

District Information Pack

Clarence Valley

The Clarence Valley Rural Fire District is located in North Eastern New South Wales and includes the entire Local Government Area of Clarence Valley.

The Clarence Valley Bush Fire Risk Management Plan covers an area of 10,428.68 square kilometers. As one of the larger LGAs in New South Wales, it features a diverse range of landscapes, including coastal regions, river valleys, and hinterland areas.

The region is organised into three major geographic planning zones, each containing several population centres:

Clarence Coast: Maclean, Yamba, Angourie, Wooloweyah, Iluka, and Woombah

Greater Grafton: Grafton and South Grafton

Clarence Country: Glenreagh, Halfway Creek, Lawrence and Copmanhurst

Issues impacting community preparedness for bushfires in the Clarence Valley BFMC area:

High Proportion of Retirees and Older Residents: The coastal fringe has a significant number of retirees and older residents who may face challenges in bushfire preparedness and response.

Seasonal Population Fluctuations: High tourism areas experience changes in population density throughout the year, which can complicate preparedness and emergency response efforts.

Newcomers with Limited Bushfire Knowledge: Individuals relocating to the Clarence Valley for a "sea change" or "tree change" may lack familiarity with bushfire risks, mitigation strategies, and local protocols.

Illegal Occupancy in Remote Areas: There are concerns about illegal dwellings in heavily vegetated and difficult-to-access regions, which can hinder effective bushfire management and evacuation efforts.

The bush fire season in the Clarence Valley is closely aligned to most other parts of northeastern New South Wales in that it occurs much earlier than in other areas of the State. Generally, the Bush Fire Danger period commences early September and finishes late February/early March, however has been known to commence as early as mid July and finish as late as mid April the following year.

During the bushfire season in the Clarence Valley BFMC area, prevailing weather conditions typically include strong, warm, and dry westerly winds in spring. These conditions are accompanied by extended periods of below-average rainfall, high daytime temperatures, and low relative humidity, all of which contribute to elevated fire danger. Additionally, dry lightning storms are frequently observed during this period, further exacerbating the risk of bushfires.

The Clarence Valley area experiences an average of 500 bushfires per year, with approximately 45% classified as major fires. The primary sources of ignition in the region include:

- Irresponsible or indiscriminate burning practices,
- Long-term re-ignitions
- Lightning strikes
- Illegal burning

The nominated Incident Management Facility is the Clarence Valley Fire Control Centre located at 15 Coldstream St. Ulmarra 2462.

1.1. Contact Information

District Office Address:	15 Coldstream St Ulmarra NSW 2462			
District Office Phone:	02 6644 5135			
After Hours Contact:	Via State Operations on 02 8741 5400			
A PSN Radio Channel:	107 CLVLY A			
B PSN Radio Channel:	207 CLVLY B			
PMR Channel:	2207 CLVLY P - Primary Dispatch Channel			
ESO Conversion Chart:	Please see file in folder for relevant conversion information			
Fire Weather Forecast Area:	Far North Coast			
Local Government Area:	Clarence Valley			

1.2. Topography

Much of the area is predominately agricultural with large tracts of heavily timbered forests and National Parks opening on to improved pasture land and grasslands. The eastern coastline is comprised of popular coastal tourism and holiday locations, including Yamba, Angourie, Wooloweyah, Iluka, Brooms Head, Minnie Water, Wooli, Sandon and Diggers Camp.

The area consists of three major water catchments, these being the Warragamba, Grose and Bungleboori Catchments. The Warragamba Catchment is the major drinking water catchment for Sydney and the mid-lower mountains areas, whilst two of the sub catchments of the Grose (the Blackheath Catchment and Cascades Catchment) provide drinking water for the upper mountains communities.

1.3. Vegetation

Clarence Valley District has a combination of timbered areas, scattered pine plantations, grasslands, pastures and sugar cane plantations and refinery operations continuing to seafood and maritime industries along the Clarence River towards the coast, ranging from coastal heath along the coastal strip and beaches, to forested areas predominately throughout the ranges as well as grassland expanses.

Variations in soils, landscapes and climate across the area have fostered a great diversity of flora and fauna. World Heritage Listed Wilderness areas provide safe haven for the many threatened species that reside within the deeply penetrating gorges and valleys of the upper reaches of the Clarence Valley.

Forest Corporation of NSW managed lands consists of Plantations such as Keybarbin, Grange, Banyabba, Ellis, Moonpar and Hyland State Forests.

Almost 50% of the region's valuable native hardwood forests, such as Chaelundi and Pine Brush, are also located in the Clarence Valley LGA. Almost half of the total timber resource of the region is growing in the Clarence Valley. In 2008, Clarence Valley's native forest resource was estimated at approximately 270,000 ha in total size of which approx. 62% is private native forest and 38%, is managed by Forest Corporation of NSW.

1.4. Climate

The typical / average climate in the Clarence Valley BFMC area is warm temperate maritime with a summer/autumn rainfall peak (January to March). Local climatic variations are strongly influenced by changes in topography and elevation resulting in considerable differences in rainfall and temperature across the area. The lower altitude landforms have generally lower rainfall than those at higher altitudes and on the coast. The lower altitude landform rainfall is very unreliable during the normal late winter/spring dry period.

The higher altitude and coastal landforms have an earlier onset of summer rainfall as well as two distinct drier periods April/May and September. There is also a secondary rainfall peak in June. The early onset of summer rain is associated with spring thunderstorm activity. The orographic effect of the coastal and mountain landforms on winter cold fronts from the south accounts for the June peak. Lower altitude landforms are in a rain-shadow and fail to intercept the southerly rain-bearing air masses.

During the winter months (June, July August), the average temperature in the Upper Mountains is around 5°C while in Summer (December, January February), the average temperature is around 18°C.

1.5. Average Weather Data

Summary of major climate statistics recorded at Grafton Airport AWS recorded by the BoM (last updated 10 April 2024)

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Element (Mean)	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Max Temp (°C)	26.8	28.4	29.4	30.3	29.8	28.3	25.7	23.2	20.7	20.6	22.6	24.9
Min Temp (°C)	12.9	15.8	17.5	19.1	18.9	17.7	13.8	9.4	6.9	5.3	6.0	9.7
Rainfall (mm)	72.4	103.7	116.9	123.3	172.4	174.3	86.6	71.0	79.9	31.2	53. 4	48.5
3pm Temp (°C)												
3pm wind (km/h)	No data available											
3pm RH (%)												

1.6. Known Radio Comms Blackspots

- TBA

1.7. Hazards

The Clarence Valley is an area of high volume bush fire activity due to its varied and complex terrain, vegetation and climate.

1.7.1. Human Settlement

- WOOMBAH: Village situated 14 kms inland from coastal village of Iluka and 62 kms north east of Grafton City. Bundjalung National Park is situated to the north and east of Woombah, with Clarence River to the south and Pacific Highway and sugar cane industry to the west. Serviced by Woombah RFB.
- DIGGERS CAMP: Coastal village comprising approx. 30 houses, 48 kms south east of Grafton City between Minnie Water (north) and Wooli (south). Surrounded on north, west and south by Yuraygir National Park and ocean on east. Single gravel access and egress road. Serviced by Wooli RFB and Diggers Camp CFU.
- DUNDURRABIN: Village of Dundurrabin is to the far south of Clarence Valley on the Gibraltar Range, situated 87 kms to the south east of Grafton City. Mostly scattered isolated houses. It is surrounded by Dry Sclerophyll Forest and Forestry Plantation. Serviced by Tyringham RFB.
- **BROOMS HEAD:** Coastal Village 65 kms east of Grafton City. High tourist area. Surrounded by Yuraygir National Park with single road access/egress. Serviced by Brooms Head RFB.
- MINNIE WATER: Small coastal village 50 kms south east of Grafton City. Bounded by Pacific Ocean
 on east and entirely surrounded on north, west and south by Yuraygir National Park. High tourist
 area with single access and egress road. Serviced by Minnie Water RFB.
- WOOLI: Small coastal village 50 kms south east of Grafton City located on Wooli Wooli River and surrounded by Yuraygir National Park to the north and across the River to the east and south.
 Moderately high tourist area with single road access and egress. Serviced by Wooli RFB.
- WOOLOWEYAH: Coastal village 68 kms north east of Grafton City and 6 kms south of the mouth of the Clarence River and Yamba. Single road access and egress. Surrounded by Lake Wooloweyah to the west and northwest, and Yuraygir National Park heathlands to the north, east and south east. Serviced by Wooloweyah RFB.
- ANGOURIE: Coastal village 68 kms north east of Grafton City. 2 kms east of Village of Wooloweyah.
 High tourist area with single access and egress road. Surrounded on west south and north by Yuraygir National Park and Pacific Ocean to the east. Serviced by Wooloweyah RFB.
- SANDON: Is located on the southern shores of the Sandon River-mouth across river from Brooms Head to the north and 56 kms due east of Grafton City. Accessible only via river crossing in a boat or, along the beach from Minnie Water. There is also a Fire Trail leading to the Village, however does require traversing along beach for short distance. Sandon is an isolated township with about 20 houses, surrounded totally by Yuraygir National Park and River. Serviced by Minnie Water RFB and Sandon CFU.
- ILUKA: Coastal village 77 kms north east of Grafton and is located north of the mouth of the Clarence River. High tourist area and retirement / fishing village. Single road access and egress.
 Surrounded by Bundjalung National Park and Iluka Nature Reserve. Serviced by Iluka RFB.

Village Protection Strategies/Community Protection Plans have been prepared for these areas and can be accessed Clarence Valley District Office.

1.7.2. Transportation and Freight

- The A1/Pacific Highway runs through the District, with several arterial roads leading to the towns and villages. The A1/Pacific Highway has heavy traffic 24hrs a day with night traffic consisting mainly of semi-trailers transporting various loads between Sydney and Brisbane. The highway also carries a large volume of holiday transport to Clarence Valley's major tourist centres along the coast, with heavy traffic flow to the Town of Maclean and City of Grafton.
- The Gwydir Highway is the major link between the North Coast and the New England and northwest NSW. Other major arterial roads are Big River Way (Old Pacific Highway), Summerland Way, Armidale Rod, Clarence Way and Orara Way.
- The arterial roads within the Clarence Valley have daily traffic of medium to heavy trucks carrying various mixed loads.
- Major rail network is the North Coast Line carrying passengers, mixed freight and dangerous goods.

1.7.3. Agriculture

Whilst traditional agricultural industries abound throughout the District, the area boasts a sugar cane industry and refinery along its coastal strip, which provides fire risk during the firing of cane prior to harvest.

1.7.4. Energy and Water

Essential Energy and Transgrid are the primary providers of electrical substations and high voltage infrastructure throughout the Clarence Valley.

The Shannon Creek Dam, situated at Chambigne supplies drinking water to Coffs Harbour and Clarence Valley LGAs and is fed by water pumped from the Nymboida River.

1.7.5. Other Identified hazards

- Unexploded ordinances north of Minnie Water
- North Coast Rail line (intermittent train activity)
- Pacific Highway (heavy haulage and general traffic)
- Gwydir Highway (heavy haulage and general traffic)
- Yamba Marina (chemicals & fuel)
- Harwood Sugar Mill
- Old Koolkhan Power Station (asbestos, miscellaneous hazard)
- Quarry, Jacky Bulbin Pit C (200 tonne of explosives)
- Quarry at Jacky Bulbin other sites other than Pit C (explosives)
- Koppers Logs (treated logs, arsenic)
- Baryulgil mine (asbestos)
- Sawmills scattered throughout Clarence Valley
- Woodford Wharf (chemicals & fuel)
- Harwood Slipway (chemicals & fuel)
- Iluka Fish Co-op (chemicals)

1.8. Land Management Authorities

Land Manager	% of BFMC Area
National Parks & Wildlife Service	14.64
Forestry Corporation NSW	13.96
Department of Lands	3.11
Local Government	0.15

For more specific data on the Clarence Valley District, please follow the link to the Clarence Valley Bush Fire Risk Management Plan <u>here.</u>

Note: This link will only work with internet coverage.

For further information regarding the Clarence Valley District Information pack, please contact the Operational Improvement team via **email at operational.improvement@rfs.nsw.gov.au**

