

**Cessnock LGA**

# Local Flood Emergency Sub Plan



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# **CESSNOCK CITY COUNCIL FLOOD EMERGENCY SUB PLAN**

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

**Volume 1 of the Cessnock City Council Local Flood Plan**

**Endorsed by the Cessnock City Council Emergency Management Committee**

**Endorsed Date:** 16 March 2022

# AUTHORISATION

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

Authorised

 Joseph Ebrson Cessnock City Unit Commander  
NSW SES Local/Unit Commander

Date: 16 March 2022

Endorsed

 Michael Gorman  
Chair, Local Emergency Management Committee

Date: MARCH 16, 2022

## VERSION HISTORY

Version Number	Description	Date
	Cessnock City Local Flood Plan	February 2009

**THE BELOW TABLE LISTS ALL PREVIOUSLY ENDORSED VERSIONS OF THIS PLAN.**

Description	Date

## AMENDMENT LIST

Suggestions for amendments to this plan should be forwarded to:

Community Planning and Engagement  
NSW State Emergency Service  
PO Box 6126, Wollongong NSW 2500  
[nswses.communityplanning@ses.nsw.gov.au](mailto:nswses.communityplanning@ses.nsw.gov.au)

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

Amendment Number	Description	Updated by	Date
1.1	Minor modifications	T Ware	14.2.22

## DISTRIBUTION LIST

Available for general use and distribution on the following websites - [www.emergency.nsw.gov.au](http://www.emergency.nsw.gov.au)  
or [www.ses.nsw.gov.au](http://www.ses.nsw.gov.au)

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# CONTENTS

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

5.5	Protection of Property.....	15
5.6	Road and Traffic Control.....	15
5.7	Protection of Essential Services.....	16
5.8	Evacuation .....	17
5.9	Evacuee Management And Welfare.....	18
5.10	Flood Rescue .....	19
5.11	Resupply.....	20
5.12	All Clear and Return .....	20
5.13	End of Response Operations.....	21
5.14	Post Impact Actions .....	21
<b>6</b>	<b>RECOVERY OPERATIONS .....</b>	<b>22</b>
6.1	Introduction.....	22
6.2	NSW SES Recovery Role.....	22
<b>7</b>	<b>ABBREVIATIONS .....</b>	<b>23</b>
<b>8</b>	<b>GLOSSARY .....</b>	<b>23</b>
<b>9</b>	<b>APPENDIX A – MAP OF CESSNOCK CITY COUNCIL AREA .....</b>	<b>24</b>
<b>10</b>	<b>APPENDIX B – ROLES AND RESPONSIBILITIES.....</b>	<b>25</b>
<b>11</b>	<b>APPENDIX C – COMMUNITY SPECIFIC ROLES AND RESPONSIBILITIES .....</b>	<b>37</b>

# 1 OUTLINE AND SCOPE

## 1.1 PURPOSE

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

## 1.2 AUTHORITY

- 1.2.1 This plan is written and issued under the authority of the *State Emergency and Rescue Management Act 1989* (NSW) ('SERM Act'), the *State Emergency Service Act 1989* (NSW) ('SES Act') and the NSW State Emergency Management Plan (EMPLAN).
- 1.2.2 This plan is a sub plan to the Cessnock City Council Local Emergency Management Plan (EMPLAN) and is endorsed by the Cessnock City Council Emergency Management Committee (LEMC).

## 1.3 ACTIVATION

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

## 1.4 SCOPE

- 1.4.1 The area covered by this plan is the Cessnock City Council LGA. The Cessnock City Council LGA and its principal towns, villages, rivers and creeks are shown in Appendix A.
- 1.4.2 The Council area is in the NSW SES Northern Zone and for emergency management purposes, is part of the Hunter Central Coast Emergency Management Region.
- 1.4.3 The plan sets out the Cessnock City Council local emergency management arrangements for prevention, preparation, response and initial recovery for flooding in the Cessnock City Council LGA. Hazard and Risk information and SES Response Arrangements can be found in Volume 3.
- 1.4.4 In this plan a flood is defined as a relatively high water level which overtops the natural or artificial banks in any part of a stream, river, estuary, lake or dam, and/or local overland flooding associated with drainage before entering a watercourse, and/or coastal inundation resulting from super-elevated sea levels and/or waves (including tsunamis) overtopping coastline defences.
- 1.4.5 This plan outlines the local level arrangements for the management of downstream consequences of flooding due to dam failure, however it does not cover the management of flooding of an underground mine by inrush or other cause, which should be covered by the Mine Sub Plan for the respective mine.

## **1.5 GOALS**

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

## **1.6 KEY PRINCIPLES**

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

## **1.7 ROLES AND RESPONSIBILITIES**

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

## **1.8 PLAN MAINTENANCE AND REVIEW**

- 1.8.1 The NSW SES will maintain the currency of this plan by:
- a. Ensuring that all supporting emergency services and functional areas, organisations and officers mentioned in it are aware of their roles and responsibilities.
  - b. Conducting exercises to test arrangements.
  - c. Reviewing the contents of the plan:



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

## 1.9 SUPPLEMENTARY DOCUMENTS

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

## 2 OVERVIEW OF NSW FLOOD HAZARD AND RISK

### 2.1 THE FLOOD THREAT

- 2.1.1 The NSW SES maintains information on the nature of flooding and effects of flooding on the community in the Cessnock City Council LGA. This is outlined in Volume 2 – Hazard and Risk in Cessnock City Council.
- 2.1.2 Declared dams in or upstream of the «LGA\_Name» Local Government Area.

Dam Name	Owner	High Risk Dam
El Klaros	Mawipalivier Pty Ltd	
Glennies Creek	Water NSW	
Hungerford Hill	Roche Group	
Kalingo	Austar Coal Mine Pty Ltd	
Mount View Detention Basin	Cessnock City Council	

## 3 PREVENTION/ MITIGATION

### 3.1 INTRODUCTION

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

## 3.2 LAND USE PLANNING

3.2.1 **Strategy:** Work with landuse planning and consent authorities to advocate that the risks arising from floods are considered so as to prevent the creation of intolerable impacts of these hazards on the community.

**Actions:**

- a. NSW SES will provide strategic input about land use planning matters which have or will create significant flood risk.
- b. NSW SES will provide responses to land use planning proposal referrals that have or will create significant flood risk.

## 3.3 FLOODPLAIN RISK MANAGEMENT

3.3.1 **Strategy:** NSW SES advocates for the recognition of emergency management considerations through participation in the floodplain risk management program.

**Actions:**

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

# 4 PREPARATION

## 4.1 INTRODUCTION

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

## 4.2 FLOOD EMERGENCY PLANNING

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

4.2.2 **Actions:**

- a. Develop and review this NSW SES Local Flood Plan as required. Local Flood Plans outline the specific arrangements for management of flood events within an LGA, and may include cross boundary arrangements; and
- b. Review plans as per [Section 1.8](#).

4.2.3 Local EMPLAN Consequence Management Guides (CMG) for flood are not required for communities covered by NSW SES Local Flood Plans.

## 4.3 FLOOD INTELLIGENCE SYSTEMS

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

**Actions:**

- a. Gather and assess flood information for the full range of flood types and severities.
- b. Collect, collate, and assess information on the characteristics of communities at risk and the potential effects of flooding on communities at risk; and
- c. Share flood intelligence information with supporting agencies.

## **4.4 DEVELOPMENT OF WARNING SYSTEMS**

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

**Actions:**

- a. All levels of government work in partnership to develop and maintain flood warning infrastructure.
- b. NSW SES maintains a list of the requirements for flood warnings for flood gauges in NSW (including flood classifications, warning times required and key statistics) and can be found in the supplementary document to the NSW State Flood Plan (see Section 1.9). Gauges of relevance within the Cessnock City Council LGA are also listed in Volume 3 of this plan.
- c. The NSW SES will recommend new warning services and changes to warning alert levels for gauges to the NSW Flood Warning Consultative Committee.
- d. The State Government, in partnership with Local Government, is responsible for developing and maintaining flash flood warning systems for local catchments where required.
- e. Cessnock City Council are currently developing Cessnock Urban Area & Swamp Creek Flood Warning Systems (FWS) and commencement date is envisaged during 2022 calendar year.
- f. Dam Owners will provide Dam Failure Warning Systems (where required) and consult NSW SES on alert levels and messaging. Alert level definitions are listed in Dam Emergency Plans
- g. NSW SES maintains a dedicated dam failure hotline and procedures to ensure priority dissemination of dam failure warnings.
- h. NSW SES develops and maintains warning and flood information products by:
  - Utilising flood intelligence data.
  - Developing pre-written warning and flood information products.
  - Continuously reviewing warning and flood information products; and
  - Consulting with affected communities, key stakeholders, Dam Safety NSW and the NSW Flood Warning Consultative Committee; and maintain Operational Readiness.

## 4.5 BRIEFING, TRAINING AND EXERCISING

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

**Actions:**

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

## 4.6 COMMUNITY RESILIENCE TO FLOODING

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

**Actions:**

- a. Ensure ongoing recruitment and training of a diverse range of volunteers.
- b. Ensure pre-planning to facilitate the management of spontaneous volunteers and community members during a flood.

4.6.2 **Strategy:** NSW SES works with individuals, communities, businesses and government agencies to build flood resilience.

**Actions:**

- a. Work with communities to understand and manage the risks associated with floods, including providing business continuity guidance (NSW SES Business FloodSafe), family preparedness (NSW SES Home FloodSafe) and other engagement strategies.
- b. NSW SES will collate, assess and disseminate flood information to the community.
- c. Collaborate with individuals, businesses, government agencies and communities when developing flood intelligence, preparedness and response information.
- d. Plan for floods collaboratively with communities through community and stakeholder participation and engagement.

# 5 RESPONSE

## 5.1 INTRODUCTION

5.1.1 Flood response operations will begin:

- a. On receipt of a Bureau of Meteorology (BoM) Severe Weather Warning or Thunderstorm Warning that includes heavy rain or storm surge; or
- b. On the receipt of a BoM Flood Watch or Flood Warning; or
- c. On receipt warnings for flash flood; or
- d. On receipt of a dam failure alert; or
- e. When other evidence leads to an expectation of flooding.

## 5.2 INCIDENT MANAGEMENT ARRANGEMENTS

5.2.1 **Strategy:** Maintain effective control of flood operations across New South Wales.

**Actions:**

- a. The NSW SES uses the Australasian Inter-service Incident Management System (AIIMS) to manage the flood response.
- b. Control of flood response will be at the lowest effective level and may be scaled to suit the incident.
- c. The NSW SES State Duty Commander will appoint Incident Controllers and establish Incident Control Centres (see NSW SES facilities on map in Appendix A).
- d. The Incident Controller, in consultation with participating supporting emergency services and Functional Areas will determine the appropriate breakdown of an incident area into Divisions and/or Sectors in accordance with the principles of AIIMS as well as the predefined Divisions and Sectors outlined within the NSW SES Intelligence System

5.2.2 **Strategy:** Maintain Incident Control Centre(s).

**Actions:**

- a. NSW SES will operate Incident Control Centre(s) as required.
- b. The NSW SES Incident Control Centre(s) will:
  - Control resources from NSW SES and coordinate resources of supporting emergency services and functional areas.
  - Manage Request for Assistance (RFA) tasking and ensure they are actioned in a timely manner.
  - Undertake response planning and determine future resourcing requirements; and
  - Coordinate information flow, including warnings, public information and social media.

5.2.3 **Strategy:** Provide effective liaison between the NSW SES and supporting agencies or functional areas in accordance with Local EMPLAN.

**Actions:**

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

5.2.4 **Strategy:** Coordinate resources and logistics support to ensure operational effectiveness.

**Actions:**

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

### 5.3 USE OF INFORMATION AND COLLECTION OF INTELLIGENCE

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

**Actions:**

- a. Information relating to the consequences of flooding, response strategies, situational awareness and operational updates will be distributed by NSW SES to supporting emergency services and Functional Areas listed under this Plan.
- b. All supporting emergency services and Functional Areas will accurately record and report information relevant to their activities and any real time flood information (including road closure information) to the NSW SES Incident Controller. This may be in the form of a combined Emergency Operations Centre (EOC) report, or direct from agencies where an EOC has not been established.
- c. The NSW SES may establish and operate a Joint Intelligence Unit to coordinate the collection, collation, interpretation, mapping, actioning and dissemination of information; and
- d. Reconnaissance, mapping, damage assessments, intelligence validation and post flood evaluation will be coordinated by NSW SES. This may occur post impact and continue into the recovery phase.

5.3.2 **Strategy:** Ensure flood intelligence is incorporated into operational decision-making.

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

## 5.4 PROVISION OF INFORMATION AND WARNINGS TO THE COMMUNITY

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

**Actions:**

- a. The BoM issues public weather and flood warning products before and during a flood. These may include:
  - Severe Thunderstorm Warnings with reference to heavy rainfall
  - Regional Severe Thunderstorm Warnings with reference to heavy rainfall
  - Detailed Severe Thunderstorm Warnings (for Sydney / Newcastle / Wollongong) with reference to heavy rainfall,
  - Severe Weather Warnings with reference to heavy rainfall and/or storm surge,
  - Flood Watches, and
  - Flood Warnings.
  - Councils will use the following once developed (due to commence during 2022) flash flood warning system for Cessnock Local Government area to provide warnings and information to NSW SES, key stakeholders and the community.
    - Cessnock Urban Area & Swamp Creek Flood Warning System (FWS).
- b. Dam Owners will utilise Dam Failure Warning Systems to provide warnings and information to NSW SES and communities (where appropriate).
- c. NSW SES Incident Controllers will issue the following NSW SES flood information products incorporating warnings from the above, expected consequences and safety messages:
  - Livestock and Equipment (pump) Warnings
  - Local Flood Advices
  - Flood Bulletins
  - NSW SES Evacuation Warning
  - NSW SES Evacuation Order
  - NSW SES All Clear
- d. NSW SES liaises with the Bureau of Meteorology to discuss the development of flood warnings as required.
- e. NSW SES provides alerts and deliver flood information to affected communities using a combination of the following methods:
  - Mobile and fixed public address systems.
  - Two-way radio.
  - Emergency Alert (SMS and voice message alerting system).
  - Telecommunications (including Auto dial systems).

- Facsimile
  - Standard Emergency Warning Signal.
  - Doorknocking.
  - Mobile and fixed sirens.
  - Variable message signs.
  - Community notices in identified hubs.
  - Distribution through established community liaison networks, partnerships and relationships; and
  - NSW SES social media and website.
- f. NSW SES may request supporting agencies redistribute NSW SES alerts and information, including through the provision of doorknocking teams.
- g. Road closure information will be provided to the community through the following agencies/methods:
- Local Government Council websites; and
  - My Road Info
  - Transport for NSW 'Live Traffic' website: [www.livetraffic.com](http://www.livetraffic.com) or 'Transport InfoLine': 131 500. VMS messaging on roadways may also be used to advise motorists.
- h. The Public Information and Inquiry Centre will be established by the NSW Police Force where required to provide information regarding evacuees and emergency information. Contact details will be broadcast once the centre is established.
- i. The Disaster Welfare Assistance Line will be established by Disaster Welfare Services where required to provide information on welfare services and assistance. Assistance line contact details will be broadcast once Disaster Welfare Services commence.

## 5.5 PROTECTION OF PROPERTY

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

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

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

## 5.6 ROAD AND TRAFFIC CONTROL

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



**Actions:**

- a. Cessnock City Council will coordinate the closure and reopening of council managed roads once inspections have been carried out by the relevant authority.
- b. The Transport Management Centre (TMC) in coordination with Transport for NSW will coordinate the closure and reopening of the state road network.
- c. The NSW Police Force may close and re-open roads but will normally only do so (if the Cessnock City Council or Transport for NSW have not already acted and if public safety requires such action);
- d. NSW SES will assist with erecting road closure signs and barriers when time and resources permit.
- e.

5.6.2 **Strategy:** Coordinate traffic control measures in flood affected areas.

- a. The NSW SES Incident Controller may direct the imposition of traffic control measures into flood affected areas in accordance with the provisions of the *State Emergency Service Act, 1989* and the *State Emergency Rescue Management Act, 1989*.
- b. The NSW SES Incident Controller may request the Local Emergency Operations Controller provide suitable personnel to assist with traffic coordination.

## 5.7 PROTECTION OF ESSENTIAL SERVICES

5.7.1 Arrangements for the protection of local assets are outlined in Volume 3 of this NSW SES local Flood Plan. In addition, Local and Region EMPLAN's contain infrastructure inventories.

5.7.2 **Strategy:** Minimise disruption to the community by ensuring protection of infrastructure and supply of essential energy and utility services.

**Actions:**

- a. Transport Services Functional Area will keep the NSW SES informed of the status of transport network infrastructure.
- b. The Energy and Utility Services Functional Area is to coordinate the assessment and restoration of essential energy and utility services (not including telecommunications).
- c. The Telecommunications Services Functional Area is to coordinate the assessment and restoration of telecommunications and the Government Radio Network.
- d. The Engineering Services Functional Area is to coordinate the assessment and restoration of critical public buildings for example hospitals; and
- e. Functional Areas will keep the NSW SES informed of the status of utilities and infrastructure.

## 5.8 EVACUATION

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

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

5.8.3 **Strategy:** Conduct planning to ensure all evacuation constraints are considered.

### **Actions:**

- a. Evacuations will take place when there is a risk to public safety. Circumstances may include:
  - Evacuation of people when their homes or businesses are likely to flood.
  - Evacuation of people who are unsuited to living in isolated circumstances, due to flood water closing access; and
  - Evacuation of people where essential energy and/or utility services are likely to fail or where buildings have been or may be made uninhabitable; and
- b. The NSW SES will consider the following in evacuation decisions:
  - Duration of evacuation.
  - Characteristics of the community.
  - Numbers requiring evacuation.
  - Availability of evacuation routes and transport.
  - Time available for evacuation.
  - Evacuee management requirements; and
  - Resources and delivery of evacuation information.
- c. NSW SES Incident Controllers, and flood planners will carefully consider the risks involved in conducting evacuations.
- d. All evacuation decisions will be made as per the current NSW SES policies and procedures, and consistent with the NSW Evacuation Management Guidelines.
- e. Potential Evacuation Centres are located in Volume 3 / Local EMPLAN; and
- f. The NSW Police Force will coordinate the provision of overall security for evacuated areas.

5.8.4 **Strategy:** Evacuate people pre-emptively from dangerous or potentially dangerous places and or locations created by the flood hazard to safe locations away from the hazard.

- a. NSW SES will control and coordinate the evacuation of affected communities.
- b. The NSW SES Incident Controller will warn communities to prepare for a possible evacuation, where circumstances allow such lead time.
- c. The NSW SES Incident Controller will order any necessary evacuations and provide information to the community about when and how to evacuate.

- d. Support to evacuation operations may be requested from other emergency services and supporting agencies using arrangements in the local EMPLAN and supporting plans.
- e. Health Services Functional Area will coordinate the evacuation of hospitals, health centres and aged care facilities (including nursing homes) in consultation with the NSW SES and Welfare Services.
- f. School administration offices (Government and Private) will coordinate the evacuation of schools in consultation with the NSW SES and Welfare Services, if not already closed.
- g. Caravan Park proprietors will inform the NSW SES Incident Controller when caravan park evacuations have been completed.
- h. People who are reluctant or refuse to comply with any Evacuation Order will be referred to the NSW Police Force.

## **5.9 EVACUEE MANAGEMENT AND WELFARE**

5.9.1 Research and experience in flood operations shows that most evacuees go to family, friends and commercial accommodation outside the impact area.

5.9.2 **Strategy:** Maintain the welfare of communities and individuals affected by the impact of a flood.

### **Actions:**

- a. NSW SES will provide initial welfare for evacuees where required but will hand the responsibility over to the Welfare Services Functional Area as soon as possible. In these cases, the NSW SES will brief the Welfare Services Functional Area at the earliest opportunity regarding the level of assistance required.
- b. Welfare Services Functional Area will manage evacuation centres for affected residents and travellers in accordance with the Welfare Services Functional Area Supporting Plan.
- c. Schools Administration (Government and Private) will manage the safety of students directly affected by flooding and will work with the NSW SES in the temporary closure of schools and will coordinate with NSW SES Transport and Welfare Services in the management of school evacuees.
- d. Disaster Victim Registration will be controlled and coordinated by the NSW Police Force with the assistance of NSW SES and Welfare Services Functional Area.
- e. NSW SES will provide details of all residents assisted in evacuations to the Welfare Services Functional Area as early as possible.
- f. Where the expected remaining number of evacuees and the duration of evacuation is assessed to be beyond the capability and capacity of the established evacuation centre arrangements the SEOCAN may establish Major Evacuation Centres or Mass Care facilities; and
- g. The decision to establish Major Evacuation Centres or Mass Care Facilities will be made by the NSW SES and SEOCAN in consultation with members of the State Emergency Management Committee.

5.9.3 **Strategy:** Coordinate available and accessible health services for flood affected communities.

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

5.9.4 **Strategy:** Coordinate maintenance of food supplies for flood affected communities.

**Actions:** All matters relating to the primary production, manufacturing, processing and handling of all food from primary industries to retail, inclusive of all restaurants, food services and catering businesses should be referred to the NSW Food Authority through the Agriculture and Animal Services Functional Area.

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

**Actions:**

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

## 5.10 FLOOD RESCUE

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

**Actions:**

- a. NSW SES will perform flood rescue, where training and equipment is suitable and where a risk assessment has indicated that the risk to rescuers is acceptable.
- b. Flood rescue operations will be conducted in accordance with the State Rescue Board Land Rescue Policy and the NSW State Rescue Board Flood Rescue Policy which sets out the framework, governance, responsibilities and requirements for the management and conduct of flood rescue in NSW.
- c. NSW SES may request other supporting emergency services to undertake flood rescues on behalf of the NSW SES. Agencies must be authorised/accredited to undertake flood rescue operations in accordance with State Rescue Board requirements, as prescribed by NSW SES. Supporting emergency services must supply information regarding rescues performed to the NSW SES. Notification arrangements with NSW Police Force are outlined in the NSW State Rescue Board Flood Rescue Policy; and
- d. Rescue agencies will conduct rescue of domestic small and large animals as per the State Rescue Board Land Rescue Policy (and may include Large Animal Rescue of family horses and cows at a residence or property). The rescue of livestock (which includes commercial animals found on farming and breeding

enterprises) will be coordinated through Animal and Agriculture Services Functional Area.

## **5.11 RESUPPLY**

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

**Actions:**

- a. NSW SES will advise communities and businesses if flood predictions indicate that areas are likely to become isolated, and indicative timeframes where possible.
- b. Retailers should be advised to ensure sufficient stock is available for the duration of the flood.
- c. When isolation occurs, NSW SES will establish loading points where retailers can instruct suppliers to deliver goods.
- d. NSW SES will endeavour to deliver mail to isolated communities but may not be able to do so according to normal Australia Post timetables.
- e. NSW SES will assist hospitals with resupply of linen and other consumables where able.
- f. NSW SES may request resupply assistance from supporting agencies.

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

**Actions:**

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

## **5.12 ALL CLEAR AND RETURN**

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

**Actions:**

- a. NSW SES Incident Controller will determine when it is safe to progressively return in consultation with the relevant Emergency Operations Controller and supporting agencies, considering the impact on the following:
  - Access and egress
  - Communications
  - Power supply
  - Gas supply
  - Infrastructure damage

- Hazardous materials; and
  - Public health risks (including sewerage)
- b. NSW SES Incident Controller will specify the level of access to affected communities as the following:
- Not suitable for access.
  - Limited access by emergency services and response agencies.
  - Limited access by residents and/or business operators; or
  - Full access
- c. NSW SES Incident Controller will issue an 'All Clear' message when the immediate danger to life and property has passed for areas assessed as safe; and
- d. The NSW SES will facilitate the return of evacuees to their homes.

## **5.13 END OF RESPONSE OPERATIONS**

5.13.1 **Strategy:** Conclude response operations.

**Actions:**

- a. Response operations will conclude when:
- The physical impact of the flood has ceased.
  - All requests for assistance related to the flood have been completed;
  - The need for warning and evacuation no longer exist.
  - There is no further likelihood of rescuing people.
  - Resupply is no longer required (resupply operations may occur concurrently with the recovery phase).
  - Response to fire and hazardous material incidents have concluded (not including subsequent clean-up of contaminated sites); and
  - All affected areas have had an 'All Clear' issued.

## **5.14 POST IMPACT ACTIONS**

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

**Actions:**

- a. NSW SES will continue to engage with communities after significant floods through convening one or more community forums, workshops or other opportunities to provide communities a chance to provide feedback, address any concerns and provide input into the recovery process. These will typically include other agencies such as the Bureau of Meteorology, Welfare Services and Cessnock City Council representatives.

- b. NSW SES will ensure that damage assessment information is provided to the relevant Emergency Operations Controller to inform the recovery impact assessment.
- c. NSW SES will conduct After Action Reviews, wherever possible, within three weeks of the end of response operations, which will involve all stakeholders. Findings will be shared and incorporated into improved disaster resilience planning.
- d. NSW SES will undertake/coordinate a comprehensive review of intelligence and plans following significant flood events.

5.14.2 **Strategy:** Participate in post flood data collection analysis.

**Actions:** NSW SES will work with the NSW Department of Planning, Industry and Environment (DPIE) and Cessnock City Council Council(s) on post flood data collection analysis including review of flood intelligence where necessary.

## 6 RECOVERY OPERATIONS

### 6.1 INTRODUCTION

6.1.1 Recovery is the process of returning an affected community to its proper level of functioning after an emergency. It will generally commence simultaneously with the Response phase.

6.1.2 Recovery operations will be initiated and conducted as outlined in the NSW State EMPLAN and as further detailed in the NSW Recovery Supporting Plan.

### 6.2 NSW SES RECOVERY ROLE

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

6.2.2 **Actions:**

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

## 7 ABBREVIATIONS

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

## 8 GLOSSARY

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

Readers should refer to EMPLAN Annex 9 – Definitions.

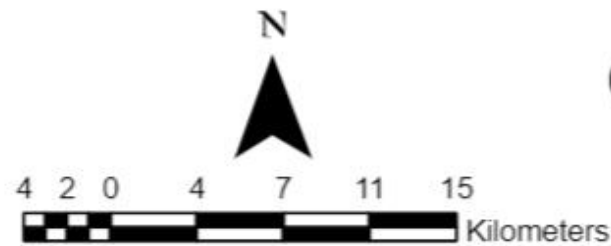
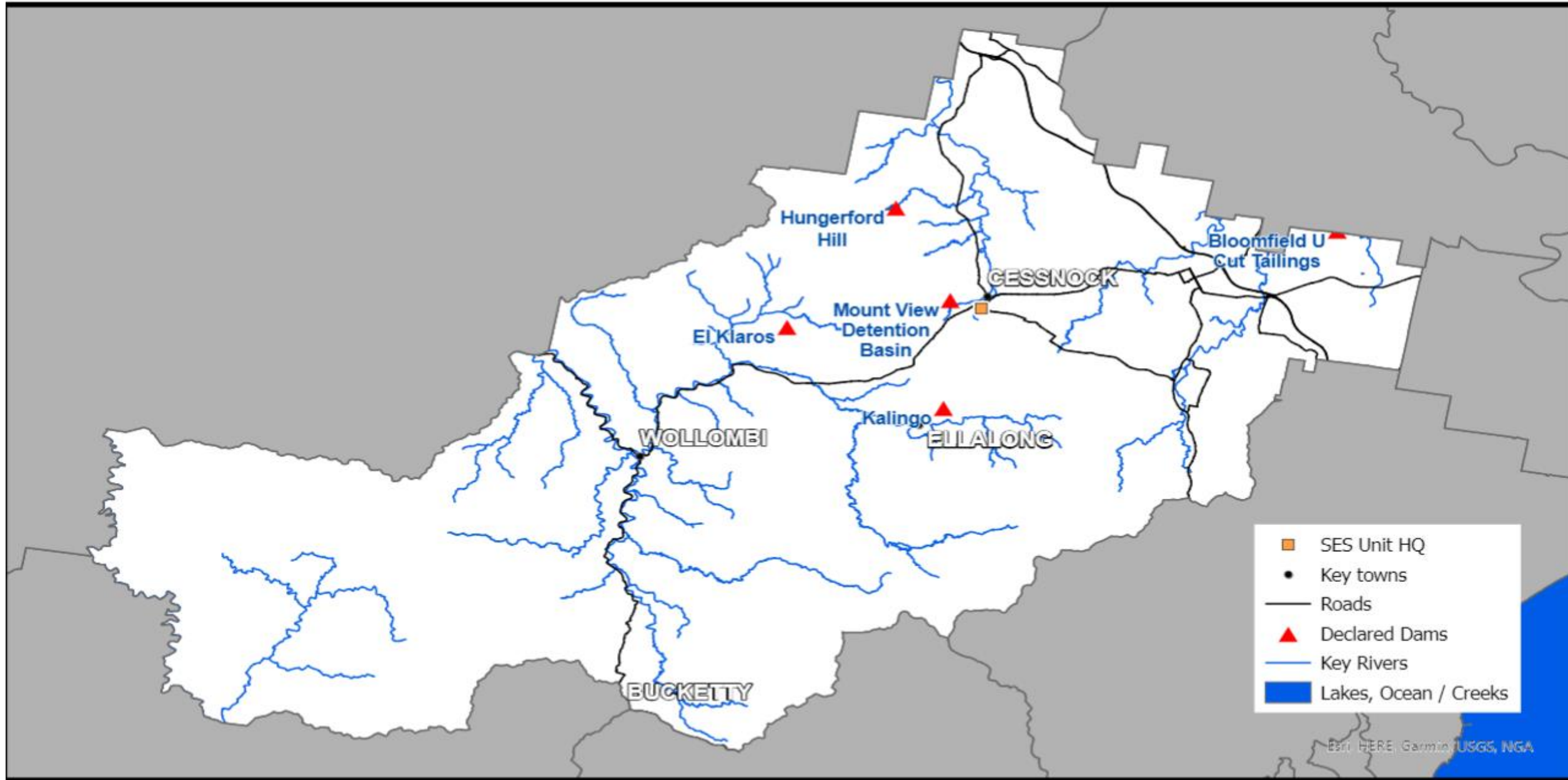
Refer to the NSW State Flood Plan for a complete glossary of terminology used throughout this plan and within NSW SES Flood Plans.

**For a full list of definitions refer to the Supporting Document - State Flood Plan Glossary**

<https://www.ses.nsw.gov.au/media/2650/glossary.pdf>



9 Appendix A – Map of Cessnock City Council Area



**CESSNOCK  
LGA**

**DISCLAIMER** This map publication is presented by the NSW State Emergency Service for the purpose of disseminating emergency management information free of charge to members of emergency management organisations. The information in this map publication is not intended for use by the general public or untrained persons, and is not a substitute for professional advice and/or training. Untrained persons should not use this map publication unless they are under the supervision of trained and qualified emergency management personnel. The State Emergency Service disclaims any liability (including for negligence) to any person in respect of anything and the consequences of anything, done, or not done by any such person in whole or partial reliance upon the whole or part of the information in this map publication.

## 10 Appendix B – Roles and Responsibilities

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

AGENCY	RESPONSIBILITIES
<b>Agriculture and Animal Services Functional Area</b>	<p>The roles and responsibilities for Agriculture and Animal Services are outlined in the <a href="#">Agriculture and Animal Services Supporting Plan</a></p> <p>Roles and responsibilities in addition to the Supporting Plan are:</p> <ul style="list-style-type: none"> <li>• Disseminate briefing information to participating agriculture and animal services and related stakeholders.</li> <li>• When activated the Agriculture and Animal Services will coordinate the provision of required services which may include: <ul style="list-style-type: none"> <li>– Coordinate response for animal welfare including pets, livestock and wildlife.</li> <li>– Supply and delivery of emergency fodder.</li> <li>– Emergency water replacement in certain circumstances; and</li> <li>– Financial, welfare and damage assessment assistance to flood affected primary producers.</li> </ul> </li> <li>• Support recovery arrangements including: <ul style="list-style-type: none"> <li>– Administer transport subsidies to primary producers.</li> </ul> </li> </ul>
<b>Australian Government Bureau of Meteorology</b>	The roles and responsibilities of the Australian Government Bureau of Meteorology are outlined in the NSW State Flood Plan.
<b>Cessnock City Council</b>	<p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• Establish and maintain floodplain and coastal risk management committees and ensure that key agencies are represented.</li> <li>• Develop and implement floodplain risk management plans in accordance with the NSW Government’s Flood Prone Land Policy and the Floodplain Development Manual.</li> <li>• Provide levee studies, flood studies and floodplain management studies to the NSW SES.</li> <li>• Maintain Dam Safety Emergency Plans for the [Cessnock City Council] dams and provide copies to the NSW SES.</li> <li>• Provide information on the consequences of dam failure to the NSW SES for incorporation into planning and flood intelligence.</li> </ul>

AGENCY	RESPONSIBILITIES
	<ul style="list-style-type: none"> <li>• Coordinate the development of warning services for catchments prone to flash flooding (small catchments), where appropriate;</li> <li>• Maintain council-owned flood warning networks and flood mitigation works.</li> <li>• Participate in NSW SES-led flood emergency planning meetings, to assist in the preparation of Flood Sub-Plans.</li> <li>• Maintain a plant and equipment resource list for the council area.</li> <li>• Contribute to community engagement activities.</li> <li>• Provide a Liaison Officer to the SES IC if requested.</li> </ul> <p><b>Response</b></p> <ul style="list-style-type: none"> <li>• Subject to the availability of council resources, assist the NSW SES with flood operations including: <ul style="list-style-type: none"> <li>– Traffic management on council managed roads.</li> <li>– Provision of assistance to the NSW SES (plant, equipment and personnel where able and requested).</li> <li>– Property protection tasks including sandbagging.</li> <li>– Assist with the removal of caravans from caravan parks</li> <li>– Warning and/or evacuation of residents and other people in flood liable areas.</li> <li>– Provision of back-up radio communications</li> <li>– Resupply of isolated properties; and</li> <li>– Technical advice on the impacts of flooding.</li> <li>– Close and reopen council roads (and other roads nominated by agreement with Transport for NSW) and advise the NSW SES, the NSW Police Force and people who contact the council for road information.</li> <li>– Assist the NSW SES to provide filled sandbags and filling facilities to residents and business in areas which flooding is expected.</li> </ul> </li> <li>• Assist with making facilities available for domestic pets and companion animals of evacuees during evacuations.</li> <li>• Operate flash flood warning systems;</li> <li>• Operate flood mitigation works including critical structures such as detention basins and levees and advise the NSW SES regarding their operation.</li> <li>• Manage and protect council-owned infrastructure facilities during floods.</li> <li>• Provide advice to the NSW SES and the Health Services Functional Area during floods about key council managed infrastructure such as sewerage treatment and water supply.</li> </ul>

AGENCY	RESPONSIBILITIES
	<ul style="list-style-type: none"> <li>• Advise the Environmental Protection Agency of any sewerage overflow caused by flooding.</li> <li>• Work with the NSW SES and DPIE to collect flood related data during and after flood events.</li> </ul> <p><b>Recovery</b></p> <ul style="list-style-type: none"> <li>• Provide for the management of health hazards associated with flooding including removing debris and waste.</li> <li>• Ensure premises are fit and safe for reoccupation and assess any need for demolition.</li> <li>• Provide services, assistance and advice to State Government in accordance with the State Recovery Plan.</li> </ul>
<b>Caravan Park Proprietor(s)</b>	<ul style="list-style-type: none"> <li>• Prepare a flood emergency plan for the Caravan Park;</li> <li>• Ensure that owners and occupiers of movable dwellings are aware that the caravan park is flood liable by providing a written notice to occupiers taking up residence and displaying this notice and emergency management arrangement within the park.</li> <li>• Ensure that owners and occupiers of movable dwellings are aware that if they are expecting to be absent for extended periods, they should: <ul style="list-style-type: none"> <li>– Provide the manager of the caravan park with a contact address and telephone number in case of an emergency; and</li> <li>– Leave any movable dwelling in a condition allowing it to be relocated in an emergency (i.e.: should ensure that the wheels, axles and draw bar of the caravans are not removed and are maintained in proper working order).</li> </ul> </li> <li>• Ensure that occupiers are informed of Flood Information. At this time, occupiers should be advised to: <ul style="list-style-type: none"> <li>– Ensure that they have spare batteries for their radios.</li> <li>– Listen to a local radio station for updated flood information; and</li> <li>– Prepare for evacuation and movable dwelling (cabins) relocation.</li> </ul> </li> <li>• Ensure that owners and occupiers of caravans are aware of what they must do to facilitate evacuation and movable dwelling relocation when flooding occurs.</li> <li>• Coordinate the evacuation of people and the relocation of movable dwellings when floods are rising and their return when flood waters have subsided. Movable dwellings will be relocated back to the caravan park(s) by owners or by vehicles and drivers arranged by the park managers.</li> <li>• Secure any movable dwellings that are not able to be relocated to prevent floatation; and</li> </ul>

AGENCY	RESPONSIBILITIES
	<ul style="list-style-type: none"> <li>• Inform the NSW SES of the progress of evacuation and/or movable dwellings relocation operations and of any need for assistance in the conduct of these tasks.</li> </ul>
<b>Childcare Centres and Preschools</b>	<ul style="list-style-type: none"> <li>• When notified of possible flooding or isolation, childcare centres and preschools should. <ul style="list-style-type: none"> <li>– Liaise with the NSW SES and arrange for the early release of children whose travel arrangements are likely to be disrupted by flooding and/or road closures; and</li> <li>– Assist with coordinating the evacuation of preschools and childcare centres.</li> </ul> </li> </ul>
<b>Dams Safety NSW</b>	The roles and responsibilities of the Dams Safety NSW (formerly NSW Dam Safety Committee) are outlined in the NSW State Flood Plan.
<b>Department of Defence</b>	Arrangements for Defence Assistance to the Civil Community are detailed within the State EMPLAN (section 448).
<b>Department of Industry</b>	The roles and responsibilities for the Department of Industry (Crown Lands and Water Division) are outlined in the NSW State Flood Plan.
<b>Energy and Utilities Services Functional Area</b>	<p>The roles and responsibilities for Energy and Utilities Services are outlined in the <a href="#">Energy and Utility Services Supporting Plan (EUSPLAN)</a>.</p> <p>Roles and responsibilities in addition to the Supporting Plan are:</p> <ul style="list-style-type: none"> <li>• Assist NSW SES with identification of infrastructure at risk of flood damage where resources are available.</li> <li>• Facilitate local utility service distribution providers (electricity, gas, water, wastewater) to: <ul style="list-style-type: none"> <li>– Provide advice to the NSW SES of any need to disconnect power/gas/water/wastewater supplies or of any timetable for reconnection.</li> <li>– Advise the NSW SES of any hazards from utility services during flooding and coastal erosion/inundation.</li> <li>– Advise the public with regard to electrical hazards during flooding and coastal erosion/inundation, and to the availability or otherwise of the electricity supply.</li> <li>– Clear or make safe any hazard caused by power lines or electricity distribution equipment.</li> <li>– Reconnect customers' electrical/ gas/ water/wastewater installations, when certified safe to do so and as conditions allow.</li> <li>– Assist the NSW SES to identify infrastructure at risk of flooding for incorporation into planning and intelligence.</li> </ul> </li> </ul>
<b>Engineering Services Functional Area</b>	The roles and responsibilities for Engineering Services are outlined in the <a href="#">Engineering Services Supporting Plan</a> .

AGENCY	RESPONSIBILITIES
Environmental Services Functional Area	The roles and responsibilities for Environmental Services are outlined in the <a href="#">Environmental Services (ENVIROPLAN) Supporting Plan</a> .
Floodplain Management Australia	The roles and responsibilities of Floodplain Management Australia are outlined in the <a href="#">New South Wales State Flood Plan</a> .
Fire and Rescue NSW (as per NSW State Flood Plan)	<p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• Identify and notify the NSW SES of any locations at risk of fire (within Fire Districts (13) or hazardous materials that pose a significant threat to surrounding populations due to the impact of a flood for incorporation into NSW SES flood intelligence and planning; and</li> </ul> <p><b>Response</b></p> <ul style="list-style-type: none"> <li>• Meet the agreed arrangements described in the NSW SES and Fire and Rescue NSW Mutual Aid Agreement.</li> <li>• Provide Incident Management personnel and Liaison Officers to the NSW SES where required.</li> <li>• When requested by NSW SES, provide support to the NSW SES in response to flood emergencies across the State.</li> <li>• Assist the NSW SES with the warning and/or evacuation of at-risk communities.</li> <li>• Assist the NSW SES with the monitoring/reconnaissance of flood prone areas.</li> <li>• Provision of Land Based and In Water Flood Rescue Operators as required.</li> <li>• Provision of appropriately trained personnel to perform Down the Wire (DTW) functions as required.</li> <li>• Conduct Hazmat operations including asbestos risks, arising from flood emergencies in coordination with the SES Incident Controller.</li> <li>• Decontamination of Flood Rescue Operators as required.</li> <li>• Assist the NSW SES with the resupply of isolated communities and/or properties.</li> <li>• Assist the NSW SES with property protection tasks including sandbagging.</li> <li>• Provide resources for pumping flood water out of buildings and from low-lying areas.</li> <li>• Assist with clean-up operations, including the hosing out of flood affected properties.</li> </ul>

AGENCY	RESPONSIBILITIES
	<ul style="list-style-type: none"> <li>• Provide trained staff to support a joint intelligence unit, if established by NSW SES, including Remotely Piloted Aircraft System (RPAS) pilots to assist with field observations.</li> <li>• Assist the NSW SES to undertake damage assessment including structural collapse risks.</li> <li>• Coordinate the pre-deployment of fire resources to communities within NSW Fire Districts if access is expected to be lost, in consultation with the NSW SES; and</li> <li>• Coordinate the deployment of the FRNSW High trans Pump to locations in consultation with NSW SES.</li> </ul> <p><b>Recovery</b></p> <ul style="list-style-type: none"> <li>• Participate in After Action Reviews as required.</li> </ul>
<b>Forestry Corporation of NSW</b>	<p><b>Response</b></p> <ul style="list-style-type: none"> <li>• Close and reopen Forestry Corporation of NSW roads when affected by flood waters and advise the NSW SES of its status.</li> <li>• Manage traffic on Forestry Corporation of NSW roads.</li> <li>• Facilitate the safe reliable access of emergency resources on Forestry Corporation managed roads.</li> <li>• Assist the NSW SES with identification of road infrastructure at risk of flooding.</li> <li>• Assist the NSW SES with the communication of warnings and information provision to the public through variable message signs and other appropriate means; and</li> <li>• Close and relocate people from camping grounds at risk of flooding in State Forest managed areas.</li> </ul>
<b>Health Services Functional Area</b>	<p>The roles and responsibilities for Health Services Functional Area are outlined in the <a href="#">Health Services (HEALTHPLAN) Supporting Plan</a>.</p> <p>Roles and responsibilities in addition to the Supporting Plan are:</p> <ul style="list-style-type: none"> <li>• Ensure that appropriate business continuity plans are developed for essential health infrastructure and are activated during floods.</li> </ul>
<b>Local Emergency Operations Controller (LEOCON)</b>	<ul style="list-style-type: none"> <li>• Monitor flood operations.</li> <li>• If requested, coordinate support for the NSW SES Incident Controller.</li> </ul>
<b>Local Emergency Management Officer (LEMO)</b>	<ul style="list-style-type: none"> <li>• If requested by the NSW SES Incident Controller, advise appropriate agencies and officers of the start of response operations.</li> </ul>
<b>Manly Hydraulics Laboratory (MHL)</b>	<p>The roles and responsibilities of Manly Hydraulic Laboratory are outlined in the NSW State Flood Plan.</p>

AGENCY	RESPONSIBILITIES
<b>Marine Rescue NSW (as per NSW State Flood Plan)</b>	<p><b>Response</b></p> <ul style="list-style-type: none"> <li>• When requested by NSW SES, assist in flood operations when training and equipment are available and suitable including assistance with: <ul style="list-style-type: none"> <li>– Warning and/or evacuation of at-risk communities.</li> <li>– Providing communications personnel.</li> <li>– Property protection tasks including sandbagging; and</li> <li>– Flood rescue operations.</li> </ul> </li> </ul>
<b>NSW Ambulance</b>	<p>The roles and responsibilities for NSW Ambulance are outlined in the <a href="#">Health Services (HEALTHPLAN) Supporting Plan.</a></p>
<b>NSW Department of Education</b>	<p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• 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);</li> <li>• Ensure that evacuation plans for flood liable schools have arrangements for flooding; and</li> <li>• Assist NSW SES with community engagement and capacity building programs.</li> </ul> <p><b>Response</b></p> <ul style="list-style-type: none"> <li>• Assist with the coordination of the evacuation of schools and the immediate welfare of students until returned to the appropriate carer.</li> <li>• Pass information to school bus drivers/companies and/or school principals on expected or actual impacts of flooding; and</li> <li>• Provide space in schools for evacuation centres where necessary.</li> </ul>
<b>NSW Department of Industry, Planning and Environment (as per NSW State Flood Plan)</b>	<p><b>Prevention</b></p> <ul style="list-style-type: none"> <li>• Oversee the delivery of the NSW Flood Prone Land Policy including financial support through the Floodplain Management Program. Provide technical advice to councils and state agencies including assistance with the identification of risks, the preparation and implementation of Floodplain Risk Management Plans and associated mitigation and management actions and understanding flood mitigation schemes including levees.</li> <li>• Work with the NSW SES on the Flood Data Access Program to improve the provision of flood information through the NSW Flood Data Portal.</li> <li>• Assist the Department of Industry-Water in the preparation of rural floodplain management plans under the <i>Water Management Act 2000</i> (NSW); and</li> </ul>



AGENCY	RESPONSIBILITIES
	<ul style="list-style-type: none"> <li>• Provision of strategic technical advice to support floodplain risk management and environmental water management in rural areas of the Murray Darling Basin.</li> </ul> <p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• Assist the NSW SES in the exercising of Flood Sub Plans.</li> <li>• Management of the state government’s water level gauges for the flood warning network in tidal areas in NSW (Manly Hydraulic Laboratory operates this system as a service provider on behalf of DPIE.).</li> <li>• Advise NSW SES about conditions which may lead to coastal inundation or retarded river drainage near the coast.</li> </ul> <p><b>Response</b></p> <ul style="list-style-type: none"> <li>• Provide related advice on flood risks to the NSW SES on request; and</li> <li>• Work with the relevant local council and NSW SES to collect flood related data during and after flood events.</li> </ul> <p><b>Recovery</b></p> <p>Support recovery committees as required.</p>
NSW Food Authority	The roles and responsibilities for NSW Food Authority are outlined in the <a href="#">Food Industry Emergency Sub Plan</a> .
NSW National Parks and Wildlife Services (as per NSW State Flood Plan)	<p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• Assist the NSW SES with identification of road infrastructure in National Parks at risk of flooding.</li> </ul> <p><b>Response</b></p> <ul style="list-style-type: none"> <li>• Close and reopen National Parks and Wildlife Service roads when affected by flood waters and advise the NSW SES of its status.</li> <li>• Facilitate the safe reliable access by emergency resources on National Parks and Wildlife Service managed roads.</li> <li>• Assist the NSW SES with the communication of warnings and information provision to the public through variable message signs and other appropriate means; and</li> </ul> <p>Close and direct people to leave camping grounds at risk of flooding in National Parks and Wildlife Service managed areas.</p>
NSW Police Force (as per NSW State Flood Plan)	<p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• Participate in NSW SES briefings, training and exercises as required.</li> </ul> <p><b>Response</b></p> <ul style="list-style-type: none"> <li>• Provide a Liaison Officer to the NSW SES Operation Centre if required.</li> </ul>

AGENCY	RESPONSIBILITIES
	<ul style="list-style-type: none"> <li>• When requested by NSW SES, in flood operations when training and equipment are available and suitable. <ul style="list-style-type: none"> <li>– Assist with warning and/or evacuation of at-risk communities.</li> <li>– Assist with monitoring / reconnaissance of flood prone areas.</li> <li>– Assist with flood rescue operations.</li> </ul> </li> <li>• Conduct road and traffic control operations in conjunction with council and/or Transport NSW.</li> <li>• Coordinate searches for missing people within flood affected areas.</li> <li>• Coordinate security of supply lines evacuated and damaged areas.</li> <li>• Manage Disaster Victim Registration; and</li> <li>• Operate the Public Information and Inquiry Centre, if requested or otherwise needed during flood events.</li> </ul> <p><b>Recovery</b></p> <ul style="list-style-type: none"> <li>• Participate in After Action Reviews as required.</li> </ul>
<p><b>NSW Rural Fire Service (as per NSW State Flood Plan)</b></p>	<p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• Participate in NSW SES briefings, training and exercises as required; and</li> <li>• Meet the agreed arrangements described in the NSW SES/NSW RFS Memorandum of Understanding.</li> </ul> <p><b>Response</b></p> <ul style="list-style-type: none"> <li>• Provide a Liaison Officer to the NSW SES Operation Centre or Emergency Operations Centre as required.</li> <li>• Provide Incident Management Personnel when requested.</li> <li>• Provide trained staff to support a joint intelligence unit, if established by NSW SES.</li> <li>• Provide aviation support, management and advice as requested through the State Air Desk.</li> <li>• Provide speciality aircraft and appropriately trained personnel to perform Down the Wire (DTW) functions as required.</li> <li>• Assist with Damage Assessments; and</li> <li>• Provide Strike Teams during flood operations when requested by NSW SES. This may include assistance with: <ul style="list-style-type: none"> <li>– Warning and/or evacuation of at-risk communities.</li> <li>– Monitoring / reconnaissance of flood prone areas.</li> <li>– Property protection tasks including sandbagging.</li> <li>– Pumping flood water out of buildings and from low-lying areas.</li> </ul> </li> </ul>

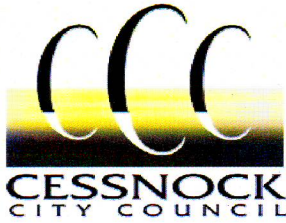
AGENCY	RESPONSIBILITIES
	<ul style="list-style-type: none"> <li>– Back-up radio communications.</li> <li>– Clean-up operations, including the hosing out of flood affected properties.</li> <li>– Deploying resources to communities within Rural Fire Districts where access is expected to be lost in consultation with the NSW SES.</li> <li>– The resupply of isolated communities and/or properties; and</li> <li>– Decontamination of NSW SES Flood Rescue Operators as required.</li> </ul> <p><b>Recovery</b></p> <ul style="list-style-type: none"> <li>• Participate in After Action Reviews as required.</li> </ul>
<p><b>NSW Volunteer Rescue Association (as per NSW State Flood Plan)</b></p>	<p><b>Response</b></p> <ul style="list-style-type: none"> <li>• Where requested by the NSW SES, assist in flood operations when training and equipment are available and suitable, including assistance with: <ul style="list-style-type: none"> <li>– The warning and/or evacuation of at-risk communities.</li> <li>– Flood rescue operations.</li> <li>– Monitoring / reconnaissance of flood prone areas.</li> <li>– Resupply of isolated communities and/or properties; and</li> <li>– Property protection tasks including sandbagging.</li> </ul> </li> </ul>
<p><b>Owners of Declared Dams within or upstream of the LGA (as per NSW State Flood Plan)</b></p>	<p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• Assist the NSW SES with community engagement programs.</li> <li>• Provide NSW SES with information necessary for response planning and warning distribution.</li> <li>• Assist the NSW SES identify correlations between water level and/or discharges at the dam for use in flood response operations (warning and evacuation); and</li> <li>• Consult with the NSW SES State Headquarters in the development of Dam Emergency Plans, including the development of dam failure alerts, in accordance with the Dam Safety Committee Guidelines.</li> </ul> <p><b>Response</b></p> <ul style="list-style-type: none"> <li>• Where water level monitoring or other instrumentation allows, provide NSW SES with flood advices as per pre-agreed thresholds for use in downstream flood response operations (warnings).</li> <li>• Notify NSW SES of potential or actual dam failures in accordance with the Dam Emergency Plan and Dam Safety NSW Guidelines.</li> <li>• Close at-risk camping grounds/recreational areas within their managed areas.</li> </ul>

AGENCY	RESPONSIBILITIES
	<ul style="list-style-type: none"> <li>• In the case of declared dams whose risks are intolerable, assist the NSW SES in planning to warn and evacuate people at risk of dam failure and maintain and operate any special Dam Failure Warning Systems and/or automatic telemetered monitoring devices to assist with early detection of incidents which are installed until such time that the risks have been lowered to an acceptable level; and</li> </ul> <p>Owners of gated dams:</p> <ul style="list-style-type: none"> <li>• Provide all available information to the BoM and the NSW SES on storage levels and actual and prospective water releases and their likely impacts on downstream river levels.</li> <li>• Advise the downstream community of prospective and actual water releases, except in those circumstances where the BoM would issue flood warnings; and</li> <li>• Where possible actively work with NSW SES and the BoM to reduce the impacts of flooding on communities through management of water releases within identified safe parameters and within statutory licencing provisions under the <i>Water Management Act 2000</i> and <i>Water NSW Act 2014</i>.</li> </ul>
<b>Public Information Services Functional Area</b>	<p>The roles and responsibilities for Public Information Services are outlined in the <a href="#">Public Information Services Supporting Plan</a>.</p> <p>Roles and responsibilities in addition to the Supporting Plan are:</p> <ul style="list-style-type: none"> <li>• On receipt of advice from NSW SES of any weather event likely to result in significant multi agency operational activity, the Public Information Functional Area Coordinator PIFAC determines if a daily multi-agency teleconference is required to ensure that the information needs of each agency are being met and to address any issues. These teleconferences continue through the response phase into the recovery phase.</li> </ul>
<b>Resilience NSW</b>	<ul style="list-style-type: none"> <li>• The roles and responsibilities of Resilience NSW are outlined in the NSW State Flood Plan.</li> </ul>
<b>SEOCON/SEOC</b>	<p>The roles and responsibilities of the SEOCON/SEOC are outlined in the <a href="#">New South Wales State Flood Plan</a>.</p>
<b>Surf Life Saving NSW (as per NSW State Flood Plan)</b>	<p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• Contribute to NSW SES reviews into plans, policies and procedures as required; and</li> <li>• Participate in NSW SES briefings, training and exercises as required.</li> </ul> <p><b>Response</b></p> <ul style="list-style-type: none"> <li>• Assist the NSW SES with the warning and/or evacuation of at-risk communities.</li> </ul>

AGENCY	RESPONSIBILITIES
	<ul style="list-style-type: none"> <li>• Provide accommodation in Surf Life Saving facilities for evacuation centres where required; and</li> <li>• Assist the NSW SES with flood rescue operations, where training and equipment are suitable.</li> </ul>
<b>Telecommunications Services Functional Area</b>	The roles and responsibilities for Telecommunications Services are outlined in the <a href="#">Telecommunications Services (TELCOPLAN) Supporting Plan</a> .
<b>Transport for NSW (TfNSW)</b>	<ul style="list-style-type: none"> <li>• Transport for NSW (TfNSW) will coordinate information on state road conditions for emergency services access.</li> <li>• Transport for NSW (TfNSW) will coordinate the management of the state road network across all modes of transport.</li> <li>• Transport for NSW (TfNSW) may assist the NSW SES with the evacuation of at-risk communities by maintaining access and egress routes.</li> <li>• Transport for NSW (TfNSW) in collaboration with Transport Management Centre (TMC) will assist the NSW SES with the communication of flood warnings and information provision to the public through Live Traffic and social media according to the VMS protocols and procedures.</li> <li>• Transport for NSW (TfNSW) will assist the NSW SES with identification of State Road infrastructure at risk of flooding.</li> <li>• Transport for NSW (TfNSW) (NSW Trainlink) in conjunction with Rail Infrastructure Manager (RIM) will manage passenger rail services where rail infrastructure is impacted.</li> </ul>
<b>Transport Services Functional Area</b>	<p>The roles and responsibilities for Transport Services are outlined in the <a href="#">Transport Services Supporting Plan</a>.</p> <p>Roles and responsibilities in addition to the Supporting Plan are:</p> <ul style="list-style-type: none"> <li>• Participate in risk management studies.</li> <li>• Assist the NSW SES to identify transport infrastructure at risk of flood damage for incorporation into planning and intelligence; and</li> <li>• Coordinate the provision of traffic and transport operations as consistent with the roles of Transport organisations.</li> </ul>
<b>Water NSW</b>	The roles and responsibilities for Water NSW are outlined in the <a href="#">New South Wales State Flood Plan</a> .
<b>Welfare Services Functional Area</b>	The roles and responsibilities for Welfare Services are outlined in the Welfare Services Functional Area Supporting Plan.

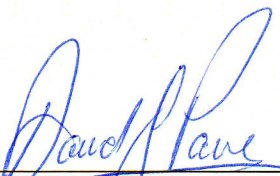
## 11 Appendix C – Community Specific Roles and Responsibilities

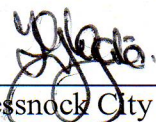
<b>Community Members</b>	<p><b>Preparedness</b></p> <ul style="list-style-type: none"> <li>• Understand the potential risk and impact of flooding.</li> <li>• Prepare homes and property to reduce the impact of flooding.</li> <li>• Understand warnings and other triggers for action and the safest actions to take in a flood.</li> <li>• Households, institutions and businesses develop plans to manage flood risks, sharing and practicing this with family, friends, employees and neighbours.</li> <li>• Have an emergency kit; and</li> <li>• Be involved in local emergency planning processes.</li> </ul> <p><b>Recovery</b></p> <ul style="list-style-type: none"> <li>• Assist with community clean-up if required and able to do so. Participate in After Action Reviews if required.</li> </ul>
<b>Private companies or other organisations</b>	<ul style="list-style-type: none"> <li>• Not Applicable</li> </ul>
<b>Service and sporting clubs</b>	<ul style="list-style-type: none"> <li>• Not Applicable</li> </ul>
<b>Aboriginal organisations or groups</b>	<ul style="list-style-type: none"> <li>• Not Applicable</li> </ul>
<b>Communication</b>	<ul style="list-style-type: none"> <li>• Not Applicable</li> </ul>
<b>Name of farmer or flood warning networks</b>	<ul style="list-style-type: none"> <li>• Not Applicable</li> </ul>
<b>Cross-border assistance arrangement</b>	<ul style="list-style-type: none"> <li>• Not Applicable</li> </ul>



## **CESSNOCK CITY LOCAL FLOOD PLAN**

### **A SUB-PLAN OF THE CESSNOCK CITY LOCAL DISASTER PLAN (DISPLAN)**

  
\_\_\_\_\_  
Chair, Local Emergency  
Management Committee

 OSM  
\_\_\_\_\_  
Cessnock City SES Local Controller

**FEBRUARY 2009 EDITION**

**TO BE REVIEWED NO LATER THAN FEBRUARY 2014**

# CONTENTS

<b>DISTRIBUTION LIST .....</b>	<b>iii</b>
<b>AMENDMENT LIST .....</b>	<b>iv</b>
<b>LIST OF ABBREVIATIONS .....</b>	<b>v</b>
<b>GLOSSARY .....</b>	<b>vi</b>
<b>PART 1 - INTRODUCTION .....</b>	<b>1</b>
1.1 Purpose .....	1
1.2 Authority.....	1
1.3 Area Covered By The Plan .....	1
1.4 Description Of Flooding And Its Effects .....	2
1.5 Responsibilities.....	2
1.6 Cross-Border Assistance Arrangements.....	10
<b>PART 2 - PREPAREDNESS .....</b>	<b>11</b>
2.1 Maintenance Of This Plan .....	11
2.2 Floodplain Risk Management.....	11
2.3 Development of Flood Intelligence .....	11
2.4 Development of Warning Systems .....	12
2.5 Public Education.....	12
2.6 Training .....	12
2.7 Resources.....	12
<b>PART 3 - RESPONSE.....</b>	<b>13</b>
3.1 Control.....	13
3.2 Operations Centres .....	13
3.3 Liaison .....	13
3.4 Communications .....	13
3.5 Start of Response Operations.....	14
3.6 Flood Intelligence .....	14
3.7 Preliminary Deployments .....	15
3.8 Warnings.....	15
3.9 Information .....	17
3.10 Road Control.....	17
3.11 Traffic Control.....	18
3.12 Flood Rescue .....	18
3.13 Evacuations.....	18
3.14 Registration.....	20
3.15 Management Of Evacuees' Pets .....	20
3.16 Essential Services .....	20
3.17 Logistics .....	20
3.18 Aircraft Management.....	20
3.19 Resupply of Isolated Towns and Villages .....	21
3.20 Resupply of Isolated Properties .....	22
3.21 Assistance for Animals.....	22
3.22 Stranded Travellers.....	22
3.23 All Clear .....	23
<b>PART 4 - RECOVERY .....</b>	<b>24</b>
4.1 Welfare .....	24
4.2 Recovery Coordination.....	24
4.3 Arrangements for Debriefs / After Action Reviews .....	24



**ANNEX A - THE FLOOD THREAT ..... A-1**

    Landforms and River System(s) ..... A-1

    Storage Dams..... A-1

    Weather Systems and Flooding ..... A-1

    Extreme Flooding ..... A-2

**ANNEX B - EFFECTS OF FLOODING ON THE COMMUNITY ..... B-1**

    Community Profile ..... B-1

    Specific Risk Areas ..... B-1

**ANNEX C - GAUGES MONITORED BY THE CESSNOCK CITY SES LOCAL HEADQUARTERS ..... C-1**

**ANNEX D - DISSEMINATION OF SES FLOOD BULLETINS..... D-1**

**ANNEX E - TEMPLATE EVACUATION WARNING MESSAGE ..... E-1**

**ANNEX F - EVACUATION ARRANGEMENTS FOR THE CESSNOCK CITY COUNCIL AREA..... F-1**

    Background..... F-1

    Arrangements ..... F-1

    Phase 1 – Decision to Evacuate ..... F-1

    Phase 2 – Warning..... F-2

    Phase 3 – Withdrawal ..... F-2

    Phase 4 – Shelter ..... F-3

    Phase 5 – Return ..... F-4

**ANNEX G - DETAILS OF EVACUATION ARRANGEMENTS IN THE EVENT OF DAM-FAILURE OR OTHER EXTREME FLOODING: BRANXTON OPERATIONAL AREA G-1**

**ANNEX H - DETAILS OF EVACUATION ARRANGEMENTS IN THE EVENT OF DAM-FAILURE OR OTHER EXTREME FLOODING: EAST BRANXTON - GRETA OPERATIONAL AREA H-1**

**ANNEX I - DETAILS OF EVACUATION ARRANGEMENTS IN THE EVENT OF DAM-FAILURE OR OTHER EXTREME FLOODING: LOXFORD-WESTON-CLIFTFLEIGH OPERATIONAL AREA I-1**

**ANNEX J - DETAILS OF THE DAM-FAILURE WARNING AND EVACUATION SYSTEM FOR GLENNIES CREEK DAM ..... J-1**

**MAP 1 - RIVER BASIN..... I**

**MAP 2 - COUNCIL AREA..... II**

**MAP 3 - CESSNOCK AREA ..... III**

## DISTRIBUTION LIST

Cessnock City SES Local Controller .....	1
Cessnock City SES Unit .....	2
Hunter SES Region Headquarters.....	2
NSW SES State Headquarters .....	1
Cessnock City Local Emergency Operations Controller .....	1
NSW Police Force, Central Hunter Local Area Command .....	1
Cessnock City Local Emergency Management Committee Members .....	4
Cessnock City Local Emergency Management Officer.....	1
Cessnock City Local Emergency Operations Centre.....	1
Cessnock City Council Mayor .....	1
Cessnock City Council General Manager.....	1
Cessnock City Council Technical Services Department .....	1
NSW Fire Brigades - Abermain, Bellbird, Branxton, Cessnock, Kearsley, Kurri Kurri, Paxton and Weston.....	1 each
NSW Rural Fire Service - Hunter Zone.....	1
Ambulance Service of NSW - Cessnock and Kurri Kurri.....	1 each
Volunteer Rescue Association, Cessnock Rescue Squad .....	1
Energy Australia .....	1
Telstra .....	1
Department of Industry and Investment NSW - Hunter Region.....	1
Community Services - Cessnock .....	1
Roads and Traffic Authority .....	1
Evacuation Centre.....	1 each
Hospitals.....	1 each
Schools .....	1 each
Council Libraries .....	1
Spare .....	5



## LIST OF ABBREVIATIONS

The following abbreviations have been used in this plan:

<b>AEP</b>	Annual Exceedance Probability
<b>AHD</b>	Australian Height Datum
<b>ARI</b>	Average Recurrence Interval (Years)
<b>ALERT</b>	Automated Local Evaluation in Real Time
<b>AWRC</b>	Australian Water Resources Council
<b>BoM</b>	Australian Government Bureau of Meteorology
<b>CBD</b>	Central Business District
<b>DCF</b>	Dam Crest Flood
<b>DECCW</b>	Department of Environment, Climate Change & Water
<b>DSC</b>	Dams Safety Committee
<b>DISPLAN</b>	Disaster Plan
<b>CS</b>	Community Services
<b>DSEP</b>	Dam Safety Emergency Plan
<b>DVR</b>	Disaster Victim Registration
<b>DWE</b>	Department of Water and Energy
<b>GIS</b>	Geographic Information System
<b>GRN</b>	Government Radio Network
<b>HF</b>	High Frequency
<b>IFF</b>	Imminent Failure Flood
<b>I &amp; I NSW</b>	<b>Industry and Investment NSW</b>
<b>PMF</b>	Probable Maximum Flood
<b>PMR</b>	Private Mobile Radio
<b>PMP</b>	Probable Maximum Precipitations
<b>PSTN</b>	Public Switched Telephone Network
<b>RTA</b>	Roads and Traffic Authority
<b>SES</b>	State Emergency Service
<b>SEWS</b>	Standard Emergency Warning Signal
<b>UHF</b>	Ultra High Frequency
<b>VHF</b>	Very High Frequency
<b>VRA</b>	Volunteer Rescue Association
<b>WICEN</b>	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).

**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.

**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.

**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.

**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.

**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 liable 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.

**Flood Plan.** A plan that deals specifically with flooding and is a sub-plan of a Disaster Plan. Flood plans describe a grid roles, responsibilities, functions, actions and management arrangements for the conduct of flood operations and for preparing for them.

**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.

**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 BoM 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.

**Geographic Information System (GIS).** A computerised database for the capture, storage, analysis and display of locationally defined information. Commonly, a GIS portrays a portion of the earth's surface in the form of a map on which this information is overlaid.

**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 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.

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

**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).

**Runoff.** The amount of rainfall which ends up as streamflow, 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.

## **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 Cessnock City Council 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 and the State Emergency Service Act 1989. It has been accepted by the Hunter SES Region Controller and the Cessnock City Local Emergency Management Committee.

### **1.3 Area Covered By The Plan**

- 1.3.1 The area covered by the plan is the Cessnock City Council Local Government Area which includes the towns and villages of Abermain, Abernethy, Bellbird, Branxton, Cessnock, Clifleigh, Ellalong, Greta, Heddon Greta, Kearsley, Kitchener, Kurri Kurri, Loxford, Millfield, Mulbring, Neath, North Rothbury, Nulkaba, Paxton, Pelaw Main, Pokolbin, Stanford Merthyr, Weston and Wollombi, intervening rural areas and large expanses of forest.

- 1.3.2 The Council area includes the following tributaries of the Hunter River:

- a. Wollombi Brook and its tributary creeks, North and South Arm and Quorrobolong, Congewai, Sweetmans, Slacks, Cedar, Narone, Yango Stockyard and Watagan Creeks.
- b. Wallis Creek and its tributaries, Kurri Kurri Main Drain, Swamp (Fishery), Deep, Brunkerville, Sandy and Surveyors Creeks.
- c. Black Creek and its tributaries, Lavender, Bellbird, Aberdare, Kearsley, Anvil and Redhouse Creeks.

The Council area also includes the upper reaches of Yengo Creek and the left bank of the McDonald River of which Yengo Creek is a tributary.

- 1.3.3 The Council area and its principal rivers and creeks are shown in Maps 1 and 2.
- 1.3.4 The Council area is in the Hunter SES Region and for emergency management purposes is part of the Hunter Central Coast Emergency Management District.



## 1.4 Description Of Flooding And Its Effects

1.4.1 The nature of flooding in the Cessnock City Council area is described in Annex A.

1.4.2 The effects of flooding on the community are detailed in Annex B.

## 1.5 Responsibilities

1.5.1 The general responsibilities of emergency service organisations and supporting services (functional areas) are listed in the Local Disaster Plan (DISPLAN). 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 **Cessnock City SES Local Controller.** The Cessnock City SES Local Controller is responsible for dealing with floods as detailed in the State Flood Plan, and will:

a. Control flood operations. This includes:

- Directing the activities of the SES units operating within the council area.
- Coordinating the activities of supporting agencies and organisations and ensuring that liaison is established with them.

b. Maintain a Local Headquarters at South Avenue, Cessnock in accordance with the SES Controllers' Handbook and the SES Operations Manual.

c. Ensure that SES members are trained to undertake operations in accordance with current policy as laid down in the SES Controllers' Handbook and the SES Operations Manual.

d. Develop and operate a flood intelligence system.

e. Coordinate the development and operation of a flood warning service for the community.

f. Participate in floodplain risk management initiatives organised by the Cessnock City Council.

g. Coordinate a public education program

h. Ensure that the currency of this plan is maintained.

i. Identify and monitor people and/or communities at risk of flooding

j. Direct the conduct of flood rescue operations.

k. Direct the evacuation of people and/or communities.

- l. Provide immediate welfare support for evacuated people.
- m. Coordinate the provision of emergency food and medical supplies to isolated people and/or communities.
- n. 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.
- o. Coordinate operations to protect property, for example by:
- Arranging resources for sandbagging operations.
  - Lifting or moving household furniture.
  - Lifting or moving commercial stock and equipment.
- p. Arrange for support (for example, accommodation and meals) for emergency service organisation members and volunteers assisting them.
- q. If SES resources are available, assist with emergency flood supply operations conducted by Department of Industry and Investment NSW (I&I NSW).
- r. If SES resources are available, assist the NSW Police Force, RTA and Council with road closure and traffic control operations.
- s. Exercise financial delegations relating to the use of emergency orders as laid down in the SES Controllers' Handbook.
- t. Coordinate the collection of flood intelligence.
- u. Submit Situation Reports to the Hunter SES 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.
- v. Keep the Cessnock City Local Emergency Operations Controller advised of the flood situation and the operational response.
  - w. Issue the 'All Clear' when flood operations have been completed.
  - x. Ensure that appropriate Debriefs/After Action Reviews are held after floods.
  - y. Assist in the establishment and deliberations of the Recovery Coordinating Committee.

### 1.5.3 Cessnock City SES Unit Members

a. Carry out flood response tasks. These may include:

- The management of the Cessnock City SES Local Headquarters Operations Centre.
- Gathering flood intelligence.
- Evacuation.
- Providing immediate welfare for evacuated people.
- Delivery of warnings and information.
- Resupply.
- Sandbagging.
- Lifting and/or moving household furniture and commercial stock.
- Assisting with road closure and traffic control operations.
- Assisting with emergency fodder supply operations.

b. Assist with preparedness activities.

c. Undertake training in flood operations.

### 1.5.4 Ambulance Service of NSW, Cessnock and Kurri Kurri:

a. Assist with the evacuation of elderly and/or infirm people.

b. Deploy ambulance resources to areas likely to become isolated, in consultation with the Cessnock City SES Local Controller.

#### 1.5.5 Australian Government Bureau of Meteorology (BoM):

- a. Provide Flood Watches for the Hunter River.
- b. Provide Flood Warnings, incorporating height-time predictions, for gauges on the Hunter River at Singleton and Maitland.
- c. Provide severe weather warnings when flash flooding is likely to occur.

#### 1.5.6 Cessnock City Council:

- a. Maintain a plant and equipment resource list for the Council area.
- b. Contribute to the development and implementation of a public education program.
- c. At the request of the Local SES Controller, deploy personnel and resources for flood related activities.
- d. Close and reopen council roads (and other roads nominated by agreement with the RTA) and advise the Cessnock City SES Local Controller, the Police and people who telephone the Council for road information.
- e. Provide filled sandbags to urban and village areas in which flooding is expected.
- f. Assist with the removal of caravans from caravan parks.
- g. Provide back-up radio communications.
- h. In the event of evacuations, assist with making facilities available for the domestic pets and companion animals of evacuees.
- i. Provide for the management of health hazards associated with flooding. This includes removing debris and waste.
- j. Ensure premises are fit and safe for reoccupation and assess any need for demolition.
- k. Establish and maintain floodplain risk management committees and ensure that key agencies are represented on such committees.
- l. Provide flood studies and floodplain management studies to the SES.

#### 1.5.7 Cessnock City Local Emergency Management Officer (LEMO):

- a. Provide executive support to the Local Emergency Operations Controller in accordance with the Cessnock City Local Disaster Plan.
- b. At the request of the Cessnock City SES Local Controller, advise appropriate agencies and officers of the activation of this plan.

#### 1.5.8 Cessnock City Local Emergency Operations Controller (LEOCON):

- a. Monitor flood operations.
- b. Coordinate support to the Cessnock City SES Local Controller if requested to do so.

#### 1.5.9 Childcare Centres and Preschools:

- a. The following childcare centres are to be contacted by the SES in the event of imminent flooding:
  - Abermain Early Learning Centre, 23 Grafton Street, Abermain.
  - Bees Nees Early Learning, 104 Hillview Road, East Branxton.
  - Branxton Preschool, 35 Bowen Street, Branxton.
  - Greta Community Pre-School, 1 Water Street, Greta.
  - Tilly's Plan & Development Centre, corner of Melbourne and Bathurst Streets, Abermain.
- b. When notified the childcare centres should:
  - Liaise with the SES and arrange for the early release of children whose travel arrangements are likely to be disrupted by flooding and/or road closures.
  - Assist with coordinating the evacuation of preschools and childcare centres.

#### 1.5.10 Citizens' Radio Emergency Service Teams (CREST) / Wireless Institute Civil Emergency Network (WICEN):

- a. Provide communications assistance as requested.

#### 1.5.11 Community Services (CS) Cessnock:

- a. Manage evacuation centres.
- b. Provide clothing, accommodation, food and welfare services for flood affected people, including stranded travellers.

#### 1.5.12 Department of Industry and Investment NSW (I&I NSW), Hunter Region:

- a. Coordinate the supply and delivery of emergency fodder.
- b. Provide advice on dealing with dead and injured farm animals.

- c. Provide financial, welfare and damage assessment assistance to flood affected farm people.
- d. Coordinate the operation of animal shelter compound, facilitate for the domestic pets and companion animals of evacuees.

**1.5.13 Energy Australia:**

- a. Provide advice to the Cessnock City SES Local Controller of any need to disconnect power supplies or of any timetable for reconnection.
- b. Clear or make safe any hazard caused by power lines or electrical reticulation equipment.
- c. Assess the necessity for and implement the disconnection of customers' electrical installations where these may present a hazard.
- d. Advise the public with regard to electrical hazards during flooding and to the availability or otherwise of the electricity supply.
- e. Inspect, test and reconnect customers' electrical installations as conditions allow.
- f. Assist the SES to identify infrastructure at risk of flooding for incorporation into planning and intelligence

**1.5.14 NSW Fire Brigades, Abermain, Bellbird, Branxton, Cessnock, Kearsley, Kurri Kurri, Paxton and Weston:**

- a. Assist with the delivery of evacuation warnings.
- b. Assist with the conduct of evacuations.
- c. Provide equipment for pumping flood water out of buildings and from low-lying areas.
- d. Assist with cleanup operations, including the hosing out of flood affected properties.

**1.5.15 NSW Police Force, Central Hunter LAC:**

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

#### 1.5.16 NSW Rural Fire Service (RFS), Hunter Zone:

- a. Assist by providing personnel in rural areas and villages to:
  - inform the Cessnock City SES 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 with the delivery of evacuation warnings.
- d. Assist 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 cleanup operations, including the hosing of flood affected properties.

#### 1.5.17 Rail Corporation NSW (RailCorp):

- a. Close and re-open railway lines as necessary and advise the Cessnock City SES Local Controller.
- b. Arrange trains for evacuations and/or commuting purposes.

#### 1.5.18 Roads and Traffic Authority (RTA):

- a. Close and reopen New England Highway if affected by flood waters and advise the Cessnock City SES Local Controller.

#### 1.5.19 School Administration Offices (including Catholic Education Office Diocese of Maitland/Newcastle, Department of Education & Training Maitland and Private Schools:

- a. Liaise with the SES and arrange for the early release of students whose travel arrangements are likely to be disrupted by flooding and/or road closures.
- b. Pass information to school bus drivers/companies and/or other school principals on expected or actual impacts of flooding.
- c. Assist with coordinating the evacuation of the following schools
  - Congewai Public School, Congewai Street, Paxton

- Laguna Public School, Laguna
- Millfield Public School, Wollombi Road, Millfield
- Mulbring Public School, Water Street, Mulbring
- Nulkaba Public School, corner of O'Connors Road and Branxton Street, Nulkaba
- Paxton Public School, Anderson Avenue, Paxton
- Wollombi Public School, Maitland Road, Wollombi

d. Provide space in the schools for Evacuation centres where necessary

#### 1.5.20 **State Water:**

- a. Maintain and operate the Dam Failure Warning System for Glennies Creek Dam.
- b. Contribute to the development and implementation of a public education program on flooding within the council area.
- c. Maintain a Dam Safety Emergency Plan and provide copies to the SES.
- d. Provide information on the consequences of dam failure to the SES for incorporation into planning and flood intelligence.

#### 1.5.21 **Telstra:**

- a. Maintain telephone services.
- b. Repair and restore telephone facilities damaged by flooding.
- c. Provide additional telecommunications support for the Cessnock City SES Local Headquarters as required.
- d. Assist the SES to identify infrastructure at risk of flooding for incorporation into planning and intelligence

#### 1.5.22 **Transport Services Coordinator:**

- a. Arrange transport facilities for evacuations and/or commuting purposes.

#### 1.5.23 **Volunteer Rescue Association (VRA), Cessnock:**

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

#### 1.5.24 **Flood Warning Network:**

- a. Provide flood information to the Cessnock City SES Local Controller.



- b. Distribute flood warnings and flood information provided by the Cessnock City SES Local Controller.

## **1.6 Cross-Border Assistance Arrangements**

- 1.6.1 A local cross-border assistance arrangement exists in which the Cessnock City SES will deploy resources to support the Singleton SES.
- 1.6.2 During significant flood operations in the Singleton LGA, the Singleton SES is unable to access Elderslie via road. Cessnock City SES will carry out reconnaissance along Elderslie Road into the Singleton LGA area and assist residents where possible.

## **PART 2 - PREPAREDNESS**

### **2.1 Maintenance Of This Plan**

2.1.1 The Cessnock City SES 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 In any event, the plan is to be reviewed no less frequently than every five years.

### **2.2 Floodplain Risk Management**

2.2.1 The Cessnock City SES Local Controller will ensure that the SES:

- a. Participates in floodplain risk management committee activities when those committees are formed.
- b. Consults with the flood prone community about the nature of the flood problem and its management.
- c. Informs the Hunter SES Region Headquarters of involvement in floodplain 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 SES will develop and maintain a flood intelligence system.

## **2.4 Development of Warning Systems**

- 2.4.1 The SES will establish and/or maintain a flood warning system for areas affected by flooding. This requires:
- a. An identification of the potential clients of flood warning information at different levels of flooding (ie. 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 Public Education**

- a. The Cessnock City SES Local Controller, with the assistance of the Cessnock City Council, the Hunter SES Region Headquarters and SES State Headquarters, is responsible for ensuring that the residents of the Council area are aware of the flood threat in their vicinity and how to protect themselves from it.
- 2.5.2 Specific strategies to be employed include:
- a. Dissemination of flood-related brochures and booklets in flood liable areas.
  - b. Talks and displays orientated to community organisations and schools.
  - c. Publicity given to this plan and to flood-orientated 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 Cessnock City SES. The Cessnock City SES 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 SES.

## **2.7 Resources**

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

## **PART 3 - RESPONSE**

### **3.1 Control**

- 3.1.1 The 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.

### **3.2 Operations Centres**

- 3.2.1 The Cessnock City SES maintains an Operations Centre at South Avenue, Cessnock.
- 3.2.2 The Cessnock City Emergency Operations Centre is located at Cessnock City Council Administration Building Vincent Street, Cessnock.

### **3.3 Liaison**

- 3.3.1 At the request of the Cessnock City SES Local Controller, each agency with responsibilities identified in this plan will provide liaison (including a liaison officer where necessary) to the Cessnock City SES Operations Centre.
- 3.3.2 Liaison officers are to:
- a. Have the authority to deploy the resources of their parent organisations at the request of the Cessnock City SES Local Controller,
  - b. Advise the Cessnock City SES Local Controller on resource availability for their service, and
  - c. Be able to provide communications to their own organisations.

### **3.4 Communications**

- 3.4.1 The primary means of office-to-office communications is by telephone, GRN radio and facsimile.
- 3.4.2 The primary means of communication to and between deployed SES resources is by GRN radio.
- 3.4.3 All other organisations will provide communications as necessary to their deployed field teams.
- 3.4.4 Back-up communications are provided as follows:
- a. The Cessnock Rural Fire Service radio system.
  - b. The Cessnock Council UHF radio system.

### 3.5 Start of Response Operations

- 3.5.1 This plan is always active to ensure that preparedness actions detailed in this plan are completed.
- 3.5.2 Response operation will begin:
- a. On receipt of a Bureau of Meteorology Preliminary Flood Warning, Flood Warning, Flood Watch or a Severe Weather Warning.
  - b. On receipt of a dam failure alert.
  - c. When other evidence leads to an expectation of flooding within the council area.
- 3.5.3 Contact with the Bureau of Meteorology to discuss the development of flood warnings will normally be through the Hunter SES Region Headquarters.
- 3.5.4 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. Cessnock City Local Emergency Operations Controller (for transmission to the NSW Police Force Local Area Command Headquarters).
  - b. Cessnock City SES Unit.
  - c. Hunter SES Region Headquarters.
  - d. Cessnock City Local Emergency Management Officer (for transmission to appropriate Council officers and departments).
  - e. Cessnock City Council Mayor.
- 3.5.5 Other agencies listed in this plan will be advised by the LEMO on the request of the Cessnock City SES Local Controller and as appropriate to the location and nature of the threat.

### 3.6 Flood Intelligence

- 3.6.1 Sources of flood intelligence during times of flooding are:
- a. **Bureau of Meteorology.** The Bureau provides:
    - Flood Watches, which give an early appreciation of developing meteorological situations that could lead to flooding. These are normally provided on a whole-catchment basis for the Hunter River.
    - Flood Warnings, which include river height readings and height-time predictions. The gauges for which predictions are provided for are listed in Annex C.

- Weather Forecasts warning of potential storm activity including Severe Weather Warnings and Severe Thunderstorm Warnings.
  - Watches and Warnings are also available on the BoM website: [www.bom.gov.au](http://www.bom.gov.au)
- b. **Hunter SES Region Headquarters.** The Region Headquarters provides information on flooding and its consequences, including those in nearby council areas.
- c. **Cessnock City Council.** Provide information on road closures within the Council area.
- d. **Manly Hydraulics Laboratory (MHL) Computerised River Watch (Flood-to-Fax) System.** This system provides river height and rainfall readings for a number of gauges as indicated in Annex C. Data from this system is available on the Manly Hydraulic Laboratory website: [www.mhl.nsw.gov.au](http://www.mhl.nsw.gov.au)
- e. **Glennies Creek Dam Early Warning System (EWS).** The EWS is designed to alert the residents living within the 45 minute zone below the dam and the SES, to any threat to the security of the Glennies Creek Dam. The alerts are automatically triggered when the water level at the dam reaches certain prescribed levels. Information on any threat would be relayed immediately to the SES State Headquarters Communications Centre and forwarded to the Cessnock City SES Local Controller via the Hunter SES Region Headquarters.
- f. **NSW Office Of Water, East Maitland Office.** This office advises flow rates and rates of rise for the Hunter River. Daily river reports containing information on gauge heights and river flows are available from the DWE website: [www.hits.nsw.gov.au](http://www.hits.nsw.gov.au)

### 3.7 Preliminary Deployments

- 3.7.1 When flooding is expected to be severe enough to cut road access to towns, within towns and/or rural communities, the Cessnock City SES Local Controller will ensure that resources are in place for the distribution of foodstuffs and medical supplies to the areas that could become isolated.

### 3.8 Warnings

- 3.8.1 Warning services operate according to the following arrangements:

- a. The Cessnock City SES Local Headquarters:
- Provides advice to the Hunter SES Region Headquarters on current and expected impacts of flooding.

- Coordinates the delivery of warnings to the community by door-knocking, telephone, mobile public address systems, local radio stations and two-way radio.
- b. The Hunter SES Region Headquarters issues warning information in the form of SES Region Flood Bulletins to:
- Media organisations and agencies listed in Annex D.

### 3.8.2 Warnings are provided as follows:

- a. **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 Cessnock City SES Local Controller will advise the Hunter SES Region Headquarters which will issue SES Livestock and Equipment Warnings.
- b. **Bureau of Meteorology Flood Watches.** If there are signs of impending floods, Flood Watches will be incorporated in SES Flood Bulletins issued by the Hunter SES Region Headquarters.
- c. **Bureau of Meteorology Flood Warnings.** Flood Warnings are issued for the locations detailed in Annex C. On receipt of such warnings, the Cessnock City SES Local Controller will:
- Advise the Cessnock City Local Emergency Operations Controller and the Cessnock City Local Emergency Management Officer.
  - Provide the Hunter SES Region Headquarters with information for inclusion in SES Flood Bulletins on the estimated impacts of flooding at the predicted heights.
- d. **SES Local Flood Advices.** The SES may issue Local Flood Advices for the gauges listed in Annex C. These are issued in SES Region Flood Bulletins.
- e. **Evacuation Warnings.** A template guide to the content of evacuation warning messages is at Annex E.
- f. **Special Warnings. Cessnock Rain/Creek Reading Network.** The SES Local Controller monitors a number of rain, river and road gauges. These are listed in Annex C.
- g. **A network of Cessnock VRA and Rural Fire Service** members scattered across the Council area reads these gauges and provides information on rainfall and flood conditions
- h. **Dam-Failure Warnings.** Special arrangements apply in the case of severe flooding that may have the potential to cause the failure of Glennies Creek Dam. Details of these arrangements are described in Annex J.

- i. **Standard Emergency Warning Signal (SEWS).** This signal may be played over radio and television stations to alert communities to Evacuation Warnings, Special Warnings or Dam-Failure Warnings. Use of the signal will be approved by the Hunter SES Region Headquarters.

### **3.9 Information**

- 3.9.1 The Hunter SES Region Headquarters issues SES Flood Bulletins to media outlets and agencies on behalf of all SES units in the Region. SES Flood Bulletins contain the following information relating to all council areas in which flooding is occurring:
  - a. Current warnings, together with indications of the likely impact of flooding at any predicted heights.
  - b. Current flood heights and flood behaviour.
  - c. Details of conditions and closures of main roads.
  - d. Advice on safety matters and means of protecting property.
- 3.9.2 The Cessnock City SES Local Headquarters provides a “phone-in” information service for the community in relation to current warnings, river heights, flood behaviour, road conditions and closures of local and main roads and advice on safety matters and means of protecting property.
- 3.9.3 Collation and dissemination of road information is actioned as follows:
  - a. The Cessnock City SES Local Controller provides road status reports for main roads in the council area to the Hunter SES Region Headquarters and to the Central Hunter Police Local Area Command Headquarters. Road information is also obtained from the Police, Council and RTA.
  - b. The Hunter SES Region Headquarters distributes information on main roads to SES units, media outlets and agencies as part of SES Flood Bulletins.
  - c. Road information is also available from the RTA website (<http://www.rta.nsw.gov.au/trafficreports/regionalnewsouthwales/index.html>)
- 3.9.4 The Cessnock City SES Local Controller is to ensure that the Hunter SES Region Controller is regularly briefed on the progress of operations and on future resource needs.

### **3.10 Road Control**

- 3.10.1 A number of roads within the council area are affected by flooding. Details are provided in Annex B.
- 3.10.2 The Council closes and re-opens its own local roads, as well as State Roads for which it is the “road authority” under the Roads Act 1993. This includes MR 527 (George Booth Drive), MR 588 (John Renshaw Drive), MR 220 (Heaton



Gap to Branxton), MR 195 (Kurri Kurri to Maitland) and Leggett's Drive (Mulbring to Kurri Kurri Road).

- 3.10.3 RTA closes and re-opens the New England Highway
- 3.10.4 The NSW Police Force has the authority to close and re-open roads but will normally only do so (if the council or the RTA has not already acted) if public safety requires such action.
- 3.10.5 When resources permit, the SES assists Council or the Police by erecting road closure signs and barriers.

### **3.11 Traffic Control.**

- 3.11.1 In the event of major flooding, the Cessnock City SES Local 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).

### **3.12 Flood Rescue**

- 3.12.1 The Cessnock City SES Local Controller is responsible for the coordination of flood rescue.
- 3.12.2 Flood rescues, may be carried out by accredited units using high clearance vehicles, flood boats and (under some circumstances) helicopters
- 3.12.3 Additional flood boats and crews can be requested through the Hunter SES Region Headquarters.

### **3.13 Evacuations**

- 3.13.1 In most floods, no evacuations are necessary. Severe floods on the creeks of the Council area may create a need for small numbers of evacuations, especially along Wollombi Brook. A very severe flood on the Hunter River (including a flood caused by the failure of Glennies Creek Dam) could necessitate a large number of evacuations. Details are in Annexes (F – H).
- 3.13.2 Evacuations will be controlled by the Cessnock City SES Local Controller and conducted by SES, VRA, Police and RFS personnel.
- 3.13.3 When evacuations are possible, the Cessnock City SES Local Controller will advise relevant DoCS personnel so that evacuation centres and welfare support can be set up in timely fashion.
- 3.13.4 Some residents may make their own decision to evacuate and move to alternative accommodation using their own transport. Such evacuees must be advised via the media to inform the Police or the SES of their evacuation and their temporary address.

- 3.13.5 Field teams conducting doorknocks will record and report back to the Operations Centre:
- a. Addresses and locations of houses doorknocked and/or evacuated.
  - b. 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).
- 3.13.6 The field teams will then carry out evacuations as required. Details of these premises will be passed to the Branxton, Cessnock, Kurri Kurri, Wollombi Police Stations.
- 3.13.7 The NSW Police Force will provide security for evacuated areas.
- 3.13.8 Evacuees will be taken to or advised to go to the nearest accessible evacuation centre, which may initially be established at the direction of the Cessnock City SES Local Controller but which will be managed as soon as possible by the CS. Any or all of the following sites may be used as evacuation centres:
- a. **Abermain:** - Abermain Bowling & Recreation Club, Corner of Armidale and Goulburn Streets, Abermain.
  - b. **Branxton:** - Branxton Golf Club, Cessnock Road, Branxton.
  - c. **Cessnock:** - East Cessnock Bowling Club, Neath Street, Cessnock.  
Cessnock High School, Aberdare Road, Cessnock.  
Mount View High School, Mount View Road, Cessnock.
  - d. **Greta:** - Greta Workers Club, West Street, Greta.  
Greta Public School, Wyndham Street, Greta.
  - e. **Kurri Kurri:** - Kurri Kurri High School, Stanford Street, Kurri Kurri.
  - f. **Laguna:** - Laguna Community Hall, Great North Road, Laguna.
  - g. **Weston:** - Weston Workers Club, Government Road, Weston.
  - h. **Wollombi:** - Wollombi Community Hall, Maitland Road, Wollombi.

In extreme floods on the Hunter River, it is possible that the Branxton and Greta evacuation centres would become inundated or inaccessible. In such an eventuality, evacuees will be directed or taken to the following evacuation centres:

- i. **Nulkaba:** - Potters Hotel & Brewery, Wine Country Drive, Nulkaba.
- j. **Lochinvar:** St Joseph's College, New England Hwy, Lochinvar (in Maitland LGA).

- 3.13.9 On arrival, evacuees will be registered, medically checked if necessary and provided with their immediate welfare needs.
- 3.13.10 Transport and storage of furniture from flood-threatened properties will be arranged as time and resources permit.

### **3.14 Registration**

- 3.14.1 NSW Police Force will ensure that all evacuees are registered on arrival at evacuation centres and details of registrations are sent to the Police District Headquarters by the quickest means available.

### **3.15 Management Of Evacuees' Pets**

- 3.15.1 In the event of a large-scale evacuation, animal shelter compound facilities will be set up for domestic animals and companion animals. These facilities will be operated by Cessnock City Council
- 3.15.2 Assistance animals are to accompany and/or remain in the care of their owners at all times. This includes transport and access into evacuation centres etc.

### **3.16 Essential Services**

- 3.16.1 The Cessnock City SES Local Controller will ensure that the providers of essential services (electricity, water, sewerage, medical and public health) are kept advised of the flood situation. Essential service providers must keep the Cessnock City SES Local Controller abreast of their status and ongoing ability to provide those services.

### **3.17 Logistics**

- 3.17.1 The Cessnock City SES Local Headquarters maintains a small stock of sandbags and back-up supplies are available through the Hunter SES Region Headquarters. Motorised sandbag-filling machines are sourced through Hunter SES Region Headquarters. Alternatively, local concrete trucks may be used.

### **3.18 Aircraft Management**

- 3.18.1 Aircraft can be used for a variety of purposes during flood operations including evacuation, rescue, resupply, reconnaissance and emergency travel.
- 3.18.2 Air support operations will be conducted under the control of the Hunter SES Region Headquarters, which may allocate aircraft to units if applicable. The Cessnock City SES Local Controller may task aircraft allocated by the Hunter SES Region Headquarters for flood operations within the Council area.

### 3.18.3 Helicopter Landing Points. Suitable landing points are located at:

Area	Helicopter Landing Points	Coordinates
Branxton	Branxton Golf Club Cessnock Road, Branxton	32o 39' 36.95''S 151o 21' 12.80'E
Cessnock	Cessnock Showground Mount View Road, Cessnock	32o 49' 57.12''S 151o 20' 33.57''E
Greta	Greta Oval, Corner of New England Highway and Nelson Street Greta	32o 41' 00.92''S 151o 23' 49.76''E
Kurri Kurri	Kurri Kurri High School Stanford Street, Kurri Kurri	32o 48' 38.16''S 151o 29' 08.36''E
Laguna	Oval, Great North Road (MR 181), Laguna	32o 59' 32.44''S 151o 07' 55.43''E
Lochinvar	St Joseph's College, New England Highway, Lochinvar	32o 41' 49.51''S 151o 27' 28.27''E
Nulkaba	Potters Hotel & Brewery, Wine Country Drive, Nulkaba	32o 48' 23.66''S 151o 20' 58.27''E
Pokolbin	Cessnock Airport Wine Country Drive, Pokolbin	32o 46' 53.21''S 151o 20' 31.95''E
Weston	Weston Park Government Road, Weston	32o 48' 49.17''S 151o 27' 57.49''E

3.18.4 **Airport.** Access to the Cessnock Airport remains open at all times. The airport is capable of handling light aircraft and helicopters only.

## 3.19 Resupply of Isolated Towns and Villages

- 3.19.1 The SES is responsible for the coordination of the resupply of isolated communities. If flood predictions indicate that areas are likely to become isolated, the Cessnock City SES local Controller should advise businesses (normally through the Cessnock City Council) that they should stock up.
- 3.19.2 When isolation occurs, storekeepers will be expected to place orders on 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 SES.
- 3.19.3 Where practicable the Cessnock City SES Local Controller will arrange for the delivery from normal suppliers of essential foodstuffs, fuels or urgent medical supplies required by an isolated property or community. This may be done using high clearance vehicles, flood boats or, on occasions, aircraft.
- 3.19.4 The Cessnock City Council will establish and chair a vetting committee to ensure that only essentials are ordered and that the business requesting the supplies is not using the flood as a means of restocking free of charge.
- 3.19.5 Where supplies are not available within the council area, the Cessnock City SES Local Controller may request them through the Hunter SES Region Headquarters. The Region Headquarters will usually arrange for them to be

delivered to the Cessnock City SES Local Controller for further distribution within the council area.

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

### **3.20 Resupply of Isolated Properties**

- 3.20.1 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. Property owners may call their suppliers direct or place their orders with the Cessnock City SES, through Community Services (CS), or through their own social networks.

- 3.20.2 The principles to be applied when planning for the resupply of isolated properties are:

- a. The SES will coordinate resupply and establish a schedule.
- b. CS will liaise with the SES concerning property holders who place orders with them. They will include people in dire circumstances who receive resupply at no cost. CS have a well developed system for this situation, including a standard list of approved resupply items.
- c. If a property holder seeks resupply from the SES and claims to be, or is considered to be, in dire circumstances, he/she is to be referred to CS.
- d. Local suppliers will liaise with the SES regarding delivery of resupply items to the designated loading point.
- e. Local suppliers are responsible for packaging resupply items for delivery.

### **3.21 Assistance for Animals**

- 3.21.1 Matters relating to the welfare of livestock, companion animals and wildlife (including feeding and rescue) are to be referred to Department of Industry and Investment NSW (I&I NSW) formerly the Department of Primary Industries.
- 3.21.2 Requests for emergency supply and/or delivery of fodder to stranded livestock, or for livestock rescue, are to be passed to Department of Industry and Investment NSW.

### **3.22 Stranded Travellers**

- 3.22.1 Stranded travellers seeking assistance will be referred to the Community Services for the arrangement of temporary accommodation.

### **3.23 All Clear**

- 3.23.1 When the danger to life and property has passed, the Cessnock City SES Local Controller will issue an 'All Clear' message signifying that response operations have been completed. This message will also advise details of arrangements for evacuated residents to return to their homes or indicate what longer-term accommodation arrangements have been made for those unable to do so.

## **PART 4 - RECOVERY**

### **4.1 Welfare**

- 4.1.1 The Department of Community Services will provide for the long-term welfare of people who have been evacuated.

### **4.2 Recovery Coordination**

- 4.2.1 The Cessnock City SES Local Controller will ensure that planning for long-term recovery operations begins at the earliest opportunity. This is to be done by briefing the chairman of the Cessnock City Council Local Emergency Management Committee on the details of the flooding and assisting in the establishment of a Recovery Coordinating Committee.
- 4.2.2 The Recovery Coordinating Committee is to prepare an outline plan for recovery operations and be prepared to recommend how such operations would best be controlled and coordinated.

### **4.3 Arrangements for Debriefs / After Action Reviews**

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

## **ANNEX A - THE FLOOD THREAT**

### **Landforms and River System(s)**

1. Except for its far western portion, which drains southwards via Yengo Creek (a tributary of the MacDonal River), the City of Cessnock falls within the catchment of the Hunter River. The principal watercourse within the Council area is Wollombi Brook, which rises in the far south and flows in a northerly direction before leaving the Council area just downstream of Paynes Crossing. Within the Council area, the main tributaries of Wollombi Brook are the North and South Arms and Quorrobolong, Congewai and Watagan Creeks. Wollombi Brook enters the Hunter River upstream of the town of Singleton.
2. The eastern portion of the Council area is drained by Wallis Creek, which joins the Hunter River at Maitland. Wallis Creek's main tributaries are Swamp (Fishery), Deep and Surveyors Creeks and Kurri Kurri Main Drain.
3. Black Creek and its tributaries, Anvil and Bellbird Creeks, drain the central and northern portions of the Council area from Kitchener to Branxton. Major inundation of Cessnock, South Cessnock and Bellbird occurs due to flooding of Black Creek and its tributaries.
4. The southern and western parts of the Council area are forested and rugged and are made up of the Hunter and Myall Ranges and Mt Warrawolong. Most of the remainder is undulating country. Few large floodplains have developed except along Wallis Creek and on the lower reaches of Black and Anvil Creeks. Only limited floodplain development occurs along Wollombi Brook.

### **Storage Dams**

5. Glennies Creek Dam is located on Glennies Creek (previously known as Falbrook), a tributary of the Hunter River. The dam is located below the junction of the Carrowbrook and the Falbrook and is 39km upstream from its junction with the Hunter River. Singleton is located approximately 26km downstream.
6. Flood waters could begin to reach the Branxton and Greta areas within five and a half hours of failure and the Wentworth Swamps about four and a half hours later. Flood flows would be much faster than has been recorded in past events.
7. A major detention basin has been constructed to the south of Mount View Road opposite Mount View High School to control runoff into Lavender Creek. This detention basin is monitored by Cessnock City Council.

### **Weather Systems and Flooding**

8. Three major rainfall mechanisms are responsible for most of the flooding in the Cessnock Council area. The first is based on inland depressions forming in the tropics over northern Australia and moving in a southerly or south-easterly



direction depositing heavy rainfall as they move. Such systems cause flooding on the Goulburn and Hunter Rivers and in severe events the flood waters may back up along Black and Anvil Creeks in the north of the Council area. Likewise they may fill the Wallis Creek lowlands between Kurri Kurri and Maitland.

9. Flood-producing rains can also be caused by ex-tropical cyclones originating in the Coral Sea and moving southwards along the Queensland and New South Wales coasts. Occasionally these systems move far enough south and west to affect the Hunter Valley. Especially heavy rains can occur when the low-pressure cell becomes stationary off or over the coastline. Flooding from these northern influences tends to be most common during the summer months.
10. Vigorous east coast low pressure systems can also produce flooding when a deep depression off the coast is accompanied by a blocking anti-cyclone over inland New South Wales. In these circumstances a cool, moist, south-easterly airstream results in heavy rain along the coast and over the catchment of Wollombi Brook. The most severe floods on this Brook have tended to occur in winter. In the June 1949 Hunter Valley flood, nearly 40% of the flood volume at Maitland was from the Wollombi catchment which also made significant contributions to other winter floods such as those in June 1930 and August 1952. The 1949 flood was the worst seen on Wollombi Brook since European settlement. Congewai Creek was backed up by flooding on the brook. In June 2007, intense rainfall from an east coast low caused major flash flooding within the Cessnock Council area.
11. A fourth flood-producing mechanism, the high-intensity, short-duration convective thunderstorm, can lead to local flooding over limited areas during the summer months. Such storms may cause town and village drainage systems to surcharge and create short term 'flash' flooding on minor creeks (including the upper reaches of Black, Bellbird and Swamp Creeks). They do not last long enough or cover sufficiently large areas to cause significant rises on Wollombi Brook or the Hunter River.

## **Extreme Flooding**

12. The worst floods ever recorded in the Cessnock Council area since European settlement should not be regarded as the most severe which can occur there. Worse floods than have been seen in recent decades must be expected. They will be very rare, but as tends to occur with extreme events, they may reach considerably greater heights than have previously been recorded. In addition, they may be both faster to rise and more dangerous in terms of depth and velocity than previous events. An extreme flood could cut communities off from normal means of supply for periods of several days.
13. No assessments of the gauge heights which would be reached by the Probable Maximum Flood (PMF) or other extreme events have been made for locations within the council area. It is believed, however, that on the Hunter River a naturally-occurring flood more severe than that of 1955 could approximate the effects of a flood caused by a failure of Glennies Creek Dam. The possible effects of such a flood are outlined in Annexes (B, F, G and H).

## ANNEX B - EFFECTS OF FLOODING ON THE COMMUNITY

### Community Profile

Census Description	LGA	Branxton-Greta	Cessnock-Bellbird	Kurri Kurri-Weston
Total Persons	46206	4679	18317	12532
Total Dwellings	16664	1621	6529	4812
Total persons aged 65 years and over	6273	400	2976	1717
Total persons aged below 15 years	10048	1215	3855	2762
Total persons with a need for assistance (profound / severe disability)	2770	183	1340	812
Total persons of indigenous origin	1603	116	698	493
Total persons using Internet	8365	898	2997	2184
Single parent families	2447	204	1042	793
Persons living alone	3942	321	1654	1268
Total persons who do not speak English well	75	11	51	8
Total persons who lived at a different address 5 years ago	13559	1549	5178	3625
Households without vehicles	1439	86	724	519
Total persons residing in caravans, cabins or houseboats	156	11	63	22
Mean household size	3	3	2	2

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

### Specific Risk Areas

1. Most flooding within the Cessnock Council area does not have severe impacts on the community. The effects of floods are mostly felt in rural areas and villages as inconvenience and isolation caused by the closure of roads. In some areas, farmers may be isolated for a few days and resupply by flood boat may become necessary. Few pumps or farm animals have needed relocation in the past and evacuations are uncommon except for a small number of dwellings. People south of Laguna who need to evacuate do so to Gosford and Wyong. In

the record 1949 flood, waters from Wollombi Brook reached Maitland, Negro, Canning and Narone Streets, Wollombi.

2. **Branxton-Greta** (2006 Census urban area population 4,679): Branxton is located six kilometres from the Hunter River but in severe events it can be affected by back-up flooding along Black and Anvil Creeks which flow through the town. During the 1955 flood, the water reached a depth of six metres over the New England Highway at Anvil Creek and several commercial and residential properties were seriously affected by flood waters which reached depths of up to 4 metres. In June 2007, the New England Highway (Maitland Street) was closed at Anvil Creek and four properties (Elderslie Road, Maitland and Lindsay Streets Branxton and in Spring Street East Branxton) had above floor inundation.
3. In exceptionally severe flood events (including any flood resulting from a failure of Glennies Creek Dam) it is likely that Branxton and East Branxton would be cut off from each other and that a total of up to 470 dwellings in Branxton, East Branxton and Greta would need to be evacuated. It is also possible that failure of services could necessitate the evacuation of the whole of Branxton. These communities are not protected by levees. Minor flooding of Branxton and surrounds can occur from Black and Anvil Creeks alone.
4. **Kurri Kurri** (2006 Census urban area population 12,532 including Weston). In extreme flood events, back-up in the Wentworth Swamps could affect houses in the Cliftleigh, Loxford and Weston areas and create significant evacuation problems. Access between Kurri Kurri and Maitland (Cessnock Road) is cut at Testers Hollow even under relatively less serious flood conditions.
5. A failure of the Glennies Creek Dam would cause severe flooding as a result of back-up flooding in the Wentworth Swamps. Large areas of rural land would be inundated, some of it to a depth of several metres and up to 50 dwellings could require evacuation.
6. **Cessnock** (2006 Census urban area population 18,317 including Bellbird). Within the urban area, parts of Black, Lavender, Kearsley and Bellbird Creeks are confined by concrete-lined channels whose capacities can be exceeded for short periods resulting in major flash flooding within Cessnock.

In June 2007, seven residential properties in Gordon Avenue and Edgeworth and Oliver Streets and two commercial properties in Vincent Street near Aberdare Road had flood inundation above floor level. It should also be noted that the severity of the 2007 flood was diminished by the loss of floodwaters upstream of South Cessnock into an underground coal mine.

7. **Other areas in Cessnock LGA affected by the June 2007 Flood.**

**Abermain:** Thirteen properties had flood inundation above floor level from the flooded Swamp Creek. The properties were in Mary (2), William (3), Elizabeth (7) and Harle (1) Streets.

**Weston:** Four properties had flood inundation above floor level from the flooded Swamp Creek. The properties were in Fourth (3) and Ninth (1) Streets.

**Wollombi:** Three properties had flood inundation above floor level from the flooded Wollombi Brook and Congewai Creek. The properties were in Paynes Crossing, Great North and Wollombi Roads. Paynes Crossing Road was closed at Cuneens and Williams Bridges for over a week. A number of isolated properties required resupply.

**All June 2007 data is from the Flood Level Survey by Carman Surveyors.**

## 8. Special Needs Groups

- Jacaranda Grove Hostel, Mount View Road Cessnock.
- Cessnock Masonic Village, Tinkerbark Street (off West Street), Cessnock.

## Road Closures

9. Flooding causes road closures as follows:

ROAD	LOCATIONS OF CLOSURE	CONDITIONS AND IMPLICATIONS
Millfield to Broke	Between Wollombi and Paynes Crossing, at Williams Bridge and Paynes Crossing.	Occurs at a gauge height of 2.5 m at Hanging Rock. Closure can last for some days with disruption to local traffic.
Cessnock to Kurri Kurri (Cessnock Road, MR 218)	Between Neath and Abermain, at approach to Abermain.	Occurs during flash floods; closure may last for a few hours. Affects bus travel to Maitland; no alternative route for buses.
Kurri Kurri to Maitland (Cessnock Road, MR 195)	Testers Hollow, from back-up flooding to Cliftleigh.	Closure can be for some days; buses affected; alternative routes via Old Maitland Rd and Buchanan Rd. These may also be closed.
New England Highway	Between Branxton and Greta and west of Branxton; usually from back-up flow on Black and Anvil Creeks.	Major disruption; can last for several days.
John Renshaw Drive (MR 588)	Twin bridges (Wallis and Surveyors Creeks).	Occurs only in severe events; causes severe disruption to commercial traffic to and from Newcastle.
Wollombi to Kulnura	Between Wollombi and Kulnura, mainly at Blaxland Arm, Watagan Creek Road and Murray's Run Road.	Occurs during flash floods; closure may last for a few hours or days; disruption to local traffic.

Minor back roads may also be closed, usually only for short periods but even in times of relatively low-level flooding.

Severe flooding along the Hunter River could close the New England Railway line.

## ANNEX C - GAUGES MONITORED BY THE CESSNOCK CITY SES LOCAL HEADQUARTERS

Gauge Name	Type	AWRC No	Stream	Flood Classification			Reading Arrangements
				Min	Mod	Maj	
Singleton*(‡)	River	210001	Hunter River	10.0	11.5	13.0	BoM (telemeter)
Maitland (Belmore Bridge)*(‡)	River	210458	Hunter River	5.9 AHD	8.9 AHD	10.5 AHD	BoM (telemeter)
Congewai	Road (Ellalong Swamp)	10100	Congewai Creek				Cessnock VRA
Millfield Bridge (Wollombi Road)	River	10236	Congewai Creek				Local Reader or Millfield Rural Fire Service members
Abermain	River		Swamp Creek				Local Reader
Hanging Rock (North Arm)	Rain-River						Local Reader
Wollombi	Road	10429	Wollombi River				Wollombi Police, Wollombi Rural Fire Service, Cessnock Council
Wollombi (Williams Bridge, Wollombi-Broke Road)	Road		Wollombi River				Wollombi Police, Wollombi Rural Fire Service, Cessnock Council
Wollombi (Cuneen Bridge, Wollombi-Broke Road)	Road		Wollombi River				Wollombi Police, Wollombi Rural Fire Service, Cessnock Council
Wollombi (Cleghorn Bridge, Wollombi-Laguna Road)	Road		Wollombi River				Wollombi Police, Wollombi Rural Fire Service, Cessnock Council
Wollombi (Wollombi Bridge)	River		Wollombi River				Local Reader
Laguna (Watagan Creek)	River	10208	Wollombi River				Laguna Rural Fire Service
Murrays Run	River	10255	Wollombi River				Local Reader
Mulbring	Road		Wallis Creek				Cessnock Council
Mulbring (Wallis Creek)	River	210036	Wallis Creek				Mulbring Rural Fire Service

White Bridge Road (Wallis Creek)	River	10419	Wallis Creek				Mulbring Rural Fire Service
John Renshaw Drive (Twin Bridges)	River	10191					Cessnock Council, Cessnock VRA or RTA
Testers Hollow (Kurri Kurri-Maitland Road)	Road	10373	Wallis Creek				Cessnock Council or Cessnock VRA
Greta (Anvil Creek)	River	210131	Anvil Creek				Greta Rural Fire Service

**Notes:**

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

**Rain Gauges Monitored by Cessnock SES**

Gauge Name	Type	AWRC No	Stream	Flood Classification			Reading Arrangements
				Min	Mod	Maj	
Cessnock	2 rain gauges						Local Readers
Congewai	Rain						Local Readers
Greta	Rain						Greta Rural Fire Service
Mulbring	Rain						Mulbring Rural Fire Service
Quorrobolong	Rain						Quorrobolong Rural Fire Service
Bucketty	Rain						Bucketty Rural Fire Service
Laguna	Rain						Laguna Rural Fire Service
Wollombi	2 rain gauges						Wollombi Police and Wollombi Rural Fire Service
Elrington	Rain		Swamp Creek				Local Reader
Neath	Rain		Swamp Creek				Local Reader

## ANNEX D - DISSEMINATION OF SES FLOOD BULLETINS

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

### Television Stations:

Station	Location
Prime	Newcastle
NBN 3	Newcastle
TEN (Southern Cross Ten)	Coffs Harbour

### Radio Stations:

Station	Location	Frequency	Modulation
1233 ABC	Newcastle	1233	AM
2HD	Sandgate	1143	AM
NEW FM	Sandgate	105.3	FM
KO FM	Charlestown	102.9	FM
NX FM	Charlestown	106.9	FM

### Newspapers:

Name	Location
The Advertiser	Cessnock
The Herald	Newcastle

### Other Agencies:

- All other agencies listed with responsibilities under this plan or Local Disaster Plan

## ANNEX E - TEMPLATE EVACUATION WARNING MESSAGE FOR [ENTER NAME OF AREA]

**Evacuation Warning for** [ ]

**Date/Time of Issue:** [ ]

**Authorised By:** [ ]

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

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

To prepare for evacuation, you should:

- Raise belongings by placing them on tables, beds and benches. Put electrical items on top. Some items may be able to be placed in ceilings.
- Gather medicines, personal and financial documents and mementos together to take with you.
- Listen to radio stations 1233 ABC, 2HD, NEW FM, KO FM and NX FM for further information and to confirm this warning.
- If possible, check to see whether your neighbours need help.
- Make arrangements for care of pets or companion animals.

If evacuation is necessary:

- Turn off the electricity, gas and water.
- Take three days' supply of clothes with you.
- If you have a car, drive to the evacuation centre at [ ] (*specify route if appropriate*).
- If you don't have a car, buses will operate on normal routes. Special transport can also be provided on request if necessary by phoning the SES on 132 500.
- So that you can be accounted for, it is important that you register at the evacuation centre.
- After registering, you may go to the house of a friend or relative. Alternatively, accommodation will be arranged for you.
- The Police will provide security for your property while you are away.



## **ANNEX F - EVACUATION ARRANGEMENTS FOR THE CESSNOCK CITY COUNCIL AREA**

### **Background**

1. Cessnock is divided into three sectors for purposes of evacuation during extreme flood events:
  - ◆ Branxton (see Annex G)
  - ◆ East Branxton – Greta (see Annex H)
  - ◆ Loxford – Weston – Cliftleigh (see Annex I)

### **Arrangements**

2. **Control.** During floods, evacuations will be controlled by the NSW SES. Small-scale evacuations will be controlled by the Cessnock City SES Local Controller. Should the evacuations operations escalate beyond the capabilities of local resources, control may be handed over to the Hunter SES Region Controller.
3. **Conduct.** Evacuations will be controlled by the SES and conducted in five phases:
  - a. Phase 1 - Decision to Evacuate
  - b. Phase 2 - Warning.
  - c. Phase 3 – Withdrawal.
  - d. Phase 4 – Shelter.
  - e. Phase 5 – Return.

### **Phase 1 – Decision to Evacuate**

4. The decision to evacuate. The responsibility for issuing any general evacuation order during flooding rests with the Cessnock City SES Local Controller who exercises his/her authority in accordance with Section 22(1) of The State Emergency Service Act 1989. However, the decision to evacuate will usually be made after consultation with the Local Emergency Operations Controller and the Hunter SES Region Controller.
5. When evacuation should occur. As far as possible, evacuation will be carried out before inundation occurs.

6. Self-motivated evacuation. Some people will make their own decision to evacuate earlier and move to alternative accommodation using their own transport. These evacuees will be advised, via the media, to inform the Police or SES of their evacuation and their temporary address.

## **Phase 2 – Warning**

7. **Evacuation warnings.** On the receipt of flood warnings predicting imminent flooding at the Singleton Gauge; the Cessnock City SES Local Controller will consult with Hunter SES Region Headquarters as necessary to determine the level of the threat and the need to consider evacuations. As soon as possible after the decision to evacuate is made, the Cessnock City SES Local Controller will issue evacuation warnings to the ‘at risk’ residents, indicating what people should do before evacuating and when actually doing so.
8. **Content of Evacuation Warnings.** A template guide to the content of evacuation warning messages is at Annex E. These are disseminated via:
  - The radio and TV stations listed in Annex D.
  - Door-knocks by emergency service personnel.
  - Public address systems from emergency service vehicles.
  - Telephone.
  - Two-way radio.
  - SES Flood Bulletins.

## **Phase 3 – Withdrawal**

9. **Introduction.** Withdrawal involves the actual removal of the community/individuals from dangerous or potentially dangerous areas to safer areas.
10. **Movement.** Evacuees are to be encouraged to move using their own transport where possible. The Cessnock City SES Local Controller will arrange transport for those people without their own vehicles.
11. **Evacuation routes.**
  - a. **Branxton:** MR 220 (Branxton to Cessnock via Wine Country Road). This road is expected to be flood free, except for local flooding which may cause some problems.
  - b. **East Branxton – Greta:** New England Hwy to Lochinvar. This route is expected to remain flood-free for six hours after dam failure.
  - c. **Loxford – Weston – Cliftleigh:** as appropriate in individual cases, to Kurri Kurri

12. **Animals.** 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. Department of Industry and Investment NSW will make separate arrangements for the evacuation and care of companion animals.
13. **Doorknocking.** Field teams conducting doorknocks will record and report back the following information back to the Cessnock SES Operations Centre
  - Addresses and locations of houses doorknocked and/or evacuated.
  - The number of occupants.
  - Details of support required (such as transport, medical evacuation, assistance to secure house and/or property and raise or move belongings).
  - Details of residents who refuse to comply with the evacuation order.
14. **Refusal to evacuate.** Field teams should not waste time dealing with people who are reluctant or refuse to comply with any evacuation order. These cases should be referred to the Local Emergency Management Operations Controller who will arrange for Police to ensure their evacuation.
15. **Security.** The NSW Police Force will provide security for evacuated areas.
16. **Transport and storage.** Transport and storage of furniture from flood threatened properties will be arranged as time and resources permit.

#### **Phase 4 – Shelter**

17. **Evacuation centres.** The usual purpose of evacuation centres is to meet the immediate needs of victims, not to provide them with accommodation. Evacuees will be advised to go to or be taken to the nearest accessible evacuation centre, which may initially be established at the direction of the Cessnock City SES Local Controller but managed as soon as possible by Community Services. Any or all of the following sites may be used as evacuation centres during extreme flood events:
  - a. **Branxton:** Potters Hotel & Brewery, Wine Country Drive, Nulkaba.
  - b. **East Branxton – Greta:** St Joseph's College, New England Highway, Lochinvar.
  - c. **Loxford – Weston – Clifftleigh:** Kurri Kurri High School, Stanford Street, Kurri Kurri.

18. **Action on arrival.** On arrival, evacuees will be:
  - a. registered;
  - b. medically checked, if necessary; and
  - c. provided with their immediate welfare needs.
19. **Registration.** The NSW Police Force will ensure that all evacuees are registered on arrival at the designated evacuation centres.
20. **Animal shelter compounds.** Animal shelter compounds will be set up for the domestic pets and companion animals of evacuees. These facilities will be operated by Cessnock City Council.

### **Phase 5 – Return**

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

## **ANNEX G - DETAILS OF EVACUATION ARRANGEMENTS IN THE EVENT OF DAM- FAILURE OR OTHER EXTREME FLOODING – BRANXTON OPERATIONAL AREA**

1. Evacuations will be controlled by the Cessnock SES Local Controller. Should the evacuation operations escalate beyond the capabilities of the local resources, control may be handed over to the Hunter SES Region Controller.
2. The area contains approximately 300 dwellings (900 people), and up to 250 dwellings (750 people) could be directly affected by flood waters after a dam-failure had occurred. The area also contains Branxton Primary School (corner King and Bowen Streets), St Bridgett's Primary School (Station Street) and the Branxton Pre-School (Cliff Street). Given the relatively small number of dwellings not affected and given the strong likelihood of failure of services, it is expected that full evacuation would be necessary. In the worst case, flood waters from Glennies Creek Dam could reach the area five and a half hours after dam failure.
3. Evacuation route: Wine Country Drive (MR 220, Branxton to Cessnock). This road is expected to be flood free, except for local flooding which may cause some problems. Council resources would need to be allocated to effect temporary engineering solutions at known low points on the road.
4. Road blocks to restrict traffic to evacuees' vehicles and emergency vehicles will be required as follows:
  - a. Junction of Broke Road and Wine Country Drive (MR 220) at Lovedale.
  - b. Branxton Railway Crossing over Wine Country Drive (MR 220) and Bridge Street.
5. Evacuation Centre: Potters Hotel & Brewery, Wine Country Drive, Nulkaba.
6. Evacuation Program Requirements:
  - a. Number of doorknockers: 26
  - b. Number of buses: 6 (3 for Branxton and 3 for the evacuation route).
  - c. Time to complete the evacuation operation once the decision to evacuate has been made: 5 hours (1.5 to assemble and brief doorknockers, 2 to doorknock dwellings, 1.5 for occupants of the last dwelling doorknocked to clear the area).



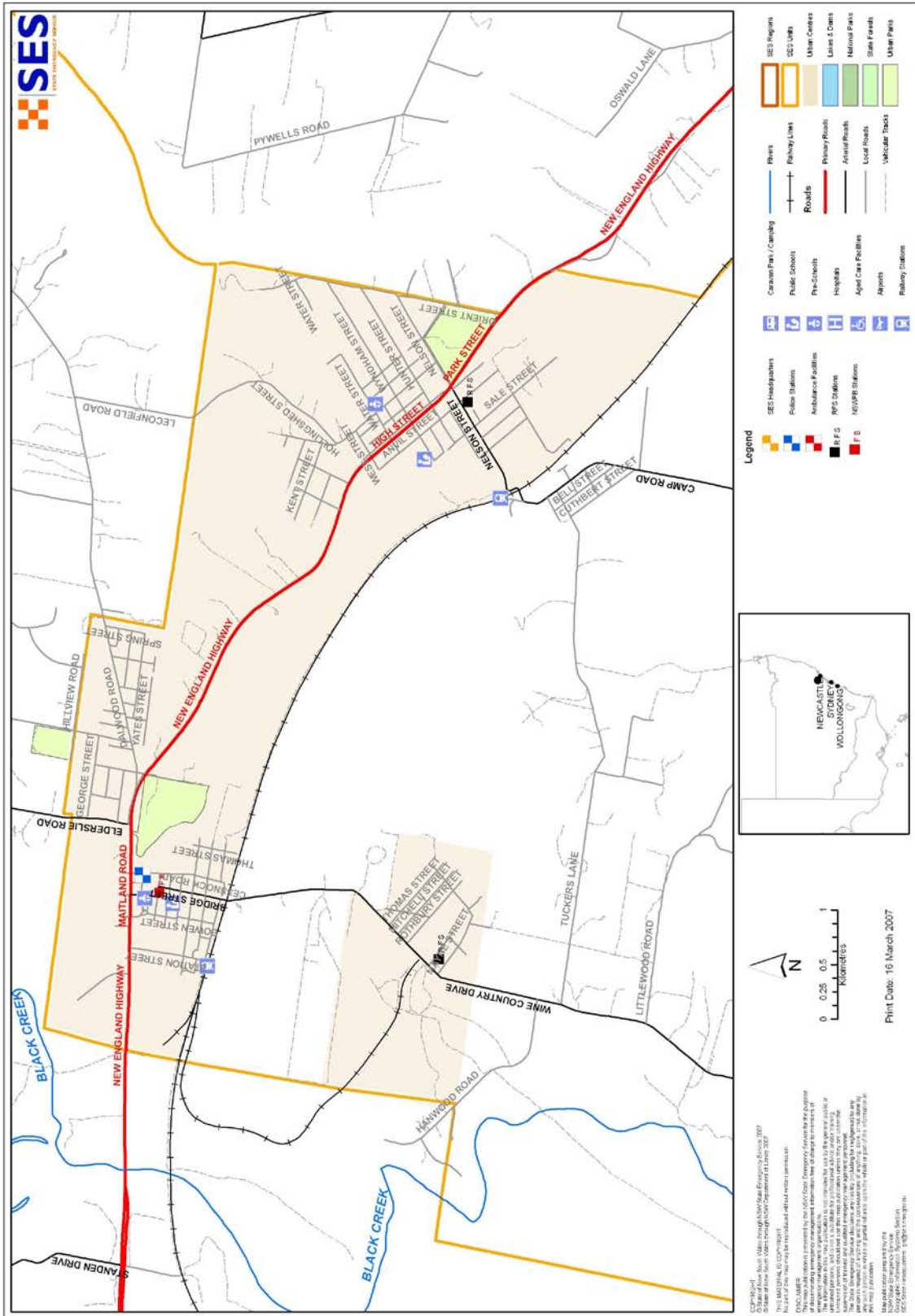
## **ANNEX H - DETAILS OF EVACUATION ARRANGEMENTS IN THE EVENT OF DAM- FAILURE OR OTHER EXTREME FLOODING – EAST BRANXTON – GRETA OPERATIONAL AREA**

1. Evacuations will be controlled by the Cessnock SES Local Controller. Should the evacuation operations escalate beyond the capabilities of the local resources, control may be handed over to the Hunter SES Region Controller.
2. The area contains approximately 750 dwellings (2,300 people), two schools (Greta Primary School, Wyndham Street and St Mary's Primary School, Branxton Street) and the Greta Pre-School (High Street). About 220 dwellings (650 people) could be directly affected by dam-failure flooding. Flood waters from Glennies Creek Dam could reach the area five and a half hours after dam failure.
3. Evacuation route: New England Highway to Lochinvar. This route is expected to remain flood-free for six hours after dam failure.
4. Evacuation Centre: St Joseph's College, New England Highway, Lochinvar (Maitland LGA).
5. Helicopter Landing Point and Aerial Drop Zone: Greta Oval, intersection of New England Highway and Nelson Street, Greta. This facility would be necessary if the evacuation route was closed by flooding before the evacuation was completed.
6. Evacuation Program Requirements:
  - a. Number of doorknockers: 20
  - b. Number of buses: 4 (2 for East Branxton-Greta, 2 for the evacuation route).
  - c. Time to complete the evacuation operation once the decision to evacuate has been made: 5 hours (1.5 to assemble and brief doorknockers, 2 to conduct doorknocks, 1.5 for occupants of the last dwelling doorknocked to clear the area).





MAP – BRANXTON – GRETA AREA



**ANNEX I - DETAILS OF EVACUATION  
ARRANGEMENTS IN THE EVENT OF DAM-  
FAILURE OR OTHER EXTREME FLOODING –  
LOXFORD – WESTON - CLIFBLEIGH  
OPERATIONAL AREA**

1. Evacuations will be controlled by the Cessnock SES Local Controller. Should the evacuation operations escalate beyond the capabilities of the local resources, control may be handed over to the Hunter SES Region Controller.
2. The area contains between 20 and 50 houses (60 - 150 people) which may be directly affected by back-up water in the Wentworth Swamps in a dam-failure flood. Flood water from Glennies Creek Dam could reach the area ten hours after dam failure. The decision to evacuate can be made later for this area than for the Branxton and East Branxton-Greta areas.
3. Evacuation route: as appropriate in individual cases, to Kurri Kurri.
4. Evacuation centre: Kurri Kurri High School, Stanford Street, Kurri Kurri.
5. Evacuation Program Requirements:
  - a. Number of doorknockers: 6
  - b. Number of buses: 1 (for both the affected areas and the roads to Kurri Kurri). This bus could make repeat trips if necessary.
  - c. Time to complete the evacuation operation once the decision to evacuate has been made: 5 hours (1.5 to assemble and brief doorknockers, 2 to conduct doorknocks, 1.5 for occupants of the last dwelling doorknocked to clear the area).



## **ANNEX J - DETAILS OF THE DAM-FAILURE WARNING AND EVACUATION SYSTEM FOR GLENNIES CREEK DAM**

All dams on waterways impose a range of permanent effects on their natural flow and may change the peak, timing and duration of floods. These flow modifications are typically a lessening of the flood peak accompanied by the lengthening of the flood duration. However, dams at maximum capacity will have little if any mitigation impact on floods.

Dams also have the potential to fail and the subsequent dam break floods can cause substantial damage downstream.

Glennies Creek Dam is located on Glennies Creek (formerly known as Falbrook) below the junction of the Carrowbrook and the Falbrook, 39 kilometres from its junction with the Hunter River and 26 kilometres north of Singleton by road.

Glennies Creek Dam is a concrete faced, rockfill dam approximately 67 metres high and 535 metres long at crest level. The main embankment is constructed of 875,000 cubic metres of rockfill and 11,500 cubic metres of reinforced concrete.

The Outlet Works comprise a 60 metre high Intake Tower connecting to the Outlet Valve Block via a concrete lined tunnel section 4.0 metres in diameter and 230 metres long and a steel penstock 2.6 metres diameter and 126 metres long.

The lake formed by the dam has a volume of 284 gigalitres at Full Supply Level and a surface area of 1,540 hectares.

The two major possible causes of dam failure are:

- Failure due to extreme flood levels overtopping the embankments.
- Failure due to a rapidly deteriorating structural deficiency such as may be induced by an extreme earthquake or internal erosion. (This is the so-called “Sunny Day’ failure, ie not induced by an inflow flood)

### **WARNING PROCEDURE**

State Water Corporation is responsible for providing warnings of flood conditions at Glennies Creek Dam and carrying out the following:

1. Monitoring of water levels at the dam and of the condition of the dam wall.
2. When conditions (such as severe flooding, or earthquake, or cracks in the wall) imply a threat to the security of the dam, the provision of advice and warnings as follows:
  - a. To the SES State Headquarters Communications Centre and Hunter Region Headquarters immediate notification by telephone, Early Warning System (EWS) or GRN radio at the following alert levels:

- ◆ Spillway Alert RL 186.5m AHD (spillway is operational)
- ◆ White Alert RL 187.5m AHD (1.0m above spillway)
- ◆ Yellow Alert RL 187.9m AHD (1.4m above spillway)
- ◆ Amber Alert RL 189.5m AHD (3.0m above spillway)
- ◆ Red Alert RL 191.3m AHD (4.8m above spillway)

- b. At the same alert levels, the Early Warning System (EWS) also notifies all residents that are within the 45minute zone (dam wall to Mt Pleasant).

In the event of a possible “sunny day” dam failure caused by earthquake conditions, cracks or seepage in the dam wall, residents of the Hunter River catchment downstream of Jerrys Plains would be notified by the SES via the media, phone calls and doorknocking.

Note that the Imminent Failure Flood level of the dam is 192.8 metres AHD. This flood equates to 85% of the volume of the PMF.

## WARNING TIMES

A failure of Glennies Creek Dam would cause inundation to occur extremely quickly along with rapid rates of rise in flood levels. Estimates of the amount of warning time which is likely to be available **before** dam failure occurs, and of the amount of time it would take for flood waters from the dam to actually **reach** various points downstream of the dam, are indicated below. The sum of the two periods constitutes the time in which evacuation operations must be able to be completed.

1. **Warning time before dam failure** - in the case of failure because of a massive rain event over the dam’s catchment area, the water level at the dam would **in the worst (fastest water-level rise) case** take:
  - Two hours to rise from the **White Alert** level (187.5 metres) to the **Orange Alert** level (189.5 metres)
  - Four and a half hours to rise from the **White Alert** level to the **Red Alert** level (191.3 metres)
  - Six hours to rise from the **White Alert** level to the **Imminent Failure Flood** level (192.8 metres)

It is not possible to provide a quantitative estimate of time to failure in the case of failure caused by cracking or slippage of the dam wall caused, for example, by a very severe earthquake. Overseas experience with dams similar to Glennies Creek, however, suggests that signs of structural failure can occur many hours or even days before failure actually takes place. Moreover, emptying of the impounded water is likely to occur over a longer period than would be the case with a failure caused by flooding at the dam wall.

2. **Water travelling time after dam failure** - the time which would elapse between dam failure and the **arrival** of the initial flood waters from the dam would be approximately as follows:

Dam wall to Mt Pleasant	0-45 minutes
Camberwell	1.5 hours
Singleton	3 hours (4.5 hours before the levee crest would be reached)
Scotts Flat	4 hours
Elderslie	5 hours
Dalwood	6 hours

The times for intermediate locations can be interpolated from these.

### **OTHER MATTERS**

- a. Dam failure due to flood, would probably take place **after** severe flooding had begun to affect the Cessnock LGA, with the result that some evacuation routes may have been cut **before** waters from the dam arrive.
- b. In a dam-failure flood, it is likely that response operations prior to failure would have led to some people having already been evacuated.
- c. SES Hunter Region Headquarters will co-ordinate the distribution of warnings and public advice information through broadcast media. Cessnock SES Local Headquarters will co-ordinate the distribution of warnings and public advice information through narrowcast means eg doorknocking and mobile public address.
- d. It is the responsibility of State Water to maintain the Dam Safety Emergency Plan for Glennies Creek.







# MAP 3 - CESSNOCK AREA

