

District Information Pack

Macarthur 2024/2025

1. District Details

The Macarthur District area is located in the Sydney Basin, approximately 50 kms from the heart of the Sydney CBD, more specifically the South Western Sydney Corridor between the Georges and Nepean Rivers and includes the Local Government Areas of Camden, Campbelltown and Liverpool Cities.

Geographically, Macarthur forms the foothills between the Blue Mountains and the Southern Highlands regions. It is one of the fastest-growing regions in the Sydney metropolitan area, with many new modern suburbs sprouting up in recent decades. The region is generally regarded as the area where the city of Sydney meets the rural countryside of regional New South Wales.

The district boundary follows Elizabeth Drive to the north, part of Holsworthy (Liverpool Military Area) to the east, southern Camden to the south and reaches out to Bents Basin to the west.

The land covered under the Macarthur Bush Fire Risk Management Plan is approximately 822,000ha (822sq kms), containing three main population centres (Camden, Campbelltown and Liverpool) and a number of smaller villages and rural residential estates.

The ecological community is threatened by new urban developments and current major projects across the Macarthur District. Maintaining patches and improving connectivity around developments improves the local environment and conserves biodiversity.

The Macarthur area has on average 417 bush fires per year, of which annually 5 on average can be considered to be major fires.. The main sources of ignition in the Macarthur area are varied in nature, but the major contributing factor associated with ignition in the Macarthur District listed as arson and deliberate misuse of fire involving motor vehicles, structure/house and bushland settings. The occurrences of these instances are very frequent and statistically average twice daily.

The nominated Incident Management Facility is the Cumberland Fire Control Centre

The primary Local Emergency Operations Centre for Campbelltown is located at the Staff Training Centre (STC) within the Council Depot on the corner of Sark Grove and Pembroke Road, MINTO NSW 2566.

The Local Emergency Operations Centre for Camden is located at Camden Council Chambers, 70 Central Avenue, ORAN PARK NSW 2570.

The Local Emergency Operations Centre for Liverpool is located at Liverpool Council Depot, 99 Rose Street, LIVERPOOL NSW 2170.

1.1. Contact Information

District Office Address:	Cnr Alderney Street & Townson Ave Minto
District Office Phone:	02 9608 7777
After Hours Contact:	Via State Operations on 02 8741 5400
A PSN Radio Channel:	124 MCTHR A - Primary Dispatch Channel
B PSN Radio Channel:	224 MCTHR B
PMR Channel:	NA
ESO Conversion:	Please see file in folder for relevant conversion information
Fire Weather Forecast Area:	Greater Sydney
Local Government Area:	Camden, Campbelltown, Liverpool

1.2. Topography

The Macarthur District in its topography, ranges from rolling hills and plains of flat grassland areas of the Liverpool and Camden western regions transitioning to the steeper areas of the eastern escarpment of Campbelltown LGA.

Average elevation details for each district are:

Campbelltown CBD – 68m / 223 feet

Highest elevation is 362m on Old Coach Road in Liverpool Military Area

Lowest elevation is 56m in Glenfield

Camden CBD - 76m / 249 feet

Highest elevation is 184m in Cobbitty

Lowest elevation is 82m west of Cobbitty

Liverpool CBD - 19m / 62 feet

Highest elevation is 187m at Bents Basin

Lowest elevation is 85m at Greendale

1.3. Vegetation

A snapshot of the Macarthur Region specific to Camden and Liverpool is Cumberland Plain Shale Woodlands with eucalypt trees over shrub or grass sub-formation. From the western side of the region the vegetation consists of remnant Cumberland plain woodland amongst undulating landscape and plains of rural grasslands and farms, extending to the east into Shale Sandstone Transition Forest, sandstone ridges and plateaus down to the underlying soils of the riparian freshwater community along the Georges River.

To the east of the District, some areas have more of a dry sclerophyll forests (shrubby sub-formation) forest structure which is more prevalent to the Campbelltown district. Tree canopy is usually dominated by grey box, forest red gum or red ironbark.

The Georges River runs from the southern end of the region through to the north, consisting of Sydney Hinterland Apple-Blackbutt Gully Forest along the steep gullies. Hinterland Grey Gum Ridgetop Forest is dominant along the sandstone ridgelines and plateaus through Holsworthy.

- Forested wetlands
- Saline wetlands

1.4. Climate

The Macarthur District generally experiences a warm temperate climate, with high summer rainfalls between January and March, low relative humidity with little variation throughout the year, and predominant northwest to southerly winds in summer.

Local climatic conditions are influenced by topography and rainfall patterns reflect elevation and distance from the coast. The more eastern portions of the Macarthur District (Campbelltown East) area have traditionally higher rainfall patterns when compared to western areas such as (Luddenham, Bringelly, and Cobbitty).

The warmest months are November through to March, with May to August being the cooler, drier months. The greatest period of fire danger occurs after a dry winter and spring, before the onset of rain in summer. Occasional strong winds with cold fronts during summer can lead to extreme fire danger.

During the fire season, weather conditions of concern are hot, dry winds, particularly from the north-west, accompanied by temperatures above 30 degrees and low relative humidity. These conditions are sometimes followed by a rapid change producing strong southerly winds and high intensity storms, with concentrated periods of lightning with little rain. In most years, summer rainfall and slightly higher relative humidity in the latter months of summer generally characterises the end of the fire season.

Afternoon winds vary from north-west during late spring/summer months swinging to west/southwest/southerly in later periods of the afternoon.

1.5. Average Weather Data

Summary of major climate statistics for Camden recorded at Camden 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)	24.4	26.3	28.6	29.7	28.6	26.9	23.9	20.6	17.8	17.4	19.1	22.1
Min Temp (°C)	10.1	13.0	15.3	17.0	16.8	14.9	11.0	7.0	4.6	3.0	3.9	6.8
Rainfall (mm)	65.2	76.9	58.0	83.5	101.9	102.0	68.6	52.6	64.1	39.9	40.8	39.0
3pm Temp (°C)	22.4	24.3	26.8	27.7	26.9	25.4	22.5	19.3	16.5	16.0	17.7	20.3
3pm wind (km/h)	17.7	17.7	18.5	17.5	15.5	15.0	13.8	12.5	13.9	14.6	16.8	18.1
3pm RH (%)	47	50	46	49	52	52	52	52	53	50	43	44

1.6. Known Radio Comms Blackspots

- Vehicle based comms around the George's River are ok, however portable hand held radios may present issues.
- Radio coverage issues have been experienced in parts of the Holsworthy Military Area and Wedderburn.

1.7. Hazards

1.7.1. Transportation

The Hume Highway (M31) is the main traffic corridor out of Sydney to the south-west, connecting Sydney with Canberra, Melbourne and key regional centres in the NSW south and south west. The Hume Highway is fed from Sydney ring motorways of the M7 and M5 in Liverpool.

The Hume Highway (M31), M7, M5, Camden Valley Way, Narellan Road, The Northern Road, Elizabeth Drive, Campbelltown Road, Appin Road all hold moderate to heavy traffic during peak periods and motor vehicle accidents are common. With the increase in urban development growth through-out the Macarthur District, higher volumes of traffic are increasing travel times on major arterial road network, further increasing the risk of vehicle accidents.

Rail is also present throughout the Macarthur Zone with the main south line from Sydney to Melbourne/Canberra running through the middle of the zone in a southerly direction and the Leppington Branch line running from Liverpool and terminating at Leppington station and stabling yards. Both lines are passenger lines and the main south line also has express passenger trains as well as mixed freight trains traversing at all times of day.

Hazmat Incidents from industry and chemical cartage throughout the district by heavy vehicle transport poses a threat on main arterial roads. Large intermodal transport hub and industrial/commercial precinct within the Moorebank and Liverpool areas attracts high volume of heavy haulage transport, posing a risk.

1.7.2. Aviation

Camden Airport (Aerodrome Rd, COBBITTY NSW, 2570) is a small general aviation airfield with facilities for gliders and hot air ballooning. The airport has one grass runway and one paved runway as well as 2 glider airstrips.

Western Sydney/Nancy Bird Walton International Airport (Current access from 26 Badgery's Creek Road, BADGERYS CREEK 2555) is currently being built in the Badgery's Creek/Luddenham area with flights expected to commence in 2026.

Holsworthy Army Barracks and Range has an airfield called Luscombe Army Airfield.

The Australia Army has 6th Aviation permanently located and operate out of Holsworthy. Restricted airspace within and around the surrounds of the Liverpool Military Area are enforced. R555 aviation clearance from Army Range Control prior to entry into airspace is required for any suppression operations of any fires in the vicinity.

1.7.3. Energy & Water Utilities

There are a number of electricity substations and high voltage infrastructure located within and transiting the Macarthur District. TransGrid and Endeavour energy are the network operators and are responsible for the maintenance of the networks within the district.

TransGrid 500kV Substation fourth Ave, AUSTRAL NSW 2179.

Water NSW are the responsible authority for catchments with main catchment areas being the Nepean River Catchment in the south west and west on the district, and the Georges River Catchment in the south east and east of the district.

1.7.4. Military

Holsworthy Army Barracks (Alec Campbell Dr, HOLSWORTHY NSW 2173) on the eastern side of the district is home to numerous Army Units including Special forces, Engineers, Aviation and the Defence Correctional Establishment. Holsworthy also has a 22,000ha training range used for field exercises and artillery training. Significant Unexploded ordinance is found on site and Australian Army escorts are required when operating within the barracks.

1.7.5. Special Fire Protection Facilities

There are three primary hospital precincts within the Macarthur District (Liverpool, Campbelltown and Camden), as well as many aged care facilities throughout all built areas.

Across the District there are many schools, TAFE and University campuses and pre-School facilities. Many of these are within suburban built areas, however there are a number scattered within the rural land areas of Camden and Liverpool Council LGAs.

The area along, and adjacent to the Georges River from Long point to Wedderburn contains a significant spectrum of endangered and vulnerable species for which there is a risk that bush fire events, fire suppression operations and/or hazard reduction activities could negatively impact their existence. This area also contains the risk of rapid fire progression toward properties in nearby urban areas. Fires originating from this area may expand uncontrolled to the east becoming significant fire events that may impact assets within and beyond the Liverpool Military Range.

1.7.6. Vegetation Hazards

In the western areas of the District, grazing and crop farming areas consist of mainly grass fuels, which begin to cure due to frosts during the winter period and again during the drier later months of the year during the summer period. Wet season in spring can cause the grass fuels to increase to one-metre-high which can cause significant grass fire hazards several weeks later. Dry lightning hazards exist along with fire hazard from farming machinery.

In the eastern areas of the District, the forested areas are predominately dry sclerophyll forest. Surface fuel over time, averages around 15 tonnes per hectare. Potential fire hazard from arson does exist and the potential for fires to impact on urban interface relies on the effect of wind speed and direction from the east.

There is a restricted area around the Kemps Creek Nature Reserve (National Parks) were there is a biohazard with the infestation of Phytophthora. There is specific decontamination procedures that all vehicles must adhere too. Fire management strategy can be found here.

For more specific data on the Macarthur District, please follow the link to the Macarthur Busl Management Plan <u>here.</u>	า Fire Risk
Note: Links will only work with internet coverage.	
For further information regarding the Macarthur District Information pack, please contact the Operational Improvement team via email at operational.improvement@rfs.nsw.gov.au	NSW GOVERNMENT