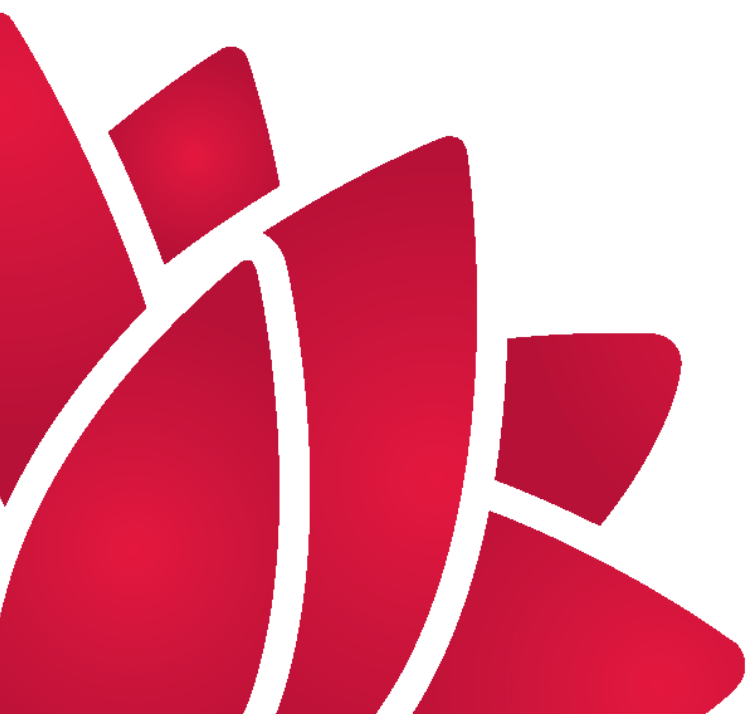


Penrith

**Local Emergency
Management Plan**

November 2015



Part 1 – Administration

Authority

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

APPROVED

.....

Chair Penrith Local Emergency Management Committee

Hans Meijer

Dated:

ENDORSED

.....

Assistant Commissioner Dennis Clifford, Chair

Regional Emergency Management Committee

Dated:

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

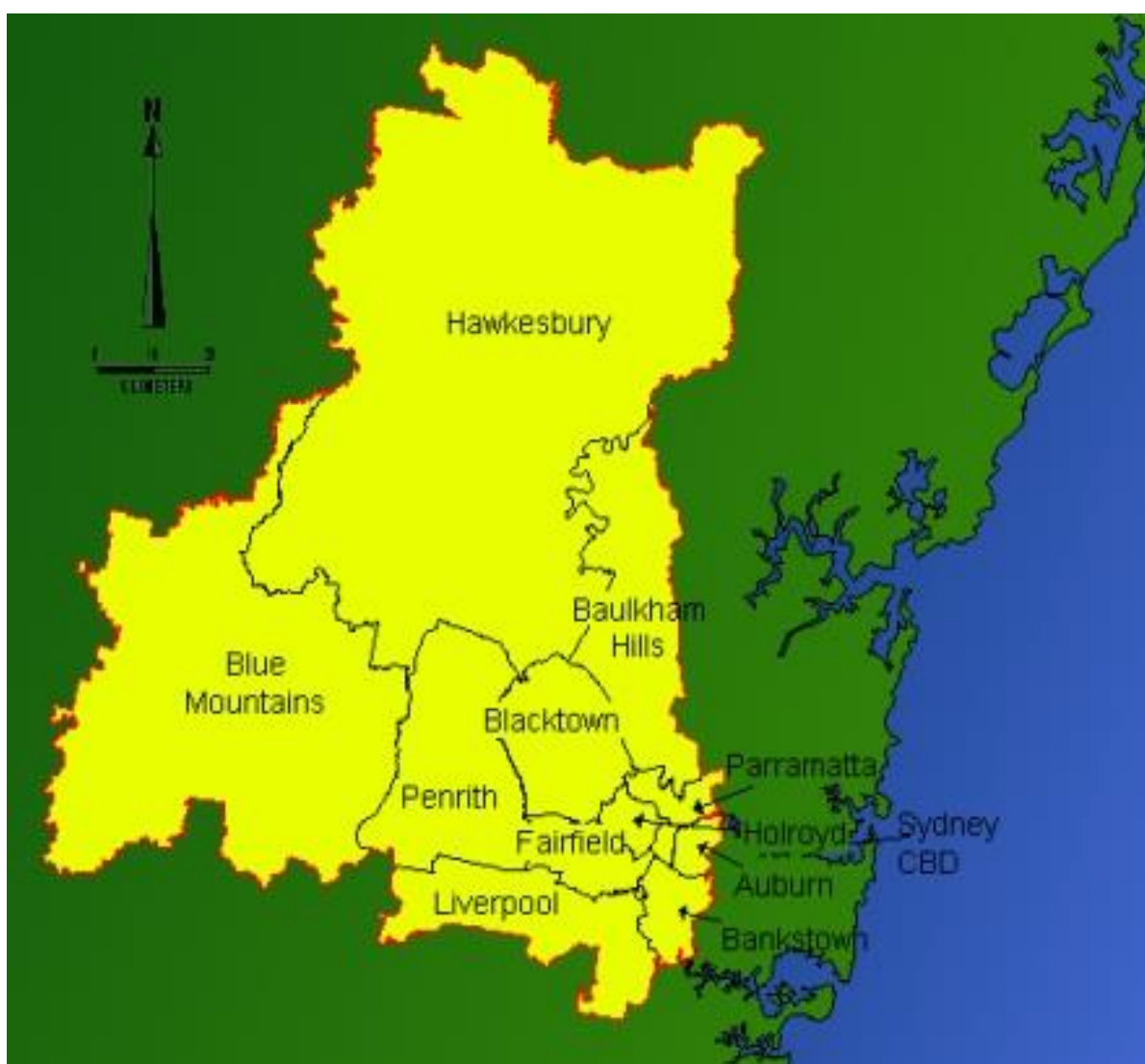
- activation of the Plan in response to an emergency;
- legislative changes affecting the Plan; and
- exercises conducted to test all or part of the Plan.

Part 2 – Community Context

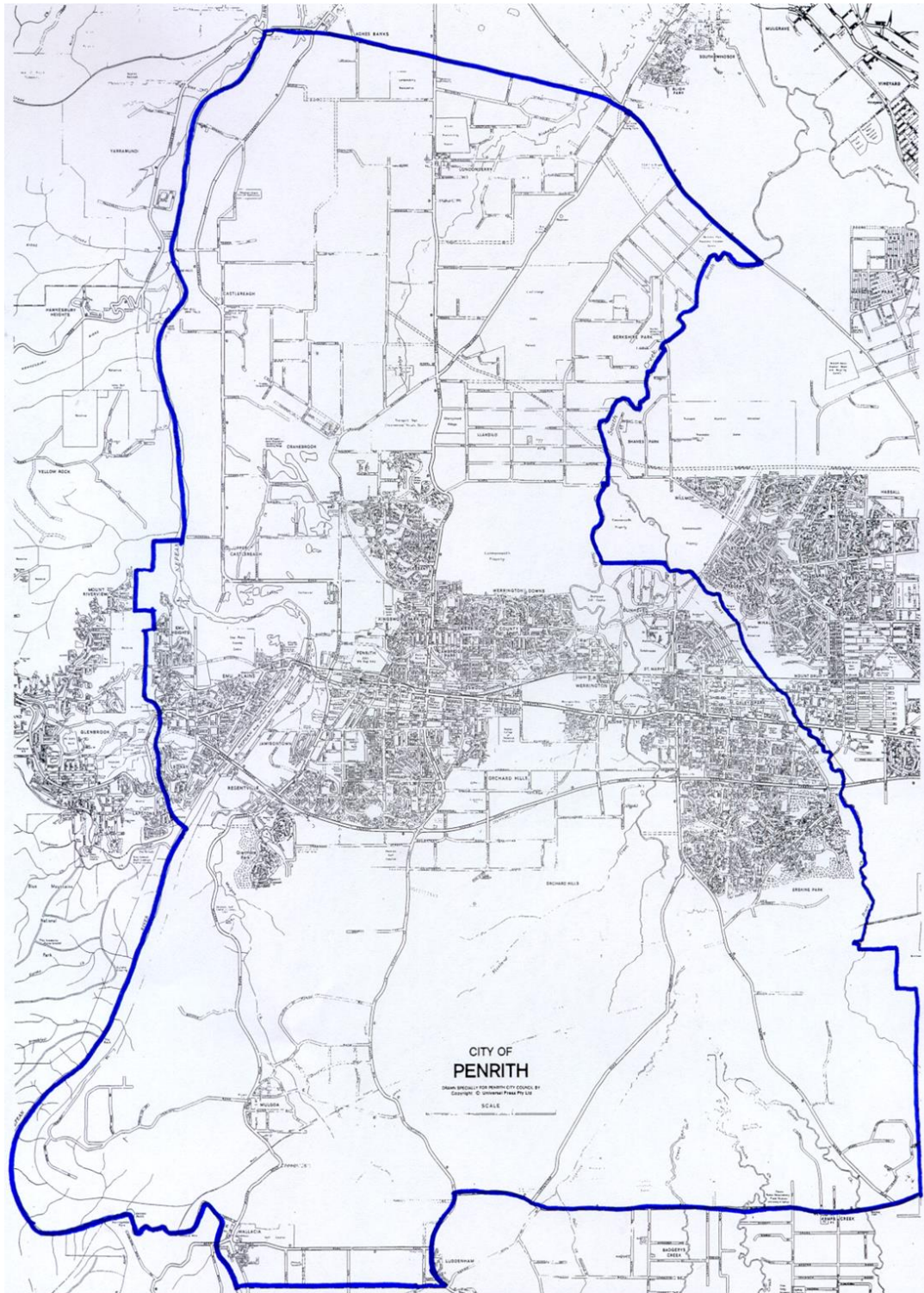
Annexure A – Community Profile

General

Penrith City is located at the western fringe of the Sydney metropolitan area - approximately 54 kilometres from the Sydney GPO. Penrith City is bounded by Hawkesbury City in the north, Blacktown City and Fairfield City in the east, Liverpool City and Wollondilly Shire in the south and Blue Mountains City in the west



Penrith City contains a blend of urban and rural communities which include Agnes Banks (part), Badgerys Creek (part), Berkshire Park, Caddens, Cambridge Gardens, Cambridge Park, Castlereagh, Claremont Meadows, Colyton, Cranebrook, Emu Heights, Emu Plains, Erskine Park, Glenmore Park, Jamisontown, Jordan Springs, Kemps Creek (part), Kingswood, Kingswood Park, Leonay, Llandilo, Londonderry, Luddenham (part), Mount Vernon, Mulgoa, North Penrith, North St Marys, Orchard Hills, Oxley Park, Penrith, Regentville, South Penrith, St Clair, St Marys, Wallacia (part), Werrington, Werrington County and Werrington Downs.



Landform and Topography

Topography of the Penrith LGA is variable with elevations of between 20m and 240m AHD.

The Penrith area forms part of the physiographic unit commonly referred to as the Cumberland Plain. The following general description broadly describes the topography, although local variations do exist.

The highest and steepest areas occur on the Blue Mountains Escarpment at Emu Plains and along the Nepean Gorge, south of the M4 Motorway Bridge. Flat alluvial plains are associated with the Nepean River north of the Penrith Town Centre and along the middle to lower section of South, Ropes and Mulgoa Creeks. Gently to moderately undulating land is located in the central and southern parts of the LGA. The northern portion of the LGA is slightly undulating.

Climate

Penrith is entirely within a temperate climate zone, which may be described as temperate with warm to hot summers, cool to cold winters and generally reliable rainfall all year round (Bureau of Meteorology, 1991).

Extreme climate conditions, (heat and cold) such as, temperatures of above 40 degrees over five days and below – 2 degrees over two or more days, may have adverse health effects on the very young, aged and infirmed. These conditions may be exacerbated by short – long-term failure of infrastructure during such occurrences.

Data obtained from the Bureau of Meteorology shows that the mean annual rainfall in the LGA between 1995 and 2013 is 713.8mm whilst the highest average annual rainfall during the same period was 1013.4mm. The data also shows that the lowest rainfall during this period was 501mm during 2006.

The mean maximum temperature in the LGA in the same period was 24.5 degrees Celsius with the highest temperature of 46.5 degrees Celsius occurring on 18 January 2013 and the lowest mean annual temperature of 11.2 degrees Celsius occurring on 26 July 2009.

The mean minimum temperature was 12.3 degrees Celsius. The lowest temperature during the period of -1.4 degrees Celsius occurred on 12 July 2002. However, on 13 August 2005 and 30 June 2010 minimum temperatures of -0.5 and -1.1 degrees Celsius also occurred.

Surface wind speed and direction in the Penrith LGA is influenced by day-to-day changes in synoptic weather patterns and drainage basin topography. Onshore (easterly) winds predominate in the summer months and predominantly westerly winds in winter. In the Sydney air shed as a whole, summer sea-breezes and cold air drainage flows at night have a significant effect on weather and air quality conditions.

The following summary of climate change implications was prepared for Penrith City Council by Parsons Brinckerhoff (PB) with the projections based on information taken largely from the technical report 'Climate Change in Australia – Technical Report 2007' with supporting information from 'Impact of Climatic Variability and Climate Change on Rainfall Extremes in Western Sydney and Surrounding Areas: Component 4 – Dynamical Downscaling - 2008' and input from agencies such as the CSIRO.

- Overall, Penrith is expected to become warmer, with more hot days and fewer cold nights. As a result, energy demand for cooling in summer will increase markedly. Buildings, roads and other Council assets will deteriorate more quickly, increasing life-cycle costs and maintenance requirements.
- The incidence of more extreme and longer lasting heatwaves is likely to result in an increase in heat related deaths, and hospital admissions for heat stress and heat related illness. Higher temperatures may also contribute to the spread of vector-borne viruses and water-borne and food-borne diseases.
- Sydney's mains water supply will come under increasing stress as population growth and environmental flow requirements increase the demand for water, whilst reduced annual rainfalls and increased evaporation will mean less runoff into rivers and storage areas. Water restrictions are likely to be semi-permanent, with the use of potable water prohibited for irrigating playing fields.
- Small urban streams will likely become ephemeral, while urban wetlands will dry out or suffer serious water quality problems from weed or algae. Aquatic weed in the Nepean River will require increasing effort and resources to control.
- Droughts are likely to become more frequent and severe as the century advances.
- Food will become much more expensive and limited as Australia's major food producing regions suffer from increasing water shortages.
- With decreased rainfall and higher temperatures, the risk of serious bush fires will grow. The average annual days of very high or extreme bush fire risk will increase from 12 currently to 16 in 2030, and 22 by 2070.
- Increases in short-duration extreme rainfall events are likely to result in more frequent and severe flooding in Penrith's smaller urban streams and surcharge of sewerage and drainage systems causing both water quality and quantity problems.
- Mainstream flooding from the Nepean River could increase by 2030, but then decrease by 2070 as rainfall intensities in longer-duration storms decrease.
- Possible increases in storm severity will place additional demands on emergency services, and increase insurance premiums. Power blackouts will happen more often when transmission lines are damaged.

Land Use

An extensive survey of rural land uses was conducted in 2001/02, to identify specific land uses in the rural areas of the LGA.

The Penrith Rural Lands Study provided an analysis of the existing situation and discussed various options that could be addressed to ensure that the future of Penrith's rural lands remains sustainable.

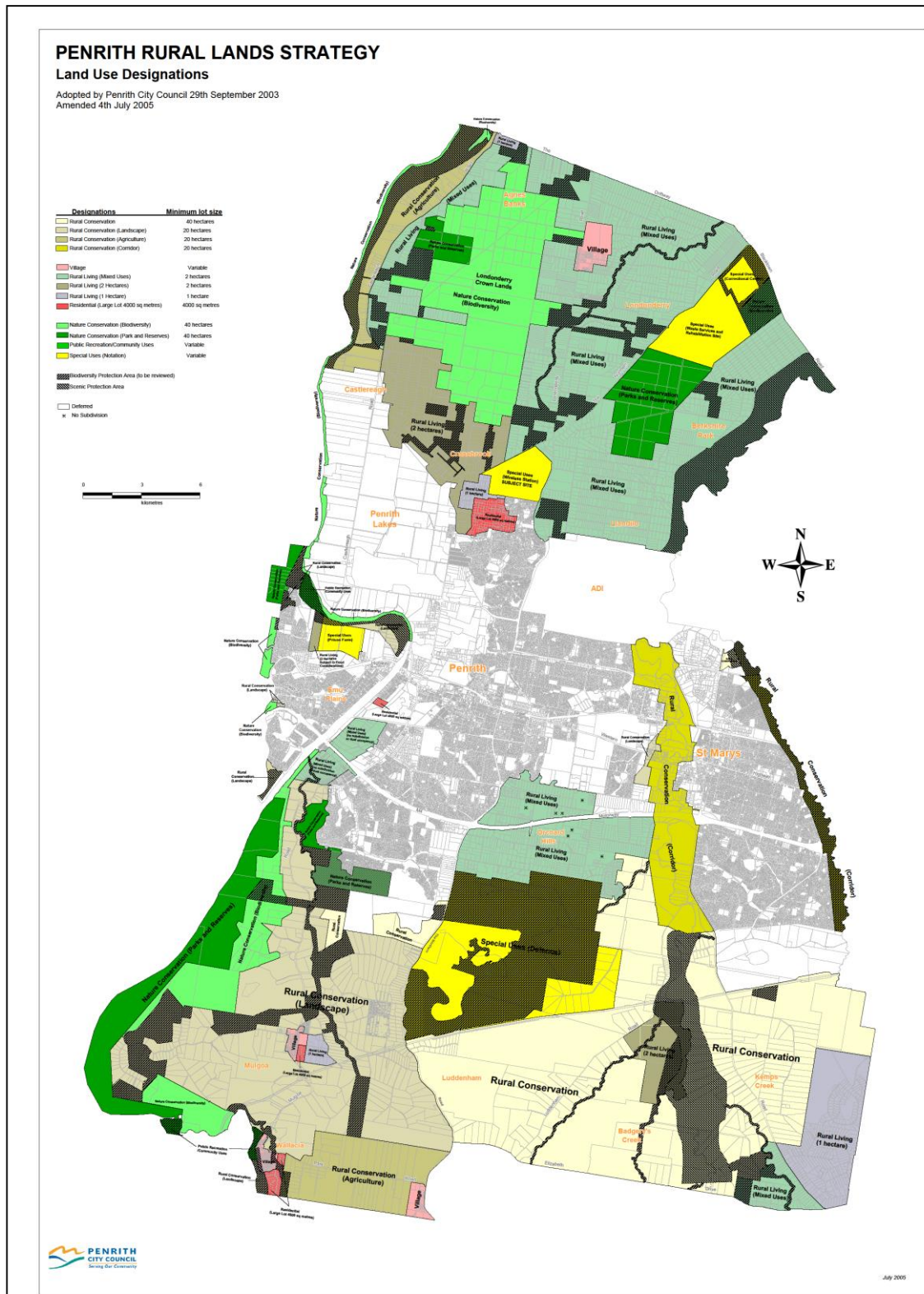
A set of land use designations and corresponding recommended minimum lot sizes has been established for rural lands to reflect the desirable land uses for identified localities. The land use designations are:

Rural Conservation	40 hectares
Rural Conservation (Landscape)	20 hectares
Rural Conservation (Agriculture)	20 hectares
Rural Conservation (Corridor)	20 hectares
Village	<i>Variable</i>
Rural Living (Mixed Uses)	2 hectares
Rural Living (2 ha)	2 hectares
Rural Living (1 ha)	1 hectares
Residential (Large Lot 4000 m ²)	4000 m ²
Nature Conservation	40 hectares
Public Recreation / Community Uses	<i>to be determined</i>
Special Uses (Notation)	<i>to be determined</i>
Biodiversity Protection Area	(hatching)
Scenic Protection Area	(hatching)

ABS 2011 data identifies a range of agricultural activities within the Penrith LGA that includes 170 commercial businesses operating on 4,400 ha, which includes 512 ha of crops and 3,209 ha of grazing lands. This includes 68 commercial vegetable businesses, 6 properties reporting commercial orchards, 52 beef grazing holdings, 18 meat poultry farms, 8 egg farms and 1 horse stud. In addition to these commercial activities there is also a broad range of livestock and companion animals held by rural landowners.

The presence of these activities on rural lands within the Penrith LGA provides potential implications for emergency service agencies, in Particular the Department of Primary Industries, managing evacuation of animals in the event of the bushfires and flooding or isolation of livestock and farming properties in the event of an outbreak of significant plant and animal communicable diseases.

The map below indicates the land use designation adopted by Penrith Council in its Penrith Rural Lands strategy 2003 as amended on 4 July 2005.



There are also significant industrial centres within Penrith and St Marys. A large commercial/industrial area exists at Penrith (Castlereagh Road) and St Marys (Dunheved Estate). A major new development at Erskine Park has also been established

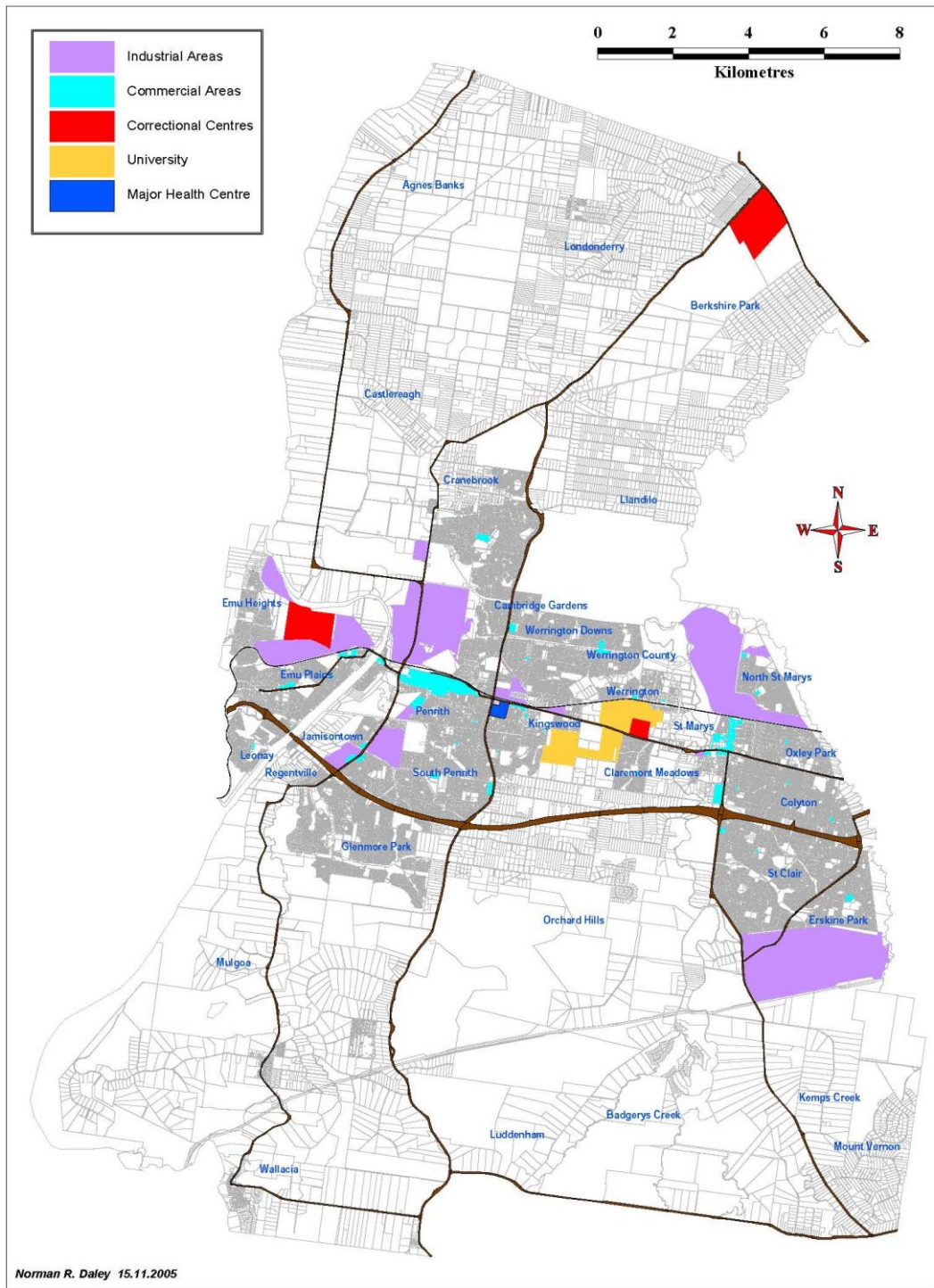
The Western Sydney University has its largest campus at Kingswood, where some 10,000 students are enrolled.

Three correctional centres are located within the LGA: Cobham at Kingswood, Emu Plains Correctional Centre, and John Moroney at Londonderry.

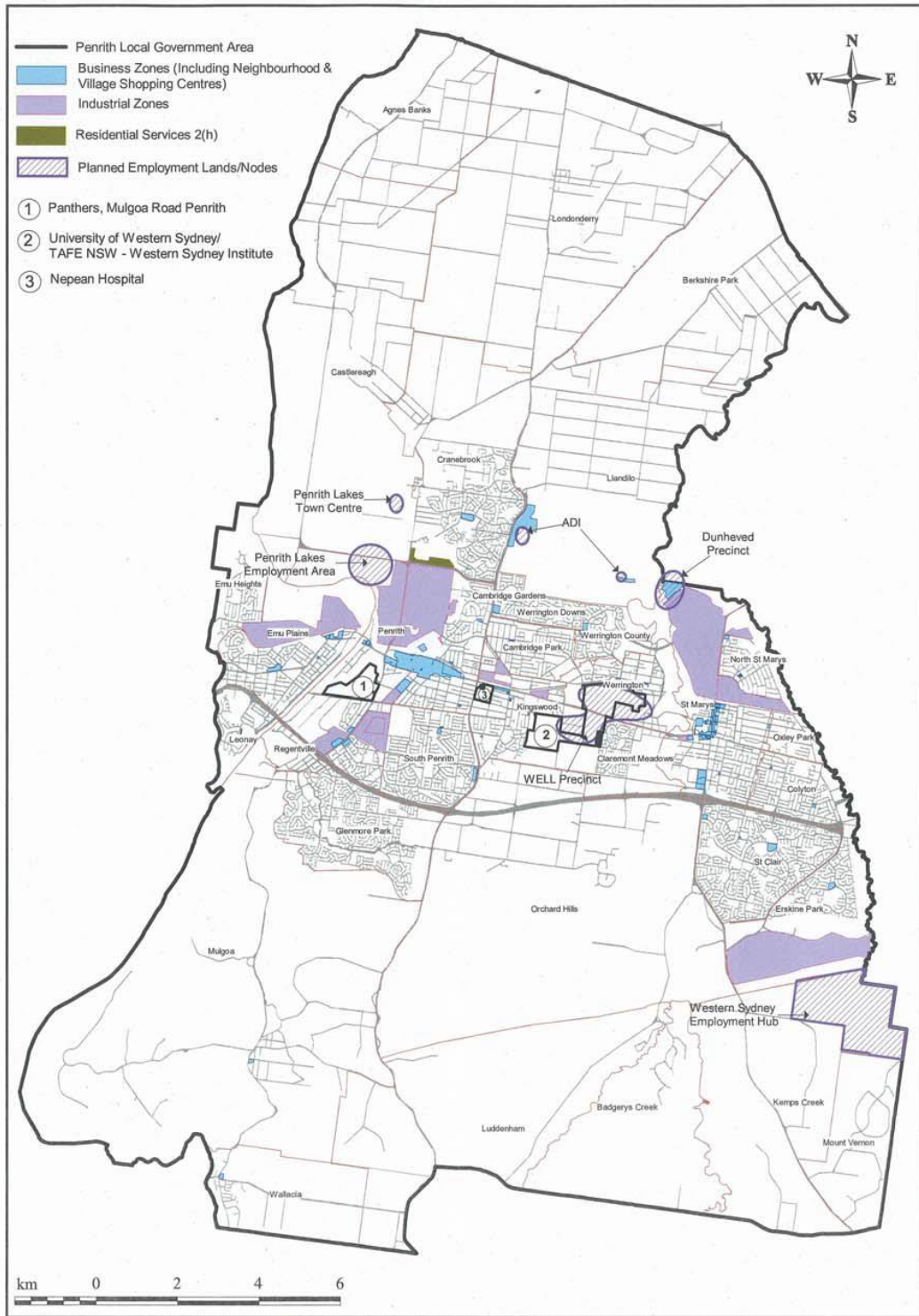
Industries include:

- Light industry
- Agriculture
- Education
- Health Facilities - The major public hospital in the area is the Nepean Hospital at Kingswood.
- Tourism
- Correctional Centres

The following maps show the existing and future planned facilities within the Penrith LGA.



Major Industrial/Commercial Areas in Penrith LGA



17.11.2006

PLANNED EMPLOYMENT LANDS IN PENRITH LGA

The table below shows the approximate areas as at March 2015, of the various land use zonings within the Penrith Local Government Area.

Land Use Zone / Type / Classification	Area (sq km)	% of LGA
Business Zones	4.72	1
Industrial Zones	15.6	4
Recreation Zones	26.82	7
Residential Zones	72.61	18
Rural Zones	162.7	40
Special Purpose Zones	20.76	5
Environment Protection Zones	100.5	25
	403.71	100

Population and People

Population statistics were obtained from Profile id data for the Penrith LGA. The Penrith City Community Profile provides demographic analysis for the City and its suburbs based on results from the 2011, 2006, 2001, 1996, 1991 Censuses of Population and Housing. The profile is updated with population estimates when the Australian Bureau of Statistics (ABS) releases new figures.

In 2006, the total population of Penrith City was estimated at 177,152 people. It is expected to experience an increase of over 27,100 people to 204,258 by 2021, at an average annual growth rate of 0.95% per annum over 15 years. This is based on an increase of over 11,900 households during the period, with the average number of persons per household falling from 2.85 to 2.75 by 2021.

In 2011, the total residential population in the Penrith LGA had risen to 184,681 compared to 177,152, in 2006. This change represented a significant growth rate between these Census periods.

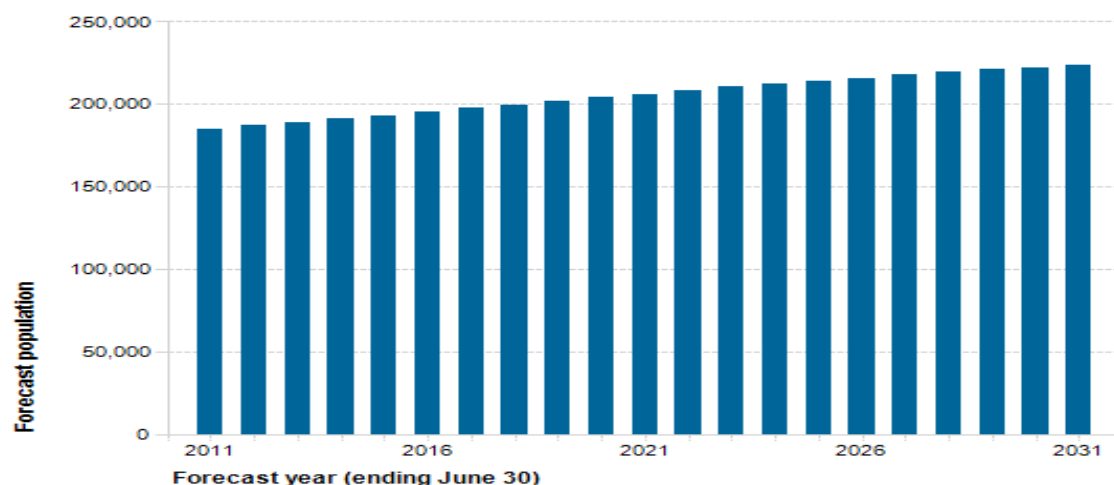
The Penrith City Estimated Resident Population for 2013 is 190,428, with a population density of 4.71 persons per hectare. These figures indicate that Penrith is continuing to experience a significant growth in its resident population.

The most recent population projections are based on the release of significant estates at the ADI site with the potential to accommodate 24,000 people (estimated 7,800 people in Penrith LGA), and the Penrith Lakes Scheme likely to provide houses to a further 14,000 people.

The Penrith City population forecast for 2014 is 191,170, and is forecast to grow to 223,631 by 2031. This represents an overall population change from the 2014 projection of 16.98% as indicated in the graph below.

Forecast population

Penrith City



Population and household forecasts, 2011 to 2031, prepared by .id, May 2012.



However, the overall rate of population increase is expected to be approximately 0.96% per annum with the highest average annual population increases occurring within the Caddens release Area (28.7%), Penrith Lakes (34.6%), and the St Marys release Area – Jordan Springs (49.6%) shaded blue in the table below.

Population summary

Change between 2011 and 2031

Penrith City

Forecast year

Area	2011	2016	2021	2026	2031	Total change	Avg. annual % change
Penrith City	184,722	195,460	206,192	215,948	223,628	+38,906	1.0
Caddens Release Area	22	1,082	2,534	3,371	3,443	+3,421	28.7
Cambridge Park	6,488	6,747	6,918	7,033	7,194	+706	0.5
Claremont Meadows	4,313	5,123	5,071	5,056	5,199	+886	0.9
Colyton	8,213	8,371	8,447	8,579	8,728	+515	0.3
Cranebrook	15,217	16,093	16,072	16,070	16,200	+983	0.3
Emu Heights	3,458	3,404	3,409	3,445	3,524	+66	0.1
Emu Plains	8,362	8,625	8,954	9,107	9,380	+1,018	0.6
Erskine Park	6,899	6,495	6,365	6,320	6,368	-531	-0.4
Glenmore Park	20,720	23,313	24,536	24,402	23,948	+3,228	0.7
Jamisontown	5,415	5,636	5,604	5,704	5,800	+385	0.3
Kingswood	9,432	10,093	11,382	11,393	11,339	+1,907	0.9
Leonay	2,498	2,504	2,476	2,489	2,525	+27	0.1
Llandilo - Berkshire Park	3,419	3,390	3,370	3,367	3,407	-12	0.0
Londonderry - Castlereagh - Agnes Banks	5,504	5,459	5,389	5,364	5,368	-136	-0.1
North St Marys	3,822	3,804	3,818	3,845	3,869	+47	0.1
Orchard Hills - Rural South	4,446	4,750	4,960	5,140	5,149	+703	0.7
Oxley Park	2,767	2,903	2,983	3,065	3,237	+470	0.8
Penrith	12,267	13,236	14,674	16,120	16,835	+4,568	1.6
Penrith Lakes	23	477	2,223	5,562	8,816	+8,793	34.6
Regentville - Mulgoa - Wallacia	3,960	4,089	4,354	4,504	4,759	+799	0.9
South Penrith	12,040	12,132	12,106	12,108	12,219	+179	0.1
St Clair	20,557	19,841	19,242	19,121	19,205	-1,352	-0.3
St Marys	11,695	12,243	12,413	12,656	13,030	+1,335	0.5
St Marys Release Area - Jordan Springs	3	2,474	5,260	8,085	9,512	+9,509	49.6
Werrington	3,987	4,321	5,035	5,475	5,964	+1,977	2.0
Werrington Downs - Werrington County - Cambridge Gardens	9,195	8,855	8,597	8,567	8,610	-585	-0.3

Population and household forecasts, 2011 to 2031, prepared by .id the population experts, May 2012.
<http://www.id.com.au>



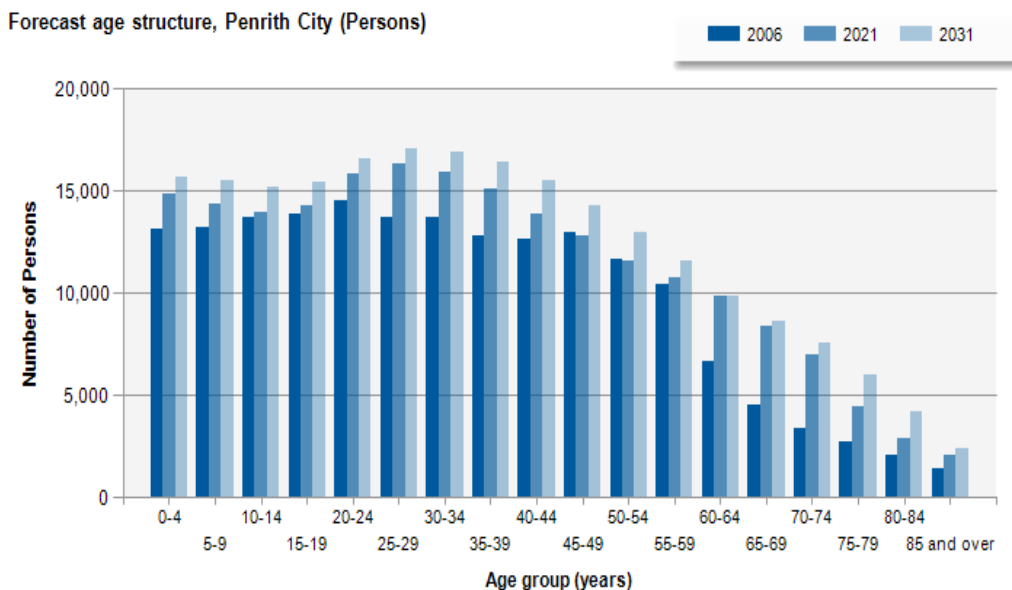
In 2006, the most populous age group in Penrith City was 20-24 year olds, with 14,548 persons. In 2011, the dominant age structure for persons in Penrith City was ages 25 to 29, which accounted for 7.9% of the total persons.

In 2021 the most populous forecast age group will be 25-29 year olds, with an estimated 16,237 persons.

The largest increase in persons between 2011 and 2021 is forecast to be in ages 70 to 74, which is expected to increase by 3,340 and account for 3.6% of the total persons.

The age group which is forecast to have the largest proportional increase (relative to its population size) by 2021 is 70-74 year olds, who are forecast to increase by 108.4% to 6,957 persons.

The number of people aged under 15 is forecast to increase by 3,066 (7.6%), representing a rise in the proportion of the population to 21.1%. The number of people aged over 65 is expected to increase by 10,596 (75.1%), and represent 12.1% of the population by 2021.



Family Type

As expected with a relatively young population, Penrith has a significantly higher proportion of families with children and less without children. Penrith also has a slightly higher proportion of single parent families.

Ethnicity

Analysis of the country of birth of the population in Penrith City in 2011 compared to the Sydney Statistical Division shows that there was a smaller proportion of people born overseas and also a smaller proportion of people from a non-English speaking background.

Overall, 20.9% of the population was born overseas, and 13.3% were from a non-English speaking background, compared with 34.2% and 26.3% respectively for the Sydney Statistical Division.

The dominant non-English speaking country of birth in Penrith City was Philippines, where 1.7% of the population, or 3,073 people, were born.

There were no major differences between Penrith City and the Sydney Statistical Division's country of birth data in 2011.

Emerging groups

Between 2006 and 2011, the number of people born overseas increased by 1,960 or 5.6%, and the number of people from a non-English speaking background increased by 2,314 or 10.8%.

The largest changes in birthplace countries of the population in this area between 2006 and 2011 were for those born in:

- United Kingdom (-662 persons)
- India (+654 persons)
- Philippines (+468 persons)
- New Zealand (+297 persons)

Aboriginality

The Indigenous population Penrith increased from 4,083 in 2006 to 5,388 in 2011. As a proportion of Penrith's total population, Aboriginal or Torres Strait Islanders make up 3.04% of the population; this proportion was 7.5% in 2006.

Analysis of the Aboriginal and Torres Strait Islander service age groups in Penrith City in 2011 compared to the Aboriginal and Torres Strait Islander population in New South Wales shows that there was a similar proportion of people in the younger age groups (0 to 17 years) and a lower proportion of people in the older age group (65+ years).

Overall, 42.2% of the Aboriginal and Torres Strait Islander population in Penrith City was aged between 0 and 17, and 3.6% were aged 65 years and over, compared with 42.6% and 4.3% respectively for the Aboriginal and Torres Strait Islander population in New South Wales.

The major differences between the age groups of the Aboriginal and Torres Strait Islander population in Penrith City and the Aboriginal and Torres Strait Islander population in New South Wales were:

- A *larger* percentage of people aged 18 to 24 years (13.8% compared to 12.0%)
- A *larger* percentage of people aged 25 to 34 years (13.0% compared to 11.8%)
- A *smaller* percentage of people aged 50 to 59 years (7.4% compared to 8.7%)

Emerging Groups

From 2006 to 2011, Penrith City's Aboriginal and Torres Strait Islander population increased by 1,340 people (33.1%). This represents an average annual population change of 5.89% per year over the period.

The largest changes in age groups of the Aboriginal and Torres Strait Islander population in this area between 2006 and 2011 were in the age groups:

- 35 to 49 (+250 people)
- 18 to 24 (+207 people)
- 12 to 17 (+187 people)
- 50 to 59 (+162 people)

Key statistics

Aboriginal and Torres Strait Islander peoples - Penrith City

Number of persons usually resident	2011			2006			Change
	Number	%	New South Wales - ATSI %	Number	%	New South Wales - ATSI %	
Population summary							
Total population	5,388	100.0	100.0	4,048	100.0	100.0	+1,340
Males	2,634	48.9	49.3	1,955	48.3	49.4	+679
Females	2,754	51.1	50.7	2,093	51.7	50.6	+661
Indigenous status							
Aboriginal	5,188	96.3	94.9	3,881	95.9	94.4	+1,307
Torres Strait Islander	121	2.2	2.7	105	2.6	3.5	+16
Both Aboriginal and Torres Strait Islander	78	1.4	1.9	64	1.6	2.1	+14
Dwellings							
Persons counted in non private dwellings	243			237			+6
Persons counted in private dwellings	5,202			3,848			+1,354
Occupied private dwellings	2,366			1,785			+581

Source: Australian Bureau of Statistics, Census of Population and Housing 2006 and 2011 (Usual residence). Compiled and presented in profile.id by .id, the pop

<http://www.id.com.au>



Transport Routes and Facilities

The main transport routes through the Region are: -

- | | |
|-------------------|-----------------------|
| M4 Motorway | Great Western Highway |
| The Northern Road | Mamre Road |
| Castlereagh Road | Elizabeth Drive |
| Mulgoa Road | Dunheved Road |

The Main Western Rail Line connecting Sydney CBD to the Western Districts and Western NSW.

The rail line traverses East-West through the centre of the city, adjacent to residential, commercial and industrial areas. The line is used for the transport of people (particularly during peak hours), hazardous and inert materials.

The consequences of a rail accident will vary, depending on the nature of the incident, with factors including the type of material being transported (hazardous or inert material), the time at which the accident occurs, and the location along the rail line relative to adjacent housing and transport routes.

Incidents which will impact on both internal and external to the Rail network system are infrequent; however the consequences of such an accident may be high.

Major aircraft routes traverse the area and include air traffic from Richmond air base, Mascot, Bankstown, and to a lesser extent to smaller airfield at Camden.

Disruptions on these routes are likely to cause a significant regional problem.

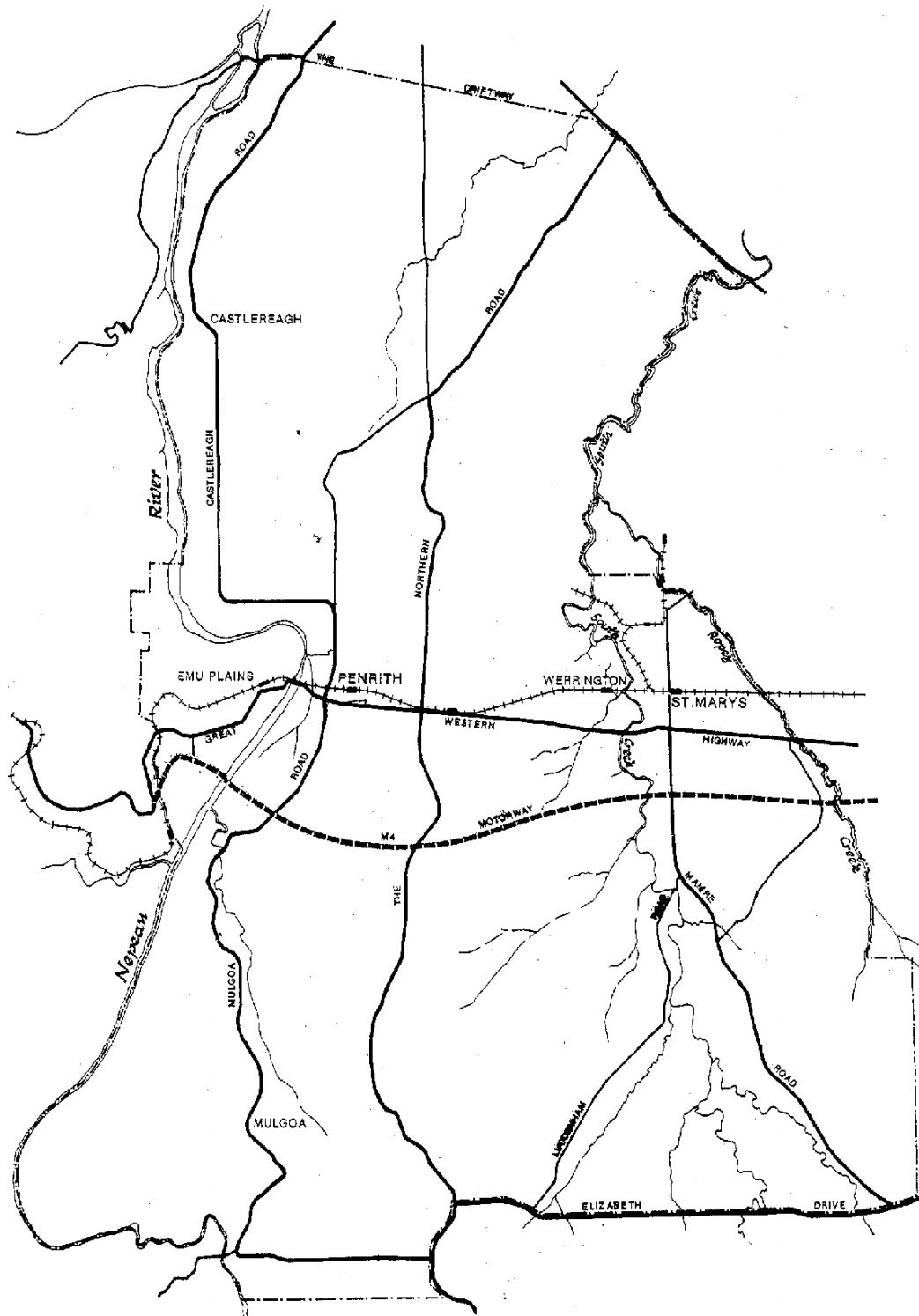
The area's main waterway is the Nepean River, which is utilised by a wide variety of watercraft (particularly in summer), including motorboats, rowboats and jet skis.

The area is traversed by smaller, un-navigable waterways flowing in a northerly direction (*see Map below*).

Major fresh water storage reservoir facilities exist at:

- RAAF Base Orchard Hills - The Northern Road, Orchard Hills
- Cranebrook - adjacent to the intersection of Borrowdale Way and The Northern Road
- Kingswood - Glebe Place
- Erskine Park - adjacent to the corner of Swallow Drive and Chameleon Drive

Major Transport Routes & Waterways



Economy and Industry

Penrith City is a residential and rural area, with most of the population living in residential areas in a linear corridor along the Great Western Highway and the main western railway.

The City has a total area of approximately 407 sq km, of which 80% is either rural and/or rural residential. Most of the urban area is residential, with some commercial and industrial areas which include extractive industries and manufacturing. A large portion of the rural area is used for agricultural purposes, including dairy, poultry and hobby farming, orcharding, market gardening and horse breeding. The major commercial centres within the LGA are situated at Penrith and St Marys.

The employment statistics in this section have been extracted from data obtained from .id in its economic and industrial profile of Penrith City. The employment statistics were compiled by .id from the National Institute of economic and Industry Research (NIEIR). Employment total is the most accurate and up to date measure of the total number of people employed in Penrith.

The workforce in Penrith is made up of all the people who are employed in the local area, regardless of where they live. Workforce statistics reveal how the characteristics of the workforce in Penrith City vary between each industry sector and indicates specific industry sector workforce requirements and employment opportunities.

The analysis of the workforce in Penrith City in 2013/2014 identified the three largest employment industries as:

- Health Care and Social Assistance (9,605 people or 13.6%)
- Retail Trade (9,504 people or 13.5%)
- Education and training (7,581 people or 10.8%)

In combination, these three industries accounted for 26,690 people in total or 37.9% of the workforce.

The number of people in the workforce in Penrith City increased by 2,851 between 2008/09 and 2013/14, with the largest changes in employment being for people employed in:

- Wholesale Trade (+1,091 persons)
- Retail Trade (+914 persons)
- Health Care and Social Assistance (+863 persons); and
- Accommodation and Food Services (-666 persons)

The economic impacts of disasters or emergencies can potentially be devastating given that dwellings, business, and community infrastructure can be damaged and services disrupted with a flow on effect on employment.

Businesses and households experience a range of impacts both direct and indirect which, depending on the nature of the emergency/disaster and its severity, that have long and short term effects.

Direct impacts result from flood, storm, wind, and bushfire or fire damage to crops, and damage to commercial/ residential/and public buildings and infrastructure including roads and services. Indirect impacts result from disruptions to communications and transport networks.

Indirect impacts may impact on tourism, workers and businesses due to trade losses, loss of social and business networks and interruptions to the natural resource/raw materials and product supply chains.

Historical data indicates that the emergencies or disasters most likely to occur in the Penrith Local Government Area are low impact and short term bushfire and flood (riverine and flash flooding) emergencies which will have a short term effect but are unlikely to have a long term effect the local Penrith economy.

Employment (total) by industry

Penrith City	2013/14			2008/09			Change
Industry	New South			New South			2008/09 to
	Number	%	Wales%	Number	%	Wales%	2013/14
Agriculture, Forestry and Fishing	758	1.1	2.3	666	1.0	2.6	+92
Mining	307	0.4	1.0	156	0.2	0.9	+152
Manufacturing	7,553	10.7	7.9	7,929	11.7	9.3	376
Electricity, Gas, Water and Waste Services	942	1.3	1.2	1,118	1.7	1.1	176
Construction	5,470	7.8	7.7	5,540	8.2	7.7	70
Wholesale Trade	3,404	4.8	4.6	2,313	3.4	4.8	+1,091
Retail Trade	9,504	13.5	10.2	8,590	12.7	10.6	+914
Accommodation and Food Services	5,560	7.9	7.0	6,226	9.2	6.6	666
Transport, Postal and Warehousing	3,410	4.8	5.2	3,677	5.4	5.3	267
Information Media and Telecommunications	683	1.0	2.5	529	0.8	2.5	+154
Financial and Insurance Services	965	1.4	5.4	830	1.2	5.4	+135
Rental, Hiring and Real Estate Services	1,051	1.5	1.8	987	1.5	1.8	+64
Professional, Scientific and Technical Services	2,357	3.3	8.6	2,134	3.2	8.1	+223
Administrative and Support Services	1,753	2.5	3.5	1,993	2.9	3.3	240
Public Administration and Safety	5,400	7.7	6.2	4,754	7.0	6.2	+646
Education and Training	7,581	10.8	8.2	7,498	11.1	7.8	+83

Penrith City	2013/14			2008/09			Change
Industry	New South			New South 2008/09 to			
Health Care and Social Assistance	9,605	13.6	11.3	8,742	12.9	10.8	+863
Arts and Recreation Services	1,165	1.7	1.5	1,007	1.5	1.4	+158
Other Services	2,975	4.2	4.1	2,903	4.3	3.9	+72
Total Industries	70,443	100.0	100.0	67,592	100.0	100.0	+2,851

Registered businesses by industry

Penrith City Total	2013			2009			Change
		New South		New South		2009 to	
Industry	Number	%	Wales %	Number	%	Wales %	2013
Agriculture, Forestry and Fishing	305	2.5	6.7	340	2.7	7.3	35
Mining	19	0.2	0.2	26	0.2	0.2	7
Manufacturing	692	5.6	3.6	743	5.9	4.0	51
Electricity, Gas, Water and Waste Services	52	0.4	0.2	60	0.5	0.2	8
Construction	2,885	23.3	14.2	3,094	24.4	15.4	209
Wholesale Trade	452	3.7	3.8	497	3.9	4.0	45
Retail Trade	794	6.4	6.6	870	6.9	7.0	76
Accommodation and Food Services	315	2.5	4.0	320	2.5	4.0	5
Transport, Postal and Warehousing	1,265	10.2	6.0	1,408	11.1	6.4	143
Information Media and Telecommunications	73	0.6	1.2	77	0.6	1.2	5
Financial and Insurance Services	638	5.2	8.5	529	4.2	7.8	+109
Rental, Hiring and Real Estate Services	1,287	10.4	11.0	1,356	10.7	11.3	69
Professional, Scientific and Technical Services	970	7.8	13.1	1,021	8.0	12.9	52
Administrative and Support Services	515	4.2	4.1	530	4.2	4.2	15
Public Administration and Safety	78	0.6	0.4	69	0.5	0.5	+8

Penrith City Total	2013			2009			Change
		New South			New South		2009 to
Education and Training	152	1.2	1.3	121	0.9	1.3	+32
Health Care and Social Assistance	551	4.5	5.7	502	4.0	5.2	+49
Arts and Recreation Services	149	1.2	1.4	162	1.3	1.5	14
Other Services	762	6.2	4.0	783	6.2	4.1	22
Industry not classified	428	3.5	4.0	182	1.4	1.6	+246
Total business	12,380	100.0	100.0	12,690	100.0	100.0	310

Workforce key statistics - All industries

Penrith City	2011			2006			Change
Name	Number	New South		New South		2006 to 2011	
		%	Wales %	%	Wales %		
Workforce	--	--	--	--	--	--	--
Total workforce (Census)	54,993	100.0	100.0	52,325	100.0	100.0	+2,668
Males	26,957	49.0	53.2	25,433	48.6	53.6	+1,524
Females	28,036	51.0	46.8	26,892	51.4	46.4	+1,144
Age structure	--	--	--	--	--	--	--
15 - 24 years	9,236	16.8	14.4	9,918	19.0	15.4	-682
25 - 54 years	35,848	65.2	67.8	34,850	66.6	69.2	+998
55 - 64 years	8,442	15.4	14.5	6,673	12.8	12.9	+1,769
65 years and over	1,467	2.7	3.4	884	1.7	2.6	+583

Penrith City	2011			2006			Change
Name	Number	New South		Number	New South		2006 to 2011
		%	Wales %		%	Wales %	
Top three industries	--	--	--	--	--	--	--
Health care and social assistance	7,691	13.8	11.6	6,750	12.8	10.5	+941
Retail trade	7,230	13.0	10.4	7,784	14.7	11.2	-554
Manufacturing	6,531	11.7	8.4	6,492	12.3	9.5	+39
Top three occupations	--	--	--	--	--	--	--
Hours worked	--	--	--	--	--	--	--
Full time	34,468	62.7	64.6	32,555	62.2	65.5	+1,913
Part time	19,793	36.0	34.0	18,715	35.8	32.6	+1,078
Qualifications	--	--	--	--	--	--	--
Bachelor or higher degree	11,374	20.7	28.2	9,520	18.2	24.4	+1,854
Advanced diploma or diploma	5,165	9.4	10.6	4,295	8.2	9.8	+870
Certificate level	1,110	2.0	2.0	1,256	2.4	2.4	-146

Penrith City	2011			2006			Change
Name	Number	New South		Number	New South		2006 to 2011
		%	Wales %		%	Wales %	
No qualifications	23,942	43.5	34.6	23,797	45.5	38.3	+145
Individual Income	--	--	--	--	--	--	--
\$0-\$599	16,722	30.4	27.7	--	--	--	--
\$600-\$1249	23,740	43.2	39.8	--	--	--	--
\$1250 or more	13,824	25.1	31.1	--	--	--	--
Method of Travel to Work	--	--	--	--	--	--	--
Car	41,043	74.6	62.9	37,608	71.9	62.4	+3,435
Public Transport	2,347	4.3	13.8	2,053	3.9	12.4	+294
Bicycle	244	0.4	0.8	302	0.6	0.7	-58
Walked only	1,201	2.2	4.1	1,391	2.7	4.5	-190

Annexure B – Hazards and Risks Summary

A Local Emergency Risk Management (ERM) Study has been undertaken by the Penrith 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. The Penrith Local Emergency Risk Management Study should be referenced to identify the complete list of consequences and risk descriptions.

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	Moderate	High	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.	Rare	Major	High	SEOCN
Building Collapse	Collapse of building owing to structural failure or impact from external/internal event of other hazards /incidents.	Rare	Major	High	FRNSW (USAR) LEOCN
Communicable Disease - Human	Pandemic illness that affects, or has potential to affect, large portions of the human population	Possible	Major	Extreme	Ministry 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	Major	Low	NSW SES
Earthquake	Earthquake of significant strength that results in localised or widespread damage.	Rare	Major	Low	EOCON
Fire (Bush or Grass)	Major fires in areas of bush or grasslands.	Likely	Major	High	NSW RFS FRNSW
Fire (Industrial)	Serious industrial fire in office complexes and/or warehouses within industrial estates.	Possible	Major	High	FRNSW NSW RFS
Fire (Commercial)	Serious commercial fires in shopping centres, aged persons units, nursing homes and hospitals.	Possible	Major	High	FRNSW NSW RFS
Fire (Residential)	Serious residential fire in medium/high rise apartments.	Possible	Major	Low	FRNSW NSW RFS
Flood (Flash)	Heavy rainfall causes excessive localised flooding with minimal warning time	Likely	Minor	High	NSW SES

Hazard	Risk Description	Likelihood Rating	Consequence Rating	Risk Priority	Combat / Responsible Agency
Flood (Riverine)	River flows exceed the capacity of normal river systems resulting in flood waters escaping and inundating river plains	Rare	Major	High	NSW SES
Hazardous Release	Hazardous material released as a result of an incident or accident.	Possible	Major	High	FRNSW
Heatwave	A sequence of abnormally hot conditions having the potential to affect a community adversely.	Possible	Major	Extreme	SEOCON
Landslip	Landslip/landslide resulting in localised or widespread damage.	Unlikely	Insignificant	Low	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.	Unlikely	Moderate	Low	LEOCON

Hazard	Risk Description	Likelihood Rating	Consequence Rating	Risk Priority	Combat / Responsible Agency
Transport Emergency (Rail)	A major rail accident that disrupts one or more major transport routes that can result in risk to people trapped in train carriages, restrict supply routes and/or protracted loss of access to or from the area.	Unlikely	Moderate	Low	LEOCON
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.	Rare	Moderate	Low	LEOCON
Transport Emergency (Sea)	A major accident that results in environmental damage and major recovery operation	Unlikely	Minor	Low	Relevant Port / Maritime Authority
Utilities Failure	Major failure of essential utility for unreasonable periods of time as a result of a natural or man-made occurrence.	Possible	Moderate	Low	LEOCON (monitoring)

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 Penrith 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 LEMO on behalf of the LEMC and public release versions are available on the Council Website.

Plan/Policy	Purpose	Combat / Responsible Agency
Hawkebury Nepean Flood Emergency State Plan	This Plan covers the preparedness measures, the conduct of response operations and coordination of immediate recovery measures for all levels of flooding on the Nepean River	NSW State Emergency Service
City of Penrith Local Flood Plan 2012	This Plan covers the preparedness measures, the conduct of response operations and coordination of immediate recovery measures for all levels of flooding on the Nepean River within the boundaries of the Penrith City.	NSW State Emergency Service

Plan/Policy	Purpose	Combat / Responsible Agency
<p>State Agriculture and Animal Services Functional Area Supporting Plan</p>	<p>This supporting plan details the control and coordination arrangements for the use of all agricultural and animal resources available within the State to the Agriculture and Animal Services Functional Area Coordinator for the prevention of, preparedness for, response to, and recovery from the impact and effects of an emergency</p>	<p>Department of Primary Industries/Local Land service.</p>