



RFS

District Information Pack

Lower Hunter

The Lower Hunter District is located north of the Sydney and north and west of Newcastle. The District is centred on the lower portion of the Hunter Valley around Cessnock and Maitland and extends north up the Karuah, Patterson, Williams and Allyn river valleys into the Barrington Tops and Mount Royal and south along the valleys between the Watagan Mountains and Broken Back Range into the Yengo National Park. The District extends out to the coast at Port Stephens between the Karuah River and northern edge of Newcastle covering the Tilligerry and Tomaree Peninsulas. The District covers areas of the World Heritage National Parks – Yengo, Mount Royal and Barrington Tops. The Lower Hunter District includes the combined Local Government Areas (LGA) of Cessnock, Dungog, Maitland and Port Stephens.

Lower Hunter District attends approx. 2369 incidents per year approx. 400-600 bushfires per year, of which 4-6 can be considered to be major fires. Main source of ignition include:

- human (arson, accidental and juvenile play)
- stolen vehicle fires
- power infrastructure
- lightning

Fires generally travel in an easterly direction under the influence of westerly winds. Southerly and/or easterly weather changes also have the potential to intensify wildfire.

Smoke attributed to bush fire can have a major impact on various infrastructures, facilities and the environment. These include major transportation routes for road and rail, ventilation shafts for mines, tourism operations, urban interface areas and the hospitals, along with the wineries in the area, Wind direction, fuel moisture contents and lighting techniques are considered and managed to reduce the likelihood of smoke issues.

East Maitland Fire Control Centre is the nominated Incident Control Centre (ICC) and All Hazards Emergency Operation Centre (EOC) for the District.

1.1. Contact Information

District Office Address:	110 Mt Vincent Road East Maitland NSW 2323
District Office Phone:	02 4015 0000
After Hours Contact:	Via State Operations on 02 8741 5400
A PSN Radio Channel:	122 LWHUN A – Primary Dispatch Channel
B PSN Radio Channel:	222 LWHUN B
PMR Channel:	NA
ESO Conversion Chart:	Please see file in folder for relevant conversion information
Fire Weather Forecast Area:	Greater Hunter
Local Government Area:	Cessnock, Dungog, Maitland, Port Stephens

1.2. Topography

The area is a mix of rural and urban areas, comprising of a diverse range of topography from low lying coastal areas, inland valley floor to rugged mountain ranges.

Elevations range from 12m to over 1100m.

Given the diverse nature of the District, the weather patterns vary, maximum temperatures averaging 26/30 degrees, minimum average temperatures 12/18 degrees. Rainfall averages from 50mm/80mm.

Winds inland are predominately from the west with afternoon winds varying from the south-west to north-east. Winds coastal vary throughout the day, the predominate winds will be offshore in the afternoon.

The Bushfire Season can start in early September; however, the vast majority of major fires occur within the Bushfire Danger Period October- March.

1.3. Vegetation

Lower Hunter District has a numerous vegetation types, in the coastal areas there is a mix of coastal heath, dry sclerophyll forest, littoral rainforest and grasslands. The interior of the District there is Dry and Wet Sclerophyll forest, inland heath, grasslands (including pastoral) and littoral rainforest.

Dry Sclerophyll average fuel loading is approx. 12/15tha, the Wet Sclerophyll average is approx. 50tha pending on last time since fire.

The inland and Coastal Heath vary in fuel loads, due to high fire frequency (average of every 4 years) the inland Heath has minimal surface fuels and fire behaviour and available fuel is determined by the mid storey fuel, coastal heath is determined by near-surface and mid storey fuel.

Grasslands typically begin to cure during the month of September and are fully cured by October. Fuel loads in grassland areas are subject to variation based upon grazing levels and rainfall received during winter/spring and the previous season.

Littoral Rainforest, have very little fire history, however over the last decade we have now had several fire events, fuel loads are extremely difficult to determine due to access, however the available fuel

is driven by the drought status and you can experience surface to crown fire growth with very high intensity.

There are significant Cultural and Environmental values within the LGAs, however of note is the Koala Habitat in Port Stephens, Cessnock and Dungog LGAs, there is also significant environmental values in the Barrington Tops in around the Upper Allyn area. Cessnock also has the Regent Honey Eater (Bird).

1.4. Climate

The typical / average climate in the Lower Hunter area is warm subtropical with the higher altitude areas tending toward warm temperate and the bush fire season generally runs from October to March. Prevailing weather conditions associated with the bush fire season in the Lower Hunter area are north-westerly winds accompanied by high daytime temperatures and low relative humidity. There are also frequently dry lightning storms in the western areas occurring during the bush fire season.

1.5. Average Weather Data

Summary of major climate statistics recorded at Cessnock Airport AWS recorded by the BoM (last updated 4 July 2024)

Element (Mean)	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Max Temp (°C)	25.4	27.0	29.1	30.4	29.3	27.4	24.2	20.8	17.9	17.6	19.6	22.7
Min Temp (°C)	9.9	13.0	15.2	17.1	16.9	15.0	10.7	7.5	5.7	4.1	4.5	7.1
Rainfall (mm)	55.5	76.0	80.3	74.5	100.7	86.8	57.9	39.7	54.5	35.9	34.1	43.2
3pm Temp (°C)	23.4	25.0	27.3	28.7	27.3	25.7	23.0	19.6	16.8	16.4	18.6	21.2
3pm wind (km/h)	18.7	18.6	18.3	18.5	17.3	15.7	14.6	14.2	15.1	15.3	17.3	19.1
3pm RH (%)	44	47	46	46	53	53	52	54	55	49	42	42

Summary of major climate statistics for Maitland recorded by the BoM (last updated 4 July 2024)

Element (Mean)	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Max Temp (°C)	21.6	24.9	26.4	29.3	28.5	25.9	22.4	18.2	15.5	14.3	15.5	18.1
Min Temp (°C)	10.1	12.3	13.8	15.8	15.9	14.5	12.6	10.0	7.9	7.0	7.2	8.5
Rainfall (mm)	41.1	28.4	23.9	18.0	21.9	20.6	42.3	62.4	68.1	65.3	61.5	49.1
3pm Temp (°C)	20.0	23.4	25.0	28.0	27.4	24.8	21.3	17.1	14.5	13.3	14.4	16.7
3pm wind (km/h)	14.3	14.0	13.9	13.5	12.4	12.4	12.2	12.9	13.6	15.2	15.6	15.2
3pm RH (%)	46	40	39	35	39	42	48	59	64	66	62	56

Summary of major climate statistics for Williamstown RAAF recorded by the BoM (last updated 4 July 2024)

Element (Mean)	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Max Temp (°C)	23.8	25.6	27.4	28.3	27.7	26.4	23.8	20.4	17.7	17.2	18.8	21.5
Min Temp (°C)	12.0	14.5	16.6	18.2	18.2	16.5	13.3	10.1	8.0	6.5	6.9	9.2
Rainfall (mm)	75.9	82.7	76.8	98.4	118.7	126.9	110.7	110.8	122.	75.2	71.7	60.1
3pm Temp (°C)	21.9	23.8	25.6	26.5	26.1	24.9	22.5	19.3	16.8	16.2	17.6	20.0
3pm wind (km/h)	22.5	23.5	23.5	21.9	20.6	18.9	17.2	15.8	17.5	18.7	20.9	22.0
3pm RH (%)	Data Not Available											

1.6. Known Radio Comms Blackspots

- Areas around Wollombi and Laguna
- Areas around Karuah
- Areas around Salisbury and Eccleston

1.7. Hazards

1.7.1. Economy & Industry

The Lower Hunter is characterised by large areas of rural, agricultural and forested lands. Based on a major river and coastal estuary, it contains areas of high quality agricultural and horticultural land, important drinking water catchments and natural values which underpin a strong tourism sector. The LGA's within the Lower Hunter benefit from a strong mining and industrial manufacturing heritage upon which an increasingly diverse economic base, skilled workforce and nationally significant economic infrastructure has been built.

The District's LGA's are conveniently situated at the junction of major transport routes and uniquely placed between the global gateways of the Port of Newcastle and Newcastle Airport and the productive industries of the Hunter and North West. This position, combined with the availability of green field industrial land, commercial investment and improved transport connections to export/import gateways, has resulted in the emergence of advanced manufacturing, mining equipment, technology and services and transport and logistics as growth areas. This is particularly the case in the Maitland and Port Stephens areas.

The viticulture industry is a significant element of the Lower Hunter economy. It is estimated that there are approximately 2,324ha of vineyards within the Hunter Valley wine making region which straddles the Lower Hunter and Hunter Valley Districts. Whilst it produces a smaller quantity of wine than other wine making regions in Australia, it is Australia's oldest wine region and recognised as producing internationally recognised wines. The Hunter Valley has some of the oldest vineyards still growing on their original European rootstocks due to the exclusion of phylloxera from the region. As a result, the Hunter Valley is home to some of the oldest vines of certain varieties still growing anywhere on the globe and contains rare and unique genetic material.

The area is the focal point for the New South Wales wine industry and a significant tourism destination and entertainment node. There are more than 150 cellar doors and 283 businesses that are focused on wine-related tourism. The area attracts 1.4 million visitors annually and is

New South Wales' most visited wine region accounting for 47.1% of wine region visits by domestic travellers and 65.7% of wine region visits by international travellers. Wine tourism is estimated to contribute over \$500 million to economies of the LGA's in the Lower Hunter and Hunter Valley Districts annually, and to provide 2,800 jobs.

Coastal tourism is also a significant contributor to the local economy, with Nelson Bay and Tomaree Peninsula a primary tourist centre for the broader Hunter area. The coastal areas are some of the most visited and scenic parts of the region and attract on average of 1.3 million visitors per year, generating over \$335 million for the local economy.

Defence is an important sector in the Lower Hunter economy, with the Williamstown Royal Australian Air Force Base and Salt Ash Air Weapons Range located within the District. The recent addition of the F-35 Joint Strike Fighter Division to the Williamstown RAAF Base has strengthened the defence and aeronautical industries. The defence sector has strong relationships with housing, logistics, technology, education and manufacturing industries in the region.

1.7.2. Transport

- Hunter Express Way (M15) – Lake Macquarie through Whittingham
- New England Hwy (A43) –Hexham to Queensland
- Pacific Hwy (A1) Hexham to Queensland
- John Renshaw Drive (B68) Beresfield to Kurri Kurri
- Nelson Bay Rd (B63) Stockton to Nelson Bay

1.7.3. Mining

There are mines south of Maitland LGA with other smaller quarry's (gravel and sand) throughout the remainder of the District.

1.7.4. Agricultural

- Livestock – Dungog, Cessnock, Maitland Port Stephens
- Vineyards – Cessnock

1.7.5. Tourism

Port Stephens and Cessnock, high number of tourist centred around the coast in Port Stephens LGA and Pokolbin in Cessnock LGA.

1.7.6. Aviation

- Williamstown Airport (Domestic/International)
- Williamstown RAAF Base (Military movements and affiliated businesses for Defence)
- Cessnock Airport (flying school, recreational, charter services and scenic flights)
- Maitland Airport (flying school, recreational flights)
- Luskintyre airfield (recreational flights)

1.7.7. Special Fire Protection Facilities

With the district there are 4 Hospitals (one in each LGA), numerous aged care facilities in each of the CBD.

- Dungog LGA - High schools (1) Primary Schools (8) Early Learning/Childcare (2)
- Port Stephens LGA - High schools (4) Primary Schools (13) Early Learning/Childcare (17) TAFE (1)
- Maitland LGA - High schools (9) Primary Schools (8) Early Learning/Childcare (15) TAFE (1) Total
- Cessnock LGA - High schools (4) Primary Schools (9) Early Learning/Childcare (5) TAFE (2)

1.7.8. Energy & Water

There are various electricity substations and high voltage infrastructure situated throughout Lower Hunter District. TRANSGRID Energy and AUSGRID Energy are the organisation responsible for maintenance of the network.

- Catchment Dams - Chichester Dam - Dungog LGA and Grahamstown Dam - Port Stephens LGA
- Major Rivers - Hunter River, Patterson River, Williams River and Karuah River
- Sand Beds at Port Stephens

1.8. Land Management Authorities

Land Manager	% of Area
National Parks & Wildlife Service	19.4
Forestry Corporation NSW	7.3
Department of Lands	5.4
Local Government	
Commonwealth	0.6
Private	64.7
Catchment	2.5

For more specific data on the Lower Hunter District, please follow the link to the Lower Hunter Bush Fire Risk Management Plan [here](#).

Note: This link will only work with internet coverage.

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

