

Oberon

Local Flood Plan



Dec 2015

To be reviewed no later than Dec 2020

OBERON FLOOD EMERGENCY SUB PLAN

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


Volume 1 of the Oberon Local Flood Plan



AUTHORISATION

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

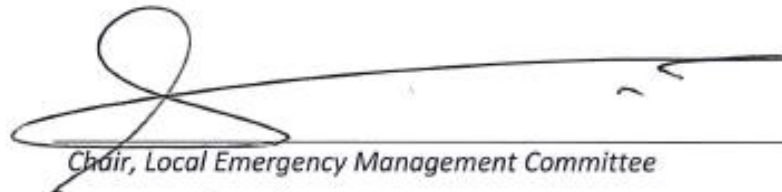
Recommended



MSW SES Oberon Local Controller

Date: 7-12-15

Approved



Chair, Local Emergency Management Committee

Date: 7/12/15.

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DISTRIBUTION LIST

Recipient	Number of copies
NSW SES Oberon Local Controller	1
NSW SES Oberon, Burruga, Bathurst Unit Controller(s)	1
NSW SES Oberon, Burruga, Bathurst Unit(s)	1
NSW SES Central West Region Headquarters	1
NSW SES State Headquarters	1
Oberon, Local Emergency Operations Controller	1
NSW Police Force, Chifley Local Area Command	1
Oberon, Local Emergency Management Committee Members	4
Oberon, Local Emergency Management Officer	1
Oberon, Local Emergency Operations Centre	1
Oberon Council, Mayor	1
Oberon Council, General Manager	1
Oberon Council, Technical Services Department	1
Fire and Rescue NSW, Oberon	1
NSW Rural Fire Service, Oberon	1
NSW Ambulance, Oberon	1
Volunteer Rescue Association, Lithgow and District Rescue Squad	1
Office of Environment and Heritage	1
Evacuation Centres	1 each
Hospitals	1 each
Schools	1 each
Council Libraries	1 each
Total	

VERSION HISTORY

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

Description	Date
Oberon Local Flood Plan	July 2011

AMENDMENT LIST

Suggestions for amendments to this plan should be forwarded to:

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

Amendments promulgated in the amendments list below have been entered in this 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, Radiation 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 SES	NSW State Emergency Service
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
RFS	Rural Fire Service
SEOCN	State Emergency Operations Controller
SERCON	State Emergency Recovery Controller
SEWS	Standard Emergency Warning Signal
SITREPs	Situation Reports
VRA	Volunteer Rescue Association
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 object of a 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 a 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).

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).

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 (5).

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 Oberon area. 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 Oberon Local Controller and the NSW SES Central West Region Controller as a NSW SES plan and endorsed by the Oberon 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 Oberon Council area which includes: the town of Oberon, the communities of Black Springs, Edith, Jenolan Caves, O'Connell, Porters Retreat and Wisemans Creek, and rural areas along the rivers and creeks.
- 1.3.2 The council area and its principal rivers and creeks are shown in Attachment 3.
- 1.3.3 The council area includes:
- a. The Abercrombie River system, which forms the southern boundary of the council area.
 - b. The Campbells River system which is on the council area's western boundary.
 - c. The Fish River system, which rises to the south of Oberon township and flows through Oberon Dam to join the Macquarie River on the council area's north-western boundary.
 - d. The Duckmaloi River system, which rises to the south-east of Oberon Township and flows north on the eastern side of the council area.
 - e. The Kowmung River, which flows to the east mainly through National Park and inaccessible country.
 - f. The Cox's River and its tributary the Jenolan River, which together drain an eastern section of the council area.
- 1.3.4 The council area is in the NSW SES Central West Region and for emergency management purposes is part of the Central West Emergency Management Region.

1.4 DESCRIPTION OF FLOODING AND ITS EFFECTS

- 1.4.1 The NSW SES maintains information on the nature of flooding and effects of flooding on the community in the Oberon Council area.

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 Oberon Local Controller.** The NSW SES Oberon Local Controller is responsible for dealing with floods as detailed in the State Flood Plan, and will:

Preparedness

- a. Maintain a Local Headquarters at 15 Lowes Mount Road, Oberon 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 Oberon 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 Local 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 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 conduct of flood rescue operations.
- 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.
- 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 Central West 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 Oberon and Burruga Unit Members:**

- a. Carry out flood response tasks. These may include:
 - The management of the NSW SES Oberon 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.
 - Sandbagging.
 - Lifting and/or moving household furniture and commercial stock.
 - Animal rescue.
 - 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 **Oberon Local Emergency Operations Controller (LEOCON)**

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

1.5.5 **Oberon Local Emergency Management Officer**

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

1.5.6 Oberon 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, floodplain management studies to the NSW SES.
- d. Provide information on the consequences of dam failure to the NSW SES for incorporation into planning and flood intelligence.
- e. Maintain a plant and equipment resource list for the council area.
- f. Work with NSW SES on the development and implementation of a community engagement and capacity building program.

Response

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

Recovery

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

1.5.7 Community Members

Preparedness

- a. Understanding the potential risk and impact of flooding;
- b. Preparing homes and property to reduce the impact of flooding;

- c. Understanding warnings and other triggers for action and the safest actions to take in a flood;
- d. Households, institutions and businesses developing plans to manage flood risks, sharing and practicing this with family, friends, employees and neighbours;
- e. Having an emergency kit;
- f. Being involved in local emergency planning processes.

1.5.8 **Agriculture and Animal Services Functional Area:**

- a. When requested by NSW SES:
 - Activate the Agriculture and Animal Services Supporting Plan as required and coordinate the provision of required services which may include:
 - Co-ordinate response for all animals including pets, livestock and wildlife.
 - Supply and delivery of emergency fodder.
 - Emergency water replacement in certain circumstances.
 - Coordinate the management of livestock and farm animals.
 - Advice on dealing with dead and injured farm animals.
 - Financial, welfare and damage assessment assistance to flood affected farmers.
 - Co-ordinate the establishment of animal shelter compound facilities for the domestic pets and companion animals of evacuees.

1.5.9 **The New South Wales Ambulance:**

- a. Assist with the evacuation of at risk communities (in particular elderly and/or infirm people).
- b. Deploy ambulance resources to appropriate locations if access is expected to be lost.
- c. Assist the NSW SES with flood rescue operations.

1.5.10 **Australian Government Bureau of Meteorology (The Bureau):**

- a. Provide Flood Watches for the Duckmaloi River Basin.
- b. Provide Flood Warnings, incorporating height-time predictions
- c. Provide severe weather warnings when flash flooding is likely to occur.

1.5.11 **Caravan Park Proprietor(s)**

- a. Ensure that owners and occupiers of 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.
- b. 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) (6).
 - c. 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.
 - d. Ensure that owners and occupiers of caravans are aware of what they must do to facilitate evacuation and moveable dwelling relocation when flooding occurs.
 - e. 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.
 - f. Secure any moveable dwellings that are not able to be relocated to prevent floatation.
 - g. 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.

1.5.12 **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.

1.5.13 **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 Oberon 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.
- c. Fish River Water Supply:
- Monitor water levels at Oberon Dam.
 - Test, maintain and operate the Special Oberon Dam Warning and Alarm System.
 - Provide information to the SES on potential flooding at and below Oberon Dam.

- Contribute information to ensure that owners and occupiers of residences at risk of flooding in the event of dam failure are aware of the threat and of their evacuation arrangements.
- Provide resources to assist with the distribution of evacuation warnings and the conduct of evacuations.

1.5.14 **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.

1.5.15 **Environmental Services Functional Area:**

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

1.5.16 **Fire and Rescue NSW, Oberon:**

- 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:
 - Assist the NSW SES with the warning and/or evacuation of at risk communities.
 - Assist the NSW SES with the monitoring / reconnaissance of flood prone areas.
 - Assist the NSW SES with the resupply of isolated communities and/or properties.
 - Assist the NSW SES with property protection tasks including sandbagging.

- Provide resources for pumping flood water out of buildings and from low-lying areas.
 - Assist with cleanup 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.

1.5.17 **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.

1.5.18 **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 vulnerable persons assessment for mental health and drug and alcohol dependant persons, dialysis, frail and/or aged and oxygen dependant persons in the community, known to the health service.

1.5.19 **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.

1.5.20 **NSW Police Force, Chifley Local Area Command (LAC):**

- 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.

1.5.21 **NSW Rural Fire Service (RFS Oberon):**

- a. Provide personnel in rural areas and villages to:
 - inform the NSW SES Oberon 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.
- j. Provide 4WD vehicles for resupply and reconnaissance operations through the Fire Control Officer as requested by the NSW SES Local Controller.

1.5.22 Office of Environment and Heritage:

- a. Provide specialist policy, engineering and scientific advice to councils and the NSW SES on flood related matters including assistance with:
 - The identification of flood problems.
 - The preparation of Floodplain Risk Management Plans and associated studies.
 - The implementation of floodplain risk management plans. This involves floodplain management projects which include flood mitigation works, flood warning, strategic land use planning and upgrade of evacuation routes.
 - The exercising of Local Flood Plans.
- b. Provide specialist advice flood related matters as follows:
 - Provide the NSW SES with access to relevant studies regarding flooding, including Flood Studies and Floodplain Risk Management Studies.
 - Coordinate the collection of post event flood data, in consultation with the NSW SES.
 - Provide advice to the NSW SES about conditions which may lead to coastal flooding or retarded river drainage near the coast.
 - 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).
 - 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).

c. **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.

1.5.23 **Owners of Prescribed Dams within or upstream of Oberon:**

Dam	Owner
Oberon Dam	NSW State Water Corporation

- 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.

1.5.24 **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.

1.5.25 **Red Cross Society, Lithgow and Bathurst:**

- a. Provide Disaster Registration Teams at evacuation centres.

1.5.26 **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 including the Mid Western, Mitchell and Great Western Highways.

- 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 Central West Region Transport Services Functional Area Coordinator

1.5.27 School Administration Offices (including Catholic Education Office Diocese of Bathurst, Department of Education Bathurst 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.

1.5.28 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.

1.5.29 The Central West Transport Services Functional Area Coordinator (TSFAC):

- a. The TSFAC will assist the 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 materials/dangerous goods.

- Maintaining and operating a transport route advisory service to the NSW SES, emergency service organisations, other functional areas and members of the community.

1.5.30 NSW Train Link

- a. Operate NSW regional and interstate rail services through the Oberon Council 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 trains.
- d. Cooperate with, and assist the NSW SES Local Controller in relation to public safety during flood emergencies.
- e. Cooperate with the Central West Transport Services Functional Area Coordinator.

1.5.31 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.

1.5.32 Volunteer Rescue Association (VRA), Lithgow:

- a. Assist the NSW SES Oberon Local Controller with flood operations, where equipment and training are suitable.

PART 2 - PREPAREDNESS

2.1 MAINTENANCE OF THIS PLAN

- 2.1.1 The NSW SES Oberon 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 Oberon 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 Central West 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 (3). 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.
- 2.5.3 The NSW SES Oberon Local Controller, with the assistance of the Oberon Council, the NSW SES Central West 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 Oberon and Burruga Unit(s). The NSW SES Oberon 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 Oberon Local Controller is responsible for maintaining the condition and state of readiness of NSW SES equipment and the NSW SES Oberon Local Headquarters.

2.7.2 The NSW SES Oberon and Burruga Unit Controllers have similar responsibilities in relation to the Oberon Unit Headquarters and equipment.

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 Local Incident Controller.

3.2 OPERATIONAL MANAGEMENT

- 3.2.1 NSW SES utilises the Australasian Inter-service Incident Management System (AIIMS), which is based on three principles:
- a. functional management;
 - b. management by objectives; and
 - c. 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.
 - c. When other evidence leads to an expectation of flooding within the council area.
- 3.3.3 Contact with the Bureau of Meteorology to discuss the development of flood warnings will normally be through the NSW SES Central West Region Headquarters and/or NSW SES State Headquarters.

- 3.3.4 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 Central West Region Headquarters.
 - b. NSW SES Oberon and Burruga Controllers.
 - c. NSW SES Oberon and Burruga Units.
 - d. Oberon Local Emergency Operations Controller (for transmission to the NSW Police Force Local Area Command Headquarters).
 - e. Oberon Local Emergency Management Officer (for transmission to appropriate council officers and departments).
 - f. Oberon Council Mayor.
 - g. Other agencies listed in this plan will be advised by the Local Emergency Management Officer on the request of the NSW SES Oberon Local 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 (7)
 - 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 Local 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 Oberon Operations Centre is located at 15 Lowes Mount Rd, Oberon.

3.5.2 NSW SES Unit Operations Centre is located at Oberon Unit, 15 Lowes Mount Rd, Oberon.

3.5.3 Supporting EOCs are located at:

- a. Oberon Council Chambers, Oberon Street, Oberon.
- b. NSW Rural Fire Service, 15 Lowes Mount Road, Oberon.

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 Oberon 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 Local Incident Controller.

3.7 END OF RESPONSE OPERATIONS

- 3.7.1 When the immediate danger to life and property has passed the NSW SES Region Incident Controller or the NSW SES Local 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 Oberon Local Headquarters collates information on the current situation in the Oberon LGA and incorporates in Situation Reports.
- 3.8.3 The NSW SES Central West Region Headquarters collates Region-wide information for inclusion in Region NSW SES 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 Oberon Local 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:
 - The O'Connell Road at O'Connell
 - Multiple causeways and river crossings throughout the LGA
 - 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 Oberon Council area. 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 Duckmaloi and Fish Rivers. Daily river reports containing information on gauge heights and river flows are available from the website: <http://waterinfo.nsw.gov.au/>
 - f. **Oberon Dam Storage Monitoring System (Oberon LGA).** This system provides information on Oberon Dam. This system, which has been established by the Fish River Water Supply, monitors the condition of Oberon Dam and water levels there when floods are rising. Information on potential flooding is relayed to the Oberon SES Local Controller when water reaches a depth of 0.5 metres in the dam's spillway.
 - g. **Lyell Dam Storage Monitoring System (Lithgow LGA).** This system provides information on Lyell Dam. Pacific Power has established a flood warning system which monitors water levels at Lyell Dam and provides information on flows into the Cox's River.
 - h. **Chifley Dam Storage Monitoring System (Bathurst LGA).** This system provides information on Chifley Dam. The Bathurst City Council, in conjunction with the Bureau of Meteorology, has established a flood warning system incorporating remote automatic rainfall and river height gauges. This warning system supplies information on rainfall and river heights in the Oberon Council area. It also monitors water levels at Chifley Dam.
 - i. **NSW SES Central West 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).
 - j. **Oberon Council.** The Oberon Council provides road closure bulletins and information relating to council owned infrastructure.
- 3.8.5 During flood operations sources of information on roads closed by flooding include:
- a. Oberon Council (www.oberon.nsw.gov.au and 6329 8100)
 - b. Chifley Police Local Area Command (Bathurst Police Station 6332 8699).
 - c. Roads and Maritime Services (website and/or telephone service).
 - d. NSW SES Central West Region Headquarters.
 - e. NSW SES Oberon 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 Oberon Local Headquarters provides advice to the NSW SES Central West Region Headquarters on current and expected impacts of flooding in the Oberon LGA.
- 3.9.2 The NSW SES Central West 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 Oberon Local Incident Controller will ensure that the NSW SES Central West Region Incident Controller is regularly briefed on the progress of operations.
- 3.9.4 NSW SES Oberon 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 Central West Region Headquarters.
- 3.9.8 **Bureau of Meteorology Flood Warnings.** The NSW SES Central West Region Headquarters will send a copy of Bureau Flood Warnings to the NSW SES Oberon Unit. On receipt the NSW SES Local Incident Controller will provide the NSW SES Central West 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 Oberon Local Incident Controller will advise the NSW SES Central West Region Headquarters which will issue NSW SES Livestock and Equipment Warnings.
- 3.9.10 **NSW SES Local Flood Advices.** The NSW SES Local 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 Central West 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 Region Incident Controller on behalf of the NSW SES Local Incident Controller.
- 3.9.13 **Special Warnings.** NSW State Water will notify the SES in regards to potential failure of Oberon Dam. Details of the system are described in Volume 3. Warnings relating to potential failures of Chifley Dam and Lyell Dam, which are located outside the Oberon Council area but whose failures would create flooding of low-lying land along the council area's Campbells River and Cox's River boundaries, would be co-ordinated by the Bathurst and Lithgow SES Local Headquarters respectively.
- 3.9.14 **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.
- 3.9.15 A flow chart illustrating the notification arrangements for potential dam failure is shown in Attachment 2.
- 3.9.16 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.

- 3.9.17 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).
- 3.9.18 **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 **Oberon Council** will provide information on the status of roads.
- 3.9.23 Collation and dissemination of road information is actioned as follows:
- As part of Situation Reports, the NSW SES Oberon Local Incident Controller provides road status reports for main roads in the council area to the NSW SES Central West Region Headquarters.

- b. The NSW SES Central West 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 Region Headquarters, which may allocate aircraft to units if applicable.
- 3.10.3 NSW SES maintains the following information for the Oberon 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 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 and NSW SES PMR.
- 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. Oberon Council will provide communications in radio-equipped vehicles and a base station operator on council's own VHF radio network.
 - b. The Oberon Rural Fire Service has available a VHF radio network.

- c. The Fish River Water Supply has available a VHF radio network.

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 Oberon Local 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 Oberon Local 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. The council also closes the following roads in its capacity as an agent of the RMS:
 - a. Duckmaloi Road
 - b. Jenolan Caves Road
 - c. Edith Road
 - d. O'Connell Road
 - e. Abercrombie Road.
- 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 Oberon Local 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 Oberon Local Headquarters, which will then provide a road information service to local emergency services, the public and the NSW SES Central West 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 maintains stocks of sandbags.

3.17 MANAGING FLOOD RESCUE OPERATIONS

Strategy

- 3.17.1 Rescue of people and animals from floods.

Actions

- 3.17.2 The NSW SES Oberon Local Incident Controller controls flood rescue in Oberon 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 Central West Region Headquarters.
- 3.17.5 In the Oberon Sector there may be some residual population which did not evacuate during the early stages of flooding and which require rescue.
- 3.17.6 The Fish River Water Supply also has a boat.

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 Oberon Local Incident Controller. Should the scale of evacuation operations be beyond the capabilities of local resources control may be escalated to the NSW SES Central West Region Incident Controller.

Decision to evacuate

3.18.4 In most cases the decision to evacuate rests with the NSW SES Oberon Local 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 Central West Region Incident Controller 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 Region or the State Incident 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 Local Incident Controller will request the following personnel for doorknock teams for designated Sectors/locations:

- a. NSW SES Oberon Unit members.
- b. RFS Oberon District members via the RFS Fire Control Officer.

- c. Local Police Force officers via the Local Area Command.
- 3.18.8 The NSW SES Central West Region Incident Controller will request any additional personnel required to assist with doorknock teams using:
- a. NSW SES members from the NSW SES Central West 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 Local 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 Local Incident Controller will arrange liaison officers for Sector Command Centres.

Delivery of Evacuation Warnings and Evacuation Orders

- 3.18.11 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.
- 3.18.12 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.
- 3.18.13 The NSW SES Local Incident Controller will distribute Evacuation Warnings and Evacuation Orders to:
- a. Sector/Division Command Centres (where established).
 - b. Oberon Local Emergency Operations Centre.
 - c. Oberon Council.
 - d. Chifley Police Local Area Command.
 - e. Oberon Rural Fire Service Control Centre.
 - f. Radio Stations.
 - g. Other local agencies and specified individuals.
- 3.18.14 The NSW SES Central West Region Incident Controller will distribute Evacuation Warnings and Evacuation Orders to:
- a. The NSW SES State Operations Centre.
 - b. The NSW SES Oberon Local Incident Controller.
 - c. Affected communities via dial-out warning systems where installed or applicable.
 - d. Relevant media outlets and agencies.
- 3.18.15 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.
 - f. Direct access to Radio Station ABC, 2BS & 2MCE FM Bathurst, 2LT Lithgow and 2CR Orange.
- 3.18.16 The Standard Emergency Warning Signal (SEWS) may be used to precede all Evacuation Orders broadcast on Radio Stations.
- 3.18.17 Sector Commanders, where established, will distribute Evacuation Orders via Emergency Service personnel in doorknock teams to areas under threat of inundation.
- 3.18.18 Doorknock teams will work at the direction of:
- a. The Sector Commander if a Sector Command Centre is established.
 - b. The relevant Team Leader where a Sector Command Centre has not been established.
- 3.18.19 Field teams conducting doorknocks will record and report back the following information to their Commander:
- 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.
- 3.18.20 Refusal to evacuate. Field teams cannot afford to 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

- 3.18.21 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.
- 3.18.22 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).
- 3.18.23 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.
- 3.18.24 Evacuees will:
- a. Move under local traffic arrangements from the relevant Sectors via managed evacuation routes;
 - b. Continue along the suburban/regional/rural road network to allocated Evacuation Centres.
- 3.18.25 **Health Services.** The Health Services Functional Area will coordinate the evacuation of hospitals, health centres and aged care facilities (including nursing homes).
- 3.18.26 **Schools.** School administration offices (Department of Education, Catholic Education Office and Private Schools) will coordinate the evacuation of schools if not already closed.
- 3.18.27 If there is sufficient time between the start of response operations and the evacuation of communities, the NSW SES Central West Region Incident Controller will discuss the temporary closure of appropriate schools with the Department of Education. This will enable pupils to stay at home or be returned home so they can be evacuated (if required) with their families.
- 3.18.28 Note that in the Oberon LGA, school principals may close some schools affected by flooding in the early stages of flooding.
- 3.18.29 **Caravan parks.** When an evacuation order is given occupiers of moveable dwellings should:
- a. Isolate power to moveable dwellings.
 - b. Collect personal papers, medicines, a change of clothing, toiletries and bedclothes.
 - c. Lift the other contents in any remaining dwellings as high as possible.
 - d. Move to friends, relatives or a designated evacuation centre if they have their own transport, or move to the caravan office to await transport.
 - e. If undertaking self-managed evacuation, register their movements with the caravan park management upon leaving the park.
- 3.18.30 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.
- 3.18.31 Caravan park managers will ensure that their caravan park is capable of being evacuated in a timely and safe manner.
- 3.18.32 Advise the NSW SES Oberon Local Controller of:
- a. The number of people requiring transport.
 - b. Details of any medical evacuations required.
 - c. Whether additional assistance is required to effect the evacuation.

- 3.18.33 Check that all residents and visitors are accounted for.
- 3.18.34 Inform the NSW SES Oberon Local Controller when the evacuation of the caravan park has been completed.
- 3.18.35 Provide the NSW SES Oberon Local Controller with a register of people that have been evacuated.
- 3.18.36 **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. 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. Agriculture and Animal Services will make separate arrangements for the evacuation and care of companion animals.
- 3.18.37 **Transport and storage:** Transport and storage of furniture from flood threatened properties will be arranged as time and resources permit.
- 3.18.38 **Security:** The NSW Police Force will coordinate the provision of overall security for evacuated areas.
- 3.18.39 The NSW SES Local Incident Controller is to provide the following reports to the NSW SES Central West 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.
- 3.18.40 **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

- 3.18.41 **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 Oberon Local Incident Controller, but managed as soon as possible by Welfare Services.
- 3.18.42 The following locations are suitable for use as flood evacuation centres:
- a. Oberon District Hospital Day Care Centre, Oberon.
 - b. Tarana Hotel, Tarana.
 - c. O'Connell Hotel, O'Connell. In the event of a dam-failure flood, the O'Connell Anglican Church would be used instead of the O'Connell Hotel.
 - d. Duckmaloi Water Clarification Plant, Duckmaloi.

- e. Showground Oberon.
- 3.18.43 **Registration:** The NSW Police Force will ensure that evacuees are registered on arrival at the designated evacuation centres. The Oberon Red Cross Society will assist the Police by providing a Disaster Victim Registration Team at evacuation centres.
- 3.18.44 **Animal shelter compounds:** Animal shelter compounds will be set up for the domestic pets and companion animals of evacuees if required. Facilities will be managed by Agriculture and Animal Services.

Return

- 3.18.45 The NSW SES Local Incident Controller will advise when return to evacuated areas is safe after flood waters have receded and reliable access is available.
- 3.18.46 The NSW SES Local 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-coordinator (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 Oberon LEOCON,
 - g. the Oberon Council,
 - h. NSW SES Region Incident Controller,
 - i. Other appropriate agencies/functional areas as required (mitigation and advice regarding identified risks resulting from the flood event).
- 3.18.47 Once it is considered safe to do so, the NSW SES Incident Controller will authorise the return of evacuees.
- 3.18.48 The return will be controlled by the NSW SES Local 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 Local 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 Towns and Villages

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 Local 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:
- a. The NSW SES will coordinate resupply and establish a schedule.
 - b. 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.

- c. Local suppliers will liaise with the NSW SES regarding delivery of resupply items to the designated loading point.
- d. 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 Oberon 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 Oberon 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 Region Incident Controller, 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

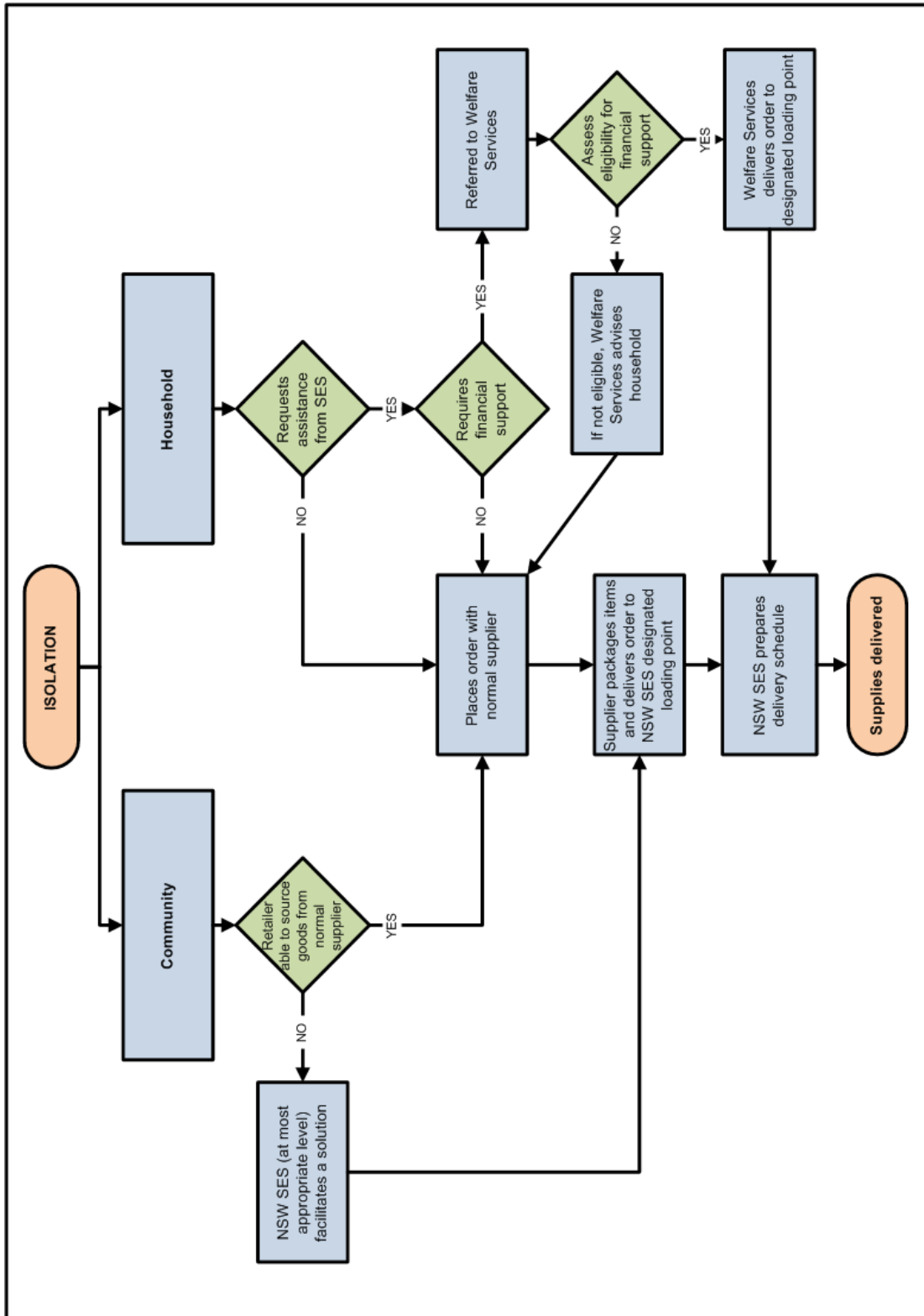
implications including the need for a Region Recovery Committee. This is conveyed in the first instance to the SEOCAN for confirmation with the SERCON.

- 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

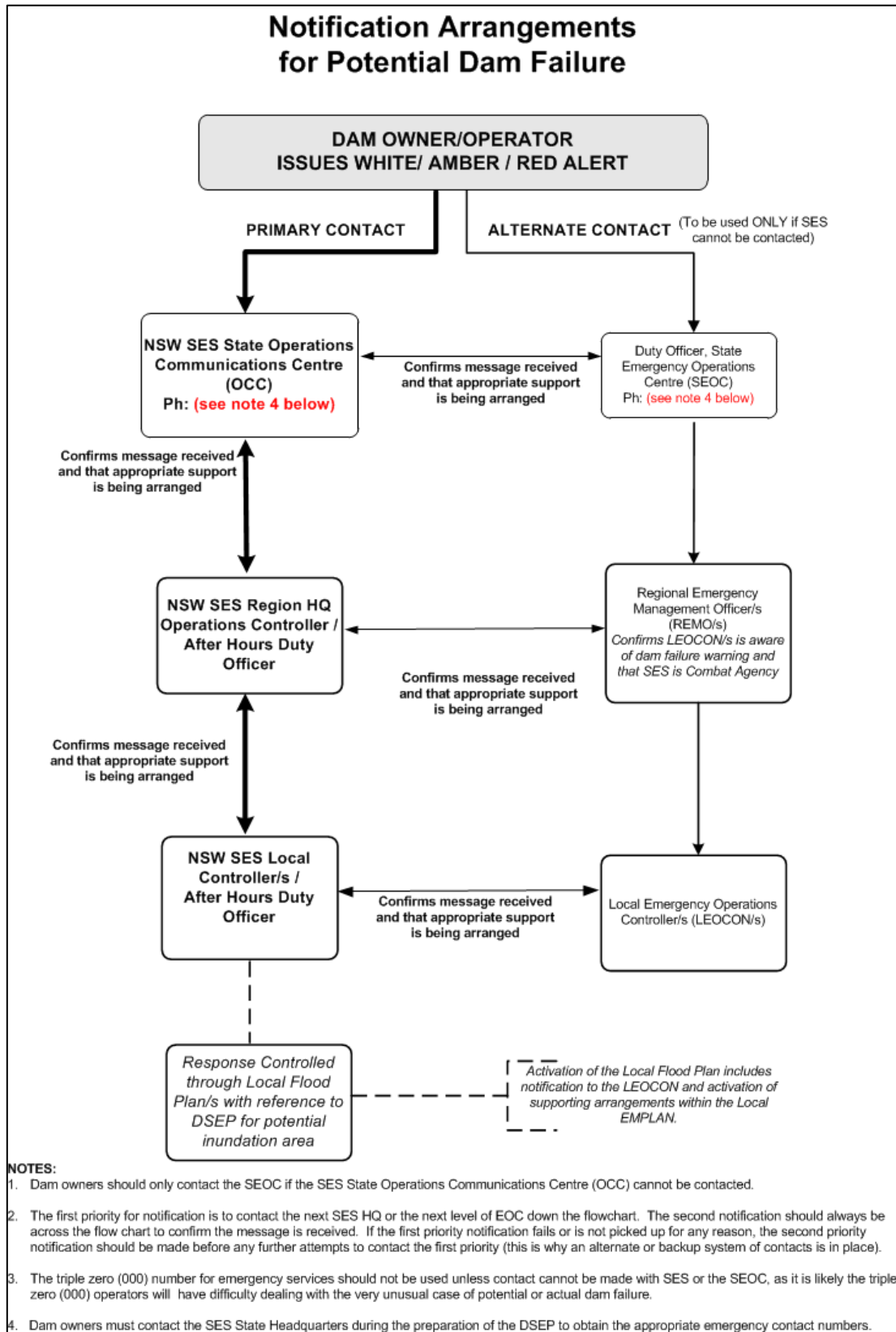
- 4.3.1 As soon as possible after flooding has abated, the NSW SES Oberon Local Controller will advise participating organisations of details of response operation after action review arrangements.
- 4.3.2 The NSW SES Oberon Local Controller will ensure that adequate arrangements are in place to record 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 Oberon Local Emergency Management Committee.

ATTACHMENT 1 - RESUPPLY FLOWCHART

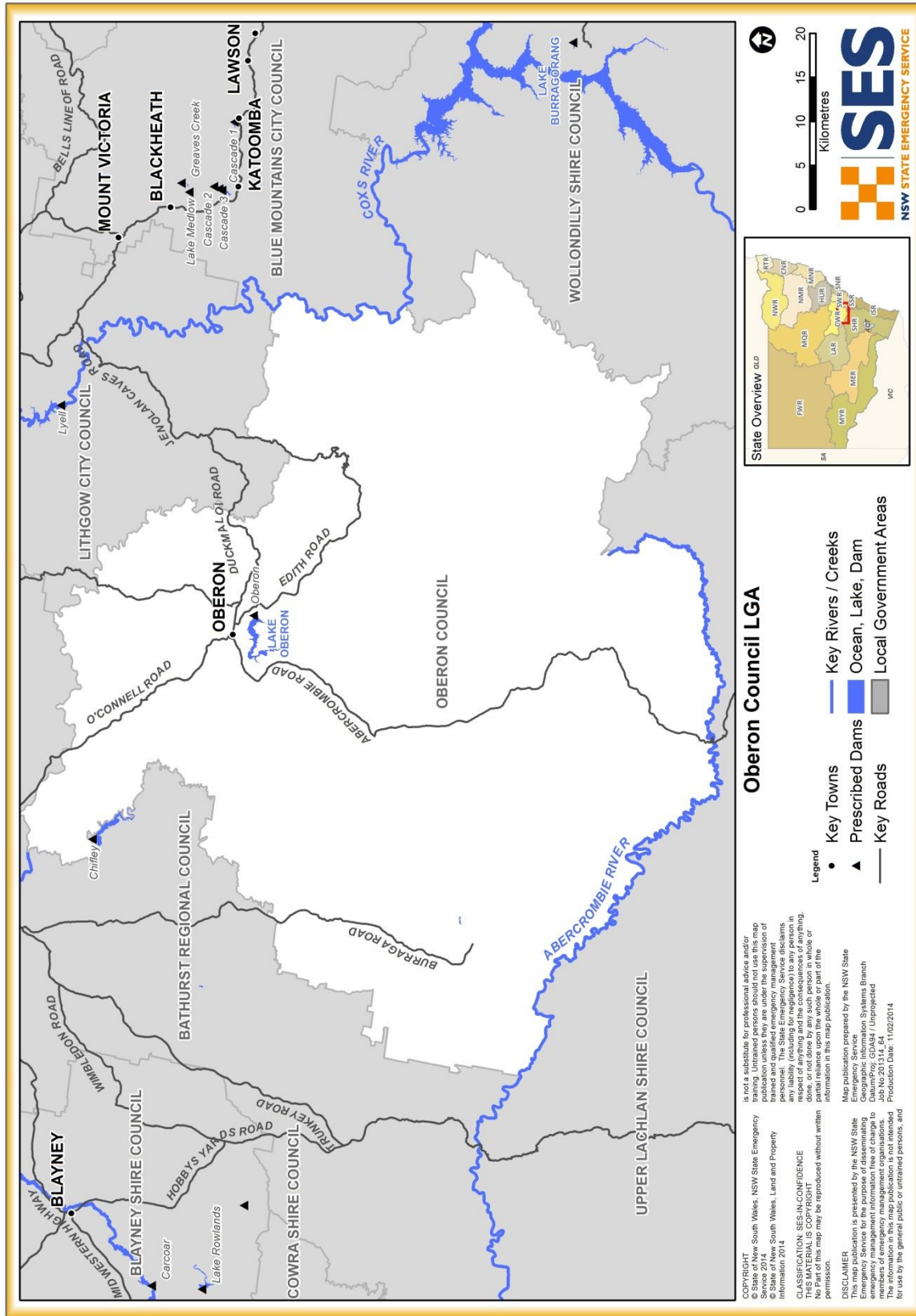


Please Note: The chart outlines the resupply process, but does not encompass all potential situations and outcomes.

ATTACHMENT 2 - DAM FAILURE ALERT NOTIFICATION ARRANGEMENTS FLOWCHART



ATTACHMENT 3 - OBERON LGA MAP



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HAZARD AND RISK IN OBERON

Volume 2 of the Oberon Local Flood Plan

Last Update: July 2011

ANNEX A - THE FLOOD THREAT

LANDFORMS AND RIVER SYSTEMS

GENERAL

1. The Oberon Council Area is located on the higher country of the NSW Central Tablelands in undulating to mountainous terrain. In general, the area has only minor problems with flooding. Most flooding is of short duration, lasting only a matter of hours.
1. Warning times for floods are typically very short and all rivers within the council area rise and fall quickly, especially in their upper reaches. Flash flooding may occur extremely quickly after a storm and with no warning.
2. Flooding can occur at any time of year as a result of one of three main types of weather system:
 - a) In summer, low-pressure troughs extending southward from the northern part of the continent can cause intense short-period rainfall leading to flooding.
 - b) Winter floods tend to be the result of sequences of troughs associated with southern depressions and crossing the region from west to east. These rarely produce high daily falls but can bring substantial falls over long periods. In general, it is these winter systems which are the more significant in terms of flood production.
 - c) High-intensity, short-duration convective thunderstorms occur in summer and bring flooding to limited areas. They may cause town and village drainage systems to surcharge and small creeks to flood, but they rarely cause significant rises in major streams.


RIVER SYSTEMS

3. **Duckmaloi River:** The Duckmaloi River flows north through Edith on the western side of the Great Divide through rural and forested areas to join the Fish River just north of Duckmaloi. The Duckmaloi Weir is located on the Duckmaloi River a short distance below Edith. Water from the weir is piped into the Fish River water supply system.
4. **Fish River:** The Fish River rises to the south of the Oberon town-ship and runs through the centre of the Oberon Council Area through rural and forested lands into Oberon Dam. From here the river flows north east to Duckmaloi where it is joined by the Duckmaloi River and continues on to Tarana to the north. The river then turns west, flowing through rural land to the open plain of

O'Connell and on towards Bathurst. The river forms the northern boundary of the council area.

5. **Kowmung River:** The Kowmung River flows to the east of the Great Divide, mainly through National Park and inaccessible country. Water levels rise and fall rapidly.
6. **Cox's River:** The Cox's River rises north of the Oberon Council Area and flows along part of its eastern boundary through rugged country. Its major tributary within the council area is the Jenolan River.
7. **Abercrombie River:** The Abercrombie River flows in a westerly direction along the southern boundary of the Oberon Council Area through rural areas with low populations. The surrounding country is very steep, causing the river to rise quickly. The main tributary of the Abercrombie within council area is Mt Warong Creek.
8. **Campbells River:** The Campbells River flows north on the western side of the Oberon Council Area into Ben Chifley Dam and then through rural areas to join the Fish River and form the Macquarie River. Lower lying land in The Lagoon area is flood liable.

A1. STORAGE DAMS

9. Dam locations are shown on Map 2 in Annex L in the Oberon LGA Map, signified by the symbol 

Oberon Dam - Oberon LGA

10. (Owner: State Water Corporation, Fish River Water Supply Scheme). The dam is located on the Fish River 2 km south of Oberon. It was constructed in three stages with the final security upgrading completed in 1996 and provides bulk water to Oberon, Lithgow, Pacific Power and Sydney Water. The dam type is a concrete slab & buttress and homogenous earth with toe filter drains. There are two (2) types of spillways; 1 x uncontrolled, ogee crest overflow with flip bucket; 1 x fuse plug chute. Crest length is 399 metres (232m concrete buttress dam & 167m earth embankment). Storage at FSL is 45,000 ML.

In the event of dam failure at least nine (9) houses between Oberon and Tarana (Lithgow LGA) would be inundated to beyond floor level and would require evacuation before the arrival of waters from the dam. Beyond Tarana it is expected that very serious flooding would also occur. The same is true in the area of The Lagoon which would be affected by back-up flow up the Campbells River. The current Dam Safety Emergency Plan (DSEP) is dated August 2007.

Ben Chifley Dam - Bathurst LGA

11. Ben Chifley Dam (capacity approx 30,800 million litres) owned by Bathurst Regional Council is located approx 15 kilometres south of Bathurst and 3.5 kilometres south east of The Lagoon on the Campbells River. The dam is used as a water supply for Bathurst as well as for recreational activities. The dam is an earth fill embankment dam with a height of 34.4m and a crest length of 455m. The original concrete lined service spillway located on the right abutment controls flow with an 84m long ogee crest. The auxiliary fuse plug spillway on the left abutment is 172m wide with provision of 6 fuse plug embankments, varying in height from 4.4m to 11.4m. A dam break study for failure of this dam showed that in a sunny day failure up to 350 houses downstream would be inundated with a flood wave time to the first residence being 26 minutes. During a PMF dambreak event there would be between 600 and 650 houses inundated. The current Dam Safety Emergency Plan (DSEP) is dated June 2005 and is a 'draft' copy.

A2. WEATHER SYSTEMS AND FLOODING

1. Most parts of the Oberon Council area have an average annual rainfall of between 900 & 1200mm. This rainfall is distributed in a fairly uniform manner across the seasons, but there are tendencies towards higher flood frequencies in the February-April and June-August periods than at other times of year. Almost all of recorded severe flood events have occurred during these periods however, large amounts of rain can fall at any time of year. In severe events, more than half the average annual rainfall could be recorded at some stations over a period of several days.
2. Flooding in the Oberon Council area usually results from one of four mechanisms:
 - i. **Cyclonic depressions** forming troughs extending from northern Australia and directing northerly streams of moist, unstable air into northern and central western NSW. Such systems, which occur during the warmer months, frequently produce intense short-period rainfalls leading to flooding. Flooding from this mechanism is rare, however.
 - ii. **Well-developed low-pressure troughs** associated with depressions well to the south and crossing the council areas from west to east. Sequences of such troughs can produce high rainfall totals over a period of weeks, usually in the winter months, with daily falls being less intense than those experienced as a result of the cyclonic depressions noted above.
 - iii. **Low-pressure systems** situated off the coast of NSW and causing flows of moist air across the Great Dividing Range. This mechanism was responsible for the floods of August 1986 and August 1998.

- iv. **High-intensity, short-duration convective thunderstorms** bringing very heavy rain and causing local runoff, flash flooding on minor tributaries and the surcharging of artificial drainage systems in built-up areas. Such storms are largely confined to the late spring, summer and early autumn months and do not create main-stream flooding.
3. Detailed records of flooding within the council area generally concentrate on the surrounding areas to river systems in the LGA including the village of O'Connell from the Fish River. It is known, however, that flooding is irregular on all streams, with long virtually flood-free periods separated by shorter periods of frequent and sometimes severe flooding.

A3. CHARACTERISTICS OF FLOODING

1. There are no large flood prone areas within the Oberon Council Area. Isolated properties and houses in the various river valleys may be affected by flooding however, stock movement is periodically necessary, especially on the lower reaches of the Fish and Campbell's Rivers. Some houses can be isolated for periods of several hours when floods occur. Only on rare occasions however, are evacuations necessary. The largest area of flood liable land is in the O'Connell area, where several houses can be affected due to flooding of the Fish River.
2. The main effects of flooding in the area are road closures which can range from short periods to in the worst cases for up to two (2) days causing considerable disruption to traffic. The Edith Road (Oberon to Jenolan Caves) can be cut at Edith and the Duckmaloi Road (Oberon to Hampton) can be cut just outside Oberon. In both cases, flood response operations in the east of the council area can be hampered. Roads can also be cut in the Tarana and O'Connell areas, and the Shooters Hill, Dog Rocks and Taralga Roads (Oberon - Goulburn) can be affected by flood waters.
3. Bush walkers, campers and tourists can be cut off by flooding, especially in the Jenolan Caves area and in the remote country in the east and south of the council area in the valleys of the Cox's, Kowmung and Abercrombie Rivers.

A4. FLOOD HISTORY

1. There are a low number of recorded flood events in the Oberon area, however peak river heights are available for the Fish River at O'Connell and the Duckmaloi/Fish River Junction.

Month, Year	Peak River Heights	Impacts
April 1950	Abercrombie river height unknown	Causes: Rain (unknown amount) Effects: flooding of Abercrombie Caves with approx. 7m height recorded in main arch carve.
August 1986	Fish River 6.10m at O'Connell Bridge	Causes: Rain (unknown amount) Effects: Roads closed and houses inundated (details not known)
July 1988	Duckmaloi River 3.9m at Junction	Causes: Rain (unknown amount) Effects: (details not known)
August 1990	Fish River at O'Connell Bridge Duckmaloi River 2m at Junction	Causes: Rain (unknown amount) Effects: Water on O'Connell-Oberon Road at 3.7m and inundation to houses (Mills Cottage at 4.9m)

A5. FLOOD MITIGATION SYSTEMS

1. There are no known purpose built flood mitigation systems within the Oberon LGA.

A6. EXTREME FLOODING

1. The worst floods ever recorded in the Oberon Council area should not be considered to be the most serious which will ever occur. An extreme flood would be expected to rise more quickly than did serious floods in the past and could reach much higher levels and higher velocities of flow.
2. It has been ascertained that Oberon Dam located on the Fish River near the town of Oberon, could fail in a genuinely extreme flood of a magnitude which would be likely to occur only very rarely and which would be more severe than any flood so far experienced in the Fish River valley. If failure were to occur, a large volume of water would be released and would travel down the valley as a flood wave inundating large areas close to the river.

ANNEX B - EFFECTS ON THE COMMUNITY

B1. COMMUNITY PROFILE

Census Description	LGA	Oberon
Total Persons	5031	2474
Total Dwellings	1808	951
Total persons aged 65 years and over	646	339
Total persons aged below 15 years	1044	571
Total persons needing assistance (profound / severe disability)	160	94
Total persons of indigenous origin	108	57
Total persons using Internet	956	435
Single parent families	146	102
Persons living alone	467	297
Total persons who do not speak English well	8	4
Total persons who lived at a different address 5 years ago	1582	916
Households without vehicles	84	73
Total persons residing in caravans, cabins or houseboats	36	24
Mean household size	3	2

Table B-1: Census of Housing and Population data (2006)

B2. SPECIFIC RISK AREAS - FLOOD

OBERON

1. The town of Oberon has no significant flooding issues with most flooding experienced in the wider area in villages of O'Connell, Burruga and Abercrombie.

Dams

2. The Special Oberon Dam Warning and Alarm System has been developed to warn nine at-risk households below Oberon Dam of potential or actual dam failure flooding. The system consists of a series of arrangements for monitoring flood levels at the dam and for passing warning messages to the households downstream.
3. Residents of the nine houses at risk have been issued with a written summary of the circumstances under which dam failure could occur and of the arrangements governing the passage of warnings. In addition, they have been advised as to what to take with them when they evacuate and where they should go.
 - a) Special arrangements have been devised to warn the potentially at-risk residence in The Lagoon area of any threat of a failure of Ben Chifley Dam, and to facilitate evacuation if required. These arrangements are summarised in the table at the end of this appendix and consist of:
 - b) Notification procedures to ensure that appropriate agencies are made aware of any threat and can mobilise necessary resources. These include:
 - The monitoring devices of the Bathurst ALERT system, which provide information on rainfall and streamflow conditions and the depth of water in the dam's spillway.
 - Automatic alarms which are transmitted to Bathurst City Council and Central West SES Region Headquarters personnel when these monitoring devices reach particular, pre-set levels.
 - Procedures for notifying the Oberon SES Local Headquarters and other agencies within the Oberon Council area.
 - Procedures to initiate monitoring of the dam and surveillance of downstream areas.
 - c) Procedures for warning the residents of the at-risk dwelling and advising them as to appropriate actions. These could be to prepare to evacuate or to actually do so. Warning would be automatically by pager in the first instance, followed up by phone calls and doorknocks.

- d) Arrangements to guide evacuations. Should evacuation become necessary, an evacuation centre would be established at the Apsley Downs Sales Complex and assistance would be provided to evacuees as necessary to reach this location.

Other Considerations

4. Special events in Oberon may attract increased visitors to the area, with the following major events being identified:
- Oberon Show, February each year.
 - Oberon Steam Festival, February each year.

B3. ROAD CLOSURES

1. The following table lists roads liable to flooding in the Oberon Council area :

Road	Closure location	Consequence of closure	Alternate Route	Indicative gauge height
Oberon - Bathurst	Eight Mile Swamp Creek	Short term closure (1-4 hours)		
Foleys Creek	Brisbane Valley Creek	Short term closure (1-4 hours)		
Oberon - Rockley	Brisbane Valley Creek	Short term closure (1-4 hours)		
Oberon - Rockley	Native Dog Creek	Short term closure (1-4 hours)		
Black Springs - O'Connell	Brisbane Valley Creek	Short term closure (1-4 hours)		
Black Springs - O'Connell	Captain Kings Creek	Short term closure (1-4 hours)		
O'Connell - Lagoon	Alicks Creek	Short term closure (1-4 hours)		
Bloom Hill	Alicks Creek	Short term closure (1-4 hours)		
Wisemans Creek	Sewells Creek	Short term closure (1-4 hours)		
Jaunter	Browns Creek	Short term closure (1-4 hours)		
Jaunter	Long Flat Creek	Short term closure (1-4 hours)		
Arkstone - Burruga	Isabella River	Short term closure (1-4 hours)		
Greywacke	Captain Kings Creek	Short term closure (1-4 hours)		
MR 255	Slippery Creek	Short term closure (1-4 hours)		
MR 255	Emu Valley Creek	Short term closure (1-4 hours)		

Road	Closure location	Consequence of closure	Alternate Route	Indicative gauge height
Mt Olive Rd	Emu Valley Creek	Short term closure (1-4 hours)		
Carlwood Rd	Snakes Valley Creek	Short term closure (1-4 hours)		
Chatham Valley	Duckmaloi River	Short term closure (1-4 hours)		
Mozart Rd	Fish River Creek	Short term closure (1-4 hours)		
Mozart Rd	Long Arm Creek	Short term closure (1-4 hours)		
Murrays Lane	Fish River Creek	Short term closure (1-4 hours)		
MR 255	Fish River	Medium - Long term closure (up to two days)		
Tarana - O'Connell - Muttons Falls	Fish River	Medium - Long term closure (up to two days)		
Tarana - O'Connell - Sydmouth Valley	Fish River	Medium - Long term closure (up to two days)		
Tarana - O'Connell - Rainville	Fish River	Medium - Long term closure (up to two days)		
MR 253 - O'Connell	Fish River	Medium - Long term closure (up to two days)		
MR 256	Abercrombie River	Medium - Long term closure (up to two days)		
Jerrong	Abercrombie River	Medium - Long term closure (up to two days)		
Jerrong	Werong Creek	Medium - Long term closure (up to two days)		
MR 253-Edith	Duckmaloi River	Medium - Long term closure (up to two days)		
Burroughs Crossing	Duckmaloi River	Medium - Long term closure (up to two days)		

Road	Closure location	Consequence of closure	Alternate Route	Indicative gauge height
Hazelgrove - Duckmaloi	Duckmaloi River	Medium - Long term closure (up to two days)		
Isabella - Burruga	Isabella River	Medium - Long term closure (up to two days)		
Black Springs - Burruga	Campbell's River	Medium - Long term closure (up to two days)		
Phill's Falls	Fish River	Medium - Long term closure (up to two days)		

B4. SUMMARY OF ISOLATED COMMUNITIES AND PROPERTIES

1. There are no significant areas within Oberon LGA that are susceptible to lengthy periods of isolation due to flooding.

SES RESPONSE ARRANGEMENTS FOR OBERON

Volume 3 of the Oberon Local Flood Plan

Last Update: July 2011

ANNEX C - GAUGES MONITORED BY THE OBERON SES LOCAL HEADQUARTERS

Gauge Name	Type	AWRC No.	Stream	Flood level classification			Special Reading Arrangements	Owner
				Minor	Moderate	Major		
Oberon Dam			Fish					
Hazelgrove ‡		10176	Fish					SES
Duckmaloi Junction ‡	Manual	10125	Fish					SES
Tarana (Telemetric) ‡	Telemetric	10365	Fish					SES
O'Connell Causeway		10278	Fish					SES
O'Connell Bridge ‡		10279	Fish					DLWC
Saltwater Creek	Manual	10339	Fish					
Edith (Duckmaloi) ‡	Manual	10133	Duckmaloi					DLWC
Ben Chifley Dam ‡		10020	Campbells					COU

Table C-1: Gauges monitored by the Oberon SES Local Headquarters

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

ANNEX D - DISSEMINATION OPTIONS FOR SES FLOOD INFORMATION AND WARNING PRODUCTS

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

Television Stations:

Station	Location
Capital TV	Orange
Prime TV	Orange
WIN TV	Orange
ABC TV	Sydney

Radio Stations:

Station	Location	Frequency	Modulation
2BS	Bathurst	1503	AM
2LT	Lithgow	107.9	FM
2CR	Orange	549	AM
2MCE	Bathurst	92.3	FM

Newspapers:

Name	Location
Oberon Review - Thursdays	Printed Rural Press Dubbo

Other Agencies:

- List other agencies to assist with dissemination of flood information and warnings (eg use of a third party website).
- Note any arrangements for SES LHQ to pass information direct to media organisations.

ANNEX E - TEMPLATE EVACUATION WARNING, EVACUATION ORDER AND ALL CLEAR

Flood Evacuation Warning



[name] SES Region Headquarters

[Enter address]

Telephone: (02) [#####]

Fax: (02) [#####]

Issued [day] [date] at [time in civilian format (am,pm)]

Email: [#####]

Radio stations are asked to immediately broadcast this message and repeat it.

Use of the Standard Emergency Warning Signal (SEWS) with this message is authorized.

Flood Evacuation Warning for [Enter location/s]

Authorised By: [(name and operational position title)]

As a result of the flood level predicted by the Bureau of Meteorology for [*location*] at [*date/time*] the State Emergency Service recommends that residents within the nominated areas should prepare to evacuate within the next [*number*] hours.

Residents should monitor the situation and be prepared to evacuate when instructed to do so. A Flood Evacuation Order will be issued by the SES if evacuation is required.

You can choose to go to friends or relatives. Alternatively, evacuation centres will be established at [*location/s*] where you can obtain temporary accommodation and other help.

To prepare for possible evacuation you should:

- Raise belongings by placing them on tables, beds and benches. Put electrical items on top. You may be able to place light weight items in the roof space.
- Collect together medicines, personal and financial documents, mementos and photos
- If possible, check to see if your neighbours need help
- Make arrangements for care of pets or other animals, or take your pets with you when you evacuate
- Take three days' supply of clothing and medicines
- Find out where to turn off the electricity and gas
- Continue to listen to a local radio station for updates

Don't walk ride or drive through floodwaters – this is the main cause of death and injury during floods

For emergency assistance telephone the SES on 132 500

Web site: www.ses.nsw.gov.au

End SES Flood Evacuation Warning _____

[Enter next update and currency details]

Flood Evacuation Order



[name] SES Region Headquarters

[Enter address]

Telephone: (02) [#####]

Fax: (02) [#####]

Issued [day] [date] at [time in civilian format (am,pm)]

Email: [#####]

Radio stations are asked to immediately broadcast this message and repeat it.

Use of the Standard Emergency Warning Signal (SEWS) with this message is authorized.

Flood Evacuation Order for [Enter locations]

Authorised By: [(name & operational position title)]

As a result of the flood level predicted by the Bureau of Meteorology for [*location*] at [*date/time*] the State Emergency Service is directing residents within the nominated areas to evacuate within the next [*number*] hours.

Do not delay your evacuation. Roads will be congested or closed. You could become trapped and need rescue. Remaining in flooded areas is dangerous and may place your life at risk.

You can choose to go to friends or relatives. Alternatively, evacuation centres will be established at [*location/s*] where you can obtain temporary accommodation and other help.

Delete as required {If you don't have a car, buses may operate where possible on normal routes. Special transport can also be provided on request if necessary, telephone [*telephone number*] }

As you evacuate you should:

- Take your important documents, mementos and photos
- Take your spare clothing and medicines
- If possible, check to see if your neighbours need help
- Turn off the electricity and gas
- Don't walk ride or drive through floodwater
- Continue to listen to a local radio station for updates

For emergency assistance telephone the SES on 132500

SES web site: www.ses.nsw.gov.au

End SES Flood Evacuation Order

This Flood Evacuation Order remains current until the All Clear has been issued

ALL CLEAR



[name] SES Region Headquarters

[Enter address]

Telephone: (02) [#####]

Fax: (02) [#####]

Issued [day] [date] at [time in civilian format (am,pm)]

Email: [#####]

Radio stations are asked to immediately broadcast this message and repeat it.

All Clear for [Enter locations]

Authorised By: [(name & operational position title)]

[Describe the condition that justify the All Clear including any special precautions/conditions and safety advices that people must take]

The SES has issued the ALL CLEAR for [enter locations] at [time / date]. This means that it is now safe to return to [enter locations].

People with access to transport can return to their properties now.

[People who/If you] require transport assistance you should contact [insert contact details] for further information on arrangement for return.

For emergency assistance telephone the SES on 132500

SES web site: www.ses.nsw.gov.au

End SES All Clear

ANNEX F - DETAILS OF THE DAM FAILURE WARNING SYSTEM FOR OBERON DAM

This Annex describes the downstream consequences and specific notification and warning arrangements for the failure of Oberon Dam and should be read in conjunction with the response arrangements detailed in this plan.

F1. INTRODUCTION

1. The dam is located on the Fish River 2 km south of Oberon. It was constructed in three stages with the final security upgrading completed in 1996 and provides bulk water to Oberon, Lithgow, Pacific Power and Sydney Water. The dam type is a concrete slab & buttress and homogenous earth with toe filter drains. There are two (2) types of spillways; 1 x uncontrolled, ogee crest overflow with flip bucket; 1 x fuse plug chute. Crest length is 399 metres (232m concrete buttress dam & 167m earth embankment). Storage at FSL is 45,000 ML.
2. The most likely causes of dam failure are:
 - 'Sunny Day' Failure due to a rapidly deteriorating structural condition induced by engineering fault or sabotage (not induced by an inflow flood).
 - Failure due to a rapidly deteriorating structural condition such as may be induced by earthquake.
 - Failure due to an extreme flood overtopping the dam
3. Although the dam is currently not identified as having deficiencies, an unsafe or emergency condition could occur at any time due to extreme natural events. Failure from a cause not related to extreme natural events is always a possibility although the probability of occurrence is extremely low. Oberon Dam as it presently exists is categorised as a 'High B' Consequence dam.
4. The Oberon Dam is estimated to be able to withstand a flood inflow volume of approximately 935m³/s which would produce an outflow of approximately 282m³/s. This is the equivalent to the maximum spillway capacity at the dam's embankment crest equalling a Potential Failure Flood (PFF). The dam wall would overtop at this level and its structural integrity is not guaranteed.

F2. CONSEQUENCES OF FAILURE

1. Dam failure could result in the following:
2. Up to 31 residential properties could be inundated however it is only likely that 10 of these would be affected. These properties are located on the southern

fringe of Oberon towards Edith, with the river valleys travelling towards Tarana and into the Macquarie River. Significant damage would be caused to infrastructure including bridges and roads, and the main western railway line. Also, water supply would sustain damage due to the dam being a source of water for the area.

3. Approximately 27 dwellings could be inundated by failure of Oberon Dam.

Modelled Event	Number of Houses	Population at Risk
PFF (IFF) No Dam Failure	1	3
PFF + Dambreak	9	27
Sunny Day Failure	9	27
PMF	9	27

Table F-1: Number of houses at risk of inundation

4. The number of houses at risk of inundation in the four (4) modelled scenarios is shown in the table above. The study area of the model extends from the dam downstream to the Tarana - O'Connell Road a distance of 58.55 kilometres.
5. The DSEP identifies properties at risk. In the event of an Alert being issued to SES for Oberon Dam, some or all of these properties may require evacuation.

F3. FLOW TRAVEL TIMES

1. The flow time for a dam break wave to reach the first property to be inundated during a PFF + dambreak flood event is approximately sixty (60) minutes. (refer to chainage charts in Dam Break Study for individual flow times to affected properties downstream).
2. It should be noted that the travel times listed relate to only one component of the lead-up time before downstream flooding commences, and should be considered indicative only.

F4. INUNDATION AREA

1. Downstream flood inundation mapping has been completed for Oberon Dam and is located in the Dam Safety Emergency Plan and Dambreak Study.

F5. SUNNY DAY FAILURE.

1. In the unlikely event of the dam failing under normal inflow conditions, downstream flood inundation would result from water held in the storage.

2. The non-flood failure is considered to have the most potential for loss of life as it is likely to occur when there are no flood warnings and hence emergency services are not on standby and the public is unprepared.

F6. INUNDATION MAPPING.

1. Dam break flood inundation mapping has been prepared for Oberon Dam and is contained in the Oberon Dam Safety Emergency Plan.

F7. MONITORING

1. The dam owner/operator is responsible for monitoring and managing any potential emergency at the dam site.
2. The system operates as follows as a flood is rising:
 - a) A manual gauge located on the Fish River upstream of Lake Oberon is monitored by Fish River Water Supply personnel to provide an indication of flows into the lake from the upper catchment.
 - b) Flood levels at Oberon Dam are monitored by Fish River Water Supply personnel living adjacent to the dam. At particular, pre-determined flood levels, a flood sensor activates a siren which can be heard by these employees who then contact the following by telephone, pager or radio:
 - Officer In Charge, Duckmaloi Water Clarification Plant (Fish River Water Supply).
 - SES Local Controller.
 - Oberon Police Station.
 - Central West SES Division Headquarters.
 - c) Other monitoring networks for the Oberon Dam include:
 - Electronic Piezometers - Located on Main embankments 1-3 and monitored daily.
 - Seepage Monitoring Point - Located downstream of collector wall and monitored daily.
 - Standpipe Piezometers - Located on Main embankments 1-4 and monitored daily.
 - Visual Dam Level Inspections conducted daily.
 - Dam inspections of Main embankment, Concrete structure and fuse plugs conducted twice weekly.
 - Crack surveys of Main embankment conducted every seven (7) years.

F8. NOTIFICATION PROCEDURES

1. The primary contact for dam failure warning notification by the dam owner to the SES is the NSW SES 24hr Operations Communications Centre. The SES Operations Communications Centre will subsequently notify the Central West SES Region Headquarters After Hours Duty Officer who will contact the Oberon SES Local Controller. An alternate NSW Police contact is available if this notification procedure was to fail.
2. A flow chart illustrating the notification arrangements for potential dam failure is shown in Annex J.

F9. WARNING

1. Dam failure alerts are issued to SES and are used to trigger appropriate response actions. Alert levels from the DSEP for flood failure have been reproduced in Table F-3 against SES responses. Responses escalate as the alert level migrates from white to red. The conditions that define each of the alert levels (as identified in the DSEP) are listed in Table F-2 below. The meaning of each alert level is as follows:
 - White: Preliminary alert to assist the SES in its preparation. This is not a public alert. It indicates a potential issue/condition has been observed at the dam and is being investigated.
 - Amber: Alert level necessitating the warning of the population at risk to prepare for evacuation.
 - Red: Alert level requiring the immediate evacuation of the downstream population at risk.
2. Actions indicated as occurring at particular Alert Levels may be brought forward if the development of a flood warrants.

Alert	Defining Conditions	Min Time to Reach Alert Levels (approx)
White Alert	Storage level of dam reaches RL 1069.73m AHD - 1.65m above FSL Discharge reaches 8,640 ML/day equivalent to 1:10 AEP flood.	Approximately 45 minutes until amber level reached
Amber Alert	Storage Level Bay 1 triggered at water level of RL 1071.05m AHD - 2.97m above FSL In the event of an Earthquake	Approximately 35 minutes until red level reached
Red Alert	Storage Level has reached crest level of the concrete section of RL 1072.13m AHD - 4.05m above FSL	

Table F-2: Oberon Dam Flood Failure Alert levels

3. The State Water Corporation (Dam Safety and Audit Manager) will disseminate dam failure warnings.
4. State Water Corporation Staff will keep the SES informed of the conditions of the dam through monitoring networks and the discharge through the spillway at 0.5m interval releases. The dam alerts will be activated in sequence as the storage level rises during the course of a major flood event and will be sent to the SES as they occur.
5. The following table outlines the notification, warning and evacuation arrangements for a potential failure of Oberon Dam.

Alerts	Defining Conditions	Notification Arrangements and Actions for Oberon Dam					
		State Water Corporation	SES OCC	SES Region Controller	SES Local Controller	LEOCON / Other agencies	People at risk
White Alert	Storage level of dam reaches RL 1069.73m AHD - 1.65m above FSL Discharge reaches 8,640 ML/day equivalent to 1:10 AEP flood.	Advise SES Communications Centre of White Alert Level being reached and provide regular updates on the situation at the dam	Receive notification from dam operator Advise SES Region Controller Advise SEOC	Receive notification from SES SHQ Advise SES Local Controller, SES Units SES Local Headquarters Advise the District Emergency Management Officer (DEMO). Consider need for OAAA for warning and evacuation operations.	Confirm SES RHQ has been notified. Activate Local Flood Plan. Refer to Local Flood Plan for agencies to notify that the White Alert Level has been reached. (See Annex I, Dam Failure Alert Notification Arrangements Flowchart).	When requested by SES Local Controller, coordinate support	No action required. Some evacuations may be necessary due to mainstream riverine flooding.
Amber Alert	Storage Level Bay 1 triggered at water level of RL 1071.05m AHD - 2.97m above FSL In the event of	Advise SES Operations Communications Centre of Amber Alert Level being reached and provide regular updates on the	Receive notification from dam operator Advise SES Region Controller	Notify SES Local Controller, SES units SES LHQ. Provides SES Flood Bulletins and evacuation warnings to the	Confirm SES RHQ has been notified. Coordinate the delivery of warnings to at-risk residents.	When requested by SES Local Controller, coordinate support	Prepare homes for inundation, pack valuables, mementos and pets and prepare to evacuate.

Alerts	Defining Conditions	Notification Arrangements and Actions for Oberon Dam					
		State Water Corporation	SES OCC	SES Region Controller	SES Local Controller	LEOCON / Other agencies	People at risk
	an Earthquake	<p>situation at the dam</p> <p>Closely monitor the condition of Oberon Dam and implement preventative measures to return it to a safe condition as soon as possible.</p>	Advise SEOC	<p>media organisations listed in Annex D.</p> <p>Coordinate provision of out of area assistance for warning and evacuation operations.</p>	Coordinate the notification of other agencies as listed in Local Flood Plan		<p>Notify SES doorknockers if transport to evacuation centres will be required.</p> <p>Some evacuations may be necessary due to mainstream riverine flooding.</p>
Red Alert	Storage Level has reached crest level of the concrete section of RL 1072.13m AHD - 4.05m above FSL	Advise SES Communications Centre of Red Alert Level being reached and provide regular updates on the situation at the dam	<p>Receive notification from dam operator</p> <p>Advise SES Region Controller</p> <p>Advise SEOC</p>	<p>Notify SES Local Controller, SES units, SES LHQ.</p> <p>Advise the DEMO.</p> <p>Confirm that residents immediately downstream of the dam have been notified of Red Alert Level being reached.</p>	<p>Confirm SES RHQ has been notified.</p> <p>Evacuate at-risk residents.</p> <p>Coordinate the notification of other agencies as per the Local Flood Plan</p> <p>Ensure that evacuation centres are ready to receive</p>	When requested by SES Local Controller, coordinate support	Evacuate to nearest evacuation centre or assembly area.

Alerts	Defining Conditions	Notification Arrangements and Actions for Oberon Dam					
		State Water Corporation	SES OCC	SES Region Controller	SES Local Controller	LEOCON / Other agencies	People at risk
				<p>Activate the Standard Emergency Warning Signal (SEWS) and ensure that evacuation warnings are broadcast over the radio stations listed in Annex D.</p> <p>Coordinate provision of out of area assistance for evacuation operations</p>	<p>evacuees.</p> <p>Conduct warning and evacuation of downstream residents by doorknock and public address systems from emergency service vehicles.</p> <p>Coordinate transport of evacuees without their own vehicles.</p>		
Dam failure alert cancellation	Dam owner assesses threat and advises whether the risk to the dam structure has passed.	Advise SES OCC of the outcome of the risk assessment	<p>Receive notification from dam operator</p> <p>Advise SES Region Controller</p> <p>Advise SEOC</p>	<p>Following risk assessment of the dam, decide in consultation with Local and State Controller whether to issue an All Clear.</p> <p>Issue 'All Clear'</p>	<p>Deliver 'All Clear' message to other agencies as necessary.</p> <p>Coordinate issue of 'All Clear' message at evacuation centres or by phone/doorknock.</p>	When requested by SES Local Controller, coordinate support	Stay home, return home or await further advice.

Alerts	Defining Conditions	Notification Arrangements and Actions for Oberon Dam					
		State Water Corporation	SES OCC	SES Region Controller	SES Local Controller	LEOCON / Other agencies	People at risk
				<p>message to SES Local Controller, SES Units, SES Local HQ and SES State HQ</p> <p>Advise the DEMO that 'All Clear' has been issued.</p> <p>Issue 'All Clear' message over radio stations listed in Annex D.</p>			

Table F-3: Notification, warning and evacuation arrangements for a potential failure of Oberon Dam

ANNEX G - DETAILS OF THE DAM FAILURE WARNING SYSTEM FOR BEN CHIFLEY DAM

This Annex describes the downstream consequences and specific notification and warning arrangements for the failure of Ben Chifley Dam and should be read in conjunction with the response arrangements detailed in this plan.

G1. INTRODUCTION

1. Ben Chifley Dam was constructed in 1957 and is a water supply for the city of Bathurst, the dam is located in the Bathurst Regional Council Local Government Area (LGA) and is on the western boundary of the Oberon LGA. The dam is located on the Campbells River, a tributary of the Macquarie River and is approximately 17kms south of Bathurst. Ben Chifley Dam is a zoned earth fill embankment dam with a sloping central clay core constructed of weathered granite. The embankment crest has a length of 455m and a height of 34.4m with a storage capacity of 30,800 ML at FSL. The service spillway is an ogee crest with a fuse plug auxiliary consisting of 6 fuse plug embankments.
2. The most likely causes of dam failure are:
 - Failure due to flood levels overtopping the embankment
 - Failure due to rapidly deteriorating structural deficiency such as may be induced by an extreme earthquake, internal erosion, piping, landslide or sabotage. (This is the so-called "Sunny Day" failure, i.e. not induced by an inflow flood).
3. Although the dam is currently in good condition, an unsafe or emergency condition could occur at any time due to extreme natural events. Failure from a cause not related to extreme natural events is always a possibility although the probability of occurrence is extremely low.
4. Ben Chifley as it presently exists is categorised as a 'High A' Consequence dam.
5. The Ben Chifley Dam is expected to withstand a PMF event and is estimated to be able to withstand a flood volume up to a peak inflow of 9346m³/sec and peak outflow of 9172m³/sec. [insert details] passing through the storage.

G2. CONSEQUENCES OF FAILURE

1. Dam failure could result in the following:
2. There are approximately 350 downstream residences that would be inundated due to 'Sunny Day' Dam Failure with this number increasing to around 650 in a PMF and PMF + Dambreak event. These downstream properties are located in the Campbells River Valley and The Lagoon, and the O'Connell village which is

part of the Oberon LGA, wider areas on the Macquarie River towards the city of Bathurst. Numerous roads in this area including roads in The Lagoon, the Lagoon Road to O'Connell and further downstream into Bathurst with numerous bridges at Hereford, Esrom and Rankin Streets affected along with the Main western Railway Line. Water supply to Bathurst would be affected.

- Up to approximately 650 dwellings could be inundated by failure of Ben Chifley Dam.

Modelled Event	Number of Houses	Population at Risk
Sunny Day Dam Failure	350	875
Sunny Day Fuse Plug Bay 6 Failure	250	625
PMF (No Failure)	600	1500
PMF Dambreak	650	1625

Table G-1: Number of houses at risk of inundation

- The number of houses at risk of inundation in the four (4) modelled scenarios is shown in the table above. The study area of the model extends from the dam downstream to the city of Bathurst.
- The DSEP identifies properties at risk. In the event of an Alert being issued to SES for Ben Chifley Dam, some or all of these properties may require evacuation.

G3. FLOW TRAVEL TIMES

- Flow times for water to reach the first affected property downstream in PMF + Dam Break event is three (3) minutes. (refer to chainage charts in Dam Break Study and DSEP for individual flow times to affected properties downstream).
- It should be noted that the travel times listed relate to only one component of the lead-up time before downstream flooding commences, and should be considered indicative only.

G4. INUNDATION AREA

- Downstream flood inundation could occur as the result of a dam failure due to a flood or a 'Sunny Day' failure. Areas affected by inundation in the Oberon LGA include those in the Campbells Creek Valley and The Lagoon.

G5. FLOOD FAILURE

1. The likelihood of dam failure due of flooding would result from a PMF event that would have the potential to cause failure to the auxiliary fuse plugs 1-6. (see DSEP and Dam Break Study).

G6. SUNNY DAY FAILURE.

1. In the unlikely event of the dam failing under normal inflow conditions, downstream flood inundation would result from water held in the storage.
2. The non-flood failure is considered to have the most potential for loss of life as it is likely to occur when there are no flood warnings and hence emergency services are not on standby and the public is unprepared.

G7. INUNDATION MAPPING.

1. Dam break flood inundation mapping has been prepared for Ben Chifley Dam and is contained in the Ben Chifley Dam Safety Emergency Plan.

G8. MONITORING

1. The dam owner/operator is responsible for monitoring and managing any potential emergency at the dam site.
2. Ben Chifley Dam is monitored by a network of instrumentation comprising of:
 - Electrical Piezometers - 1 located upstream and 13 downstream of embankment monitored fortnightly.
 - Standpipes - 3 located upstream and 5 downstream of embankment these are NOT monitored.
 - Settlement Points - 18 located upstream and 31 downstream of embankment monitored annually.
 - Seepage Weir - located adjacent to the downstream toe retaining wall monitored weekly.
 - Storage level Gauge Plates - telemetry system that is checked manually.

G9. NOTIFICATION PROCEDURES

1. The primary contact for dam failure warning notification by the dam owner to the SES is the NSW SES 24hr Operations Communications Centre. The SES Operations Communications Centre will subsequently notify the Central West SES Region Headquarters After Hours Duty Officer who will contact the Oberon SES Local Controller. An alternate NSW Police contact is available if this notification procedure was to fail.

2. A flow chart illustrating the notification arrangements for potential dam failure is shown in Annex J.

G10. WARNING

1. Dam failure alerts are issued to SES and are used to trigger appropriate response actions. Alert levels from the DSEP for flood failure have been reproduced in Table G-3 against SES responses. Responses escalate as the alert level migrates from white to red. The conditions that define each of the alert levels (as identified in the DSEP) are listed in Table G-2 below. The meaning of each alert level is as follows:
 - White: Preliminary alert to assist the SES in its preparation. This is not a public alert. It indicates a potential issue/condition has been observed at the dam and is being investigated.
 - Amber: Alert level necessitating the warning of the population at risk to prepare for evacuation.
 - Red: Alert level requiring the immediate evacuation of the downstream population at risk.
2. Actions indicated as occurring at particular Alert Levels may be brought forward if the development of a flood warrants.

Alert	Defining Conditions	Min Time to Reach Alert Levels (approx)
White Alert	- 2.0m over service spillway (RL 712.62m AHD) - 2.0m over FSL	From WHITE alert stage to AMBER alert stage: 1 hour.
Amber Alert	- 2.6m over service spillway (RL 713.22m AHD) - 2.6m over FSL	From AMBER alert stage to RED alert stage: 1 hour.
Red Alert	- 3.5m over service spillway (RL 714.12m AHD) 3.5m over FSL.	From issue of RED alert stage to failure of dam wall: 3 hours.

Table G-2: Ben Chifley Dam Flood Failure Alert levels

3. The Bathurst Regional Council will disseminate dam failure warnings.
4. Bathurst Regional Council Staff will keep the SES informed of the monitoring and surveillance data relating to streamflow, spillway discharge and dam integrity. The dam alerts will be activated in sequence as the storage level rises during the course of a major flood event and will be sent to the SES as they occur.
5. The following table outlines the notification, warning and evacuation arrangements for a potential failure of Ben Chifley Dam.

Alerts	Defining Conditions	Notification Arrangements and Actions for Ben Chifley Dam					
		Bathurst Regional Council	SES OCC	SES Region Controller	SES Local Controller	LEOCON / Other agencies	People at risk
White Alert	- 2.0m over service spillway (RL 712.62m AHD) - 2.0m over FSL	Advise SES Communications Centre of White Alert Level being reached and provide regular updates on the situation at the dam	Receive notification from dam operator Advise SES Region Controller Advise SEOC	Receive notification from SES SHQ Advise SES Local Controller, SES Units SES Local Headquarters Advise the District Emergency Management Officer (DEMO). Consider need for OOAA for warning and evacuation operations.	Confirm SES RHQ has been notified. Activate Local Flood Plan. Refer to Local Flood Plan for agencies to notify that the White Alert Level has been reached. (See Annex I, Dam Failure Alert Notification Arrangements Flowchart).	When requested by SES Local Controller, coordinate support	No action required. Some evacuations may be necessary due to mainstream riverine flooding.
Amber Alert	- 2.6m over service spillway (RL 713.22m	Advise SES Operations Communications Centre of Amber	Receive notification from dam operator	Notify SES Local Controller, SES units SES	Confirm SES RHQ has been notified. Coordinate the	When requested by SES Local Controller,	Prepare homes for inundation, pack

			<p>Advise SES Region Controller</p> <p>Advise SEOC</p>	<p>LHQ.</p> <p>Provides SES Flood Bulletins and evacuation warnings to the media organisations listed in Annex D.</p> <p>Coordinate provision of out of area assistance for warning and evacuation operations.</p>	<p>delivery of warnings to at-risk residents.</p> <p>Coordinate the notification of other agencies as listed in Local Flood Plan</p>	<p>coordinate support</p>	<p>valuables, mementos and pets and prepare to evacuate.</p> <p>Notify SES doorknockers if transport to evacuation centres will be required.</p> <p>Some evacuations may be necessary due to mainstream riverine flooding.</p>
	<p>AHD) - 2.6m over FSL.</p>	<p>Alert Level being reached and provide regular updates on the situation at the dam</p> <p>Closely monitor the condition of Ben Chifley Dam and implement preventative</p>					

		measures to return it to a safe condition as soon as possible.					
Red Alert	- 3.5m over service spillway (RL 714.12m AHD) 3.5m over FSL.	Advise SES Communications Centre of Red Alert Level being reached and provide regular updates on the situation at the dam	Receive notification from dam operator Advise SES Region Controller Advise SEOC	Notify SES Local Controller, SES units, SES LHQ. Advise the DEMO. Confirm that residents immediately downstream of the dam have been notified of Red Alert Level being reached. Activate the Standard Emergency Warning Signal (SEWS) and ensure that	Confirm SES RHQ has been notified. Evacuate at-risk residents. Coordinate the notification of other agencies as per the Local Flood Plan Ensure that evacuation centres are ready to receive evacuees. Conduct warning and evacuation of downstream residents by doorknock and public address systems from emergency service vehicles.	When requested by SES Local Controller, coordinate support	Evacuate to nearest evacuation centre or assembly area.

				<p>evacuation warnings are broadcast over the radio stations listed in Annex D.</p> <p>Coordinate provision of out of area assistance for evacuation operations</p>	<p>Coordinate transport of evacuees without their own vehicles.</p>		
<p>Dam failure alert cancellation</p>	<p>Dam owner assesses threat and advises whether the risk to the dam structure has passed.</p>	<p>Advise SES OCC of the outcome of the risk assessment</p>	<p>Receive notification from dam operator</p> <p>Advise SES Region Controller</p> <p>Advise SEOC</p>	<p>Following risk assessment of the dam, decide in consultation with Local and State Controller whether to issue an All Clear.</p> <p>Issue 'All Clear' message to SES Local Controller, SES units, SES Local HQ and</p>	<p>Deliver 'All Clear' message to other agencies as necessary.</p> <p>Coordinate issue of 'All Clear' message at evacuation centres or by phone/doorknock.</p>	<p>When requested by SES Local Controller, coordinate support</p>	<p>Stay home, return home or await further advice.</p>

				<p>SES State HQ</p> <p>Advise the DEMO that 'All Clear' has been issued.</p> <p>Issue 'All Clear' message over radio stations listed in Annex D.</p>			
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Table G-3: Notification, warning and evacuation arrangements for a potential failure of Ben Chifley Dam

ANNEX H - RESUPPLY FLOWCHART

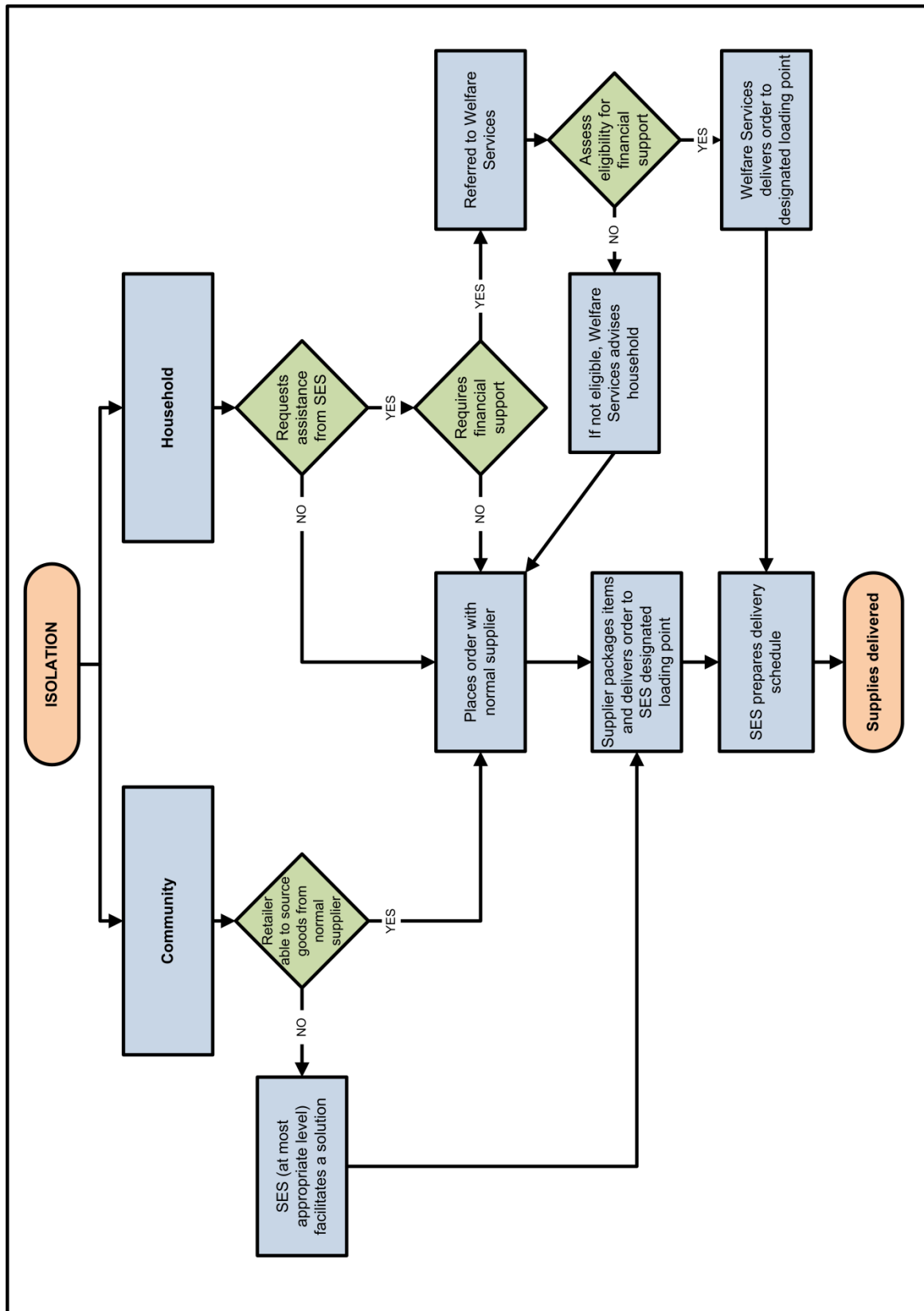
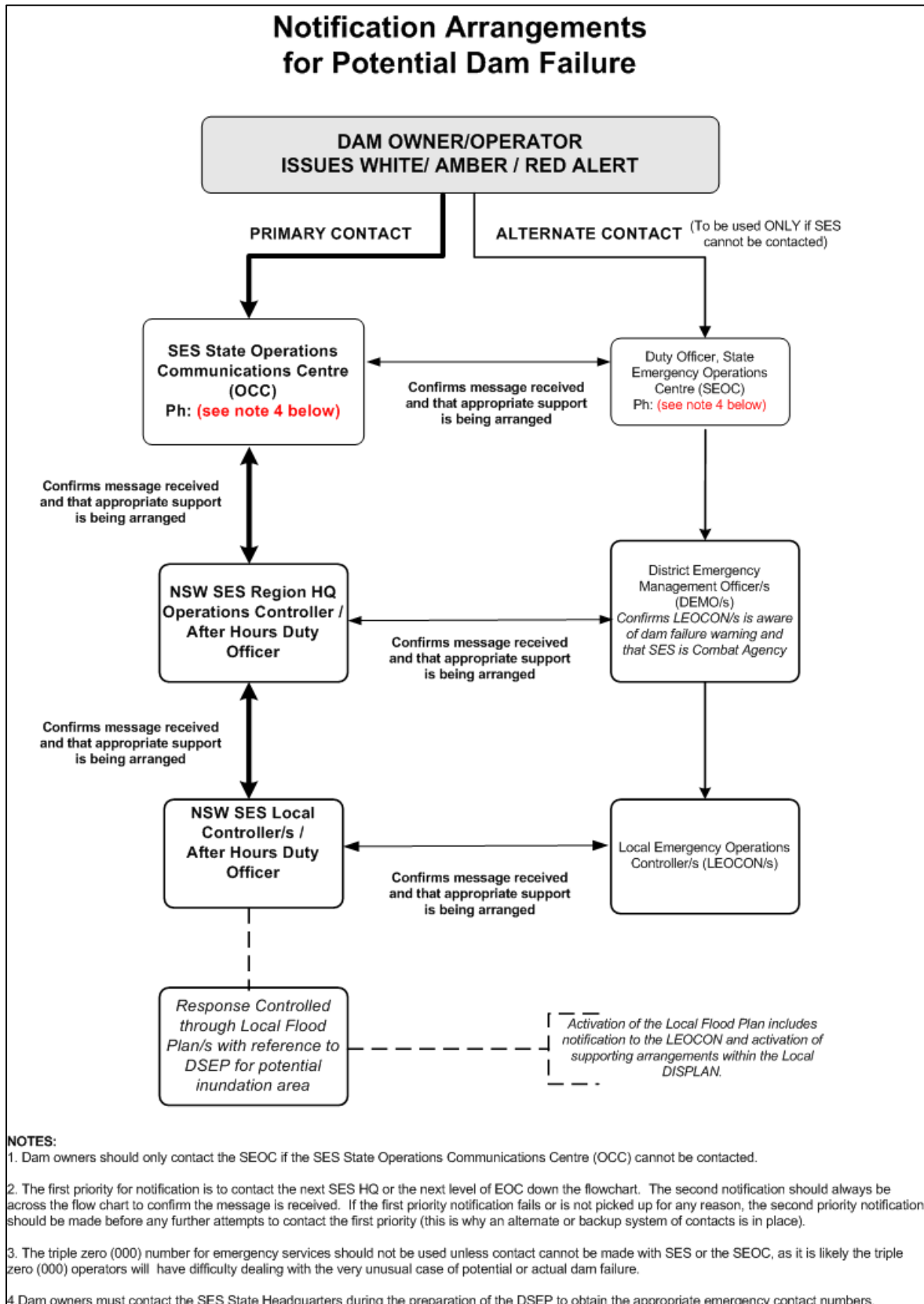


Figure H-1: Resupply Flowchart. Please note that the flowchart outlines the resupply process but does not encompass all potential situations and/or outcomes.

ANNEX I - DAM FAILURE ALERT NOTIFICATION ARRANGEMENTS FLOWCHART



ANNEX J - MAPS

MAP 1 - Hawkesbury River Basin

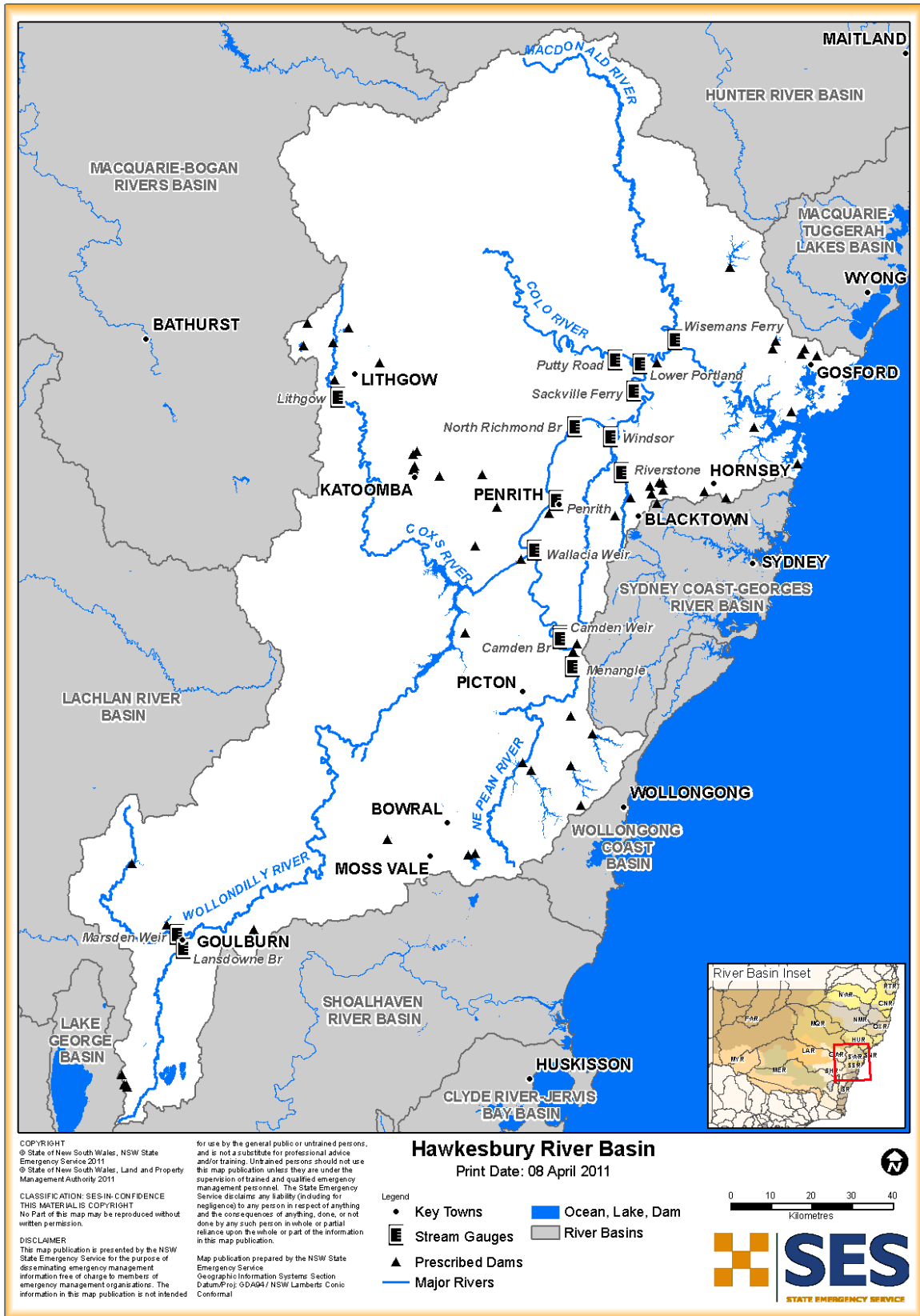
MAP 2 - Macquarie River Basin

MAP 3 - Lachlan River Basin

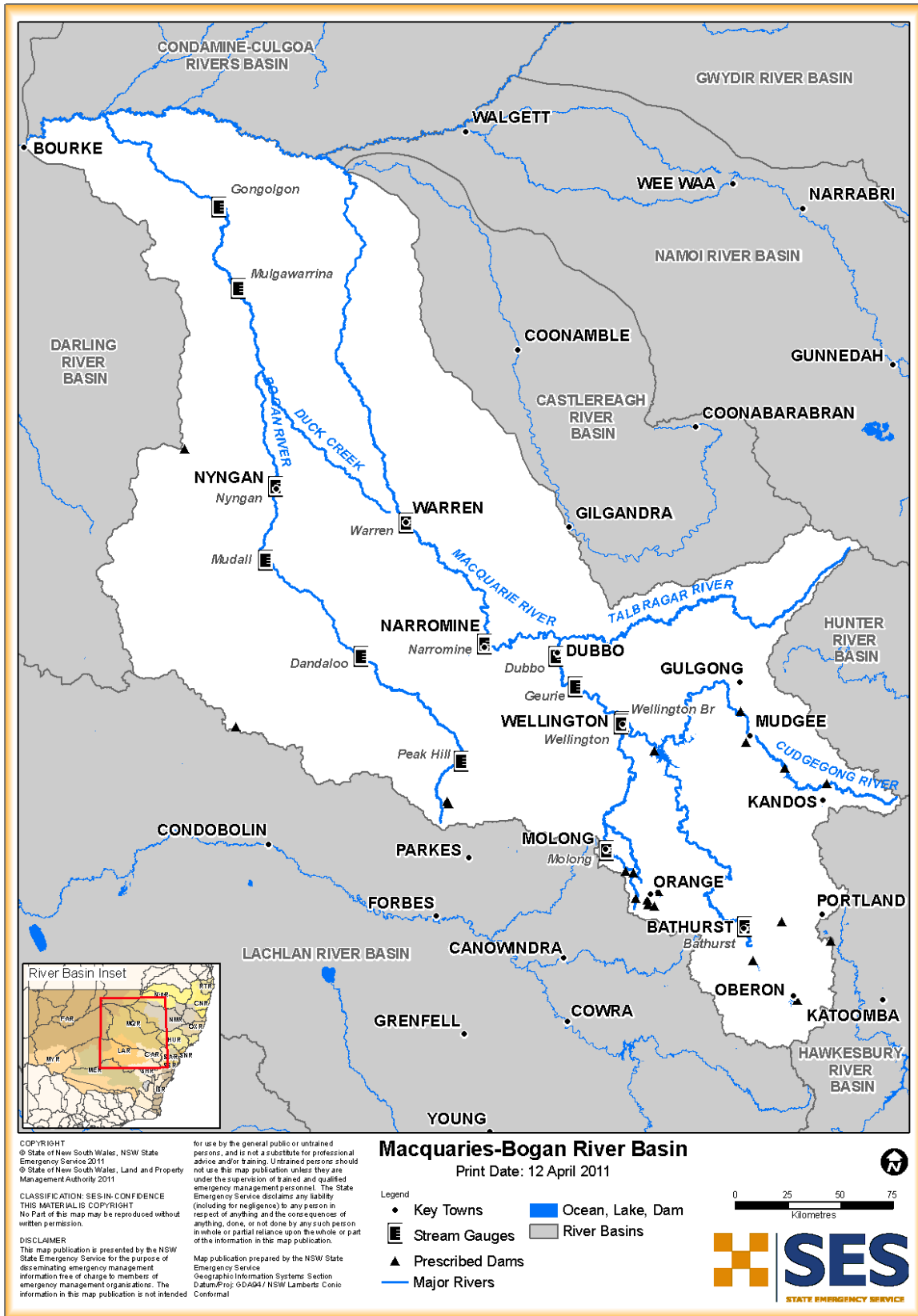
MAP 4 - Oberon Local Government Area

MAP 5 - Oberon Town

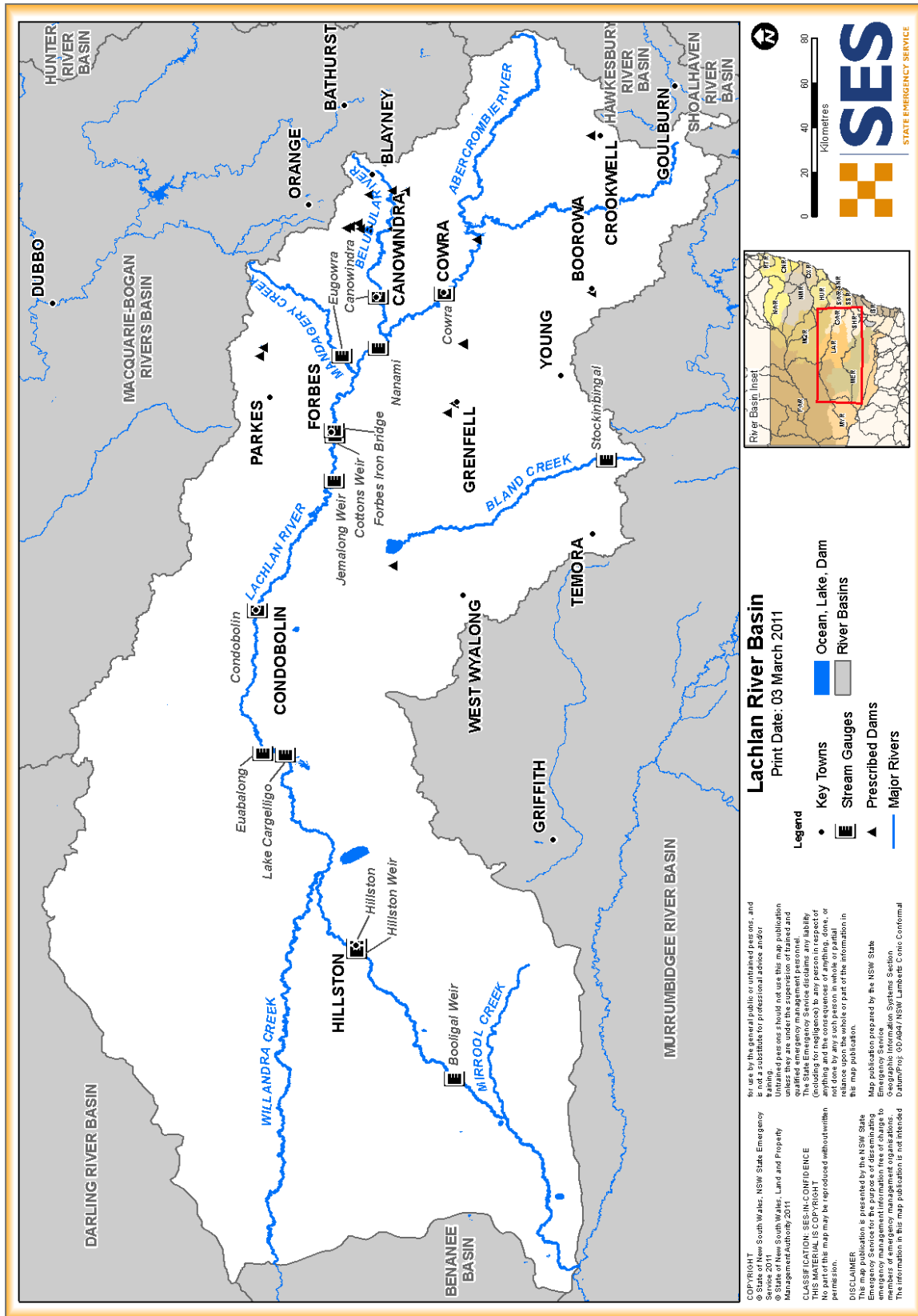
MAP 1 - THE HAWKESBURY RIVER BASIN



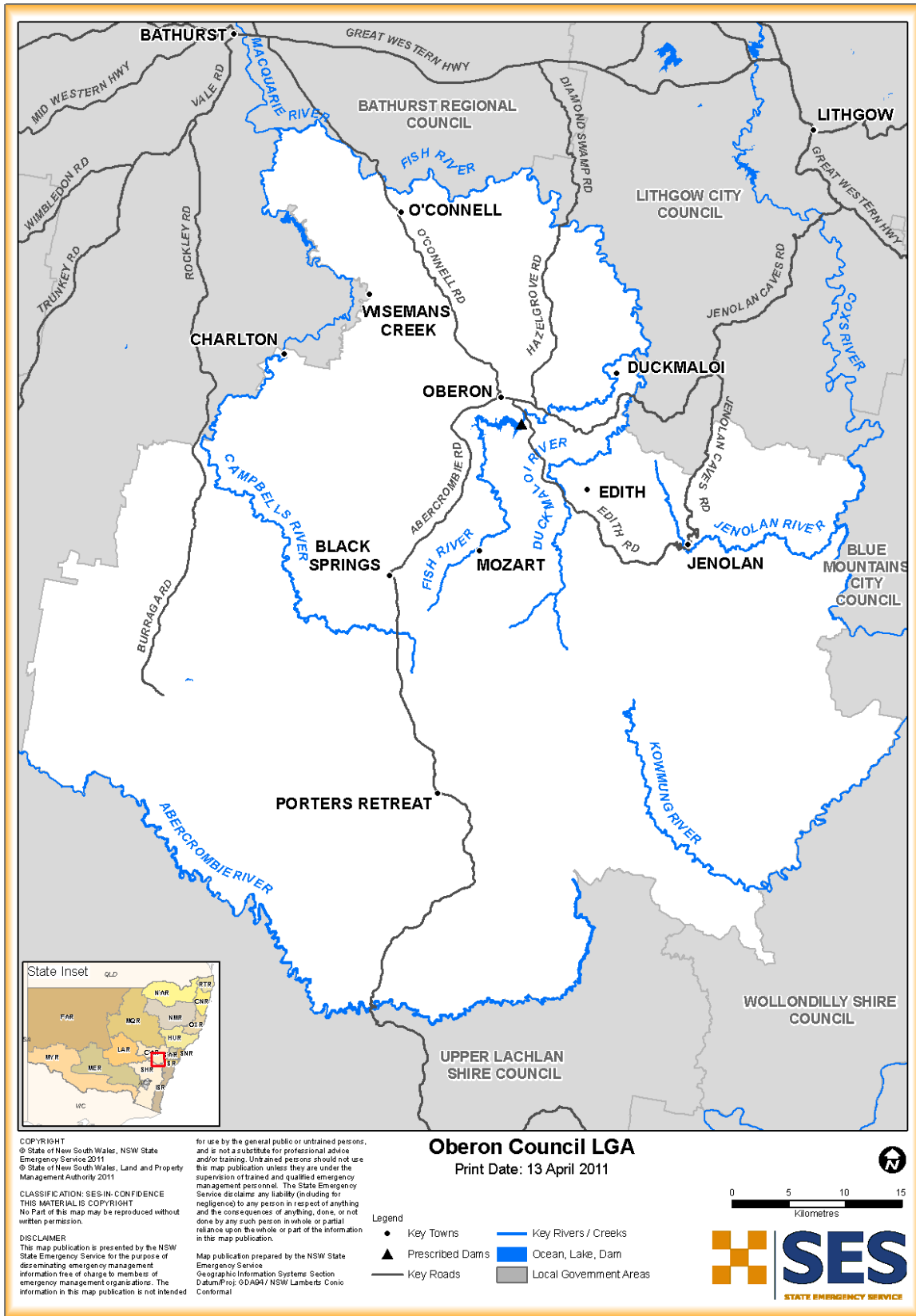
MAP 2 - MACQUARIE RIVER BASIN



MAP 3 - LACHLAN RIVER BASIN



MAP 4 - OBERON COUNCIL AREA



MAP 5 - OBERON TOWN MAP

