

**Clarence Valley  
Local Emergency  
Management Plan  
2020**



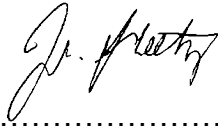
## Part 1 – Administration

### Authority

The Clarence Valley Local Emergency Management Plan (EMPLAN) has been prepared by the Clarence Valley Local Emergency Management Committee in compliance with the State Emergency & Rescue Management Act 1989.

APPROVED

Jamie Fleeting



Chair

Clarence Valley Local Emergency Management Committee

Dated: 11.8.21

ENDORSED



Superintendent Steve Clarke (Deputy REOCON)

Chair

North Coast Regional Emergency Management Committee

Dated: 25 November 2020

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## Purpose

Details arrangements for, prevention of, preparation for, response to and recovery from emergencies within the Local Government Area(s) covered by this plan.

It encompasses arrangements for:

- emergencies controlled by combat agencies;
- emergencies controlled by combat agencies and supported by the Local Emergency Operations Controller (LEOCON);
- emergency operations for which there is no combat agency; and
- circumstances where a combat agency has passed control to the LEOCON.

## Objectives

The objectives of this plan are to:

- define participating organisation and Functional Area roles and responsibilities in preparation for, response to and recovery from emergencies;
- set out the control, co-ordination and liaison arrangements at the Local level;
- detail activation and alerting arrangements for involved agencies; and
- detail arrangements for the acquisition and co-ordination of resources.

## Scope

The plan describes the arrangements at Local level to prevent, prepare for, respond to and recover from emergencies and also provides policy direction for the preparation of Sub Plans and Supporting Plans:

- Arrangements detailed in this plan are based on the assumption that the resources upon which the plan relies are available when required; and
- The effectiveness of arrangements detailed in this plan are dependent upon all involved agencies preparing, testing and maintaining appropriate internal instructions, and/or standing operating procedures.

## Principles

The following principles are applied in this plan:

- a) The Emergency Risk Management (ERM) process is to be used as the basis for emergency planning in New South Wales. This methodical approach to the planning process is to be applied by Emergency Management Committees at all levels.
- b) Responsibility for preparation, response and recovery rests initially at Local level. If Local agencies and available resources are not sufficient they are augmented by those at Regional level.
- c) Control of emergency response and recovery operations is conducted at the lowest effective level.
- d) Agencies may deploy their own resources from their own service from outside the affected Local area or Region if they are needed.
- e) The Local Emergency Operations Controller (LEOCON) is responsible, when requested by a combat agency, to co-ordinate the provision of resources support. EOCs would not normally assume control from a combat agency unless the situation can no longer be contained. Where necessary, this should only be done after consultation with the Regional Emergency Operations Controller (REOCON) and agreement of the combat agency and the appropriate level of control.
- f) Emergency preparation, response and recovery operations should be conducted with all agencies carrying out their normal functions wherever possible.
- g) Prevention measures remain the responsibility of authorities/agencies charged by statute with the responsibility.

## Test and Review Process

The Clarence Valley Local Emergency Management Committee (LEMC) will review this Plan every three (3) years, or following any:

- activation of the Plan in response to an emergency;
- legislative changes affecting the Plan; and
- exercises conducted to test all or part of the Plan.

## Part 2 – Community Context

### Annexure A – Community Profile

#### General

The area covered by the Emergency Management Plan is referred to as the Clarence Valley Local Government Area (LGA). The Clarence Valley LGA is located in the Northern Rivers region of New South Wales, about 600 kilometres north of Sydney and 300 kilometres south of Brisbane. The LGA is bounded by the Kyogle and Richmond Valley Council areas in the north, the Coral Sea in the east, Coffs Harbour City and Bellingen Shire in the south and Glen Innes Severn Council area, Guyra Shire and Tenterfield Shire in the west.

The Clarence Valley LGA includes numerous rural localities and the townships and villages including Alice, Angourie, Ashby, Baryulgil, Braunstone, Brooms Head, Clouds Creek, Coaldale, Copmanhurst, Coutts Crossing, Cowper, Dalmorton, Diggers Camp, Dundurrabin, Glenreagh, Grafton, Gulmarrad, Iluka, Jackadgery, Junction Hill, Lawrence, Malabugilmah, Maclean, Minnie Water, Newton Boyd, Nymboida, Palmers Island, Ramornie, Sandon, South Grafton, Southgate, Townsend, Tucabia, Ulmarra, Waterview Heights, Woolli, Wooloweyah, Woombah and Yamba.

#### Landform and Topography

The Clarence Valley LGA is predominantly rural, with expanding residential areas and some industrial and commercial land uses. The Clarence Valley LGA encompasses a total land area of 10,440 square kilometres, of which a significant proportion is National Park, State Forest and nature reserves, including beaches, rainforests, mountains and rivers. Much of the rural area is used for forestry, agriculture and grazing, including beef cattle and sugarcane growing. Fishing is also an important industry. In more recent years tourism has become a major industry, especially along the coast. Settlement is based around the main town of Grafton and the townships of Iluka, Maclean and Yamba, with many small villages and localities along the coast and inland.

#### Climate

The Clarence Valley has a humid subtropical climate with hot, wet and humid summers, and mild, drier winters. Rainfall is lower inland of the LGA compared to on the coast. There is an annual average rainfall of up to 1,465mm in coastal centres such as Yamba and 975mm at Grafton. As can be seen in Figure 1, there are numerous BOM weather stations located in the Clarence Valley LGA. The below two tables illustrated the typical weather conditions in two of these stations, Grafton and Yamba.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean max temp (°C)	30.3	30.0	28.1	25.8	23.0	20.6	20.4	21.9	25.2	27.2	28.7	29.9	25.9
Mean min temp (°C)	19.0	18.9	17.7	14.6	10.4	8.3	6.7	7.2	10.4	13.4	16.0	18.0	13.4
Mean rainfall (mm)	131.9	127.5	122.4	79.3	69.9	73.1	48.9	39.6	42.2	62.2	79.1	101.3	980.5
Mean no. days ≥ 1 mm rain	4.3	3.8	4.6	3.5	2.9	2.8	1.9	1.8	2.0	2.7	2.8	3.7	36.8

Table 1. Grafton Weather data from 1917 to 2020

Yamba from 1877 to 2015	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Mean max temp (°C)	26.7	26.8	26.1	24.3	21.8	19.7	19.1	20.2	22.0	23.4	24.7	26.0	23.4
Mean min temp (°C)	20.3	20.4	19.3	16.5	13.3	10.9	9.7	10.5	13.0	15.4	17.5	19.2	15.5
Mean rainfall (mm)	138.2	158.0	186.0	161.0	154.0	137.7	99.6	75.7	59.0	79.0	93.0	115.4	1457.8
Mean no. days ≥ 1 mm rain	10.2	10.9	13.3	11.5	10.5	8.8	7.5	6.7	6.4	7.7	8.2	8.9	110.6

Table 2. Yamba Weather Data from 1877 to 2020



Figure 1. BOM Weather Stations in the Clarence Valley LGA

Land Use

Land Use Zone / Type / Classification	Area Hectares	% of LGA
B1 Neighbourhood Centre	23.2022	0.002
B2 Local Centre	31.2054	0.003
B3 Commercial Core	59.8472	0.006
B5 Business Development	44.5542	0.004
E1 National Parks and Nature Reserves	225478.3	21.597
E2 Environmental Conservation	6006.05	0.575
E3 Environmental Management	53078.31	5.084
IN1 General Industrial	539.252	0.052
IN4 Working Waterfront	31.1324	0.003
R1 General Residential	1277.93	0.122
R2 Low Density Residential	1726.88	0.165
R3 Medium Density Residential	108.877	0.010
R5 Large Lot Residential	7489.84	0.717
RE1 Public Recreation	723.626	0.069

Land Use Zone / Type / Classification	Area Hectares	% of LGA
RE2 Private Recreation	243.766	0.023
RU1 Primary Production	115555.53	11.068
RU2 Rural Landscape	400802.85	38.390
RU3 Forestry	206053.7	19.736
SP1 Special Activities	0.60347	0.000
SP2 Infrastructure	2413.41	0.231
SP3 Tourist	108.268	0.010
W1 Natural Waterways	13942.06	1.335
W2 Recreational Waterways	8268.4	0.792
W3 Working Waterways	18.2544	0.002

### Population and People

The original inhabitants of the Clarence Valley area were the Bundjalung, Gumbaingirr and Yaegl Aboriginal groups. The Clarence River forms the boundary between the Bundjalung Nation to the north and the Gumbaingirr and Yaegl Nations to the south.

The Clarence Valley LGA Estimated Resident Population for 2014 is 51,003. Figure 2 is provided illustrate the changes in this total over the preceding 10 year period. Table 3 provides more detail regarding the specific areas of the Clarence Valley and the population numbers recorded in the 2011 Census. Further demographic information for the Clarence Valley LGA is provided in Table 4.

### Estimated Resident Population (ERP)

Clarence Valley Council area			
Year (ending June 30)	Number	Change in number	Change in percent
2006	49,149		
2007	49,524	+375	+0.76
2008	49,818	+294	+0.59
2009	50,433	+615	+1.23
2010	50,993	+560	+1.11
2011	51,287	+294	+0.58
2012	51,350	+63	+0.12
2013	51,443	+93	+0.18
2014	51,498	+55	+0.11
2015	51,547	+49	+0.10
2016	51,622	+75	+0.15
2017	51,596	-26	-0.05
2018	51,647	+51	+0.10

Source: Australian Bureau of Statistics, Regional Population Growth, Australia

Figure 2. Clarence Valley LGA Population Changes



Grafton	10,580
South Grafton	6,179
Junction Hill area	2,341
Waterview Heights area	4,163
Ulmarra area	1,732
Maclean	2,669
Gulmarrad area	2,616
Yamba	6,191
Iluka	1,740
Wooli Tucabia area	2,361
Lawrence Woombah area	4,215
Palmer's Angourie area	1,596
Glenreagh area	1,769
Rural North West	2,452
Rural South West	1,019

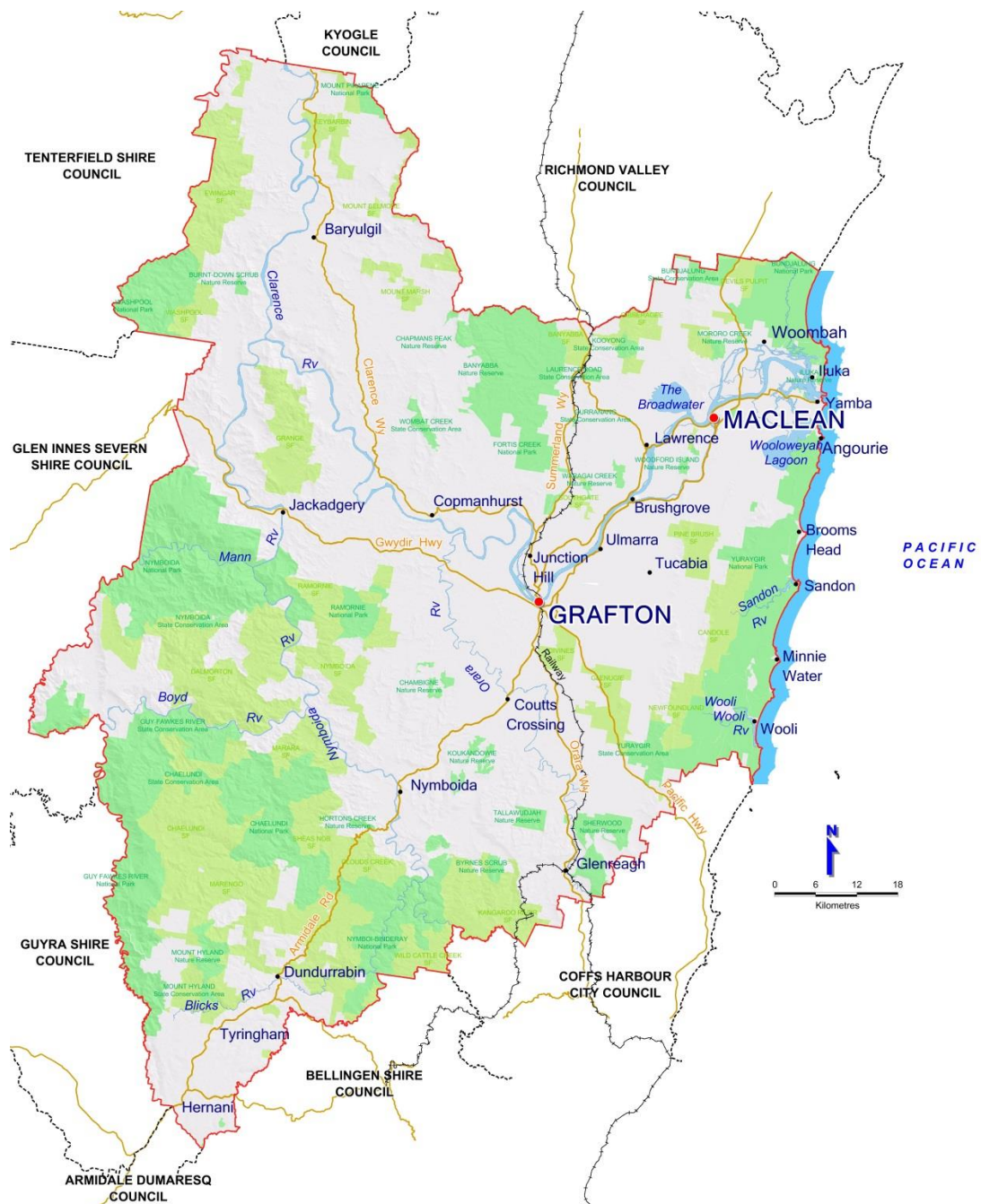
Table 3. Clarence Valley LGA Area Populations

	Clarence Valley LGA	New South Wales	Australia
Median age	49	38	38
Median weekly household income	\$910	\$1,486	\$1,438
Couples with children	32%	46%	45%
Medium and high density Housing	12%	31%	25%
Households with a mortgage	27%	32%	36%
Median weekly rent	\$255	\$380	\$335
Households renting	25%	32%	31%
Non-English speaking backgrounds	3%	27%	22%
Bachelor or Higher degree	10%	23%	22%
Public transport (to work)	1%	16%	12%
Unemployment	9%	6%	7%

Table 4. Further Demographic information for the Clarence Valley LGA

## Transport Routes and Facilities

The Valley is at the convergence of three major highways and the north-south rail network. The Clarence has its own regional airport and seaport. The Pacific Highway is the key road transport network linking the Clarence Valley north to Queensland and south to Sydney. The Summerland Way is an inland highway network that provides important north-south connectivity and is an alternative highway route between Brisbane, Casino, Grafton and Coffs Harbour. The Gwydir Highway is an east-west corridor that links the inland plains to the Clarence via the New England region. Owned and operated by Council, the Clarence Valley Regional Airport is a code 3C facility located 17kms south of Grafton along the Pacific Highway. The airport caters for scheduled passenger services, charter traffic and general aviation. The airport is a security classified aerodrome under the Aviation Transport Security Act 2004.



## Economy and Industry

The Clarence Valley industries with the highest employed persons are Health Care and Retail. Education and Public Administration also provide high levels of employments. The full list of employment by sector is provided in Table 5.

Industry sector of employment for the Clarence Valley LGA							
Industry sector	2016			2011			Change
	Number	%	Regional NSW %	Number	%	Regional NSW %	2011 to 2016
Agriculture, Forestry and Fishing	1,128	6.4	5.7	1,078	6.1	5.8	+50
Mining	96	0.5	2.4	95	0.5	2.5	+1
Manufacturing	966	5.5	6.0	1,400	7.9	8.3	-434
Electricity, Gas, Water and Waste Services	194	1.1	1.3	252	1.4	1.5	-58
Construction	1,530	8.7	8.7	1,375	7.7	7.9	+155
Wholesale trade	298	1.7	2.0	495	2.8	2.8	-197
Retail Trade	2,062	11.7	10.3	2,353	13.3	11.4	-291
Accommodation and Food Services	1,620	9.2	7.9	1,563	8.8	7.7	+57
Transport, Postal and Warehousing	752	4.3	4.0	757	4.3	4.2	-5
Information Media and Telecommunications	156	0.9	0.9	170	1.0	1.0	-14
Financial and Insurance Services	218	1.2	2.0	283	1.6	2.2	-65
Rental, Hiring and Real Estate Services	278	1.6	1.4	299	1.7	1.4	-21
Professional, Scientific and Technical Services	590	3.4	4.5	572	3.2	4.6	+18
Administrative and Support Services	576	3.3	3.3	462	2.6	2.8	+114
Public Administration and Safety	1,392	7.9	7.2	1,468	8.3	7.2	-76
Education and Training	1,392	7.9	9.0	1,407	7.9	8.6	-15
Health Care and Social Assistance	2,710	15.4	14.4	2,475	13.9	13.0	+235
Arts and Recreation Services	223	1.3	1.2	200	1.1	1.2	+23
Other Services	726	4.1	3.9	694	3.9	3.9	+32
Inadequately described or not stated	680	3.9	3.8	360	2.0	2.1	+320
<b>Total employed persons aged 15+</b>	<b>17,587</b>	<b>100.0</b>	<b>100.0</b>	<b>17,758</b>	<b>100.0</b>	<b>100.0</b>	<b>-171</b>

Table 5. Industry sector of employment for the Clarence Valley LGA

## Annexure B – Hazards and Risks Summary

A Local Emergency Risk Management (ERM) Study has been undertaken by the Clarence Valley Local Emergency Management Committee identifying the following hazards as having risk of causing loss of life, property, utilities, services and/or the community's ability to function within its normal capacity. These hazards have been identified as having the potential to create an emergency.

Hazard	Risk Description	Likelihood Rating	Consequence Rating	Risk Priority	Combat / Responsible Agency
Agricultural Disease (Animal/Animal)	An agriculture/horticulture incident that results, or has potential to result, in the spread of a communicable disease or infestation.	Possible	Major	Extreme	Department of Primary Industries
Bridge Collapse	Failure of a major bridge structure with or without warning owing to structural failure or as a result of external/ internal events or other hazards/ incidents.	Unlikely	Major	High	LEOCON
Building Collapse	Collapse of building owing to structural failure or impact from external/internal event of other hazards /incidents.	Rare	Minor	Low	FRNSW (USAR) LEOCON
Communicable Disease (Human/Animal)	Pandemic illness that affects, or has potential to affect, large portions of the human or animal population	Possible	Major	Extreme	Department of Health

Hazard	Risk Description	Likelihood Rating	Consequence Rating	Risk Priority	Combat / Responsible Agency
Dam Failure	A dam is compromised that results in localised or widespread flooding.	Rare	Minor	Low	Dam Owners NSW SES
Earthquake	Earthquake of significant strength that results in localised or widespread damage.	Rare	Major	High	LEOCON
Fire (Bush or Grass)	Major fires in areas of bush or grasslands.	Likely	Moderate	High	NSW RFS FRNSW
Fire (Industrial)	Serious industrial fire in office complexes and/or warehouses within industrial estates.	Likely	Moderate	High	FRNSW NSW RFS
Fire (Commercial)	Serious commercial fires in shopping centres, aged persons units, nursing homes and hospitals.	Likely	Moderate	High	FRNSW NSW RFS
Fire (Residential)	Serious residential fire in medium/high rise apartments.	Likely	Minor	High	FRNSW NSW RFS
Fire (Shipping)	Serious fire on board a large shipping vessel	Possible	Moderate	High	Port Authority FRNSW

Hazard	Risk Description	Likelihood Rating	Consequence Rating	Risk Priority	Combat / Responsible Agency
Flood (Flash)	Heavy rainfall causes excessive localised flooding with minimal warning time	Likely	Moderate	High	NSW SES
Flood (Riverine)	River flows exceed the capacity of normal river systems resulting in flood waters escaping and inundating river plains	Likely	Major	Extreme	NSW SES
Hazardous Release	Hazardous material released as a result of an incident or accident.	Almost Certain	Insignificant	High	FRNSW
Heatwave	A sequence of abnormally hot conditions having the potential to affect a community adversely.	Unlikely	Minor	Low	SEOCON
Landslip	Landslip/landslide resulting in localised or widespread damage.	Possible	Minor	Medium	LEOCON
Storm	Severe storm with accompanying lightning, hail, wind, and/or rain that causes severe damage and/or localised flooding.(includes tornado)	Possible	Moderate	High	NSW SES
Transport Emergency (Air)	Aircraft crashes in LGA resulting in large number of fatalities, injuries and/or damage to property.	Rare	Catastrophic	High	LEOCON

Hazard	Risk Description	Likelihood Rating	Consequence Rating	Risk Priority	Combat / Responsible Agency
Transport Emergency (Road)	A major vehicle accident that disrupts one or more major transport routes that can result in risk to people trapped in traffic jams, restrict supply routes and/or protracted loss of access to or from the area.	Almost Certain	Minor	High	LEOCON
Transport Emergency (Sea)	A major accident that results in environmental damage and major recovery operation	Unlikely	Moderate	Medium	Relevant Port / Maritime
Tsunami	A tsunami wave of magnitude that presents a risk to land and marine elements.	Rare	Major	High	NSW SES
Utilities Failure	Major failure of essential utility for unreasonable periods of time as a result of a natural or man-made occurrence.	Unlikely	Major	High	LEOCON

## Annexure C – Local Sub Plans, Supporting Plans and Policies

Responsibility for the preparation and maintenance of appropriate sub and supporting plans rest with the relevant Combat Agency Controller or the relevant Functional Area Coordinator.

The sub/supporting plans are developed in consultation with the Clarence Valley LEMC and the community.

The plans listed below are supplementary to this EMPLAN. The sub/supporting plans have been endorsed by the LEMC and are determined as compliant and complimentary to the arrangements listed in this EMPLAN.

These plans are retained by the Local Emergency Management Officer (LEMO) on behalf of the LEMC and public release versions may be available on the Council Website.

Plan/Policy	Purpose	Combat / Responsible Agency	Type of Document	Saved on LEMC File
Clarence Valley Section 52 Plan of Operations	Bushfire	NSW Rural Fire Service	Sub Plan	Yes
Clarence Valley Local Flood Plan	Flood	NSW State Emergency Service	Sub Plan	Yes
Flood Traffic Management Plan - Clarence Valley Local Government Area	Traffic Management	Transport for NSW	Supporting Plan	Yes
Port of Yamba Marine Oil & Chemical Spill Contingency Plan	Port of Yamba	Relevant Port Authority	Sub Plan	Yes
Clarence Valley LGA Emergency Operation Centre Standing Operating Procedures	Emergency Operation Centre Arrangements	Clarence Valley LEMC	LEMC Document	Yes
Clarence Valley Evacuation Centre Audits	Evacuations	Clarence Valley LEMC	LEMC Document	Yes



Plan/Policy	Purpose	Combat / Responsible Agency	Type of Document	Saved on LEMC File
North Coast Regional Emergency Response Plan	Electricity Supply	Essential Energy	Supporting Plan	No
Grafton and Maclean Hospital Code Brown External Disaster/Major Incident Response Plans	Local Hospital Emergency arrangements	Department of Health	Supporting Plan	Yes
Maclean Hospital Flood Plan	Flood	Department of Health	Supporting Plan	Yes
Grafton Hospital Flood Plan	Flood	Department of Health	Supporting Plan	No
Grafton Aerodrome Emergency Plan	Airport	Clarence Valley Council	Supporting Plan	Yes
Shannon Creek Dam Safety Emergency Plan	Dam Safety	Clarence Valley Council	Supporting Plan	Yes
Yamba Coastline Emergency Management Plan	Yamba Hill landslip monitoring and evacuations	Clarence Valley Council	Supporting Plan	Yes
Broom Head & Woolli Erosion Emergency Action Plans	Coastal Erosion	Clarence Valley Council	Supporting Plan	Yes
Clarence Valley Council Flood Procedures Manual	Flood	Clarence Valley Council	Supporting Plan	Yes



**The Remainder of the Clarence Valley Local  
Emergency Management Plan contains  
Restricted Operational Information.**

**If you believe there is good reason for you to  
view this information please contact:**

**[lemo@clarence.nsw.gov.au](mailto:lemo@clarence.nsw.gov.au)**

