

Parokes Shire

Local Flood Emergency Sub Plan



PARKES SHIRE FLOOD EMERGENCY SUB PLAN

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

Volume 1 of the Parkes Shire Flood Emergency Sub Plan

Endorsed by the Parkes Shire Emergency Management Committee

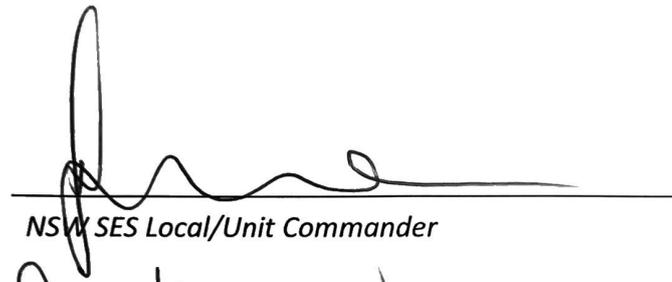
**28 February 2024
Version 3.0**

AUTHORISATION

The Parkes Shire Flood Emergency Sub Plan is a sub plan of the Parkes 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:



NSW SES Local/Unit Commander

Print Name:



Date:



Endorsed

Signature:

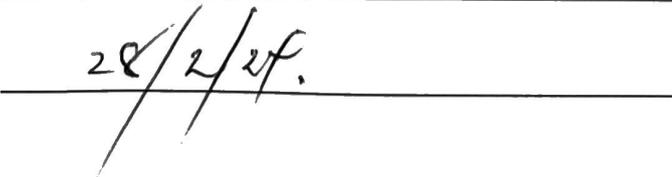


Chair, Local Emergency Management Committee

Print Name:



Date:



VERSION HISTORY

Version Number	Description	Date
1.0	Parkes Shire Local Flood Plan	January 2008
2.0	Parkes Shire Local Flood Plan	February 2014

AMENDMENT LIST

Suggestions for amendments to this plan should be forwarded to:

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

Amendment Number	Description	Updated by	Date

DISTRIBUTION LIST

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1 OUTLINE AND SCOPE

1.1 PURPOSE

- 1.1.1 The purpose of this plan is to set out the multi-agency arrangements for the emergency management of flooding in the Parkes 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 Parkes 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 Parkes 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 Parkes Shire LGA. The Parkes 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 Southern Zone and for emergency management purposes, is part of the Central West Emergency Management Region.
- 1.4.3 The plan sets out the Parkes Shire level emergency management arrangements for prevention, preparation, response and initial recovery for flooding in the Parkes Shire LGA. Hazard and Risk information can be found in Volume 2 of this document, and NSW SES Response Arrangements can be found in Volume 3.
- 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 tsunamis) 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 Parkes Shire are detailed within this plan, Appendix B and Appendix C.

1.7.3 Any agency with agreed responsibilities in this plan that 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 (for regional level responsibilities outside of response operations).

1.8 PLAN MAINTENANCE AND REVIEW

1.8.1 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 NSW SES maintains information on the nature of flooding and effects of flooding on the community in the Parkes Shire LGA. This is outlined in Volume 2 – Hazard and Risk in Parkes Shire .
- 2.1.2 Declared dams in or upstream of the Parkes Shire Local Government Area.

Dam Name	Owner	High Risk Dam
Beargamil	Parkes Shire Council	No
Lake Endeavour	Parkes Shire Council	No
North Parkes E27 - Estcourt Tailings Goonumbla	Northparkes Mines	No
North Parkes Rosedale Tailings Storage - Goonumbla	Northparkes Mines	No
North Parkes Infill Tailings Storage Facility- Goonumbla	Northparkes Mines	No
North Parkes Tailings - Parkes	Northparkes Mines	No
North Parkes Tailings 2 - Parkes	Northparkes Mines	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. 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. 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. 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. 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. NSW SES will provide advice, support, technical resources and training for NSW SES representatives to contribute effectively on local Floodplain Risk Management Committees.

4 PREPARATION

4.1 INTRODUCTION

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

4.2 FLOOD EMERGENCY PLANNING

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

Actions:

- a. Develop and review this NSW SES Local Flood Emergency Sub Plan as required. Local Flood Emergency Sub Plans outline the specific arrangements for management of flood events within an LGA and may include cross boundary arrangements.

- b. Review plans as per [Section 1.8](#).

4.2.2 Local EMPLAN Consequence Management Guides (CMG's) 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 NSW SES.

4.3 FLOOD INTELLIGENCE SYSTEMS

4.3.1 **Strategy:** 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. 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). Gauges of relevance within the Parkes Shire LGA are also listed in Volume 3 of this plan.
- c. 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. Dam Owners will provide Dam Emergency Plans (where required) and consult with NSW SES on alert levels and messaging. Alert level definitions are listed in Dam Emergency Plans.
- f. NSW SES maintains a dedicated dam failure hotline and procedures to ensure priority dissemination of dam failure warnings.
- g. 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.
- h. 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 NSW SES.

4.5 BRIEFING, TRAINING AND EXERCISING

4.5.1 **Strategy:** Ensure 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. NSW SES will consult stakeholders throughout the development of plans.
- b. NSW SES will inform stakeholders of content changes after revisions.
- c. NSW SES will ensure their facilities and resources are maintained and operationally ready.
- d. NSW SES will train personnel for their expected flood operation roles.
- e. 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:** 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:** 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. 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. 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. NSW SES will operate Incident Control Centre(s) as required.
- b. The NSW SES Incident Control Centre(s) will:
 - Control resources from 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 NSW SES and supporting agencies or functional areas in accordance with 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.
- 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.
- 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 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 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. 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 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: 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. NSW SES liaises with the Bureau to discuss the development of flood warnings as required.

- e. NSW SES provides alerts and deliver flood information to affected communities using a combination of public information.
- f. 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 Info Line': 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: 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. Parkes 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. NSW Police Force may close and re-open roads but will normally only do so (if the Parkes Shire Council or Transport for NSW have not already acted and if public safety requires such action).

- d. 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 Arrangements for the protection of local assets are outlined in Volume 3 of this NSW SES Local Flood Emergency Sub Plan. In addition, 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 Parkes Shire Council will keep NSW SES informed of the status of utilities and infrastructure.

5.8 EVACUATION

5.8.1 Evacuation is NSW SES's primary response strategy for managing the population at risk of flooding.

5.8.2 Community specific evacuation arrangements are located in Volume 3 of this Plan.

5.8.3 **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. NSW SES will consider the following in evacuation decisions:
 - Duration of evacuation.
 - Characteristics of the community.
 - Numbers requiring evacuation.
 - Availability of evacuation routes and transport.
 - The ability for existing levees or other flood protection works to fulfil their intended function.
 - Time available for evacuation.
 - Evacuee management requirements.
 - Resources and delivery of evacuation information.
 - Length of isolation.
- c. NSW SES Incident Controllers, planning and intelligence officers will carefully consider the risks involved in conducting evacuations.
- d. All evacuation decisions will be made as per the current NSW SES policies and procedures, and consistent with the NSW Evacuation Management Guidelines.
- e. Potential Evacuation Centres are located in Volume 3 / local EMPLAN.
- f. NSW Police Force will coordinate the provision of overall security for evacuated areas.

5.8.4 **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 NSW SES and Welfare Services.
- f. School administration offices (Government and Private) will coordinate the evacuation of schools in consultation with NSW SES and Welfare Services, 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 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. 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. 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 NSW SES in the temporary closure of schools and will coordinate with NSW SES, Transport and Welfare Services in the management of school evacuees.
- d. Disaster Victim Registration will be controlled and coordinated by NSW Police Force with the assistance of NSW SES and the Welfare Services Functional Area.
- e. 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 NSW SES and SEOCN 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 of animals and assessment, humane destruction and disposal of affected animals, and supply of emergency fodder, water and aerial support where necessary.

5.10 FLOOD RESCUE

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

Actions:

- a. 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. NSW SES may request other supporting emergency services to undertake flood rescues on behalf of NSW SES. Agencies must be authorised/accredited to undertake flood rescue operations in accordance with State Rescue Board requirements, as prescribed by NSW SES. Supporting emergency services must supply information regarding rescues performed to NSW SES. Notification arrangements with NSW Police Force are outlined in the NSW 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. 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, NSW SES will establish loading points where retailers can instruct suppliers to deliver goods.
- d. 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. NSW SES will assist hospitals with resupply of linen and other consumables where able.
- f. NSW SES may request resupply assistance from supporting agencies.
- g. 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 will 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, NSW SES will establish a resupply schedule and coordinate the resupply for isolated rural properties.
- b. 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 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. 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. 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, Welfare Services and Parkes Shire Council representatives.
- b. NSW SES will conduct After Action Reviews, at the conclusion of response operations, which will involve all stakeholders. Findings will be shared and incorporated into improved disaster resilience planning.
- c. NSW SES will provide information and data throughout the emergency response to inform community recovery. A report will be developed at the request of the SERCON at the conclusion of the response within an area. Should a response summary report be required it will include the following:
 - The emergency action plan in place at conclusion of the response emphasising any continuing activities including community meetings/ engagement activities.

- Resources allocated to the emergency response and associated exit strategies.
- Details of any areas or situations with potential to re-escalate the emergency.
- A recommendation for the conclusion of NSW SES as lead agency to transition to 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. 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: NSW SES works with relevant stakeholders and Parkes 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:** NSW SES will support recovery operations and established Recovery Committees.

6.2.2 **Actions:**

- a. NSW SES will provide representation to Recovery Committees as required and may have an ongoing role in the recovery phase.
- b. 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. NSW SES will provide information to NSW Reconstruction Authority to support applications to Treasury for Natural Disaster Relief and Recovery Arrangements.

- d. 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. NSW SES and where required supporting agencies will assist with clean-up operations after floods, where possible when resources and personnel permit.
- f. NSW SES may coordinate immediate relief in collaboration with SEOC 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>

9 Appendix A – Map of Parkes Shire Council Area



10 Appendix B – Roles and Responsibilities

AGENCY	RESPONSIBILITIES
NSW State Emergency Service	NSW SES is the designated Combat Agency for floods, storms and tsunami and controls response operations. 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 Agriculture and Animal Services are outlined in the Agriculture and Animal Services Supporting Plan and NSW State Flood Plan.
Australian Government Bureau of Meteorology	The roles and responsibilities for the Australian Government Bureau of Meteorology (Bureau) are outlined in the NSW State Flood Plan.
Caravan Park Proprietor(s)	<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 occupiers taking up residence and displaying this notice and emergency management arrangement within the park. • Ensure that owners and occupiers of movable dwellings are aware that if they are expecting to be absent for extended periods, they should: <ul 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.

AGENCY	RESPONSIBILITIES
	<ul style="list-style-type: none"> • Secure any movable dwellings that are not able to be relocated to prevent floatation. • Inform 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.
Childcare Centres and Preschools	<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 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.
Dams Safety NSW	The roles and responsibilities for Dams Safety NSW (formerly NSW Dam Safety Committee) are outlined in the NSW State Flood Plan.
Department of Defence	Arrangements for Defence Assistance to the Civil Community are detailed within the State EMPLAN (section 448).
Energy and Utilities Services Functional Area	<p>The roles and responsibilities for 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 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 NSW SES of any need to disconnect power/gas/water/wastewater supplies or of any timetable for reconnection. – Advise 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 NSW SES to identify infrastructure at risk of flooding for incorporation into planning and intelligence.
Engineering Services Functional Area	The roles and responsibilities for Engineering Services are outlined in the Engineering Services Supporting Plan and NSW State Flood Plan.

AGENCY	RESPONSIBILITIES
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 Health Services 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.
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 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 NSW Police Force are outlined in the NSW State Flood Plan.

AGENCY	RESPONSIBILITIES
NSW Reconstruction Authority	The roles and responsibilities for NSW Reconstruction Authority are outlined in the NSW State Flood Plan.
NSW Rural Fire Service	The roles and responsibilities for 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.
Parkes Shire Council	<p data-bbox="507 584 687 613">Preparedness</p> <ul data-bbox="507 645 1455 1451" 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 NSW SES. • Maintain Dam Emergency Plans for the Beargamil and Lake Endeavour 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. • 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 data-bbox="507 1473 635 1503">Response</p> <ul data-bbox="507 1534 1455 2042" style="list-style-type: none"> • Subject to the availability of council resources, assist NSW SES with flood operations including: <ul style="list-style-type: none"> – Traffic management on council managed roads. – Provision of assistance to 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.

AGENCY	RESPONSIBILITIES
	<ul style="list-style-type: none"> – Close and reopen council roads (and other roads nominated by agreement with Transport for NSW) and advise 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. • 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 NSW SES regarding their operation. • Manage and protect council-owned infrastructure facilities during floods. • Provide advice to 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 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.
Public Information Services Functional Area	The roles and responsibilities for Public Information Services are outlined in the Public Information Services Supporting Plan and NSW State Flood Plan.
State Emergency Operations Controller (SEOC)	The roles and responsibilities for the SEOC/SEOC are outlined in the NSW State Flood Plan.
Surf Life Saving NSW	The roles and responsibilities for Surf Life Saving NSW are outlined in the NSW State Flood Plan.
Telecommunications Services Functional Area	The roles and responsibilities for Telecommunications Services 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.

AGENCY	RESPONSIBILITIES
	<ul style="list-style-type: none"> • 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 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 NSW SES with identification of road infrastructure at risk of flooding.
Transport Services Functional Area	The roles and responsibilities for Transport Services 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 Welfare Services are outlined in the Welfare Services Functional Area Supporting Plan and NSW State Flood Plan.

11 Appendix C – Community Specific Roles and Responsibilities

Community Members	<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.
Private Companies or other Organizations	<ul style="list-style-type: none"> • Assist the NSW SES with provision of personnel for sand bag filling. <ul style="list-style-type: none"> - North Parkes Mine. - Parkes Food Products. - Currajong Disability Services. • Assist the NSW SES with the provision of equipment. <ul style="list-style-type: none"> - Kennards Hire.
Service and Sporting Clubs	<ul style="list-style-type: none"> • Assist the NSW SES with the provision of meals. <ul style="list-style-type: none"> - Parkes RSL Club (supply under contract).
Communication	<ul style="list-style-type: none"> • NSW SES Unit Parkes Facebook page. • Parkes Phoenix newspaper.
Name of Farmer or Flood Warning Networks	<ul style="list-style-type: none"> • Provide information on flooding to the Parkes Unit Commander. <ul style="list-style-type: none"> - Nelungaloo (Overland Flows): Emma Nyman - Orange Road (Billabong Creek): Graham Hunt - Tichborne (Billabong Creek): Fiona Watts
Community Assistance Groups	<ul style="list-style-type: none"> • Assist the NSW SES with the provision of welfare. <ul style="list-style-type: none"> - Rapid Relief

HAZARD AND RISK IN PARKES SHIRE

Volume 2 of the Parkes Shire Local Flood Plan

Last Update: August 2017

AUTHORISATION

The Hazard and Risk in Parkes 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



Manager Emergency Risk Management

Date: 2-8-17

Approved



NSW SES Lachlan Region Controller

Date: 31.07.17

Tabled at LEMC

Date: 23 August 2017

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VERSION LIST

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

Description	Date
Parkes Shire Local Flood Plan - Annex A and B	January 2008
Volume 2 - Hazard and Risk in Parkes Shire	August 2016

AMENDMENT LIST

Suggestions for amendments to this Volume should be forwarded to:

The Parkes Unit Local Controller
 NSW State Emergency Service
 Cnr Clark & Alluvial Streets
 Parkes, NSW, 2870

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

Amendment Number	Description	Updated by	Date
1	Section 1.3 Storage Dams – Amendments to the North Parkes Tailings Dams table.	Maria De Deuge	2 Jun 2018

Document Issue: Version 3-02052016

1 THE FLOOD THREAT

1.1 OVERVIEW

- a. Parkes Shire Local Government Area (LGA) is located on the headwaters of the Bogan River which is a tributary of the Macquarie River (Basin No 421) and the Goobang (Billabong) Creek which is a tributary of the Lachlan River (Basin No 412) (1).
- b. Parkes is the major town with a number of smaller towns including Bogan Gate, Peak Hill, Trundle and Tullamore in the LGA.

1.2 LANDFORMS AND RIVER SYSTEMS

Lachlan River Valley

- a. The Lachlan River Valley is located in central western New South Wales, lying between the Macquarie and Murrumbidgee River Valleys. The valley covers an area of 84,700 square kilometres as a long and narrow basin. The Lachlan River rises on the Breadalbane Plain to the east of Gunning and flows initially westwards. Near Gunning the river veers northwards for some 120 kilometres until it is joined by a major tributary, the Crookwell River, which rises near Crookwell in the south-east of the valley. The river then flows northward for about 64 kilometres before entering the storage of Wyangala Dam. Another major tributary, the Abercrombie River, enters the Wyangala Dam storage after draining rugged sections of the Divide in the east of the valley (2).
- b. Below Wyangala Dam, the Lachlan River veers north-west. It is joined from the south by Hovell's Creek and the Boorowa River (Hilltops LGA) before it reaches Cowra (Cowra LGA). Downstream of Cowra the river enters a broadening valley and is met by two major tributaries, the Belubula River and Mandagery Creek (the southern and western boundaries of Cabonne LGA respectively), both of which drain the high country along the northern boundary. The river then flows to Forbes (Forbes LGA) where it is joined by the Goobang Creek and assumes a more westerly course to Condobolin (Lachlan LGA). On this reach the course is characterised by extensive meanders and swampy depressions. South of this section is Lake Cowal (Bland LGA) which is fed by a catchment of about 9,800 square kilometres which, during wet years, fills and overflows down its escape to the Lachlan and branch system (2).
- c. About 60 kilometres downstream from Condobolin the river turns south westerly and flows through flat country for about 800 kilometres before joining the Murrumbidgee River approximately 35 kilometres downstream of Maude (Hay LGA) (3).

Lachlan Catchment East of Parkes

- a. The Goobang Creek system comprising of the Back Goobang, Beargamil, Billabong, Bindogandri, Crooked, Flagstone and Ridgey Creeks drains the area north, east and south of Parkes. The Goobang Creek is also known as Billabong Creek where it flows through the old Parkes Municipal area (1).
- b. The Gunningbland and Milpose Creeks drain the area north west of Parkes and flow through the Gunning Range at Bogan Gate (Parkes LGA) (1).

Lachlan Catchment West of Parkes

- a. The creek systems which drain this area are Yarrabundry, Yarrabandai, Gillonbine and Gunningbland Creeks (1).

Macquarie-Bogan River Valley

- a. The Bogan River starts in the Hervey Range near Peak Hill and flows north-west to Nyngan. The western side of the catchment is drained by four major tributaries: Bullock Creek near Tottenham and Bulbodney, Pangee and Whitbarrow Creeks to the west of Nyngan. The eastern catchment between the Bogan and Macquarie Rivers is ill-defined and has only one major tributary, Mulla Cowal near Nyngan (outside of the Parkes LGA), with a catchment area of 1,000 square kilometres. The total catchment area of the Bogan River upstream of Nyngan is approximately 18,000 square kilometres. Unlike the other main rivers of inland New South Wales, the Bogan does not rise in the well-watered highland areas, so it's flow is low and erratic (4).
- b. The Parkes Shire LGA only covers a small part in the south of this catchment which includes the network of tributaries which drain the western side of the upper catchment west of Peak Hill. These include Burradona, Burrill, Ten Mile, Cookopie, Genaren, Sandy, Kadungle and Bullock Creeks (1). The river forms the northern boundary of the Parkes / Narromine LGAs from about 7 kilometres northwest of Peak Hill to a point about 12 kilometres southeast of the rural locality of Dandaloo.

1.3 STORAGE DAMS

- a. Dam locations are shown on the Basin Map.

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

Lake Endeavour Dam (1)	
Owner / Operator	Parkes Shire Council
Description of Dam	<p>Lake Endeavour Dam was built in 1940 and has a capacity of 2,400ML at FSL.</p> <p>It is an earth fill dam with concrete core wall. It has a concrete spillway. The dam is the main water supply for Parkes and Peak Hill.</p> <p>(5).</p> <p>The dam was upgraded in 2015 to strengthen the Dam embankment and spillway training wall to ensure long term stability and integrity. As at August 2016 the dam is still undergoing an assessment on the revised alert trigger levels.</p>
Location	This dam located 25 Kilometres east of Parkes on Billabong Creek (5).
Communities Downstream	<p>Downstream of the dam there are a number of houses near Billabong Creek.</p> <p>73 houses potentially affected downstream in PMF dam failure (along Billabong Creek)</p>
Monitoring System	There is a SCADA monitoring system installed at the dam to monitor water levels and the security system (5).
Warning System	The dam has an early warning system which notifies Council & SES via SMS messages of protection, orange and red alert levels (5). It also has an early warning system available online: https://adms.ajenti.com.au/
Other	Flow times are short. It is estimated the first house will be flooded above floor level in about 16 minutes of a dam failure (6). Further inundation will occur particularly to properties within the first 16 kilometres of the dam (5).

Beargamil Dam	
Owner / Operator	Parkes Shire Council
Description of Dam	Beargamil Dam, built in 1924 is located on Beargamil Creek and has a capacity of 480ML. Construction of the dam created Lake Metcalfe. This dam also feeds into the Parkes and Peak Hill water supply.
Location	The dam is located about 19 kilometres northeast of Parkes and 4.5 kilometres northwest of Endeavour Dam
Communities Downstream	Not known. Flows into Beargamil Creek, east of Parkes.
Monitoring System	Not known
Warning System	Not known
Other	Not known

North Parkes Tailings Dams (7)	
Owner / Operator	Northparkes Mines
Description of Dam	Rosedale Tailings Storage Facility (TSF) contains 3 off stream mine tailings dams, Caloola Ponds (North, South, East). Storage capacities are 462,500, 628,100 and 416,600 m ³ , which is estimated to be sufficient to retain water volumes pumped out of the TSF in a 1% AEP 72 hour storm event. However this assumes full capacity of Caloola Ponds is available, when historically, Caloola Ponds has been used to store excess water temporarily
Location	Located to the west of Bogan Road, approximately 30km north west of Parkes.
Communities Downstream	Peak Hill
Monitoring System	A comprehensive monitoring program (including inspections and piezo monitoring) has been developed for the TSF to detect potential problems early and ensure remedial actions are taken to reduce the likelihood of failures.
Warning System	Not known
Other	Not known

1.4 WEATHER SYSTEMS AND FLOODING

- a. The Parkes Shire LGA has an average annual rainfall of 588 millimetres with the higher eastern area of the shire receiving slightly more rainfall than the plains to the west. In (one) significant rainfall event rain exceeding 155 millimetres in a 24 hour period has been recorded (1).
- b. The rainfall is slightly more dominant in Autumn through Spring, however flooding can occur in any season. In summer, low pressure troughs moving southward from the northern parts of the continent can cause intense short-periods of rainfall leading to flooding. Winter floods are historically from a sequence of troughs moving from the southwest, these produce substantial rain over an extended period (1).
- c. Thunderstorms between November and March have produced extensive rainfall over short periods resulting in flash flooding as town drains, culverts and smaller creeks fail to contain the volume of water in them (1).

1.5 CHARACTERISTICS OF FLOODING

- a. The characteristics and extent of flooding in the Lachlan River Basin is best considered in three distinct areas, they are (1):

- i. The Lachlan catchment east of the Gunning Range. This area has no direct relevance to this plan.
 - ii. The Lachlan catchment west of the Gunning Range. This includes the central and southern parts of the Parkes LGA.
 - iii. The Bogan catchment. The headwaters of this catchment are in the northern part of the Parkes LGA west of Peak Hill.
- b. In the Lachlan River catchment, floods generally rise quickly, are contained within the creek lines and adjacent low lying flats, and fall relatively quickly. The exception is on Goobang (Billabong) Creek downstream of Tichborne (10 kilometres south of Parkes) where the flood plain is up to one kilometre wide and extensive and prolonged flooding starts to occur by the time the creek reaches the Goobang Range (1).
 - c. Flooding in Parkes is limited to local urban stormwater surcharges and response actions usually only require minor sandbagging and/or pumping operations (1).
 - d. Flooding on Yarrabundry, Yarrabandai, Gillonbine and Gunningbland Creeks to the west of Parkes (and Gunningbland Range) can result in the development of flood runners in usually dry watercourses. This results in some extensive areas of inundation. In the case of Gunningbland Creek flows generally west southwest, with the drainage of these flood waters is inhibited by the Bogan Gate-Condobolin Road and Railway Line (1).
 - e. In the southern part of the Macquarie-Bogan catchment flood waters are generally limited to the adjacent river flats however from a line north of the Peak Hill-Tullamore Road (MR348) flood waters from the Bogan River, Sandy and Kadungle Creeks break out in to a series of flood runners that cover an extensive area (1).

1.6 FLOOD HISTORY

- a. Records show a history of flooding, in what is now the Parkes Shire LGA, at Trundle and Bogan Gate with the most significant in 1930, 1952, 1973, 1976, 1990, 1992, 1998, 2005 (1), 2012 (7) and 2016.
- b. Flooding in these years resulted in houses in one or both these communities being inundated (1). Above floor inundation was reported in Trundle for both 2005 and 2012 floods.
- c. The Bogan catchment below Peak Hill also had a significant flood event in 1978 (1).
- d. Rural properties Rosehill, Montana and Pine Park south west of Tullamore towards Fifield were flooded during the 2005 storm event with Rosehill and Pine Park recording one metre of water through the homesteads (1).

- e. Parkes township was isolated by floodwaters and flash flooding after 106 millimetres of rain fell in 24 hours on 3rd December 2010 (5).
- f. In July 2016, the Bogan River at Peak Hill peaked at 3.81 metres with minor flooding, resulting in a number of local road closures.
- g. In September 2016, a large number of roads were impacted by overland and flash flooding including Narromine-Tullamore Road, Bogan Gate-Trundle Road, Bogan Way, Peak Hill-Tullamore Road, Eugowra Road, Henry Parkes (Orange) Road, Newell Highway and 202 local roads. Trundle was isolated for a few days which included 339 dwellings and 250 campers. The power and sewerage in Parkes was also impacted for 24-48 hours, as a consequence of the rainfall (8). Rural inundation was experienced across the LGA (9).

1.7 FLOOD MITIGATION SYSTEMS

- a. There are no known specific flood mitigation systems within the Parkes LGA.

1.8 EXTREME FLOODING

- a. Trundle becomes isolated in the 1% AEP event and almost the entire town is flooded in the PMF event (10).
- b. In extreme flood events residences at Tichborne (10 kilometres south of Parkes on the Newell Highway (HW17)), Bogan Gate and rural properties west of Tullamore may become flooded. Trundle can be isolated for periods in excess of one week and Tullamore and Bogan Gate isolated for shorter periods of one to three days (1).

2 EFFECTS ON THE COMMUNITY

2.1 COMMUNITY PROFILE

Table 2: Census of Housing and Population data (2011)

Census Description	Parkes (LGA)	Parkes	Peak Hill	Trundle	Tullamore
Total Persons	14,592	10,946	1,152	665	663
Aged 0-4 yrs	1,040	807	70	46	52
Aged 5-14 yrs	2,238	1,718	140	93	96
Aged 65 + yrs	2,640	1,925	258	153	147
Of Indigenous Origin	1,212	792	247	46	43
Who do not speak English well	30	29	0	3	0
Have a need for assistance (profound/severe disability)	907	676	88	52	36
Living alone (Total)	1,557	1,164	160	89	60
Living alone (Aged 65+)	713	532	72	46	26
Residing in caravans, cabins or houseboats or improvised dwellings	68	62	9	3	3
Occupied Private Dwellings (Households)	5,402	4,025	459	269	254
No Motor Vehicle	494	386	58	27	14
Caravan, cabin, houseboat or improvised dwell	37	31	4	0	3
Rented via State or Housing Authority	255	240	16	3	3
Rented via Housing Co-Op or Community Church Group	75	44	25	10	0
No Internet Connection	1,735	1,252	196	108	81
Unoccupied Private Dwellings	731	349	121	63	77
Average persons per occup dwelling	2.5	2.5	2.2	2.5	2.7
Average vehicles per occup dwelling	1.7	1.6	1.6	1.8	2.1

SPECIFIC RISK AREAS - FLOOD

Lachlan River Valley

2.2 PARKES AND TICHBORNE

2.2.1 Community Overview

- a. Parkes is located in mid-western NSW, on the Newell Highway (HW17). It is the major town servicing the Parkes Shire LGA. The town is surrounded by farmland where wheat and wool are the main products. Parkes has an urban population of 10,026 as at 2011 with an indigenous population of 765 (11). Demographics are summarised in table 2.
- b. Tichborne is a small village 10 kilometres to the south of Parkes, it has a population of approximately 380 and 160 dwellings (11).

2.2.2 Characteristics of flooding

- a. Flooding in Parkes township is limited to local urban stormwater surcharges (1).
- b. Flooding in Tichborne generally occurs due to Goobang Creek flooding.

2.2.3 Flood Behaviour

- a. Flooding on Goobang Creek downstream of Tichborne, the floodplain is up to a kilometre wide and extensive and prolonged flooding can occur.
- b. Heavy rain in the upper reaches of the Goobang Creek can result in major flooding in Tichborne for example in 2010 (7).

2.2.4 Classification of Floodplain

- a. No information is currently available.

2.2.5 Inundation

- a. Historically, floods in Parkes has required minor sandbagging and/or pumping operations, with no significant inundation recorded (1).
- b. In Tichborne, up to six properties along the Goobang (Billabong) Creek either side of the Newell Highway (HW17), Warregal Road and Watts Lane can be inundated or isolated for up to 24 hours (1).

2.2.6 Isolation

- a. The primary threat posed by creeks in the area is road closures and some short term property isolation. This can result from either prolonged spells of wet weather or rainfall after lengthy dry periods (1). For example, Parkes township was isolated by

floodwaters and flash flooding after 106 millimetres of rain fell in 24 hours on 3rd December 2010 (5).

2.2.7 Flood Mitigation Systems

- a. No known flood mitigation systems have been identified.

2.2.8 Dams

- a. Lake Endeavour Dam is located 25 kilometres east of Parkes on Billabong Creek. Beargamil Dam is located 19 kilometres to the northeast of Parkes. Failure of either dam is unlikely to impact on Parkes or Tichborne.

2.2.9 At Risk Facilities

- a. The facilities that are at risk of flooding and/or isolation within the Parkes LGA including schools, child care centres, hospitals, aged and infirm, infrastructure and caravan parks are shown in Annex 2.

2.2.10 Other Considerations

- a. Parkes hosts the annual Elvis Festival over the second weekend in January and visitor numbers may exceed 20,000 for the event (12).

2.3 TRUNDLE AND BOGAN GATE

2.3.1 Community Overview

- a. Trundle is a rural community situated 60 kilometres north-west of Parkes with a population of 666 and a median age of 45 and an indigenous population of 50 (11).
- b. Bogan Gate is a small rural community with a population of 307 (11). It lies about 36 kilometres west of Parkes and 24 kilometres southeast of Trundle. It is situated adjacent to the main Sydney – Broken Hill railway.

2.3.2 Characteristics of Flooding

- a. Trundle township experiences frequent flooding from Yarrabandai and Goobang Creeks and residents are isolated during floods for up to one week and access to Trundle Hospital (located in Brookview Street) is lost for several days (10).
- b. Bogan Gate experiences flash flooding from local creeks, including Gunningbland Creek.

2.3.3 Flood Behaviour

- a. Trundle experiences frequent flooding resulting from rainfall runoff generated from the catchment areas of Yarrabandai and Goobang Creeks. Yarrabandai Creek is located to the north and Goobang Creek to the south, which bisect the town during floods. These creeks join in bushland just southwest of the town (10).
- b. During an average storm event, the residential and commercial areas are affected due to the short-term closure of roads. Larger events lead to the entire town becoming isolated for up to several days and access to Trundle Hospital is also cut. Each flood event usually results in a consistent pattern of inundation (10).
- c. There are several causways in the Trundle township that have historically caused flash flooding in and around Forbes Street, Mentone Street, North Street, Brookview Street and Parkes Street (8).

2.3.4 Classification of Floodplain

- a. Trundle becomes a low flood island in extreme floods, and is a high flood island at a 1% AEP flood when the Bogan Way north and south, Fifield Road, Condobolin Road, Middle Trundle Road and Ascot Road are all cut (7).

2.3.5 Inundation

- a. In Trundle, up to 13 homes can be inundated in Forbes Street (The Bogan Way), Parkes, Brookview, Hutton, Mentone, Long, North and Austral Streets adjacent to Yarrabandai Creek. The Services and Golf Clubs have also been inundated by up to

1.5 metres of water in 2005 and the Hospital and Aged Care Home (Multi-purpose Service Facility) for periods of 24-36 hours (1).

- b. Bogan Gate residences may become flooded in an extreme event (7).

2.3.6 Isolation

- a. Trundle becomes isolated in floods less than the 1% AEP event and the 2005 flood event is considered to be similar to the 1% AEP flood (10). In 2016, the town was isolated for a few days. Isolation may be in excess of one week for larger floods (7).
- b. In Bogan Gate, six properties on and near The Common next to the Gunningbland creek, north of Leafy Tank Road, Footshill Lane and The Bogan Way, were isolated in 1990 with residents requiring emergency accommodation for three days (1). Isolation generally occurs for one to three days (7).
- c. Road closures shown in Section 2.6 combined with those in the Bogan River Catchment area can mean that Trundle can be isolated for periods up to one week and Bogan Gate for 24-36 hours.

2.3.7 Flood Mitigation Systems

- a. There is a private levee constructed by one resident of Mentone Street on the northern side of the street in Trundle. It protects one residential dwelling. This levee was overtopped in March 2012 and required pumping of floodwaters out of the protected area (7).

2.3.8 Dams

- a. There are no prescribed dams near Trundle or Bogan Gate.

2.3.9 At Risk Facilities

- a. The facilities that are at risk of flooding and/or isolation within the Parkes LGA including schools, child care centres, hospitals, aged and infirm, infrastructure and caravan parks are shown in Annex 2.

2.3.10 Other Considerations

- a. Trundle Abba Festival is held on the 1st Saturday in May annually. This event takes the population of Trundle from 665 to 5000 for several days (8) (13). In addition the Bushtucker Day is held annually in September, bringing a large number of tourists and campers (14).

2.4 COOKAMIDGERA

2.4.1 Community Overview

- a. Cookamidgera is a locality of around 215 people (11), located approximately 13 kilometres to the south east of Parkes.

2.4.2 Characteristics of Flooding

- a. Cookamidgera can be flooded as a result of runoff from the Cooka Hills to the east, as well as local flooding from rainfall and flash flooding of Bartleys Creek through the town (mainly urban runoff).

2.4.3 Flood Behaviour

- a. Flooding can occur quickly and can be quite fast and deep, particularly along Trigg Hill Road. This area is ungauged.

2.4.4 Classification of Floodplain

- a. Insufficient information available.

2.4.5 Inundation

- a. At least one property on the intersection of Mullins Street and Flagstone Street is at risk of inundation (14).

2.4.6 Isolation

- a. Cookamidgera can become isolated when Trigg Hill Road is cut at the causeway (Quart Pot Creek) between Eugowra Road and Cookamidgera; as well as when Cookamidgera Road and Cooka Hills Road are cut from local rainfall (14).
- b. Haynes Street is at risk of being cut temporarily and the northern side of the Flagstone Street is also at risk of being cut at the culvert near the Cooka Hills Road intersection (14). This can further isolate rural residents to the north (approximately 15 properties) and east (<20 residents) of the town (14).

2.4.7 Flood Mitigation Systems

- a. No known flood mitigation systems.

2.4.8 Dams

- a. There are no prescribed dams near Cookamidgera.

2.4.9 At Risk Facilities

- a. The facilities that are at risk of flooding and/or isolation within the Parkes LGA including schools, child care centres, hospitals, aged and infirm, infrastructure and caravan parks are shown in Annex 2.

2.4.10 Other Considerations

- a. No other considerations have been identified.

Macquarie-Bogan River Valley

2.5 PEAK HILL AND RURAL LOCALITIES

2.5.1 Community Overview

- a. The main population centre in the Bogan River Valley within the Parkes Shire LGA is Peak Hill which is located about 50 kilometres north of Parkes on the Newell Highway (HW17).
- b. The population of Peak Hill is 1150, with an Indigenous population of 21% (243) (11).

2.5.2 Characteristics of Flooding

- a. Flooding of the Bogan River in Parkes LGA is typically riverine and overland flooding impacting low lying farming areas and road crossings.

2.5.3 Flood Behaviour

- a. Flooding around Peak Hill is caused by the Bogan River, and its smaller tributaries including Goonumba Creek, Deception Creek, Stanfords Creek, Stockroute Creek and Hallinans Creek.
- b. The Bogan River water level is monitored with river gauges at Peak Hill near the Bogan Weir (421076).

2.5.4 Classification of Floodplain

- a. No information is currently available.

2.5.5 Inundation

- a. The rural community and properties along the Bogan River and its tributary creeks may be impacted by floodwaters when the Bogan River exceeds minor flood level on the Peak Hill gauge (Gauge No 421076).
- b. There are no recorded inundation consequences in the township of Peak Hill itself, as is not situated on the Bogan River; however, the rural properties Rosehill, Montana and Pine Park south west of Tullamore towards Fifield are susceptible to over floor flooding for example in the 2005 storm event (1).

2.5.6 Isolation

- a. Tullamore Road, (between Tullamore and Peak Hill) is likely to be cut before the minor flood level, at around 1.1 metres on the Peak Hill gauge (421076).
- b. Minor flooding (2.5 metres) causes low level road crossings to flood and may result in road closures of Kitto's Bridge, Mungery West (off Bulgandramine Road over the Bogan River). Adavale Lane, Goonumbra (near the Limestone State Forest) may also be flooded where it crosses the Bogan River (15).

- c. Major flooding (6m on Peak Hill gauge) causes all river roads to close, isolating a number of rural properties around Peak Hill (16). Rural properties, particularly those in the north and west of the shire are isolated for short periods, no further details have been recorded of resupply or other assistance (1).
- d. A list of roads at risk of flooding is provided in section 2.6.

2.5.7 Flood Mitigation Systems

- a. No known flood mitigation systems have been identified in the Bogan River valley.

2.5.8 Dams

- a. Northparkes Mine tailing dams are located in this catchment and are prescribed dams. They are located off stream to the west of Peak Hill.
- b. Bogan Weir (412005), is located on the Bogan River at Peak Hill. It is not a prescribed dam.

2.5.9 At Risk Facilities

- a. The facilities that are at risk of flooding and/or isolation within the Parkes LGA including schools, child care centres, hospitals, aged and infirm, infrastructure and caravan parks are shown in Annex 2.

2.5.10 Other Considerations

- a. No other considerations have been identified.
- b. It is acknowledged that rural properties, particularly those in the north and west of the shire are isolated for short periods and except for those properties already identified, no further details have been recorded of resupply or other assistance (1).

ROAD CLOSURES AND ISOLATED COMMUNITIES

2.6 ROAD CLOSURES

- a. Table 3 lists roads liable to flooding in the Parkes LGA.

Table 3: Roads liable to flooding in Parkes LGA (1).

Road	Closure location	Consequence of closure	Alternate Route	Indicative gauge height
Lachlan River Valley East of Parkes				
Henry Parkes Way (MR61)	Can be closed by long shallow sheet flooding from the tributary streams of the Billabong and Bindogandri Creeks.	Flooding usually lasts no longer than two-three hours. Cuts direct access between Parkes and Orange		n/a
Renshaw McGirr Way, Parkes (MR233)	Goobang Creek and Olieview Road	Can be cut for up to three hours. Cuts direct access between Parkes and Wellington		n/a
Eugowra Road, Parkes (MR238)	Low level crossing over Goobang (Billabong Creek) on the south eastern side of Parkes.	Can be cut for up to two days. Permanent alternate route available between Eugowra and Parkes	Permanently marked detour via Military Road	n/a
The Newell Highway (HW17)	Alectown (Burrandong Creek)	Can be cut for a few hours to 24 hours		n/a
Lachlan River Valley West of Parkes				
The Newell Highway (HW17)	Goobang (Billabong) Creek at Tichborne; 15 kilometres south of Tichborne at Crooked Creek	Can be cut for up to 24 hours- a few days by flooding cutting access between Forbes and Parkes		n/a
Henry Parkes Way (MR61)	Ridgey Creek and Brolog Creek	Can be cut for up to four hours (there have been reports of water across the road at Brolog Creek, 18kilometres west of Parkes, for up to three days) restricting access between Parkes and Condobolin		n/a

Road	Closure location	Consequence of closure	Alternate Route	Indicative gauge height
The Bogan Way (MR350)	Goobang (Billabong) Creek and the Crooked Creek	Can be cut for up to several days restricting access between Bogan Gate and Forbes		n/a
Middle Trundle Road, Back Trundle Road, Ascot Road, Boorr Hill (Capell) Road, Scotson Lane, Ravenswood Lane, Woodview Road, Carlisle-Trundle Road, Condobolin-Trundle Road, Fifield-Trundle Road	Various locations along Yarrabandai Creek & Yarrabundry Creek	Can be cut up to seven days isolating Trundle from surrounding villages and towns - Isolates rural properties near Trundle for 36-48 hours.	No	n/a
Henry Parkes Way (MR61)	Gunningbland Creek approx. 6 kilometres west of Bogan Gate. Can be cut for up to four days by the Gunningbland Creek	Restricts access between Bogan Gate and Condobolin		n/a
Henry Parkes Way (MR61)	Approx. 3 kilometres East of Bogan Gate. Can be cut for up to four days by the Gunningbland Creek	Restricts access between Bogan Gate and Parkes		n/a
The Bogan Way (MR350)	Approx. 1.5 kilometres North of Bogan Gate. Can be cut for up to four days by the Gunningbland Creek.	Restricts access between Bogan Gate and Trundle		n/a
Bogan River Valley				
Tullamore Road (MR348)	Bogan River and/or Ten Mile Creek. Can be cut by the Bogan River and/or Ten Mile Creek for a period of up to four days. This road can also be cut by Genaren,	Restricts direct access between Tullamore and Peak Hill	Detour via Minerong Road is available except during major flooding.	

Road	Closure location	Consequence of closure	Alternate Route	Indicative gauge height
	Sandy and Kadungle Creeks for up to 24 hours			
The Bogan Way, Kadungle (MR350)	Kadungle Creek	Can be cut for up to 24 hours restricting direct access between Trundle and Tullamore	No	
Bruie Plains Road, Trundle	Genaren Creek. Can be cut by the Genaren Creek and Yarren Creek	Access between Trundle and Bruie Plains and Peak Hill can be cut for 24hrs (8)	No	
The McGrane Way (aka Narromine Road) MR354	Can be cut at a number of places, including the leg of Mutton Creek, the Bogan River and some of the Genaren Creek tributaries	Access is closed for several days between Narromine and Tullamore. Closed to heavy vehicles for months in 2016. (8)	No	
The Bogan Way (Tullamore-Tottenham Road) (MR57) / The McGrane Way	Bullock Creek about 3 kilometres north of Tullamore. Can be cut at the western approach to the Bullock Creek bridge for up to 24 hours.	Restricts access between Tullamore and Tottenham	No	
Numalla Road (Tullamore-Peakhill Road)	Sandy Creek about 20km north east of Trundle	Can be cut for 24hrs	No	

b. In July 2016 the following roads were closed due to local rainfalls of 53 millimetres in the Parkes Shire Council LGA (which peaked at 3.81 metres at Peak Hill on 21 July 2016).

- i. Narromine to Tullamore (also referred to as The McGrane Way and Narromine Road) (MR354)
- ii. Tullamore to Peak Hill (Tullamore Road) (MR348)
- iii. Bulgandramine Road, Peak Hill at Stockroute Creek (SR1162)
- iv. Railway Parade, Peak Hill at Fiddlers Creek (SR82A)
- v. Mingerong Road, Peak Hill at the Bogan River (SR129)
- vi. Renshaw McGirr Way, Parkes at Olievie Road (SR26)
- vii. Taweni Road, Parkes at Deception Creek
- viii. Terrill Road, Parkes near Jubilee Farm (SR19-21)

- ix. Kamandra Lane, Parkes at Goobang Creek (SR17)
- x. Bruie Plains Road, Trundle at Genaren Creek (SR1158)
- xi. Eugowra Road, Parkes at Bartleys Creek (U980)
- xii. Back Yamma Road, Parkes near Parkesborough Road (SR2)
- xiii. The Welcome Road, Parkes near Parkesborough Road (SR8)
- xiv. Coopers Road, Parkes (SR47)
- xv. Coobang Road, Parkes at Goobang Creek (SR27)
- xvi. Ben Hall Road, Parkes (SR17)
- xvii. Gobondery Road, Tullamore at Bullock Creek (SR168)
- xviii. Parkes to Cookamidgera Road (Cookamidgera Road), Cookamidgera (SR1B)
- xix. Warregal Road, Tichborne (SR42)

2.7 SUMMARY OF ISOLATED COMMUNITIES AND PROPERTIES

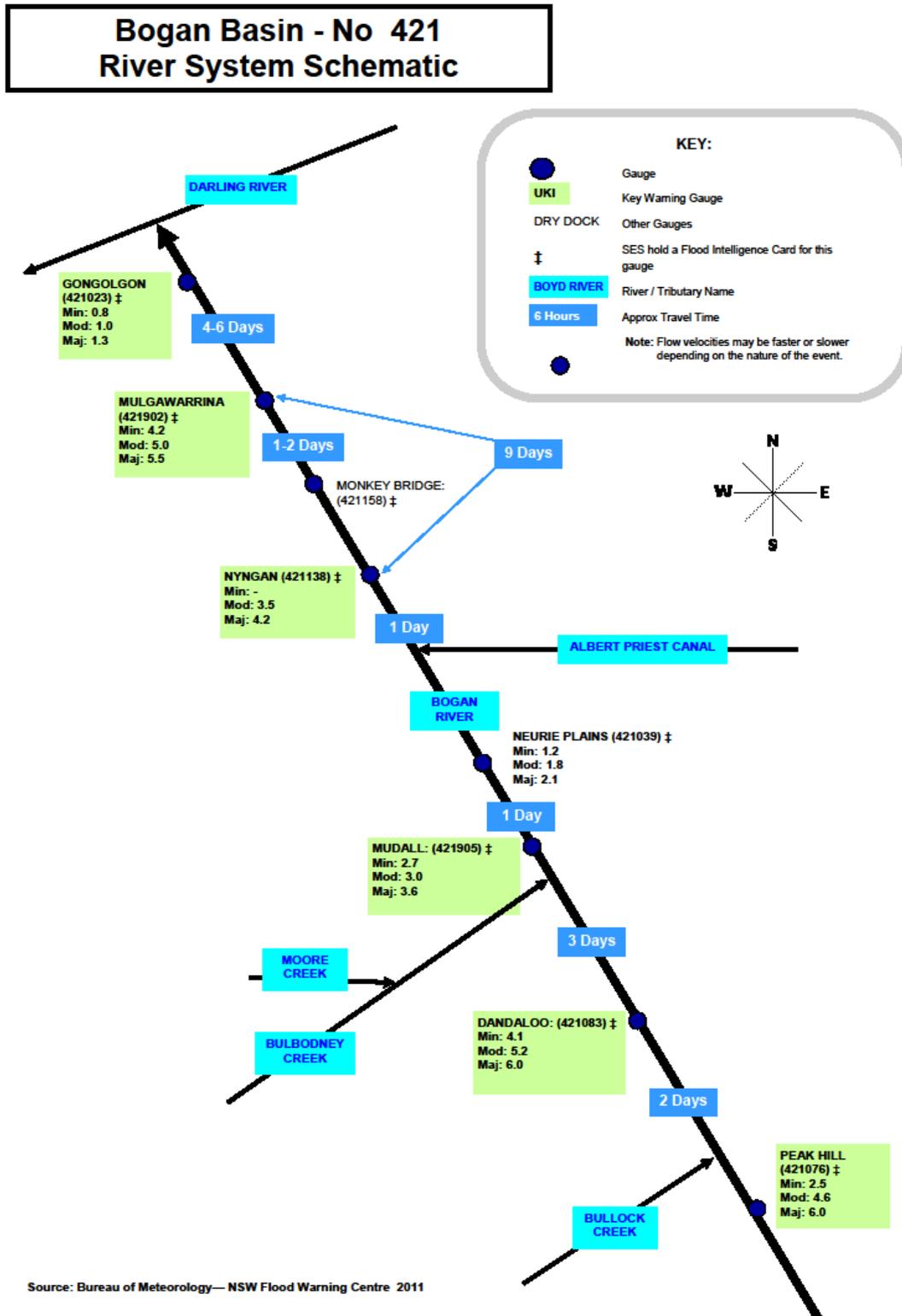
a. Details of isolated communities is summarised in table 4.

Table 4: Potential Periods of Isolation for communities in the Parkes LGA during a Major flood.

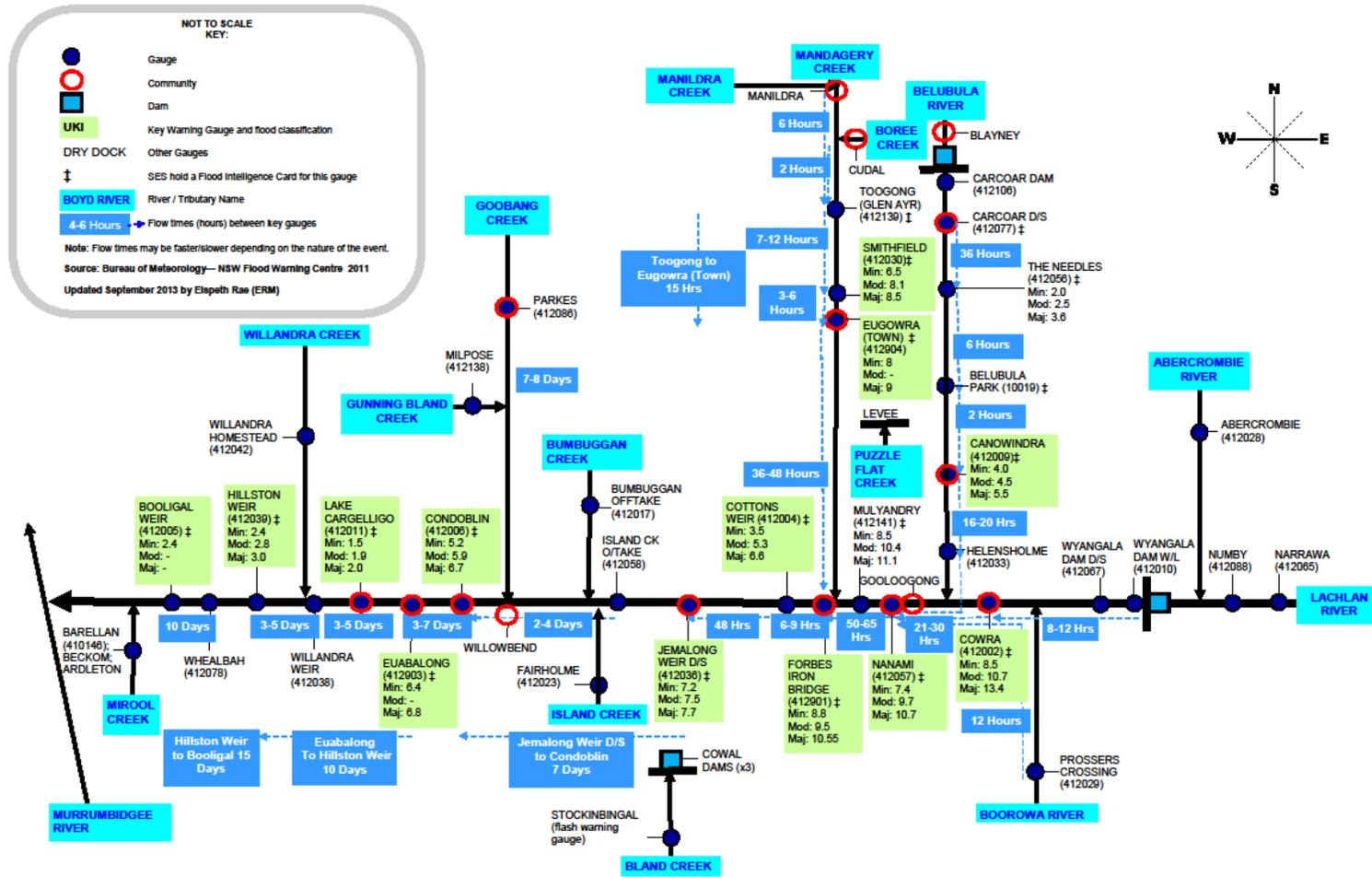
Town / Area (River Basin)	Population/ Dwellings	Flood Affect Classification	Approximate period isolation	Days								NOTES	
				1	2	3	4	5	6	7	8		
Trundle	666 persons / 337 dwellings	High Flood island at 1% AEP, Low Flood Island in extreme	6 – 7 days										Resupply by rotary aircraft as roads closed and no suitable airstrip in town vicinity
Bogan Gate	307 persons /160 dwellings	High Flood island	1 – 2 days										Resupply by rotary aircraft

Note: Periods of isolation are a guide only. Liaison with the Local Controller and communities/residents involved is essential during periods of potential and actual isolation.

ANNEX 1A: MACQUARIE -BOGAN RIVER BASIN SCHEMATIC



ANNEX 1B: LACHLAN RIVER BASIN SCHEMATIC



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 Untrained persons should not use this map unless they are under supervision of trained and qualified emergency management personnel. The NSW State Emergency Service disclaims any liability to any persons in respect of anything and the consequence of whole or partial reliance upon the whole or part of the information in this map publication.

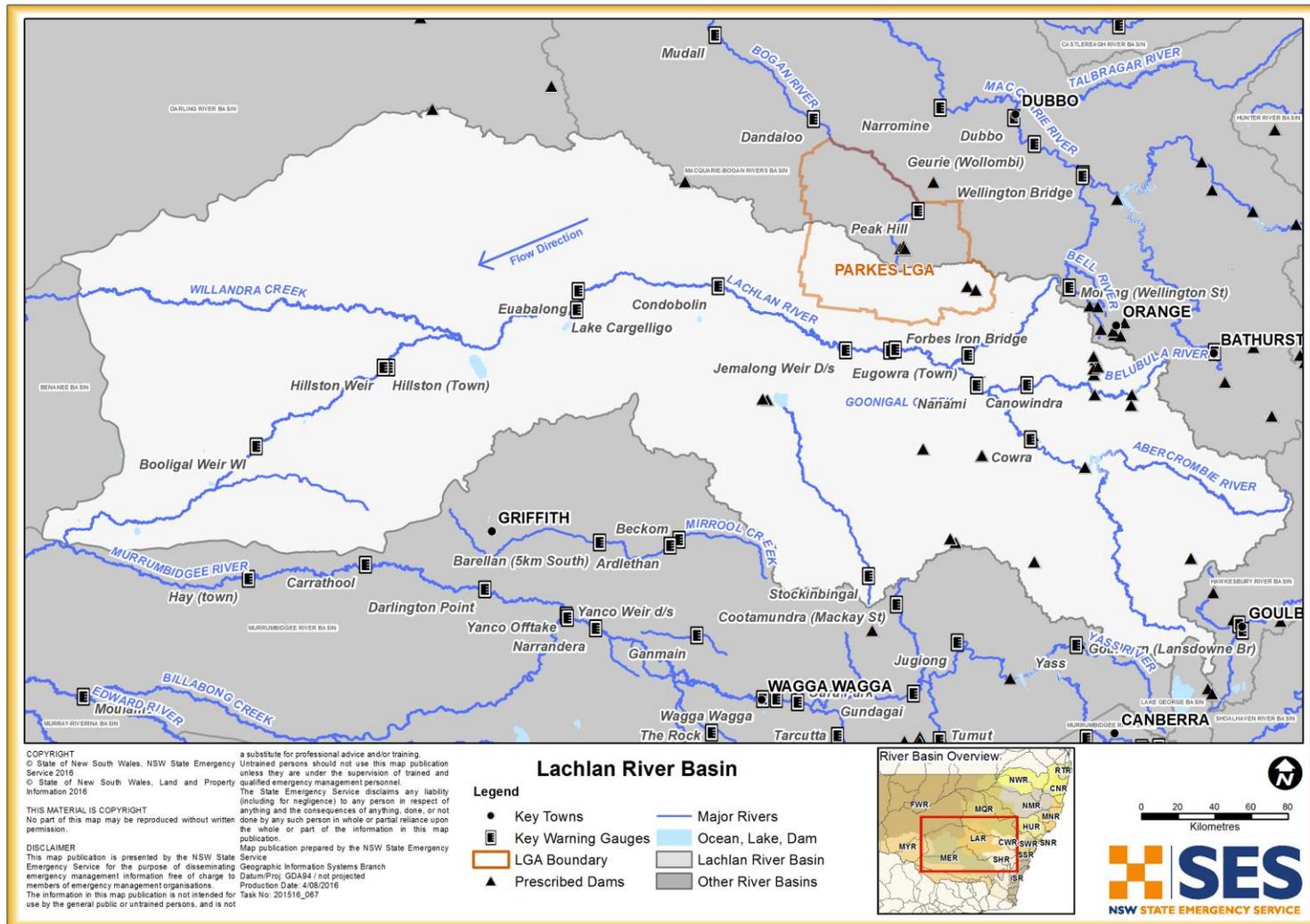
**Lachlan Basin No 412
 River System Schematic**

ANNEX 2: FACILITIES AT RISK OF FLOODING AND/OR ISOLATION

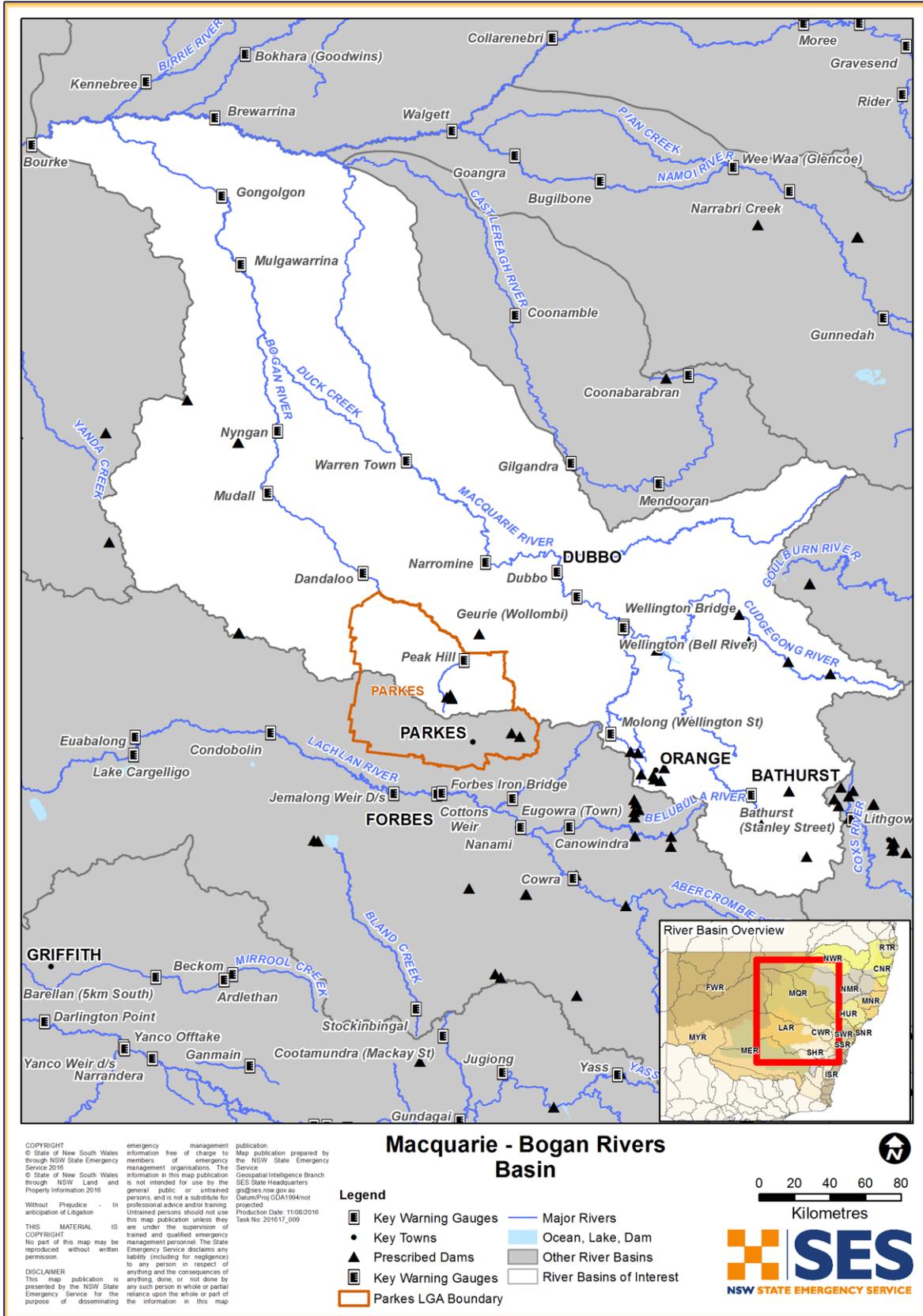
Lachlan Valley

Facility Name	Street	Suburb	Comment
Schools			
Trundle Central school	Croft Street	Trundle	
St Patricks Primary School	1 Austin Street	Trundle	
Child Care Centres			
Trundle Child Care Centre/Pre-school	15 Forbes Street	Trundle	
Facilities for the aged and/or infirm			
Trundle Multi-Purpose Service (hospital and aged care)	Brookview Street	Trundle	A 1% AEP flood can isolate the town and higher floodwater depths can inundate the Multi-Purpose Service buildings
Utilities and infrastructure			With the exception of unformed road, drainage culverts and the east-west rail line there is no record of any significant infrastructure damage (1).
Camping Ground / Caravan Parks			
Trundle Showground	Austral Street	Trundle	Isolated due to local flash flooding

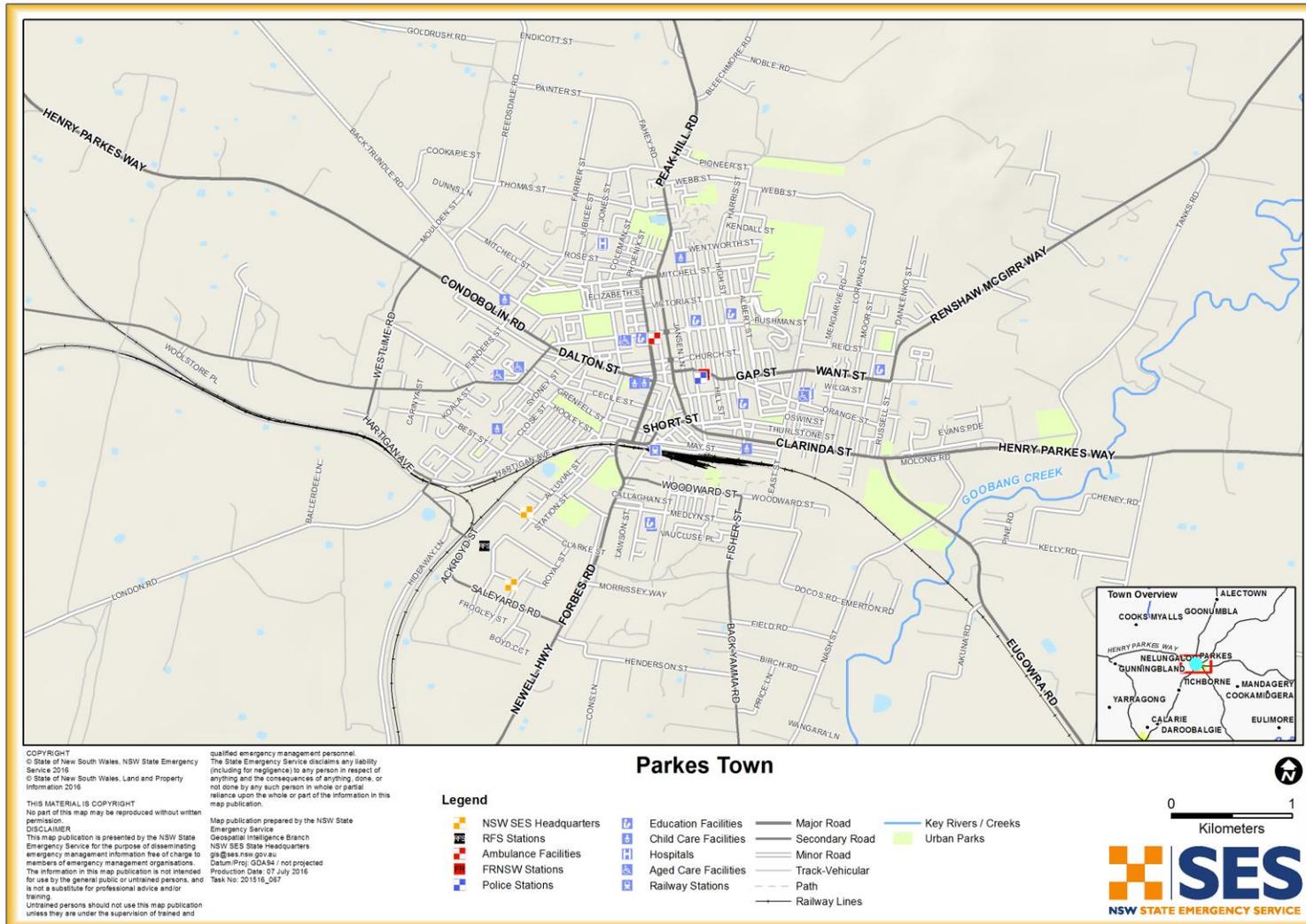
MAP 1: LACHLAN RIVERBASIN



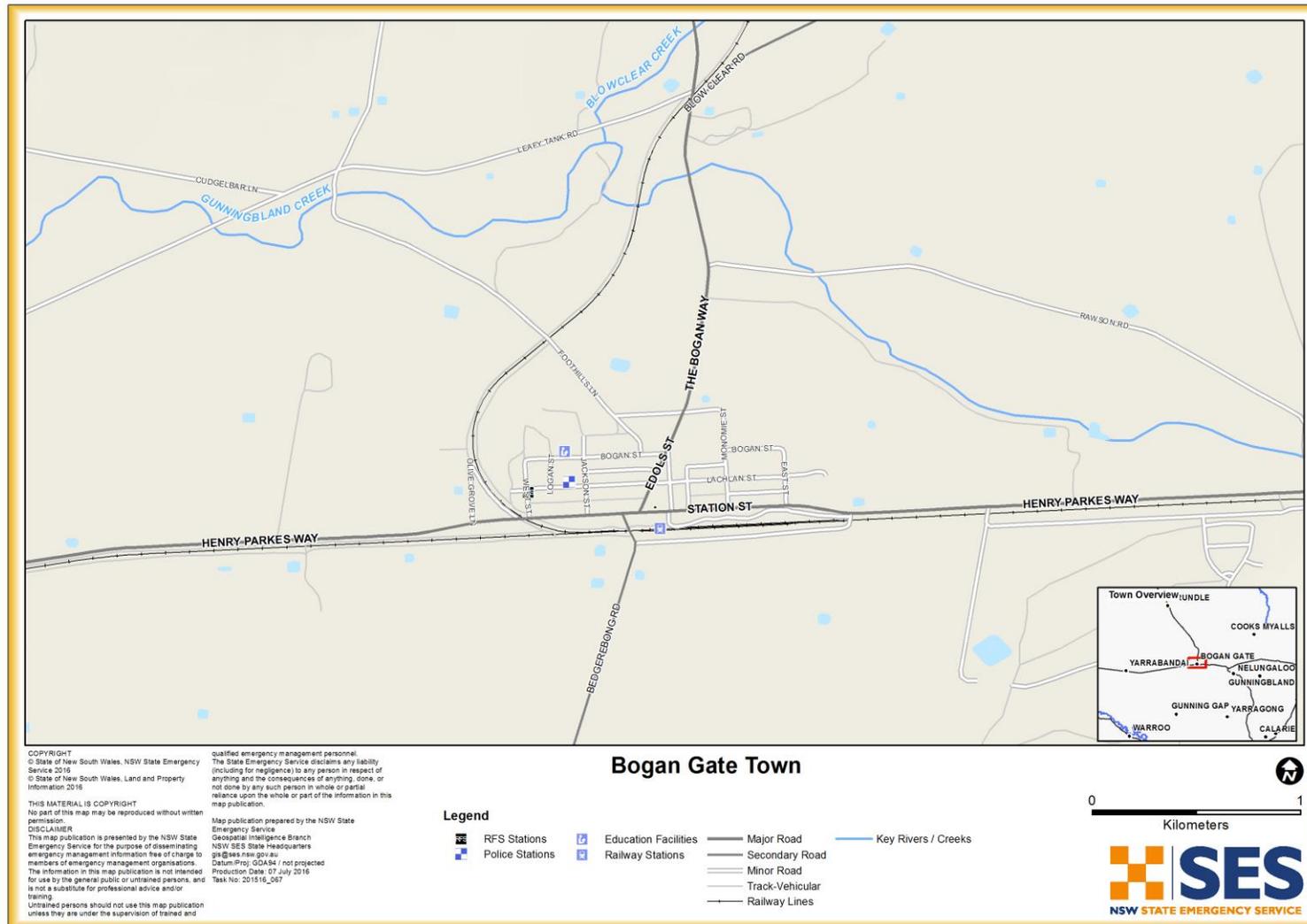
MAP 2: MACQUARIE RIVERBASIN



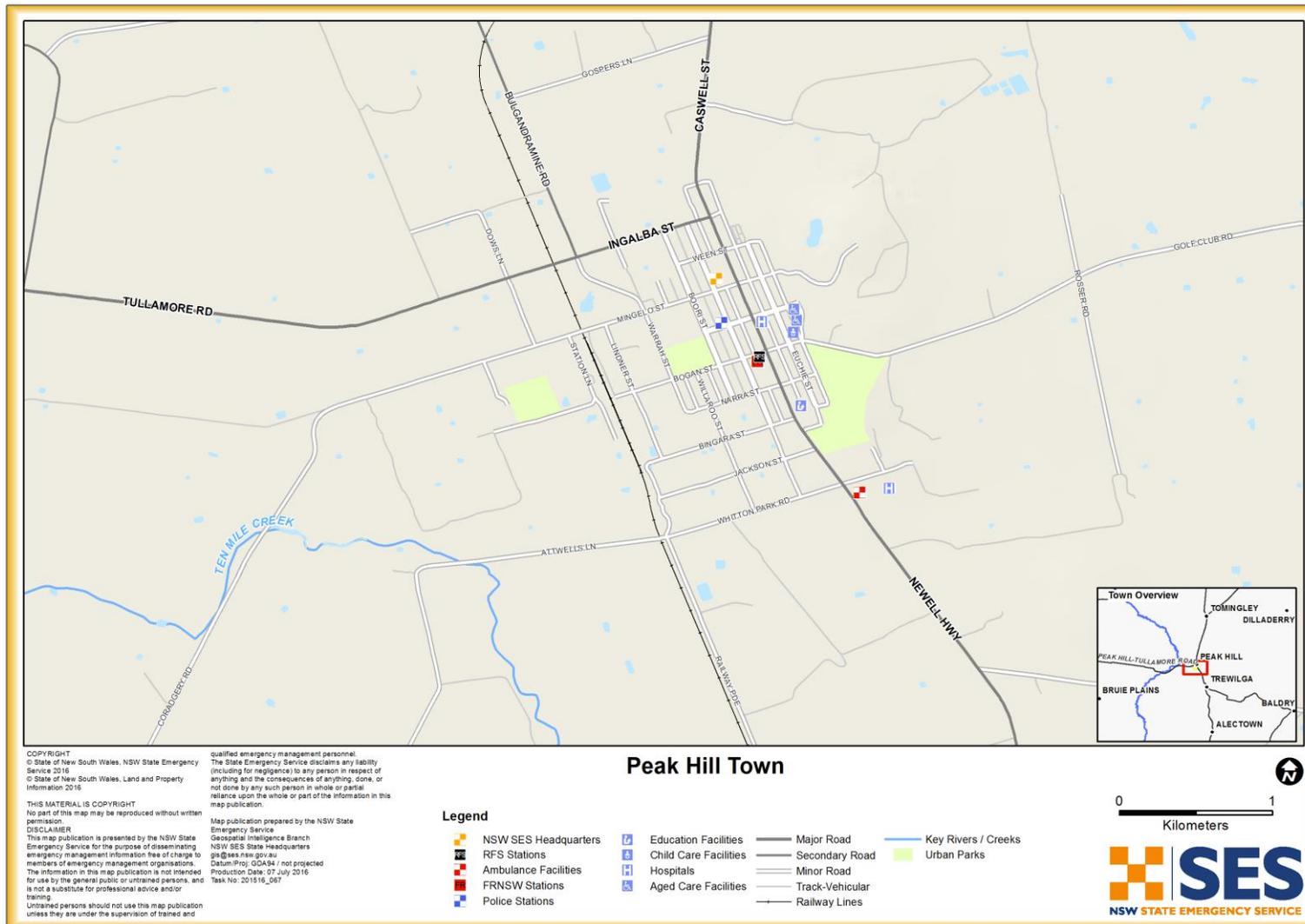
MAP 3: PARKES TOWN MAP



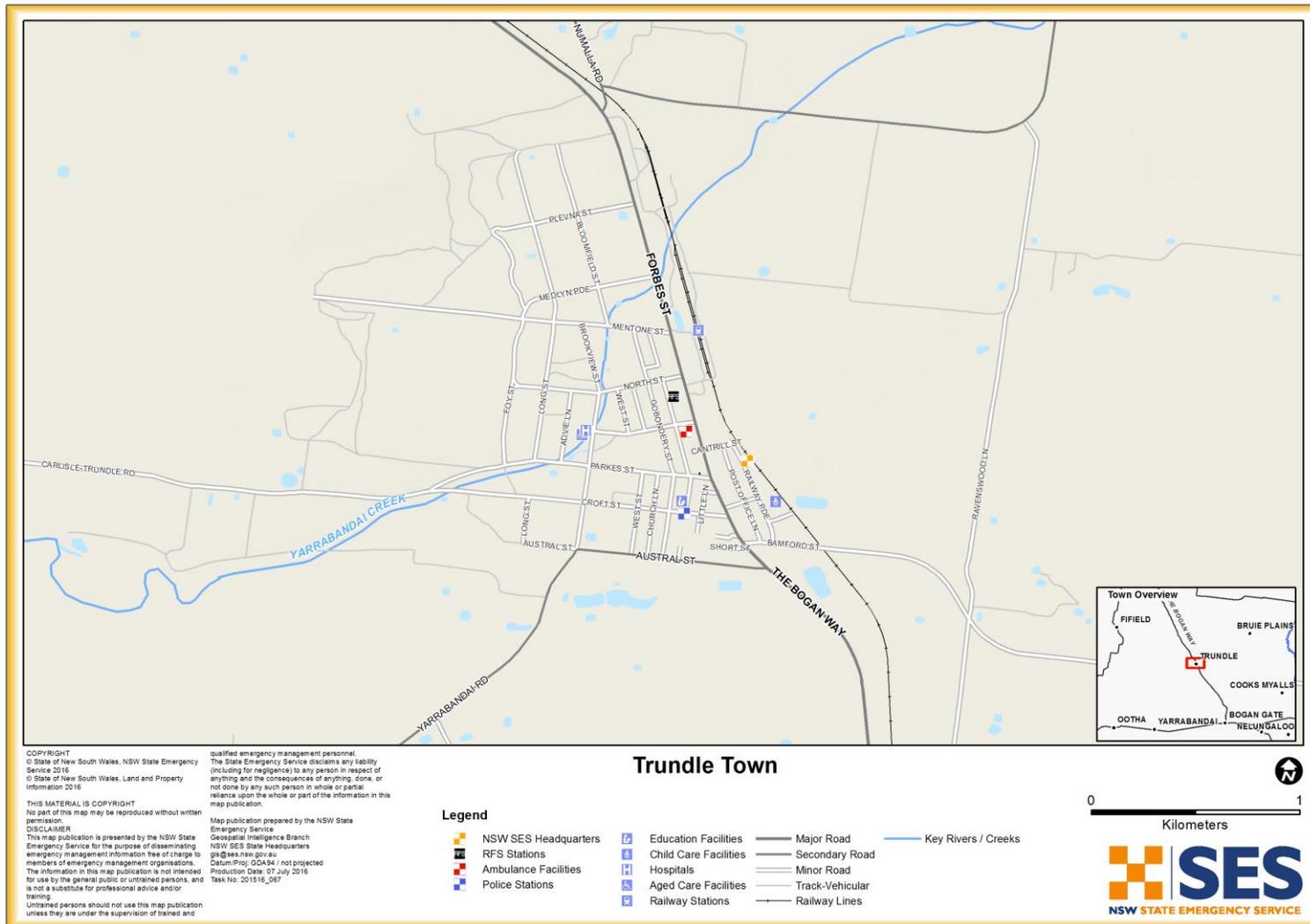
MAP 4: BOGAN GATE TOWN MAP



MAP 5: PEAK HILL TOWN MAP



MAP 6: TRUNDLE TOWN MAP



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SES RESPONSE ARRANGEMENTS FOR PARKES SHIRE

Volume 3 of the Parkes 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 Dam Failure Arrangements

- *Not Applicable*

Chapter 4: 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.*

PARKES SHIRE: FLOOD WARNING SYSTEMS AND ARRANGEMENTS

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

Last Update: September 2018

AUTHORISATION

Parkes 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 Lachlan Region Controller

Date: 10 September 2018

Tabled at LEMC

28 November 2018

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1. GAUGES MONITORED BY THE NSW SES PARKES LOCAL HEADQUARTERS

Table 1: Gauges monitored by the NSW SES Parkes Shire Local Headquarters

Gauge Name	Type	AWRC No.	Bureau Gauge No.	Stream	Flood level classification in metres			Special Reading Arrangements	Owner
					MIN	MOD	MAJ		
Dandaloo*(‡)	Automatic	551002	421083	Bogan River	4.1	5.2	6.0		WaterNSW
Peak Hill*(‡)	Automatic	551001	421076	Bogan River	2.5	4.6	6.0		WaterNSW
Parkes	Manual	412086	na	Goobang Creek	na	na	na	Parkes Unit monitor gauge	DLWC
Tichborne Fields	Manual	10380	na	Goobang Creek	na	na	na	Parkes Unit monitor gauge	COU

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 Lachlan 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
Prime	Orange
Southern Cross	Orange
WIN	Orange
ABC	Orange

Radio Stations:

Station	Location	Frequency	Modulation
2CR (ABC)	Orange	549	AM
Easy Listening Ten-89	Orange	1089	AM
2LF	Cowra	1350	AM
2PK	Parkes	1404	AM
Star FM	Orange	105.9	FM
2MCE-FM	Orange	94.7	FM
ROCK-FM	Parkes	95.5	FM
2GZ-FM	Orange	105.1	FM
Star FM	Cowra	93.9	FM
ZOO-FM	Dubbo	92.7	FM
2LVR	Forbes	97.9	FM

Newspapers:

Name	Location
Parkes Champion Post	Parkes

Other Agencies:

Agencies as listed in Volume 1 of this Local Flood Plan.

PARKES SHIRE: NSW SES LOCALITY RESPONSE ARRANGEMENTS

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

Last Update: September 2018

AUTHORISATION

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



Approved

NSW SES Lachlan Region Controller

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SECTOR OVERVIEW

Table 1: Overview of Sectors in the Parkes Shire LGA.

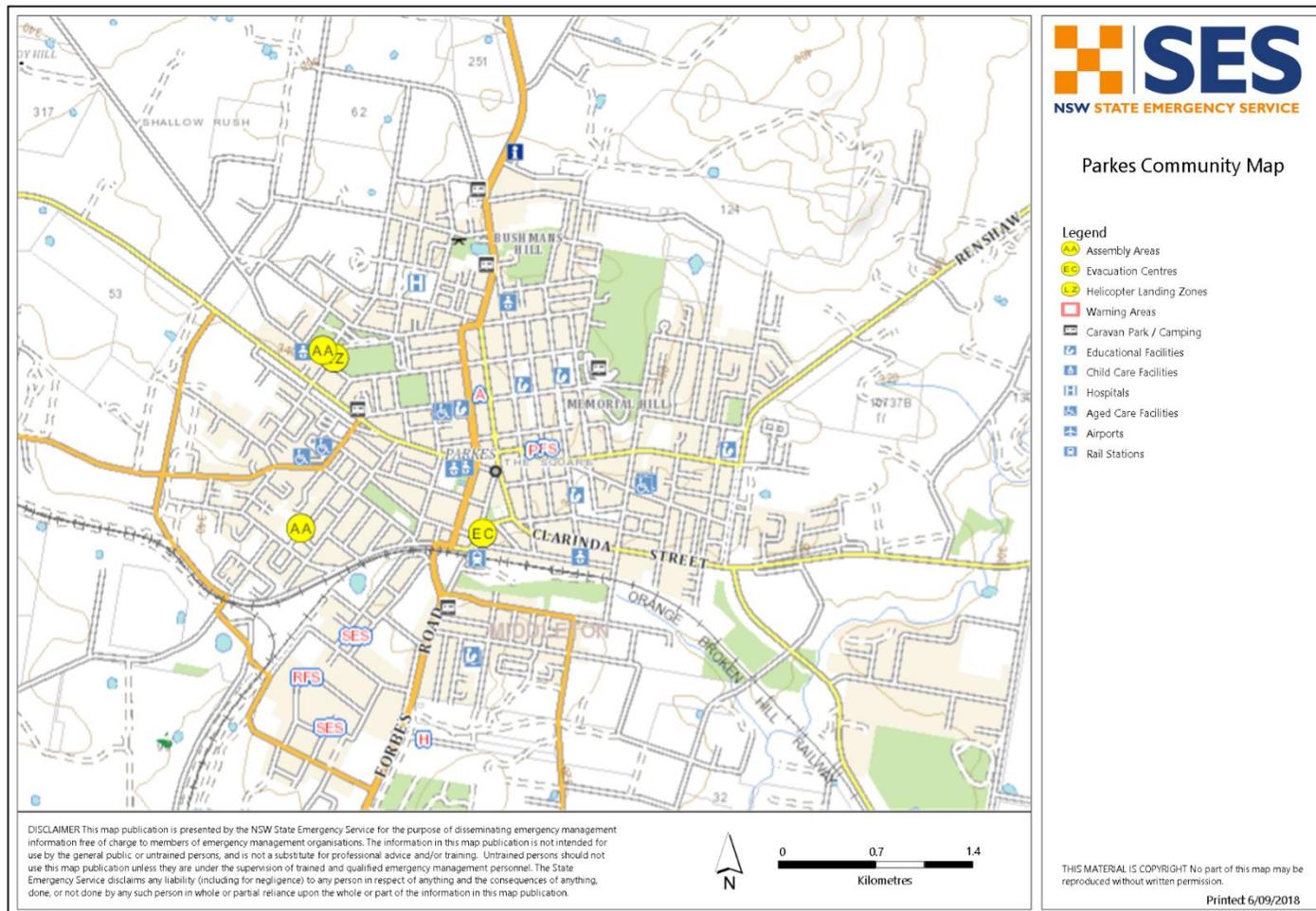
Sector Name	Community	Sector Basis	Total properties	Properties potentially at risk
Sector 1	Parkes	Nil classification	4,904	6 inundation
Sector 2	Tichborne	Nil classification	30	6 inundation
Sector 3	Trundle	High Flood Island	370	13 inundations, 370 isolation
Sector 4	Cookamidgera	Nil classification	70	1 inundations, 70 isolations
Sector 5	Peak Hill	Nil classification	600	3 inundations

1. PARKES SECTOR / COMMUNITY

1.1. PARKES RESPONSE ARRANGEMENTS					
Refer to Volume 2: Hazard and Risk in Parkes Shire for more information about this Sector/Community.					
Sector Description	Parkes is located in mid-western NSW, on the Newell Highway (HW17). It is the major town servicing the Parkes Shire LGA. The town is surrounded by farmland where wheat and wool are the main products. Parkes has an urban population of 10,026 as at 2011 with an indigenous population of 765 (11).				
Hazard	Local urban stormwater surcharges				
Flood Affect Classification	Nil classification				
At risk properties	6	Total number of properties within Sector/Community			4,904
Sector Control	Parkes Local Controller will discuss operational requirements with the effected residents within the community and action accordingly.				
Key Warning Gauge Name	Name	AWRC No.	Min (m)	Mod (m)	Maj (m)
	Parkes	412086			
General Strategy	Initiate sandbagging and/or pumping operations as required with no significant inundation recorded.				
Key Risks / Consequences	Flash Flooding and storm water surcharges at the intersections of; <ul style="list-style-type: none"> • Newell Highway and Grenfell Street • Newell Highway and Welcome Street • Clarinda Street and Church Streets • Bushman Street and Currajong Flooding has also been reported along Pioneer Street.				
Information and Warnings	NSW SES Flood Bulletins will localise the consequences of the Bureau products on the sector. NSW SES Lachlan Region will issue timely, relevant and tailored information to the public in the following formats: NSW SES Bulletins Equipment, Livestock and Aquaculture Warnings Media briefing Interagency Local Emergency Management Committee (LEMC) briefings Bureau products, such as Flood Watches and Flood Warnings, will include NSW SES safety advice. Warnings are also provided on the unit Facebook page and other media as listed in Volume 3 Chapter 1.				
Property Protection	<i>Specific property protection measures:</i> The NSW SES Parkes Unit maintain stocks of sandbags with back-up supplies being held at the NSW SES Lachlan Region Headquarters. The supply of emergency stores such as sandbags will be processed through the NSW SES Lachlan Region Headquarters. A motorised sandbagging machine is also available for use at the NSW SES Parkes Unit Headquarters.				

	<p><i>Assistance with property protection:</i></p> <p>Assistance with sandbagging is provided by the NSW SES Parkes Unit on request from residents.</p>
	<p><i>Protection of essential infrastructure:</i></p> <p>Nil</p>
Evacuation and/or Isolation Triggers	<p>Nil requirement, Evacuation would only occur if Lake Endeavour Dam fails.</p>
Evacuation Triggers	<p>Evacuation will be considered when:</p> <ul style="list-style-type: none"> ▪ Notification of dam failure
Sequencing of evacuation	<p>On notification of possible dam failure evacuations would occur;</p> <ul style="list-style-type: none"> ▪ Activate Lake Endeavour Emergency Plan ▪ 73 houses potentially affected downstream in PMF dam failure (along Billabong Creek) ▪ Flow times are short. It is estimated the first house will be flooded above floor level in about 16 minutes of a dam failure. <p>Further inundation will occur particularly to properties within the first 16 kilometres of the dam.</p>
Evacuation Routes	<ul style="list-style-type: none"> • Henry Parkes Way to Manildra (Dam Failure)
Evacuation Route Closure	<ul style="list-style-type: none"> • Henry Parkes Way towards Parkes (Dam Failure)
Method of Evacuation	<p>Self-evacuation is the predominant means of evacuation, using private vehicles, to family and friends.</p>
Evacuation Centre/Assembly Point	<ul style="list-style-type: none"> ▪ Parkes Showground ▪ Parkes Police and Citizens and Youth Club (PCYC) ▪ Parkes Services and Citizens Club
Large scale evacuations	<p>A large scale evacuation in Parkes is not likely.</p>
Rescue	<p>Insufficient information available</p>
Resupply	<p>Table 2, in Volume 2 provides information about isolated communities in the Parkes Shire area and potential periods of isolation.</p> <p>A flowchart illustrating the Resupply process is shown in Volume 1 of the Local Flood Plan, Attachment 1.</p>
Aircraft Management	<p><i>Helicopter Landing Points:</i></p> <p>Suitable landing points are located at:</p> <ul style="list-style-type: none"> ▪ Parkes Showground <p><i>Airports:</i></p> <p>Access to the Parkes airport remains and is capable of handling fixed and rotary wing aircraft.</p>
Other	<p>Parkes hosts the annual Elvis Festival over the second weekend in January and visitor numbers may exceed 20,000 for the event</p>

1.2. PARKES SECTOR/COMMUNITY MAP



2. TICHBORNE SECTOR / COMMUNITY

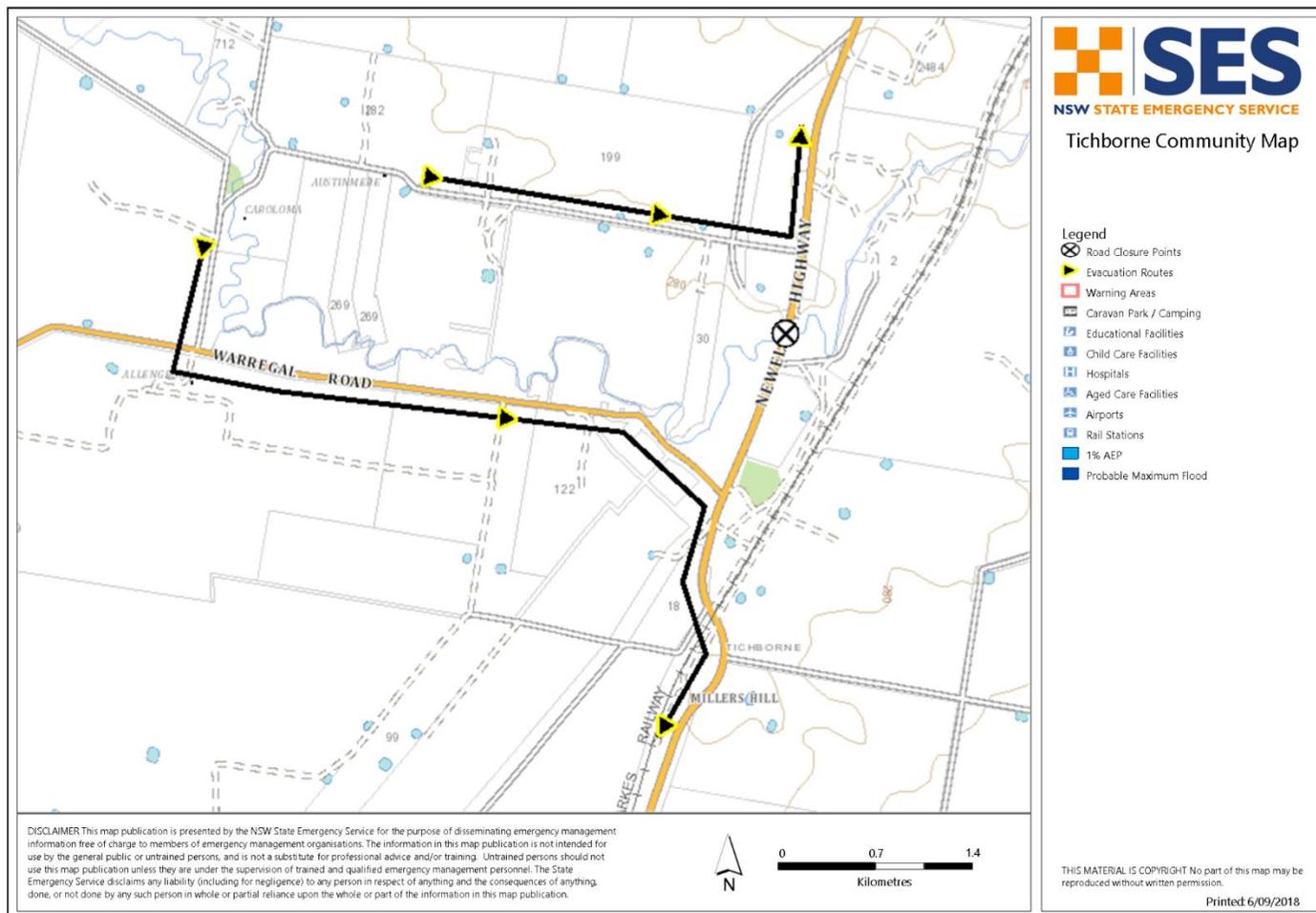
2.1. TICHBORNE RESPONSE ARRANGEMENTS

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

Sector Description	Tichborne is a small village 10 Kilometres to the south of Parkes, it has a population of approximately 78.				
Hazard	Flooding generally occurs due to Goobang Creek flooding.				
Flood Affect Classification	Nil Classification				
At risk properties	6	Total number of properties within Sector/Community	30		
Sector Control	Parkes Local Controller will discuss operational requirements with the effected residents within the community and action accordingly.				
Key Warning Gauge Name	Name	AWRC No.	Min (m)	Mod (m)	Maj (m)
	Tichborne	10380			
General Strategy	If the Newell Highway becomes closed there is minimal access to support the community therefore all RFA's will be tasked to Forbes Unit until access is available				
Key Risks / Consequences	Possible inundation and isolation of residential properties and closure of the Newell Highway.				
Property Protection	<i>Specific property protection measures:</i> Minor sandbagging and/or pumping operations				
	<i>Assistance with property protection:</i> As required				
	<i>Protection of essential infrastructure:</i> Nil				
Evacuation and/or Isolation Triggers	In Tichborne up to six properties along the Goobang (Billabong) Creek either side of the Newell Highway (HW17) and Watts Lane can be inundated or isolated for up to 24 hours.				
Evacuation Triggers	Insufficient information available				
Sequencing of evacuation	Insufficient information available				
Evacuation Routes	Newell Highway via Forbes				
Evacuation Route Closure	Newell Highway at Billabong Creek Bridge, Tichborne towards Parkes				
Method of Evacuation	Self-evacuation is the predominant means of evacuation, using private vehicles, to family and friends.				
Evacuation Centre/Assembly Point	Insufficient information available				

Large scale evacuations	A large scale evacuation in Tichborne is not likely
Rescue	Insufficient information available
Resupply	<p>Table 2, in Volume 2 provides information about isolated communities in the Parkes Shire area and potential periods of isolation.</p> <p>A flowchart illustrating the Resupply process is shown in Volume 1 of the Local Flood Plan, Attachment 1.</p>
Aircraft Management	<p><i>Helicopter Landing Points:</i></p> <p>Suitable landing points are located at:</p> <ul style="list-style-type: none"> ▪ To be defined at the time (rural area)
	<p><i>Airports:</i></p> <p>Access to the Parkes airport remains and is capable of handling fixed and rotary wing aircraft.</p>
Other	Nil

2.2. TICHBORNE SECTOR/COMMUNITY MAP

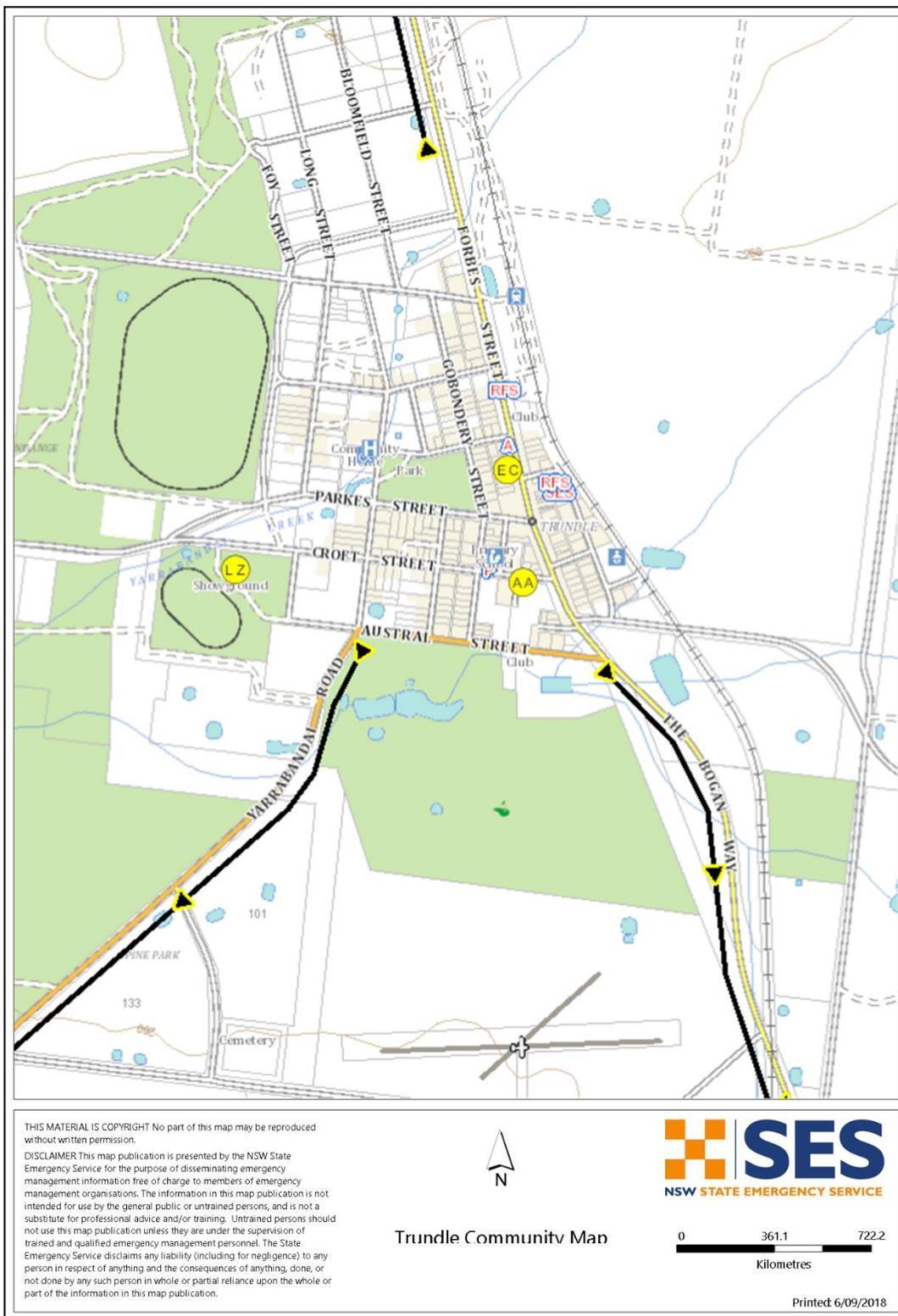


3. TRUNDLE SECTOR / COMMUNITY

3.1. TRUNDLE RESPONSE ARRANGEMENTS					
Refer to Volume 2: Hazard and Risk in Parkes Shire for more information about this Sector/Community.					
Sector Description	Trundle is a rural community situated 60 kilometres north-west of Parkes with a population of 687.				
Hazard	Frequent flooding from Yarrabandai and Goobang Creeks				
Flood Affect Classification	High Flood Island at 1% AEP				
At risk properties	13	Total number of properties within Sector/Community			370
Sector Control	Trundle Unit Controller will discuss operational requirements with the effected residents within the community and action accordingly.				
Key Warning Gauge Name	Name	AWRC No.	Min (m)	Mod (m)	Maj (m)
	This area is ungauged				
General Strategy	Initiate sandbagging and/or pumping operations as required.				
Key Risks / Consequences	<p>Trundle township experiences frequent flooding from Yarrabandai and Goobang Creeks and residents are isolated during floods for up to one week and access to Trundle Hospital (located in Brookview Street) is lost for several days.</p> <p>In Trundle, up to 13 homes can be inundated in Forbes Street (The Bogan Way), Parkes, Brookview, Hutton, Mentone, Long, North and Austral Streets adjacent to Yarrabandai Creek.</p> <p>The Services and Golf Clubs have also been inundated by up to 1.5 metres of water in 2005.</p> <p>The Hospital and Aged Care Home (Multi-purpose Service Facility) can become isolated for periods of 24-36 hours.</p>				
Information and Warnings	<p>NSW SES Flood Bulletins will localise the consequences of the Bureau products on the sector. NSW SES Lachlan Region will issue timely, relevant and tailored information to the public in the following formats:</p> <p>NSW SES Bulletins</p> <p>Equipment, Livestock and Aquaculture Warnings</p> <p>Media briefing</p> <p>Interagency Local Emergency Management Committee (LEMC) briefings</p> <p>Bureau products, such as Flood Watches and Flood Warnings, will include NSW SES safety advice.</p> <p>Warnings are also provided on the unit Facebook page and other media as listed in Volume 3 Chapter 1.</p>				
Property Protection	<i>Specific property protection measures:</i>				
	There is a private levee constructed by one resident of Mentone Street on the North side of Trundle, this levee overtopped in March 2012 and required pumping.				
	<i>Assistance with property protection:</i>				
	Sandbagging and/or pumping as required.				

	<p><i>Protection of essential infrastructure:</i></p> <p>Unit Controller to coordinate response arrangements with Hospital and Aged Care Home (Multi-purpose Service Facility).</p>
Evacuation and/or Isolation Triggers	<ul style="list-style-type: none"> • Isolation of Hospital and Aged Care Home (Multi-purpose Service Facility). • Isolation of the community due to the Bogan Way north and south, Fifield Road, Condobolin Road, Middle Trundle Road, Capell Road and Ascot Road closures.
Sequencing of evacuation	<ul style="list-style-type: none"> • Relocation of high risk patients from the hospital and the • relocation of the elderly or effected residence to family or friends outside the flood areas prior to isolation
Evacuation Routes	<ul style="list-style-type: none"> • The Bogan Way either north or south • Yarrabandai Road • Fifield Road
Evacuation Route Closure	<ul style="list-style-type: none"> • Bogan Way north and south, Fifield Road, Condobolin Road, Middle Trundle Road, Capell Road and Ascot Road in multiple locations.
Method of Evacuation	<p>Self-evacuation is the predominant means of evacuation, using private vehicles, to family and friends.</p>
Evacuation Centre/Assembly Point	<ul style="list-style-type: none"> ▪ Trundle Memorial Hall ▪ Trundle Central School
Large scale evacuations	<p>Large scale evacuations are unlikely to occur in trundle</p>
Rescue	<p>Insignificant information available</p>
Resupply	<p>Table 2, in Volume 2 provides information about isolated communities in the Parkes Shire area and potential periods of isolation.</p> <p>A flowchart illustrating the Resupply process is shown in Volume 1 of the Local Flood Plan, Attachment 1.</p>
Aircraft Management	<p><i>Helicopter Landing Points:</i></p> <p>Suitable landing points are located at:</p> <ul style="list-style-type: none"> ▪ Trundle Showground <p><i>Airports:</i></p> <ul style="list-style-type: none"> ▪ Closest airport is at Parkes
Other	<p>Trundle Abba Festival is held on the 1st Saturday in May annually and the Trundle Bush Tucker Day is held on the 1st September annually, both events can double even triple the population of Trundle for up to 3 days.</p>

3.2. TRUNDLE SECTOR/COMMUNITY MAP

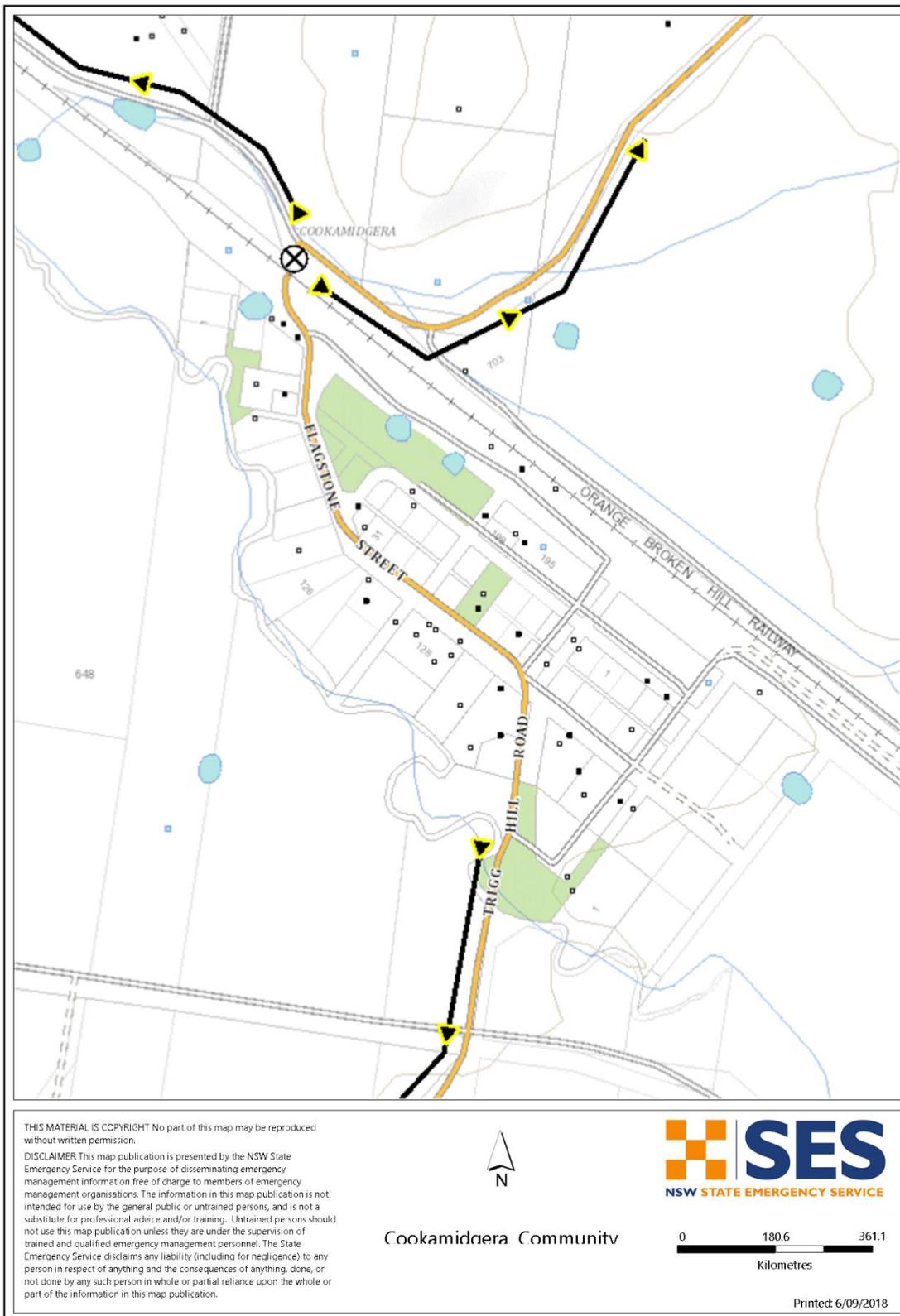


4. COOKAMIDGERA SECTOR / COMMUNITY

4.1. COOKAMIDGERA RESPONSE ARRANGEMENTS					
Refer to Volume 2: Hazard and Risk in Parkes Shire for more information about this Sector/Community.					
Sector Description	Cookamidgera is a small village with a population of 164 and is situated 13 kilometres southeast of Parkes.				
Hazard	Cookamidgera can be flooded as a result of runoff from the Cooka Hills to the east, as well as local flooding from rainfall and flash flooding of Bartleys Creek through the town (mainly urban runoff).				
Flood Affect Classification	Nil Classification				
At risk properties	1	Total number of properties within Sector/Community			70
Sector Control	Parkes Local Controller will discuss operational requirements with the effected residents within the community and action accordingly.				
Key Warning Gauge Name	Name	AWRC No.	Min (m)	Mod (m)	Maj (m)
	This area is ungauged				
General Strategy	Local controller Parkes unit will place sand and sandbag supplies for locals as the community become isolated during flood events.				
Key Risks / Consequences	Flooding can occur quickly and can be fast and deep, particularly along Trigg Hill Road One property on the intersection of Mullins Street and Flagstone Street is at risk of inundation.				
Information and Warnings	NSW SES Flood Bulletins will localise the consequences of the Bureau products on the sector. NSW SES Lachlan Region will issue timely, relevant and tailored information to the public in the following formats: NSW SES Bulletins Equipment, Livestock and Aquaculture Warnings Media briefing Interagency Local Emergency Management Committee (LEMC) briefings Bureau products, such as Flood Watches and Flood Warnings, will include NSW SES safety advice. Warnings are also provided on the unit Facebook page and other media as listed in Volume 3 Chapter 1.				
Property Protection	<i>Specific property protection measures:</i> Sandbagging				
	<i>Assistance with property protection:</i> Sandbagging occurs with local residents initiating activities if the Parkes Unit are unable to gain access to the community				
	<i>Protection of essential infrastructure:</i> Nil				
Evacuation and/or Isolation Triggers	Insufficient information available				

Sequencing of evacuation	Insufficient information available
Evacuation Routes	<ul style="list-style-type: none"> • Cookamidgera Road • Trigg Hill Road • Cooka Hills Road
Evacuation Route Closure	<ul style="list-style-type: none"> • Trigg Hill Road is cut at the causeway (Quart Pot Creek) between Eugowra Road and Cookamidgera • Cookamidgera Road and Cooka Hills Roads are often cut by local rainfall • Hays street is at risk of being cut temporarily • The northern side of Flagstaff Street is at risk at the culvert near the Cooka Hills Road intersection.
Method of Evacuation	Self-evacuation is the predominant means of evacuation, using private vehicles, to family and friends.
Evacuation Centre/Assembly Point	Nil
Large scale evacuations	A large scale evacuation is unlikely to occur in Cookamidgera
Rescue	Insufficient information available
Resupply	<p>Table 2, in Volume 2 provides information about isolated communities in the Parkes Shire area and potential periods of isolation.</p> <p>A flowchart illustrating the Resupply process is shown in Volume 1 of the Local Flood Plan, Attachment 1</p>
Aircraft Management	<p><i>Helicopter Landing Points:</i></p> <p>Suitable landing points are located at:</p> <ul style="list-style-type: none"> ▪ To be determined on the day
	<p><i>Airports:</i></p> <ul style="list-style-type: none"> ▪ Closest Airport is at Parkes
Other	Nil

4.2. COOKAMIDGERA SECTOR/COMMUNITY MAP



5. PEAK HILL AND RURAL COMMUNITIES

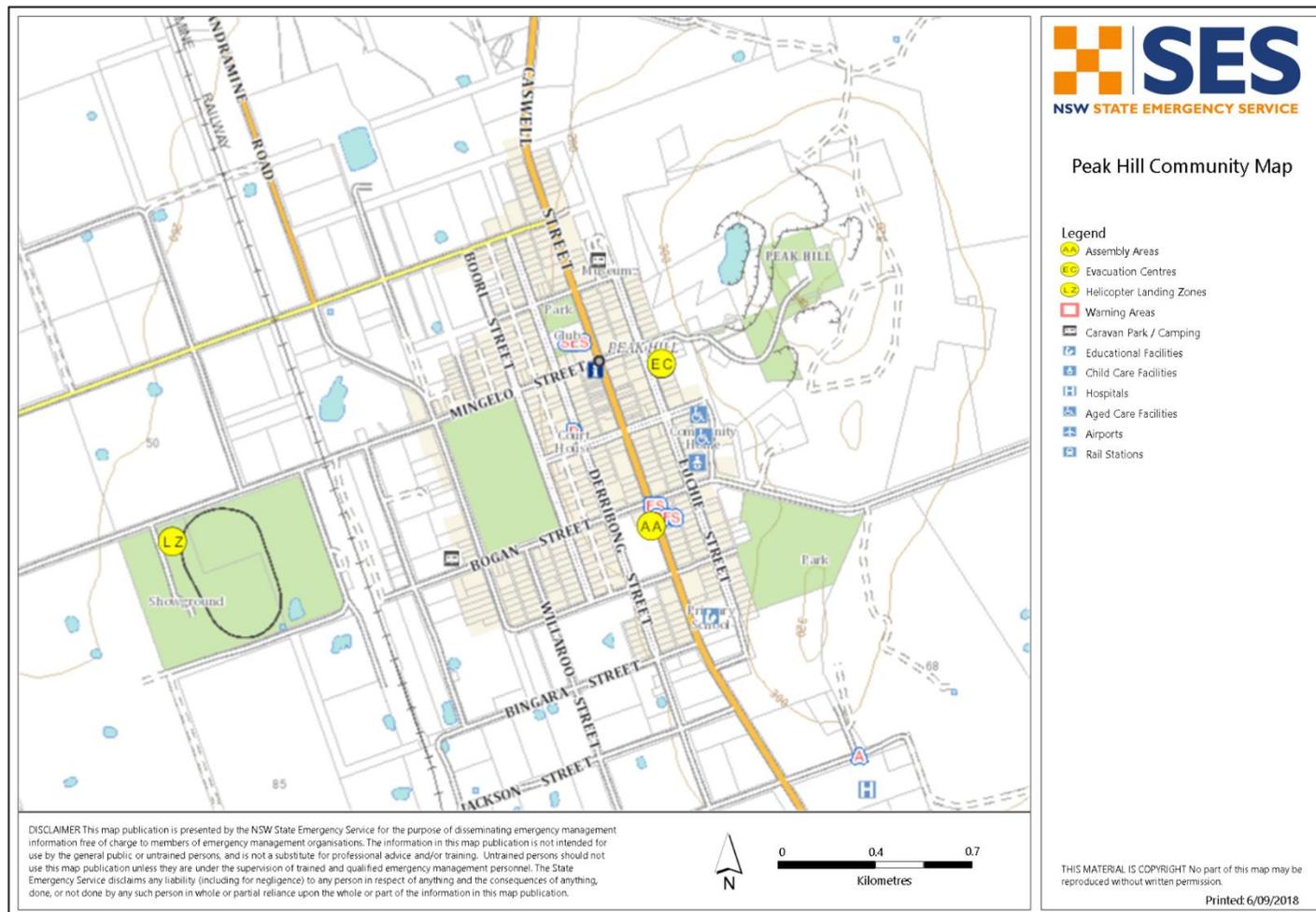
5.1. PEAK HILL AND RURAL COMMUNITIES RESPONSE ARRANGEMENTS

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

Sector Description	Peak Hill is located about 50 kilometres north of Parkes on the Newell Highway. The population of Peak Hill is				
Hazard	Flooding around Peak Hill is caused by the Bogan River, and its smaller tributaries including Goonumba Creek, Deception Creek, Stanfords Creek, Stockroute Creek and Hallinans Creek.				
Flood Affect Classification	Nil Classification				
At risk properties	3	Total number of properties within Sector/Community	600		
Sector Control	Peak Hill Unit Controller will discuss operational requirements with the effected residents within the community and action accordingly.				
Key Warning Gauge Name	Name	AWRC No.	Min (m)	Mod (m)	Maj (m)
	Peak Hill	421076	2.50	4.60	6.00
General Strategy	Flooding around Peak Hill is typical riverine and overland flooding impacting low lying farming areas and road crossings.				
Key Risks / Consequences	<p>Rural communities and properties along the Bogan River and its tributary creeks may be impacted by floodwaters when the Bogan River exceeds minor flood levels.</p> <p>There are no recorded inundation consequences in the township of Peak Hill itself as it is not situated on the Bogan River.</p> <p>Three rural properties, “Rosehill”, “Montana” and “Pine Park” south west of Tullamore towards Fifield are susceptible to over floor flooding.</p>				
Information and Warnings	<p>NSW SES Flood Bulletins will localise the consequences of the Bureau products on the sector. NSW SES Lachlan Region will issue timely, relevant and tailored information to the public in the following formats:</p> <p>NSW SES Bulletins</p> <p>Equipment, Livestock and Aquaculture Warnings</p> <p>Media briefing</p> <p>Interagency Local Emergency Management Committee (LEMC) briefings</p> <p>Bureau products, such as Flood Watches and Flood Warnings, will include NSW SES safety advice.</p> <p>Warnings are also provided on the unit Facebook page and other media as listed in Volume 3 Chapter 1.</p>				
Property Protection	<p><i>Specific property protection measures:</i></p> <p>Insufficient information available</p>				
	<p><i>Assistance with property protection:</i></p> <p>Insufficient information available</p>				
	<p><i>Protection of essential infrastructure:</i></p> <p>Insufficient information available</p>				

Evacuation and/or Isolation Triggers	Insufficient information available
Sequencing of evacuation	Insufficient information available
Evacuation Routes	Insufficient information available
Evacuation Route Closure	<p>Tullamore Road between Tullamore and Peak Hill, is likely to be cut before the minor flood level, at around 1.1 metres on the Peak Hill gauge.</p> <p>Minor flooding causes low level road crossings to flood and may result in road closures at:</p> <ul style="list-style-type: none"> • Kitto’s Bridge, • Mungery West (off Bulgandramine Road over the Bogan River). • Adavale Lane, Goonumbla (near the Limestone State Forest) may also be flooded where it crosses the Bogan River
Method of Evacuation	Self-evacuation is the predominant means of evacuation, using private vehicles, to family and friends.
Evacuation Centre/Assembly Point	<ul style="list-style-type: none"> ▪ Peak Hill Masonic Hall ▪ Peak Hill Central School
Large scale evacuations	A large scale evacuation would be unlikely for Peak Hill
Rescue	Insufficient information available
Resupply	Table 2, in Volume 2 provides information about isolated communities in the Parkes Shire area and potential periods 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"> ▪ Peak Hill Showground
	<p><i>Airports:</i></p> <ul style="list-style-type: none"> ▪ Closest Airport is Parkes
Other	Nil

5.2. PEAK HILL SECTOR/COMMUNITY MAP



PARKES SHIRE NSW SES CARAVAN PARK ARRANGEMENTS

**Chapter 4 of Volume 3 (NSW SES Response Arrangements for Parkes
Shire) of the Parkes Shire Local Flood Plan**

Last Update: September 2018

AUTHORISATION

The Parkes 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 Lachlan Region Controller

Date: 10 September 2018

Tabled at LEMC

28 November 2018

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1 ARRANGEMENTS FOR THE EVACUATION OF CARAVAN PARKS AND THE RELOCATION OF MOVABLE DWELLINGS

1.1 GENERAL

1.1.1 The following caravan parks are flood liable:

- a. Trundle Showground

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 movable dwellings are:

- a. Made aware that the caravan park is flood liable by:
 - Providing a written notice to occupiers taking up residence. The notice will indicate that the caravan park is liable to flooding and designate the location of flood liable land within the park (1).
 - Displaying this notice and the emergency arrangements for the Caravan Park prominently in the park.
- b. Made aware that if they are expecting to be absent for extended periods, they should:
 - 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).
- c. Informed of Flood Warning Information. 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 movable dwelling relocation.

1.2.2 The NSW SES Parkes Shire Local Controller will ensure that the managers of caravan parks are advised of Flood Information (described in Volume 1 of the Parkes Shire Local Flood Plan).

1.3 EVACUATION OF OCCUPANTS AND RELOCATION OF MOVEABLE DWELLINGS

1.3.1 When an evacuation order is given caravan park occupants should follow the flood evacuation procedures for the park under the direction of the caravan park management. This should include advice to:

- a. Isolate power to moveable dwellings.
- b. Collect personal papers, medicines, a change of clothing, toiletries and bedclothes.
- c. Lift the other contents in any remaining dwellings as high as possible.
- d. Move to friends, relatives or a designated evacuation centre if they have their own transport, or move to the caravan office to await transport.
- e. If undertaking self-managed evacuation, register their movements with the caravan park management upon leaving the park.

1.3.2 Where possible, movable dwellings that can be moved will be relocated by their owners. Park managers will arrange for the relocation of movable dwellings as required. Council and NSW SES personnel may assist if required. Vans are to be moved to the locations outlined in Tables 1 and 2 at the end of this Chapter.

1.3.3 Caravan park managers will:

- a. Secure any movable dwellings that are not able to be relocated to prevent floatation.
- b. Ensure that their caravan park is capable of being evacuated in a timely and safe manner.
- c. Advise the NSW SES Parkes Shire Local Controller of:
 - The number of people requiring transport.
 - Details of any medical evacuations required.
 - Whether additional assistance is required to effect the evacuation.
- d. Check that all residents and visitors are accounted for.
- e. Inform the NSW SES Parkes Shire Local Controller when the evacuation of the caravan park has been completed.
- f. Provide the NSW SES Parkes Shire Local Controller with a register of people that have been evacuated.

1.4 RETURN OF OCCUPANTS AND MOVEABLE DWELLINGS

1.4.1 The NSW SES Parkes Shire Local Controller, using council resources as necessary, will advise when it is safe for the caravan parks to be re-occupied.

1.4.2 Moveable dwellings will be returned back to the caravan park(s) by owners or by vehicles and drivers arranged by the park managers.

1.4.3 Council and NSW SES personnel may assist by request where resources are 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	Moveable dwelling relocation location	Evacuation centre	Notes
Trundle Showground	Austral St, Trundle	Trundle	na	Isolated due to local flash flooding	na	na	na	na	

LIST OF REFERENCES

1. **NSW Government.** *Local Government (Manufactured Home Estates, Caravan Parks, Camping Grounds and Moveable Dwellings) Regulation 2005 Part 3 Division 3 Subdivision 7 Clause 123.* 2005.