 (1). The PMF is estimated to reach 11.9 metres at Canowindra and 9.7 metres at Molong. This would result in a significant amount of properties inundated in Molong and at least 103 residential, 80 commercial and 9 public buildings flooded above floor in Canowindra (7).
- 1.7.3 Flooding within the Cabonne Council area is the most severe at Eugowra. At Eugowra, the most serious flood on record – that of April 1950 reached 10.51 metres on the Eugowra Gauge. In more recent times the flood of August 1990 reaching 9.9 meters on the Eugowra Gauge – was of a magnitude which can be expected to occur once in about 70 years **on average**. When severe floods occur in Eugowra, they can reach **much** greater heights than those previously recorded. Moreover, they are generally both faster to rise and more dangerous in terms of depth and velocity than previous events (1).

2 EFFECTS ON THE COMMUNITY

2.1 COMMUNITY PROFILE

Table 5: Census of Housing and Population data (2011)

Census Description	Cabonne (A)	Canowindra	Cargo	Cudal	Cumnock
Total Persons	12,821	2,629	541	653	614
Aged 0-4 yrs	854	176	44	53	32
Aged 5-14 yrs	1,950	328	70	87	107
Aged 65 + yrs	2,261	584	84	108	110
Of Indigenous Origin	400	63	24	13	23
Who do not speak English well	15	9	0	0	0
Have a need for assistance (profound/severe disability)	633	186	22	36	37
Living alone (Total)	1,107	294	48	60	48
Living alone (Aged 65+)	539	151	22	37	23
Residing in caravans, cabins or houseboats or improvised dwellings	77	9	4	5	3
Occupied Private Dwellings (Households)	4,706	1,017	195	251	225
No Motor Vehicle	217	80	4	10	11
Caravan, cabin, houseboat or improvised dwell	45	0	4	5	4
Rented via State or Housing Authority	27	22	0	0	0
Rented via Housing Co-Op or Community Church Group	37	3	0	5	3
No Internet Connection	1,264	328	64	66	78
Unoccupied Private Dwellings	750	195	31	41	58
Average persons per occup dwelling	2.6	2.3	2.6	2.5	2.5
Average vehicles per occup dwelling	2.0	1.9	2.1	2.1	2.0

Census Description	Cabonne (A)	Eugowra	Manildra	Molong	Yeoval
Total Persons	12,821	912	728	2,509	519
Aged 0-4 yrs	854	45	50	184	34
Aged 5-14 yrs	1,950	112	128	402	86
Aged 65 + yrs	2,261	207	120	468	133
Of Indigenous Origin	400	38	21	78	47
Who do not speak English well	15	0	0	3	0
Have a need for assistance (profound/severe disability)	633	55	29	148	47
Living alone (Total)	1,107	104	90	210	61
Living alone (Aged 65+)	539	49	41	115	45
Residing in caravans, cabins or houseboats or improvised dwellings	77	0	0	12	6
Occupied Private Dwellings (Households)	4,706	357	281	916	193
No Motor Vehicle	217	7	20	40	27
Caravan, cabin, houseboat or improvised dwell	45	0	0	13	3
Rented via State or Housing Authority	27	0	0	7	0
Rented via Housing Co-Op or Community Church Group	37	4	6	20	5
No Internet Connection	1,264	114	108	260	74
Unoccupied Private Dwellings	750	76	60	122	54
Average persons per occup dwelling	2.6	2.4	2.3	2.7	2.6
Average vehicles per occup dwelling	2.0	2.1	1.8	1.9	1.6

SPECIFIC RISK AREAS - FLOOD

Lachlan River Valley

2.2 CANOWINDRA

- 2.2.1 Canowindra sits beside the Belubula River, about 36 kilometres upstream of its confluence with the Lachlan River. It is situated approximately 4 hours west of Sydney between Orange and Cowra and 2.5 hours north of Canberra (Map 3).
- 2.2.2 It has a population of approximately 2,600 with approximately 22% of the population over the age of 65 (8).

Cultural and Linguistic Diversity

- 2.2.3 There are approximately 63 indigenous persons in Canowindra and there are 9 people who do not have proficiency in English (8).

Schools and childcare centres

- 2.2.4 Although not directly affected by flooding the following schools and childcare centres need to be contacted when 4.0 metres is reached on the John Grant Bridge gauge as the Canowindra – Woodstock road (George Russell Drive) may close to light traffic near Gallaghers Lane impacting access.
- a. **Schools**
 - Canowindra High School – Browns Avenue, Canowindra
 - Canowindra Public School – Tilga Street, Canowindra
 - St Edward’s – Tilga Street, Canowindra
 - b. **Childcare centres**
 - Canowindra Pre-School – Corner Ferguson and Ryall Streets, Canowindra

Utilities and Infrastructure

- 2.2.5 The following utilities and infrastructure are at risk of flooding:
- a. Cabonne Shire Council Sewer pump which is located on East Street. This pump will become affected when the John Grant Bridge Gauge reaches 6.00 metres.
 - b. Cabonne Shire Council Sewer pump which is located on the corner of Canowindra and Newtown Street. This pump will become affected when the John Grant Bridge Gauge reaches 5.46 metres.
- 2.2.6 Caravan Parks are listed in Volume 3, Chapter 4 of this Local Flood Plan (SES Caravan Park Arrangements), including Canowindra Caravan Park.

Classification of Floodplain

- 2.2.7 **Rising road access.** Rising road access refers to areas where access roads rise steadily uphill and away from the rising floodwaters. However the town is split into two at 5.60 metres when the John Grant Bridge becomes flooded (9).

Inundation

- 2.2.8 Canowindra uses the Canowindra gauge at John Grant Bridge (412009) for flood warning, with minor, moderate and flood classification levels at 4.0, 4.5 and 5.5 metres respectively.
- 2.2.9 Most of the town including the commercial area is located on the northern bank of the river and is above major flood level (2).
- 2.2.10 Major flooding causes access problems in Finns Lane behind the shops in the main street (Gaskill Street). In such floods, water reaches the backs of the shops on the southern side of this street and in some cases has entered the lower-lying premises (1).
- 2.2.11 In major floods, residential flooding occurs in East Street and sandbagging to create a temporary levee bank is necessary to hold back flood waters. There is a possibility of 3-4 houses being inundated in this street in a severe event (1).
- 2.2.12 A flood in the order of a 1% AEP flood (6.10 metres), it is estimated that 26 properties in Gaskill, Cowra, Bridge and East Street as well as 35 commercial buildings and two public buildings are at risk of flooding, however only one of these (a commercial property) is expected to flood above floor (2). With further river rises inundation could also be experienced in South Canowindra (at the eastern end of Bridge Street in Cowra Street and on the Woodstock road) around 7.5 metres (2). In a 0.2 % AEP flood, it is estimated that although there would be significant property inundation, only one residential and 23 commercial buildings would be flooded above floor (2).
- 2.2.13 The extent of flooding in a PMF would cause flooding of Mill Street, parts of Gaskill Street, parts of Blatchford Street, areas around Bowds Lane, parts of Icely Street including the approach to the bridge that gives access to the west and to Cowra. On the west side between Icely and Tilga Streets, Cowra Street, Milton Street and Canowindra Street are at risk of flooding. On the western side of Tilga Street, Bridge Street is at risk of flooding. This would result in 103 residential dwellings, 80 commercial and nine public buildings flooded above floor (2).

Isolation

- 2.2.14 Cherry Tree Falls Bridge is overtopped in minor floods, with alternative routes available (2).
- 2.2.15 Canowindra is cut in two by a major flood (approximately 5.6 metres), the main bridge across the Belubula River (John Grant Bridge) being closed to traffic. This bridge was reconstructed in 1995. A nearby footbridge (the Swing

Bridge) is closed before the major flood level is reached and there is significant disruption to traffic on roads upstream and downstream of the town.

- 2.2.16 In Canowindra itself, the main bridge has been closed for periods of up to eight hours during floods. Access into and out of Canowindra is still available via Orange to the North East and Cowra to the south.

Characteristics of flooding

- 2.2.17 Typically most flood events in Canowindra can be considered to be slow rising. A typical rate of rise of floodwaters would be around 0.1m/hr. Records have shown that there have been flood events that have had water that has risen quickly with a 12 hour time for floodwaters to reach their peak (2).
- 2.2.18 Estimated travel times of the flood peak along the Belubula River can vary from two hours (Cherry Tree Falls to Canowindra (John Grant Bridge) to 36 hours (Carcoar to The Needles) (1).
- 2.2.19 The floodplain is up to 800 metres wide in a 1% AEP flood, and is mainly open space devoted to pasture and cropping. There are several local stormwater catchments draining the urban area on the northern side of the river. They drain along flow paths which mainly follow the street system before entering grassed drainage channels which convey stormwater runoff to the Belubula River (2).

Flood Mitigation Systems

- 2.2.20 There are a number of rural levees in the Canowindra area, built in the 1970's to protect riparian farmland from minor flood events. The levees protect the rural land up to a 10% AEP flood event (2).

Dams

- 2.2.21 There are no known consequences of dam failure in Canowindra.

Other Considerations

- 2.2.22 There are two main events that are held in Canowindra each year.
- a. The Canowindra Show is held annually in September which can attract up to 1,000 visitors.
 - b. The Canowindra International Balloon Challenge which is held annually in April which can attract up to 10,000 visitors.

2.3 CARGO

2.3.1 Cargo, situated 35 kilometres south west of Orange is a small country hamlet with a population of approximately 541 (1). A small creek runs through the town in a northerly direction (Map 4).

2.3.2 Nearly 16 per cent of the population are over the age of 65 years (8).

Cultural and Linguistic Diversity

2.3.3 There are approximately 24 indigenous persons in Cargo and there are no identified persons who do not have proficiency in English (8).

Schools and childcare centres

2.3.4 The following schools and childcare centres are at risk of localised flash and overland flooding and/or isolation.

a. Schools

- Cargo Public School - Hutton Street (Off Hamilton Street), Cargo

Facilities for the aged and/or infirm

2.3.5 There are no hospitals, aged care or group homes that are at known risk of flooding.

Utilities and Infrastructure

2.3.6 There are no utilities or infrastructure that are at known risk of flooding.

Classification of Floodplain

2.3.7 There is currently insufficient information to classify this community.

Inundation

2.3.8 No flood problems sufficient to inundate dwellings are known to exist for this village. However flash flooding could occur after heavy rain and could close some local roads (1).

Isolation

2.3.9 There is no known isolation risk.

Characteristics of flooding

2.3.10 Cargo is subject to flash flooding resulting from local heavy rain. Water levels can rise quickly and travel quickly.

Flood Mitigation Systems

2.3.11 There are no known flood mitigation systems in Cargo.

Dams

2.3.12 There are no known consequences of dam failure in Cargo.

Other Considerations

2.3.13 There are no known festivals or special events held in Cargo.

2.4 CUDAL

2.4.1 The township of Cudal is situated approximately 35 kilometres west of Orange. It has a population of 653 (2) (Map 5).

2.4.2 Nearly 16 per cent of the population are over the age of 65 years (2).

Cultural and Linguistic Diversity

2.4.3 There are approximately 13 indigenous persons in Cudal and there are no identified persons who do not have proficiency in English (2).

Schools and childcare centres

2.4.4 The following schools and childcare centres are at risk of flooding and/or isolation.

a. **Schools**

- Cudal Public School – Toogong Street, Cudal

b. **Childcare centres**

- Cudal Pre-School – Main Street, Cudal

Facilities for the aged and/or infirm

2.4.5 The following facilities are at risk of flooding and/or isolation, as occurred in November 2009, where 80 millimetres of rain fell in 30 minutes:

- a. Cudal War Memorial Health Service – corner Toogong and Cargo Streets.

Utilities and Infrastructure

2.4.6 The following utilities and infrastructure are at risk of flooding:

- a. There are no known utilities or infrastructure that are at risk of flooding.

2.4.7 Caravan Parks are listed in Volume 3, Chapter 3 of this Local Flood Plan (SES Caravan Park Arrangements), including Cudal Caravan Park.

Classification of Floodplain

2.4.8 The community of Cudal is located on the Boree Creek and the town can be classified as having rising road access.

Inundation

2.4.9 Boree Creek can rise quickly with little or no warning causing significant damage.

2.4.10 A number of low lying residential properties in Cudal can be inundated by Boree Creek and overland flooding after heavy rainfall, such as occurred in November 2005. In the November 2005 flood up to eight dwellings were inundated at Cudal. The worst affected dwelling located in Nathan Street suffered significant damage with water reaching a height of over one metre.

Isolation

2.4.11 There is no known risk of isolation.

Characteristics of flooding

2.4.12 The creek running parallel to Nathan Street and is subject to riverine and overland flooding, which can be fast flowing.

Flood Mitigation Systems

2.4.13 There are no known flood mitigation systems in Cudal.

Dams

2.4.14 There are no known consequences of dam failure in Cudal.

Other Considerations

2.4.15 The Cudal Show is held annually in September which can attract up to 1,000 visitors. The show is held at the Cudal Showground which is located on the northern side of the Boree Creek.

2.5 EUGOWRA

- 2.5.1 Eugowra is located to the south east of the Cabonne LGA, on Mandagery Creek and its tributary Puzzle Flat Creek. It is located 35 kilometres east of Forbes on the main road to Orange. The town is dissected by Mandagery Creek, connected by a bridge linking Broad and Pye Streets (Map 6).
- 2.5.2 Eugowra has a population of 912 (2). There is a high proportion, approximately 23 per cent, who are over 65 years of age. Some of these residents will need assistance during flood periods (7).

Cultural and Linguistic Diversity

- 2.5.3 There are approximately 38 indigenous persons in Eugowra and there are no identified persons who do not have proficiency in English (2).

Schools and childcare centres

- 2.5.4 The following schools and childcare centres are at risk of flooding and/or isolation:
- a. Schools
 - St Joseph's – Pye Street, Eugowra inundated at around 9.90 metres on the Eugowra Town gauge. The school buildings are not at risk of inundation but some of the surrounding school grounds are at risk of inundation.
 - b. Childcare centres
 - Eugowra Pre-School – Nanima Street, Eugowra inundated at around 9.45 metres on the Eugowra Town gauge. The pre-school buildings are not at risk of inundation but some of the surrounding school grounds are at risk of inundation.

Facilities for the aged and/or infirm

- 2.5.5 The following facilities are at risk of flooding and/or isolation:
- a. A block of self-care units in Nanima Street is situated adjacent to a floodway, which may become inundated from around 9.90 metres on the Eugowra Town gauge.
 - b. The Hospital can only be accessed by those west of Bowler Street in floods above the 5% AEP flood.

Utilities and Infrastructure

- 2.5.6 The following utilities and infrastructure are at risk of flooding and become inundated at around 9.45 metres on the Eugowra Town gauge (4):
- a. Telstra Exchange - Nanima Street
 - b. Eugowra Post Office / Rural Transaction Centre – Broad Street

- c. Police station – Nanima Street
- d. RFS Brigade Station – Nanima Street

Classification of Floodplain

- 2.5.7 The floodplain can be classified as an area with rising road access. Mandagery Creek breaks its western bank at 8.70 metres on the Eugowra Town gauge. At approximately 8.80 metres on the Eugowra Town Gauge road access in a westerly direction is lost.

Inundation

- 2.5.8 Eugowra utilises the Eugowra Town gauge (412904) for flood warning, with minor and major flood levels at 8.0 and 9.0 metres respectively. There is also a Eugowra Flood Warning Committee consisting of land holders and residents to monitor a number of stream and rain gauges including 'Glenayr' about 10-14 hours travel time upstream of Eugowra (4).
- 2.5.9 Even in relatively frequent floods, between 8.70 and 9.90 metres on the Eugowra Town gauge, water starts to enter dwellings in Broad Street (four dwellings) and several yards and sheds in Broad Street, Barrack Street, Cheshier Street, Myral Street, North Street, Grevillea Avenue, Copper Street and Pye Street (12).
- 2.5.10 Eleven residential and six businesses are at risk of overfloor flooding at around 9.2 metres, increasing to 15 residential and nine businesses at 9.45 metres and 35 building on the west and 25 buildings on the east at 9.9 metres (1990 flood height). Sections of North Street, Hill Street, Broad Street, Cooper Street, Camp Street, Cheshire Street, Barrack Street, Mackays Creek Road and Myall Street on the western side are the first affected. Most of the town's businesses in Broad Street can experience inundation around this height also. On the eastern side of the Creek Grevillia Avenue and Pye, Nanima, Evelyn and Loftus Streets are at risk of flooding (4).
- 2.5.11 A block of self-care units in Nanima Street is situated adjacent to a floodway and can result in dangerous inundation depths and velocities (1).
- 2.5.12 In a 1% AEP event, 60 residential dwellings would be flooded above floor, with 40 of those located in a high hazard area of the floodplain. 37 commercial buildings would also be inundated. Residential flooding is experienced in an area bounded approximately by Grevillea/Noble/Karreena Streets in the eastern part of town and Bowler/Cooper Streets in the western part of town (13).
- 2.5.13 In addition, up to 18 public buildings are at risk of flooding in a PMF, 5 of which are flooded in a 5% AEP flood and 14 of which in a 1% AEP flood (10.17 metres). These are located in Barrack Street, Nanima Street, North Street and Pye Street and include the Masonic Hall, Youth Centre, School, Church, toilets, Police Station, telephone exchange, Post Office, pool and Youth Centre (13).

Isolation

- 2.5.14 In major flood events like those experienced in 1990 the eastern side of Eugowra is separated from the west and East Eugowra can be cut off from outside communities as well (1).
- 2.5.15 Rural properties can become isolated from around 9.2 metres on the Eugowra gauge (9).
- 2.5.16 More extreme floods above that of 1990 (flood equivalent to a once-in-70-years-event), would cause widespread inundation of parts of East Eugowra and will cause the majority of residences in the eastern side of Eugowra to be inundated (1).

Characteristics of flooding

- 2.5.17 Eugowra is at risk of riverine and overland flooding. Floods in Eugowra can be characterised as potentially being severe in the event that the Mandagery Creek is in flood (1).
- 2.5.18 Different sections of Eugowra are affected in a variety of ways by floods depending on their proximity to Mandagery Creek and Puzzle Flat Creek. Even in a relatively minor flood, the town is cut into two by Mandagery Creek (4).
- 2.5.19 Flooding of rural areas along the Mandagery Creek and its tributaries is common, and the town is flood liable. Flows escape the main creek during floods and move down floodway on either side. They can be dangerously fast moving, with velocities of up to two metres per second having been recorded (1). In addition, as the catchment area is small floods can occur quickly, making them difficult to predict (11).
- 2.5.20 Around 8.7 metres at Eugowra, Mandagery Creek breaks its western bank in Eugowra near the intersection of Hill Street and North Street and at the eastern and western ends of Barrack Street. Flooding occurs in North, Cooper, Camp Cheshier and Barrack streets soon after the breakout. A flood runner may flow through east Eugowra in major floods, down North Street and across the park and down Cheshier Street which acts as a floodway. Water depths exceed one metre and two metres per second (4). The depth and velocity of this floodway make it particularly dangerous (12).
- 2.5.21 From a 5% AEP flood, Puzzle Flat Creek would start to overtop its banks, and move to the rural area west of the creek, deflect south along Noble Street to the railway then west to Mandagery Creek, the streets acting as floodways (13).
- 2.5.22 The floodplain is 400 metres wide on the western bank of the Mandagery Creek at Eugowra, and over one kilometre wide on the eastern bank (with the eastern floodway known as Billygoat Creek). The eastern floodway conveys water from 1.5 kilometres upstream of the town as well as the floodwater from the Puzzle Flat Creek breakout upstream of "Heatherville" (4).
- 2.5.23 Floodwater from Puzzle Flat Creek do not contribute significantly to flood levels in eastern Eugowra; however the floodplain is quite wide in the vicinity

of Eugowra (600 metres upstream of the racecourse levee). Flooding of Puzzle Flat Creek is independent to Mandagery Creek flooding (4).

- 2.5.24 Floods have been observed to persist for over 10 days (4).

Flood Mitigation Systems

- 2.5.25 Two levee banks constructed on Puzzle Flat Creek in 1992 have reduced the frequency of flooding from this creek. The levees are located on Canowindra Road and Eugowra trotting track. In 2017, there was a 900 metre section of the levee that was not the same height as the rest of the levee (12).
- 2.5.26 The banks could be overtopped in an extreme flood event, above a 1% AEP flood (10.17 metres) (2).
- 2.5.27 The levee bank on Puzzle Flat Creek is approximately 3.32 kilometres long, and does not cover the entire length of the northern bank. Consequently, nuisance flooding could still occur in the eastern part of Eugowra (11).
- 2.5.28 There are two detention basins currently in operation in the Puzzle Flat Creek catchment (13).
- 2.5.29 Levees have also been constructed in the vicinity of "Heatherville" homestead to prevent floodwaters flowing parallel to the road and joining floodwater from Mandagery Creek discharging down Billygoat Creek (13) and on the northern bank of the creek at Canowindra Road to prevent water entering the town along the roadside drainage system (13).

Dams

- 2.5.30 There are no known consequences of dam failure in Eugowra.

Other Considerations

- 2.5.31 The Eugowra Show is held annually in September and will attract up to 1,000 people.

2.6 MANILDRA

2.6.1 The township of Manildra is located halfway between Orange and Parkes. It has a population of 728 (2) (Map 7).

2.6.2 Nearly 16 per cent of the population are over the age of 65 years (2).

Cultural and Linguistic Diversity

2.6.3 There are approximately 21 indigenous persons in Manildra and there are no identified persons who do not have proficiency in English (2).

Schools and childcare centres

2.6.4 The following schools and childcare centres are at risk of localised and overland flash flooding and/or isolation.

a. **Schools**

- Manildra Public School – Packham Drive, Manildra
- St Joseph’s - Loftus Street, Manildra

b. **Childcare centres**

- Manildra Pre-School - Molong Road, Manildra

Facilities for the aged and/or infirm

2.6.5 The following facilities are at risk of flooding and/or isolation:

- a. There are no known hospitals, aged care or group homes that are at risk of flooding.

Utilities and Infrastructure

2.6.6 The following utilities and infrastructure are at risk of flooding:

- a. There are no known utilities or infrastructure that are at risk of flooding.

Classification of Floodplain

2.6.7 The town of Manildra can be classified as an area that has rising road access.

Inundation

2.6.8 Manildra is located at the confluence of the Manildra and Mandagery Creeks, and may have a very small number of houses which could be flooded along with the river flats. Local roads can be closed and the railway line cut. In November 2005 a major flood on the Mandagery Creek came close to inundating the old Mill Managers house and parts of the Manildra Flour Mill.

Isolation

2.6.9 There is no known risk of isolation.

Characteristics of flooding

- 2.6.10 Manildra is known to have riverine and overland flooding which is deep and fast flowing.

Flood Mitigation Systems

- 2.6.11 There are no known flood mitigation systems in Manildra.

Dams

- 2.6.12 There are no known consequences of dam failure in Manildra.

Other Considerations

- 2.6.13 The Manildra Show is held annually in September which can attract up to 1,000 visitors.

Macquarie River Valley

2.7 CUMNOCK

2.7.1 Cumnock is a small town in a scenic rural area of Central NSW, 22 kilometres from Molong and about 45 minutes north west of Orange (Map 8).

2.7.2 It has a population of 614, with approximately 18% of the population over 65 years of age (8).

Cultural and Linguistic Diversity

2.7.3 There are approximately 23 indigenous persons in Cumnock and there are no identified persons who do not have proficiency in English (8).

Schools and childcare centres

2.7.4 The following schools and childcare centres are at risk of overland and localised flash flooding and/or isolation.

- a. Schools
 - Cumnock Public School - Railway Parade, Cumnock
- b. Childcare centres
 - Cumnock Pre-School - Obley Street, Cumnock

Facilities for the aged and/or infirm

2.7.5 There are no hospitals, aged care or group homes that are at known risk of flooding.

Utilities and Infrastructure

2.7.6 There are no utilities or infrastructure that are at known risk of flooding.

Classification of Floodplain

2.7.7 The town of Cumnock can be classified as an area that has rising road access.

Inundation

2.7.8 Cumnock is located at the confluence of Doughboy and Cumnock Creeks. The town has three houses which may be flood liable at the northern end of Obley Street during a significant flood on Doughboy Creek. In an extreme flood event, up to three additional dwellings, also located at the northern end of Obley Street could be at risk of inundation. Inundation of one house located alongside Cumnock Creek near the Obley Street Bridge (Cumnock Creek flows through the centre of the town) could occur. After heavy rain in November 2005 one house in Cundumble Street was inundated with another being at risk as a result of blocked drains (1).

Isolation

- 2.7.9 The town is cut into two when the Doughboy creek breaks its banks. Cumnock is not isolated as alternative routes are available into and out of the town (1).

Characteristics of flooding

- 2.7.10 Cumnock is known to have riverine and overland flooding from Doughboy and Cumnock creeks. Water levels can rise quickly and travel quickly (1).

Flood Mitigation Systems

- 2.7.11 There are no known flood mitigation systems in Cumnock.

Dams

- 2.7.12 There are no known consequences of dam failure in Cumnock.

Other Considerations

- 2.7.13 There are a number of events that occur in Cumnock. They are:
- a. The Cumnock Show is held annually in May, which can attract up to 1,000 people.
 - b. The Cumnock Camp Draft is held annually in January, which can attract up to 300 people.
 - c. The Cumnock Christmas Tree Event is held annually in December, which can attract up to 500 people.

2.8 MOLONG

- 2.8.1 Molong is located on the Mitchell Highway about 300 kilometres west of Sydney and about 35 kilometres north west of Orange. It is situated on Molong Creek (Map 9).
- 2.8.2 Molong has a population of 2,509 people (8). Nearly 19 per cent of the population are over the age of 65 years (8).

Cultural and Linguistic Diversity

- 2.8.3 There are approximately 78 indigenous persons in Molong and there are approximately 3 identified persons who do not have proficiency in English (8).

Schools and childcare centres

- 2.8.4 There are no schools or childcare centres in Molong that are at known risk of flooding and/or isolation.

Facilities for the aged and/or infirm

- 2.8.5 There are no hospitals, aged care or group homes that are at known risk of flooding.

Utilities and Infrastructure

- 2.8.6 The following utilities or infrastructure are at risk of flooding:
- a. NSW SES Molong Headquarters access may be cut from Boree Hollow Creek flooding (as occurred in August 1996) (2).
 - b. Police Station is Bundella Place is at risk of inundation in a 1% AEP flood (in the order of 4.9 metres) (2).
 - c. Railway and railway station is at risk of inundation in a 1% AEP flood (4.9 metres) (2).
- 2.8.7 Caravan Parks are listed in Volume 3, Chapter 4 of this Local Flood Plan (SES Caravan Park Arrangements), including Molong Caravan Park.

Classification of Floodplain

- 2.8.8 The town of Molong can be classified as an area that has rising road access.

Inundation

- 2.8.9 Molong uses the Molong (Wellington Street) gauge for flood warning. It is a component of the flash flood warning system, consisting of a number of rainfall and river gauges. Moderate and major flood classifications are 3.3 and 3.9 metres respectively. It is estimated that the NSW Office of Water telemetered gauge is 0.2 metres above that of the SES gauge (2), located 13 kilometres upstream of Molong. The travel time between these gauges is generally around 2 hours (16).

- 2.8.10 Much of the commercial area (on the western bank) and a significant proportion of the residential properties (on the eastern bank) are located within the floodplain and overbank flow is known to have entered the shopping area, starting from a moderate flood (e.g. in 1956, 1990 and 2005) (1).
- 2.8.11 Overfloor flooding commences in the commercial area around a 10% AEP event, estimated to be around 3.3 metres on the Wellington Street gauge (2).
- 2.8.12 Betts Street, a residential area to the east of the railway line, is the first part of the town to be affected by flood waters (1), inundating around a 5% AEP flood (3.9 metres) (2).
- 2.8.13 Ten houses in Betts, Watson, Hill and Edward streets are at risk of inundation in a moderate flood, from around 3.75 metres. This number progressively increases as the river level rises. Euchareena Road and Gidley Street properties start to inundate around 4.5 metres (9).
- 2.8.14 In a 1% AEP flood (4.9 metres), it is estimated that 28 residential houses and 42 non-residential properties would be flooded above floor (13).
- 2.8.15 In a PMF (estimated to be 9.7 metres), approximately 43 residential dwellings are inundated in Shadforth Street (4), Riddell Street (6), Kite Street (5), Betts (8), Hill Street (15), Gidley Street (2), and Market Street (3) as well as a substantial number of commercial properties (9). Other estimates indicate that there are 96 residential and 70 non-residential buildings flooded above floor, and 102 residential and 71 non-residential properties inundated in a PMF (2).

Isolation

- 2.8.16 Molong is not at known risk of isolation.

Characteristics of flooding

- 2.8.17 Molong Creek has a relatively narrow floodplain, with the railway line on the western bank acting as a barrier to natural overbank flows (2). Above a 5% AEP flood (3.9 metres), floods may overtop the railway line (2).
- 2.8.18 Molong is known to have riverine flooding from Molong Creek, Boree Hollow Creek and storm water runoff within the town itself. Generally it is fast flowing flash flooding in nature (13).
- 2.8.19 Major flooding can occur with very little warning (2).
- 2.8.20 During minor to moderate floods, two stormwater drains beneath the railway line and station back up and cause flooding in the commercial area (2).
- 2.8.21 Boree Hollow drains into Molong Creek within the public reserve immediately north east of the intersection of Thistle and Philip Street (2).
- 2.8.22 In the flood event of November 2005 (estimated to be above a 1% AEP event) water depths of well over a metre were recorded in Bank, Watson, Hill and Gidley Streets (1). A depth of 10.5 metres is estimated to occur in Bank and

Watsons Street in a PMF (9), this is estimated to be four to five metres deeper than the 1% AEP flood depths.

- 2.8.23 Ponding from overland flow is of particular concern at Bank Street and Watson Street, Watson Street and Hills Street and Gidley Street and Hill Street intersections (16).

Flood Mitigation Systems

- 2.8.24 There are no known flood mitigation systems.

Dams

- 2.8.25 Three dams exist upstream of Molong – *Lake Canobolas*, located approximately 31 kilometres upstream of Molong on Molong Creek, *Molong Creek Dam*, located approximately 19 kilometres south-east of Molong on Molong Creek, and *Borenore Creek Dam* located on Borenore Creek approximately 16 kilometres south-east of Molong.
- 2.8.26 ‘Somerton Park’, which is about 1.5 kilometres downstream of Lake Canobolas, would be affected by a dam failure. No Dambreak Study to date has sufficiently evaluated the potential cascade dam failure scenario on Molong. Some houses in Molong would be affected by a dam break at Lake Canobolas that also triggered a dam break at Molong Creek Dam. However in the simulation no inundation heights were calculated so it is unknown how much the town is affected by this dam failure scenario (4).

Other Considerations

- 2.8.27 There are a number of events that occur in Molong. They are:
- a. The Molong Show is held annually in September which can attract up to 2000 visitors.
 - b. “Molong Camp Draft” which is held annually in September / October which can attract up to 200 people.
 - c. “Molong Markets” which is held up to four times a year in February, March, May and October which can attract up to 200 people.
 - d. “100 Mile Dinner” is held annually in April which can attract up 300 people.
 - e. “Meet you in Molong” is held every second month which can attract up to 300 people.

2.9 YEOVAL

2.9.1 Yeoval is a small village in the Central Western district of New South Wales, Australia. The town lies in Cabonne Shire, however a small part lies over Buckinbah Creek in Wellington Shire which is referred to as North Yeoval.

2.9.2 It has a population of 426, with approximately 25% over 65 years of age (8).

Cultural and Linguistic Diversity

2.9.3 There are approximately 47 indigenous persons in Yeoval and there are no identified persons who do not have proficiency in English (8).

Schools and childcare centres

2.9.4 The following schools and childcare centres are at risk of localised flash and overland flooding.

a. **Schools**

- Yeoval Central School - Obley Road, Yeoval
- St Colomba's - Forbes Street, Yeoval

b. **Childcare centres**

- Yeoval Pre-School - King Street, Yeoval

Facilities for the aged and/or infirm

2.9.5 There are no hospitals, aged care or group homes that are at known risk of flooding.

Utilities and Infrastructure

2.9.6 There are no utilities or infrastructure that are at known risk of flooding.

Classification of Floodplain

2.9.7 The town of Yeoval can be classified as an area that has rising road access.

Inundation

2.9.8 Yeoval is sited at the confluence of Sandy and Buckbinbah Creeks and its low-lying areas are flood liable. Up to five houses at the low end of Obley and Ganoo Streets could be flooded from Sandy Creek. Other areas that could be flooded in a major flood event include the low-lying areas of the golf course and showground located at the northern edge of the town (1).

Isolation

2.9.9 Yeoval is not at known risk of isolation.

Characteristics of flooding

- 2.9.10 Yeoval is known to have riverine and overland flooding from both Sandy and Buckbinbah Creeks. Water levels can rise quickly and travel quickly.

Flood Mitigation Systems

- 2.9.11 There are no known flood mitigation systems.

Dams

- 2.9.12 There are no known consequences of dam failure in Yeoval.

Other Considerations

- 2.9.13 The Yeoval Show is held annually in April / May annually which can attract up to 800 people.

ROAD CLOSURES AND ISOLATED COMMUNITIES

2.10 ROAD CLOSURES

2.10.1 Table 6 lists roads liable to flooding in the Cabonne Shire LGA.

Table 6: Roads liable to flooding in Cabonne Shire LGA.

Road	Closure location	Consequence of closure	Alternate Route	Indicative gauge height
Canowindra				
Belubula Way (Also known as Mandurama Rd)	Cherry Tree Falls Bridge – East of Canowindra	Canowindra-Mandurama access reduced. Possible duration of closure – 3 days or longer depending on the damage to the roads.	Alternate route to Blayney is via Cargo Road and Orange. George Russell Drive (if still open) or via Cowra.	Before 4.5m Canowindra gauge. First road in Canowindra area to be cut by flood water
George Russell Drive. (Also known as Woodstock Road).	Concrete culvert 3km south-east of Canowindra (East of Gallaghers Lane)	Canowindra-Woodstock access reduced. Possible duration of closure – 2 days	Access via Cowra or Orange (Cherry Tree Falls Bridge on the Mandurama Road would be closed by this time). Alternate route to Cowra is via Canowindra Road only if people are located on the Western side of Gallaghers Lane. If people are located on the Eastern side of Gallaghers Lane the alternate route is Mid Western Highway.	4.5m -5.14m Canowindra gauge
Canowindra Road. (Also known as the Cowra Road).	John Grant Bridge	Canowindra-Cowra access reduced. Possible duration of closure - Up to 12 hours. The town of Canowindra is cut in two.	Northern part may be accessed from Orange or Eugowra. Southern part may be accessed from Cowra.	5.8m Canowindra gauge. Work has been undertaken on the bridge since the road last went under which will have an impact on

Road	Closure location	Consequence of closure	Alternate Route	Indicative gauge height
				when the bridge is cut.
Rivers Road (Cowra Shire Council area)	Bangaroo Bridge	Gooloogong access reduced. You can still access Cowra or Canowindra. Possible duration of closure – 3 days	Area may be reached from the main Canowindra –Cowra Road	5.0m at Canowindra or from back-up from Lachlan River
Settlement Bridge Road	Settlement Bridge. (Bridge is also known as Settlement Bridge or Cullane’s Bridge).	Canowindra-Gooloogong access reduced for people living on the Southern side of the Belubula River on this road. Access to Canowindra or Cowra is still possible. Possible duration of closure – 3 days. In higher floods there are several points of closure and several houses are isolated.	Area may be reached from the Rivers Road or Warraderry Way	3.6m Canowindra gauge
Fish Fossil Drive. This is a dirt road that is mainly for local access by farmers within the area.	Near Fossil Corner	Canowindra – Gooloogong access not affected by this road closure(only local access affected Possible duration of closure - Up to 12 hours. In higher floods there are several points of closure and several houses are isolated.	Access to eastern end from Nangar way (Canowindra – Eugowra Rd. Access to western end via Warraderry Way.	5.5m Canowindra gauge
Warraderry Way. (Known locally as the Gooloogong Rd).	Near “Alfalfa”	Canowindra-Gooloogong access reduced. Possible duration of closure - Up to 12 hours. In higher floods there are several points of closure and several houses are isolated.	Access via minor roads off the main Canowindra-Eugowra Road.	5.5m Canowindra gauge
Wenz Lane	Eastern and Western end of	Access to Canowindra	Access via minor roads.	5.56 Canowindra

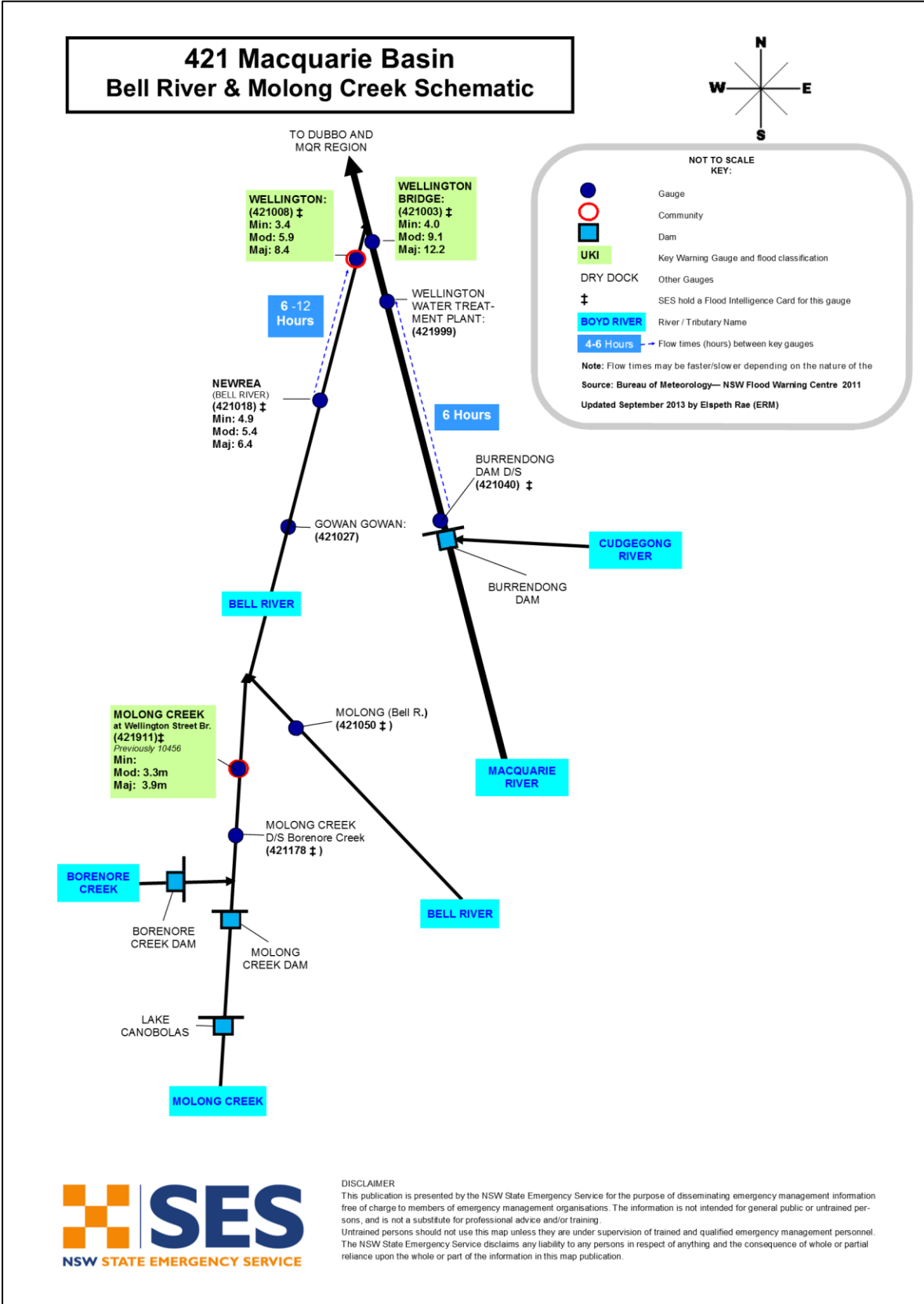
Road	Closure location	Consequence of closure	Alternate Route	Indicative gauge height
	Wenz Lane.	affected.		gauge
Eugowra				
Casuarina Drive	At "Glen Avery" property 10km South of Eugowra	Eugowra-Gooloogong access reduced. Possible duration of closure - Up to 12 hours.	Access by minor road off the main Canowindra-Eugowra Road.	n/a
Rodwells Road	Carmen Bridge (5km downstream of Murga)	Isolates 6 rural properties for up to 15 hours.	No	8.0m at Eugowra gauge
Escort Way	Broad St, Eugowra (immediately west of bridge)	Orange - Eugowra access reduced. Possible duration of closure - Up to 1 Day. Cuts the town in two.	West Eugowra may be reached from Parkes and Forbes. East Eugowra may be reached from Canowindra.	9.0m at Eugowra gauge
Escort Way	O'Neils Bridge (Murga). Eulimore Road area 70 km from Orange. Approximately 2km North-East of Eugowra at the causeway on Orange Road	Orange - Eugowra access reduced. Possible duration of closure - Up to 12 hours.	An alternative route would be from Mandagery.	8.8 metres at Eugowra gauge – note this is due to a tributary Terrara Creek
Waugan Road				9.0m at Eugowra gauge
Mackays Creek Road		Access from Eugowra to Four Ways and Island View lost.		9.0m at Eugowra gauge
Reedy Creek Road	O'Neils Bridge, Murga	Restricts access between Murga and Mandagery and Bumberry		9.0m at Eugowra gauge
Escort Way	Long Gully Creek Bridge and the lagoon near Eugowra Golf Club	Eugowra-Orange Rd (MR 377)		9.5 metres at Eugowra gauge
Yeoval				
Renshaw McGirr Way	Bridge over Sandy Creek, West Yeoval	Yeoval-Dubbo access reduced. Possible duration of closure - Up to 3 hours.	Alternative routes available via Wellington, Molong or Dubbo.	n/a

Road	Closure location	Consequence of closure	Alternate Route	Indicative gauge height
Cumnock				
Obley Road (Banjo Paterson Way)	Bridge over Doughboy Creek, North Cumnock	Cumnock-Yeoval access reduced. Possible duration of closure - Up to 3 hours. Road is also likely to be cut in a number of other low lying areas between Cumnock and Yeoval.	Alternative routes available via Wellington, Molong or Dubbo.	n/a
Molong				
Mitchell Highway	Bank Street, Molong	Possible duration of closure - Up to 6 hours.	Orange-Wellington access reduced. Bypass route via Wellington and Edward Streets.	3.5m Wellington Street gauge.
Mitchell Highway	Gidley Street, Molong	Possible duration of closure - Up to 6 hours.	Orange-Wellington access reduced. Bypass route via Wellington and Edward Streets.	3.5m Wellington Street gauge.
Mitchell Highway	5kms South-East of Molong	Possible duration of closure - Up to 3 hours.	Orange-Wellington access reduced. Alternative route via Orange-Forbes Road (Escort Way) to Boree, then Peabody Road to Molong.	4.5m Wellington Street gauge.

2.11 SUMMARY OF ISOLATED COMMUNITIES AND PROPERTIES

2.11.1 There are no known communities liable to isolation, based on historical and design events. This does not reflect the duration of isolation expected in larger and extreme events.

ANNEX 1: BELL RIVER & MOLONG CREEK SCHEMATIC



ANNEX 4: FACILITIES AT RISK OF FLOODING AND/OR ISOLATION

Lachlan River Valley

Facility Name	Street	Suburb	Comment
Schools			
Canowindra High School	Browns Avenue	Canowindra	
Canowindra Public School	Tilga Street	Canowindra	
St Edward's	Tilga Street	Canowindra	
Cargo Public School	Hutton Street	Cargo	
Nashdale Public School	Cargo Road	Nashdale	
Spring Terrace Public School	Orange Road	Spring Terrace	
Cudal Public School	Toogong Street	Cudal	
St Joseph's	Pye Street	Eugowra	Inundated at around 9.90 metres on the Eugowra Town gauge
Manildra Public School	Molong Road	Manildra	
St Joseph's	Loftus Street	Manildra	
Child Care Centres			
Canowindra Pre-School	Corner Ferguson and Ryall Streets	Canowindra	
Cudal Pre-School	Main Street	Cudal	
Eugowra Pre-School	Nanima Street	Eugowra	Inundated at around 9.45 metres on the Eugowra Town gauge
Manildra Pre-School	Molong Road	Manildra	
Facilities for the aged and/or infirm			
Cudal War Memorial Health Service	corner Toogong and Cargo Streets	Cudal	

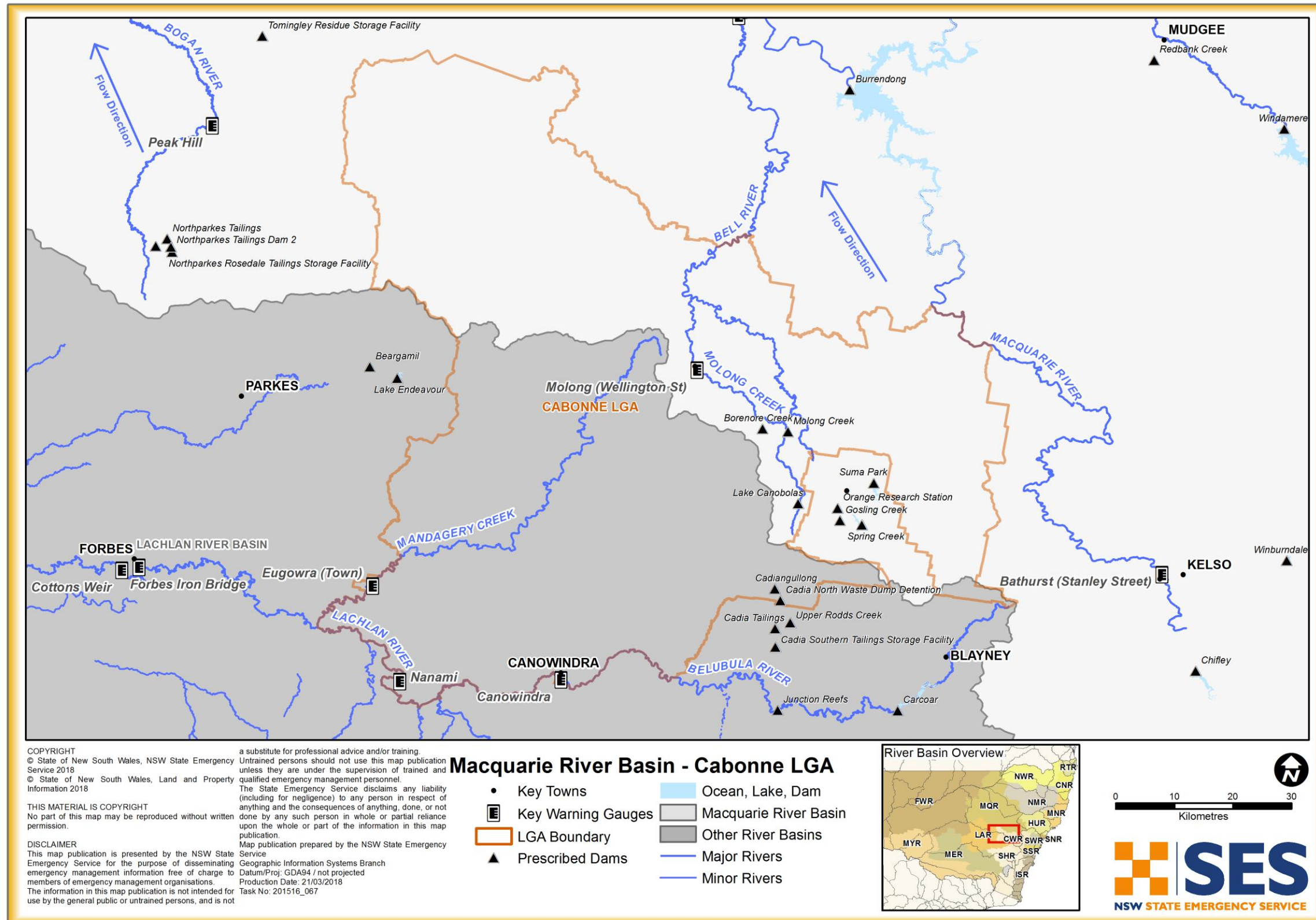
Facility Name	Street	Suburb	Comment
Block of self-care units	Nanima Street	Eugowra	A block of self-care units in Nanima Street is situated adjacent to a floodway, which may become inundated from around 9.90 metres on the Eugowra Town gauge.
Utilities and infrastructure			
Cabonne Shire Council Sewer pump	East Street	Canowindra	This pump will become affected when the John Bridge Gauge reaches 6.00 metres.
Cabonne Shire Council Sewer pump	Corner of Canowindra and Newtown Street	Canowindra	This pump will become affected when the John Bridge Gauge reaches 5.46 metres.
Telstra Exchange	Nanima Street	Eugowra	Inundated at around 9.45 metres on the Eugowra Town gauge.
Eugowra Post Office	Nanima Street	Eugowra	Inundated at around 9.45 metres on the Eugowra Town gauge.
Police station	Nanima Street	Eugowra	Inundated at around 9.45 metres on the Eugowra Town gauge.
RFS Brigade Station	Nanima Street	Eugowra	Inundated at around 9.45 metres on the Eugowra Town gauge.
Camping Ground / Caravan Parks			
Canowindra Caravan Park	Gaskill Street	Canowindra	
Cudal Caravan Park	Main Street	Cudal	

Macquarie River Basin

Facility Name	Street	Suburb	Comment
Schools			
Cumnock Public School	Railway Parade	Cumnock	
Child Care Centres			
Cumnock Pre-School	Obley Street	Cumnock	
Yeoval Central School	Obley Road	Yeoval	
St Colomba's	Forbes Street	Yeoval	
Borenore Public School	Forbes Road	Borenore	
Clergate Public School	Gazzard Lane	Clergate	
Euchareena Public School	Walter Street	Euchareena (located in Wellington LGA)	
Mullion Creek Public School	Long Point Road	Mullion Creek	
Yeoval Pre-School	King Street	Yeoval	
Facilities for the aged and/or infirm			
Nil			
Utilities and infrastructure			
NSW SES Molong Headquarters		Molong	NSW SES Molong Headquarters access may be cut from Boree Hollow Creek flooding
Ambulance Station	Bundella Place	Molong	Ambulance Station is Bundella Place is at risk of inundation in a 1% AEP flood (in the order of 4.9 metres)
Railway and railway station		Molong	Railway and railway station is at risk of inundation in a 1% AEP flood (4.9 metres)

Facility Name	Street	Suburb	Comment
Camping Ground / Caravan Parks			
Molong Caravan Park	Hill Street	Molong	

MAP 1 - MACQUARIE RIVERBASIN



MAP 2 - LACHLAN RIVERBASIN



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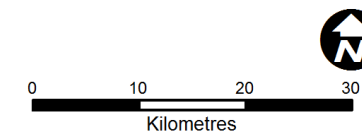
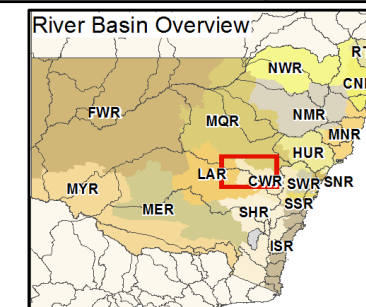
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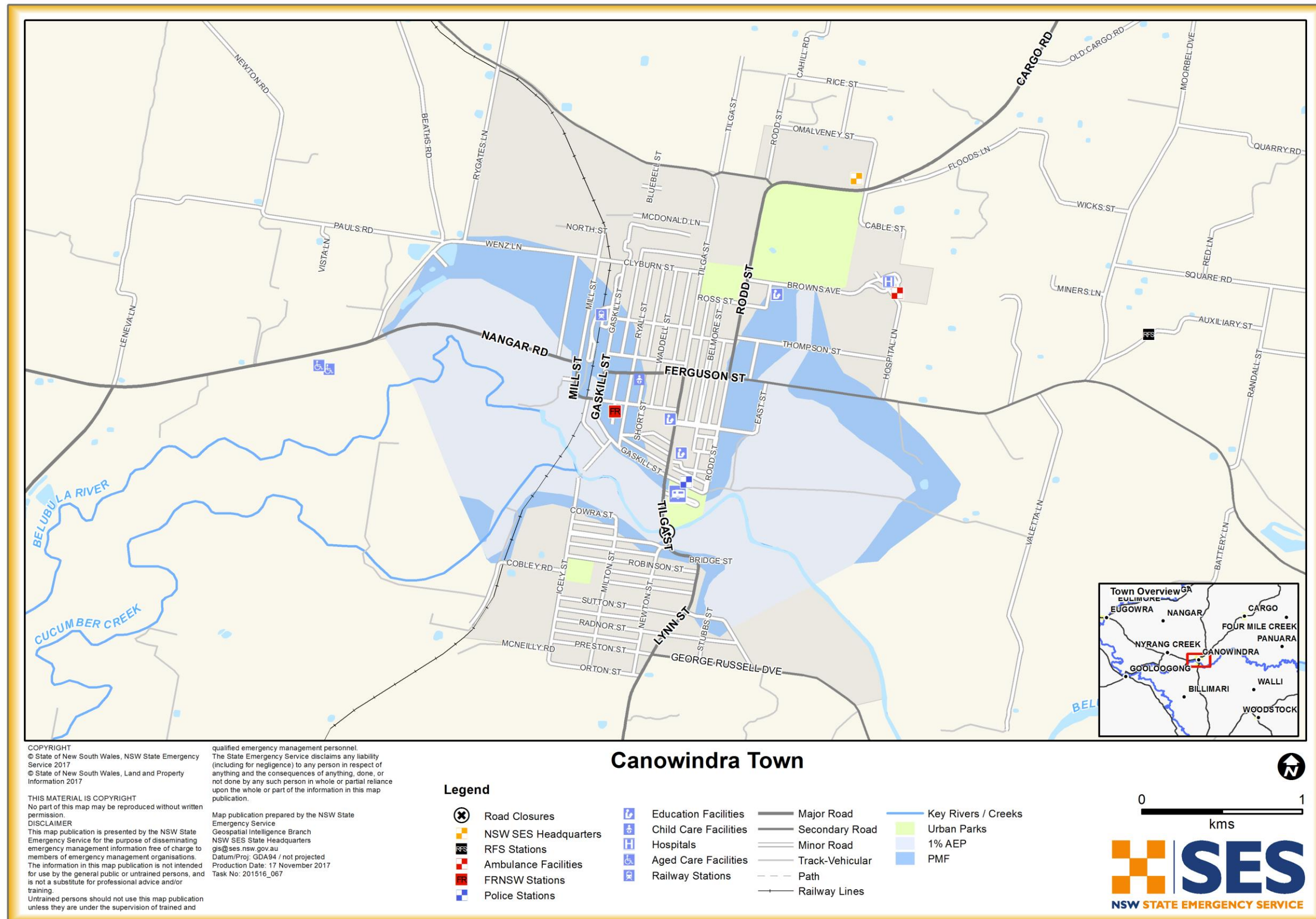
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Lachlan River Basin - Cabonne LGA

- Key Towns
- ⓔ Key Warning Gauges
- ▭ LGA Boundary
- ▲ Prescribed Dams
- Ocean, Lake, Dam
- ▭ Lachlan River Basin
- ▭ Other River Basins
- Major Rivers
- Minor Rivers



MAP 3 - CANOWINDRA TOWN MAP



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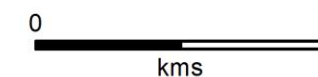
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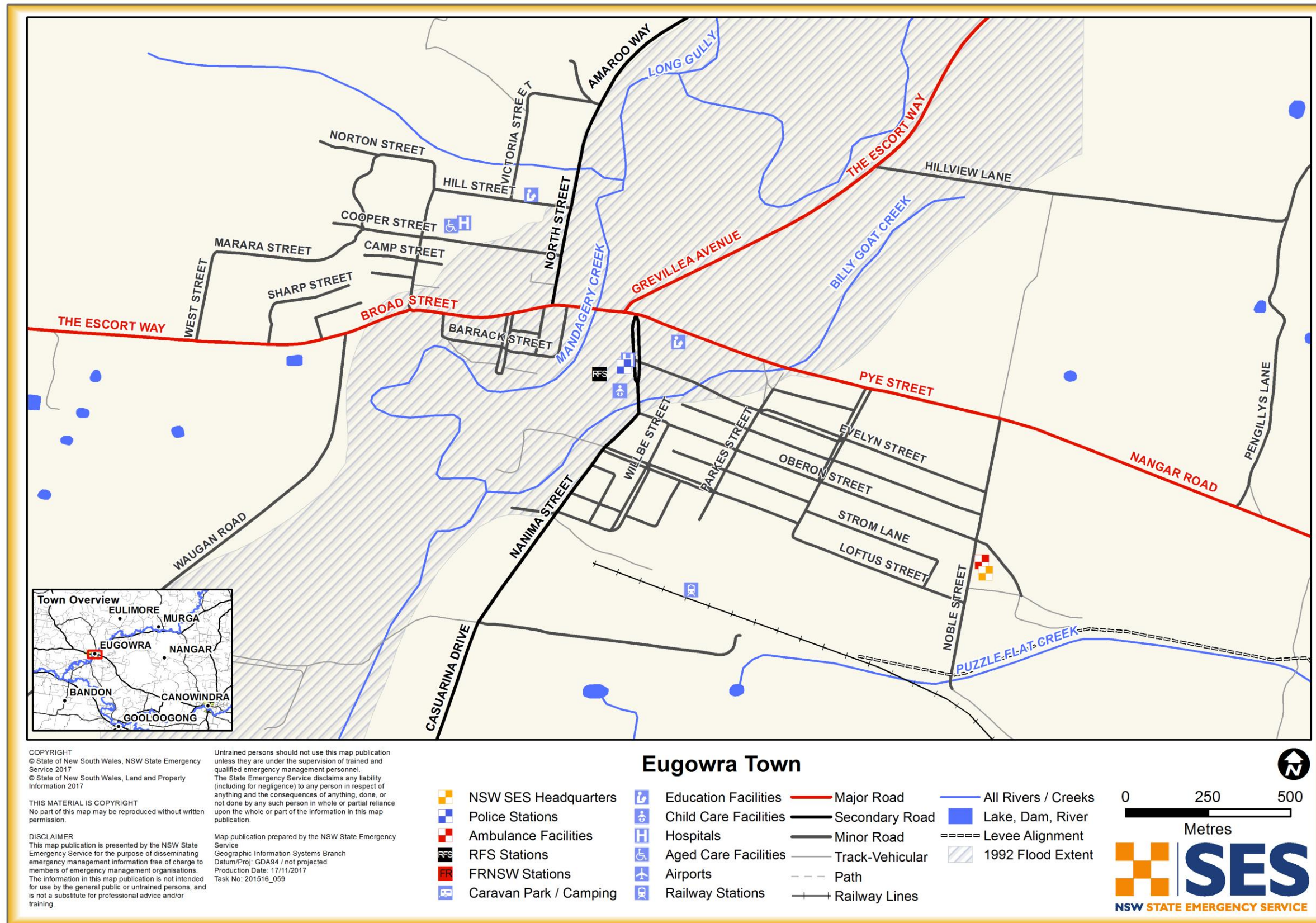
Legend

- Road Closures
- NSW SES Headquarters
- RFS Stations
- Ambulance Facilities
- FRNSW Stations
- Police Stations
- Education Facilities
- Child Care Facilities
- Hospitals
- Aged Care Facilities
- Railway Stations
- Major Road
- Secondary Road
- Minor Road
- Track-Vehicular
- Path
- Railway Lines
- Key Rivers / Creeks
- Urban Parks
- 1% AEP
- PMF

Canowindra Town



MAP 4 - EUGOWRA TOWN MAP



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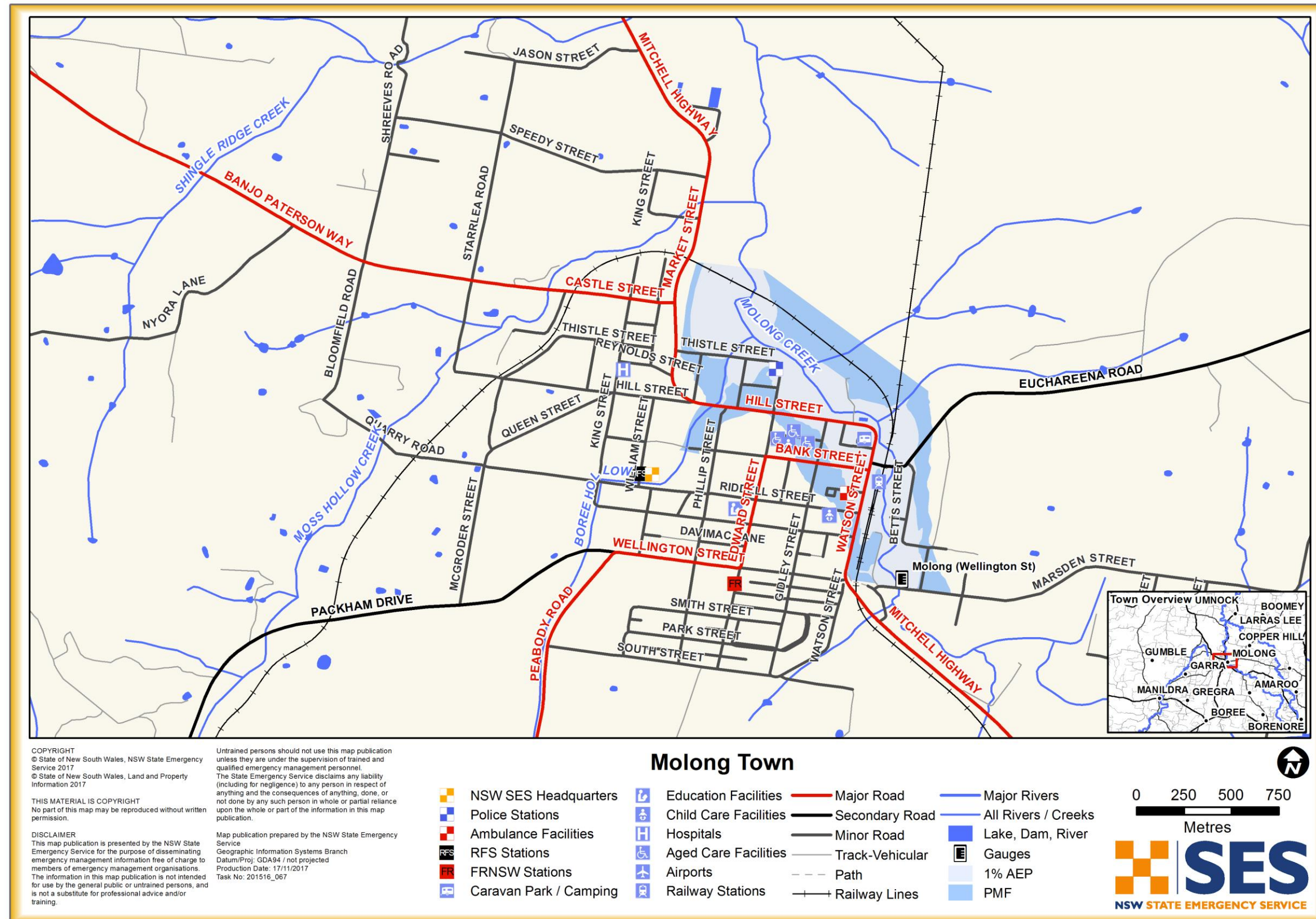
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MAP 5 - MOLONG TOWN MAP



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SES RESPONSE ARRANGEMENTS FOR CABONNE SHIRE

Volume 3 of the Cabonne Shire Local Flood Plan



CONTENTS

Chapter 1: Flood Warning Systems and Arrangements

- *Dissemination options for NSW SES flood information and warning products.*
- *Gauges monitored by the NSW SES within the LGA.*

Chapter 2: SES Locality Response Arrangements

- *NSW SES flood response arrangements by individual sector within the LGA.*

Chapter 3: SES Caravan Park Arrangements

- *Arrangements for the Evacuation of flood liable Caravan Parks within the LGA.*
- *Specific arrangements for individual parks likely to be affected by flooding.*



CABONNE SHIRE: FLOOD WARNING SYSTEMS AND ARRANGEMENTS

**Chapter 1 of Volume 3 (NSW SES Response Arrangements for Cabonne
Shire) of the Cabonne Shire Local Flood Plan**

Last Update: May 2018



AUTHORISATION

Cabonne Shire: Flood Warning Systems and Arrangements has been prepared by the NSW State Emergency Service (NSW SES) as part of a comprehensive planning process.

Approved



NSW SES Central West Region Controller

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5/6/18

Date:

Document Issue: 3.1-07042014

CONTENTS

AUTHORISATION1

CONTENTS2

LIST OF TABLES2

1. GAUGES MONITORED WITHIN THE CABONNE LGA3

2. DISSEMINATION OPTIONS FOR NSW SES FLOOD INFORMATION AND WARNING PRODUCTS5

LIST OF TABLES

TABLE 1: GAUGES MONITORED BY THE NSW SES CABONNE LOCAL HEADQUARTERS3

1. GAUGES MONITORED WITHIN THE CABONNE LGA

Table 1: Gauges monitored by the NSW SES Cabonne Local Headquarters

Gauge Name	Type	AWRC No.	Bureau Gauge No.	Stream	Flood level classification in metres			Special Reading Arrangements	Owner
					MIN	MOD	MAJ		
Carcoar Dam D/S (‡)	Telemetric	412106		Belubula	-	-	-	Telemetric	WaterNSW
The Needles (‡)	Telemetric	412056	563014	Belubula	2.0	2.5	3.6	Telemetric Local Flood Advice	WaterNSW
Cherry Tree Falls Bridge (‡)		10085		Belubula	3.5	3.8	4.2	Canowindra, NSW SES Local Flood Advice	
Canowindra U/S	Telemetric	421195	565013	Belubula	-	-	-	Telemetric	WaterNSW
Canowindra (John Grant Bridge) * (‡)	Manual	412009		Belubula	4.0	4.5	5.5	Bureau provides predictions	WaterNSW
Bangaroo Bridge (‡)		412055		Belubula	-	-	-	Local Reader	
Cudal (‡)		412076		Bourimbla Creek	-	-	-	Local Reader	
Cudal No 1 (‡)		412041		Boree Creek	-	-	-	Local Reader	
Cudal No 2 (‡)		412090		Boree Creek	-	-	-	Local Reader	
Toogong (Boree Ck) (‡)		10385		Mandagery Creek	-	-	-	Local Reader	
The Junction^^ (‡)		10377		Mandagery Creek	-	-	-	Local Reader	

Gauge Name	Type	AWRC No.	Bureau Gauge No.	Stream	Flood level classification in metres			Special Reading Arrangements	Owner
					MIN	MOD	MAJ		
'Glenayr' (Toogong) (‡)	Telemetric	412139	65084	Mandagery Creek	-	-	-	Telemetric	Water NSW
Murga (‡)		412907		Mandagery Creek	-	-	-	Local Reader	BOM
Eugowra 'Smithfield' (‡)	Telemetric	412030	65095	Mandagery Creek	-	-	-	Telemetric	WaterNSW
'Island View'		412998		Mandagery Creek	-	-	-	Local Reader	
Eugowra (Town) Gauge* (‡)		412904		Mandagery Creek	8.0	-	9.0	Eugowra, NSW SES	BOM
Heifer Station ^^ (‡)		421154		Molong Creek	-	-	-	Local Reader	
Molong Dam (‡)		10242		Molong Creek	-	-	-	Local Reader	
Molong (Wellington St Bridge) *(‡)	Manual	421911	563026	Molong Creek	-	3.3	3.9	Molong, NSW SES	Cabonne Council
Molong	Telemetric	412050	563017	Bell River	-	-	-	Telemetric	WaterNSW
Molong (D/S) (‡)	Telemetric	421178		Molong Creek	-	-	-	Telemetric	WaterNSW

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

NSW SES Local Flood Advices are provided for the gauges marked with a single cross (†).

The NSW SES holds a Flood Intelligence Card for the gauges marked with a double cross (‡).

2. DISSEMINATION OPTIONS FOR NSW SES FLOOD INFORMATION AND WARNING PRODUCTS

The NSW SES Central West Region Headquarters distributes NSW SES Flood Bulletins, NSW SES Evacuation Warnings and NSW SES Evacuation Orders to the following regional media outlets and agencies:

Television Stations:

Station	Location
ABC TV	Sydney
Prime TV	Orange
WIN TV	Orange
Southern Cross Ten TV	Orange

Radio Stations:

Station	Location	Frequency	Modulation
ABC Central West	Orange	549	AM
2EL	Orange	1089	AM
2BS	Bathurst	1503	AM
2LF	Cowra	1350	AM
2LT	Lithgow	900	AM
2PK	Parkes	1404	AM
Hit105.9 Central West	Orange	105.9	FM
2MCE-FM	Bathurst	92.3	FM
2MCE-FM	Orange	94.7	FM
ROCK-FM	Parkes	95.5	FM
B-Rock	Bathurst	99.3	FM
Triple M Central West	Orange	105.1	FM
2LF	Cowra	93.9	FM
2LVR	Forbes	97.9	FM

Newspapers:

Name	Location
Lyndhurst Shire Chronicle	Blayney (Canowindra News)
Central Western Daily	Orange
Western Advocate	Bathurst
Molong Express	Molong
Cowra Guardian	Cowra (Canowindra News)
Forbes Advocate	Forbes

Other Agencies:

- Cabonne Council
- NSW SES Cabonne Local Controller
- NSW SES Canowindra Unit Controller
- NSW SES Eugowra Unit Controller
- NSW SES Molong Unit Controller
- NSW SES Lachlan Region Headquarters – Parkes
- NSW SES Macquarie Region Headquarters – Dubbo
- Cabonne Local Emergency Operations Controller (LEOCON) – Orange
- Central West Region Emergency Management Officer (REMO) – Bathurst
- Cabonne Local Emergency Management Officer (LEMO)
- Orange Local Emergency Management Officer (LEMO)



CABONNE SHIRE: NSW SES LOCALITY RESPONSE ARRANGEMENTS

**Chapter 2 of Volume 3 (NSW SES Response Arrangements for Cabonne
Shire) of the Cabonne Shire Local Flood Plan**

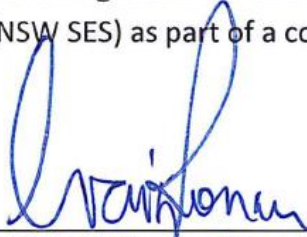
Last Update: May 2018



AUTHORISATION

NSW SES Locality Response Arrangements in Cabonne Shire has been prepared by the NSW State Emergency Service (NSW SES) as part of a comprehensive planning process.

Approved



NSW SES Central West Region Controller

Date: 28/05/2018.

5/6/18

Tabled at LEMC

Date:

CONTENTS

AUTHORISATION	2
CONTENTS	3
LIST OF TABLES	3
SECTOR OVERVIEW	4
1. CANOWINDRA COMMUNITY	6
1.1. Canowindra Response Arrangements	6
1.2. Canowindra Community Map.....	9
2. MOLONG COMMUNITY	10
2.1. Molong Response Arrangements	10
2.2. Molong Community Map.....	13
3. EUGOWRA COMMUNITY	14
3.1. Eugowra Response Arrangements.....	14
3.2. Eugowra Community Map	18
4. CUDAL AND CARGO COMMUNITY	19
4.1. Cudal and cargo Response Arrangements	19
4.2. Cudal Community Map	21
4.3. Cargo Community Map.....	22
5. NORTHERN CABONNE COMMUNITY	23
5.1. Northern Cabonne Response Arrangements.....	23
5.2. Cumnock Community Map	26
5.3. Manildra Community Map.....	27
5.4. Yeoval Community Map.....	28

LIST OF TABLES

TABLE 1: OVERVIEW OF SECTORS IN THE CABONNE LGA.	4
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SECTOR OVERVIEW

Table 1: Overview of Sectors in the Cabonne LGA.

Sector Name	Community	Sector Basis	Total properties	Properties potentially at risk
Canowindra	This covers the township of Canowindra and surrounding rural areas which has a population of 2,629. The Belubula River runs through the town. During a major flood Canowindra can be divided in two, after the northern and southern approaches to the John Grant Bridge become inundated.	Rising Road Access	1017	Up to 103 residential dwellings, 80 commercial and 9 public buildings in a PMF.
Molong	This covers the township of Molong, which has a population of 2509 as well as associated rural areas surrounding Molong. The Molong Creek runs through the town.	Rising Road Access	916	Up to 102 residential and 71 non-residential properties inundated in a PMF.
Eugowra	This covers the township of Eugowra (population of 912). During a major flood Eugowra can be divided in two, after the eastern and western approaches to the Eugowra Town Bridge become inundated.	Rising Road Access	357	Up to 60 residential dwellings would be flooded above floor, 37 commercial, 18 public buildings are at risk of flooding in a PMF.
Cudal	This sector covers the township of Cudal (population of 653).	Rising Road Access	251 in Cudal	>8 dwellings.
Cargo	This covers the township of Cargo (population of 541)	Rising Road Access	195 in Cargo	

Sector Name	Community	Sector Basis	Total properties	Properties potentially at risk
Northern Cabonne	This covers the townships of Cumnock (population of 614), Manildra (population of 728) and Yeoval (population of 519).	Rising Road Access	225 in Cumnock 281 in Manildra 193 in Yeoval	More than 6 dwellings may be flooded above floor in Cumnock. More than 5 dwellings may be flooded above floor in Yeoval. Insufficient information is available for Manildra.

1. CANOWINDRA COMMUNITY

1.1. CANOWINDRA RESPONSE ARRANGEMENTS

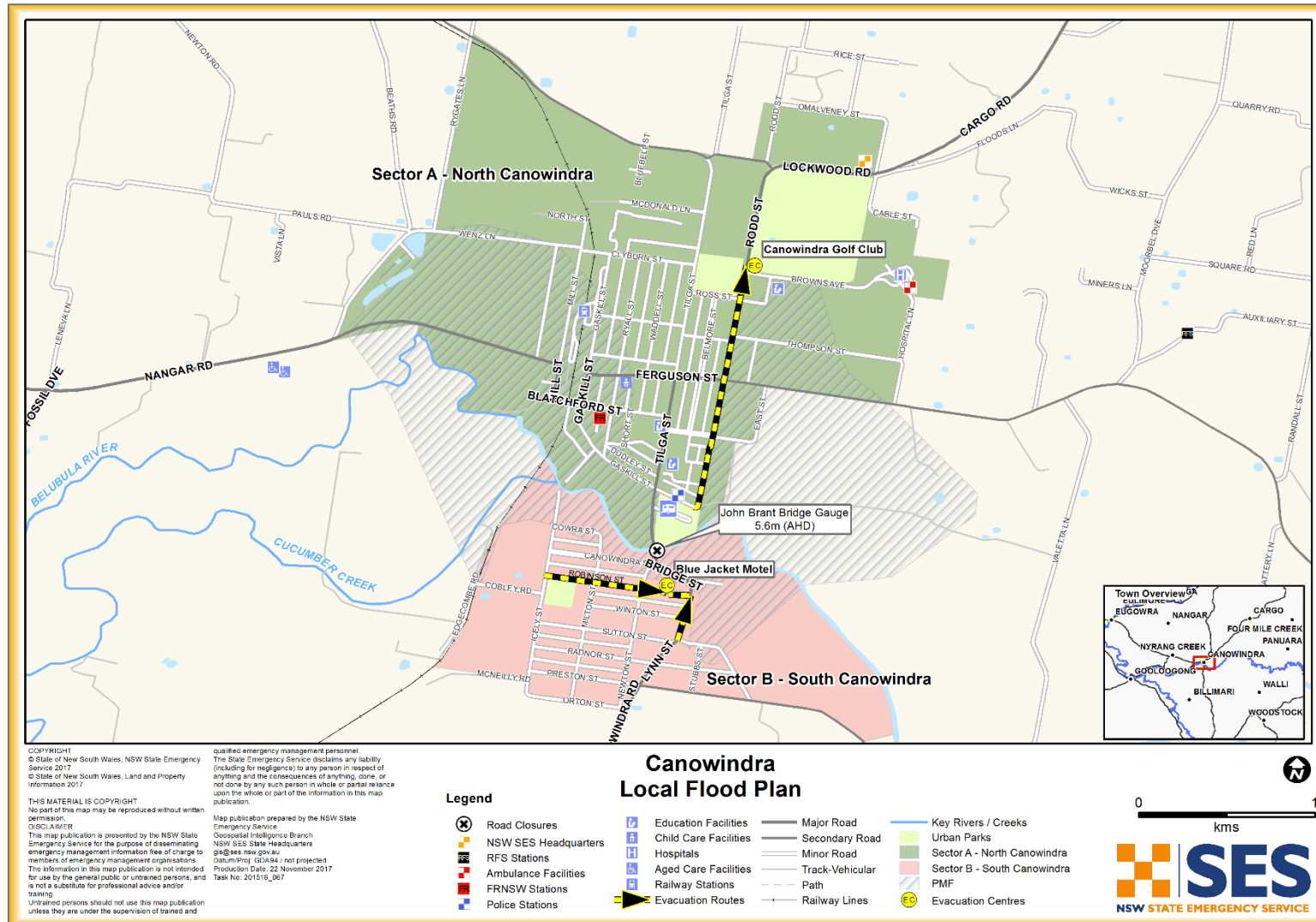
Refer to Volume 2: Hazard and Risk in Cabonne Shire for more information about this Community.

Sector Description	<p>This covers the township of Canowindra and surrounding rural areas. The Belubula River runs through the town.</p> <p>During a major flood Canowindra can be divided in two, after the approaches to the John Grant Bridge become inundated. As a result, Canowindra is divided into two Sectors by the John Grant Bridge for the purpose of evacuation:</p> <p>Sub-Sector A: North Canowindra Sub-Sector B: South Canowindra</p>				
Hazard	Both sectors are affected by the Belubula River.				
Flood Affect Classification	Rising Road Access.				
At risk properties	103 residential dwellings, 80 commercial and 9 public buildings	Total number of properties within Community	1017		
Sector Control	<p>Control - The NSW SES Incident Controller will control operations in this Sector.</p> <p>In larger events incident control may be escalated.</p> <p>Command – NSW SES and other agencies remain in command of their own resources. Command operates vertically within an organisation.</p> <p>Coordination - The coordination of other organisations and resources to support an emergency management response will occur at the EOC where established. Operations command can assist in supporting and coordinating incident management teams as required.</p> <p>Operations Centre. The Operations Centre will be established at the Canowindra Unit NSW SES, Cnr Armstrong Street and Orange Road, Canowindra.</p>				
Key Warning Gauge Name	Name	AWRC No.	Min (m)	Mod (m)	Maj (m)
	Canowindra (John Grant Bridge)	412009	4.0	4.5	5.5
General Strategy	<p>Rear access to Gaskill Street shops and flats is lost from a gauge height of 5.30m.</p> <p>Self-evacuation to friends/family outside of the impact area.</p> <p>Warn residents in East Street of potential road closure and inundation from a gauge height of 6.00m.</p>				
Key Risks / Consequences	<p>At 5.16m on the John Grant Bridge the following roads are closed:</p> <ul style="list-style-type: none"> ▪ Canowindra – Mandurama Road at Cherry Tree Falls. ▪ Canowindra – Woodstock Road at Gallaghers Lane. ▪ Solider Settlement Bridge. ▪ Rivers Road at North Bangaroo Bridge. <p>At 5.60m on the John Grant Bridge gauge John Grant Bridge is closed to all traffic. This effectively cuts the town of Canowindra in two. Access to Cowra is still possible.</p>				

<p>Information and Warnings</p>	<p>A number of methods will be used by the Central West Region Headquarters / Canowindra Unit NSW SES to inform the community regarding the potential impacts of a flood and what actions to undertake in preparation for a flood. They include:</p> <ul style="list-style-type: none"> ▪ Flood Watch ▪ Flood Bulletins ▪ Evacuation Warning ▪ Evacuation Order ▪ Sequenced door knocking of evacuation sectors ▪ Media announcements ▪ Emergency Alert (SMS, Landlines) ▪ Standard Emergency Warning Signal (SEWS)
<p>Property Protection</p>	<p><i>Specific property protection measures:</i></p> <ul style="list-style-type: none"> ▪ Monitoring rising flood waters. ▪ Relocation of livestock. ▪ Relocation of farm machinery and valuable goods. ▪ Control of surface water through sandbagging measures. ▪ Assist in the lifting of furniture to residents in need. ▪ Monitoring integrity of dwellings surrounded by flood waters. <p><i>Protection of essential infrastructure:</i></p> <p>The following Sewer pump stations are at risk of flooding:</p> <ul style="list-style-type: none"> ▪ Sewer pump station located on East Street. This pump will become affected when the John Grant Bridge reached 6.00metres. ▪ Sewer pump station located on the corner of Canowindra and Newton Streets. This pump will become affected when the John Grant Bridge reaches 5.46metres.
<p>Evacuation Triggers</p>	<p>Evacuation will be considered with a prediction to reach/exceed 6.0 metres on the Canowindra John Grant Bridge gauge (412009)</p> <ul style="list-style-type: none"> ▪ 26 residential properties in Gaskill, Cowra, Newton, Bridge and East Streets and 35 commercial/industrial buildings in Gaskill, Bridge and Mill St, with one commercial property flooded over floor level (NSW SES).
<p>Sequencing of evacuation</p>	<p>Evacuation of vulnerable facilities such as (e.g. Aged Care facilities, schools, child care facilities) will require a higher priority.</p> <p>Back of Gaskill Street should be prioritised first.</p>
<p>Evacuation Routes</p>	<p>Evacuees should be encouraged to take the following routes:</p> <ul style="list-style-type: none"> ▪ South Canowindra: Local Streets to Robinson, Newton or Bridge Street. ▪ North Canowindra: Local Streets to Rodd Street and Tilga Street.
<p>Evacuation Route Closure</p>	<p>At 5.60 metres on the John Grant Bridge gauge Canowindra will be cut in two at the northern approaches to the bridge.</p>
<p>Method of Evacuation</p>	<p>Primarily self-evacuation by private transport to family and friends outside the flood affected area or to the nominated evacuation centre.</p> <p>At risk residents will be door knocked where possible by NSW SES, RFS and other emergency services personnel and advised on the evacuation details.</p>
<p>Evacuation Centre/Assembly Point</p>	<p>Canowindra Primary School in Tilga Street is the most suitable location for use as an evacuation centre.</p>

Large scale evacuations	Large scale evacuations unlikely in Canowindra.
Rescue	The Canowindra Unit NSW SES will coordinate all Flood Rescue operations as per the Flood Rescue Operations Policy.
Resupply	Canowindra is cut in two by a major flood however access out of town is still available in both directions. Resupply is not normally required.
Aircraft Management	<p><i>Helicopter Landing Points:</i></p> <p>Suitable landing points are located at:</p> <ul style="list-style-type: none"> ▪ Canowindra Hospital - 33.5577° S, 148.6741° E. ▪ Canowindra Oval (opposite the Canowindra Golf Club) - S33 33.510 E148 39.935. ▪ Canowindra SES Unit headquarters, Armstrong Street, Canowindra.
	<p><i>Airports:</i></p> <ul style="list-style-type: none"> ▪ No airports are located at Canowindra.
Other	<p>There are two main events that are held in Canowindra each year.</p> <ul style="list-style-type: none"> ▪ The Canowindra Show is held annually in September which can attract up to 1,000 visitors. ▪ The Canowindra International Balloon Challenge which is held annually in April which can attract up to 10,000 visitors.

1.2. CANOWINDRA COMMUNITY MAP



2. MOLONG COMMUNITY

2.1. MOLONG RESPONSE ARRANGEMENTS

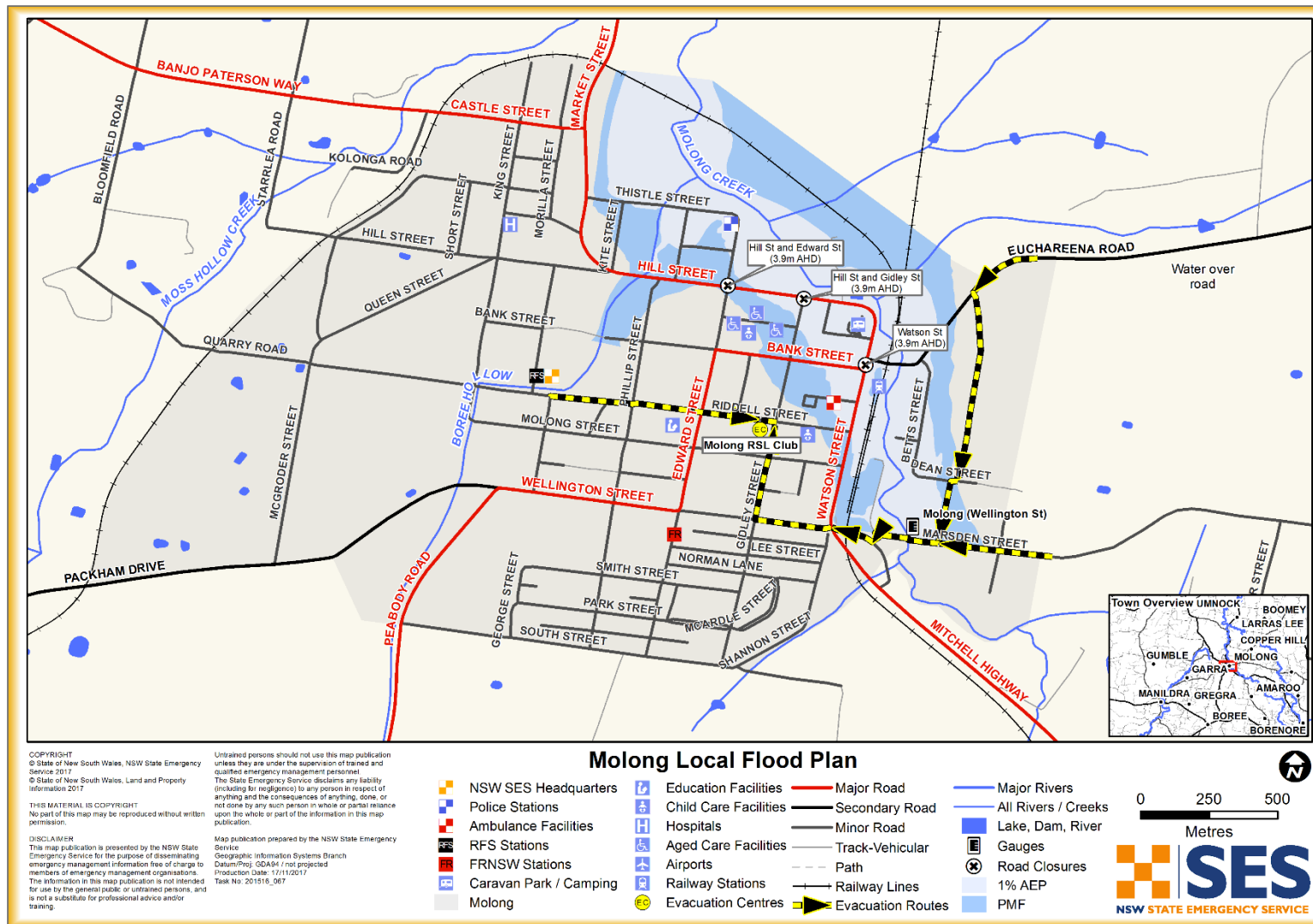
Refer to Volume 2: Hazard and Risk in Cabonne Shire for more information about this Community.

Sector Description	This covers the township of Molong, which has a population of 2509 (2011 Census) as well as associated rural areas surrounding Molong.				
Hazard	This area is affected by Molong Creek.				
Flood Affect Classification	Rising Road Access				
At risk properties	Up 102 residential and 71 non-residential properties inundated in a PMF.	Total number of properties within Community	916		
Sector Control	<p>Control - The NSW SES Incident Controller will control operations in this Sector. In larger events incident control may be escalated.</p> <p>Command – NSW SES and other agencies remain in command of their own resources. Command operates vertically within an organisation.</p> <p>Coordination - The coordination of other organisations and resources to support an emergency management response will occur at the EOC where established. Operations command can assist in supporting and coordinating incident management teams as required.</p> <p>Operations Centre. The Operations Centre will be established at the Molong Unit NSW SES, Cnr Riddell and Williams Streets, Molong.</p>				
Key Warning Gauge Name	Name	AWRC No.	Min (m)	Mod (m)	Maj (m)
	Molong (Wellington Street Bridge)	10456	-	3.3	3.9
General Strategy	<p>Overfloor flooding commences in commercial area from a height of 3.30metres on the Molong Gauge.</p> <p>Residential properties start to become affected by over floor flooding at around 3.75metres.</p>				
Key Risks / Consequences	<p>Major flooding of the lower parts of Molong can occur with very little warning.</p> <p>Minor to moderate flooding of the commercial area of Molong can occur as a result of stormwater drains beneath the railway line and station backing up.</p> <p>Ponding from overland flow can occur in Bank and Watson Street, Watson and Hill Street and Hill and Gidley Street intersections.</p>				
Information and Warnings	<p>A number of methods will be used by the Central West Region Headquarters / Molong Unit NSW SES to inform the community regarding the potential impacts of a flood and what actions to undertake in preparation for a flood. They include:</p> <ul style="list-style-type: none"> ▪ Flood Watch ▪ Flood Bulletins 				

	<ul style="list-style-type: none"> ▪ Evacuation Warning ▪ Evacuation Order ▪ Sequenced door knocking of evacuation sectors ▪ Media announcements ▪ Emergency Alert (SMS, Landlines) ▪ Standard Emergency Warning Signal (SEWS) <p>A Bureau of Meteorology (BOM) real time system, which provides rainfall and stream height data is available at the Molong Unit NSW SES Headquarters.</p>
Property Protection	<p><i>Specific property protection measures:</i></p> <ul style="list-style-type: none"> ▪ Monitoring rising flood waters. ▪ Relocation of livestock. ▪ Relocation of farm machinery and valuable goods ▪ Control of surface water through sandbagging measures. ▪ Assist in the lifting of furniture to residents in need. ▪ Monitoring integrity of dwellings surrounded by flood waters.
	<p><i>Protection of essential infrastructure:</i></p> <p>There is no known essential infrastructure requiring protection.</p>
Evacuation Triggers	<p>Evacuation will be considered with a prediction to reach and/or exceed 3.7 metres on the Molong Creek at the Wellington Street Bridge (Gauge 10456).</p> <p>Banks, Betts, Hill, Watson and Edwards streets</p>
Sequencing of evacuation	<p>The available time to warn the community is between 2-4 hours.</p> <p>The time required to evacuate the entire at-risk population in Molong (173) is dependent upon doorknocking resources available from NSW SES Molong Unit, NSW Police Force, FRNSW and NSW RFS volunteers.</p> <p>Evacuation of vulnerable facilities such as (e.g. Aged Care facilities, schools, child care facilities) will require a higher priority.</p> <p>Properties closest to the river will be flooded first and should be prioritised.</p>
Evacuation Routes	<p>Evacuees should be encouraged to take the following routes:</p> <ul style="list-style-type: none"> ▪ From Molong (east of Molong Creek): Local Streets to Wellington St, Gidley St, Riddell St. ▪ From Molong (west of Molong Creek): Local Streets to Riddell St.
Evacuation Route Closure	<p>Rising road access is available. No evacuation routes close as a result of a flood event.</p>
Method of Evacuation	<p>Primarily self-evacuation by private transport to family and friends outside the flood affected area or to the nominated evacuation centre.</p> <p>At risk residents will be door knocked where possible by SES, RFS and other emergency services personnel and advised on the evacuation details.</p>
Evacuation Centre/Assembly Point	<p>Molong RSL in Riddell Street is the most suitable location for use as an Evacuation Centre.</p>
Large scale evacuations	<p>Large scale evacuations are unlikely in Molong.</p>
Rescue	<p>The Molong Unit NSW SES will coordinate all Flood Rescue operations as per the Flood Rescue Operations Policy.</p>

Resupply	No known risk of isolation.
Aircraft Management	<p><i>Helicopter Landing Points:</i></p> <p>Suitable landing points are located at:</p> <ul style="list-style-type: none"> ▪ The oval located in the Molong Central School (on the Corner of Edward and Wellington Streets) - S33 06.0 E148 51.726. ▪ Molong Showground located east of Molong Creek on the Ironbarks Road.
	<p><i>Airports:</i></p> <ul style="list-style-type: none"> ▪ No airports in Molong.
Other	<ul style="list-style-type: none"> ▪ The Molong Show is held annually in September which can attract up to 2000 visitors. ▪ “Molong Camp Draft” which is held annually in September / October which can attract up to 200 people. ▪ “Molong Markets” which is held up to four times a year in February, March, May and October which can attract up to 200 people. ▪ “100 Mile Dinner” is held annually in April which can attract up 300 people. ▪ “Meet you in Molong” is held every second month which can attract up to 300 people.

2.2. MOLONG COMMUNITY MAP



3. EUGOWRA COMMUNITY

3.1. EUGOWRA RESPONSE ARRANGEMENTS

Refer to Volume 2: Hazard and Risk in Cabonne Shire for more information about this Community.

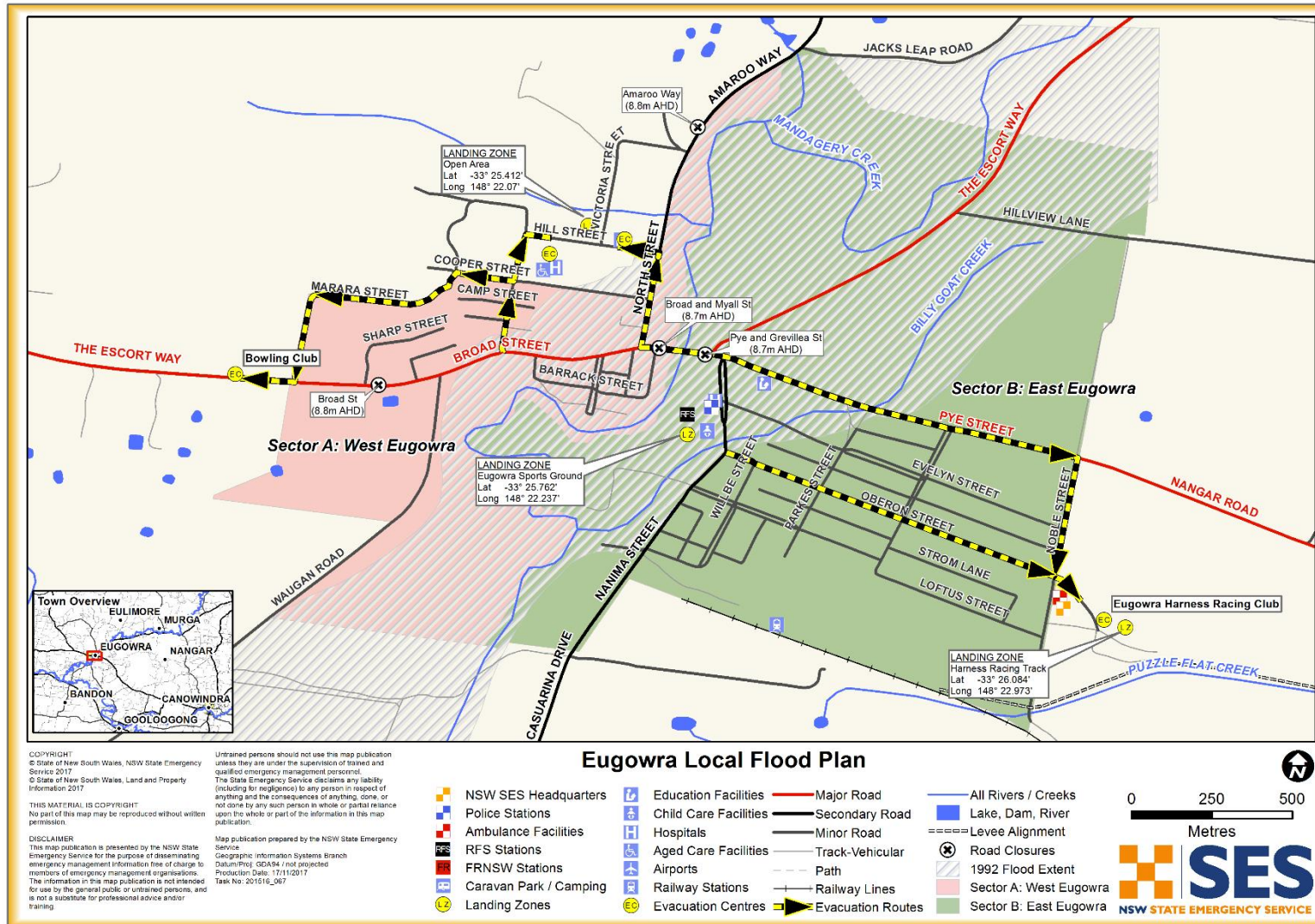
Sector Description	<p>This covers the township of Eugowra. During a major flood Eugowra can be divided in two, after the eastern and western approaches to the Eugowra Town Bridge become inundated.</p> <p>For the purposes of evacuation, Eugowra is divided into two Sectors:</p> <ul style="list-style-type: none"> ▪ Sector A - West Eugowra ▪ Sector B - East Eugowra 				
Hazard	<p>This area is affected by flood water from the Mandagery Creek and rain water build up from Puzzle Flat Creek which often floods independently of Mandagery Creek. An earthen levee bank was installed along Puzzle Flat Creek in 1990 to alleviate the flooding from the creek, but not to eliminate it.</p> <p>Waterhole Creek can also affect the flood behaviour within Eugowra. A telemetric rainfall gauge is proposed to be installed in Waterhole Creek by the BoM. Currently a manual gauge exists.</p> <p>Because Eugowra is located high in the catchment flooding can happen very quickly. Mandagery Creek flows can be impacted when the Lachlan River is also in flood.</p>				
Flood Affect Classification	<p>Rising Road Access:</p> <p>At 8.70 metres on the Eugowra Town gauge, isolating the eastern section of the town becoming a low flood island in a major flood.</p>				
At risk properties	60 residential dwellings would be flooded above floor, 37 commercial, 18 public buildings are at risk of flooding in a PMF.	Total number of properties within Community	357		
Sector Control	<p>Control- The NSW SES Incident Controller will control operations in this Sector.</p> <p>In larger events incident control may be escalated.</p> <p>Command – NSW SES and other agencies remain in command of their own resources. Command operates vertically within an organisation.</p> <p>Coordination - The coordination of other organisations and resources to support an emergency management response will occur at the EOC where established. Operations command can assist in supporting and coordinating incident management teams as required.</p> <p>Operations Centre. The Operations Centre will be established at the Eugowra Unit NSW SES, Noble Street, Eugowra. The Eugowra Unit NSW SES will conduct evacuations in this sector with assistance from NSW Police Force (Eugowra Station) and NSW RFS volunteers.</p>				
Key Warning Gauge Name	Name	AWRC No.	Min (m)	Mod (m)	Maj (m)
	Eugowra Town	412904	8.00	-	9.00
General Strategy	<p>Overfloor flooding commences in commercial area from a height of 8.80metres on the Eugowra Town Gauge.</p> <p>Residential properties start to become affected by overfloor flooding at around 8.90metres.</p>				

Key Risks / Consequences	Minor to major flooding of the commercial and residential areas of Eugowra can occur as a result of water breaking the banks of the Mandagery Creek. Major flooding can result in the town being cut in two.
Information and Warnings	<p>A number of methods will be used by the NSW SES to inform the community regarding the potential impacts of a flood and what actions to undertake in preparation for a flood. They include:</p> <ul style="list-style-type: none"> ▪ Flood Watch ▪ Flood Bulletins ▪ Evacuation Warning ▪ Evacuation Order ▪ Sequenced door knocking of evacuation sectors ▪ Media announcements ▪ Emergency Alert (SMS, Landlines) ▪ Standard Emergency Warning Signal (SEWS)
Property Protection	<p><i>Specific property protection measures:</i></p> <ul style="list-style-type: none"> ▪ Monitoring rising flood waters and gauges. ▪ Relocation of livestock. ▪ Relocation of farm machinery and valuable goods ▪ Control of surface water through sandbagging measures. ▪ Assist in the lifting of furniture to residents in need. ▪ Monitoring integrity of dwellings surrounded by flood waters. ▪ Undertake local road monitoring and closures with water inundation. <p><i>Protection of essential infrastructure:</i></p> <p>The following essential infrastructure requires protection. These facilities are at risk of inundation at around 9.45 metres on the Eugowra Town gauge:</p> <ul style="list-style-type: none"> ▪ Telstra Exchange – Nanima Street ▪ Police Station – Nanima Street <p>At approximately 9.50 metres on the Eugowra Town gauge the pump station opposite No. 17 Broad Street is affected by flooding.</p>
Evacuation and/or Isolation Triggers	<p>It is preferable that residents at risk from flooding in East Eugowra evacuate to West Eugowra before the bridge access is affected at 8.7m and above.</p> <p>The Primary Evacuation Centre and associated facilities (food, sleeping etc.) are located on the western side of Eugowra in the Public School and Bowling Club.</p> <p>A Secondary Evacuation Centre is located at the Eugowra Showground.</p>
Evacuation Triggers	<p>Evacuations in the Eugowra sectors will be staged dependent of the heights predicted by the BoM Flood Warnings.</p> <p>The NSW SES Eugowra Unit Controller has detailed Standard Operating Procedures that address the residences and businesses affected and detail the arrangements for evacuation.</p> <p>The following evacuation triggers are the predicted height by which evacuation needs to be undertaken by:</p>

	<p>West Eugowra</p> <ul style="list-style-type: none"> ▪ Stage WE1: Evacuation should occur before 8.5m (when the Flood Warning for Mandagery Creek is predicted to reach/exceed 8.8m). ▪ Stage WE2: Evacuation should occur before 8.7m (when the Flood Warning for Mandagery Creek is predicted to reach/exceed 9.0m). <p>East Eugowra</p> <ul style="list-style-type: none"> ▪ Stage EE1: If East Eugowra evacuees do not want to become isolated then evacuation to West Eugowra should occur before 8.7m, otherwise the road will be closed and East Eugowra residents will become isolated from West Eugowra. <p>If residents have become isolated after the Eugowra Town Bridge has closed (at 8.7m on the Eugowra Bridge Gauge), residents need to evacuate to the Secondary Evacuation Centre at the Eugowra Showground. The following stages are when those who have become isolated need to evacuate by:</p> <ul style="list-style-type: none"> ▪ Stage EE2: 9.0m (when the Flood Warning for Mandagery Creek is expected to reach/exceed 9.45m). ▪ Stage EE3: 9.4m (when the Flood Warning for Mandagery Creek is expected to reach/exceed 9.9m). ▪ Stage EE4 9.4m (when the Flood Warning for Mandagery Creek is expected to reach/exceed 10.5m).
<p>Sequencing of evacuation</p>	<p>The available time to warn the community is approximately 12 hours.</p> <p>The time required to evacuate the entire population at risk from flooding in east and west Eugowra (115) is dependent upon doorknocking resources available from the NSW SES Eugowra Unit, NSW Police Force (Eugowra Station) and RFS volunteers.</p> <p>Evacuation of vulnerable facilities such as (e.g. Aged Care facilities, schools, child care facilities) will require a higher priority. These facilities include:</p> <ul style="list-style-type: none"> ▪ St Joseph’s School. ▪ Eugowra Pre-school. ▪ Self Contained Units located in Nanima Street.
<p>Evacuation Routes</p>	<p>Primary Evacuation Centre</p> <p>Evacuees should be encouraged to take the following routes listed below:</p> <p>West Eugowra:</p> <ul style="list-style-type: none"> ▪ Local Streets to North Street, Hill Street to Eugowra Public School. ▪ Local Streets to Bowler Street, Hill Street to Eugowra Public School. <p>East Eugowra:</p> <ul style="list-style-type: none"> ▪ Local Streets to Pye Street, Broad Street, North Street, Hill Street to Eugowra Public School. <p>Secondary Evacuation Centre</p> <ul style="list-style-type: none"> ▪ Local Streets to Pye Street and/or Noble St to Eugowra Showground.
<p>Evacuation Route Closure</p>	<p>The evacuation route in West Eugowra (entrance to North St) gets cut at approximately 8.7m on the Eugowra Town Bridge gauge (Mandagery Creek).</p>
<p>Method of Evacuation</p>	<p>Primarily self-evacuation by private transport to family and friends outside the flood affected area or to the nominated evacuation centre.</p> <p>At risk residents will be door knocked where possible by SES, RFS and other emergency services personnel and advised on the evacuation details.</p>

<p>Evacuation Centre/Assembly Point</p>	<p>Eugowra Public School (Corner of Hill and Victoria Streets) is the primary Evacuation Centre and is to be used in conjunction with Eugowra Bowling Club, which will be used for catering purposes. This is located in the West Eugowra Sector.</p> <p>Access to the primary Evacuation Centre is only available before the water level height at the Eugowra Bridge gauge is below 8.8 metres – the time when the Eugowra Bridge is closed.</p>
<p>Large scale evacuations</p>	<p>Large scale evacuations are unlikely in Eugowra.</p>
<p>Rescue</p>	<p>The NSW SES Eugowra Unit will coordinate all Flood Rescue operations as per the Flood Rescue Operations Policy.</p>
<p>Resupply</p>	<p>Rural properties can become isolated from around 9.2 metres on the Eugowra gauge for a period of up to 12 hours. Resupply operations are not expected.</p> <p>The east and west of Eugowra town can become separated by flood water, but is not isolated. Access is available to other towns in the area.</p>
<p>Aircraft Management</p>	<p><i>Helicopter Landing Points:</i></p> <p>Suitable landing points are located at:</p> <p>West Eugowra:</p> <ul style="list-style-type: none"> ▪ Eugowra Public School Ground is the landing zone for the West Eugowra Sector - 33.4242° S, 148.3691° E. ▪ Eugowra Hospital - S33 25.558 E 148 21.910. <p>East Eugowra:</p> <ul style="list-style-type: none"> ▪ Eugowra Recreation Ground can be used as a landing zone up to 9.5m on the Eugowra Town Bridge gauge. S33 25.762 E148 22.237 ▪ Eugowra Showground is an alternate landing zone after the Recreation Ground becomes inundated. This is adjacent to the Secondary Evacuation Centre - S33 26.154 E148 22.967. <p><i>Airports:</i></p> <ul style="list-style-type: none"> ▪ No airports are located in Eugowra
<p>Other</p>	<ul style="list-style-type: none"> ▪ Eugowra Show is held annually in September and will attract up to 1,000 people.

3.2. EUGOWRA COMMUNITY MAP



4. CUDAL AND CARGO COMMUNITY

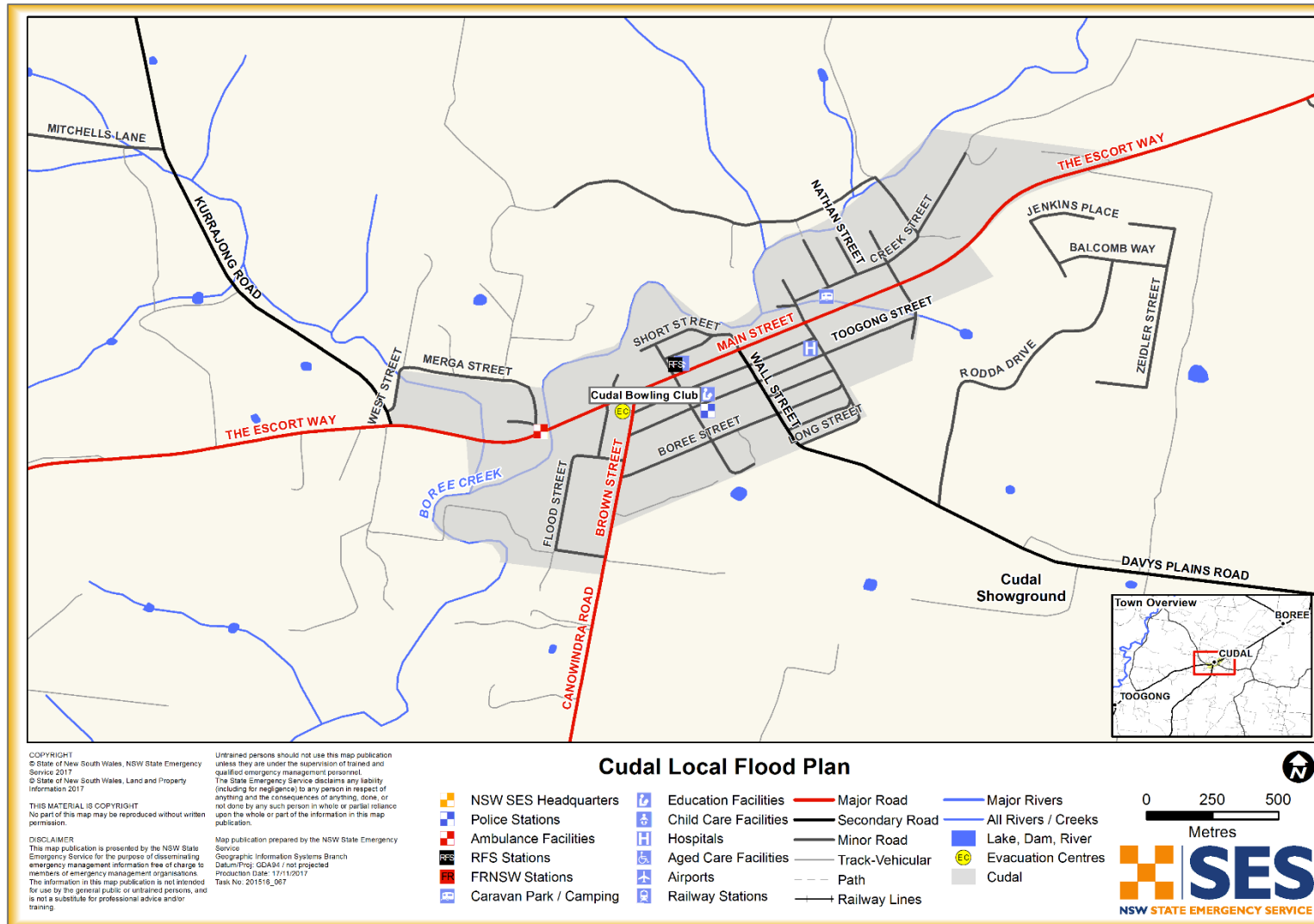
4.1. CUDAL AND CARGO RESPONSE ARRANGEMENTS

Refer to Volume 2: Hazard and Risk in Cabonne Shire for more information about this Community.

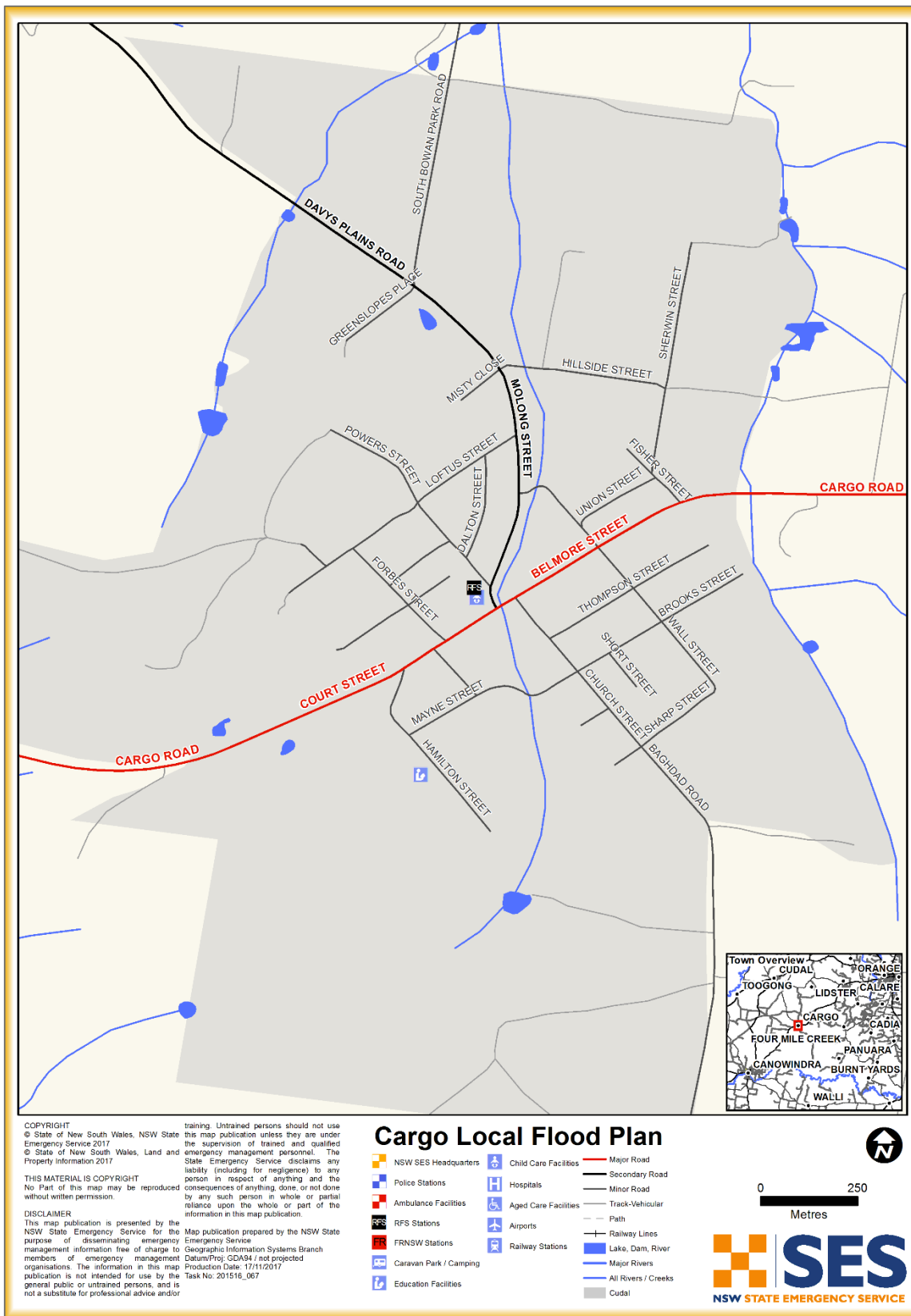
Sector Description	This sector covers the township of Cudal which has a population of 653 (2011 Census) and Cargo with a population of 541.				
Hazard	This area is affected by Boree Creek flash flooding.				
Flood Affect Classification	Rising Road Access.				
At risk properties	>8 dwellings	Total number of properties within Community	251 in Cudal 195 in Cargo		
Sector Control	<p>Control- The NSW SES Incident Controller will control operations in this Sector. In larger events incident control may be escalated.</p> <p>Command – NSW SES and other agencies remain in command of their own resources. Command operates vertically within an organisation.</p> <p>Coordination- The coordination of other organisations and resource to support an emergency management response will occur at the EOC where established. Operations command can assist in supporting and coordinating incident management teams as required.</p>				
Key Warning Gauge Name	Name	AWRC No.	Min (m)	Mod (m)	Maj (m)
	No warning gauge	-	-	-	-
General Strategy	Flooding from Boree Creek can rise quickly with little or no warning, which can cause significant damage.				
Key Risks / Consequences	Up to 8 dwellings can be inundated as a result of flooding within the low lying residential areas.				
Information and Warnings	<p>A number of methods will be used by the Central West Region Headquarters / Eugowra Unit NSW SES to inform the community regarding the potential impacts of a flood and what actions to undertake in preparation for a flood. They include:</p> <ul style="list-style-type: none"> ▪ Flood Watch ▪ Flood Bulletins ▪ Evacuation Warning ▪ Evacuation Order ▪ Sequenced door knocking of evacuation sectors ▪ Media announcements ▪ Emergency Alert (SMS, Landlines) ▪ Standard Emergency Warning Signal (SEWS) 				
Property Protection	<p><i>Specific property protection measures:</i></p> <ul style="list-style-type: none"> ▪ Monitoring rising flood waters. ▪ Relocation of livestock. 				

	<ul style="list-style-type: none"> ▪ Relocation of farm machinery and valuable goods ▪ Control of surface water through sandbagging measures. ▪ Assist in the lifting of furniture to residents in need. ▪ Monitoring integrity of dwellings surrounded by flood waters.
Evacuation Triggers	Given there are no Bureau warnings, and it is likely that flooding will be flash flooding it is difficult to set evacuation triggers for Cudal and Cargo.
Sequencing of evacuation	<p>The available time to warn the community is between 2-6 hours.</p> <p>The time required to evacuate the entire at-risk population in Cudal (around 8 dwellings) is dependent upon doorknocking resources available from the Canowindra Unit NSW SES or Molong Unit NSW SES, NSW Police Force and local RFS volunteers.</p> <p>Evacuation of vulnerable facilities such as (e.g. Aged Care facilities, schools, child care facilities) will require a higher priority.</p>
Evacuation Routes	Evacuees should be encouraged to use local roads to get to the Evacuation Centre listed above.
Method of Evacuation	<p>Primarily self-evacuation by private transport to family and friends outside the flood affected area or to the nominated Evacuation Centre.</p> <p>At risk residents will be door knocked where possible by SES, RFS and other emergency services personnel and advised on the evacuation details.</p>
Evacuation Centre/Assembly Point	The Cudal Memorial Hall in Main Street is the most suitable location to be used as an evacuation centre.
Large scale evacuations	Large scale evacuations are unlikely in Cudal.
Rescue	The Eugowra Unit NSW SES will coordinate all Flood Rescue operations as per the Flood Rescue Operations Policy.
Resupply	No known risk of isolation.
Aircraft Management	<p>Helicopter Landing Points:</p> <p>Suitable landing points are located at:</p> <ul style="list-style-type: none"> ▪ The old airport (formerly operated by Hazelton Airlines) now owned by Cobbs Machinery has the capability to land helicopters. This is located just outside of Cudal on the Orange Road - S33 16.721 E148 45.699. <p>Airports:</p> <ul style="list-style-type: none"> ▪ There are no airports in Cudal. ▪ There are no airports in Cargo.
Other	<ul style="list-style-type: none"> ▪ Cudal Show is held annually in September which can attract up to 1,000 visitors.

4.2. CUDAL COMMUNITY MAP



4.3. CARGO COMMUNITY MAP



5. NORTHERN CABONNE COMMUNITY

5.1. NORTHERN CABONNE RESPONSE ARRANGEMENTS

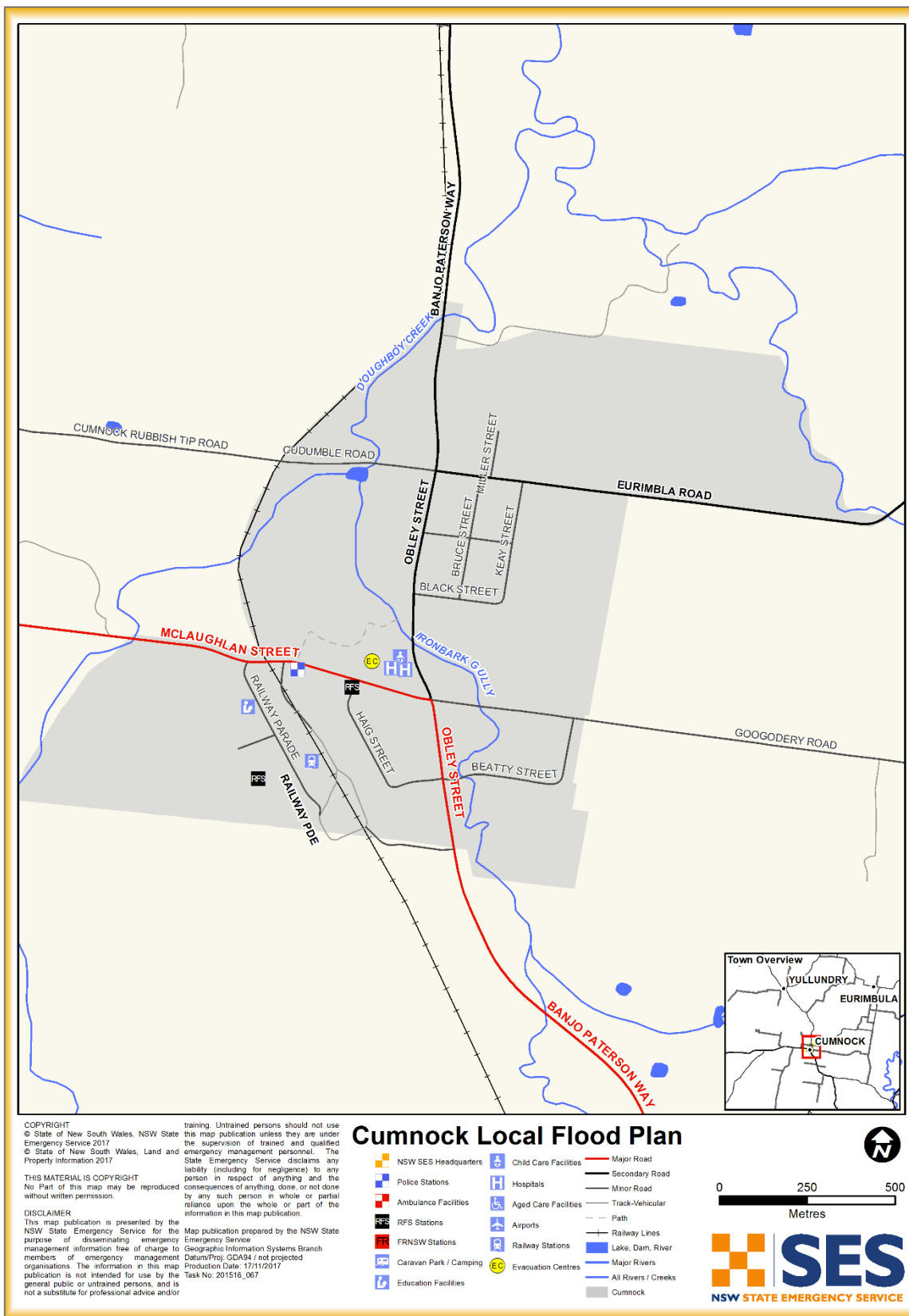
Refer to Volume 2: Hazard and Risk in Cabonne Shire for more information about these Communities.

Sector Description	This sector covers the townships of Cumnock, Manildra and Yeoval. Cumnock and Yeoval are separated into sub-sectors as they are separated by approximately 20 kilometres. Yeoval has a high proportion of elderly residents and residents without vehicles, which may increase the time necessary for evacuation. Manildra also has a high proportion of elderly.				
Hazard	Cumnock is affected by flooding from either Cumnock or Doughboy Creeks. Yeoval is affected by flooding by either Sandy or Buckbinbah Creeks. Manildra is affected by flooding from the Mandagery Creek.				
Flood Affect Classification	Rising Road Access				
At risk properties	Cumnock > 6 Manildra n/a Yeoval > 5	Total number of properties within Community	225 in Cumnock 281 in Manildra 193 in Yeoval		
Sector Control	<p>Control - The NSW SES Incident Controller will control operations in this Sector. In larger events incident control may be escalated.</p> <p>Command – NSW SES and other agencies remain in command of their own resources. Command operates vertically within an organisation.</p> <p>Coordination - The coordination of other organisations and resource to support an emergency management response will occur at the EOC where established. Operations command can assist in supporting and coordinating incident management teams as required.</p>				
Key Warning Gauge Name	Name	AWRC No.	Min (m)	Mod (m)	Maj (m)
	No warning gauge	-	-	-	-
General Strategy	<p>Flooding from Sandy and Buckbinbah Creeks can rise quickly with little or no warning, which can cause some damage to properties low-lying properties in Yeoval.</p> <p>Flooding from Doughboy Creek can rise quickly with little or no warning, which can cause some damage to properties in the northern end of Obley Street Cumnock.</p> <p>Flooding from Mandagery Creek can rise quickly with little or no warning, which can cause some damage in Manildra.</p>				
Key Risks / Consequences	Flooding can result in the inundation of a number of properties within each of the communities within the Northern Cabonne Sector.				
Information and Warnings	<p>A number of methods will be used by the Central West Region Headquarters / Molong Unit NSW SES to inform the community regarding the potential impacts of a flood and what actions to undertake in preparation for a flood. They include:</p> <ul style="list-style-type: none"> ▪ Flood Watch ▪ Flood Bulletins 				

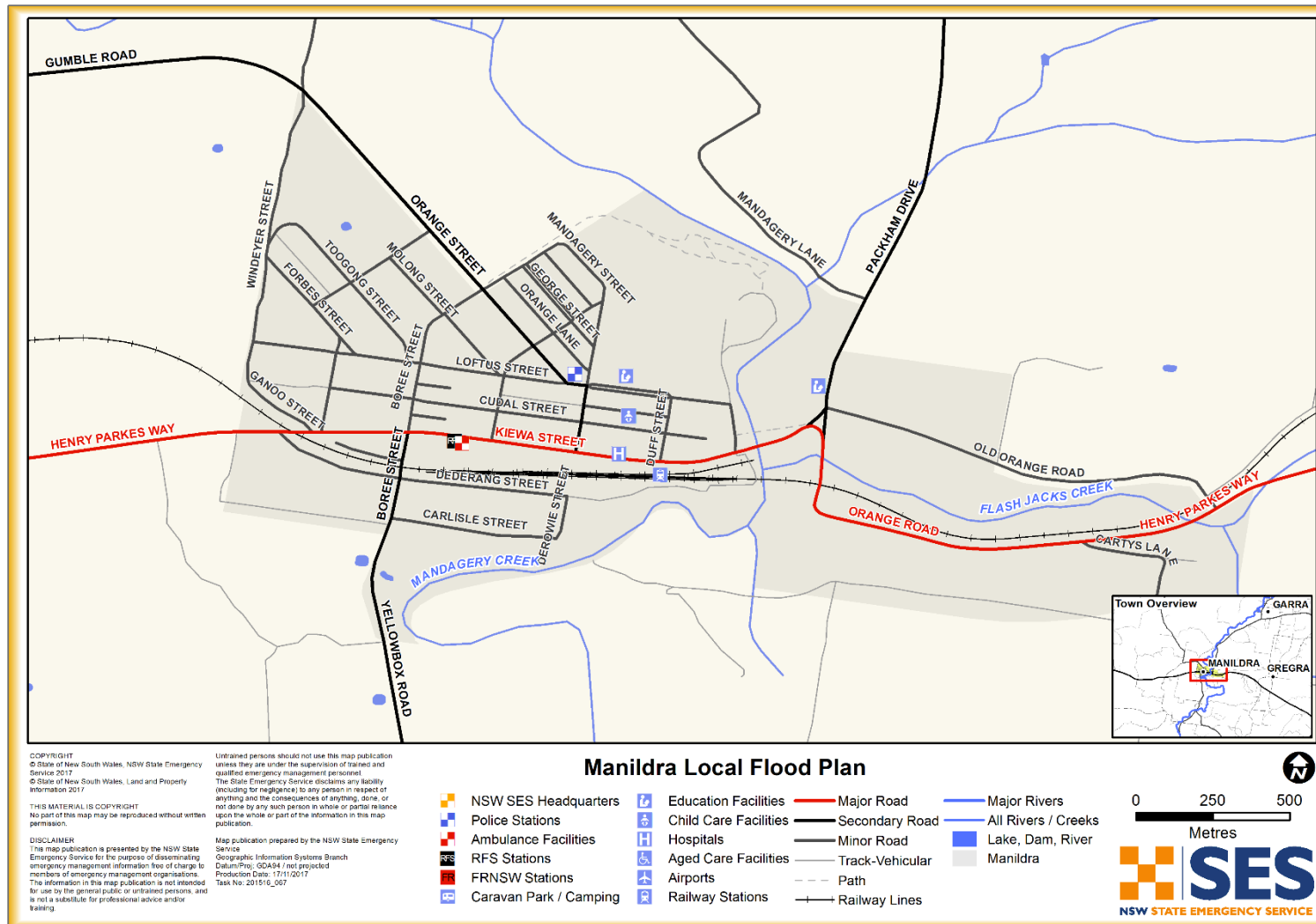
	<ul style="list-style-type: none"> ▪ Evacuation Warning ▪ Evacuation Order ▪ Sequenced door knocking of evacuation sectors ▪ Media announcements ▪ Emergency Alert (SMS, Landlines) ▪ Standard Emergency Warning Signal (SEWS)
Property Protection	<p><i>Specific property protection measures:</i></p> <ul style="list-style-type: none"> ▪ Monitoring rising flood waters. ▪ Relocation of livestock. ▪ Relocation of farm machinery and valuable goods ▪ Control of surface water through sandbagging measures. ▪ Assist in the lifting of furniture to residents in need. ▪ Monitoring integrity of dwellings surrounded by flood waters.
Sequencing of evacuation	<p>The available time to warn the community is approximately 2 hours.</p> <p>The time required to evacuate the entire at-risk population in the sector is dependent upon doorknocking resources available from local RFS volunteers, NSW Police Force and the NSW SES.</p> <p>Evacuation of vulnerable facilities such as (e.g. Aged Care facilities, schools, child care facilities) will require a higher priority.</p>
Evacuation Routes	<p>Evacuees should be encouraged to use local roads to get to the Evacuation Centres listed below.</p>
Evacuation Route Closure	<p>It is not known what, if any, evacuation routes close as a result of flooding within these towns based on current intelligence on hand.</p>
Method of Evacuation	<p>Primarily self-evacuation by private transport to family and friends outside the flood affected area or to the nominated Evacuation Centre.</p> <p>At risk residents will be door knocked where possible by SES, RFS and other emergency services personnel and advised on the evacuation details.</p>
Evacuation Centre/Assembly Point	<p>The Cumnock Community Centre in Maclaughan Street, Cumnock is the most suitable location to be used as an Evacuation Centre.</p> <p>The Yeoval Community Hall in 25 Forbes Street, Yeoval is the most suitable location to be used as an Evacuation Centre.</p> <p>The Manildra Hall, 61 Kiewa Street, Manildra is the most suitable location to be used as an Evacuation Centre.</p>
Large scale evacuations	<p>Large scale evacuations are unlikely in Cumnock, Manildra and Yeoval.</p>
Rescue	<p>The Molong Unit NSW SES will coordinate all Flood Rescue operations as per the Flood Rescue Operations Policy.</p>
Resupply	<p>No known risk of isolation.</p>
Aircraft Management	<p><i>Helicopter Landing Points:</i></p> <p>Suitable landing points are located at:</p> <ul style="list-style-type: none"> ▪ Yeoval Sporting Oval - S32 45.127 E148 38.372. ▪ Cumnock Sporting Oval - S32 55.309 E148 45.083. ▪ Manildra Showground – S33.17813 E148.68842. <p><i>Airports:</i></p> <ul style="list-style-type: none"> ▪ There are no airports in Cumnock or Yeoval.

<p>Other</p>	<p>There are a number of events that occur in Cumnock. They are:</p> <ul style="list-style-type: none"> ▪ The Cumnock Show is held annually in May, which can attract up to 1,000 people. ▪ The Cumnock Camp Draft is held annually in January, which can attract up to 300 people. ▪ The Cumnock Christmas Tree Event is held annually in December, which can attract up to 500 people. ▪ The Yeoval Show is held annually in April / May annually which can attract up to 800 people. ▪ The Manildra Show is held annually in September, which can attract up to 500 people.
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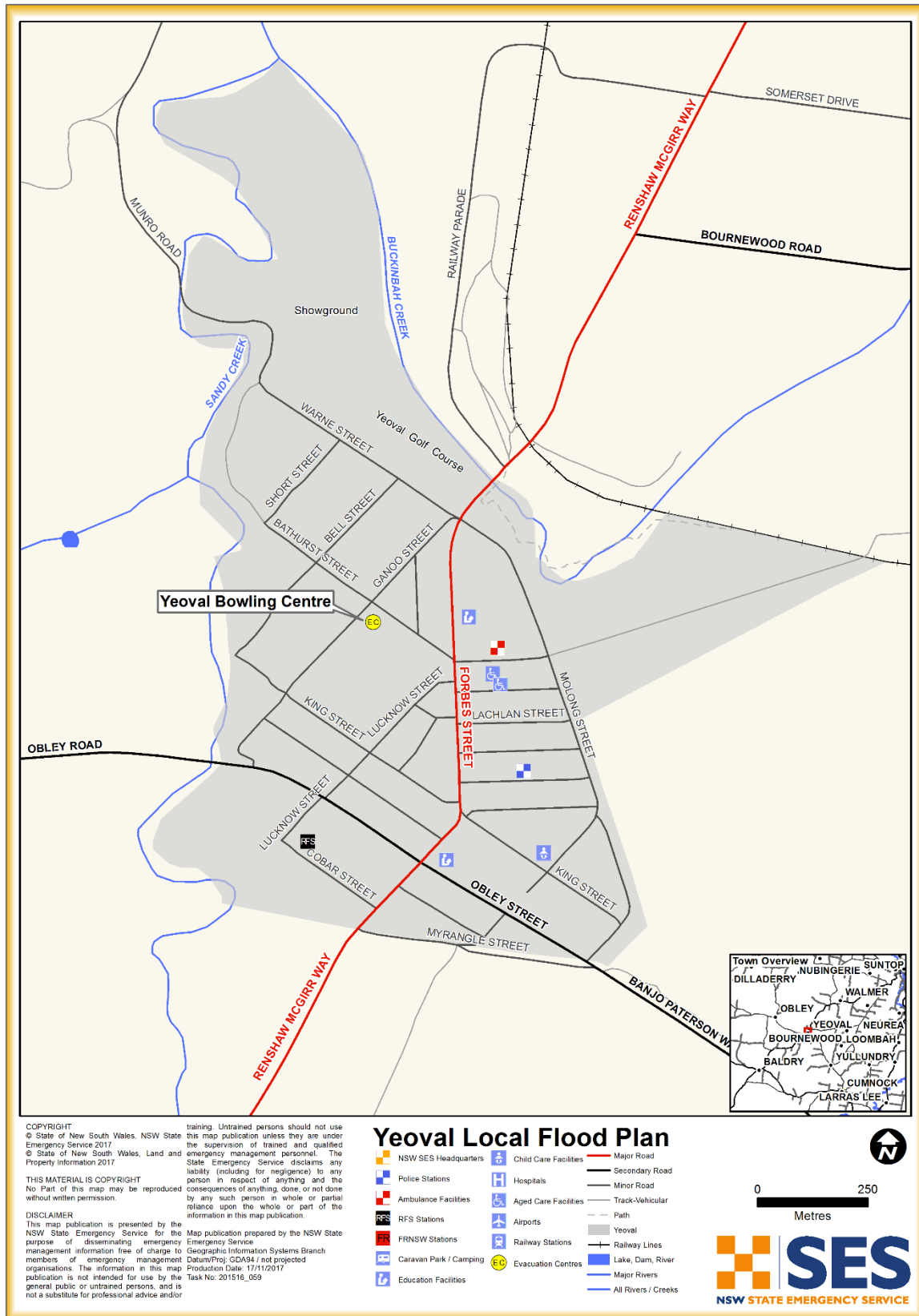
5.2. CUMNOCK COMMUNITY MAP



5.3. MANILDRA COMMUNITY MAP



5.4. YEOVAL COMMUNITY MAP





CABONNE SHIRE: NSW SES CARAVAN PARK ARRANGEMENTS

**Chapter 3 of Volume 3 (NSW SES Response Arrangements for Cabonne
Shire) of the Cabonne Shire Local Flood Plan**

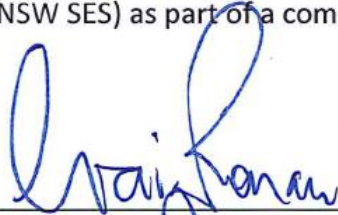
Last Update: May 2018



AUTHORISATION

The Cabonne Shire NSW SES Caravan Park Arrangements have been prepared by the NSW State Emergency Service (NSW SES) as part of a comprehensive planning process.

Approved



NSW SES Central West Region Controller

Date: 28/05/2018.

Tabled at LEMC

5/6/18
Date:

CONTENTS

AUTHORISATION	2
CONTENTS	3
LIST OF TABLES	3
1 ARRANGEMENTS FOR THE EVACUATION OF CARAVAN PARKS AND THE RELOCATION OF CARAVANS....	4
1.1 General.....	4
1.2 Advising Procedures.....	4
1.3 Evacuation of Occupants and Relocation of Vans.....	5
1.4 Return of Occupants and Vans.....	6

LIST OF TABLES

Table 1: Caravan Parks at risk of Inundation and/or Isolation from Flooding.....	7
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1 ARRANGEMENTS FOR THE EVACUATION OF CARAVAN PARKS AND THE RELOCATION OF CARAVANS

1.1 GENERAL

1.1.1 The following caravan parks are flood liable:

- a. Canowindra Caravan Park, Gaskill Street, Canowindra.
- b. Molong Caravan Park, Hill Street, Molong.
- c. Cudal Caravan Park, Main Street, Cudal.

1.1.2 For more information on individual caravan parks see Table 1 at the end of this Chapter.

1.2 ADVISING PROCEDURES

1.2.1 Caravan Park proprietors will ensure that the owners and occupiers of caravans are:

- a. Made aware that the caravan park is flood liable by:
 - Handing a printed notice to occupiers taking up residence. The notice will indicate that the caravan park is liable to flooding and outline the evacuation and van relocation arrangements as detailed in this Annex.
 - Displaying this notice prominently in each van.
- b. Made aware that if they are expecting to be absent from their vans for extended periods, they must:
 - Provide the manager with a key; in a sealed envelope; to the van.
 - Provide a contact address and telephone number.
 - Inform the manager if a vehicle will be required to relocate the van during flood time.
 - Leave any mobile van in a condition allowing it to be towed in an emergency (ie: tyres inflated, jacks wound up, personal effects secured and annexes and lines for water, sewer, electricity and gas readily detachable).
- c. Be informed when a flood is rising. At this time, occupiers will be advised to:
 - Ensure that they have spare batteries for their radios.
 - Listen to a local radio station for updated flood information.
 - Prepare for evacuation and van relocation.

- 1.2.2 The NSW SES Cabonne Local Controller will ensure that the managers of caravan parks are advised of flood warnings and the details of any evacuation order.

1.3 EVACUATION OF OCCUPANTS AND RELOCATION OF VANS

- 1.3.1 Caravan park proprietors will install flood depth indicators and road alignment markers within their caravan parks.
- 1.3.2 When an evacuation order is given occupiers of non-movable vans should:
- a. Secure their vans by tying them down to prevent flotation.
 - b. Isolate power to their vans.
 - c. Collect personal papers, medicines, a change of clothing, toiletries and bedclothes.
 - d. Lift the other contents of their vans as high as possible within the van.
 - e. Move to a designated evacuation centre if they have their own transport, or move to the caravan office to await transport.
- 1.3.3 Where possible, vans that can be moved will be relocated by their owners. Park managers will arrange for the relocation of mobile vans whose owners do not have a vehicle. Council and NSW SES personnel will assist if required and may be able to provide additional vehicles. Vans are to be moved to the locations outlined in Table 1 at the end of this Chapter.
- 1.3.4 Caravan park managers will:
- a. Ensure that their caravan park is capable of being evacuated.
 - b. Advise the Cabonne Local Controller NSW SES of:
 - The number of people requiring transport.
 - Details of any medical evacuations required.
 - Whether additional assistance is required to effect the evacuation.
 - c. Check that no people remain in non-removable vans that are likely to be inundated.
 - d. Inform the Cabonne Local Controller NSW SES when the evacuation of the caravan park has been completed.
 - e. Provide the Cabonne Local Controller NSW SES with a register of people that have been evacuated.

1.4 RETURN OF OCCUPANTS AND VANS

- 1.4.1 The Cabonne Local Controller NSW SES, using council resources as necessary, will advise when it is safe for the caravan parks to be re-occupied.
- 1.4.2 Vans will be towed back to the caravan park(s) by van owners or by vehicles and drivers arranged by the park managers. Again, Council and NSW SES personnel will assist if available.

Table 1: Caravan Parks at risk of Inundation and/or Isolation from Flooding.

Name	Address/Location description	Town/Sector	Number of sites	Risk	Evacuation route	Evacuation route closure	Van relocation location	Evacuation centre	Notes
Canowindra Caravan Park	Gaskill Street, Canowindra	Canowindra	18	Riverine flooding from Belubula River. 6 van sites are inundated (1 fixed van and 5 moveable) at 8.0 metres on the Canowindra John Grant Bridge gauge	Via Gaskill Street and Tilga Street to Rodd Street.	n/a	Canowindra Showground – Rodd Street	Canowindra Golf Club – Rodd Street	n/a
Molong Caravan Park	Hill Street, Molong	Molong	17	Flash flooding, fast flowing floodwater. All sites are at risk of inundation from 4.7 metres.	Via Mitchell Highway, then Riddell Street.	4.7 metres	Cabonne Council Works Depot – Riddell Street	Molong RSL – Riddell Street	n/a
Cudal Caravan Park	Main Street, Cudal	Cudal	12	Flash flooding through the centre of the park toward Boree Creek	Via Cargo Street and Main Street	n/a	Park located on the corner of Boree and Brown Streets (opposite the Cudal Bowling Club).	Cudal Bowling Club – Brown Street.	n/a