

Camden

Local Flood Plan

March 2016

To be reviewed no later than March 2021

CAMDEN FLOOD EMERGENCY SUB PLAN


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

Volume 1 of the Camden Local Flood Plan

AUTHORISATION

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


Recommended



NSW SES Camden Local Controller

Date: 2/3/16.

Approved



Chair, Local Emergency Management Committee

Date: 2/3/16.

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DISTRIBUTION LIST

This Local Flood Plan is distributed through the NSW State Emergency Service in electronic format and is maintained on the NSW SES FloodSafe (www.floodsafe.com.au) website.

VERSION HISTORY

The following table lists all previously endorsed versions of this plan.

Description	Date
Camden Flood Emergency Sub Plan	August 2010

AMENDMENT LIST

Suggestions for amendments to this plan should be forwarded to:

The Camden Local Controller
 NSW State Emergency Service
 PO Box 1061, CAMDEN, NSW, 2570

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

Amendment Number	Description	Updated by	Date

Document Issue: V1-30122014

LIST OF ABBREVIATIONS

The following abbreviations have been used in this plan:

AEP	Annual Exceedance Probability
AHD	Australian Height Datum
AIIMS	Australasian Inter-service Incident Management System
ARI	Average Recurrence Interval (Years)
ALERT	Automated Local Evaluation in Real Time
AWRC	Australian Water Resources Council
BUREAU	Australian Government Bureau of Meteorology
CBRN	Chemical, Biological, Radiological or Nuclear
DCF	Dam Crest Flood
DSC	Dams Safety Committee
DSEP	Dam Safety Emergency Plan
DVR	Disaster Victim Registration
EMPLAN	Emergency Management Plan
FRNSW	Fire and Rescue NSW
GIS	Geographic Information System
GRN	Government Radio Network
IAP	Incident Action Plan
IFF	Imminent Failure Flood
LEMC	Local Emergency Management Committee
LEOCON	Local Emergency Operations Controller
LO	Liaison Officer
LGA	Local Government Area
MHL	Manly Hydraulics Laboratory
NOW	NSW Office of Water

NSW RFS	NSW Rural Fire Service
NSW SES	NSW State Emergency Service
NSW VRA	NSW Volunteer Rescue Association
OEH	Office of Environment and Heritage (previously DECCW)
PMF	Probable Maximum Flood
PMR	Private Mobile Radio
PMP	Probable Maximum Precipitation
PIIC	Public Information and Inquiry Centre
REMC	Region Emergency Management Committee
REMO	Regional Emergency Management Officer
RMS	Roads and Maritime Services
SECON	State Emergency Operations Controller
SERCON	State Emergency Recovery Controller
SEWS	Standard Emergency Warning Signal
SITREPs	Situation Reports
WICEN	Wireless Institute Civil Emergency Network

GLOSSARY

Annual Exceedance Probability (AEP). The chance of a flood of a given or larger size occurring in any one year, usually expressed as a percentage. For example, if a peak flood level (height) has an AEP of 5%, there is a 5% chance (that is, a one-in-20 chance) of such a level or higher occurring in any one year (see also Average Recurrence Interval).

Assistance Animal. A guide dog, a hearing assistance dog or any other animal trained to assist a person to alleviate the effect of a disability (Refer to Section 9 of the Disability Discrimination Act 1992).

Assembly Area. An assembly area is a designated location used for the assembly of emergency-affected persons before they move to temporary accommodation or a nominated evacuation centre. As such these areas do not provide welfare assistance nor are they used for long term sheltering or provision of meals. An assembly area may also be a prearranged, strategically placed area, where support response personnel, vehicles and other equipment can be held in readiness for use during an emergency.

Australian Height Datum (AHD). A common national surface level datum approximately corresponding to mean sea level.

Average Recurrence Interval (ARI). The long-term **average** number of years between the occurrence of a flood as big as, or larger than, the selected event. For example, floods reaching a height as great as, or greater than, the 20 year ARI flood event will occur **on average** once every 20 years.

Catchment (River Basin). The land area draining through the main stream, as well as tributary streams, to a particular site. It always relates to an area above a specific location.

Coastal Erosion. The loss of land along the shoreline predominantly by the offshore movement of sand during storms.

Coastal Flooding. Flooding due to tidal or storm-driven coastal events, including storm surges in lower coastal waterways. This can be exacerbated by wind-wave generation from storm events (1)

Dambreak Study. A Dambreak Study is undertaken to determine the likely downstream inundation areas in case of a dam failure. Modelling is undertaken for a range of dam breach possibilities and design floods. The dambreak study includes information such as the extent of flooding, flood travel times and flood water velocities. The study can assist dam owners, regulators, and emergency agencies in

the preparations of evacuation plans, dam break and other flood warning systems, and hazard classification of affected areas.

Dam Failure. The uncontrolled release of a water storage. The failure may consist of the collapse of the dam or some part of it, or excessive seepage or discharges. The most likely causes of dam failure are;

- **Flood Induced Dam Failure:** Dam failure caused by flood, either due to overtopping erosion or by subsequent structural failure.
- **Sunny Day Dam Failure:** Dam Failure as a result of factors other than flood i.e. other than flood flow into the reservoir. Causes of "Sunny Day" dam failure can include internal erosion, landslide, piping, earthquake or sabotage.

Dam Safety Emergency Plan (DSEP). A DSEP outlines the required actions of owners and their personnel at dams in response to a range of possible emergency situations. The NSW Dam Safety Committee requires a quality controlled DSEP, with associated dambreak warning procedures to be prepared for prescribed dams where persons may be at risk downstream, if the dam failed.

Design Flood (or Flood Standard). A flood of specified magnitude that is adopted for planning purposes. Selections should be based on an understanding of flood behaviour and the associated flood risk, and take account of social, economic and environmental considerations. There may be several design floods for an individual area.

Emergency Alert. The national telephone warning system used by emergency services to send voice messages to landlines and text messages to mobile phones within a defined area, about likely or actual emergencies.

EMPLAN (Emergency Management Plan). The Plan established in accordance with the provisions in the State Emergency Rescue Management Act 1989. The object of an EMPLAN is to ensure the coordinated response by all agencies having responsibilities and functions in emergencies.

Essential Services. Those services, often provided by local government authorities, that are considered essential to the life of organised communities. Such services include power, lighting, water, gas, sewerage and sanitation clearance.

Evacuation. The temporary movement of people from a dangerous or potentially dangerous place to a safe location, and their eventual return. It is a safety strategy which uses distance to separate people from the danger created by the hazard.

Evacuation Order. Notification to the community, authorised by the NSW SES, when the intent of an Incident Controller is to instruct a community to immediately evacuate in response to an imminent threat.

Evacuation Warning. Notification to the community, authorised by the NSW SES, when the intent of an Incident Controller is to warn a community of the need to prepare for a possible evacuation.

Flash Flooding. Flooding which is sudden and often unexpected because it is caused by sudden local or nearby heavy rainfall. It is sometimes defined as flooding which occurs within six hours of the rain that causes it.

Flood. 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 overtopping coastline defences, including Tsunami.

Flood Classifications. Locally defined flood levels used in flood warnings to give an indication of the severity of flooding (minor, moderate or major) expected. These levels are used by the State Emergency Service and the Australian Government Bureau of Meteorology in flood bulletins and flood warnings.

Flood Intelligence. The product of collecting, collating, analysing and interpreting flood-related data to produce meaningful information (intelligence) to allow for the timely preparation, planning and warning for and response to a flood.

Flood Fringe. The remaining area of flood prone land after floodway and flood storage have been defined.

Flood Liable Land (also referred to as Flood Prone Land). Land susceptible to flooding by the Probable Maximum Flood (PMF) event. This term also describes the maximum extent of a **floodplain** which is an area of a river valley, adjacent to the river channel, which is subject to inundation in floods up to this event.

Flood of Record. Maximum observed historical flood.

Floodplain. Area of land which is subject to inundation by floods up to and including the probable maximum flood event, that is, flood prone land (2).

Floodplain Management Plan. A plan developed in accordance with the principles and guidelines in the New South Wales Floodplain Development Manual. Such a plan usually includes both written and diagrammatic information describing how particular areas of flood prone land can be used and managed to achieve defined objectives.

Flood Plan. A response strategy plan that deals specifically with flooding and is a sub-plan of an Emergency Management Plan. Flood plans describe agreed roles, responsibilities, functions, strategies and management arrangements for the

conduct of flood operations and for preparing for them. A flood plan contains information and arrangements for all floods whereas an IAP is for a specific flood/event.

Flood Rescue. The rescue or retrieval of persons trapped by floodwaters.

Flood Storage Areas. Those parts of the floodplain that are important for the temporary storage of floodwaters during the passage of a flood. The extent and behaviour of flood storage areas may change with flood severity, and loss of flood storage can increase the severity of flood impacts by reducing natural flood attenuation.

Floodway. An area where a significant volume of water flows during floods. Such areas are often aligned with obvious naturally-defined channels and are areas that, if partially blocked, would cause a significant redistribution of flood flow which may in turn adversely affect other areas. They are often, but not necessarily, the areas of deeper flow or the areas where higher velocities occur.

Flood Watch. A Flood Watch is a notification of the potential for a flood to occur as a result of a developing weather situation and consists of short generalised statements about the developing weather including forecast rainfall totals, description of catchment conditions and indicates streams at risk. The Bureau will also attempt to estimate the magnitude of likely flooding in terms of the adopted flood classifications. Flood Watches are normally issued 24 to 36 hours in advance of likely flooding. Flood watches are issued on a catchment wide basis.

Flood Warning. A Flood Warning is a gauge specific forecast of actual or imminent flooding. Flood Warnings specify the river valley, the locations expected to be flooded, the likely severity of flooding and when it will occur.

Functional Area. A category of services involved in the preparations for an emergency, including the following:

- Agriculture and Animal Services;
- Energy and Utility Services;
- Engineering Services;
- Environmental Services;
- Health Services;
- Public Information Services;
- Telecommunication Services;
- Transport Services; and
- Welfare Services.

Geographic Information System (GIS). A geographic information system (GIS) integrates hardware, software, and data for capturing, managing, analysing, and displaying all forms of geographically referenced information.

Incident Action Plan (IAP). An action plan for managing a specific event. Information from the Local Flood Plan is used to develop the flood IAP.

Indirect Effect. Indirect effects are generally a consequence of infrastructure damage or interruption of services and can affect communities distant from the actual flood footprint i.e. floodplain. Indirect effects can also refer to indirect losses due to disruption of economic activity, both in areas which are inundated or isolated. Indirect effects are one of the three primary sources of risk in the context of flooding (the other two are inundation and isolation).

Inundation. See definition for Flood.

Isolation. Properties and/or communities where flooding cuts access to essential services or means of supply. Isolation is one of the three primary sources of risk in the context of flooding (the other two are inundation and indirect effects).

Liaison Officer (LO). A person, nominated or appointed by an organisation or functional area, to represent that organisation or functional area at a control centre, emergency operations centre, or coordination centre. A liaison officer maintains communications with and conveys directions/requests to their organisation or functional area, and provides advice on the status, capabilities, actions and requirements of their organisation or functional area (3)

Local Emergency Management Committee (LEMC). The LEMC is responsible for the preparation of plans in relation to the prevention of, preparation for, response to and recovery from emergencies in the local government area for which it is constituted. In the exercise of its functions, the Committee is responsible to the Region Emergency Management Committee (REMC) and may communicate with the REMC for matters associated with Functional Areas that are not represented at the local Level.

Local Overland Flooding. Inundation by local runoff rather than overbank discharge from a stream, river, estuary, lake or dam.

Major Flooding. Flooding which causes inundation of extensive rural areas, with properties, villages and towns' isolated and/or appreciable urban areas flooded.

Minor Flooding. Flooding which causes inconvenience such as closing of minor roads and the submergence of low-level bridges. The lower limit of this class of flooding, on the reference gauge, is the initial flood level at which landholders and/or townspeople begin to be affected in a significant manner that necessitates the

issuing of a public flood warning by the Australian Government Bureau of Meteorology.

Moderate Flooding. Flooding which inundates low-lying areas, requiring removal of stock and/or evacuation of some houses. Main traffic routes may be covered.

Moveable Dwellings. Any tent, or any caravan or other van or other portable device (whether on wheels or not), used for human habitation; or a manufactured home; or any conveyance, structure or thing of a class or description prescribed by the (Local Government) regulations (4).

Operational Area Commander. The individual commanding an operational area. An Operational Area Command may be established for an area with multiple incident management teams functioning, and can cross local government and NSW SES Region boundaries (5).

Peak Height. The highest level reached, at a nominated gauging station, during a particular flood event.

Prescribed Dam. "Prescribed" dams are those listed in Schedule 1 of the Dams Safety Act 1978. The NSW Dam Safety Committee will prescribe those dams with the potential for a failure which could have a significant adverse effect on community interests.

Probable Maximum Flood (PMF). The largest flood that could conceivably be expected to occur at a particular location, usually estimated from probable maximum precipitation. The PMF defines the maximum extent of flood prone land, that is, the floodplain. It is difficult to define a meaningful Annual Exceedance Probability for the PMF, but it is commonly assumed to be of the order of 10^4 to 10^7 (once in 10,000 to 10,000,000 years).

Rescue. The safe removal of persons or domestic animals from actual or threatened danger of physical harm.

Riverine Flooding. Inundation of normally dry land occurring when water overflows the natural or artificial banks of a stream, river, estuary, lake or dam. Riverine flooding generally excludes watercourses constructed with pipes or artificial channels considered as stormwater channels (1).

Runoff. The amount of rainfall which ends up as stream flow, also known as 'rainfall excess' since it is the amount remaining after accounting for other processes such as evaporation and infiltration.

Stage Height. A level reached, at a nominated gauging station, during the development of a particular flood event.

Stream Gauging Station. A place on a river or stream at which the stage height is routinely measured, either daily or continuously, and where the discharge is measured from time to time so as to develop a relationship between stage and discharge or rating curve.

Total Flood Warning System. A flood warning system is made up of components which must be integrated if the system is to operate effectively. Components of the total flood warning system include monitoring rainfall and river flows, prediction, interpretation of the likely impacts, construction and dissemination of warning messages, response by agencies and community members, and review of the warning system after flood events. (6)

PART 1 - INTRODUCTION

1.1 PURPOSE

- 1.1.1 This plan covers preparedness measures, the conduct of response operations and the coordination of immediate recovery measures from flooding within the Camden LGA. It covers operations for all levels of flooding within the council area.

1.2 AUTHORITY

- 1.2.1 This plan is issued under the authority of the *State Emergency and Rescue Management Act 1989* (NSW) and the *State Emergency Service Act 1989* (NSW). It has been approved by the NSW SES Camden Local Controller and the NSW SES Sydney Southern Region Controller as a NSW SES plan and endorsed by the Camden Local Emergency Management Committee as a sub plan of the Local EMPLAN.

1.3 AREA COVERED BY THE PLAN

- 1.3.1 The area covered by the plan is the Camden LGA.
- 1.3.2 The council area and its principal rivers and creeks are shown in Attachment 3.
- 1.3.3 The council area is in the NSW SES Sydney Southern Region and for emergency management purposes is part of the South West Metropolitan Emergency Management Region.

1.4 DESCRIPTION OF FLOODING AND ITS EFFECTS

- 1.4.1 The Council area faces a number of flood threats including those from:
- a. The Nepean River and its tributaries
 - b. Upper South Creek and its tributaries
- 1.4.2 The NSW SES maintains information on the nature of flooding and effects of flooding on the community in the Camden LGA.

1.5 RESPONSIBILITIES

- 1.5.1 The general responsibilities of emergency service organisations and supporting services (functional areas) are listed in the Local and State Emergency Management Plans (EMPLAN). Some specific responsibilities are expanded upon in the following paragraphs. The extent of their implementation will depend on the severity of the flooding.

- 1.5.2 **NSW SES Camden Local Controller.** The NSW SES Camden Local Controller is responsible for dealing with floods as detailed in the State Flood Plan, and will;

Preparedness

- a. Ensure the Local Headquarters at 19 Queen Street, Narellan is maintained in accordance with the NSW SES Controllers' Guide and the NSW SES Operations Manual.
- b. Ensure that NSW SES members are trained to undertake operations in accordance with current policy as laid down in the NSW SES Controllers' Guide and the NSW SES Operations Manual.
- c. Coordinate the development and operation of a flood warning service for the community.
- d. Participate in floodplain risk management initiatives organised by the Camden Council.
- e. Coordinate a community engagement and capacity building program regarding local flood issues and associated risks to assist communities in building resilience to floods.
- f. Identify and monitor people and/or communities at risk of flooding.
- g. Ensure that the currency of this plan is maintained.

Response

- h. Appoint an appropriate Incident Controller to undertake response roles. The Incident Controller will;
 - Control flood and storm response operations. This includes;
 - Directing the activities of the NSW SES units operating within the council area.
 - Coordinating the activities of supporting agencies and organisations and ensuring that liaison is established with them.
 - Contribute to preparation of Region Incident Action Plan (IAP).
 - Provide an information service in relation to;
 - Flood heights and flood behaviour.
 - Road conditions and closures.
 - Advice on methods of limiting property damage.
 - Confirmation of evacuation warnings and evacuation orders.
 - Direct the evacuation of people and/or communities.
 - Provide immediate welfare support for evacuated people.
 - Coordinate the provision of emergency food and medical supplies to isolated people and/or communities.

- Coordinate operations to assist the community to protect property. This may include;
 - Arranging resources for sandbagging operations.
 - Lifting or moving household furniture.
 - Lifting or moving commercial stock and equipment.
- Assist the Camden Council to organise temporary repairs or improvements to levees.
- Where possible, arrange for support (for example, accommodation and meals) for emergency service organisation members and volunteers assisting them.
- Ensure that the managers of caravan parks are advised of flood warnings and the details of any evacuation order.
- If NSW SES resources are available, assist with emergency fodder supply operations conducted by Agriculture and Animal Services.
- If NSW SES resources are available, assist the NSW Police Force, RMS and Council with road closure and traffic control operations.
- Exercise financial delegations relating to the use of emergency orders as laid down in the NSW SES Controllers' Guide.
- Coordinate the collection of flood information for development of intelligence.
- Submit Situation Reports to the NSW SES Sydney Southern Region Headquarters and agencies assisting within the council area. These will contain information on;
 - Road conditions and closures.
 - Current flood behaviour.
 - Current operational activities.
 - Likely future flood behaviour.
 - Likely future operational activities.
 - Probable resource needs.
- Keep the Local Emergency Operations Controller advised of the flood situation and the operational response.
- Issue the 'All Clear' when flood operations have been completed.

Recovery

- i. Ensure that appropriate After Action Reviews are held after floods.
- j. Provide appropriate representation to the recovery committee for the duration of the response phase of an event and as agreed during the recovery phase.

1.5.3 NSW SES Camden Unit Members

- a. Carry out flood response tasks. These may include;
 - The management of the NSW SES Camden Local and Unit Headquarters Operations Centres.
 - Assist in the collection of flood information for the development of intelligence.
 - Flood rescue.
 - Evacuation.
 - Providing immediate welfare for evacuated people.
 - Delivery of warnings and information.
 - Resupply.
 - Levee monitoring.
 - Sandbagging.
 - Lifting and/or moving household furniture and commercial stock.
 - Animal rescue.
 - Assisting in repairing or improving levees.
 - Assisting with road closure and traffic control operations.
 - Assisting with emergency fodder supply operations.
- b. Assist with preparedness activities.
- c. Undertake training in flood and storm response operations.

1.5.4 Camden Local Emergency Operations Controller (LEOCON)

- a. Monitor flood operations.
- b. Request and coordinate support to the NSW SES Incident Controller if requested to do so.

1.5.5 Camden Local Emergency Management Officer

- a. Provide executive support to the LEMC and LEOCON in accordance with the Camden Local Emergency Management Plan.
- b. At the request of the NSW SES Incident Controller, advise appropriate agencies and officers of the start of response operations.

1.5.6 Camden Council

Preparedness

- a. Develop and implement floodplain risk management plans in accordance with the NSW Government's Flood Prone Land Policy and the Floodplain Development Manual.

- b. Establish and maintain floodplain risk management committees and ensure that key agencies are represented on such committees.
- c. Provide levee studies, flood studies and floodplain management studies to the NSW SES.
- d. Maintain a plant and equipment resource list for the council area.
- e. Work with NSW SES on the development and implementation of a community engagement and capacity building program.

Response

- f. At the request of the NSW SES Incident Controller, deploy personnel and resources for flood related activities.
- g. Close and reopen council roads (and other roads nominated by agreement with the RMS) and advise the NSW SES Incident Controller and the Police.
- h. Provide information on the status of roads.
- i. Provide filled sandbags to urban and village areas in which flooding is expected.
- j. Assist with the removal of caravans from caravan parks.
- k. Provide back-up radio communications.
- l. In the event of evacuations, assist with making available and/or locating facilities for the domestic pets and companion animals of evacuees.

Recovery

- m. Provide for the management of health hazards associated with flooding. This includes removing debris and waste.
- n. Ensure premises are fit and safe for reoccupation and assess any need for demolition.
- o. Arrange for storage of evacuees' furniture as required.

1.5.7 Agriculture and Animal Services Functional Area

- a. Activate the Agriculture and Animal Services Supporting Plan as required and coordinate the provision of required services which may include;
 - Coordinate response for animal welfare including pets, livestock and wildlife;
 - Supply and delivery of emergency fodder;
 - Emergency water replacement in certain circumstances;
 - Identify at risk animals and agriculture and support warning and preparedness measures;
 - Coordinate the assessment, care, humane destruction and disposal of affected animals;

- Financial, welfare and damage assessment assistance to flood affected farmers;
- Coordinate support to primary producers, animal holding establishments, evacuees and the community in emergencies, including rescue, evacuation and emergency care of animals; and
- Support recovery arrangements including:
 - Provide impact assessments;
 - Contribute to recovery centres and recovery committees;
 - Deliver recovery information including workshops; and
 - Administer transport subsidies to primary producers.

1.5.8 **Australian Government Bureau of Meteorology (The Bureau)**

- a. Provide Flood Watches for the Upper Nepean River Basin.
- b. Provide Flood Warnings, incorporating height-time predictions, for Menangle Bridge and Camden Bridge Gauges.
- c. Provide severe weather warnings when flash flooding is likely to occur.

1.5.9 **Caravan Park Proprietor(s)**

- a. Prepare a flood emergency plan for the Caravan Park.
- b. Ensure that owners and occupiers moveable dwellings are 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.
 - Displaying this notice and the emergency arrangements for the Caravan Park prominently in the park.
- c. Ensure that owners and occupiers of moveable dwellings are 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 moveable 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) (7).
- d. Ensure that occupiers are informed of Flood Information. At this time, occupiers should 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 moveable dwelling relocation.

- e. Ensure that owners and occupiers of caravans are aware of what they must do to facilitate evacuation and moveable dwelling relocation when flooding occurs.
- f. Coordinate the evacuation of people and the relocation of moveable dwellings when floods are rising and their return when flood waters have subsided. Moveable dwellings will be relocated back to the caravan park(s) by owners or by vehicles and drivers arranged by the park managers.
- g. Secure any moveable dwellings that are not able to be relocated to prevent floatation.
- h. Inform the NSW SES of the progress of evacuation and/or moveable dwellings relocation operations and of any need for assistance in the conduct of these tasks.

1.5.10 **Child Care Centres and Preschools**

- a. Childcare Centres are to be contacted by the NSW SES in the event of possible flooding or isolation.
- b. When notified the child care centres and preschools should;
 - Liaise with the NSW SES and arrange for the early release of children whose travel arrangements are likely to be disrupted by flooding and/or road closures.
 - Assist with coordinating the evacuation of preschools and child care centres.

1.5.11 **Energy and Utility Services Functional Area**

- a. When requested by NSW SES;
 - Implement the Energy and Utilities Services Functional Area Supporting Plan.
 - Where required, coordinate energy and utility services emergency management planning, preparation, response and recovery, including the restoration of services following a flood event.
 - Coordinate advice to the NSW SES of any need to disconnect electricity, gas, water or wastewater services.
 - Assist the NSW SES to identify infrastructure at risk of flooding for incorporation into planning and intelligence.
 - Identify interdependencies between flooding and utility services due to secondary impacts of flooding and advise the NSW SES.
 - Assist the NSW SES with advisory notices relating to hazards from utility services during flooding.
 - Coordinate with utilities on restoration of services, including advisory notices relating to estimated time for restoration and mandatory safety checks prior to reconnection. Advise the NSW SES and the

relevant recovery committee and coordinator of the timetable for restoration.

- b. Local utility service distribution providers (electricity, gas, water, waste water):
 - Provide advice to the NSW SES Camden Local Controller of any need to disconnect power/gas/water/waste water supplies or of any timetable for reconnection.
 - Advise the NSW SES of any hazards from utility services during flooding.
 - Advise the public with regard to electrical hazards during flooding 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/waste water installations, when certified safe to do so and as conditions allow.
 - Assist the NSW SES to identify infrastructure at risk of flooding for incorporation into planning and intelligence.

1.5.12 Engineering Services Functional Area

- a. When requested by NSW SES;
 - Provide engineering advice regarding the integrity of damaged structures.
 - Assist the NSW SES with damage assessment.
 - Acquire and/or provide specialist technical engineering expertise.
 - Assist the NSW SES and councils with the assessment and operation of flood protection levees when requested.
 - Assist with property protection, including the construction or repair of levees.
 - Coordinate the restoration of critical public facilities.
- b. When requested by the Recovery Coordinator:
 - Establish Recovery Centres by the procurement and fit-out of suitable properties.

1.5.13 Environmental Services Functional Area

- a. When requested by NSW SES;
 - Implement the Environmental Services Functional Area (Enviroplan) Supporting Plan if required.

1.5.14 Fire and Rescue NSW

- a. FRNSW responsibilities are primarily confined to the FRNSW Fire District. Any deployment of FRNSW resources to assist NSW SES in flood events

rests with the respective FRNSW Commander which must be a Senior Officer.

- b. The FRNSW Commander will assess the capability of FRNSW to assist NSW SES in the following tasks:
 - Warning and/or evacuation of at risk communities.
 - Monitoring / reconnaissance of flood prone areas.
 - Resupply of isolated communities and/or properties.
 - Property protection tasks including sandbagging.
 - Provide resources for pumping flood water out of buildings and from low-lying areas.
 - Clean-up operations, including the hosing out of flood affected properties.
 - Coordinate the deployment of fire resources to communities within Fire and Rescue NSW fire districts if access is expected to be lost in consultation with the NSW SES.
- c. FRNSW will use its best endeavours to deploy appliances and or resources into locations where access is expected to be lost.

1.5.15 **Forestry Corporation of NSW**

- a. Close and evacuate at risk camping grounds in State Forest managed areas.
- b. Close and reopen Forestry Corporation of NSW roads when affected by flood waters and advise the NSW SES of its status.
- c. Facilitate the safe reliable access of emergency resources on Forestry Corporation managed roads.
- d. Assist the NSW SES with identification of road infrastructure at risk of flooding.
- e. Manage traffic in Forestry Corporation of NSW roads.
- f. Assist the NSW SES with the communication of warnings and information provision to the public through variable message signs and other appropriate means.

1.5.16 **Health Services Functional Area**

- a. When requested by NSW SES;
 - Activate Healthplan if required.
 - Ensure that appropriate business continuity plans are developed for essential health infrastructure and are activated during floods.
 - Provide medical support to the NSW SES.
 - Establish health surveillance in affected areas.

- Assess potential public health risks that either acutely endanger the health of human populations or are thought to have longer term consequences.
- Provide environmental health advice.
- Provide public health warnings and advice to affected communities.
- Provide psychological counselling support to the community and emergency response workers impacted, via NSW Health Mental Health Division.
- Assist the NSW SES with the warning and evacuation of public hospitals, private hospitals and residential aged care facilities.
- Undertake assessment of at risk patients for mental health and drug and alcohol dependant persons, dialysis, community health clients and oxygen dependant persons in the community, known to the health service.

1.5.17 NSW Ambulance

- a. Provide assistance to any person/s in the community requiring medical assistance to evacuate in consultation NSW Health.
- b. Deploy ambulance resources to appropriate locations if access is expected to be lost.
- c. Assist the NSW SES with flood rescue operations.

1.5.18 NSW Office of Water

- a. Collect and maintain flood data including data relating to flood heights, velocities and discharges.
- b. Provide the Bureau of Meteorology and NSW SES real-time or near real-time access to river height gauges and height data for the development of official flood warnings.
- c. Provide flow rating charts for river height gauges.
- d. Manage (with technical support from OEH) the approval process under the Water Act 1912 and Water Management Act 2000 for flood control works (earthworks, embankments and levees which can affect the distribution of floodwaters) including;
 - Assessment and approval of flood control works (including flood mitigation works) in rural areas designated under the Acts.
 - Use of floodplain management plans prepared by OEH in rural areas designated under the Acts to assess flood control work approvals.
 - Giving the NSW SES access to relevant studies regarding flooding and studies supporting floodplain management plans prepared by OEH including flood studies, floodplain risk management studies and flood behaviour investigations.

1.5.19 NSW Police Force

- a. Assist the NSW SES with the delivery of evacuation warnings and evacuation orders.
- b. Assist the NSW SES with the conduct of evacuation operations.
- c. Conduct road and traffic control operations in conjunction with council and/or RMS.
- d. Coordinate the registration of evacuees.
- e. Secure evacuated areas.

1.5.20 NSW Rural Fire Service

- a. Provide personnel in rural areas and villages to;
 - Inform the NSW SES Camden Local Controller about flood conditions and response needs in their own communities, and
 - Disseminate flood information.
- b. Provide personnel and high-clearance vehicles for flood related activities.
- c. Assist the NSW SES with the delivery of evacuation warnings and evacuation orders.
- d. Assist the NSW SES with the conduct of evacuations.
- e. Provide equipment for pumping flood water out of buildings and from low-lying areas.
- f. Assist with the removal of caravans.
- g. Provide back-up radio communications.
- h. Assist with clean-up operations, including the hosing of flood affected properties.
- i. Deploy fire resources to appropriate locations if access is expected to be lost.

1.5.21 Office of Environment and Heritage

- a. Assist the NSW SES gain access to relevant studies regarding flooding, including Flood Studies and Floodplain Risk Management Studies undertaken under the Floodplain Management Program.
- b. Assist the NSW SES in obtaining required outputs (Section 3.1.4) from Flood Studies and Floodplain Risk Management Studies under the Floodplain Management Program which assist the NSW SES in effective emergency response planning and incorporating information into the NSW Floods Database.
- c. Coordinate the collection of post event flood data, in consultation with the NSW SES.
- d. Provide specialist advice to the NSW SES on flood related matters on;
 - The identification of flood risks.

- The operation of the Hunter Valley Flood Mitigation Scheme.
- e. Collect and maintain flood data relating to flood heights, velocities and discharges in coastal areas of NSW (through a contract with MHL as discussed separately).
- f. Provide data to the Bureau of Meteorology and NSW SES real-time or near real-time access to river height gauges and height data for the development of official flood warnings (through a contract with MHL as described in the Response section of this plan).
- g. Assist the NSW SES in the exercising of this Flood Sub Plan.
- h. **Parks and Wildlife Service**
 - Close and reopen Parks and Wildlife Service roads when affected by flood waters and advise the NSW SES of its status.
 - Facilitate the safe reliable access of emergency resources on National Parks and Wildlife Service managed roads.
 - Assist the NSW SES with identification of road infrastructure at risk of flooding.
 - Manage traffic on Parks and Wildlife Service roads.
 - Assist the NSW SES with the communication of warnings and information provision to the public through variable message signs and other appropriate means.

1.5.22 Owners of Prescribed Dams within or upstream of Camden

Dam	Owner
Cataract Dam	Water NSW
Cordeaux Dam	Water NSW
Avon Dam	Water NSW
Nepean Dam	Water NSW
Lake Tandelora Mt Annan (Mt Annan Wetland No 3)	Camden Council
Illawarra Coal, Brennan's Creek Dam	BHP Billiton
Camden Washery	Burraborang Valley Coal Pty Ltd

- a. Maintain and operate the Dam Failure Warning System for their Dam(s).
- b. Contribute to the development and implementation of community engagement and capacity building programs on flooding.
- c. Consult with NSW SES on the determination of dam failure alert levels and notification arrangements when developing Dam Safety Emergency Plans.
- d. Maintain a Dam Safety Emergency Plan and provide copies to the NSW SES.

- e. Provide information on the consequences of dam failure to the NSW SES for incorporation into planning and flood intelligence.
- f. Close and evacuate at risk camping grounds/recreational areas within their managed areas.

1.5.23 **Public Information Services Functional Area**

- a. When requested by NSW SES;
 - Assist the NSW SES in the establishment and operation of a Joint Media Information Centre.

1.5.24 **Roads and Maritime Services**

- a. Manage traffic on state roads, state highways and waterways affected by flood waters and advise the NSW SES of their status.
- b. Facilitate the safe reliable access of emergency resources on RMS managed roads.
- c. Assist the NSW SES with identification of road infrastructure at risk of flooding.
- d. Assist in Traffic management associated with evacuations where necessary.
- e. Enter state road closure information into the Live Traffic site.
- f. Assist the NSW SES and local councils with the communication of warnings and information provision to the public through variable message signs.
- g. Cooperate with the South West Metropolitan Transport Services Functional Area Coordinator.

1.5.25 **School Administration Offices (including Catholic Education Office Wollongong, Department of Education & Communities Macarthur Principal Network and Private Schools)**

- a. Liaise with the NSW SES and arrange for the early release of students whose travel arrangements are likely to be disrupted by flooding and/or road closures (or where required, for students to be moved to a suitable location until normal school closing time).
- b. Pass information to school bus drivers/companies and/or other schools on expected or actual impacts of flooding.
- c. Assist with coordinating the evacuation of schools when flooding or isolation is expected to occur.
- d. Provide space in schools for evacuation centres where necessary.

1.5.26 **Telecommunication Services Functional Area**

- a. When requested by NSW SES;
 - Coordinate the restoration of telephone facilities damaged by flooding.

- Assist the NSW SES to identify infrastructure at risk of flooding for incorporation into planning and intelligence.

1.5.27 The South West Metropolitan Transport Services Functional Area Coordinator (TSFAC)

- a. The TSFAC will assist NSW SES, emergency services and other functional areas through the provision of transport services, including;
 - The movement of emergency equipment and personnel.
 - The movement of emergency supplies and goods, including water, fuel and food.
 - The evacuation of people and animals.
 - Assistance for medical transport.
 - Transportation of animals and infectious material/dangerous goods.
 - Maintaining and operating a transport route advisory service to the NSW SES, emergency services organisations and other Functional Areas and members of the community.

1.5.28 NSW Train Link and Sydney Trains

- a. Operate rail services through the Camden LGA including the management of railway services affected by flood waters and advise the NSW SES.
- b. Assist the NSW SES with the movement or evacuation of people during flood response operations if required.
- c. Convey flood information and flood warnings to passengers and travellers on NSW and Sydney trains.
- d. Cooperate with, and assist the NSW SES Local Controller in relation to public safety during flood emergencies.
- e. Cooperate with the South West Metropolitan Transport Services Functional Area Coordinator.

1.5.29 Water NSW

- a. Advise NSW SES Camden Unit and Sydney Southern Region Headquarters of flows anticipated to exceed 6000 ML and 20 000 ML between Broughtons Pass and Pheasants Nest.

1.5.30 Welfare Services Functional Area

- a. When requested by NSW SES;
 - Establish and manage evacuation centres, and provide disaster welfare services from recovery centres.
 - Administer the Personal Hardship and Distress component of the NSW Disaster Relief Scheme established to provide financial assistance to people affected by emergencies.

1.6 CROSS-BORDER ASSISTANCE ARRANGEMENTS

1.6.1 No cross-border arrangements are currently in place.

PART 2 - PREPAREDNESS

2.1 MAINTENANCE OF THIS PLAN

- 2.1.1 The NSW SES Camden Local Controller will maintain the currency of this plan by;
- a. Ensuring that all agencies, organisations and officers mentioned in it are aware of their roles and responsibilities.
 - b. Conducting exercises to test arrangements.
 - c. Reviewing the contents of the plan;
 - After each flood operation.
 - When significant changes in land-use or community characteristics occur.
 - When new information from flood studies become available.
 - When flood control or mitigation works are implemented or altered.
 - When there are changes that alter agreed plan arrangements.
- 2.1.2 The plan is to be reviewed no less frequently than every five years.

2.2 FLOODPLAIN RISK MANAGEMENT

- 2.2.1 The NSW SES Camden Local Controller will ensure that;
- a. NSW SES participates in local floodplain risk management committee activities when those committees are formed, in accordance with the protocols outlined in the NSW SES Controllers' Guide.
 - b. The NSW SES Sydney Southern Region Headquarters is informed of involvement in floodplain risk management activities.

2.3 DEVELOPMENT OF FLOOD INTELLIGENCE

- 2.3.1 Flood intelligence describes flood behaviour and its effects on the community.
- 2.3.2 The NSW SES maintains a centralised flood intelligence system.

2.4 DEVELOPMENT OF WARNING SYSTEMS

- 2.4.1 The NSW SES establishes total flood warning systems for areas affected by flooding. This requires;
- a. An identification of the potential clients of flood warning information at different levels of flooding (i.e. who would be affected in floods of differing severities).
 - b. Available information about the estimated impacts of flooding at different heights.

- c. Identification of required actions and the amounts of time needed to carry them out.
- d. Appropriate means of disseminating warnings to different clients and at different flood levels.

2.5 COMMUNITY RESILIENCE

- 2.5.1 The community needs to be as prepared as emergency agencies for the impact of all hazards (5) including flooding.
- 2.5.2 As the combat agency, NSW SES has the primary responsibility for the collation, assessment and public dissemination of information relating to flooding. To do this, NSW SES will require assistance from other agencies, particularly local government councils, dam owners, and the Bureau in the development and delivery of materials. (3)
- 2.5.3 The NSW SES Camden Local Controller, with the assistance of the Camden Council, the NSW SES Sydney Southern Region Headquarters and NSW SES State Headquarters, is responsible for the collation, assessment and public dissemination of information relating to flooding. (3)
- 2.5.4 A range of tailored strategies to be employed with NSW communities include:
 - a. Dissemination of flood-related brochures and booklets in flood liable areas.
 - b. Talks and displays orientated to at-risk groups, community organisations, businesses and schools.
 - c. Publicity given to this plan and to flood-orientated NSW SES activities through local media outlets, including articles in local newspapers about the flood threat and appropriate responses.

2.6 TRAINING

- 2.6.1 Throughout this document there are references to functions that must be carried out by the members of the NSW SES Camden Unit. The NSW SES Camden Local Controller is responsible for ensuring that the members are;
 - a. Familiar with the contents of this plan.
 - b. Trained in the skills necessary to carry out the tasks allocated to the NSW SES.

2.7 RESOURCES

- 2.7.1 The NSW SES Camden Local Controller is responsible for maintaining the condition and state of readiness of NSW SES equipment and the NSW SES Camden Local Headquarters.

PART 3 - RESPONSE

CONTROL

3.1 CONTROL ARRANGEMENTS

- 3.1.1 The NSW SES is the legislated Combat Agency for floods and is responsible for the control of flood operations. This includes the coordination of other agencies and organisations for flood management tasks.
- 3.1.2 The Local EMPLAN will operate to provide support as requested by the NSW SES Incident Controller.

3.2 OPERATIONAL MANAGEMENT

- 3.2.1 NSW SES utilises the Australasian Inter-service Incident Management System (AIIMS), which is based on five principles;
 - a. Flexibility
 - b. Functional management
 - c. Management by objectives
 - d. Unity of Command
 - e. Span of control.
- 3.2.2 AIIMS provides for different incident levels based on the complexity of management.
- 3.2.3 The Local Government Area may be divided into sectors and divisions to manage the flood event (divisions are usually a group of sectors).
- 3.2.4 Sectors and divisions may be based on floodplain classifications, geographical, physical or functional boundaries. A town, city or suburb may be one sector or split into several sectors and divisions.

3.3 START OF RESPONSE OPERATIONS

- 3.3.1 This plan is always active to ensure that preparedness actions detailed in this plan are completed.
- 3.3.2 Response operations will begin;
 - a. On receipt of a Bureau of Meteorology Preliminary Flood Warning, Flood Warning, Flood Watch, Severe Thunderstorm Warning or a Severe Weather Warning for flash flooding.
 - b. On receipt of a dam failure alert.
- 3.3.3 When other evidence leads to an expectation of flooding within the council area.

- 3.3.4 The Camden Unit is advised by Water NSW when a combined discharge of more than 6000 ML and 20 000 ML between Broughtons Pass Weir and Pheasants Nest is anticipated.
- 3.3.5 Contact with the Bureau of Meteorology to discuss the development of flood warnings will normally be through the NSW SES Sydney Southern Region Headquarters and/or NSW SES State Headquarters.
- 3.3.6 The following persons and organisations will be advised of the start of response operations regardless of the location and severity of the flooding anticipated:
- a. NSW SES Sydney Southern Region Headquarters.
 - b. NSW SES Camden Controller.
 - c. Camden Local Emergency Operations Controller (for transmission to the NSW Police Force Local Area Command Headquarters).
 - d. Camden Local Emergency Management Officer (for transmission to appropriate council officers and departments).
 - e. Camden Council Mayor.
 - f. Other agencies listed in this plan will be advised by the Local Emergency Management Officer on the request of the NSW SES Incident Controller and as appropriate to the location and nature of the threat.

3.4 RESPONSE STRATEGIES

- 3.4.1 The main response strategies for NSW SES flood operations include;
- a. Information Provision and Warning
 - Provision of warnings, information and advice to communities.
 - Inform the community regarding the potential impacts of a flood and what actions to undertake in preparation for flooding.
 - Provide timely and accurate information to the community.
 - b. Property protection
 - Protect the property of residents and businesses at risk of flood damage.
 - Assistance with property protection by way of sandbagging and the lifting or transporting of furniture, personal effects, commercial stock and caravans.
 - Assistance with the protection of essential infrastructure.
 - c. Evacuation
 - Evacuation is a risk management strategy that may be used to mitigate the effects of an emergency on a community. It involves the movement of people to a safer location and their return. For an

evacuation to be effective it must be appropriately planned and implemented

- d. Flood Rescue
 - The rescue or safe retrieval of persons or animals trapped by floodwaters.
 - e. Resupply
 - Minimise disruption upon the community by resupplying towns and villages which have become isolated as a consequence of flooding.
 - Ensure supplies are maintained to property owners by coordinating the resupply of properties which have become isolated as a consequence of flooding.
- 3.4.2 The NSW SES Incident Controller will select the appropriate response strategy to deal with the expected impact of the flood in each sector and/or community. The impact may vary so a number of different strategies may need to be selected and implemented across the whole operational area. The available strategies for each sector and/or community are maintained by the NSW SES.
- 3.4.3 Supporting agency strategies may include;
- a. Protect the community from incidents involving fire and hazardous materials.
 - b. Maintain the welfare of communities and individuals affected by the impact of a flood.
 - c. Minimise disruption to the community by ensuring supply of essential energy and utility services.
 - d. Ensure coordinated health services are available to and accessible by the flood affected communities.
 - e. Maintain the welfare of animals affected by the impact of a flood.

3.5 OPERATIONS CENTRES

- 3.5.1 The NSW SES Camden Operations Centre is located at the Camden Unit Headquarters
- 3.5.2 The Camden Emergency Operations Centre will be established by the LEOCON.

3.6 LIAISON

- 3.6.1 Any agency with responsibilities identified in this plan may be requested by the NSW SES to provide liaison (including a liaison officer where necessary) to the NSW SES Camden Operations Centre, or designated Emergency Operations Centre.
- 3.6.2 In accordance with NSW EMPLAN, Liaison Officers will;

- a. Maintain communication with and convey directions/requests to their organisation or functional area;
- b. Provide advice on the status, resource availability, capabilities, actions and requirements of their organisation or functional area, and
- c. Where appropriate, have the authority to deploy the resources of their parent organisation at the request of the NSW SES Incident Controller.

3.7 END OF RESPONSE OPERATIONS

- 3.7.1 When the immediate danger to life and property has passed the NSW SES Operational Area Commander or the NSW SES Incident Controller will issue an 'All Clear' message signifying that response operations have been completed. The message will be distributed through the same media outlets as earlier evacuation messages. The relevant Controller will also advise details of recovery coordination arrangements, arrangements made for clean-up operations prior to evacuees being allowed to return to their homes, and stand-down instructions for agencies not required for recovery operations.

PLANNING

3.8 COLLATING SITUATIONAL INFORMATION

Strategy

- 3.8.1 The NSW SES maintains and records situational awareness of current impacts and response activities.

Actions

- 3.8.2 The NSW SES Camden Local Headquarters collates information on the current situation in the Camden LGA and incorporates in Situation Reports.
- 3.8.3 The NSW SES Sydney Southern Region Headquarters collates Region-wide information for inclusion in NSW SES Region Situation Reports.
- 3.8.4 Sources of situational information during times of flooding are;
- a. **Agency Situation Reports.** Agencies and functional areas provide regular situation reports (SITREPs) to the NSW SES.
 - b. **Active Reconnaissance.** The NSW SES Incident Controller is responsible for coordinating the reconnaissance of impact areas, recording and communicating observations. Reconnaissance can be performed on the ground and using remote sensing (more commonly aerial). The NSW SES monitors the following problem areas:
 - Macquarie Grove Road Bridge
 - Cobbitty Bridge

- Cowpasture Bridge (also known as Camden Bridge which is the name of the Bureau Flood Gauge at same location)
 - c. The **Bureau of Meteorology's Flood Warning Centre** provides river height and rainfall information, data is available on the website <http://www.bom.gov.au/nsw/flood/>.
 - d. **Manly Hydraulics Laboratory (a business unit within NSW Public Works)** automated river watch system funded by the Office of Environment and Heritage. This system provides river height and rainfall readings for a number of gauges in the Camden LGA. Recent data from this system is available on the Manly Hydraulic Laboratory website: <http://www.mhl.nsw.gov.au>. A history of area floods is also available upon request via the website.
 - e. **NSW Office of Water.** This office advises flow rates and rates of rise for the Upper Nepean River basin. Daily river reports containing information on gauge heights and river flows are available from the website: <http://waterinfo.nsw.gov.au/>.
 - f. **NSW SES Sydney Southern Region Headquarters.** The Region Headquarters provides information on flooding and its consequences, including those in nearby council areas (this information is documented in Bulletins and Situation Reports).
 - g. **Camden Council.** Camden Council provides bulletins regarding road closures and openings during times of flood.
 - h. **Water NSW** Provides information on Cataract, Cordeaux, Avon and Nepean Dams.
- 3.8.5 During flood operations sources of information on roads closed by flooding include;
- a. Camden Council (website and/or telephone service)
 - b. Camden Police Local Area Command.
 - c. Roads and Maritime Services (website and/or telephone service).
 - d. NSW SES Sydney Southern Region Headquarters.
 - e. NSW SES Camden Local Headquarters.
- 3.8.6 Situational information relating to consequences of flooding should be used to verify and validate NSW SES Flood Intelligence records.

3.9 PROVISION OF FLOOD INFORMATION AND WARNINGS

Strategy

- 3.9.1 The NSW SES Camden Local Headquarters provides advice to the NSW SES Sydney Southern Region Headquarters on current and expected impacts of flooding in the Camden LGA.
- 3.9.2 The NSW SES Sydney Southern Region Headquarters issues NSW SES Flood Bulletins, NSW SES Livestock and Equipment Warnings, Evacuation Warnings and Evacuation Orders to media outlets and agencies on behalf of all NSW SES units in the Region.

Actions

- 3.9.3 The NSW SES Incident Controller will ensure that the NSW SES Operational Area Commander is regularly briefed on the progress of operations.
- 3.9.4 NSW SES Camden Local Headquarters operations staff will be briefed regularly so that they can provide information in response to inquiries received in person or by other means such as phone or fax.
- 3.9.5 **Bureau of Meteorology Severe Thunderstorm Warning.** These are issued direct to the media by the Bureau when severe thunderstorms are expected to produce dangerous or damaging conditions, including flash flooding. Severe thunderstorms are usually smaller in scale than events covered by Flood Watches and Severe Weather Warnings.
- 3.9.6 **Bureau of Meteorology Severe Weather Warnings for Flash Flooding.** These are issued direct to the media by the Bureau and provide a warning of the possibility for flash flooding as a result of intense rainfall. These warnings are issued when severe weather is expected to affect land based communities with 6 to 24 hours. Severe Weather Warnings may also include other conditions such as Damaging Winds.
- 3.9.7 **Bureau of Meteorology Flood Watches.** Flood Watches are issued by the Bureau to advise people of the potential for flooding in a catchment area based on predicted or actual rainfall. Flood Watches will be included in NSW SES Flood Bulletins issued by the NSW SES Sydney Southern Region Headquarters.
- 3.9.8 **Bureau of Meteorology Flood Warnings.** The NSW SES Sydney Southern Region Headquarters will send a copy of Bureau Flood Warnings to the NSW SES Camden Unit. On receipt the NSW SES Incident Controller will provide the NSW SES Sydney Southern Region Headquarters with information on the estimated impacts of flooding at the predicted heights for inclusion in NSW SES Region Flood Bulletins.
- 3.9.9 **NSW SES Livestock and Equipment Warnings.** Following heavy rain or when there are indications of significant creek or river rises (even to levels below Minor Flood heights), the NSW SES Incident Controller will advise the NSW SES Sydney Southern Region Headquarters which will issue NSW SES Livestock and Equipment Warnings.

- 3.9.10 **NSW SES Local Flood Advices.** The NSW SES Incident Controller may issue Local Flood Advices for locations not covered by Bureau Flood Warnings. They may be provided verbally in response to phone inquiries but will normally be incorporated into NSW SES Region Flood Bulletins.
- 3.9.11 **NSW SES Flood Bulletins.** The NSW SES Sydney Southern Region Headquarters will regularly issue NSW SES Flood Bulletins which describe information on the estimated impacts of flooding at the predicted heights (using information from Bureau Flood Warnings and NSW SES Local Flood Advices) to NSW SES units, media outlets and agencies on behalf of all NSW SES units in the Region.
- 3.9.12 **NSW SES Evacuation Warnings and Evacuation Orders.** These are usually issued to the media by the NSW SES Operational Area Commander on behalf of the NSW SES Incident Controller.
- 3.9.13 **Dam Failure Alerts.** Dam failure alerts are issued to NSW SES by the dam owner, in accordance with arrangements in the Dam Safety Emergency Plan (DSEP), the system involves the Dam Owner notifying NSW SES State Headquarters Operations Communications Centre, who in turn distribute the warning to the NSW SES Region Headquarters and NSW SES Unit Headquarters.
- 3.9.14 A flow chart illustrating the notification arrangements for potential dam failure is shown in Attachment 2.
- 3.9.15 Dam failure alert levels are set in consultation with the NSW SES and are used to trigger appropriate response actions. The conditions that define each of the alert levels are listed in the relevant DSEP. Responses escalate as the alert level migrates from white to amber to red. Table 1 briefly outlines example defining conditions and appropriate NSW SES responses associated with each alert.

Alert Level	Example Defining Condition	NSW SES Response	NSW SES Warning Product
White	May be a structural anomaly. May be increased monitoring in response to a heavy rainfall event	Implements notification flowchart. Check operational readiness.	This is a preliminary alert to assist the NSW SES in its preparation. This is not a public alert.
Amber	Failure possible if storage level continues to rise or structural anomaly not fixed	Implements notification flowchart. Warn downstream population at risk to prepare to evacuate	NSW SES Evacuation Warning
Red	Failure imminent or occurred	Implements notification flowchart. Evacuation of downstream populations	NSW SES Evacuation Order

Table 1: Dam Failure Alert Levels

Note: Some DSEPs will have alert levels that proceed directly from White to Red. This is the case if adequate time does not exist between the three alert levels to evacuate the downstream population at risk. The decision to omit the Amber Alert level, and the general setting of Alert levels should be undertaken in consultation with the NSW SES.

- 3.9.16 The NSW SES / Dam Owner will disseminate warnings to the population at risk of dam failure (these arrangements are specific to each dam, are negotiated between the Dam Owner and NSW SES, and are documented in the DSEP).
- 3.9.17 Special arrangements apply in the case of severe flooding that may have the potential to cause the failure of Nepean Dam. Details of these arrangements are maintained by the NSW SES.
- 3.9.18 **Standard Emergency Warning Signal (SEWS).** This signal may be played over radio and television stations to alert communities to Evacuation Warnings, Evacuation Orders, Special Warnings or Dam-Failure Warnings. Approval to use the signal is associated with who approves the warning/order message.
- 3.9.19 **The Public Information and Inquiry Centre (PIIC)** (operated by the NSW Police Force) will answer calls from the public regarding registered evacuees.
- 3.9.20 **The Disaster Welfare Assistance line** is a central support and contact point for disaster affected people inquiring about welfare services advice and assistance. This normally operates during business hours, but can be extended when required.
- 3.9.21 **The RMS Transport Information Line** will provide advice to callers on the status of roads. The RMS website also lists road closure information.
- 3.9.22 **Camden Council** will provide information on the status of roads.
- 3.9.23 Collation and dissemination of road information is actioned as follows:
 - a. As part of Situation Reports, the NSW SES Incident Controller provides road status reports for main roads in the council area to the NSW SES Sydney Southern Region Headquarters.
 - b. The NSW SES Sydney Southern Region Headquarters distributes information on main roads to NSW SES units, media outlets and agencies as part of NSW SES Flood Bulletins.

OPERATIONS

3.10 AIRCRAFT MANAGEMENT

- 3.10.1 Aircraft can be used for a variety of purposes during flood operations including evacuation, rescue, resupply, reconnaissance and emergency travel.
- 3.10.2 Air support operations will be conducted under the control of the NSW SES Operational Area Commander, which may allocate aircraft to units if applicable.

- 3.10.3 NSW SES maintains the following information for the Camden Council area;
- a. Locations of suitable helicopter landing points.
 - b. Locations of suitable airports and records detailing aircraft size and type that can land at airports.
 - c. Intelligence on when access to these locations is expected to be lost.

3.11 ASSISTANCE FOR ANIMALS

- 3.11.1 Matters relating to the welfare of livestock, companion animals and wildlife are to be referred to Agriculture and Animal Services Functional Area.
- 3.11.2 Requests for emergency supply and/or delivery of fodder to stranded livestock, or for livestock rescue, are to be referred to Agriculture and Animal Services Functional Area.
- 3.11.3 Requests for domestic animal rescue should be referred to the NSW SES.

3.12 COMMUNICATION SYSTEMS

- 3.12.1 The primary means of communications between fixed locations is by telephone, email and facsimile.
- 3.12.2 The primary means of communication to and between deployed NSW SES resources is by GRN radio.
- 3.12.3 All liaison officers will provide their own communication links back to their parent agencies.
- 3.12.4 All other organisations will provide communications as necessary to their deployed field teams.
- 3.12.5 Back-up communications are provided as follows:
- a. The NSW SES Local Headquarters operates a station on the NSW SES Sydney Southern Region strategic radio network.
 - b. The Macarthur Rural Fire Service can provide communications support during flood response operations.

3.13 PRELIMINARY DEPLOYMENTS

- 3.13.1 When flooding is expected to be severe enough to cut road access to towns, within towns and/or rural communities, the NSW SES Incident Controller will ensure that resources are in place for the distribution of foodstuffs and medical supplies to the areas that could become isolated.
- 3.13.2 When access between locations is expected to be cut, the NSW SES Incident Controller will advise appropriate agencies so that resources (including sandbags, fire fighting appliances, ambulances, etc.) are deployed to ensure that operational capability is maintained.

3.14 ROAD AND TRAFFIC CONTROL

- 3.14.1 A number of roads within the council area are affected by flooding. NSW SES maintains details of these roads.
- 3.14.2 The council closes and re-opens its own roads.
- 3.14.3 The NSW Police Force has the authority to close and re-open roads but will normally only do so (if the Council or the RMS have not already acted) if public safety requires such action.
- 3.14.4 When resources permit, the NSW SES assists Council, RMS or the Police by erecting road closure signs and barriers.
- 3.14.5 In flood events, the NSW SES Incident Controller may direct the imposition of traffic control measures. The entry into flood affected areas will be controlled in accordance with the provisions of the State Emergency Service Act, 1989 (Part 5, Sections 19, 20, 21 and 22) and the State Emergency Rescue Management Act, 1989 (Part 4, Sections 60KA, 60L and 61).
- 3.14.6 Police, RMS or Council officers closing or re-opening roads or bridges affected by flooding are to advise the NSW SES Camden Local Headquarters, which will then provide a road information service to local emergency services, the public and the NSW SES Sydney Southern Region Headquarters. All such information will also be passed to the Police, RMS and the Council.

3.15 STRANDED TRAVELLERS

- 3.15.1 Flood waters can strand travellers. Travellers seeking assistance will be referred to the Welfare Services Functional Area for the arrangement of emergency accommodation.

3.16 MANAGING PROPERTY PROTECTION OPERATIONS

Strategy

- 3.16.1 Protect the property of residents and businesses at risk of flood damage.

Actions

- 3.16.2 The NSW SES is the responsible agency for the coordination of operations to protect property.
- 3.16.3 Property may be protected from floods by;
 - a. Lifting or moving of household furniture.
 - b. Lifting or moving commercial stock and equipment.
 - c. Sandbagging to minimise entry of water into buildings.
- 3.16.4 The NSW SES Camden Local Headquarters maintains a small stock of sandbags, and back-up supplies are available through the NSW SES Sydney Southern Region Headquarters. A motorised sandbag-filling machine is

available from NSW SES Liverpool Unit. Alternatively, local concrete trucks may be used.

3.17 MANAGING FLOOD RESCUE OPERATIONS

Strategy

- 3.17.1 Rescue of people and animals from floods.

Actions

- 3.17.2 The NSW SES Sydney Southern Headquarters controls flood rescue in Camden LGA during a flood emergency.
- 3.17.3 Flood rescues, may be carried out by accredited units in accordance with appropriate standards.
- 3.17.4 Additional flood boats and crews can be requested through the NSW SES Sydney Southern Region Headquarters.
- 3.17.5 There may be some residual population which did not evacuate during the early stages of flooding and which require rescue.

3.18 MANAGING EVACUATION OPERATIONS

Strategy

- 3.18.1 When there is a risk to public safety, evacuation is the primary strategy. Circumstances may include;
- a. Evacuation of people when their homes or businesses are likely to flood.
 - b. Evacuation of people who are unsuited to living in isolated circumstances, due to flood water closing access.
 - c. Evacuation of people where essential energy and utility services are likely to fail, have failed or where buildings have been made uninhabitable.

Actions

- 3.18.2 The evacuation operation will have the following stages:
- a. Decision to evacuate.
 - b. Mobilisation (mobilisation may begin prior to the decision to evacuate).
 - c. Evacuation Warning delivery.
 - d. Evacuation Order delivery.
 - e. Withdrawal.
 - f. Shelter.
 - g. Return.
- 3.18.3 During floods evacuations will be controlled by the NSW SES. Small-scale evacuations will be controlled by the NSW SES Incident Controller. Should the

scale of evacuation operations be beyond the capabilities of local resources control may be escalated to the NSW SES Operational Area Commander.

Decision to evacuate

- 3.18.4 In most cases the decision to evacuate rests with the NSW SES Incident Controller who exercises his/her authority in accordance with Section 22 (1) of The State Emergency Service Act 1989. However, the decision to evacuate will usually be made after consultation with the NSW SES Operational Area Commander and the Local Emergency Operations Controller.
- 3.18.5 In events that require large scale evacuations, the decision to evacuate may be escalated to the NSW SES Operational Area Commander or the State Operations Controller.
- 3.18.6 Some people will make their own decision to evacuate earlier and move to alternate accommodation, using their own transport. This is referred to as self-managed evacuation (8).

Mobilisation

- 3.18.7 The NSW SES Incident Controller will request the following personnel for doorknock teams for designated Sectors/locations:
 - a. NSW SES Camden Unit members.
 - b. RFS members via the RFS Fire Control Officer.
 - c. Local Police Force officers via the local area command.
- 3.18.8 The NSW SES Operational Area Commander will request any additional personnel required to assist with doorknock teams using;
 - a. NSW SES members from the NSW SES Sydney Southern Region and surrounding NSW SES Regions.
 - b. FRNSW personnel arranged via the FRNSW Liaison Officer.
 - c. RFS personnel arranged via the RFS Liaison Officer.
- 3.18.9 The NSW SES Incident Controller will request the Chairperson of the LEMC to provide Council personnel to assist with traffic coordination within Sector(s)/Community.
- 3.18.10 The NSW SES Incident Controller will arrange liaison officers for Sector Command Centres.
- 3.18.11 The NSW SES Operational Area Commander will request the required number of buses for Sectors via the Transport Services Functional Area.

Delivery of Evacuation Warnings and Evacuation Orders

- 3.18.12 The NSW SES will advise the community of the requirements to evacuate. The NSW SES will issue an **Evacuation Warning** when the intent of an NSW SES Incident Controller is to warn the community of the need to prepare for a possible evacuation.

- 3.18.13 The NSW SES will issue an **Evacuation Order** when the intent of the NSW SES Incident Controller is to instruct a community to immediately evacuate in response to an imminent threat.
- 3.18.14 The NSW SES Incident Controller will distribute Evacuation Warnings and Evacuation Orders to;
- a. Sector/Division Command Centres (where established).
 - b. Camden Local Emergency Operations Centre.
 - c. Camden Council.
 - d. Camden Police Local Area Command.
 - e. Macarthur Rural Fire Service Control Centre.
 - f. Radio Stations.
 - g. Other local agencies and specified individuals.
- 3.18.15 The NSW SES Operational Area Commander will distribute Evacuation Warnings and Evacuation Orders to;
- a. The NSW SES State Operations Centre.
 - b. The NSW SES Incident Controller.
 - c. Metropolitan media outlets via the Joint Media Information Centre.
 - d. Affected communities via dial-out warning systems where installed or applicable.
 - e. Relevant media outlets and agencies.
- 3.18.16 Evacuation Warnings and Evacuation Orders may be delivered through;
- a. Radio and television stations.
 - b. Doorknocking by emergency service personnel.
 - c. Public address systems (fixed or mobile).
 - d. Telephony-based systems (including Emergency Alert).
 - e. Two-way Radio.
- 3.18.17 The Standard Emergency Warning Signal (SEWS) may be used to precede all Evacuation Orders broadcast on Radio Stations.
- 3.18.18 Sector Commanders, where established, will distribute Evacuation Orders via Emergency Service personnel in doorknock teams to areas under threat of inundation.
- 3.18.19 Doorknock teams will work at the direction of;
- a. The Sector Commander if a Sector Command Centre is established.
 - b. The relevant Division Commander where a Sector Command Centre has not been established.
 - c. The Incident Controller.

- 3.18.20 Field teams conducting doorknocks will record and report back the following information to their Sector Commander/Division Commander/ Incident Controller;
- a. Addresses and locations of houses doorknocked and/or evacuated.
 - b. The number of occupants.
 - c. Details of support required (such as transport, medical evacuation, assistance to secure house and/or property and raise or move belongings).
 - d. Details of residents who refuse to comply with the Evacuation Order.
- 3.18.21 Refusal to evacuate. Field teams should not waste time dealing with people who are reluctant or refuse to comply with any Evacuation Order. These cases are to be referred to the NSW Police Force.

Withdrawal

- 3.18.22 Evacuations will generally be carried out in stages starting from the lowest areas, low flood islands and low trapped perimeters; and progressively from higher areas.
- 3.18.23 The most desirable method of evacuation is via road using private transport. This may be supplemented by buses for car-less people. However, other means of evacuation may also be used if available and as necessary (e.g. by foot, rail, air).
- 3.18.24 Evacuees who require emergency accommodation or disaster welfare assistance will be directed to designated evacuation centres. Evacuees who have made their own accommodation arrangements will not be directed to evacuation centres. It is not possible to determine in advance how many will fall into this category.
- 3.18.25 Evacuees will:
- a. Move under local traffic arrangements from the relevant Sectors/Community via managed evacuation routes;
 - b. Continue along the suburban/regional/rural road network to allocated Evacuation Centres.
- 3.18.26 **Health Services.** The Health Services Functional Area will coordinate the evacuation of hospitals, health centres and aged care facilities (including nursing homes).
- 3.18.27 **Schools.** School administration offices (Department of Education and Communities, Catholic Education Office and Private Schools) will coordinate the evacuation of schools if not already closed.
- 3.18.28 If there is sufficient time between the start of response operations and the evacuation of communities, the NSW SES Operational Area Commander will discuss the temporary closure of appropriate schools with the Regional Director, Macarthur Principal Network, Department of Education and

- Communities. This will enable pupils to stay at home or be returned home so they can be evacuated (if required) with their families.
- 3.18.29 Note that in the Camden LGA, school principals may close some schools affected by flooding in the early stages of flooding.
- 3.18.30 **Caravan parks.** When an evacuation order is given occupiers of moveable dwellings should:
- Isolate power to moveable dwellings.
 - Collect personal papers, medicines, a change of clothing, toiletries and bedclothes.
 - Lift the other contents in any remaining dwellings as high as possible.
 - Move to friends, relatives or a designated evacuation centre if they have their own transport, or move to the caravan office to await transport.
 - If undertaking self-managed evacuation, register their movements with the caravan park management upon leaving the park.
- 3.18.31 Where possible, dwellings that can be moved will be relocated by their owners. Park managers will arrange for the relocation of moveable dwellings as required. Council and NSW SES personnel may assist if required.
- 3.18.32 Caravan park managers will ensure that their caravan park is capable of being evacuated in a timely and safe manner.
- 3.18.33 Advise the NSW SES Incident Controller of:
- The number of people requiring transport.
 - Details of any medical evacuations required.
 - Whether additional assistance is required to effect the evacuation.
- 3.18.34 Check that all residents and visitors are accounted for.
- 3.18.35 Inform the NSW SES Incident Controller when the evacuation of the caravan park has been completed.
- 3.18.36 Provide the NSW SES Incident Controller with a register of people that have been evacuated.
- 3.18.37 **Assistance Animals, Pets and Companion Animals of Evacuees:** Assistance animals (guide dogs, hearing assistance animals, etc.) will remain in the care of their owners throughout the evacuation. This includes transport and access into evacuation centres etc.
- 3.18.38 Where possible owners should take their companion animals with them when they are asked to evacuate. Due to safety restrictions, it may not be possible to allow companion animals to accompany their owners when being transported via aircraft or flood rescue boat. In such circumstances Agriculture and Animal Services will coordinate separate arrangements for evacuation and care of companion animals

- 3.18.39 **Transport and storage:** Transport and storage of furniture from flood threatened properties will be arranged as time and resources permit.
- 3.18.40 **Security:** The NSW Police Force will coordinate the provision of overall security for evacuated areas.
- 3.18.41 The NSW SES Incident Controller is to provide the following reports to the NSW SES Sydney Southern Region Headquarters:
- a. Advice of commencement of the evacuation of each Sector,
 - b. Half-hourly progress reports (by Sectors) during evacuations,
 - c. Advice of completion of the evacuation of each Sector.
- 3.18.42 **Assembly areas:** An assembly area is a designated location used for the assembly of emergency-affected persons before they move to temporary accommodation or a nominated evacuation centre. As such these areas do not provide welfare assistance nor are they used for long term sheltering or provision of meals. An assembly area may also be a prearranged, strategically placed area, where support response personnel, vehicles and other equipment can be held in readiness for use during an emergency.

Shelter

- 3.18.43 **Evacuation Centres:** Evacuees will be advised to go to friends or relatives, or else be taken to the nearest accessible evacuation centre, which may initially be established at the direction of the NSW SES Incident Controller, but managed as soon as possible by Welfare Services.
- 3.18.44 **Registration:** The NSW Police Force will facilitate the requirement of Disaster Victim Registration for people evacuated to designated evacuation centres.
- 3.18.45 **Animal shelter:** Facilities to hold and care for companion animals of evacuees will be coordinated by Agriculture and Animal Services if required. If required Agriculture and Animal Services will also coordinate refuge areas for livestock (e.g. horses) where feasible.

Return

- 3.18.46 The NSW SES Incident Controller will advise when return to evacuated areas is safe after flood waters have receded and reliable access is available.
- 3.18.47 The NSW SES Incident Controller will determine when it is safe for evacuees to return to their homes in consultation with:
- a. The Recovery Coordinating Committee (if established)
 - b. Welfare Services Functional Area Coordinator (welfare of evacuees)
 - c. Engineering Services Functional Area Co-ordinator (safety of buildings, structural integrity of levees/dams)
 - d. Health Service Functional Area Coordinator (public health)
 - e. Transport Services Functional Areas Coordinator (arrangement of transport)

- f. The Camden LEOCON
 - g. The Camden Council
 - h. NSW SES Operational Area Commander
 - i. Other appropriate agencies/functional areas as required (mitigation and advice regarding identified risks resulting from the flood event).
- 3.18.48 Once it is considered safe to do so, the NSW SES Incident Controller will authorise the return of evacuees.
- 3.18.49 The return will be controlled by the NSW SES Incident Controller and may be conducted, at their request, by the Recovery Coordinator.

3.19 MANAGING RESUPPLY OPERATIONS

- 3.19.1 The NSW SES is responsible for the coordination of the resupply of isolated communities and properties.
- 3.19.2 If isolation is expected to occur, residents should be encouraged to consider their needs and suitability for an unknown period of isolation.
- 3.19.3 If properties/communities are going to remain in locations expected to become isolated, households/retailers should be encouraged to stock up on essential supplies.
- 3.19.4 Where practicable, once supplies are delivered to the NSW SES designated loading point, the NSW SES Incident Controller will arrange for the delivery of essential foodstuffs, fuels or urgent medical supplies required by an isolated property or community.
- 3.19.5 All reasonable effects will be made to deliver supplies, however where necessary the NSW SES will prioritise the delivery of items.

Resupply of Isolated Communities

Strategy

- 3.19.6 Minimise disruption upon the community by resupplying towns and villages which have become isolated as a consequence of flooding.

Actions

- 3.19.7 The NSW SES is responsible for the coordination of the resupply of isolated communities.
- 3.19.8 If flood predictions indicate that areas are likely to become isolated, the NSW SES Incident Controller should advise retailers that they should stock up.
- 3.19.9 When isolation occurs, retailers will be expected to place orders with suppliers where they have a line of credit and to instruct those suppliers to package their goods and deliver them to loading points designated by the NSW SES.

- 3.19.10 The NSW SES is prepared to deliver mail to isolated communities but may not be able to do so according to normal Australia Post timetables.
- 3.19.11 The NSW SES will assist hospitals with resupply of linen and other consumables where able.

Resupply of Isolated Properties

Strategy

- 3.19.12 Ensure supplies are maintained to properties by coordinating the resupply of properties which have become isolated as a consequence of flooding.

Actions

- 3.19.13 The resupply of isolated properties is a common requirement during floods and coordination can be difficult because requests can emanate from a variety of sources. Isolated properties may call their suppliers direct, place their orders through their own social networks or contact the NSW SES.
- 3.19.14 The principles to be applied when planning for the resupply of isolated properties are;
- The NSW SES will coordinate resupply and establish a schedule.
 - Some isolated households will not have the ability to purchase essential grocery items due to financial hardship. If an isolated household seeks resupply from the NSW SES and claims to be, or is considered to be, in dire circumstances, he/she is to be referred to Welfare Services for assessment of eligibility. Where financial eligibility criteria are met, Welfare Services will assist with the purchase of essential grocery items. Welfare Services will deliver the essential grocery items to the NSW SES designated loading point for transport.
 - Local suppliers will liaise with the NSW SES regarding delivery of resupply items to the designated loading point.
 - Local suppliers are responsible for packaging resupply items for delivery.
- 3.19.15 A flowchart illustrating the Resupply process is shown in Attachment 1. Please note that the flowchart outlines the resupply process but does not encompass all potential situations and/or outcomes.

PART 4 - RECOVERY

4.1 RECOVERY COORDINATION AT THE LOCAL LEVEL

- 4.1.1 The NSW SES Camden Local Controller will ensure that planning for long-term recovery operations begins at the earliest opportunity, initially through briefing the Local Emergency Management Committee (LEMC). As soon as possible the LEMC will meet to discuss recovery implications including the need for a Local Recovery Committee. The LEMC will consider any impact assessment in determining the need for recovery arrangements. This is conveyed in the first instance to the State Emergency Operations Controller (SEOCN) for confirmation with the State Emergency Recovery Controller (SERCON).
- 4.1.2 Once the need for recovery has been identified, the SERCON, in consultation with the SEOCN, may recommend the appointment of a Local Recovery Coordinator and nominate an appropriate candidate to the Minister for Police and Emergency Services.
- 4.1.3 The SERCON may send a representative to the LEMC and subsequent recovery meetings to provide expert recovery advice and guidance.
- 4.1.4 The NSW SES Camden Local Controller and Local Emergency Operations Controller (LEOCN) attend recovery meetings to provide an overview of the emergency response operation.
- 4.1.5 The NSW SES Operational Area Commander, the Regional Emergency Management Officer and appropriate Regional Functional Area Coordinators will be invited to the initial local meeting and to subsequent meetings as required.
- 4.1.6 The recovery committee will:
 - a. Develop and maintain a Recovery Action Plan with an agreed exit strategy.
 - b. Monitor and coordinate the activities of agencies with responsibility for the delivery of services during recovery.
 - c. Ensure that relevant stakeholders, especially the communities affected, are involved in the development and implementation of recovery objectives and strategies and are informed of progress made.
 - d. Provide the SERCON with an end of recovery report.
 - e. Ensure the recovery is in line with the National Principles of Disaster Recovery and the NSW tenets.

4.2 RECOVERY COORDINATION AT THE REGION AND STATE LEVEL

- 4.2.1 In the event that an emergency affects several local areas, a Region Emergency Management Committee (REMC) will meet to discuss recovery

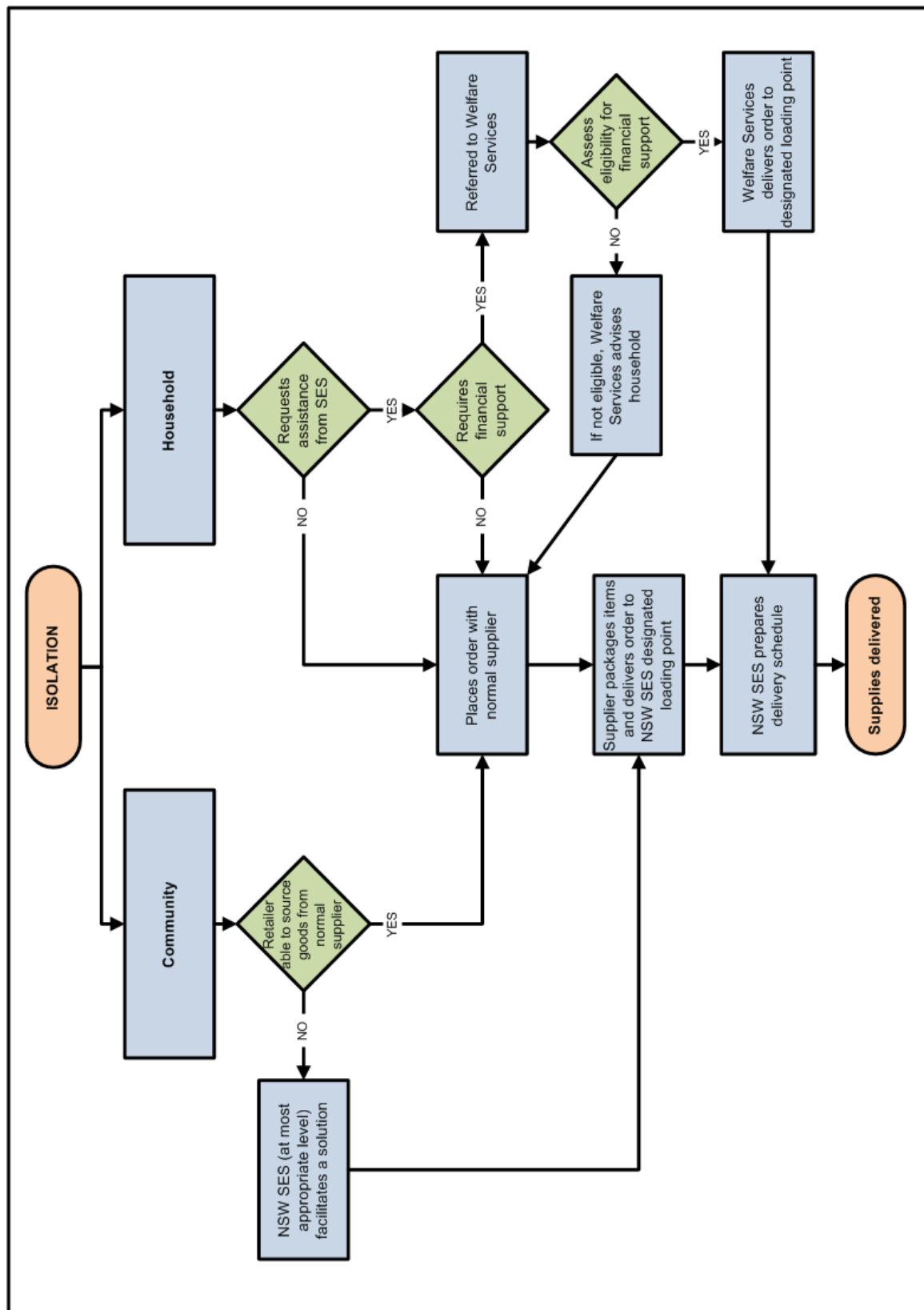
implications including the need for a Region Recovery Committee. This is conveyed in the first instance to the SEOCON for confirmation with the SERCON.

- 4.2.2 In the event of an emergency which affects multiple regions, or is of state or national consequence, or where complex, long term recovery and reconstruction is required, it may be necessary to establish a State Recovery Committee and the appointment of a State Recovery Coordinator.

4.3 ARRANGEMENTS FOR DEBRIEFS / AFTER ACTION REVIEWS

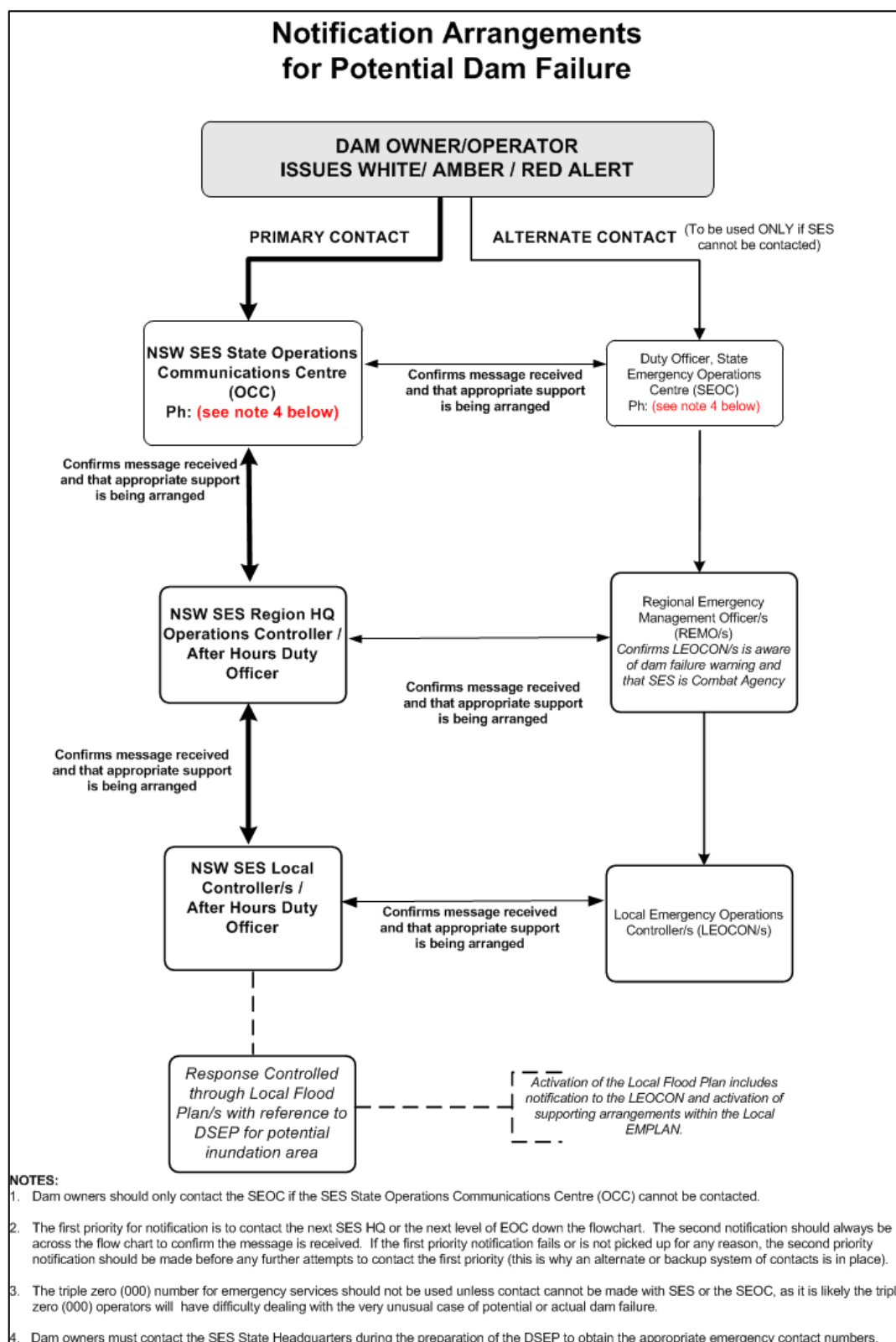
- 4.3.1 As soon as possible after flooding has abated, the NSW SES Camden Local Controller will advise participating organisations of details of response operation after action review arrangements.
- 4.3.2 The NSW SES Camden Local Controller will ensure that adequate arrangements are in place to record details of the after action review and each item requiring further action is delegated to an organisation or individual to implement.
- 4.3.3 Follow-up to ensure the satisfactory completion of these actions will be undertaken by the Camden Local Emergency Management Committee.

ATTACHMENT 1 - RESUPPLY FLOWCHART

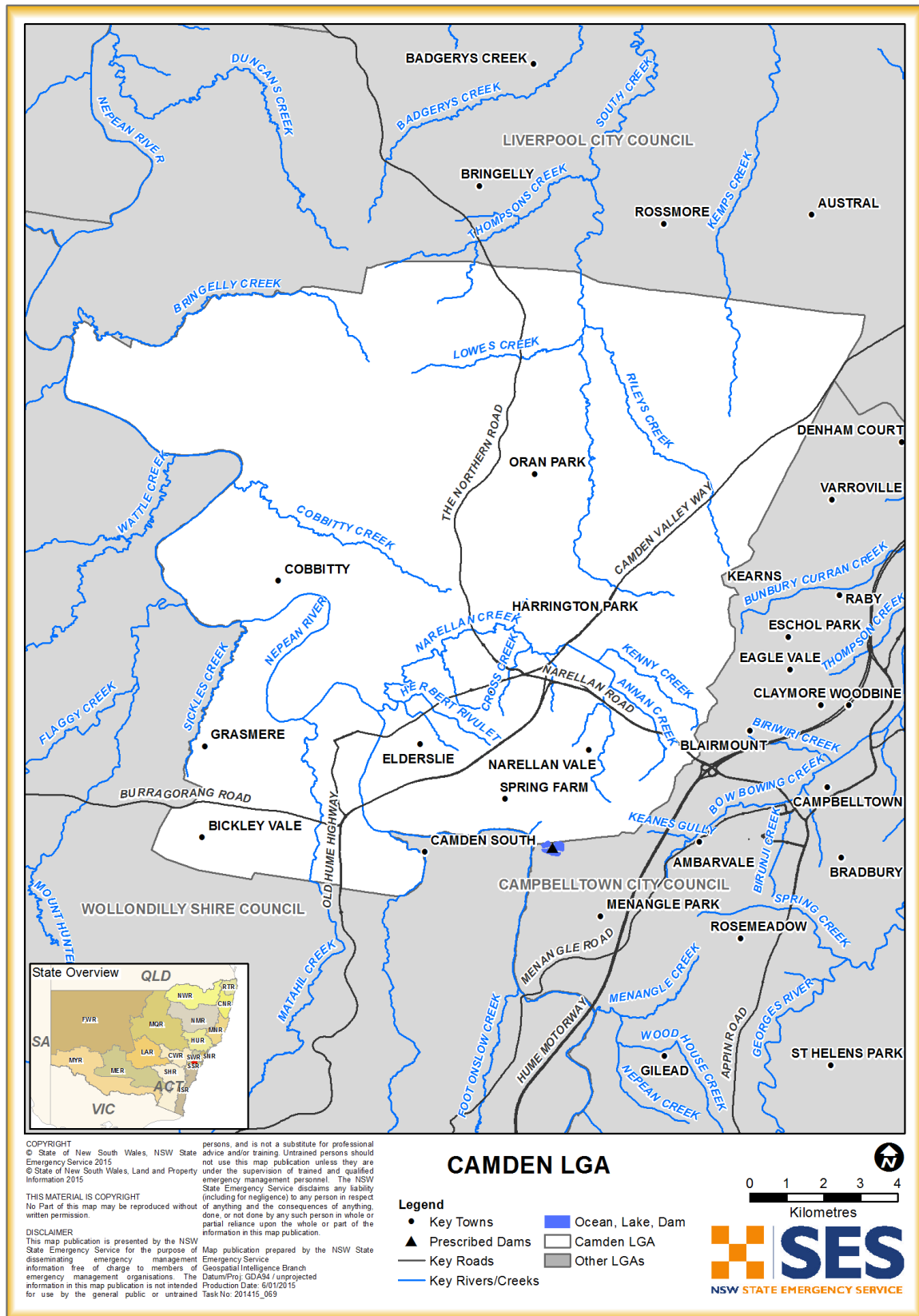


Please Note: The chart outlines the resupply process, but does not encompass all potential situations and outcomes.

ATTACHMENT 2 - DAM FAILURE ALERT NOTIFICATION ARRANGEMENTS FLOWCHART



ATTACHMENT 3 - CAMDEN LGA MAP



LIST OF REFERENCES

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HAZARD AND RISK IN CITY OF CAMDEN

Volume 2 of Camden Local Flood Plan

Last Update: Aug 2010

ANNEX A - THE FLOOD THREAT

Overview

The area covered by this plan is the Camden Local Government Area (LGA) which represents an area of approximately 206 square kilometres. The Camden LGA is bisected by the Nepean River. The tributaries of the Nepean River are the Cordeaux, Cataract and Avon Rivers. Dams under the control of Sydney Water have been constructed on all four rivers.

Consisting of three main population centres: Camden and South Camden (to the South of Nepean River); Elderslie (adjacent to Camden on the North side of the Nepean) and Narellan (including the suburbs of Harrington Park, Currans Hill and Mt Annan). In addition to this, Camden LGA also encompasses the village of Cobbitty and rural residential areas in Ellis Lane, Grasmere and Kirkham; as well as the northern areas of Rossmore, Catherine Field, Bringelly, Leppington and Oran Park.

The areas affected by flood are generally on the fringes of the flood; however areas of Camden to the north and east of the town centre can be affected by waters up to 4m in depth during major flooding. Similar depths can affect the residential areas upstream of Cowpasture Bridge.⁴

Flooding is a relatively frequent occurrence in the Upper Nepean Valley. Periodically, water from the Nepean River flows across the floodplains and into low lying areas of the Camden Township, parts of South Camden and Elderslie and the extensive floodplains associated with the Narellan and Matahil Creeks.

Flooding from these particular tributary streams, as well as Navigation, Sickles, Cobbitty and Bringelly Creeks can also cause flooding in the Camden LGA.⁵

Landforms and River Systems

The Upper Nepean River catchment has an area of about 1800 square kilometres, comprising the Nepean River and its tributaries upstream of the confluence with the Warragamba River. At Cowpasture Bridge, Camden, the catchment area is some 1380 square kilometres.

The largest of the River's floodplains occurs in the immediate vicinity of Camden. The Nepean River runs along the northern and eastern boundaries of Camden and is joined by Matahil, Sickles, Narellan and Navigation Creeks near the town. Most of the floodplain is less than 80m above sea level. Towns and villages affected by flooding are:

- a) Camden (including Camden, Camden South, Camden East and Elderslie) affected by flooding from the Nepean River.
- b) Cobbitty affected by flooding from the Nepean River.
- c) Parts of the Rossmore area are affected by flooding from the South Creek particularly in the Masterfield/Barry Avenue areas. Flood mitigation work carried out in this area is expected to significantly reduce the effect of flooding in this area.

⁴ Upper Nepean Floodplain Management Study & Plan 2001

⁵ Upper Nepean Floodplain Management Study & Plan 2001

- d) Numerous small creeks flowing into the Nepean River and South Creek can also cause flash flooding problems anywhere within the LGA.

Storage Dams

The Upper Nepean Catchment contains four dams- Nepean, Avon, Cataract and Cordeaux. Nepean and Avon dam drain that part of the catchment extending from Bargo south to Robertson. Cataract and Cordeaux dam drain the eastern part of the catchment extending to the escarpment above Wollongong. All the dams have unregulated spillways and are under the control of Sydney Water. There are no confirmed deficiencies at these dams and the risk of failure is considered to be low.

Weather Systems and Flooding

Floods are usually caused by the existence of depressions centred off the coast between Wollongong and Newcastle causing heavy rain across the catchment. Many localities in the catchment have received in excess of 175mm in a 24 hr period.

Characteristics of Flooding⁶

Floods are characterized by rapid river rises with flooding commencing as quickly as 6-12 hrs after the commencement of heavy rain if the catchment is already saturated. Under flood conditions, the Nepean River overflows its banks and commences to inundate the low lying floodplain around Camden during floods of 8.5m on the Cowpasture Bridge gauge.

The areas along the minor tributaries (especially the Narellan and Matahil Creeks) are affected by backwater flooding from the Nepean river, where large areas of low lying land is inundated to a depth that may exceed 8m in a 1% AEP (15.85m Camden Bridge gauge) event.

The tributaries themselves have relatively small catchments and therefore generally do not contribute significantly to flooding in the main river. They do pose flooding problems themselves, mainly affecting low-level road crossings and lower lying residential and 'rural residential' areas in Grasmere and Ellis Lane (both of which are affected by Sickles Creek).

⁶ Upper Nepean Floodplain Management Study 2001 (SMEC)

Flood History

Floods have occurred in all months of the year. The highest recorded flood at Camden occurred in 1873, when a height of 16.5m was recorded on the Camden gauge (approximately a 200yr ARI). Other major floods occurred in 1860 (14.1m), 1867 (14.0m), and 1898 (15.2m). In recent times, major floods have occurred in 1964 (14.1m) and 1978 (13.5m) with moderate to major flooding occurring in 1975 (12.8m) and 1988 (12.8m).

Date	Peak Gauge Height (m)	Date	Peak Gauge Height (m)
Oct 1860	14.19	Aug 1963	10.95
June 1867	14.02	June 1964	14.08
Feb 1873	16.53	Nov 1969	11.00
Feb 1898	15.21	June 1975	12.80
June 1949	12.62	March 1978	13.45
June 1950	12.46	April 1988	12.80
July 1952	11.48	Aug 1990	10.65
Feb 1956	12.42		

Table 1: Historical Flood Levels at Cowpasture Bridge⁷

Minor	Moderate	Major
6.80m	8.30m	13.80m

Table 2: Design Heights of Cowpasture Bridge

Flood Mitigation Systems

Rossmore Levee: An earthen levee 1,300m in length and up to 3m in height has been constructed in Masterfield Street, Rossmore. Designed to protect flood affected properties in Masterfield Street from flooding during a 1% (15.85m Camden Bridge gauge) event.

Extreme Flooding

Floods to a height of 15.5m (100yr ARI) would result in over-floor flooding of 166 residential and 72 commercial buildings in Camden alone and require the evacuation of approximately 1600 people. Further properties may be affected by over-ground flooding. Communities in Cut Hill Road, Cobbitty, Ellis Lane and Elderslie would be isolated.

In a PMF event, 800 homes and 175 commercial premises in Camden alone will be affected by over-floor and require evacuation. Further properties may be affected by over-ground flooding.

⁷ Upper Nepean Floodplain Management Study

ANNEX B - EFFECTS OF FLOODING ON THE COMMUNITY

Community Profile

Census Description	LGA	Cobbitty (L)	Grasmere (L)	Elderslie (L)
Total Persons	49646	656	825	754
Total Dwellings	15598	220	231	232
Total persons aged 65 years and over	4220	67	36	42
Total persons aged below 15 years	12688	136	246	175
Total persons of indigenous origin	649	12	0	6
Single parent families	1890	12	14	11
Persons living alone	2226	25	13	12
Total persons who do not speak English well	380	4	0	3
Households without vehicles	573	3	0	3
Total persons residing in caravans, cabins or houseboats	125	0	0	0
Mean household size	3	3	3.7	3.4

Table 2: Breakdown of Flood Affected Communities in Camden LGA⁸

⁸ ABS 2006 Census Data – www.abs.gov.au

Specific Risk Areas

Camden/South Camden/Elderslie

At 10.0m on the Camden gauge⁹, flooding initially affects the low lying residential/commercial developments in Edward, Exeter and Chellaston Streets and backyards in Alpha Road. Water enters rear yard of industrial property in Edward Street, isolates two houses in Peter Avenue and also enters back yards in Alpha Road. This is also the floor level of three industrial units on the corner of Edward Street & Camden Valley Way. The Swimming Pool in Mitchell Street and Tennis Courts at Onslow Park are also inundated.

As flood levels increase to 11.0m, properties in Elizabeth, Mitchell and Barsden Streets are affected along with properties in Lerida and Peter Avenues. The Service Station at the corner of Barsden Street & Cawdor Road is affected as are the Camden Bowling Club Greens (Cawdor Road), Camden Bowling Club Clubhouse (10.8m); The Crown Hotel (cnr Murray, Argyle & Cawdor Roads), the Service Station on Camden Valley Way has over floor flooding. Access to Cawdor Road is cut at 11.0m.

By 12.0m Houses in Exeter Street Camden & Milford Road Ellis Lane, have over-floor flooding as do more properties in Edward Street and Chellaston Street. Several industrial and commercial properties in these streets also have over-floor flooding.

In extreme floods (greater than 14.0m), the Macarthur Bridge (and by-pass) is closed for safety reasons. Access via Wallacia is cut at Wallacia during 'normal' flooding, but under extreme flooding there is no westerly access.

This situation would require all traffic to head south to Picton and onto the southern freeway, but in an extreme flood, the freeway bridges may also be closed for safety reasons thereby isolating Camden and other points south

Depth of water above Floor (m)	Number
> 4.0	7
3.0 – 4.0	20
2.0 – 3.0	43
1.0 – 2.0	44
0.0 – 1.0	52

Table 3: Properties in Camden, South Camden and Elderslie affected by 1% AEP flood¹⁰

⁹ Located at Cowpasture Bridge

¹⁰ Upper Nepean Floodplain Management Study, 2001 (SMEC)

Narellan (including Harrington Park, Narellan Vale, Currans Hill & Smeaton Grange)

These developments are designed to be above the 1% AEP flood that may occur within Narellan creek and its tributaries. Only Harrington Park where it is adjacent to Narellan Creek is liable to flooding from the main Nepean River and this would be backwater rather than high velocity, direct flooding.

Only under floods greater than 16.5m (Camden gauge) would large areas of Harrington Park be flooded. The issue that arises in Narellan is access during major to extreme floods, particularly access from Harrington Park along The Northern Road.

There are a number of road crossings within the Smeaton Grange development that may be cut during floods greater than 16.5m on the Camden Bridge gauge.

Cobbitty

The village is generally located on a high ridge and is not affected by mainstream flooding. The main impact (in terms of inundation and isolation) is on the rural properties surrounding the village centre. These can be directly affected by the mainstream, by the backwater up Cobbitty or Bringelly Creeks or by direct flooding from the Creeks.

Road access to Cobbitty is also cut during moderate floods (12.10m @ Camden Gauge).

Rural Areas – Ellis Lane, Grasmere and Kirkham

Ellis Lane and Grasmere are affected to varying degrees by either mainstream flooding, backwater flooding in Matahil or Sickles Creeks or by the Creeks alone. The majority of properties are not affected by a 1% AEP event; however, Sickles Creek affects the back boundaries of properties on the western periphery of Ellis Lane & Grasmere. Larger properties in the northernmost part of Ellis Lane are directly affected by Nepean River flooding.

Milford Rd in Ellis Lane is severely impacted by Sickle Creek flooding. The most affected dwelling in Milford Rd is inundated by the 5 % AEP flood to a depth of approx. 1.47m above floor height; the 2% AEP to 2.48m and the 1% AEP to 3.6m above floor height. Two properties are inundated by the 2% AEP and above. These and 6 additional dwellings affected by PMF to a depth ranging from 1 – 12m above floor height.

The majority of the properties in Kirkham Estate are not affected by a 1% AEP flood. Properties on the outskirts of Camelot Estate will have inundation on their southern boundaries and up to ½ their land inundated in a 1% AEP event.

The Ellis Lane area is affected by backwaters until a flood level is reached where flow commences to cross a low point north of Sunnyside Drive. As flood levels increase to 14.0m (Camden gauge) and above, this area becomes a major floodway isolating any residents not evacuated.¹¹

Camping Reserves

The only inundated camping area is within the Poplar Caravan Park. See Annex M for detailed information.

¹¹ Upper Nepean Floodplain Management Study & Plan 2001

Road Closures

At the onset of flooding, the low level bridge on Macquarie Grove Road is cut (3.8m). As flood levels rise to 8.5m, Kirkham Lane & Sheathers Lane are cut by the build-up of backwater in the Narellan creek and Matahil Creek flood plains.

When flood waters cut Camden Valley Way by overtopping Cowpasture Bridge, Camden and South Camden are partially isolated – the only direct access being Camden Valley way. In extreme floods (greater than 14.0m), the Macarthur Bridge (and by-pass) is closed for safety reasons. Access via Wallacia is cut at Wallacia during ‘normal’ flooding, but under extreme flooding there is no westerly access.

This situation would require all traffic to head south to Picton and onto the southern freeway, but in an extreme flood, the freeway bridges may also be closed for safety reasons thereby isolating Camden and other points south.

Effects on Utilities and Infrastructure¹²

Camden Aerodrome: Located northwest of Camden, is the only area suitable for Helicopter operations during floods. The main access road to the airport is cut at 3.80m; however alternate access remains available until 12m. During a 5% AEP (14.35m Camden gauge) flood, the south-western end of the Aerodrome becomes inundated and there is likely to be some encroachment on both runways. The majority of both runways are inundated in a 1% AEP (15.85m Camden gauge) flood, and both runways are under water during a PMF event.

Power Lines: Available information indicates that for flood events smaller than the 100 year ARI, there should be little risk of floodwater submerging the 66kV, 33kV or 11kV power lines. During a PMF event, the 66kV and 33kV feeders should be above the water level.

The 11kV line in the Sheathers Lane, Werombi Road, Burragorang Road, Cawdor Road area has some risk of submergence during a PMF event. All power lines in the Camden LGA are designed to be above the 1%AEP flood event but shut down rules & triggers exist. The transmission substation is above the PMF and only distribution voltage lines exist. Power shut down is conducted in order of conductor height i.e. lowest first.

Communications (telephone): Telstra has 3 major exchanges in the Camden area:

Cowpasture: Ironbark Ave, Camden South

Narellan: Narellan Road, Narellan

Cobbitty: Cnr Cobbitty & Cut Hill Roads, Cobbitty

All of which are located above the PMF level, however, while the exchanges are unlikely to be affected by floodwaters – other communication infrastructure, such as the pits, pillars and ‘above ground jointing posts’ are likely to be affected, which may affect services to some areas.

¹² Upper Nepean Floodplain Management Study & Plan 2001

SES RESPONSE ARRANGEMENTS FOR CAMDEN

Volume 3 of the Camden Local Flood Plan

Last Update: August 2010

ANNEX C - GAUGES MONITORED BY THE CAMDEN SES LOCAL HEADQUARTERS

Gauge Name	Type	AWRC No	Stream	Flood Classification			Reading Arrangements	Owner
				Min	Mod	Maj		
Camden (Bridge) ¹³	Manual	212900	Nepean River	6.8	8.3	13.8	* ‡	BoM
Menangle Weir	Telemetered	212239	Nepean River					SWB
Camden Weir	Telemetered	212216	Nepean River				*	SWB
Menangle Bridge	Manual	212904	Nepean River	5.2	9.2	12.2	‡	BoM

Notes:

1. The Bureau of Meteorology provides flood warnings for the gauges marked with an asterisk (*).
2. SES Local Flood Advices are provided for the gauges marked with a single cross (†).
3. The SES holds a Flood Intelligence Card for the gauges marked with a double cross (‡).

¹³ This gauge is located at Cowpasture Bridge

ANNEX D - DISSEMINATION OF SES FLOOD BULLETINS

The Sydney Southern SES Region Headquarters distributes SES Flood Bulletins and other flood related information (including Flood Warnings) to a number of regional media outlets through the Media Net online distribution lists.

Television Stations:

Station	
ABN Channel 2	ATN Channel 7
Channel 10 NSW	SBS TV
TCN Channel 9	Sky News Australia
NHK Sydney (Japan Broadcasting Corporation)	WIN
Prime	

Commercial Radio Stations:

Station			
2CH	2 Day FM	2GB	2SM
2UE	702 ABC Sydney	96.1 The Edge FM	Mix 106.5 FM
Nova 96.9 FM	Radio National	SBS Radio Sydney	Triple J (National)
Triple M Sydney	WS FM 101.7	Vega 95.3 FM	

Newspapers and other Print Media:

Name	Location
Australian Financial Review	The Australian
Daily Telegraph	News Limited
Sun Herald	Sunday Telegraph
Sydney Morning Herald	

Other Agencies:

All other agencies listed under this plan and the Camden Local DisPlan will be sent flood bulletins.

Community Radio Stations:

Station	Intended Audience
2MBS	Classical & jazz station Sydney
2RPH	Radio Reading Service for the Print Handicapped
C91.3 FM	Macarthur First Radio
Koori Radio – Sydney	Indigenous Sydneysiders
Skid Row 88.9 FM	Reaching Leichardt, Marrickville and City of Sydney
2CCR FM	Cumberland Community Radio
2NBC	Christian Channel reaching Canterbury, Rockdale, Marrickville, Kogarah, Hurstville.
2SSR	Sutherland Shire Radio
FM 99.3	Sydney's North Shore
Radio 2 Moro	Sydney Arabic Radio
The Voice of Islam	Islamic Radio based at Lakemba
2CR	China Radio Network
2RDJ	Reaching the inner west – Ashfield, Strathfield, Burwood, Canada Bay
89.7 East Side Radio	Reaching the eastern suburbs – Botany, Waverley, Woollahra, Randwick, City of Sydney
Hawkesbury Radio	Hawkesbury Region
Radio B FM	Bankstown City Radio
WOW FM	Penrith Valley
2SER FM	Sydney Educational Radio – based at North Ryde & UTS Sydney
2MCR FM	Macarthur Community Radio
2RRR	Ryde Regional Radio
FM 103.2	Sydney's Contemporary Christian Radio Channel
Ninefourone	Illawarra Christian Radio
SWR FM	Reaches Blacktown, Holroyd and Fairfield
2ME	Sydney Arabic Radio
FBI Radio	Reaches across the Sydney Basin from Katoomba to Gosford to Wollongong

ANNEX E - TEMPLATE EVACUATION WARNING MESSAGE FOR THE CAMDEN LOCAL GOVERNMENT AREA

Evacuation Warning for []

Date/Time of Issue: []

Authorised By: []

The Bureau of Meteorology has predicted a flood level of [] metres at [] (*place*) at [] (*time*). This means that the following area(s) may be inundated [].

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

To prepare for evacuation, you should:

- Raise belongings by placing them on tables, beds and benches. Put electrical items on top. Some items may be able to be placed in ceilings.
- Gather medicines, personal and financial documents and mementos together to take with you.
- Listen to radio stations ABC 702 and C91.3FM for further information and to confirm this warning.
- If possible, check to see whether your neighbours need help.
- Make arrangements for care of pets or companion animals.

If evacuation is necessary:

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

ANNEX F - EVACUATION ARRANGEMENTS FOR THE CAMDEN LGA

Background

1. The responsibility for issuing any general evacuation order during flooding rests with the Camden SES Local Controller who exercises his/her authority in accordance with Section 22(1) of The State Emergency Service Act 1989 (as amended). However, the decision to evacuate will usually be made after consultation with the Local Emergency Operations Controller and the Sydney Southern SES Region Controller.
2. As far as possible, evacuation will be carried out before inundation occurs.
3. Some people will make their own decision to evacuate earlier and move to alternative accommodation using their own transport. These evacuees will be advised, via the media, to inform the Police or SES of their evacuation and their temporary address.
4. **Evacuation triggers.**

SECTOR	SUB-SECTOR	TRIGGER POINT ¹⁴
Northern	Cut Hill Road	7.0m
	Cobbitty	7.0m
	Kirkham	8.5m
Southern	Camden	9.0m
	Ellis Lane	8.5m
Eastern	Narellan	13.0m
	Elderslie	11.0m

Arrangements

5. **Control.** During floods evacuations will be controlled by the NSW SES. Small-scale evacuations will be controlled by the Camden SES Local Controller. Should the evacuations operations escalate beyond the capabilities of local resources control may be handed over to the Sydney Southern SES Region Controller.
6. **Conduct.** Evacuations will be controlled by the SES and conducted in four phases:

¹⁴ All heights are based on readings at the Camden Gauge

- a. Phase 1 - Warning.
 - b. Phase 2 – Withdrawal.
 - c. Phase 3 – Shelter.
 - d. Phase 4 – Return.
7. **Sector Management.** During major floods, the Camden LGA will be divided into sectors. Each Sector will be managed by the SES with assistance from other emergency Service Organisations as outlined in Annex G – L

Phase 1 – Warning

8. **Evacuation warnings.** On the receipt of flood warnings predicting peak heights 7.0m and above at the Camden gauge; the Camden SES Local Controller will determine the level of the threat and the need to consider evacuations, as per the Sector Evacuation Annexes G-L. Approximately 6 hrs notice should be able to given to residents to enable evacuation to take place.

As soon as possible after the decision to evacuate is made, the Camden SES Local Controller will issue evacuation warnings to the ‘at risk’ residents, indicating what people should do before evacuating and when actually doing so.

9. **Content of Evacuation Warnings and Evacuation Orders.** A template guide to the content of evacuation warning and evacuation order messages is at Annex E. These are disseminated via:
- The radio and TV stations listed in Annex D.
 - Door-knocks by emergency service personnel.
 - Public address systems from emergency service vehicles.
 - Telephone.
 - Two-way radio.
 - SES Flood Bulletins.

Phase 2 – Withdrawal

10. **Introduction.** Withdrawal involves the actual removal of the community/individuals from dangerous or potentially dangerous areas to safer areas.
11. **Movement.** Evacuees are to be encouraged to move using their own transport where possible. Camden SES can arrange transport for people by taxi or bus if required and when time and resources permit.
12. **Evacuation routes.** Evacuation routes are sector specific and described in detail in Sector Evacuation Annexes G - L.
13. **Registration.** Community Services will ensure that all evacuees are registered on arrival at evacuation centres and details of registrations are sent to the Local Emergency Operations Centre by the quickest means available.

14. **Special Needs Groups.** Special needs groups have been identified in the individual Sector Annexes (G-L) and the evacuation of these groups will be managed as a priority.
15. **Animals.**
In the event of a large-scale evacuation of the Camden area, animal shelter compound facilities will be set up for domestic animals and companion animals. These facilities will be operated by the I&I NSW.
- Assistance animals (guide dogs, hearing assistance animals, etc) will remain in the care of their owners throughout the evacuation. This includes transport and access into evacuation centres etc. Due to safety restrictions, it may not be possible to allow companion animals to accompany their owners when being transported via aircraft or flood rescue boats. I&I NSW will make separate arrangements for the evacuation and care of companion animals.
16. **Doorknocking.** Field teams conducting doorknocks will record and report back the following information back to the SES Operations Centre:
- Addresses and locations of houses doorknocked and/or evacuated.
 - The number of occupants.
 - Details of support required (such as transport, medical evacuation, assistance to secure house and/or property and raise or move belongings).
 - Details of residents who refuse to comply with the evacuation order.
17. **Refusal to evacuate.** Field teams should not waste time dealing with people who are reluctant or refuse to comply with any evacuation order. These cases should be referred to the Local Emergency Management Operations Controller who will arrange for Police to ensure their evacuation.
18. **Security.** The NSW Police Force will provide security for evacuated areas.
19. **Transport and storage.** Transport and storage of furniture from flood threatened properties will be arranged **ONLY IF** time and resources permit.

Phase 3 – Shelter

20. **Evacuation centres.** The usual purpose of evacuation centres is to meet the immediate needs of victims, not to provide them with accommodation. Evacuees will be advised to go to or be taken to the nearest accessible evacuation centre, which may initially be established at the direction of the Camden SES Local Controller but managed as soon as possible by Community Services. Any or all of the sites listed in Annexes G-L may be used as evacuation centres.

21. **Action on arrival.** On arrival, evacuees will be:
 - a. Registered;
 - b. Medically checked, if necessary; and
 - c. Provided with their immediate welfare needs.
22. **Animal shelter compounds.** Commercially operated animal shelter compounds are to be used for the domestic pets and companion animals of evacuees.

Phase 4 – Return

23. Once it is considered safe to do so, the Camden SES Local Controller will authorise the return of evacuees to their normal or alternative place of residence. This decision will be made in consultation with appropriate officers in regard to matters such as the electrical safety of buildings.
24. The return will be controlled by the Camden SES Local Controller and may be conducted, at his/her request, by CS.

ANNEX G - ARRANGEMENTS FOR THE EVACUATION OF COBBITTY/CUT HILL ROAD AREA/KIRKHAM SECTOR

General

1. The Cobbitty/Cut Hill Road Area/Kirkham Sector is divided into three sub-sectors: Cobbitty, Cut Hill Road Area & Kirkham (see maps 4 & 5). These sub-sectors become isolated. The Cut Hill Road Area is isolated in floods that reach 8.0m on the Camden Gauge and the Cobbitty and Kirkham sub-sectors become isolated at floods exceeding 8.4m on the Camden Gauge
2. When flood predictions indicate that the communities are likely to become isolated, the communities should be advised to stock up. Residents that are unsuitable for isolated conditions or are not prepared for isolation should be evacuated.
3. The **Cut Hill Road Area sub-sector** is delineated by Bringelly Creek, the Nepean River, Cobbitty Creek and Coates Park Road.
4. The Cut Hill Road Area consists of approximately 1100 people; 400 residential properties and is predominantly a rural residential area; with some working farms and staff.
5. Evacuation planning will commence upon predictions of 8.0m or above being received for the Camden Bridge gauge.
6. The **Cobbitty sub-sector** is delineated by Cobbitty Creek and the Nepean River. It includes Cobbitty Road from the intersection of Macquarie Grove Road and all streets bounded by the above mentioned water courses.
7. The Cobbitty sub-sector consists of approximately 1084 people; 346 residential properties and also houses the Cobbitty Pre-School & Primary School; as well as a number of facilities owned and staffed by the University of Sydney.
8. Evacuation planning will commence upon predictions of 8.0m or above being received for the Camden Bridge Gauge
9. The **Kirkham sub-sector** is delineated by the Nepean River, Narellan Creek, and Cobbitty sub-sector.
10. The Kirkham sub-sector consists of approximately 645 people; 184 residential properties and is also a residential area with a few rural holdings and the Mater Dei School.
11. Evacuation planning will commence upon predictions of 8.0m or above being received for the Camden Gauge

Sector Control

12. **Control.** The Camden SES Local Controller will control evacuations in this sector
13. **Conduct.** Evacuations in this sector will be conducted by the SES with assistance from NSW Police Force, NSW Rural Fire Service (Cobbitty & Bringelly brigades).

Sequencing of Evacuation

14. The following sequencing of evacuation within the sector is based on triggers of water levels predicted, by the BoM, to reach particular heights on the Camden Gauge. Once a prediction of flood height is received (in a BoM Flood Warning) a calculation of available time for evacuation can be made with respect to the following areas.
 - a. Cut Hill Road area. This area comprises the residential & rural properties in Cut Hill Road, Coates Park Road & Colonel Pye Drive. This area is likely to require evacuation first with Cut Hill Road being closed at 7.0m on the Camden Gauge
 - b. Cobbitty. This is the entire township of Cobbitty. Cobbitty Road at Cobbitty Bridge will close at 7.0m (Camden Gauge).
 - c. Kirkham. This includes the entire township of Kirkham. This area will require evacuation by 8.5m when Kirkham Lane is flooded by Narellan Creek.

Evacuation Centres

15. Bringelly Community Centre
Greendale Road, Bringelly
Kitchen facilities, tables & chairs.
Capacity: 50
SUITS: Cut Hill Road Sector
16. Teen Ranch
Cobbitty Road, Cobbitty
Fully equipped camp – sleeping for 140, full kitchen & dining facilities.
SUITS: Cobbitty Sector, Cut Hill Road Sector

17. Macarthur Anglican School
Cobbitty Road, Cobbitty
School Facilities
SUITS: Kirkham Lane Sector & Cobbitty Sector
18. Mater Dei College
229 Macquarie Grove Road, Camden
School & Function/Conference Facilities.
SUITS: Kirkham Sector

Evacuation Routes

Cut Hill Road Sub Sector

19. Cut Hill Road: north along Colonel Pye Drive, through the Coates Park Farm road (dirt road) onto Greendale Road Bringelly to the Community Centre on Greendale Rd. This dirt road may be cut by water from Bringelly Creek.
20. Cut Hill Road: south along Cut Hill Road into Cobbitty to the Teen Ranch Evacuation Centre on Cobbitty Road. THIS ROUTE WILL CLOSE AT 7.0m Camden Gauge.

Cobbitty Sub Sector

21. Evac west to Theresa Park or Silverdale via Cobbitty Road, Werombi Road & Silverdale Road – Bridge on Cobbitty Road closed at 7.0m
22. Evac east to Bringelly, Luddenham or Penrith via Cobbitty Road & Northern Road
23. Evac to Teen Ranch, Cobbitty Road Cobbitty.
24. Evac further east to Macarthur Anglican School, Cobbitty Road, Cobbitty.

Kirkham Sub Sector

25. Evac north to Macarthur Anglican College, Bringelly, Luddenham or Penrith via Cobbitty Road & Northern Road – Cobbitty Road cut at Cobbitty Creek
26. Evac south to Studley Park Golf Course, Narellan via Kirkham Lane & Camden Valley Way – Kirkham Lane cut at Narellan Creek
27. Evac south west to Camden via Macquarie Grove Road – Macquarie Grove Road cut at Macquarie Grove Bridge (3.8m). THIS ROUTE LEADS TO EXETER & EDWARD STS CAMDEN – these areas are inundated at 11.0m

Evacuation Route Closure

- 28. Macquarie Grove Road at Bridge – 3.8m
- 29. Cobbitty Road at Cobbitty Bridge – 7.0m
- 30. Cut Hill Road at Cobbitty Creek – 8.0m
- 31. Kirkham Lane at Narellan Creek – 8.5m

Vulnerable Institutions affected

- 32. Sydney University Farms
- 33. St Pauls & Cobbitty Primary Schools
- 34. Cobbitty Pre School
- 35. Mater Dei College
- 36. Sewerage infrastructure
- 37. Camden Airport

ANNEX H - ARRANGEMENTS FOR THE EVACUATION OF ELLIS LANE AND CAMDEN SECTOR

General

1. The Ellis Lane and Camden Sectors are divided into two sub-sectors: Ellis Lane & Camden (see map 6). These sub-sectors become isolated. The Ellis Lane sub-sector is isolated in floods that reach 8.5 on the Camden Gauge and the Camden sub-sector becomes isolated at floods exceeding 14.0 on the Camden Gauge.
2. When flood predictions indicate that the communities are likely to become isolated, the communities should be advised to stock up. Residents that are unsuitable for isolated conditions or are not prepared for isolation should be evacuated.
3. The **Ellis Lane sub-sector** is delineated by Sickles Creek, Westbrook Lane, Matahil Creek and the Nepean River
4. The Ellis Lane sub-sector consists of approximately 728 people; 230 residential properties and The Carrington Centennial Hospital – which comprises of a 94 bed high care Nursing Home, 104 low care beds (separated into two buildings) and 194 self-care retirement Units.
5. Evacuation planning will commence upon receipt of Flood predictions for 8.5m on the Camden Gauge
6. The **Camden sub-sector** is delineated by the Nepean River (on north and north east side), Matahil creek to the west, Navigation Creek to the south east and Jackey Drive to the south.
7. The Camden sub-sector consists of approximately 7801 people; 2949 residential properties and consisting of a range of residential, commercial and industrial properties.
8. Evacuation planning will commence upon predictions of floods reaching 9.0m on the Cowpasture Bridge Gauge.

Sector Control

9. **Control.** The Camden SES Local Controller will control evacuations in this sector
10. **Conduct.** Evacuations in this sector will be conducted by the SES with assistance from NSW Police Force, NSW Rural Fire Service (Ellis Lane, Theresa Park, Mount Hunter Brigades), NSW Fire Brigades (Camden (based at Elderslie), Picton) NSW Ambulance Service.

Sequencing of Evacuation

11. The following sequencing of evacuation within the sector is based on triggers of water levels predicted, by the BoM, to reach particular heights on the Camden Gauge. Once a prediction of flood height is received (in a BoM Flood Warning) a calculation of available time for evacuation can be made with respect to the following areas.
 - a. Carrington Centennial Hospital, Retirement Village & Nursing Home
 - b. Ellis Lane
 - c. Grasmere
 - d. Camden
 - e. Camden South

Evacuation Centres

12. Elizabeth Macarthur Agricultural Institute
Woodbridge Road, Menangle
SUITS: Camden Sector
13. Camden Golf Club
Lodges Road, Narellan
Full Club Facilities
SUITS: Camden & Ellis Lane Sectors
14. Razorback Inn
1580 Argyle Street
Picton
Inn can accommodate 200 and has fully equipped kitchen.
SUITS: Camden & Ellis Lane Sectors
15. The Shed @ Razorback
Licensed to feed 500
SUITS: Camden & Ellis Lane Sectors

Evacuation Routes & Closure Points

Ellis Lane Sub Sector

16. West to Penrith through Orangeville via Smalls Road, Mayfarm Road & Werombi Road cut at Sickles Creek & Lower Mount Hunter Bridge (localised flooding)
17. West to Mount Hunter & The Oaks via The Old Oaks Road & Burragorang Road – remains open but access further west closes under PMF conditions
18. East to Camden via Sheathers Lane cut at Matahil Creek – 8.5m Camden gauge.
19. South to Old Razorback Inn & Shed via Old Oaks Road, Burragorang Road, Cawdor Road, Old Razorback Road & Remembrance Drive
20. South to Picton High School via Old Oaks Road, Burragorang Road, Cawdor Road, Old Razorback Road, Remembrance Drive & Argyle Street

Camden Sub Sector

21. East to Narellan via Camden Valley Way – closed at Cowpasture Bridge at 8.0m (bridge deck height 8.4m)
22. East to Narellan via By-Pass – closed approaching PMF
23. East to EMAI via Woodbridge Road – closes at low levels of flooding. 4wd access via a Private Access Road in Belgenny Farm remains open.
24. South to Old Razorback Inn & Shed via Cawdor Road & Remembrance Drive
25. South to Picton High School via Cawdor Road, Remembrance Drive & Argyle Street Picton.

Vulnerable Institutions affected

26. Carrington Centennial Hospital, Werombi Road, Grasmere
27. Water Pollution Control Plant, Sheathers Lane, Grasmere
28. Camden Hospital, Menangle Road, Camden
29. Camden Downs Retirement Village, Crookston Drive, Camden South

ANNEX I - ARRANGEMENTS FOR THE EVACUATION OF NARELLAN/MT ANNAN/SMEATON GRANGE SECTOR

General

1. The Narellan/Mt Annan/Smeaton Grange Sector is divided into three sub-sectors: Narellan, Mt Annan and Smeaton Grange (see map 8). Narellan, Mt Annan and Smeaton Grange are indirectly affected by a Nepean River flood but are subject to localised flooding. The **Narellan sub-sector** is delineated by Narellan Road in the north; Waterworth Drive in the east & south-east and Lake Way & Hilder Street in the west.
2. The Narellan sub-sector consists of approximately 10 581 people; 3495 residential properties and also a medium sized industrial complex.
3. The **industrial area** of this sub-sector is relatively unaffected by flooding; with the exception of the blocks in the northern most part. However, the adjoining residential properties on Lake Way will experience flooding in a 1% event.
4. The **Mt Annan sub-sector** is delineated by Narellan Road, Waterworth Drive and Caley Drive.
5. The Mt Annan sub-sector consists of approximately 8198 people; 2503 residential properties and has the Mount Annan Public School and Mount Annan Botanic Garden's Visitor Centre within its boundary.
6. The **Smeaton Grange sub-sector** is delineated by Camden Valley Way & Turner Road, Tramway Drive and Smeaton Grange Road/Narellan Road.
7. The Smeaton Grange sub-sector has no residential properties, but does consist of approximately 1000 businesses (commercial/industrial) in 600-700 buildings. These have approximately 5000 - 6000 workers at any given time.

This sub-sector also incorporates the community of Curran's Hill which consists of approximately 4,867 people and 1,596 residential properties.

Sector Control

8. **Control.** The Camden SES Local Controller will control evacuations in this sector
9. **Conduct.** Evacuations in this sector will be conducted by the SES with assistance from NSW Police Force, NSW Rural Fire Service (Macarthur Zone), NSW Fire Brigades (Campbelltown & Narellan) NSW Ambulance Service

Sequencing of Evacuation

10. The following sequencing of evacuation within the sector is based on triggers of water levels predicted, by the BoM, to reach particular heights on the Camden Gauge. Once a prediction of flood height is received (in a BoM Flood Warning) a calculation of available time for evacuation can be made with respect to the following areas.

- a. Narellan Industrial Complex
- b. Reconnaissance will be required in the other areas to assess when evacuations will become necessary.

Evacuation Centres

- 11. Studley Park Golf Course
Lodges Road, Narellan
Full Club Facilities
SUITS: Narellan Sector
- 12. St Gregory's College
100 Badgally Road, Campbelltown
Full Boarding School Facilities
SUITS: Narellan, Currans Hill, Smeaton Grange, Mount Annan Sectors
- 13. Magdalene Catholic High School
Smeaton Grange Road, Narellan
School Facilities only
SUITS: Smeaton Grange, Narellan, Mount Annan and Currans Hill Sectors

Evacuation Routes

Mount Annan Sub Sector

- 14. South West to Campbelltown & M5 via Narellan Road

ANNEX J - ARRANGEMENTS FOR THE EVACUATION OF ELDERSLIE SECTOR

General

1. The **Elderslie sector** (map 7) is delineated by the Nepean River in the west, Camden Valley Way in the north, Camden By-pass in the south and Hilder Street to the east.
2. The Elderslie sub-sector consists of approximately 2562 people; 964 residential properties and also has the Marwarra Public School, Elderslie Primary School and Elderslie High School.
3. The western & northern most parts of Elderslie are subject to inundation at relatively low levels of flooding.

Sector Control

4. **Control.** The Camden SES Local Controller will control evacuations in this sector
5. **Conduct.** Evacuations in this sector will be conducted by the SES with assistance from NSW Police Force, NSW Rural Fire Service (Macarthur Zone), NSW Fire Brigades (Campbelltown & Narellan) NSW Ambulance Service

Sequencing of Evacuation

6. The following sequencing of evacuation within the sector is based on triggers of water levels predicted, by the BoM, to reach particular heights on the Camden Gauge. Once a prediction of flood height is received (in a BoM Flood Warning) a calculation of available time for evacuation can be made with respect to the following areas.
 - a. Elderslie

Evacuation Centres

7. Studley Park Golf Course
Lodges Road, Narellan
Full Club Facilities
SUITS: Elderslie

Evacuation Routes

8. North west to Studley Park Golf Course along Macarthur Road, Camden Valley Way, Richardson Road and Lodges Road.
9. West to Narellan or Sydney (M5) via Camden By-pass & Narellan Road.
10. North West to Old Hume Highway via Camden By-pass & Camden Valley Way. Old Hume Highway (Camden Valley Way) closed 12.0m (Camden Gauge) at South Creek

Vulnerable Institutions affected

11. Elderslie High School (inundated)
12. Mawarra Public School (indirectly affected – access into Camden closed)
13. Poplar Caravan Park (inundated – see Annex M)
14. Camden Pre-school (inundated)
15. Blinky Bill Pre-school (inundated)

ANNEX K - ARRANGEMENTS FOR THE EVACUATION OF HARRINGTON PARK SECTOR

General

1. The Harrington Park Sector is a relatively new housing development in the Camden LGA (see Map 8). This sector is predominantly indirectly affected; however, the major access route between Harrington Park and the townships of Penrith & Narellan is cut in relatively low levels of flooding.
2. A number of local roads throughout the sector may be subject to localised flooding.
3. The **Harrington Park sector** is delineated by the Northern Road to the west/north west and Camden Valley Way to the south/south east.
4. The Harrington Park sector consists of approximately 5765 people; 1720 residential properties and contains the Harrington Park Public School.

Sector Control

5. **Control.** The Camden SES Local Controller will control evacuations in this sector
6. **Conduct.** Evacuations in this sector will be conducted by the SES with assistance from NSW Police Force, NSW Rural Fire Service (Macarthur Zone), NSW Fire Brigades & NSW Ambulance Service

Sequencing of Evacuation

7. Reconnaissance will be required in this area to assess when evacuations will become necessary.

Evacuation Centres

8. Studley Park Golf Course
Lodges Road, Narellan
Full Club Facilities

Evacuation Routes

9. To Studley Park Golf Course south via Narellan Road, Camden Valley Way, Richardson Road & Lodges Road.
10. To Sydney via Camden Valley Way.
11. To Sydney via M5 from Narellan Road.
12. To Penrith via The Northern Road

Evacuation Route Closure

13. Harrington Parkway – closed at 15.5m Camden Gauge
14. Old Hume Highway (Camden Valley Way) – closed at 12.0m (Camden Gauge) at South Creek
15. Northern Road at Harrington Park – closed in floods above 15.0m (Camden Gauge)

Vulnerable Institutions affected

16. Harrington Park Public School
17. Harrington Park Day Care Centre

ANNEX L - ARRANGEMENTS FOR THE EVACUATION OF ROSSMORE AND CATHERINE FIELDS SECTOR

General

1. The Rossmore and Catherine Fields Sectors are divided into two sub-sectors: Rossmore & Catherine Fields (see map 9). When flood predictions indicate that the communities are likely to become isolated, the communities should be advised to stock up. Residents that are unsuitable for isolated conditions or are not prepared for isolation should be evacuated.
2. The **Rossmore sub-sector** is delineated by South Creek, Bringelly Road, Allenby Road/Barry Avenue and Riley Creek.
3. The Rossmore sub-sector consists of approximately 2197 people; 652 residential properties which include a number of rural holdings.
4. The **Catherine Fields sub-sector** is delineated by Riley Creek, South Creek, Chisholm Road & Springfield Road.
5. The Catherine Fields sub-sector consists of approximately 1954 people; 579 residential properties, which include a number of rural holdings.

Sector Control

6. **Control.** The Camden SES Local Controller will control evacuations in this sector
7. **Conduct.** Evacuations in this sector will be conducted by the SES with assistance from NSW Police Force, NSW Fire Brigades & NSW Rural Fire Service (Catherine Field Brigade).

Sequencing of Evacuation

8. Reconnaissance will be required in this area to assess if evacuations will become necessary.

Evacuation Centres

9. Catherine Field Community Hall
Catherine Fields Road, Catherine Field
Standard Hall Facilities
SUITS: Catherine Field Sector
10. Rossmore Public School
Bringelly Road, Rossmore
Standard School Facilities
SUITS: Rossmore Sector

Evacuation Routes

Rossmore Sub Sector

11. East to Liverpool/Sydney via Bringelly Road & Camden Valley Way/M5

Catherine Fields Sub Sector

12. East to Liverpool/Sydney via Catherine Fields Road or Deepfields Road to Camden Valley Way & M5

Evacuation Route Closure

13. Camden Valley Way (Old Hume Highway) – closed at 12.0m (Camden Gauge) at South Creek

ANNEX M - ARRANGEMENTS FOR THE EVACUATION OF CARAVAN PARKS AND THE RELOCATION OF CARAVANS

General

1. The following caravan parks are flood liable:
 - a. **Poplar Caravan Park**. 21 MacArthur Road, Camden.
Evacuation Warnings provided upon receipt of predictions 9.0m and above (Camden Gauge).
Inundation is experienced at 9.5m at the lowest point in the park. By 14.7m (Camden Gauge) the park is completely inundated.
Evacuation Routes: North west to Studley Park Golf Course along Macarthur Road, Camden Valley Way, Richardson Road & Lodges Park Road.
West to Narellan or Sydney (M5) via Camden By-pass & Narellan Road.
North West to Old Hume Highway via Camden By-pass & Camden Valley Way. Old Hume Highway (Camden Valley Way) closed 12.0m (Camden Gauge) at South Creek

Advising Procedures

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

- Ensure that they have spare batteries for their radios.
 - Listen to a local radio station for updated flood information.
 - Prepare for evacuation and van relocation.
3. The Camden SES Local Controller will ensure that the managers of caravan parks are advised of flood warnings and the details of any evacuation order.

Evacuation of Occupants and Relocation of Vans

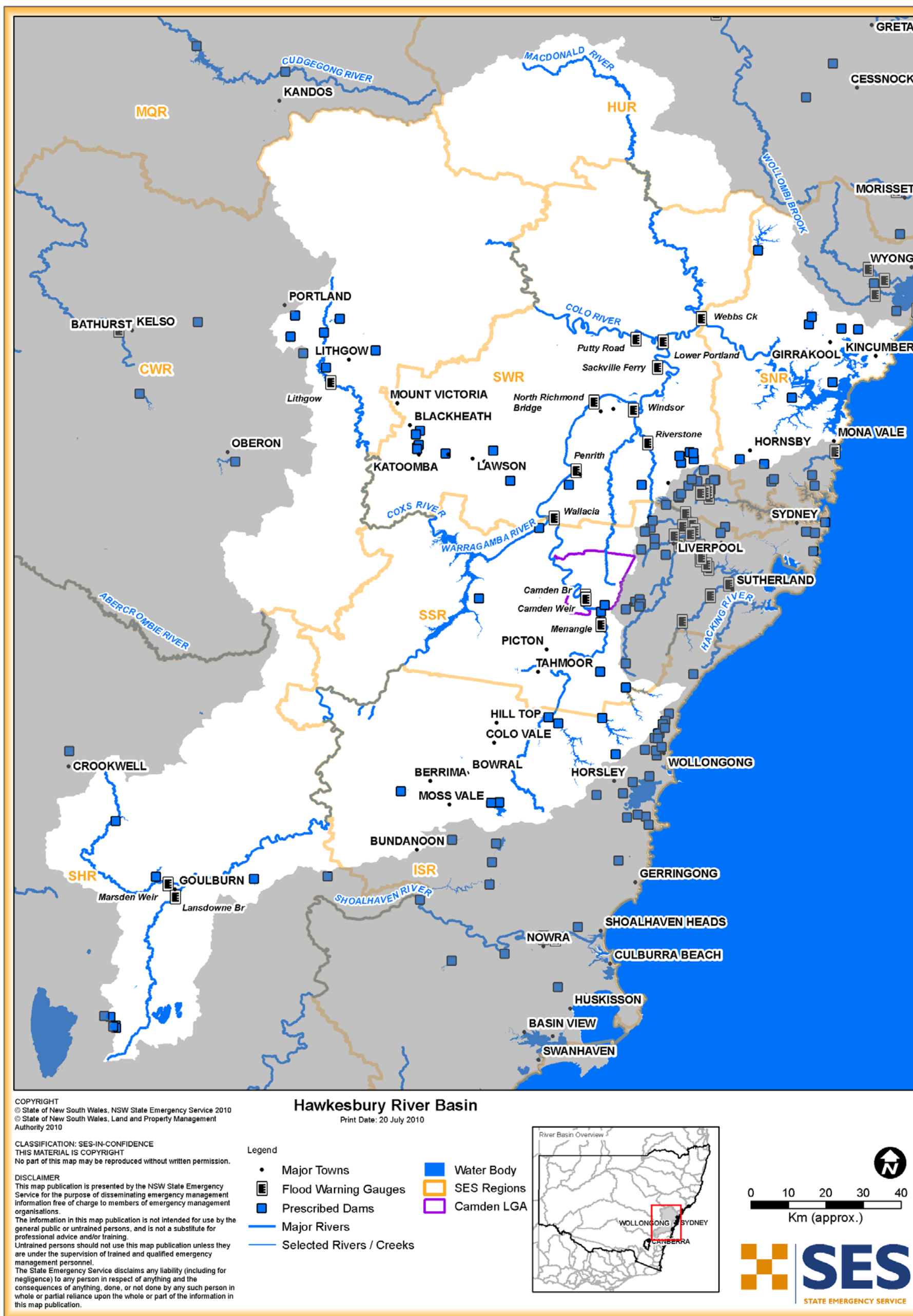
4. Caravan park proprietors will be encouraged to install flood depth indicators and road alignment markers within their caravan parks.
5. When an evacuation order is given:
 - a. Occupiers of non-movable vans should:
 - Secure their vans by tying them down to prevent flotation.
 - Isolate power to their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

Return of Occupants and Vans

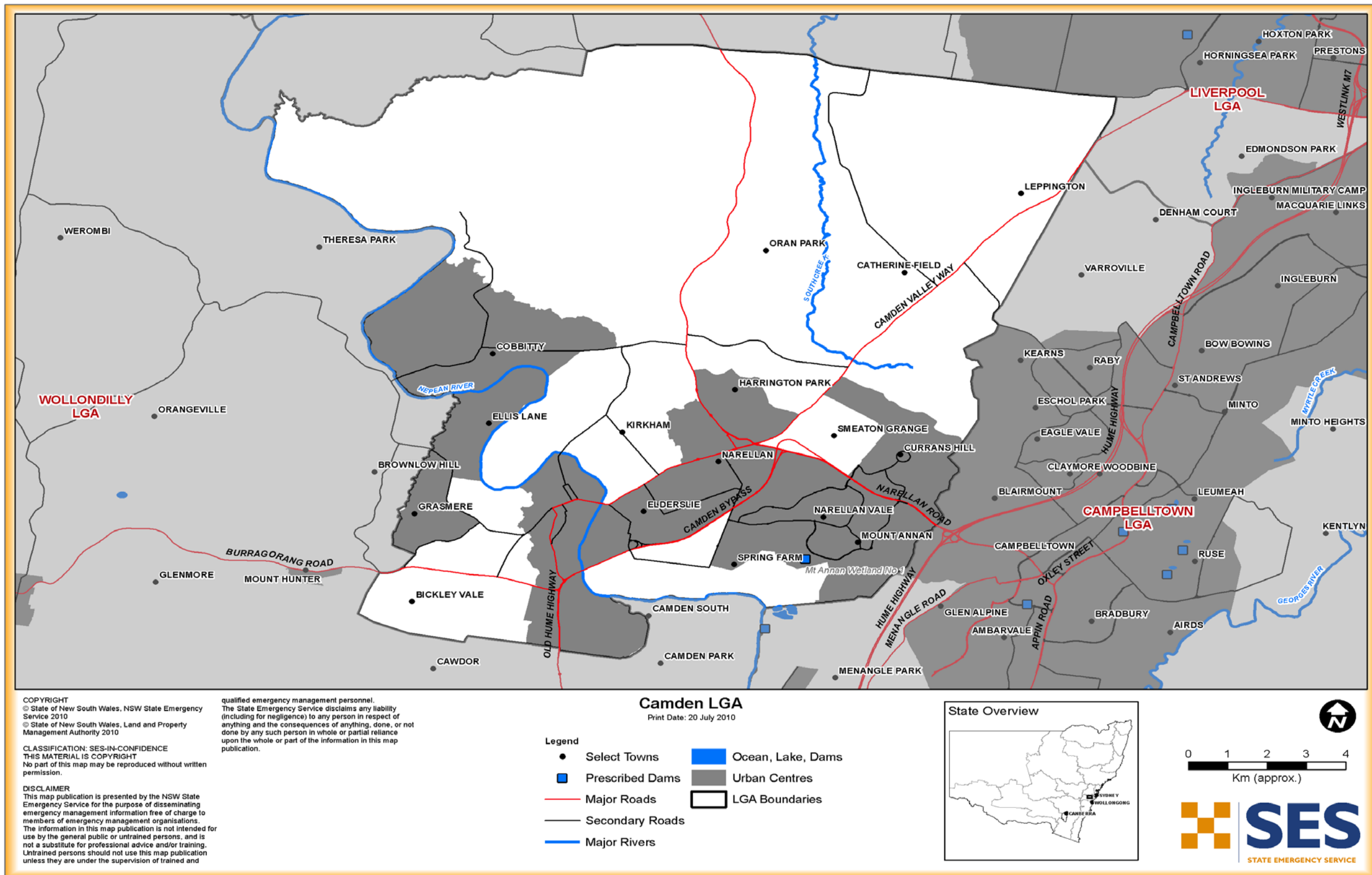
7. The Camden SES Local Controller, using council resources as necessary, will advise when it is safe for the caravan parks to be re-occupied.

8. Vans will be towed back to the caravan park(s) by van owners or by vehicles and drivers arranged by the park managers. Again, Council and SES personnel will assist if available.

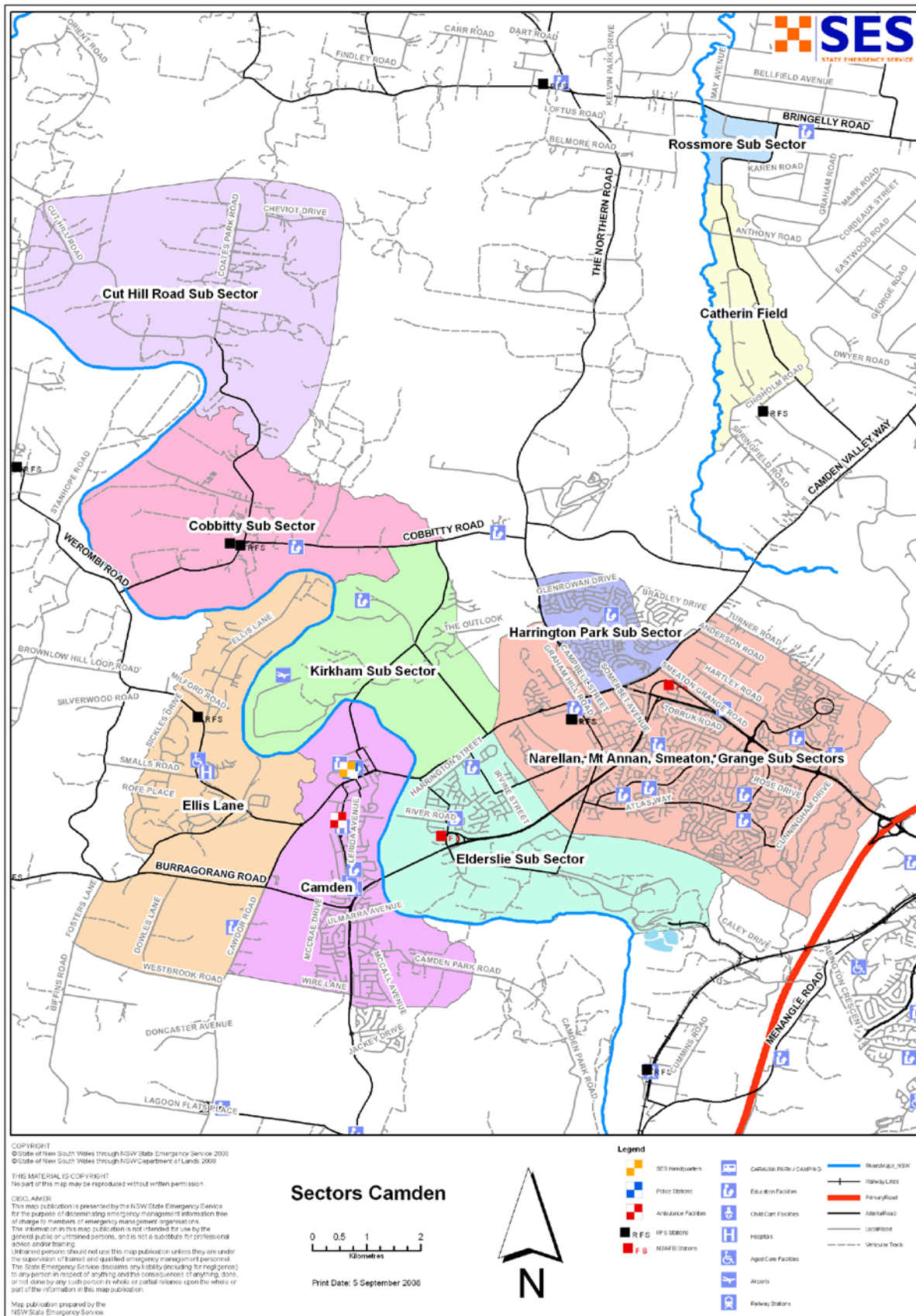
MAP 1 - RIVER BASIN



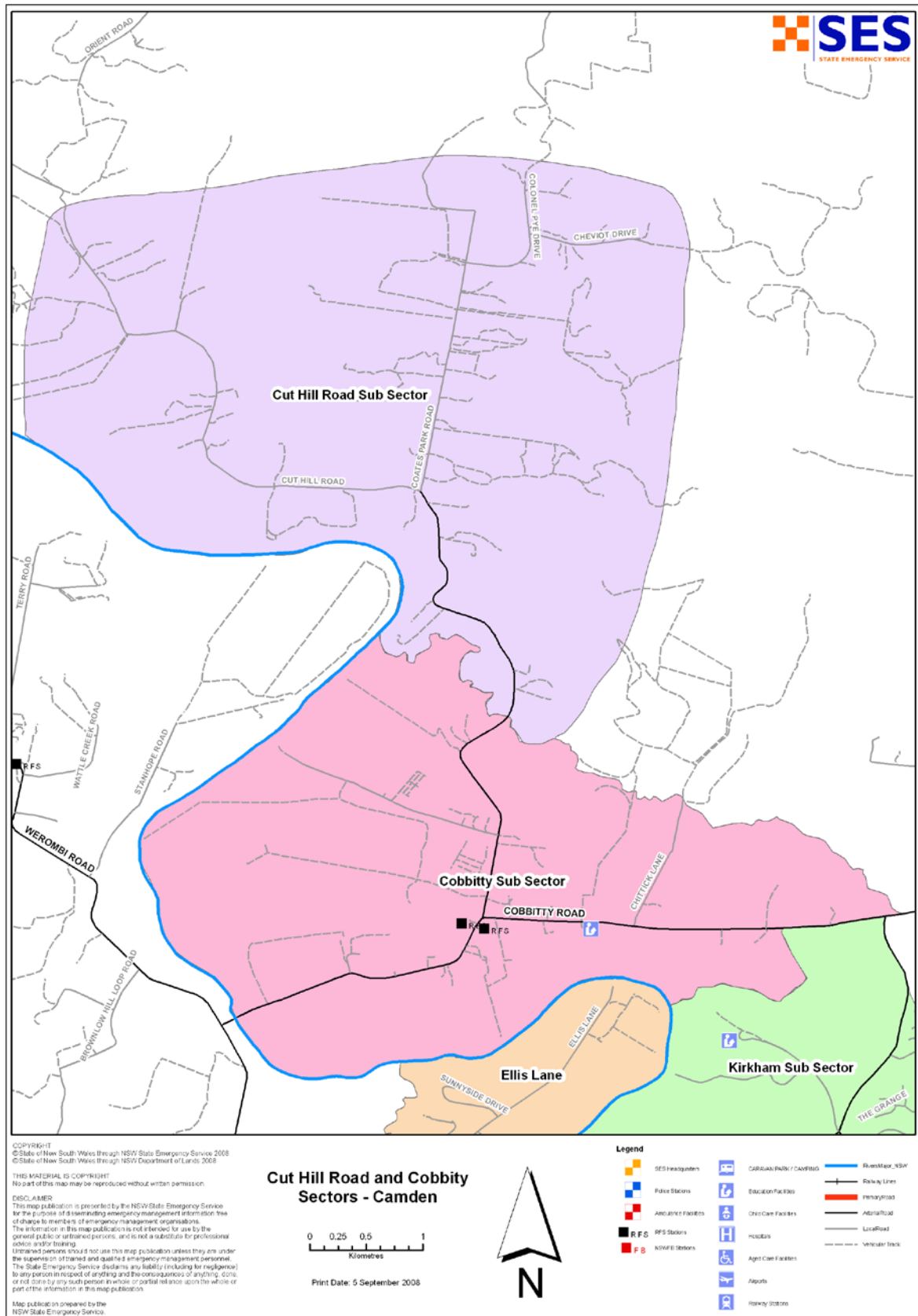
MAP 2 - COUNCIL AREA



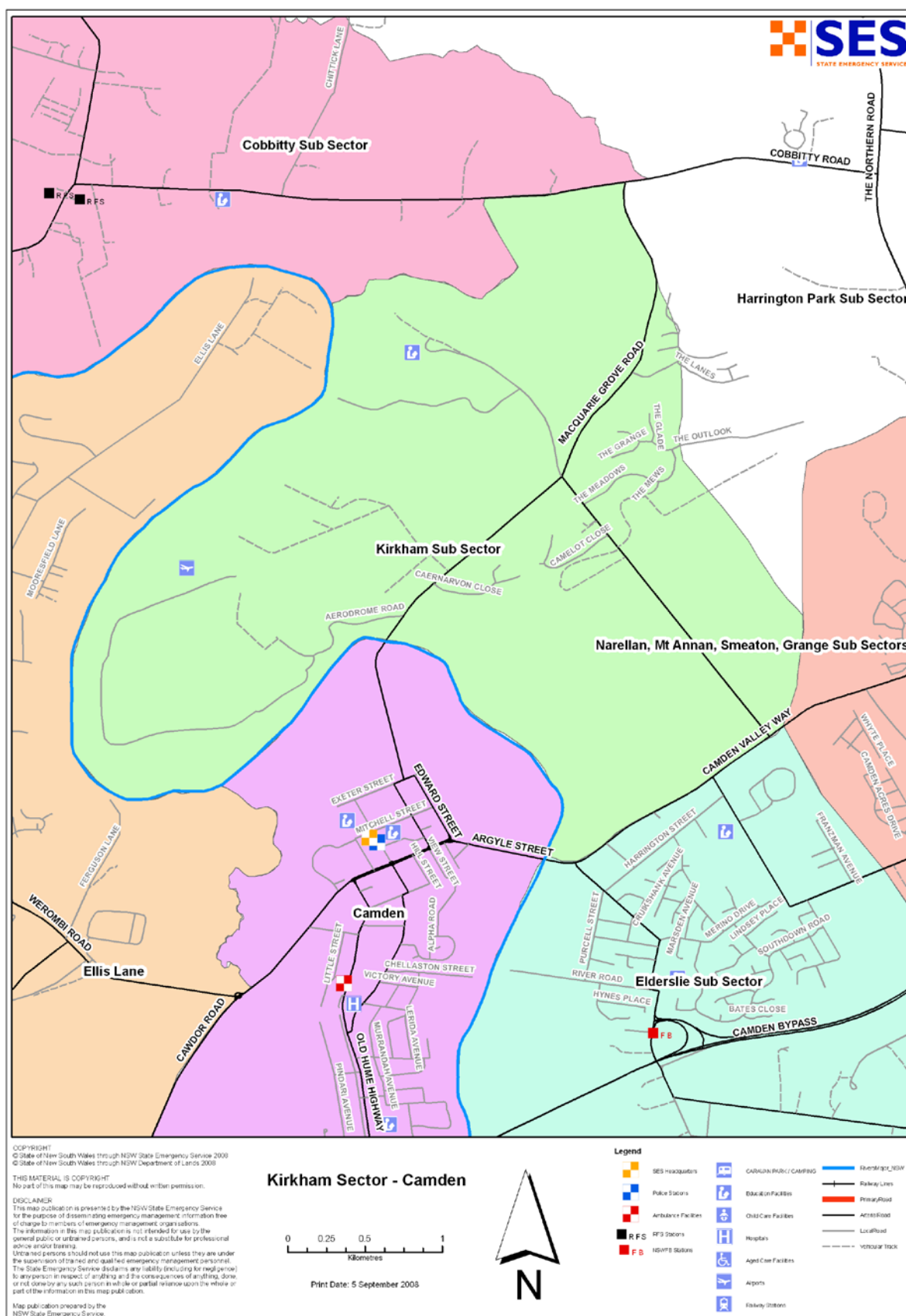
MAP 3 - Sector Overview Map



MAP 4 - Cobbitty & Cut Hill Road Map



MAP 5 - Kirkham Map



Ellis Lane and Camden Sectors - Camden

Legend

- SES Headquarters
- Police Stations
- Ambulance Facilities
- RFS
- RFS Stations
- SES Stations
- GAULINS PUBLIC CAMPING
- Basketball Facilities
- Child Care Facilities
- Hospitals
- Aged Care Facilities
- Airports
- Railway Stations
- Overbridge NSW
- Railway Lines
- Private Road
- Local Road
- Vocational Track

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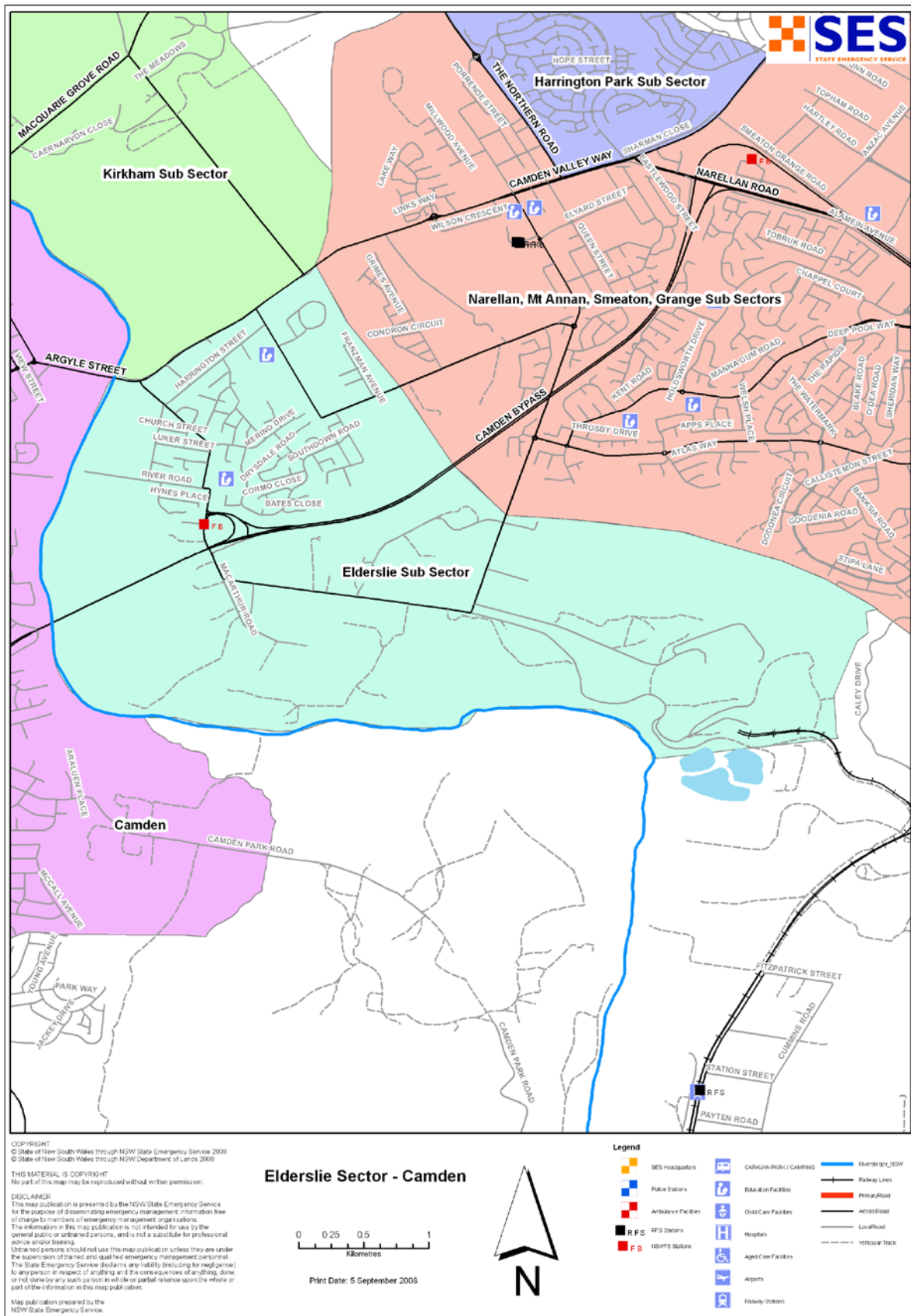
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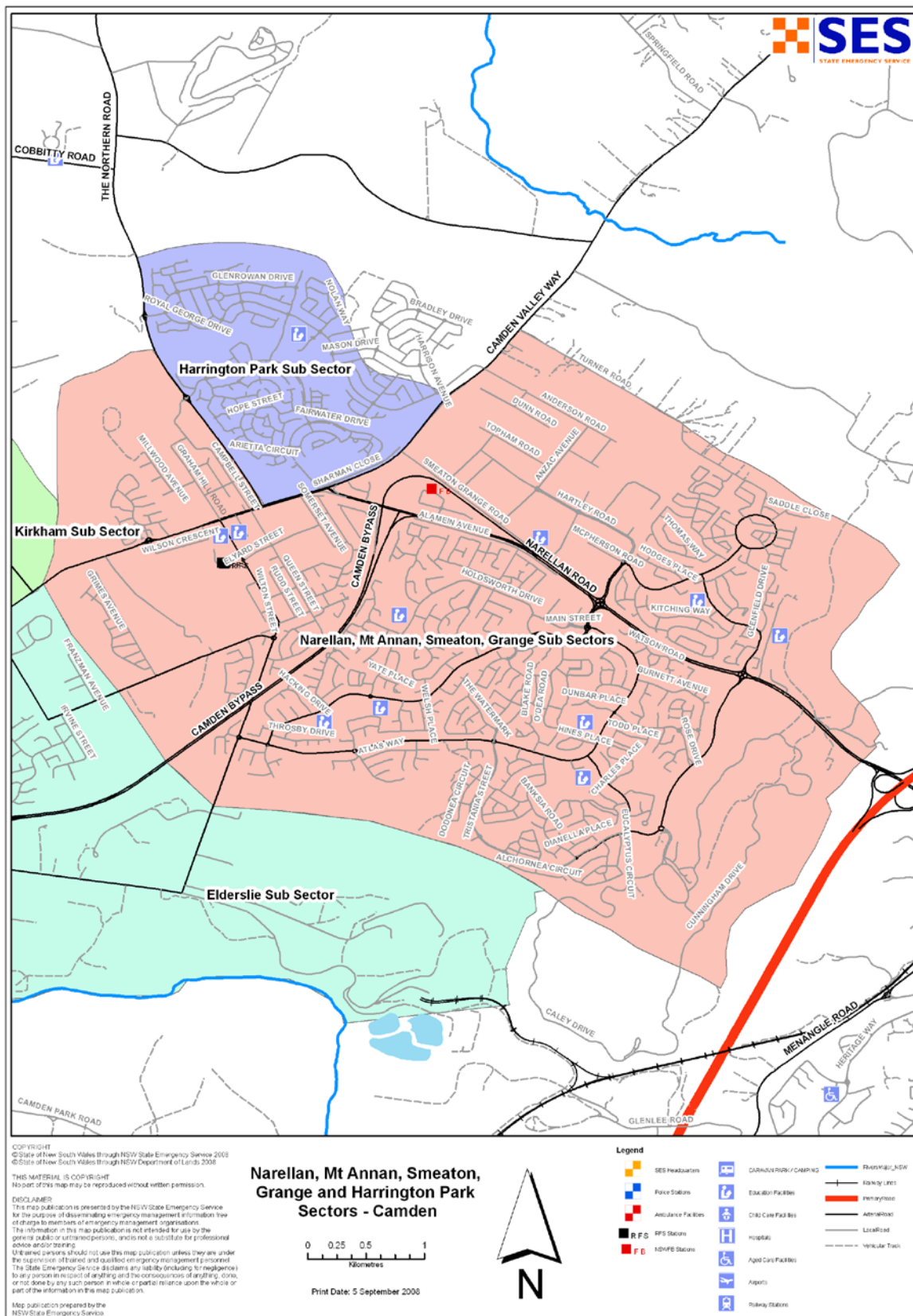
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MAP 7 - Elderslie Map



MAP 8 - Narellan, Mount Annan, Smeaton Grange & Harrington Park Map



MAP 9 - Rossmore & Catherine Field Map

