

Far West Regional Emergency Management Plan February 2021

Parts 1 - 4

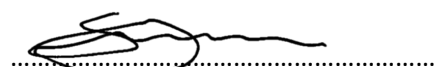


Part 1 – Administration

Authority

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

APPROVED



**Regional Emergency Operations Controller
Far West Regional Emergency Management Committee Chair**

Dated: 1 March 2021

ENDORSED

Endorsed by NSW SEMC at Meeting 120

.....

**Chair
State Emergency Management Committee**

Dated: 18 March 2021

Contents	
Part 1 – Administration	2
AUTHORITY	2
PURPOSE	4
OBJECTIVES	4
SCOPE	4
PRINCIPLES	4
ACTIVATION, ESCALATION & DEMOBILISATION	5
Activation Triggers:	5
Escalation Triggers:	5
CONTROL, COMMAND AND COORDINATION STRUCTURE	6
TEST AND REVIEW PROCESS	7
Part 2 – Context & Risk Assessment	8
Annexure A – Regional Profile	8
GENERAL	8
BOUNDARIES	8
State Borders	8
Time Zones	8
Emergency Service Organisation Boundaries	8
Boundary Alignments, Forecast And Operational Areas	9
Local Government Areas	11
The Unincorporated Area	12
EM Region Boundaries	12
LANDFORM AND TOPOGRAPHY	13
General Landforms	13
NATIONAL PARKS AND NATURE RESERVES	15
WATER FEATURES	18
Weirs	18
Dams	18
Water Storages	19
Water Catchments	19
CLIMATE	20
Climate Change	20
Rainfall	21
Temperatures	22
LAND USE	24
POPULATION AND PEOPLE	26
Population and People	26
Indigenous representation in communities	26
Population Trends	27
Age Distribution	28
Language Spoken	28
Vehicles and mode of transport	29
Home ownership and renters	29
Employment and employment types	30
People in the workforce	30
TRANSPORT ROUTES AND FACILITIES	31
Rail Transport	31
Roads	32
Approximate Highway Vehicle traffic	33
Distance between centres matrix	34
Air transport	34
Fuel supplies	35
ECONOMY AND INDUSTRY	36
Agriculture	36
Horticulture	37
Mining	37
Tourism & Hospitality	37
Annexure B – Hazards and Risks Summary	38
HISTORICAL EVENTS	44
Riverine floods	44
Localised flash flooding	44
Fires	44
Motor Vehicle Collisions	44
Part 3 – Local Emergency Management Plans	46
Annexure C – Local EMPLAN Inventory	46
ENDORSED LOCAL EMPLANS AND CMGS	46
KEY REGIONAL PLANNING CONSIDERATIONS FOR HAZARDS	48
Part 4 – Sub Plans and Supporting Plans	58
Annexure D – Regional Sub Plan and Supporting Plan Matrices	58
MAJOR HAZARD FACILITIES	58
COMBAT AGENCY SUB PLANS	59
FUNCTIONAL AREA SUPPORTING PLANS	61

Purpose

Details arrangements for, prevention of, preparation for, response to and recovery from emergencies within the Emergency Management Region covered by this plan.

It encompasses arrangements for:

- emergencies controlled by combat agencies;
- emergencies controlled by combat agencies and supported by the Regional Emergency Operations Controller (REOCON);
- emergency operations for which there is no combat agency;
- circumstances where a combat agency has passed control to the REOCON; and,
- demobilisation and transition of control from response to recovery.

Objectives

The objectives of this plan are to:

- support Local Emergency Management Plans (EMPLANS) and augment them when required;
- identify trigger points for regional level activation, escalation and demobilisation;
- define participating organisation and Functional Area roles and responsibilities in preparation for, response to and recovery from emergencies;
- set out the control, co-ordination, support and liaison arrangements at the Regional level;
- detail activation and alerting arrangements for involved agencies at the Regional level; and
- detail arrangements for the acquisition and co-ordination of resources at the Regional level.

Scope

The plan describes the arrangements at Regional 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. Further:

- This plan relies on effective implementation of the Governance framework for Emergency Management;
- 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 Region if they are needed.
- e) The Regional Emergency Operations Controller (REOCON) is responsible, when requested by a combat agency, to co-ordinate the provision of resources support. EOCONs 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 State Emergency Operations Controller (SEOCN) 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.

Activation, Escalation & Demobilisation

There are a number of Activation, Escalation and Demobilisation triggers that initiate and conclude this Regional EMPLAN or elevation of the emergency to a State level.

ACTIVATION TRIGGERS:

Support

- Designated Combat Agency has a regional level plan for emergency response;
- Whenever there is an impending or unforeseen emergency operation and Regional level support resources may be required;

Control

- Where there is no designated Combat Agency and a regional level response is required;
- Where it is necessary to coordinate two or more local level operations which are controlled by Emergency Operations Controllers;
- When the REOCON considers it necessary;
- When directed by the SEOCN to take control of an emergency response.

ESCALATION TRIGGERS:

Local to Regional

- When an emergency grows beyond the capability of a Local EOC;
- When the emergency crosses two or more local emergency management boundaries and the change in control level may improve the situation;
- When significant Political, Environmental, Social, Technological or Economic impacts are foreseen;
- When directed by the SEOCN.

Regional to State

- When an emergency grows beyond the capability of a Regional EOC;
- When the emergency crosses two or more Regional emergency management boundaries and the change in control level may improve the situation;
- When significant Political, Environmental, Social, Technological or Economic impacts are foreseen;
- When directed by the SEOCN.

Demobilisation Triggers:

- When it is determined that the incident has scaled back to the extent a regional level response is no longer required;
- When the response has transitioned into a longer-term recovery process and an appropriate handover to a recovery coordinator or committee occurs;
- When it is determined that no further control or support is required for the emergency.

Note: The REMC may identify specific Regional triggers for activation, escalation and demobilisation beyond those listed above.

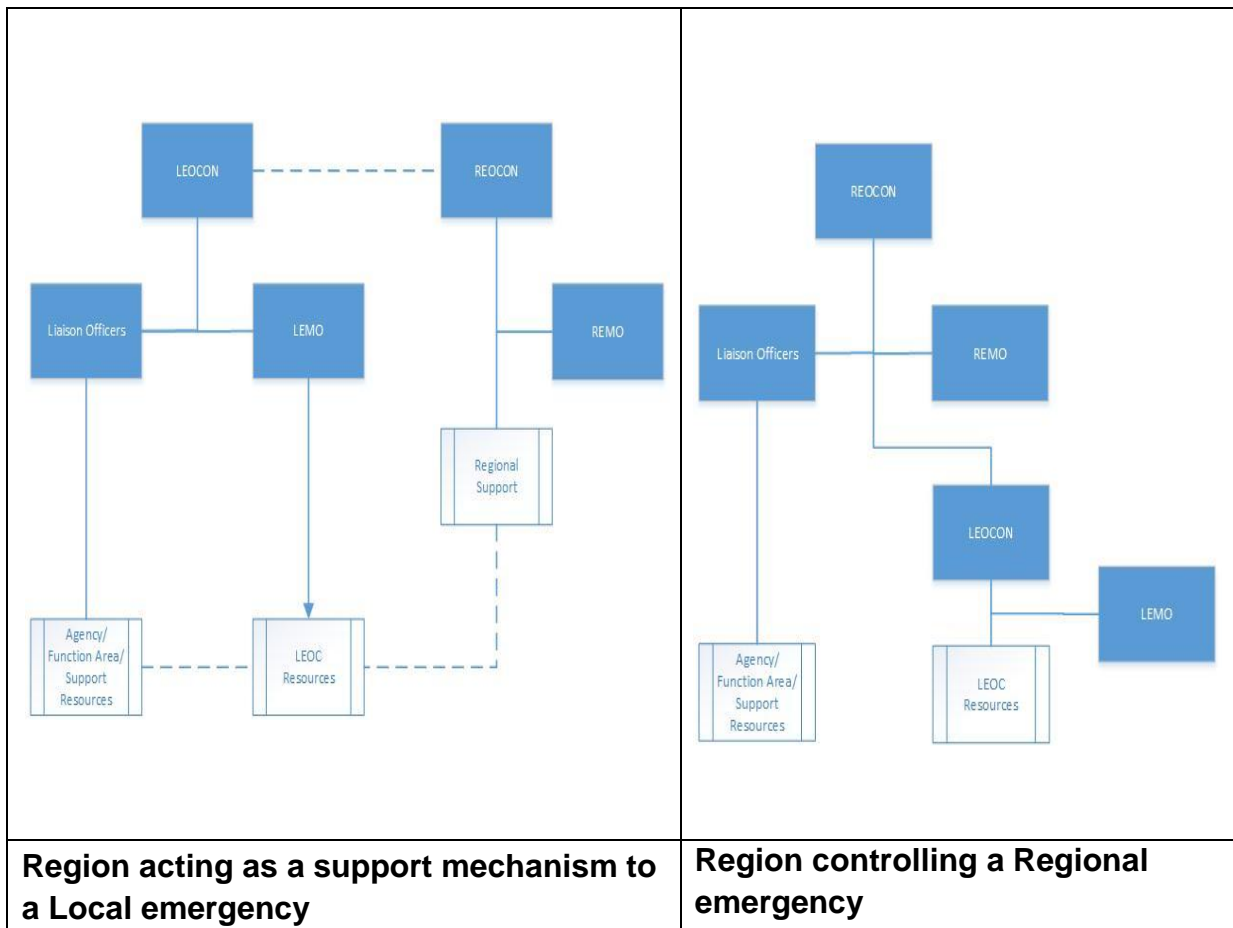
Control, Command and Coordination Structure

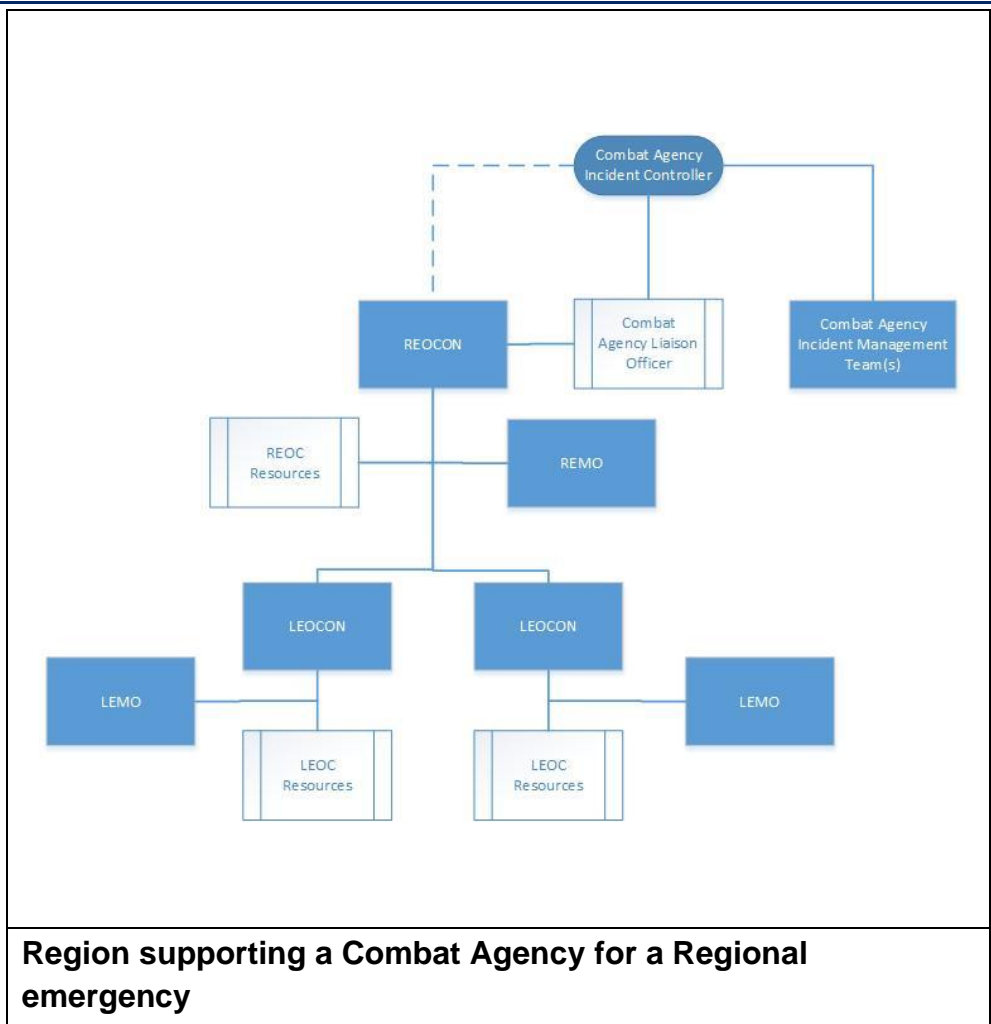
The Control, Command and Coordination (CCC) structure will vary according to the role that the Regional level response is taking. There are three standard structures that typically arise according to the role taken by the REOCON and REMC:

1. The Region acting as a support mechanism to a Local emergency;
2. The Region supporting a Combat Agency for a Regional emergency ;
3. The Region controlling a Regional emergency.

A solid line indicates a direct link and a dotted line represents an information link.

Note: the specific CCC structure can vary according to the type of emergency and should be confirmed on each occasion between stakeholders with the standard arrangements considered.





Test and Review Process

The Far West Regional Emergency Management Committee (REMC) will review this Plan every three (3) years as a part of the continuous improvement cycle, or following any:

- Significant Regional change such as boundary changes, Agency/Functional Area/Supporting organisation changes, facilities, etc;
- activation of the Plan in response to an emergency;
- legislative changes affecting the Plan;
- reviews, inquiries and lessons learned that are relevant to the purpose of the plan;
- exercises conducted to test all or part of the Plan.

Part 2 – Context & Risk Assessment

Annexure A – Regional Profile

General

The Far West Emergency Management Region covers 314,486 Km² or 39% of New South Wales. The Region stretches from the vast pastoral areas of Brewarrina, through the historically significant mining centres of Cobar and Broken Hill, to the Murray River horticultural townships of Wentworth and Balranald.

The Region is characterised by sparse population and great distances between cities, towns and settlements. Most of the Region's Local Government Areas are larger than many of the Emergency Management Regions in the state but with generally far fewer inhabitants or resources.

The Region includes the Local Government Areas of Balranald, Bogan, Bourke, Brewarrina, Broken Hill, Central Darling, Cobar, Wentworth as well as the Unincorporated Area of NSW.

The Far West Region's major centre is Broken Hill with 43% of the population. This is also the smallest local government area at only 170 Km² which equates to little more than the external boundary of the city. Broken Hill is only 50km from the South Australian border at the western end of the Region. Broken Hill is also a central hub for many State Agencies in the Region.

The Unincorporated Area, which covers 30% of the Region, has no local government control. The area has the small settlements of Tibooburra, Milparinka, Packsaddle and Silverton.

The whole Region challenges all emergency responses with large distances, small populations, resource limitations, a large unsealed road network, limited communications infrastructure and climatic extremes.

Most Rescue Agencies have representation in the Region although smaller communities rely on the volunteer agencies of SES, RFS, and VRA who often struggle to retain operational members.

Boundaries

STATE BORDERS.

The Region is bounded by the River Murray and Victorian Border in the south, the South Australia border in the west, the Queensland Border in the north, and the eastern extremities of the Brewarrina, Bogan, Cobar, Central Darling and Balranald LGA's.

TIME ZONES.

The Region is unique in NSW as having 2 time zones. Whilst the majority of the Region operates under Eastern Standard Time, Broken Hill operates under Central Standard Time. This time zone includes a 50km radius around Broken Hill. This is an unexpected revelation for many agencies and organisations and may initially pose minor confusion with the management of incidents or emergencies for Region level resources. This is especially conspicuous in agency's communications and information technology systems which usually run on Eastern Standard Time.

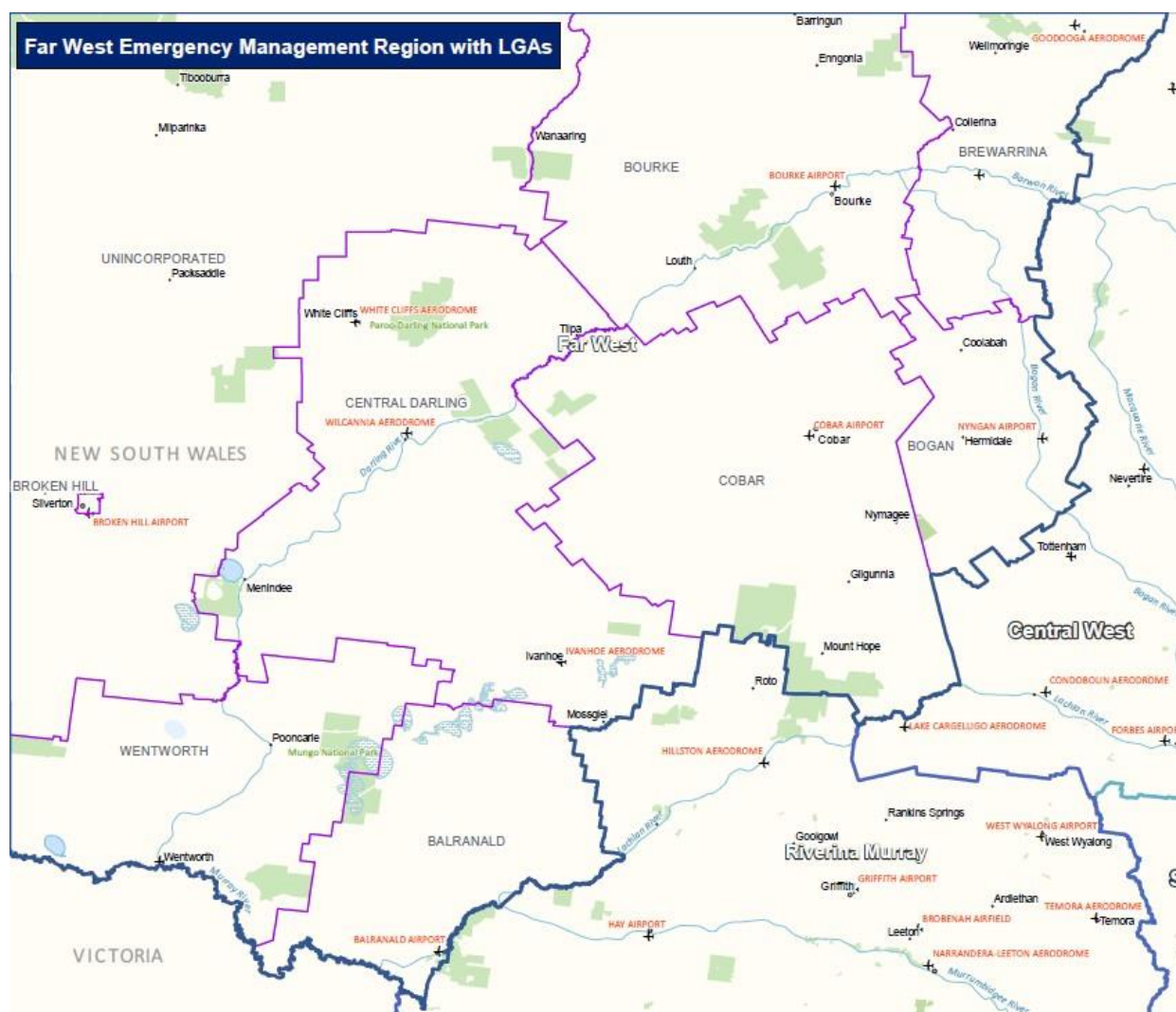
EMERGENCY SERVICE ORGANISATION BOUNDARIES.

Emergency Service Organisation boundaries broadly align with Local Government Areas in most instances but each agency defines a different border for their Regions, Zones, Districts and Areas. See their websites for details. The table below identifies some organisation boundaries.

Boundary Alignments, Forecast And Operational Areas.										
LGA	Towns/ Villages	Police District	SES Zone	RFS Fire Control Centre	FRNSW Region	Health District	Local Land Service Region	BoM Weather Forecast Area	Fire Weather Districts	BoM Flood Watch Area
Balranald	Balranald Euston	Barrier	Southern	Dareton	Region West 3	Far West LHD	Western	Lower Western	South Western	6-Willandra Lakes. 8-Murray River downstream of Tocumwal 13-Lower Murrumbidgee River
Bogan	Nyngan Hermidale Coolabah	Central North	Western	Coonamble	Region West 1	Western LHD	Central West	Central West Slopes and Plains	Upper Central West Plains	19-Bogan River
Bourke	Bourke Enngonia Wanaaring Louth	Central North	Western	Bourke	Region West 1	Western LHD	Western	Upper Western	Far Western	7-Darling River. 10-Mount Gunderbooka to Wokabity Lake. 12-Warrago River (NSW). 18-Culgoa Birrie Bokhara and Narran Rivers.
Brewarrina	Brewarrina Weilmoringle Goodooga	Central North	Western	Brewarrina	Region West 1	Western LHD	Western	Upper Western	Far Western	4-Bynguano-Lower Barrier Ranges. 7-Darling River. 17-Wallam and Mungallala Creeks. 18-Culgoa Birrie Bokhara and Narran Rivers. 21-Barwon River

Boundary Alignments, Forecast And Operational Areas.										
LGA	Towns/ Villages	Police District	SES Zone	RFS Fire Control Centre	FRNSW Region	Health District	Local Land Service Region	BoM Weather Forecast Area	Fire Weather Districts	BoM Flood Watch Area
Broken Hill	Broken Hill	Barrier	Western	Cobar	Region West 3	Far West LHD	Western	Lower Western	Far Western	4-Bynguano-Lower Barrier Ranges.
Central Darling	Wilcannia Menindee Ivanhoe White Cliffs Tilpa Mossgiel	Barrier	Western	Cobar	N/A	Far West LHD	Western	Upper Western & Lower Western	Far Western	7-Darling River. 9-Paroo River (NSW). 10-Mount Gunderbooka to Wokabity Lake.
Cobar	Cobar Nymagee Gilgunnia Mount Hope	Central North	Western	Cobar	Region West 1	Western LHD	Western	Upper Western and Lower Western	Far Western	10-Mount Gunderbooka to Wokabity Lake.
Wentworth	Wentworth Dareton Buronga Gol Gol Pooncarie	Barrier	Western	Dareton	Region West 3	Far West LHD	Western	Lower Western	South Western	2-Danggali Rivers and Creeks. 4-Bynguano-Lower Barrier Ranges. 6-Willandra Lakes. 7-Darling River.
Unincorporated Area	Tibooburra Milparinka Silverton Packsaddle	Barrier	Western	Cobar	N/A	Far West LHD	Western	Upper Western and Lower Western	Far Western	1-Lake Frome. 2-Danggali Rivers and Creeks. 3-Cooper Creek. 4-Bynguano-Lower Barrier Ranges. 5-Bulla-Bancannia District.

LOCAL GOVERNMENT AREAS.



LGA	Council Seat	Area km ² (% of Region)	Population	State Electorate
Balranald	Balranald	21,693 (7%)	2,287	Murray
Bogon	Nyngan	14,611 (5%)	2,692	Barwon
Bourke	Bourke	41,679 (13%)	2,834	Barwon
Brewarrina	Brewarrina	19,188 (6%)	1,651	Barwon
Broken Hill	Broken Hill	170 (<0.1%)	17,708	Barwon
Central Darling	Wilcannia	53,511 (17%)	1,833	Barwon
Cobar	Cobar	44,065 (14%)	4,647	Barwon
Unincorporated Area	None	93,300 (30%)	1,056	Barwon
Wentworth	Wentworth	26,269 (8%)	6,794	Murray
Total:	8	314,486 (100%)	41,502	2

THE UNINCORPORATED AREA¹

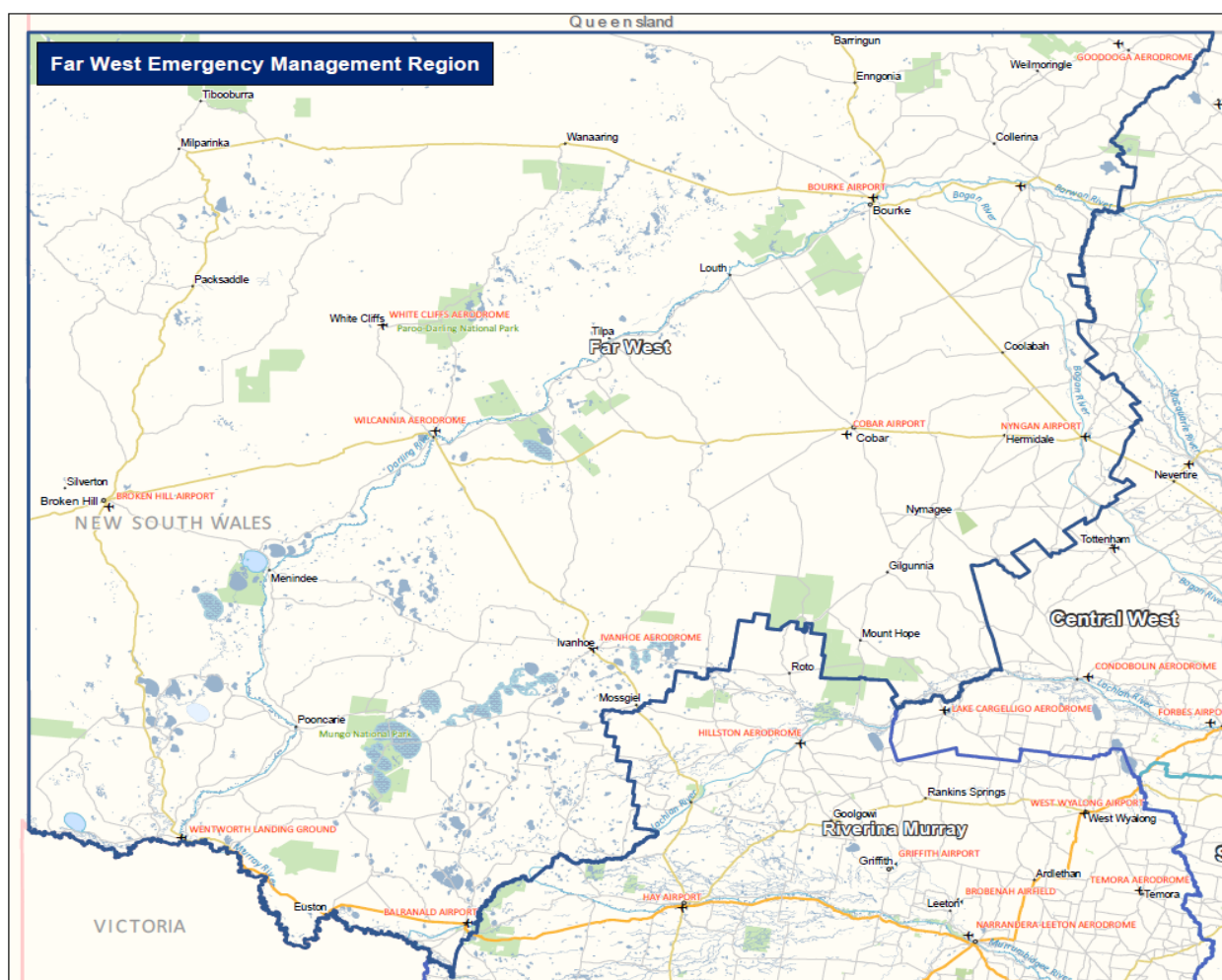
The Unincorporated Area is not governed by a local council and forms part of the Western Division. It includes the communities of Silverton, Tibooburra and Milparinka. The Unincorporated Area also has many Local Aboriginal Land Council groups, including Tibooburra, Wanaaring, Mutawintji, Wilcannia, Menindee, Broken Hill and Dareton.

There are limited planning controls on freehold land in the Unincorporated Area to guide land use and related decision-making or any applicable formal governance and planning arrangements. The Unincorporated Area has significant heritage features such as Mutawintji National Park and rock art (engravings and paintings) and environmental assets with limited protection. Similarly, there are no local planning controls or guidance on development thresholds and the community has a limited say in land use development and management.

In the absence of a local government authority, the appropriate government agencies now have responsibility for the management of the area.

EM REGION BOUNDARIES.

The Far West Region is bounded by the state borders of Victoria, South Australia and Queensland. The eastern end of the Region is bounded by the Central West EM Region in the north and the Riverina Murray Region in the south.



¹ Far West Regional Plan 2036 (2017)

Landform and Topography

GENERAL LANDFORMS

The Far West Region spans 8 main bioregions;²

- Broken Hill Complex Bioregion,

The Broken Hill Complex Bioregion in western NSW is geologically unique in the state. The western half is composed of ancient basement rocks of the Adelaide Fold Belt, and the eastern half is the edge of the much younger rocks of the Tasman Fold Belt. Many of the rocks and minerals found in the region are of considerable interest and economic importance, and geology exerts strong controls on the landscape.
- Cobar Peneplain Bioregion,

The Cobar Peneplain is a prominent topographical landscape of rolling downs and flat plains punctuated by stony ridges and ranges and is formed on the north-westerly extension of the Lachlan Fold Belt. The more elevated areas of the Cobar Peneplain are characterised by shallow, red soils and aeolian sands associated with the Darling River and the Murray Basin mantle in the lower areas in the west and south, while alluvial deposits from the Bogan River fringe the Peneplain in the east.
- Channel Country Bioregion,

The Channel Country Bioregion is a region of extensive stream systems draining to Lake Eyre. Multiple river channels, very wide floodplains and large waterholes crisscross this subdued landscape of gibber plain, low stony rises and dunefields.
- Simpson-Strzelecki Dunefields Bioregion,

The Simpson-Strzelecki Dunefields are part of the Australian continental dunefields, which consist of a huge anti-clockwise whorl of linear dunes in central Australia. Most of the dunefield lies in the Lake Eyre Basin and the edge of the region extends into the NSW corner country. The region is dominated by high linear dunes of red sand.
- Murray Darling Depression Bioregion,

The Murray Darling Depression Bioregion lies in the Murray Basin on Tertiary and Quaternary sediments deposited from a shallow sea, lakes and rivers. The bioregion extends into Vic and SA.

The landscape is characterised by dunefields, sandplains and undulating plains of brown calcareous soils. There is very little structured drainage but numerous lakes, swamps and depressions are present, some of which are driven by saline groundwater.
- Riverina Bioregion,

The Riverina covers the alluvial fans of the Lachlan, Murrumbidgee and Murray Rivers west of the Great Dividing Range and extends down the Murray. Much of the geology and geomorphology of the region is similar to that of the Darling Riverine Plains Bioregion. The upper catchment landscape is a series of overlapping, low gradient alluvial fans. The lower tract of the river is a floodplain with overflow lakes. Discharge from past and present streams control patterns of sediment deposition, soils, landscapes and vegetation.
- Mulga Lands Bioregion,

Only a few areas of Palaeozoic bedrock are found in the bioregion, where resistant quartz sandstones emerge from the Cretaceous and Quaternary blankets of sediment. These form low rounded isolated ranges and hills such as Mt Pleasant and could be considered as outliers of the Cobar Peneplain Bioregion.

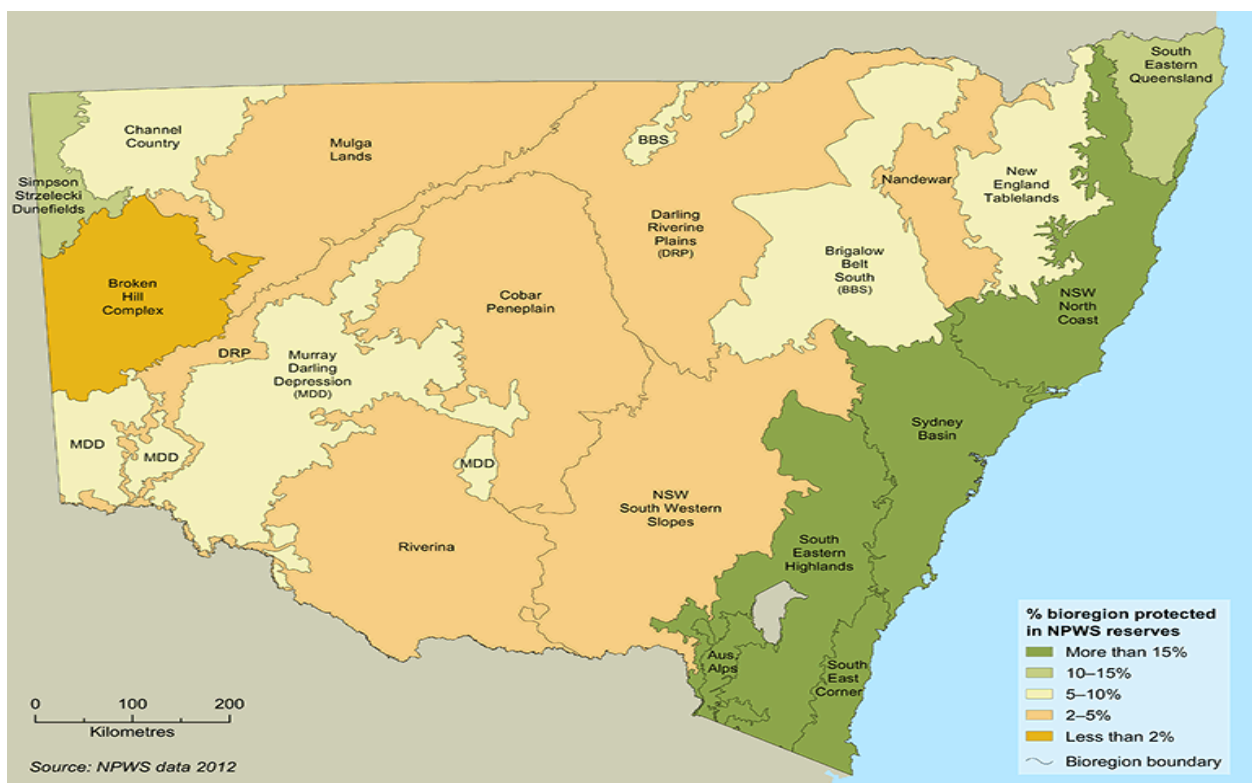
² NSW Planning, Industry & Environment.

- Darling Riverine Plains Bioregion

The Darling Riverine Plains Bioregion occupies most of the upper catchments of the Darling and Barwon Rivers in northern NSW and southern Qld and includes the channels and floodplains of the lower reaches of these catchments.

The upper catchment landscape is a series of overlapping, low gradient alluvial fans. The lower tract of the river is a narrow floodplain confined between bedrock landscapes, or by extensive sandplains and dunefields.

Discharge from past and present streams control patterns of sediment deposition, soils, landscapes and vegetation. Much of the geology and geomorphology of the region is similar to that of the Riverina Bioregion.



NSW Bioregions

National Parks and Nature Reserves

More than 14% of the Far West EM Region is made up of National Parks and Nature Reserves. All are administered by the National Parks and Wildlife Service (NPWS) which has significant representation in many townships in the Region. They have invaluable resources such as quad bikes, motor bikes and other vehicles as well as many well trained staff to assist with fires and land searches. NPWS have significant on-park fire-fighting resources which can be called upon to assist most local or regional emergencies.

LGA	Name	Location	Km ²	Administration	Information
Balranald	Mungo National Park	100km North East of Dareton, 70km south east Pooncarie	1,110	National Parks and Wildlife Service	Drones, pets and smoking prohibited. Is part of the Willandra Lakes Region World Heritage Area. The region abounds in ancient cultural and archaeological treasures. Pets and smoking prohibited.
	Yanga National Park	10km East of Balranald	311	National Parks and Wildlife Service	Pets and smoking prohibited. Long Aboriginal history in the area.
Bogan	Quanda Nature Reserve	50km South West of Nyngan	47	National Parks and Wildlife Service	Originally the Reserve was conserved as mallee fowl habitat. Pets and smoking prohibited.
Bourke	Gundabooka National Park	50km South of Bourke	639	National Parks and Wildlife Service	Pets and smoking prohibited. Gunderbooka range is highly significant to the Ngemba and Kurnu Baakandji people of western NSW.
	Gundabooka State Conservation Area	50km South of Bourke	254	National Parks and Wildlife Service	The area is of great significance to the local Ngemba People. Pets and smoking prohibited.
	Ledknapper Nature Reserve	40km East of Enngonia.	478	National Parks and Wildlife Service	Pets and smoking prohibited.
	Toorale National Park	Between Bourke and Louth	308	National Parks and Wildlife Service	Pets and smoking prohibited. This country between the Warrego and Darling rivers is of spiritual and cultural significance to Kurnu-Baakandji People.
Brewarrina	Culgoa National Park	15km North of Weilmoringle. 180km from Bourke	428	National Parks and Wildlife Service	Pets and smoking prohibited. Murrawarri people, from the Gandugari group, consider this traditional land
Central Darling	Kinchega National Park	5km West of Menindee	442	National Parks and Wildlife Service	Pets, firewood collecting and smoking prohibited. The traditional land of the Paakantji nation

LGA	Name	Location	Km ²	Administration	Information
	Morrison's Lake Nature Reserve	20km south of Ivanhoe	3	National Parkes and Wildlife Service	Pets and smoking prohibited. Roosting and breeding sites for a number of waterbirds. A terminal drainage basin on Willandra Creek.
	Paroo-Darling National Park	North East of White Cliffs	1,781	National Parkes and Wildlife Service	Pets and smoking prohibited. Traditional home of the Ngiyeempaa and Paakantyi people. No pets allowed. The park is a historically and culturally important site.
	Paroo-Darling State Conservation Area	30km East of Wilcannia	415	National Parkes and Wildlife Service	Pets and smoking prohibited.
Cobar	Balowra State Conservation Area	20km south of Nymagee	17	National Parkes and Wildlife Service	Pets and smoking prohibited.
	Nombinnie State Conservation Area	170 km South of Cobar	460	National Parkes and Wildlife Service	Pets and smoking prohibited.
	Round Hill Nature Reserve	170km south of Cobar	136	National Parkes and Wildlife Service	Pets and smoking prohibited.
	Yathong Nature Reserve	120km South West of Cobar, 120km East of Ivanhoe	1072	National Parkes and Wildlife Service	Pets and smoking prohibited.
Unincorporated Area of NSW	Mutawintji National Park	140km West of White Cliffs West of White Cliffs	689	National Parkes and Wildlife Service	Pets and smoking prohibited.
	Mutawintji Nature Reserve	40km West of White Cliffs	69	National Parkes and Wildlife Service	Access only through permit for management, research etc for protection of yellow-footed rock wallaby. Pets and smoking prohibited.
	Mutawintji State Conservation Area	45km West of White Cliffs	570	National Parkes and Wildlife Service	Mutawintji State Conservation Area was created in August 2019. Pets and smoking prohibited.
	Narriearra Caryapundy Swamp National Park	40km East of Tibooburra	1,537	National Parkes and Wildlife Service	Closed to the public. Protecting threatened species, important habitat and wetlands. Pets and smoking prohibited.
	Nocoleche Nature Reserve	20km South of Wanaaring	747	National Parkes and Wildlife Service	Used for wetlands and water fowl research, feral animal research and educational activities. Pets and smoking prohibited.

LGA	Name	Location	Km ²	Administration	Information
	Sturt National Park	5km North of Tibooburra	32,530	National Parkes and Wildlife Service	The traditional land of the Wangkumara People. Wetland habitat and home to varied endangered species. Pets and smoking prohibited.
Wentworth	Mallee Cliffs National Park	30km East of Buronga	579	National Parkes and Wildlife Service	The park contains a number of isolated, relict, plant communities that demonstrate shifts in the pattern of vegetation arising from long-term environmental change.
	Nearie Lake Nature Reserve	80km North of Wentworth	43	National Parkes and Wildlife Service	Dominated by chenopod shrublands, while the lower flooding areas support black box, lignum and old man salt bush. Sandy ridges support belah-western rosewood woodlands.
	Tarawi Nature Reserve	100km North West of Wentworth	335	National Parkes and Wildlife Service	prime habitat for the endangered malleefowl. also features areas of Acacia wilhelmiana, and bluebush daisy, an endangered plant in NSW
Total:			45,000	>14% of the Far West Region	

Water Features

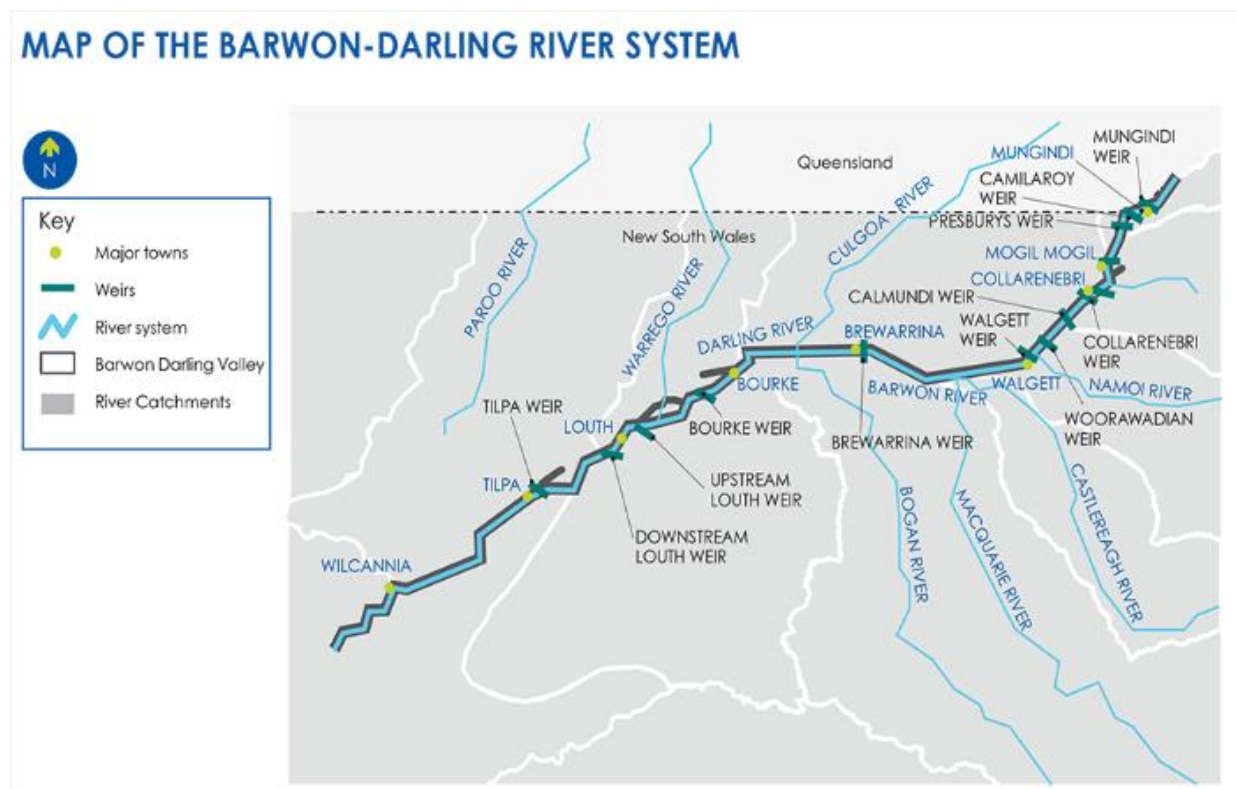
WEIRS

The Far West of NSW features numerous weirs to support the many communities and industries along the Barwon-Darling River systems. There are 29 weirs along the Barwon-Darling River and adjoining tributaries which improves water security to many river towns and communities.³

DAMS

The Far West has only 2 dams;⁴

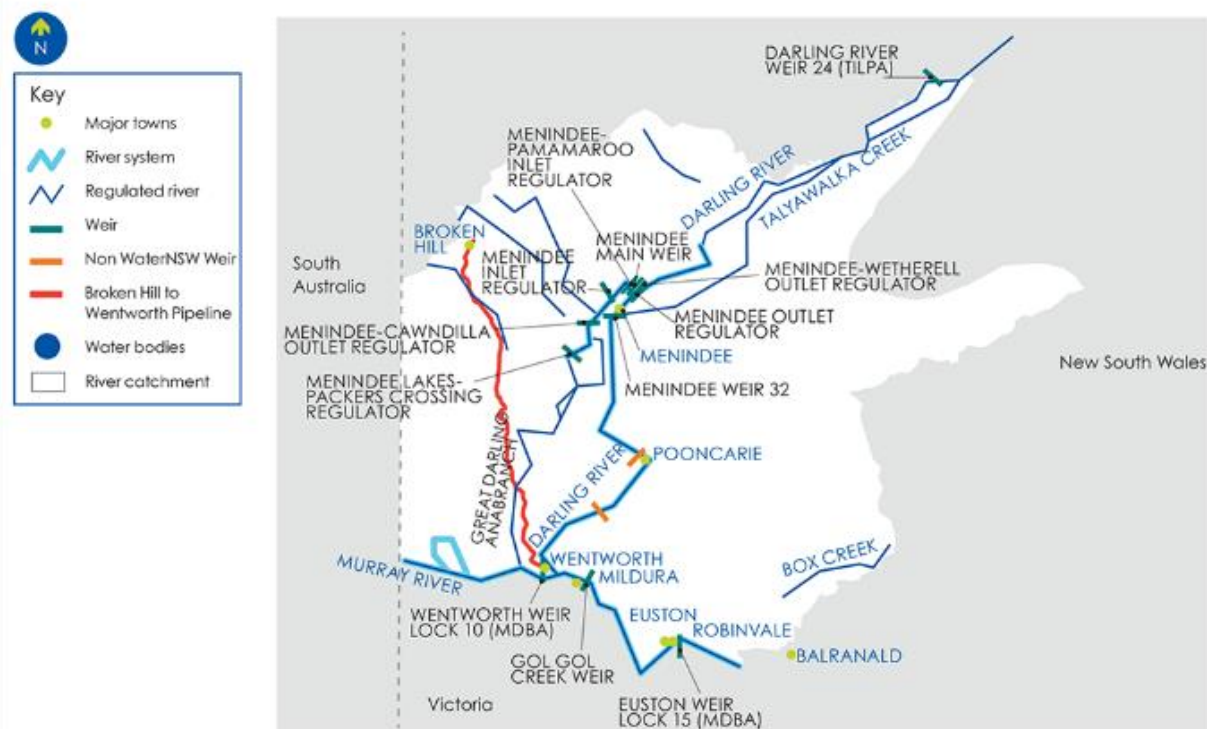
- Stephens Creek Dam 15km from Broken Hill, 2,000 ML capacity
- Umberumberka Dam 30km from Broken Hill, 1,950 ML. Scheduled for decommissioning.



³ Water NSW

⁴ Wikipedia.

MAP OF THE LOWER-DARLING RIVER SYSTEM



WATER STORAGES

There are numerous man made raised water storages in the region primarily for irrigation. Most are private storages but they include the Nyngan water security storage.

The Menindee Lakes⁵ were a series of shallow natural ephemeral lakes along the Darling River which have been developed into a water storage. When full they hold three and half times as much water as Sydney Harbour. Today the lakes supply water to meet irrigation, stock and domestic needs of landholders between Menindee and Wentworth, and supplement the River Murray system.

WATER CATCHMENTS⁶

Murray-Darling Basin

The Murray-Darling Basin is the catchment for the Murray and Darling Rivers and all their tributaries, covering most of inland NSW and extending from Queensland to South Australia. It is the twentieth largest river catchment in the world, covering more than a million square kilometres, and contains 22 major catchments.

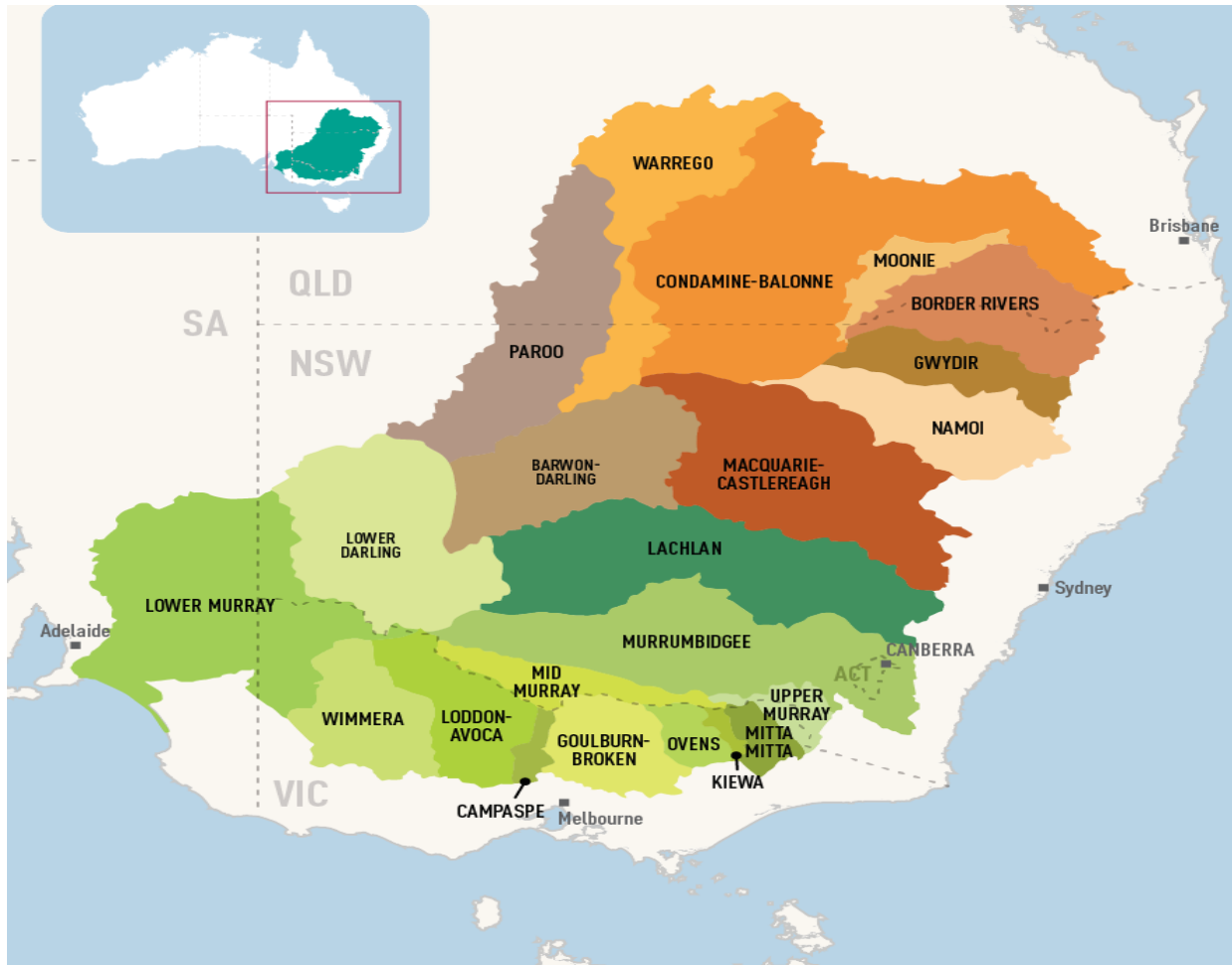
It is a significant area for food production and aquatic ecosystems. Appropriate water usage in the Basin is important, both nationally and for the more than two million people who live within the Basin.

All of the river catchments in the Murray-Darling Basin have historically led to various flood events in the Far West. Heavy rains in the eastern catchments also result in riverine flooding along the Barwon, Darling and other rivers as the water flows south west along the Darling to the Murray River.

SES, Local Government and supporting agencies are well practiced with the management of flood preparation, response and recovery in all of these catchments.

⁵ Water NSW

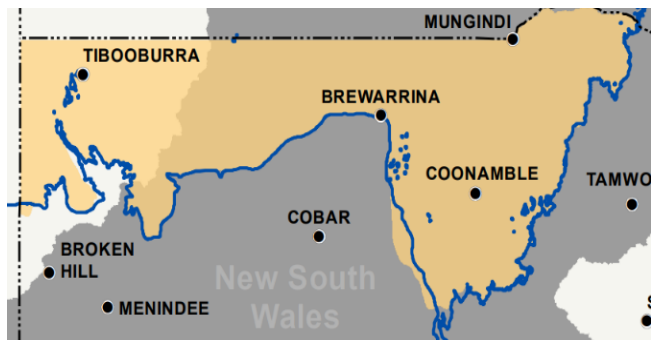
⁶ Water NSW



Murray-Darling Basin Catchments

Great Artesian Basin⁷

is one of the largest and deepest underground freshwater resources in the world. It lies below 22 percent of Australia, extending into Queensland, South Australia, NSW and Northern Territory. Nearly 25 per cent of NSW is covered by the GAB and extends to the some of the Local Government Areas of Brewarrina, Bourke, Central Darling and the Unincorporated Area.



Climate

CLIMATE CHANGE

The Far West like other NSW Regions is projected to be affected by climate change⁸ by experiencing;

- An increase in both minimum and maximum temperatures of up to 0.7°C by 2030 and by 2.1°C by 2070, particularly in the far north west;
- An increase in the number of hot days (above 35°C) per year, particularly in the northern parts of the region, with an extra 10-20 hot days by 2030, and around 30 by 2070;

⁷ Water NSW

⁸ Office of environment and Heritage, 2014, Far West Climate Change Snapshot.

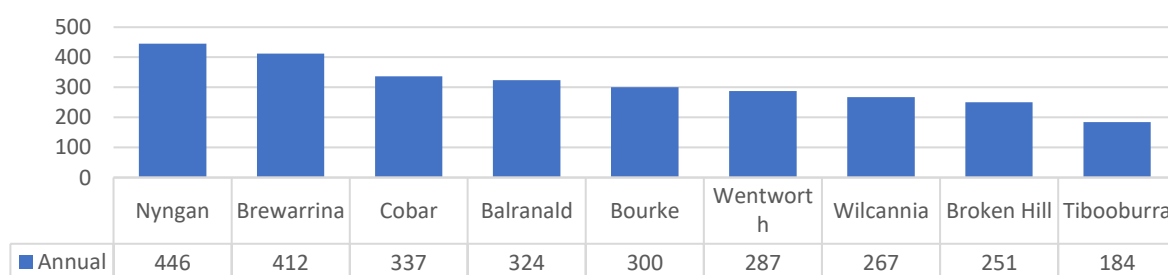
- Fewer cold nights (below 2°C) on average, with the greatest decrease in the number of cold nights likely to be in the south-east – between five and 10 fewer nights by 2030, and 10 and 20 fewer nights by 2070;
- Reduced rainfall in spring, and more rainfall in autumn, with the largest reduction in rainfall within the southern areas; and
- More intense periods of fire weather in the near future, including increased risk of bushfires and bushfire weather in spring and summer

RAINFALL

Highest and Lowest Monthly Averages.

Rainfall in mm ⁹	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann.
Nyngan	51.2	46.3	41.9	34.2	35.6	34.1	29	29.7	27.7	34.4	36	43.2	446
Brewarrina	50	47.5	40.1	29.2	30.5	33.4	28.3	21.4	24.9	29.4	34.4	38.8	412
Cobar	34.6	34.2	28.8	18.2	27.6	34.9	21.7	18.3	30	30.4	33.9	25.8	337
Balranald	22.4	24.9	22	23.7	31.2	29.4	26.3	29.4	29.1	30.2	28.6	26.2	324
Bourke	30.3	30	36.8	23.1	24.6	32.5	12.9	13	17.7	24.4	38.4	34.8	300
Wentworth	21.4	21.7	19.6	18	27.7	26.4	24	25.8	26.8	27.2	24.9	22.4	287
Wilcannia	25.4	32.9	27.8	16.7	19.5	29.3	18.7	15.5	17.4	21.9	22.1	20.1	267
Broken Hill	28.1	18.7	20.2	20.2	20	15.2	17.5	18.5	21.3	24.4	21.2	21.6	251
Tibooburra	20.2	25.9	22.3	10.7	14.7	15.6	12.3	7.4	18.1	14.2	24.7	15.3	184

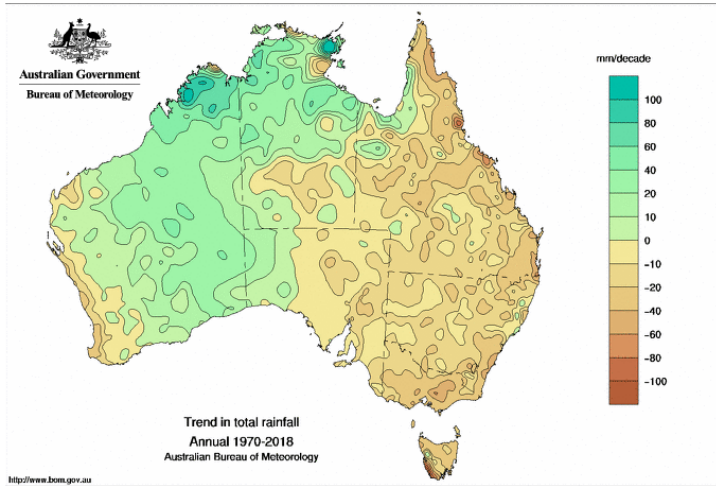
Average Annual Rainfall in mm



Average annual rainfall in the Far West Region varies widely from 184mm annually in the north of the Unincorporated area at Tibooburra to nearly 450mm in the east of the Region at Nyngan. These extremes contribute to natural disasters such as floods and droughts. These are unevenly and unpredictably distributed throughout the region.

Rainfall across the region is variable and unreliable from year to year. Tibooburra's highest annual rainfall on record was 507mm in 2010 and its lowest was 49mm in 2002. Conversely in the east Nyngan's highest rainfall was 882mm in 1950 and lowest was 118mm in 1881.

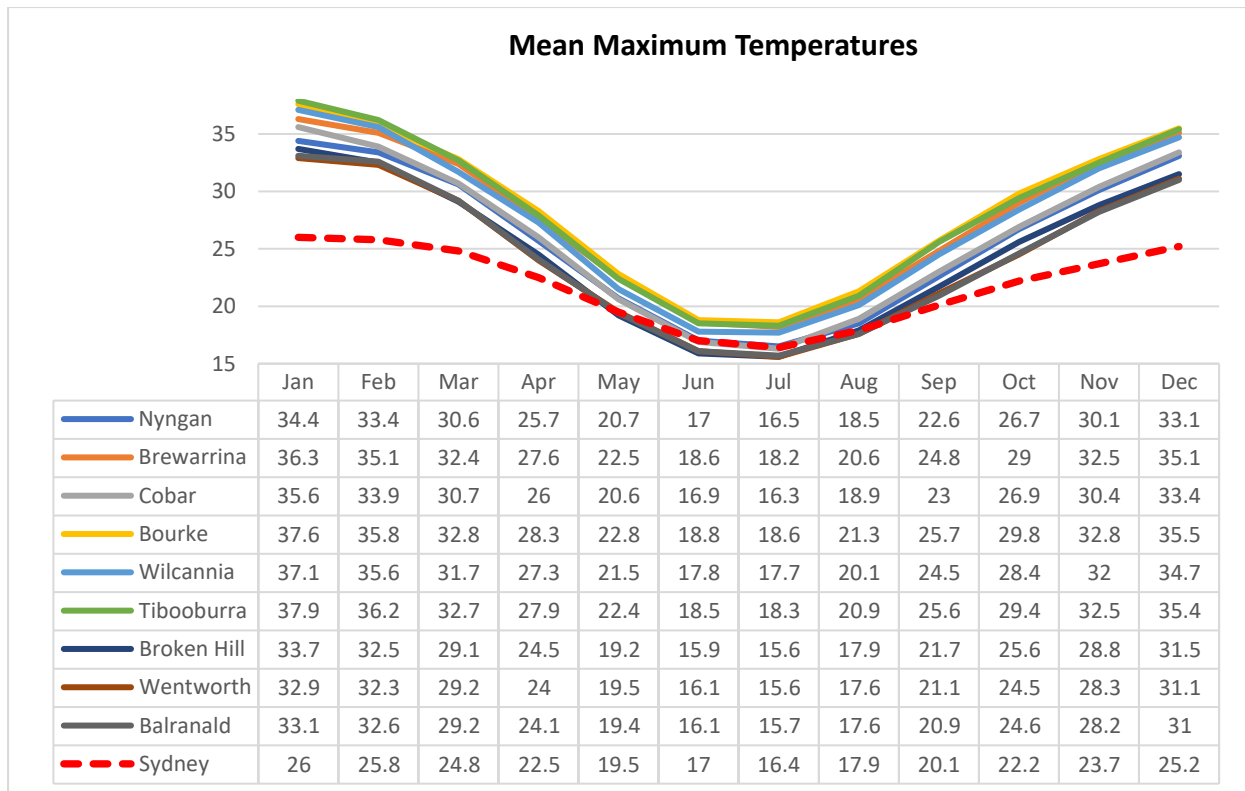
⁹ Weatherzone.com.au



This variation in rainfall may result in droughts through to widespread flooding across most of the Region. For both flooding and drought several local government areas are usually affected at the same time.

The 50 year trend in rainfall in the far west indicates a pattern of reduced rainfall of between 10mm and 40mm across the region.¹⁰ This reduction underlines the prolonged droughts experienced over this time and would also indicate a continuing drop in rainfall across the Far West Region in the future.

TEMPERATURES

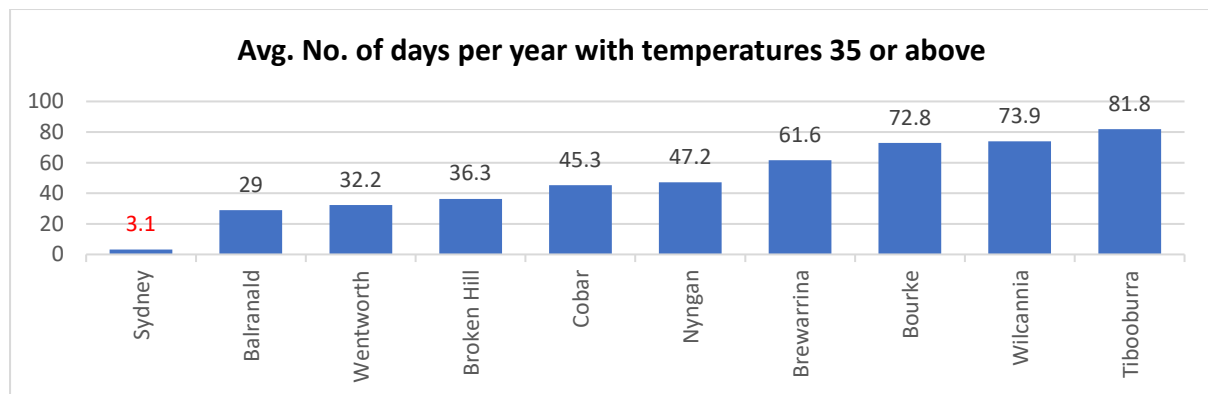
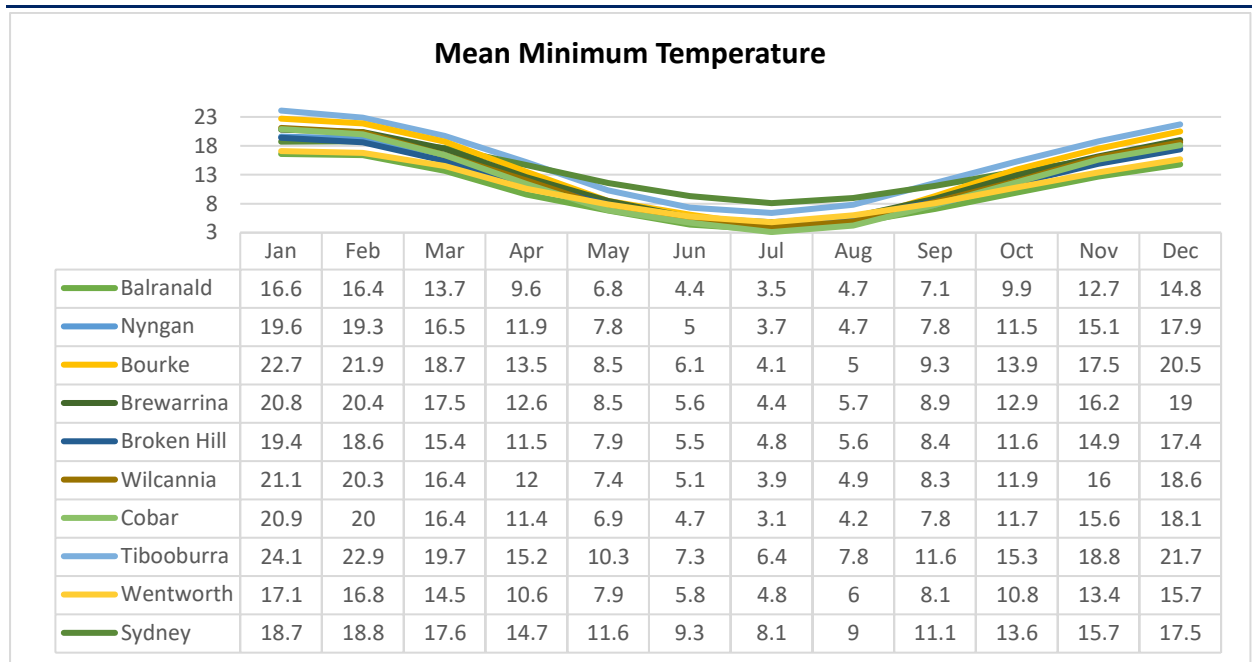


The high mean temperatures experienced in the whole Far West Region are contrasted against the data for Sydney. Most daily temperatures for Far West centres are, on average, more than 10 degrees hotter over summer than Sydney.

These expected high temperatures across the whole Region create challenges for all agency’s human and physical resources when responding to emergencies and rescues.

For emergencies such as Land Search and Rescue rapid response is critical to any successful outcome.

¹⁰ BOM.gov.au



Climate Impacts

Land Use

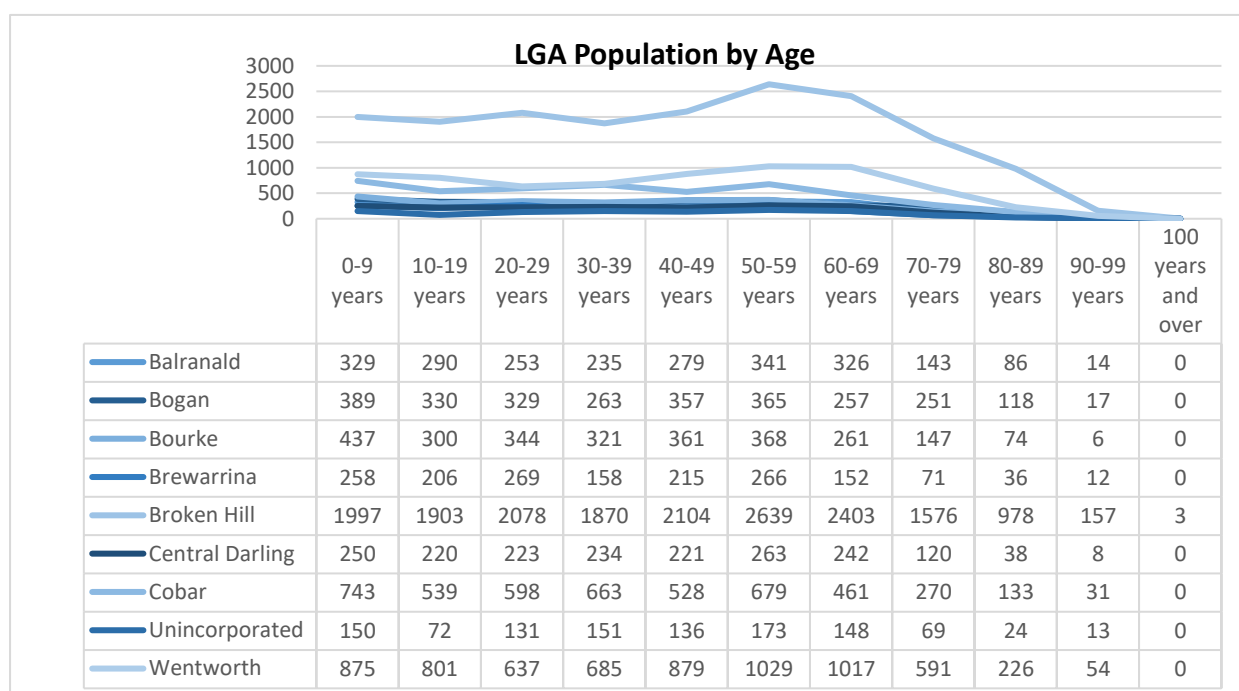
Land Use information below shows the Region is predominantly made up of grazing land (86%).

Land Use Classification	Bogan	Brewarrina	Bourke	Cobar	Central Darling	Broken Hill	Wentworth	Balranald	Unincorp-Orated Area	TOTAL Ha	% OF REGION
1.1.0 Nature conservation	4,748	46,317	269,492	276,861	248,612	3	176,034	58,593	534,121	1,614,780	5.11%
1.2.0 Managed resource protection	8,709	12,931	1,239	990	88	0	6,390	247	0	30,595	0.10%
1.3.0 Other minimal use	24,860	21,975	0	311,356	7,229	2,380	10	126	9	367,946	1.17%
2.1.0 Grazing native vegetation	855,816	1,695,136	3,763,152	3,632,790	4,826,634	10,522	2,157,459	1,745,493	8,558,405	27,245,407	86.30%
2.2.0 Production native forestry	39,485	3,611	0	42,648	1,459	0	5,173	22,556	72,179	187,111	0.59%
3.1.0 Plantation forests	0	0	0	1,251	0	0	11	0	0	1,262	0.00%
3.2.0 Grazing modified pastures	122,062	11,421	22,854	58,335	19,505	0	31,492	8,362	5,514	279,546	0.89%
3.3.0 Cropping	375,993	71,167	7,520	184,391	5,123	0	108,043	143,741	3,205	899,182	2.85%
3.6.0 Land in transition	8	0	0	24	38	0	739	62	0	872	0.00%
4.1.0 Irrigated plantation forests	0	0	0	0	0	0	45	0	0	45	0.00%
4.2.0 Grazing irrigated modified pastures	103	97	0	989	1,452	0	1,283	3,269	0	7,193	0.02%
4.3.0 Irrigated cropping	3,363	4,585	17,516	3,665	52	0	775	7,988	14,419	52,363	0.17%
4.4.0 Irrigated perennial horticulture	47	0	573	0	361	3	10,845	4,791	32	16,652	0.05%
4.5.0 Irrigated seasonal horticulture	0	0	143	0	0	0	735	71	0	949	0.00%
4.6.0 Irrigated land in transition	0	0	112	0	401	0	676	9	0	1,197	0.00%
5.1.0 Intensive horticulture	0	0	0	0	0	0	33	3	0	36	0.00%
5.2.0 Intensive animal production	10	68	3	3	14	47	103	11	0	259	0.00%
5.3.0 Manufacturing and industrial	86	0	159	79	3	127	50	94	0	598	0.00%
5.4.0 Residential and farm infrastructure	1,729	1,004	3,085	1,834	3,462	1,369	2,063	1,291	3,982	19,820	0.06%
5.5.0 Services	284	1,229	455	381	553	691	677	133	262	4,666	0.01%
5.6.0 Utilities	301	1	7	15	2	32	7	19	208	591	0.00%
5.7.0 Transport and communication	9,722	10,490	15,811	13,544	11,717	645	3,061	1,789	17,809	84,588	0.27%

Land Use Classification	Bogan	Brewarrina	Bourke	Cobar	Central Darling	Broken Hill	Wentworth	Balranald	Unincorp-Orated Area	TOTAL Ha	% OF REGION
5.8.0 Mining	676	156	250	1,795	1,272	749	2,764	271	391	8,324	0.03%
5.9.0 Waste treatment and disposal	35	15	65	79	54	92	191	49	0	580	0.00%
6.1.0 Lake	7	3,703	4,079	889	106,164	0	75,184	57,795	39,005	286,824	0.91%
6.2.0 Reservoir/dam	1,051	2,165	4,041	1,060	924	23	384	260	1,581	11,488	0.04%
6.3.0 River	4,029	15,766	9,621	11,842	11,574	124	11,547	8,928	29,640	103,071	0.33%
6.4.0 Channel/aqueduct	330	1,504	1,535	144	62	0	2	365	477	4,418	0.01%
6.5.0 Marsh/wetland	5,661	13,534	38,094	13,837	102,060	0	27,661	101,520	38,475	340,842	1.08%

Population and People

POPULATION AND PEOPLE¹¹



INDIGENOUS REPRESENTATION IN COMMUNITIES¹².

The region has a significant Aboriginal population.

Approximately 14%, or nearly 6,000, of the total population of the region is Aboriginal. Most major towns in the Region have significant aboriginal populations.

The Murdi Paaki Regional Assembly¹³ is a regional non-incorporated body that represents the interests of Aboriginal people in 16 communities

in western NSW, many of which are in the Far West. The Assembly's membership comprises representatives from the Local Aboriginal Land Councils, community working parties and a young leaders program.

LGA	Aboriginal	Total Population	Aboriginal % of total
Balranald	198	2,287	9%
Bogan	441	2,692	16%
Bourke	991	2,834	35%
Brewarrina	1477	1,651	89%
Broken Hill	627	17,708	4%
Central Darling	812	1,833	44%
Cobar	715	4,647	15%
Wentworth	627	6,794	9%
Unincorporated Area	36	1,056	3%
Total	5929	41,502	14%

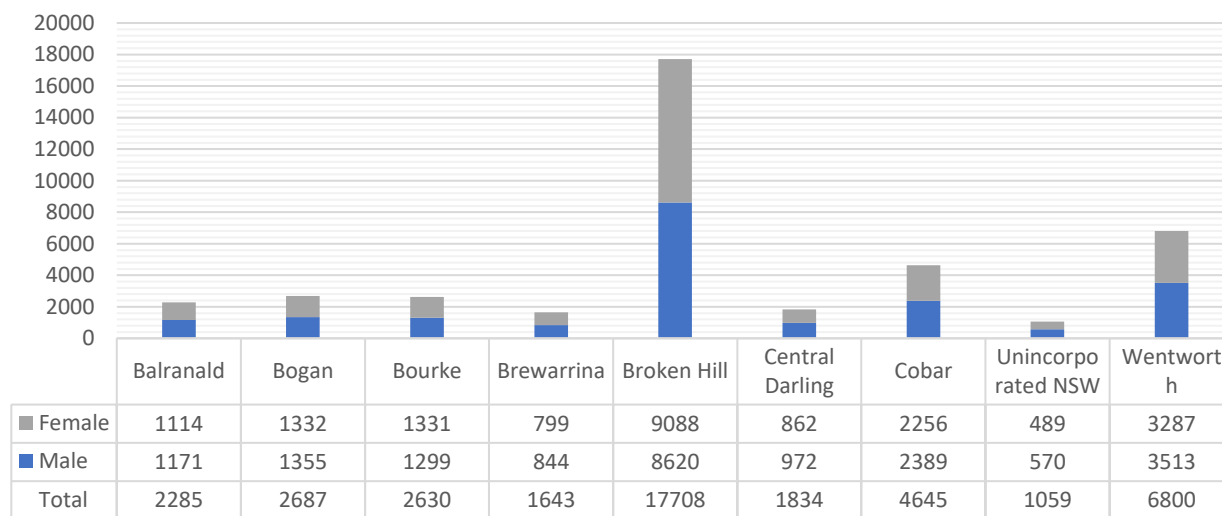
¹¹ ABS 2016 Census

¹² ABS 2016 Census

¹³ Murdi Paaki Regional Assembly, www.mpra.com.au

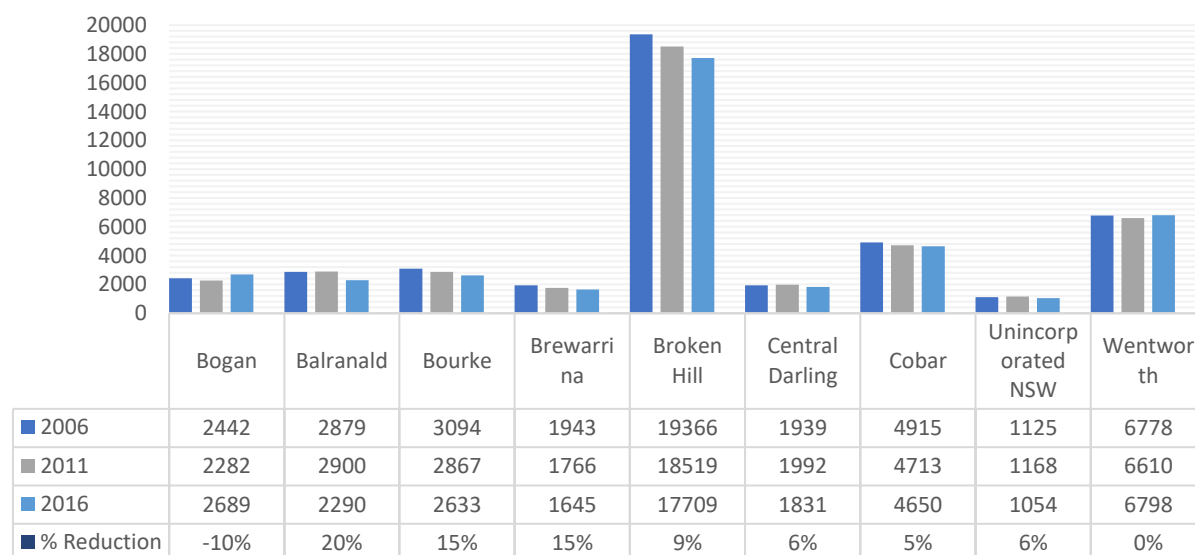
POPULATION TRENDS¹⁴

Population of each LGA by sex. Far West EM Region

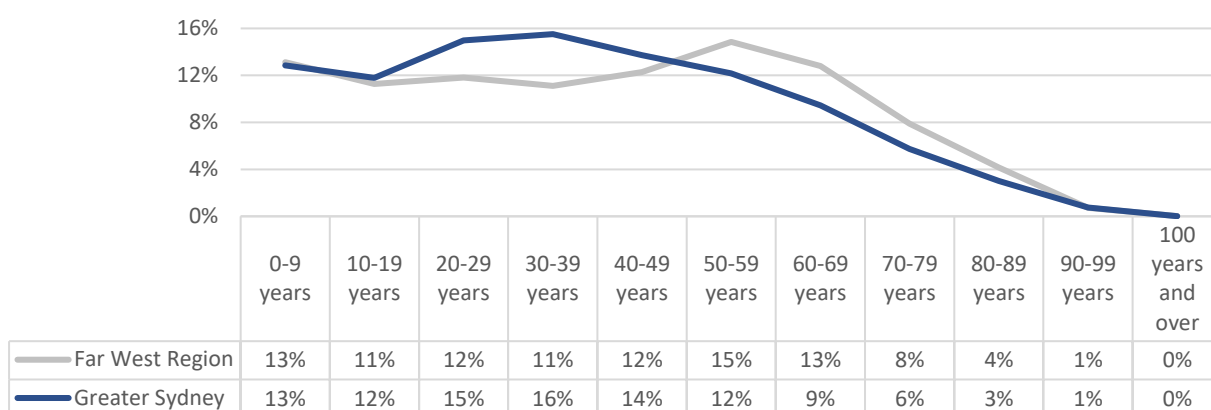


The overall population of the Region has declined by 7% between 2006 and 2016. Broken Hill saw a steady reduction of 9% over the period. Only bogan Shire saw an increase of 10% for the period.

Population trend for each LGA. Far West Region



¹⁴ ABS 2016 Census

AGE DISTRIBUTION¹⁵

The graph above demonstrates how the Far West Region is aging compared with the Metropolitan Area. There is a comparative decline in the percentage of the younger population to 40 years, and a comparative rise in the older population past 40.

LANGUAGE SPOKEN¹⁶

The Far West is a predominantly English speaking area with 97% of Census respondents identifying as speaking English at home. Other languages spoken in the area are Italian, Indo-Aryan, Asian and Indigenous languages among many. 35 languages in total are spoken across the Region. There are no local formal interpreter services in the Region

Language spoken at home – top 10	Broken Hill	Wentworth	Cobar	Bogan	Bourke	Bairnald	Central Darling	Brewarrina	Unincorporated	Total	%
English	15705	5841	3911	2335	2044	1899	1482	1416	902	35538	96.59%
Italian	42	76	12		5	68			3	211	0.57%
Indo-Aryan	46	13	33	21	19	5		4		137	0.37%
Southeast Asian Austronesian Languages	84	8	15	8		4				118	0.32%
Australian Indigenous Languages, nfd	6	29	13				9	43		103	0.28%
Pacific Austronesian Languages	10	8	3	7	4	28	13			69	0.19%
Chinese	19	7	14	7	5	14			4	64	0.17%
Dravidian	24		6	6		9	3	8		57	0.15%
Dutch and Related Languages	16	3	28	4						51	0.14%
African Languages	7	3	19		7	3				42	0.11%
Not stated	1558	757	550	294	517	237	301	171	118	4510	
Total	17709	6798	4650	2689	2633	2290	1831	1645	1054	41302	

¹⁵ ABS 2016 Census

¹⁶ ABS 2016 Census

VEHICLES AND MODE OF TRANSPORT¹⁷

Transport NSW provide bus services between larger centres servicing smaller communities eg, Broken Hill and Wilcannia, Broken Hill and Dubbo. In spite of this most communities rely on their private vehicles for travel for most needs including shopping, medical treatment, work and education. Broken Hill has its own private bus company servicing the city.

Motor vehicles per dwelling	Balranald	Bogan	Bourke	Brewarrina	Broken Hill	Central Darling	Cobar	Wentworth	Unincorporated	Total
No motor vehicles	69	79	108	134	707	99	122	167	29	1524
One motor vehicle	244	316	362	207	3045	236	585	734	132	5854
Two motor vehicles	298	336	264	111	2291	129	636	990	83	5150
Three motor vehicles	127	132	74	51	638	57	224	331	41	1673
Four or more motor vehicles	71	72	51	35	254	62	96	196	52	896
Not stated	136	169	277	78	796	160	289	375	98	2373
Not applicable	275	205	235	113	1919	308	520	505	178	4263

HOME OWNERSHIP AND RENTERS¹⁸

Home Ownership	Balranald	Bogan	Bourke	Brewarrina	Broken Hill	Central Darling	Cobar	Wentworth	Unincorp.	Total
Owned outright	355	402	305	142	3110	255	578	1007	151	29.0%
Owned with a mortgage	196	221	188	44	2139	52	416	774	71	18.9%
Being purchased - shared equity scheme	6	0	0	0	11	0	0	0	0	0.1%
Rented	217	286	320	300	1658	228	609	566	76	19.6%
Being occupied rent-free	41	32	44	44	105	43	55	62	26	2.1%
Being occupied - life tenure scheme	0	0	0	0	8	0	3	7	0	0.1%
Other tenure type	3	9	19	9	38	19	20	27	9	0.7%
Not stated	133	157	257	73	669	145	268	350	95	9.9%
Not applicable	275	205	235	113	1919	308	520	505	178	19.6%
Total	1222	1317	1369	734	9654	1058	2466	3295	613	21731

¹⁷ ABS 2016 Census

¹⁸ ABS 2016 Census

EMPLOYMENT AND EMPLOYMENT TYPES¹⁹

The primary employment in the Far West is in the Agriculture sector. Due to the aging and vulnerable population of the Region Health Care and Social Assistance is a significant employer in the area. Mining, retail, education and public administration are also significant employers in the Region.

Employment Type	Bairnald	Bogan	Brewarrina	Broken Hill	Bourke	Central Darling	Cobar	Unincorporated	Wentworth	Total %
Not applicable	1301	1521	1148	10807	1633	1267	2637	461	4010	60.0%
Agriculture, Forestry and Fishing	290	265	123	118	146	214	236	246	558	5.3%
Health Care and Social Assistance	100	102	79	1260	137	44	144	18	276	5.3%
Mining	8	166	0	746	9	3	647	4	47	3.9%
Retail Trade	85	93	10	829	84	9	137	17	226	3.6%
Education and Training	75	101	90	581	148	72	119	22	223	3.5%
Accommodation and Food Services	69	62	18	662	61	32	124	107	206	3.2%
Public Administration and Safety	52	90	74	492	146	67	137	47	158	3.1%
Construction	47	52	17	349	42	14	71	29	192	2.0%
Other Services	26	34	14	295	35	12	62	9	90	1.4%
Transport, Postal and Warehousing	45	39	12	265	10	9	55	10	118	1.4%
Administrative and Support Services	17	18	15	211	31	15	46	27	107	1.2%
Inadequately described	36	27	8	146	21	17	45	15	95	1.0%
Manufacturing	37	23	0	147	16	0	32	0	134	1.0%
Professional, Scientific and Tech Services	11	30	5	135	23	7	34	3	71	0.8%
Electricity, Gas, Water and Waste Services	19	12	6	147	17	8	22	0	61	0.7%
Not stated	23	18	13	101	24	9	28	18	45	0.7%
Wholesale Trade	8	11	0	130	14	5	18	5	63	0.6%
Financial and Insurance Services	11	9	9	90	8	3	15	0	36	0.4%
Total	2290	2689	1645	17709	2633	1831	4650	1054	6798	41302

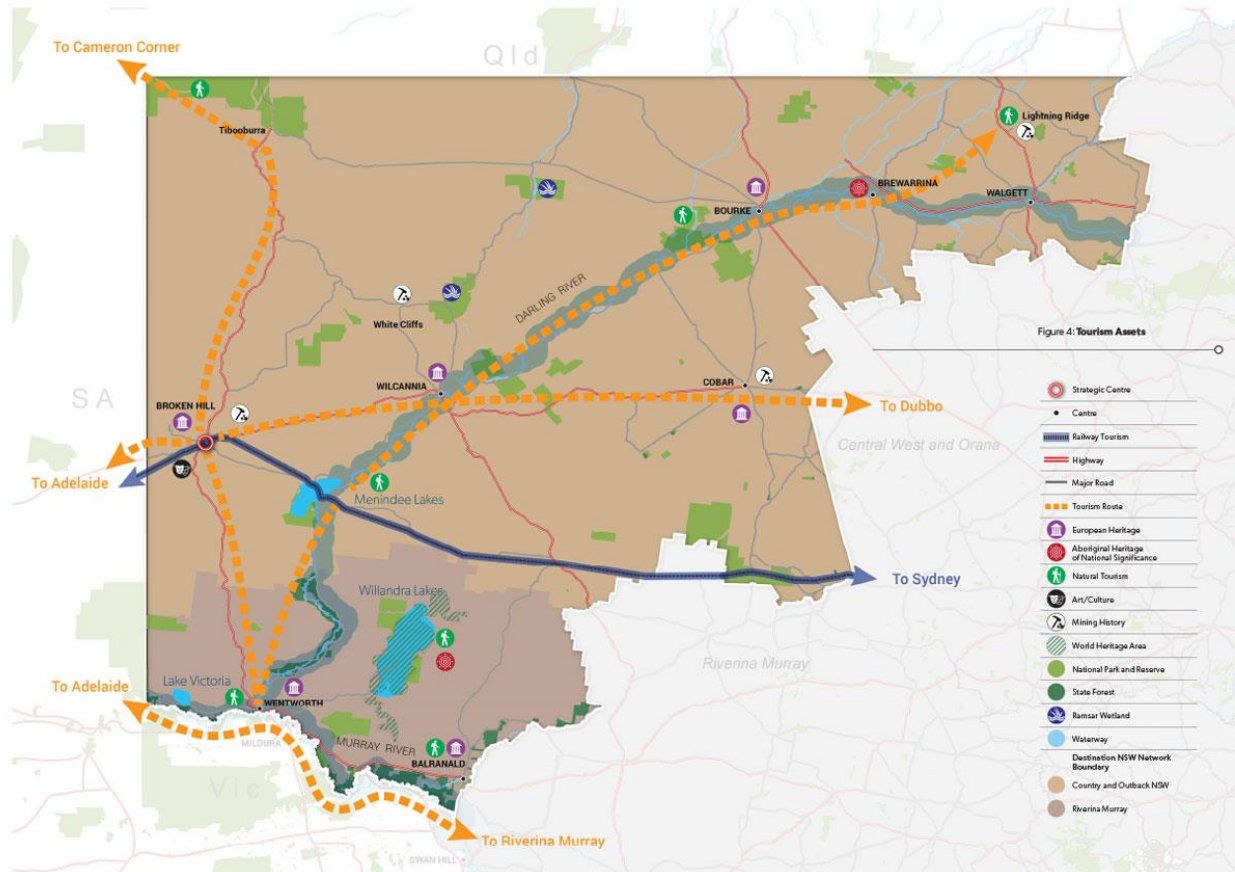
PEOPLE IN THE WORKFORCE²⁰

Employed	Bairnald	Bogan	Brewarrina	Broken Hill	Bourke	Central Darling	Cobar	Unincorporated	Wentworth	Total
Not in the labour force	556	670	571	6075	546	612	1055	168	1935	29.5%
Employed, worked full-time	612	798	346	4230	720	426	1410	402	1688	25.8%
Not applicable	484	552	377	2944	614	349	1029	184	1279	18.9%
Employed, worked part-time	304	324	109	2175	231	103	452	136	890	11.4%
Not stated	213	236	104	1116	398	235	432	93	618	8.3%
Employed, away from work	63	56	44	494	48	34	153	56	207	2.8%
Unemployed, looking for full-time work	34	41	41	453	44	53	89	8	123	2.2%
Unemployed, looking for part-time work	19	19	50	216	28	13	40	4	54	1.1%
Total	2290	2689	1645	17709	2633	1831	4650	1054	6798	41302

¹⁹ ABS 2016 Census²⁰ ABS 2016 Census

Transport Routes and Facilities

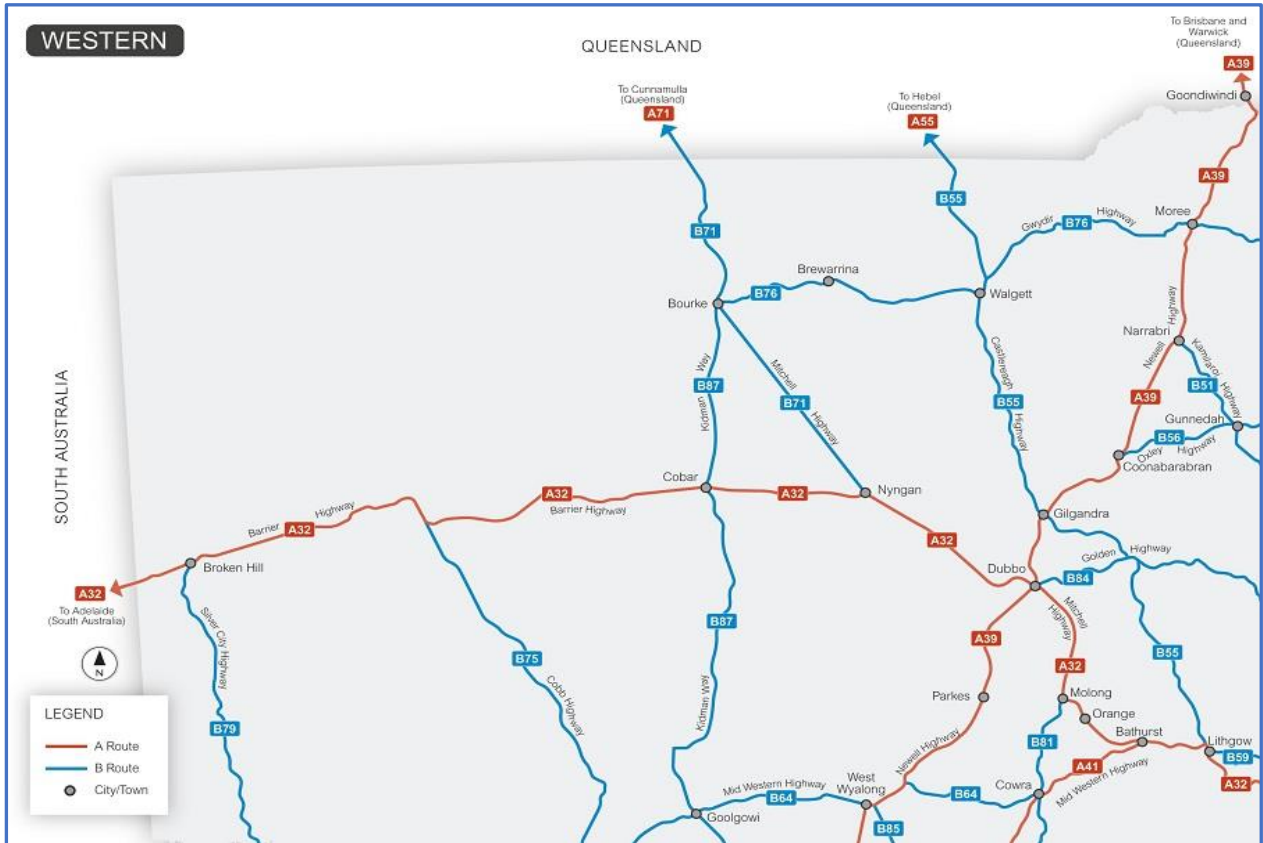
RAIL TRANSPORT



Rail transport (in **blue** above) in the Region is through the Indian/Pacific Rail link passing Broken Hill in the west, Menindee and on through Ivanhoe. The line is run by the Australian Rail Track Corporation (ARTC).

The rail line from Cobar east to Dubbo is managed by John Holland Group. The line is mostly freight and mining products but passenger charter trains occasionally use the line.

ROADS



Highways and other main roads

Two significant (A) highways traverse the Far West Region;

- Barrier Highway which passes east to west in the region through Broken Hill, and
- Sturt Highway which also passes east to west through Buronga and Balranald.

Both highways are major transportation routes with significant freight passing between the western states of Australia and New South Wales.

Other significant (B) roads travel generally north to south in the Region;

- Silver City Hwy between Wentworth, through Broken Hill and north to Tibooburra and Queensland
- Cobb Highway between Ivanhoe and Wilcannia
- Kidman Way between Cobar and Bourke and on to Queensland.

The (B) roads are important transport routes in the region and carry large amounts of local and interstate freight including stock, grain, industrial supplies, and tourists.

Unsealed Roads

Many local roads are unsealed due to the expensive cost of sealing and maintenance. Unsealed roads are generally more vulnerable to closure than sealed roads during weather events, which may cause lengthy detours and isolation for remote communities²¹.

Government have identified that sealing strategically identified portions of the region's roads could help the efficiency of the road network. This will result in increased traffic, especially heavy vehicle traffic, on minor roads in the far west by opening up the region more for tourism and industry.

APPROXIMATE HIGHWAY VEHICLE TRAFFIC²²

Highway	Location where counted	All Vehicles per day	Heavy Vehicles
Sturt Highway Balranald to Buronga	Wentworth & Balranald Shire boundary	2200	566 (27%)
Barrier Highway Broken Hill to Cobar	Argent St, Broken Hill	3760	293 (8%)
	West of Dry Lake Road (west of Wilcannia)	580	211 (36%)
	East of Tilpa Road (west of Cobar)	615	238 (39%)
Silver City Highway Broken Hill to Wentworth	5km South of Broken Hill	520	85 (16%)
Silver City Highway Broken Hill to Tibooburra	North of Mutawintje Road	73	10 (14%)
Cobb Highway Ivanhoe to Wilcannia	Barrier Highway intersection	40	5 (13%)
Kidman Way south of Cobar	Carrathool/Cobar Shire Boundary	115	47 (41%)
Kidman Way north of Cobar	5km north of Cobar	338	171 (51%)

²¹ Far West Region Plan 2036 (2017)

²² Transport NSW 2019

DISTANCE BETWEEN CENTRES MATRIX²³

	Balranald	Bourke	Brewarrina	Broken Hill	Cobar	Condobolin	Dubbo	Enngonia	Griffith	Hay	Ivanhoe	Louth	Menindee	Mildura	Nyngan	Pooncarrie	Sydney	Tibooburra	Tilpa	Wagga	Walgett	Wanaaring	Wentworth	Wilcannia
Balranald		716	814	452	557	458	648	815	269	134	341	688	409	163	643	287	846	783	751	396	919	834	185	525
Bourke	716		98	618	160	422	373	99	525	583	562	99	575	879	205	698	749	425	166	683	232	191	882	421
Brewarrina	814	98		715	258	427	379	195	623	681	659	197	673	977	210	795	729	521	264	688	134	287	980	518
Broken Hill	452	618	715		458	758	759	716	577	585	319	418	114	296	590	236	1131	332	353	848	824	489	267	198
Cobar	557	160	258	458		247	301	258	365	423	274	132	416	719	132	539	676	786	194	530	367	278	723	262
Condobolin	458	422	427	758	247		209	519	227	325	331	432	583	621	219	531	454	1085	494	261	439	577	643	561
Dubbo	648	373	379	759	301	209		471	417	515	540	432	716	811	170	867	380	797	495	406	275	563	834	561
Enngonia	815	99	195	716	258	519	471		624	681	660	197	674	977	302	796	846	722	264	779	329	276	981	519
Griffith	269	525	623	577	365	227	417	624		133	257	496	462	430	451	554	588	904	559	189	686	715	452	440
Hay	134	583	681	585	423	325	515	681	133		209	554	414	296	510	421	717	916	617	268	744	700	319	391
Ivanhoe	341	562	659	319	274	331	540	660	257	209		533	205	504	489	200	733	647	391	476	723	679	526	183
Louth	688	99	197	418	132	432	432	197	496	554	533		327	851	264	669	806	381	67	661	331	146	854	217
Menindee	409	575	673	114	416	583	716	674	462	444	205	327		262	547	122	929	442	311	681	782	448	240	156
Mildura	163	879	977	296	719	621	811	977	430	296	504	851	262		806	140	992	627	573	559	1040	782	29	418
Nyngan	643	205	210	590	132	219	170	302	451	510	489	264	547	806		670	545	628	326	480	237	656	828	393
Pooncarrie	287	698	795	236	539	531	867	796	554	421	200	669	122	140	670		925	564	434	683	904	571	118	278
Sydney	846	749	729	1131	676	454	380	846	588	717	733	806	929	992	545	925		1161	844	483	627	938	1013	935
Tibooburra	783	425	521	332	786	1085	797	722	904	916	647	381	442	627	628	564	1161		447	1179	655	234	598	342
Tilpa	751	166	264	353	194	494	495	264	559	617	391	67	311	573	326	434	844	447		724	398	213	618	156
Wagga	396	683	688	848	530	261	406	779	189	268	476	661	681	559	480	683	483	1179	724		677	807	581	791
Walgett	919	232	134	824	367	439	275	329	686	744	723	331	782	1040	237	904	627	655	398	677		421	1063	627
Wanaaring	834	191	287	489	278	577	563	276	715	700	679	146	448	782	656	571	938	234	213	807	421		753	538
Wentworth	185	882	980	267	723	643	834	981	452	319	526	854	240	29	828	118	1013	598	618	581	1063	753		499
Wilcannia	525	421	518	198	262	561	561	519	440	391	183	217	156	418	393	278	935	342	156	791	627	538	499	

AIR TRANSPORT

The Broken Hill Airport is located 6km from the City and is the major airport in the Far West Region. The airport is owned and operated by Broken Hill Council and is also a major base for the Royal Flying Doctor Service. There are several smaller airports throughout the region primarily used for emergency services, recreational and private aviation.²⁴

Certified²⁵ Aerodromes

Certificate number	Aerodrome name	Operator name	Certificate date
CASA.ADCERT.0025	Bourke	Bourke Shire Council	27/04/06
CASA.ADCERT.0181	Broken Hill	Council of the City of Broken Hill	05/04/06
CASA.ADCERT.0195	Cobar	Cobar Shire Council	07/08/15

²³ Google Maps²⁴ Agribusiness growth and diversification in far west NSW - Regional Development Australia – Far West - 2016²⁵ Certificate issued by CASA under CASR 139.050 – Rpt or frequent charter with more than 30 passengers, aerodrome manual, SMS, inspection and Reporting Officer required.

Registered²⁶ Aerodromes

Registration Number	Aerodrome Location	Operator Name	Date Registered
R049	Balranald NSW	Balranald Shire Council	06 August 2004
R161	Brewarrina NSW	Brewarrina Shire Council	25 October 2011
CASA.ADREG.0148	Ivanhoe NSW	Central Darling Shire Council	05 December 2019
R007	Nyngan NSW	Bogan Shire Council	23 March 2004
R051	Pooncarie NSW	Shire of Wentworth	06 August 2004
R013	Tibooburra NSW	NSW Trade and Investment, Crown Lands	05 April 2004
R052	Wentworth NSW	Shire of Wentworth	06 August 2004
CASA.ADREG.0149	White Cliffs NSW	Central Darling Shire Council	03 December 2019
CASA.ADREG.0150	Wilcannia NSW	Central Darling Shire Council	13 December 2019

All Weather airstrips

There are numerous other private all weather airstrips utilised by local property owners, and the RFDS for medical treatment or casualty extraction. A reliable register of these strips is maintained by the RFDS who could be contacted to confirm the location, status and suitability of these airstrips.

Highway Airstrip Shannon's Creek

In 2015 an emergency airstrip was constructed by the Transport for NSW on the Silver City Highway 225km north of Broken Hill. The airstrip is sealed with navigation lights available to set it up for night operations. The airstrip was primarily constructed for use by the RFDS for emergency casualty extraction. Activation of the airstrip, which involves closing the highway, is arranged through the RFDS, Broken Hill Police Station or the Packsaddle Roadhouse.

FUEL SUPPLIES

The Far West Region is serviced by several national fuel companies including Caltex(AMPOL), BP, Mobil and Shell. There are also several independent companies. Several isolated communities have customer operated bowsers with 24/7 availability. Fuel in isolated communities is usually limited to Diesel or Unleaded-91 fuel.

Aviation fuels are mainly available at Certified Aerodromes but can be carted to remote locations for use in emergencies. Most agency aviation support services have arrangements in place for refuelling and resupply to airstrips as necessary for operations.

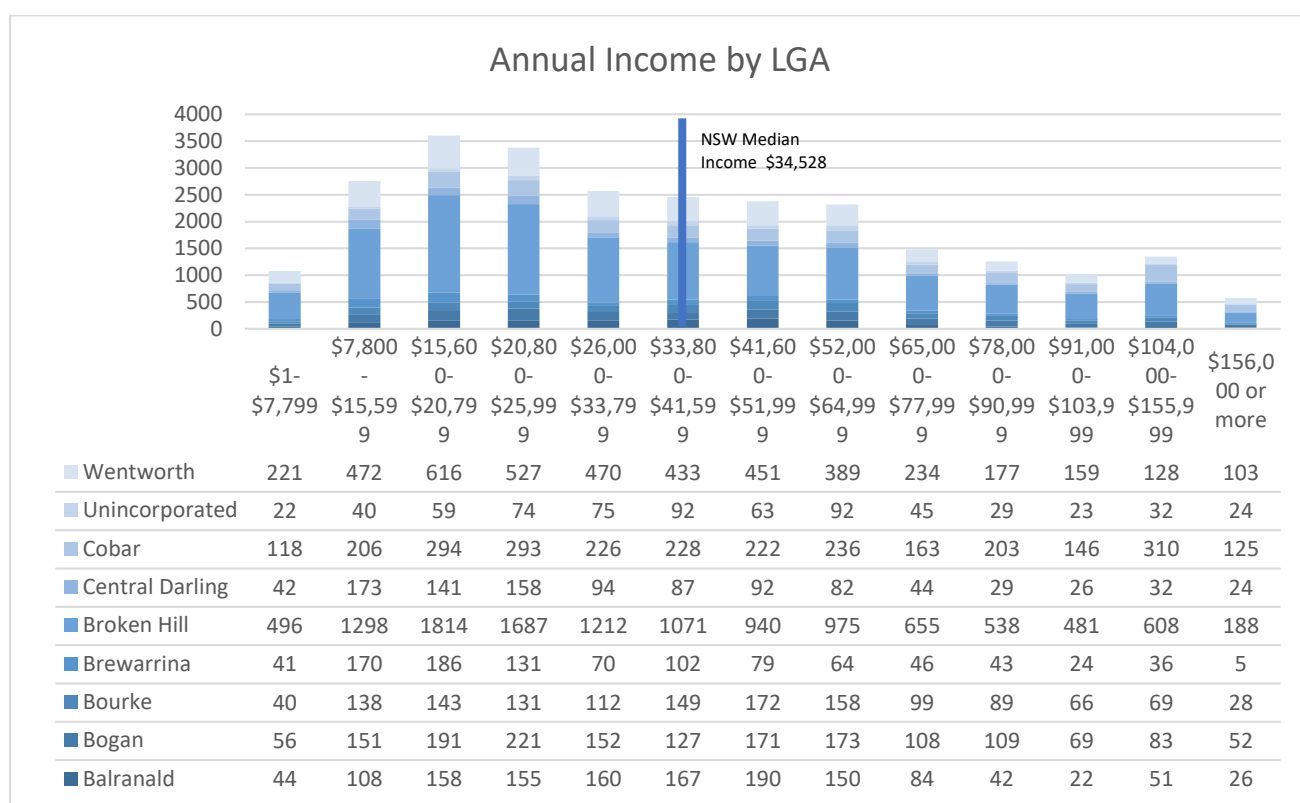
²⁶ Registered by CASA under CASR 139.265

Economy and Industry

²⁷The Far West contributes over A\$2 billion to the NSW economy in gross value added, 17% from agribusiness and food, 22% from construction and infrastructure and 19% from mining and resources. The Far West has a workforce of over 17,405.

With over 30% of NSW territory, the Far West is the largest NSW region geographically. Irrigated farming is diversifying agribusiness and food manufacturing, supported by key water security projects. The region is strategically placed at the crossroads of Australia’s largest state economies of NSW, Victoria, Queensland and South Australia.

While mining and agribusiness are the largest contributors to regional economic output, renewable energy, particularly solar and wind, offers significant potential. Visitor numbers have increased on average 5.7% annually since year ended June 2019, with expenditure increasing on average 7.1% annually in the same period to A\$357 million in year ending June 2019. Tourism growth is supported by the region’s natural heritage, national parks and rich Aboriginal culture and artefacts. The Far West has the highest Aboriginal population in NSW giving the region a unique cultural and historical identity.



AGRICULTURE

In 2014-15, total agricultural production in the Far West & Orana SA4 was \$1.3 billion. Production was dominated by three main production categories: Broad acre crops (Excl. hay production), Livestock - Slaughtered and other disposals, and Livestock products.

²⁸Beef cattle, sheep and goats were the predominant livestock holdings in the region, with very few other types of livestock. In 2014-15 stock holding numbers were; Beef Cattle - 80,931, Goats - 140,898, and Sheep - 1,529,369.

²⁷ <https://www.investregional.nsw.gov.au/regions/far-west/>

²⁸ Agribusiness growth and diversification in far west NSW - Regional Development Australia – Far West - 2016

HORTICULTURE

A range of horticultural products has been produced in the region, although this can be dependent on water availability in any given year and has been impacted over recent years with production of certain products ceasing. Past production has included: stone fruit, citrus, table and wine grapes, quandongs, table and oil olives, potatoes, and Lucerne.²⁹

The most substantial barrier to the development of the horticultural sub-sector in the region is access to water. Low rainfall periods and changes to New South Wales' agricultural water licencing system have resulted in substantial reductions in water available to horticultural producers in the region. Anecdotal evidence suggests that many of the larger horticultural operations have shuttered or reduced operations and some family owned farms have been put up for sale.

MINING

The mining industry is the primary economic driver in Broken Hill (silver, lead and zinc), Cobar (copper and gold), and White Cliffs (opal). Mining of mineral sands occurs within the Broken Hill, Balranald and Wentworth local government areas. There is also the opportunity for iron ore, copper, gold, cobalt and magnetite mining around Broken Hill³⁰.

Cobar Shire has been an important copper, gold, lead, zinc and silver mining district for nearly 140 years. Peak, CSA, Endeavour, Manuka, Tritton, Mount Boppy and Hera mines operate in the Shire and there is potential for further development in the area. Potential exists for further discoveries of gold, copper, silver, lead and zinc in two belts of north-west to south-east trending prospective rocks, referred to as the Cobar–Nymagee and Mount Drouin potential resource areas.

TOURISM & HOSPITALITY

Tourism research is available for the Broken Hill Local Government Area (LGA). As at 2014 the Broken Hill LGA had 162 tourism related businesses that had employees.

Key statistics for the region are:

- The most important visitor group were domestic overnight visitors (135,000).
- The primary reason for visiting the region was for a holiday (78,000).
- The majority of accommodation nights were spent in a hotel or similar lodging (138,000).
- The majority travel party type were couples (46,000).

²⁹ Agribusiness growth and diversification in far west NSW - Regional Development Australia – Far West - 2016

³⁰ Far West Regional Plan 2036 (2017)

Annexure B – Hazards and Risks Summary

A Regional Emergency Risk Management (ERM) Study has been undertaken by the Far West Regional 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 within Local EMPLANS (which have been endorsed by the REMC) as having the potential to create an emergency. The table below provides a Regional level summation and priority for identified hazards and risks. The Local Emergency Risk Management Study for each LGA should be referenced to identify the complete list of consequences and risk descriptions.

Hazard	Risk Description	Risk Controls	Residual Risk Priority	Combat/ Responsible Agency
Agricultural Disease (Animal/Plant)	An agriculture/horticulture incident that results, or has potential to result, in the spread of a communicable disease or infestation with broad community impacts.	<ul style="list-style-type: none"> • Biosecurity sub pan in place • State-wide control room on standby at Orange • Biosecurity & Food Authority infrastructure • Import restriction and quarantine • Livestock movement restrictions • Referral to NPWS for wildlife disease 	Medium	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.	<ul style="list-style-type: none"> • CMG & Local EMPLAN • RMS major structures • RMS engineering • LG Engineering • Response capability with ESOs • TMP for diversions by TMC 	Low	LEOCON
Building Collapse	Collapse of building owing to structural failure or impact from external/internal event of other hazards /incidents.	<ul style="list-style-type: none"> • USAR trained ESO, RFS, FRNSW, SES, Ambulance Rescue agencies • ED health facilities • ESOs to respond • CMG in Local EMPLAN • Building codes 	Low	FRNSW (USAR) LEOCON

Hazard	Risk Description	Risk Controls	Residual Risk Priority	Combat/ Responsible Agency
		<ul style="list-style-type: none"> • Utilities ability to respond and assist. • Council Engineering services • Public works advisory service NSW engineers • Media management (build into all hazards) 		
Communicable Disease (Human)	Pandemic illness that affects, or has potential to affect, large portions of the human population	<ul style="list-style-type: none"> • CMG local for EMPLAN across Region • Vaccination programs • PPE • Media • Working with External agencies as advisors • Assist with immunisation • Social Distancing • Disinfection • NSW cache of immunisation and other resources, eg field hospital • Pandemic state sub plan 	High	Department of Health
Dam Failure	A dam is compromised that results in localised or widespread flooding.	<ul style="list-style-type: none"> • DSEP – 5 registered dams in Far West but approx. 25 dams in far west including tailings and farm storages. • Menindee lakes • SES local flood plans 	Low	Dam Owners NSW SES
Earthquake	Earthquake of significant strength that results in localised or widespread damage.	<ul style="list-style-type: none"> • Building Codes • Historical mapping of faults • USAR training with FRNSW & SES, RFS. AMBOs, health • Current health, rescue agencies and infrastructure • RA for Mineral Resources • Seismic monitoring • Local Mines seismic monitoring • Existing EM Plans for weir and dams, roads 	Low	LEOCON

Hazard	Risk Description	Risk Controls	Residual Risk Priority	Combat/ Responsible Agency
		<ul style="list-style-type: none"> Dam safety committee RA major dams, weirs reservoirs structures 		
Fire (Bush or Grass)	Major fires in areas of bush or grasslands.	<ul style="list-style-type: none"> Local CMG for Bush fire Bush Fire RMP Bush Fire s52 plan (operations plan) Fire danger rating index. 4 day outlook from BOM prediction. Weather district Media distribution of dangers via RFS Website Media fire prevention campaigns RFS resourcing and training. Preparedness. BFMCF Operation Tronto (Police & RFS) Relationships with NPWS to close public areas in times of high risk Interagency relationships Radio comms infrastructure in place and growing. Mobile radio facilities to increase isolated radio coverage in fire areas. 	Low	NSW RFS FRNSW
Fire (Industrial)	Serious industrial fire in office complexes and/or warehouses within industrial estates.	<ul style="list-style-type: none"> FRNSW in place Relationships with all ESOs Hazmat capability of FRNSW Building codes Fire regulations 	Low	FRNSW NSW RFS
Fire (Commercial)	Serious commercial fires in shopping centres, aged persons units, nursing homes and hospitals.	<ul style="list-style-type: none"> FRNSW in place Relationships with all ESOs Hazmat capability of FRNSW Building codes 	Low	FRNSW NSW RFS

Hazard	Risk Description	Risk Controls	Residual Risk Priority	Combat/ Responsible Agency
		<ul style="list-style-type: none"> • Fire regulations 		
Fire (Residential)	Serious residential fire in medium/high rise apartments.	<ul style="list-style-type: none"> • FRNSW in place • Relationships with all ESOs • Hazmat capability of FRNSW • Building codes • Fire regulations 	Low	FRNSW NSW RFS
Flood (Flash)	Heavy rainfall causes excessive localised flooding with minimal warning time	<ul style="list-style-type: none"> • Flood emergency sub plans volume 1,2,3 • Flood mitigation • Local CMGs • Media management for warnings and media messaging • SES in place. 	Low	NSW SES
Flood (Riverine)	River flows exceed the capacity of normal river systems resulting in flood waters escaping and inundating river plains	<ul style="list-style-type: none"> • Flood emergency sub plans volume 1,2,3 • Flood mitigation • Local CMGs • Media management for warnings and media messaging • SES in place. • Media warning • Stock and farm preparation 	Low	NSW SES
Hazardous Release	Hazardous material released as a result of an incident or accident.	<ul style="list-style-type: none"> • FRNSW combat agency • Council regs for storage • Planning & Environment Resource Reg mine site audits, & RA • MSDS requirements 	Low	FRNSW
Heatwave	A sequence of abnormally hot conditions having the potential to affect a community adversely.	<ul style="list-style-type: none"> • Heatwave state sub plan • Community monitoring • Resilience of community • BOM weather reports • Media management. 	Low	REOCON

Hazard	Risk Description	Risk Controls	Residual Risk Priority	Combat/ Responsible Agency
Landslip	Landslip/landslide resulting in localised or widespread damage.	<ul style="list-style-type: none"> • Council codes 	Low	LEOCON
Major Hazard Facility (MHF)	Major Hazard Facility within area creates <i>[ID facility and risk]</i>	<ul style="list-style-type: none"> • Registered Contaminated sites? • Mine sites with explosives and chemicals • Natural gas pipeline and pumping station near Cobar – Bulla Park. • Location specific Emergency Management Plans 	Low	REOCON
Storm	Severe storm with accompanying lightning, hail, wind, and/or rain that causes severe damage and/or localised flooding.(includes tornado)	<ul style="list-style-type: none"> • State Storm Plan • Mitigation projects through LGA, Water NSW. • BOM weather warnings • (early warning hole on radar coverage. Increase coverage BH, Cobar) 	Medium	NSW SES
Transport Emergency (Air)	Aircraft crashes in LGA resulting in large number of fatalities, injuries and/or damage to property.	<ul style="list-style-type: none"> • CASA regulations • Local Airport Plans • AusSAR 	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.	<ul style="list-style-type: none"> • ESOs & rescue capability • Traffic management plans • RMS engineering and maintenance • Wide load • Barrier Highway Committee • Media road safety campaigns • Drug and alcohol testing 	Low	LEOCON
Transport Emergency (Rail)	A major rail accident that disrupts one or more major rail routes that can result in risk to restriction of supply routes and/or protracted loss of access to or from the area.	<ul style="list-style-type: none"> • Pacific national, John Holland, ARTC control centres. 	Low	LEOCON

Hazard	Risk Description	Risk Controls	Residual Risk Priority	Combat/ Responsible Agency
Transport Emergency (Maritime)	A major accident that results in environmental damage and major recovery operation	<ul style="list-style-type: none"> No issues 	Low	Relevant Port / Maritime / FRNSW
Tsunami	A tsunami wave of magnitude that presents a risk to land and marine elements.	<ul style="list-style-type: none"> No issues 	Low	NSW SES
Utilities Failure	Major failure of essential utility for unreasonable periods of time as a result of a natural or man-made occurrence.	<ul style="list-style-type: none"> Backup supply in vulnerable facilities Desalination plant for water, pipelines Telecomm – landlines to cover mobile, 	Medium	LEOCON

Historical Events

RIVERINE FLOODS

Riverine flooding in the Far West Region usually affects several Local Government Areas concurrently in a relatively slow rolling impact as flood waters travel along the main river systems and tributaries of the Darling/ Barwon River.

Riverine flooding can affect large parts of the Murray Darling River Basin however usually only impacts a relatively small number of people due to the sparsely populated Far West Region.

Recent historical events have realised evacuations of some smaller townships eg, Weilmoringle and Goodooga in 2010, 2011 and 2012 primarily due to the impacts of isolation. Although evacuations remain an option, NSW SES provide aerial and land support to these isolated communities allowing them to remain in place during smaller flood events.

Historical events have also led to larger evacuations eg, Nyngan in 1990 where the whole township was evacuated to Dubbo after the levee was breached and the town inundated.

Riverine flood events typically last for months throughout the Region due to the relatively flat flood plain.

LOCALISED FLASH FLOODING

Localised severe thunderstorm activity can result in flash flooding of many towns in the Far West. Flash flooding of these towns often results in minor building inundation, brief traffic diversions, vehicle damage and land erosion. Broken Hill and Cobar are often subject to flash flooding several times a year.

FIRES

Historically, large fire events in the region are generally grass and scrub fires linked directly to high rainfall years prior to the events. High fuel loads dry off over the hotter months causing higher risk of large scale fire events. The higher summer temperatures with low humidity over a lengthy summer season also increase the fire risks in the area, especially when high fuel loads are evident.

Periods of hot, dry weather after high rainfall seasons have resulted in large scale fire events eg, 1974/5 where huge tracts of grasslands were burnt across the region.

Large Scale events usually occur in the north of the region in the flat grass and scrub lands.

RFS is well resourced to combat these fire events with rural brigades spread throughout the region.

Larger fire events in the Far West are usually controlled from the Fire Control Centres at Bourke, Cobar or Dareton.

MOTOR VEHICLE COLLISIONS

Motor vehicle collisions occur regularly on region highways, main, local and private roads. Risks from a Region perspective may include;

- Large multi-trailer haulage vehicles with complex loads.
- Oversize transports that may disrupt traffic flow,
- Heavy vehicles with hazardous loads,
- Fatally or critically injured occupants from collisions,
- Stock transport rollovers with injured and dead animals.

Challenges for Responders to Motor Vehicle collisions in the Far West Region will include;

- Location
 - Distance to an incident results in travel delays for responders.

- Identifying the exact incident location so that responders may be activated from the closest, most appropriate location.
- Delays for Region resources to assist due to compounded distance to the incident location.
- Resources
 - Local resources may not exist or are unavailable, and may require escalation to a Region resource.
 - Investigation resources may be required from outside the local area.
 - Inadequate local response resources may require escalation to region or state level resources.
- Casualties
 - RFDS may be required for patient transport.
 - Patients may need to be transported Intrastate or interstate due to inadequate local medical facilities.
- Traffic
 - Road closures may be necessary
 - Traffic management and control may need to be coordinated and/or escalated to Region.
 - Traffic diversions may need to be established and/or engineered.
- Clean-up
 - Clean-up of waste or hazardous material may need Region support
 - Round-up, triage or transportation of stock may require Region Support
 - Towing may need to be arranged from outside the local area.

Part 3 – Local Emergency Management Plans

Annexure C – Local EMPLAN Inventory

It is inherent that the Regional EMPLAN have a strong link to the Local EMPLANs to ensure that the community requirements and major hazards and risks identified are catered for. The REMC have clear Governance responsibilities to ensure that the standard of all Local EMPLANs meet the prescribed standard and enable the Region to prepare for and provide support to LEMCs as anticipated. Annexure C provides a summary of all endorsed Local EMPLANs and supplement Consequence Management guides and key regional planning considerations.

Endorsed Local EMPLANS and CMGs

LEMC Local EMPLAN	CMG's for this Hazard for each LEMC	Responsible Agency
Balranald	Bridge Closure – Balranald Bridge	NSW Police
	Fire - Commercial	Fire + Rescue NSW
	Fire - Residential	Fire + Rescue NSW
	Flood	NSW State Emergency Service
	Hazardous material	Fire + Rescue NSW
	Pandemic	NSW Health
	Transport Accident - Air	Local Emergency Operations Controller
	Transport Accident - Heavy Vehicle	NSW Police
Bogan	Flood	NSW State Emergency Service
	Mine Emergency	Local Emergency Operations Controller
	Storm	NSW State Emergency Service
Bourke	Fire - Bush	NSW Rural Fire Service
	Fire - Structural	Fire + Rescue NSW
	Flood	NSW State Emergency Service
	Hazardous materials	Fire + Rescue NSW
	Storm	NSW State Emergency Service
	Transport Accident – Air	Local Emergency Operations Controller
Brewarrina	Fire - Structural	Fire + Rescue NSW
	Flood	NSW State Emergency Service
	Hazardous materials	Fire + Rescue NSW
	Storm	NSW State Emergency Service
Broken Hill	Earthquake	Local Emergency Operations Controller
	Fire - Commercial	Fire + Rescue NSW
	Fire -Industrial	Fire + Rescue NSW
	Hazardous materials	Fire + Rescue NSW

LEMC Local EMPLAN	CMG's for this Hazard for each LEMC	Responsible Agency
	Mine Emergency	Local Emergency Operations Controller
	Pandemic	NSW Health
	Storm	NSW State Emergency Service
	Structural Collapse	Fire + Rescue NSW
Central Darling	Flood	NSW State Emergency Service
	Storm	NSW State Emergency Service
Cobar	Flood	NSW State Emergency Service
	Hazardous materials	Fire + Rescue NSW
	Mine Emergency	Local Emergency Operations Controller
	Transport Accident – Air	Local Emergency Operations Controller
Wentworth	Flood	NSW State Emergency Service
	Hazardous materials	Fire + Rescue NSW
	Storm	NSW State Emergency Service
	Structural Collapse	Fire + Rescue NSW

Key Regional Planning Considerations for Hazards.

The following table recognises key regional planning considerations identified after analysis of hazards and risks in Far West Region Local EMPLANS and Consequence Management Guides. These tables deal with hazards generic to all LGAs in the Region, as well as hazards specific to some LGAs.

Hazard	Regional Hazards Overview	Key Regional Planning Considerations	LEMCs ³¹	References
Bridge Closure	The closure of bridges over the Murray River for protracted periods may pose significant inconvenience to local communities, and inhibit economic continuity by delaying cross border freight and people movement. Some local communities also rely on cross border emergency services in communities. TfNSW have pre-planned Traffic Management Plans for all border river crossings on the Murray River.	<ul style="list-style-type: none"> • See “Heavy Vehicle Accident” and “Hazardous Material” hazards above – cause and effect. • Engineers may be required from a Region level to assist with advice on impacted infrastructure. • An EOC may be required to manage event, especially in initial stages. Region resources will be required to assist with EOC. • Victorian Emergency Management resources may be required to assist. Coordination through EOC. • Local river crossings may be desirable. Region resources from SES or VRA may be required to assist. • Out of area support may be required from police to facilitate security of the site. • Other support agencies may require out of area or Region resources to support a protracted closure. 	Balranald	<ul style="list-style-type: none"> ➤ Relevant Local EMPLAN “Bridge Closure” CMG ➤ TfNSW Traffic Management Plans
Earthquake	A significant earthquake is possible in any part of the Region. A sizable quake could potentially decimate communities and infrastructure, cause substantial loss of life, and result in lengthy, complex rescue operations,	<ul style="list-style-type: none"> • Urban Search and Rescue resources may be required from Region and State Level. • An EOC may be required to manage event. Region resources will be required to assist with EOC. • Engineers may be required from a Region level to assist with advice on impacted infrastructure. • Damage to utilities may require Region level assistance to contain and/or repair. 	Broken Hill	<ul style="list-style-type: none"> ➤ Relevant local EMPLAN “Earthquake” CMG. ➤ State “Major Structural Collapse” Sub Plan. ➤ Evacuation Centre Guidelines.

³¹ List of LEMCs who have identified this hazard as a significant risk in their LGAs.

Hazard	Regional Hazards Overview	Key Regional Planning Considerations	LEMCs ³¹	References
	<p>evacuations and protracted and costly recovery. All communities in the Region will require Region and State resources to assist in the event of a damaging earthquake.</p>	<ul style="list-style-type: none"> Any Evacuation Centre established will require Region support especially with Functional Areas. Region health support from FWLHD may be required for advice on health impacts as required. State PIFAC resources may be required to assist media requirements. Region level EPA resources may be required for environmental pollution advice. DPI/LLS support for domestic or companion animal welfare issues Recovery support may be required from the Region or State level. Remote impacted locations may be impossible to airlift support resources into. If ADF assistance is considered there is a 10 hour lead time plus travel time. Resources will come out of Sydney. Utilise DACC arrangements. Requests through REMC JOSS Liaison. 		
Fire - Bush	<p>NSW RFS are well resourced and prepared to combat bush fires in the Region. Brigades are distributed throughout the region. Significant incidents in areas west of Bourke, Cobar or Dareton will be controlled from an RFS FCC in one of those towns. Much of the Region is broad areas of scrub and grasslands.</p>	<ul style="list-style-type: none"> Transport of heavy plant may be needed throughout the region. Air assets for a large operation will be deployed from Dubbo. Any EOC established may require Region level support, especially from Functional Areas. Damage to utilities may require Region level assistance to contain and/or repair. Any Evacuation Centre established will require Region support especially with Functional Areas. Protracted operations may require operational support from Region assets. 	Bourke	<ul style="list-style-type: none"> ➤ Local EMPLAN "Bush Fire" CMG ➤ Local "Bush Fire" Plans ➤ State "Bush Fire" Sub Plan
Fire - Commercial	<p>There are very few commercial premises in the Far West Region that are more than two stories in height. Generally local</p>	<ul style="list-style-type: none"> Presence of Hazardous materials. May required support from region or state resources. If investigators are required the may come from out of area. 	Balranald Broken Hill	<ul style="list-style-type: none"> ➤ Balranald Local EMPLAN "Commercial Fire" CMG

Hazard	Regional Hazards Overview	Key Regional Planning Considerations	LEMCs ³¹	References
	<p>resources should manage most commercial fires unless the fires become too large or complex. Out-of-area or region resources may be required for fire-fighting or hazmat. RFS may be requested to assist FRNSW. Where FRNSW assets do not exist in smaller communities NSW RFS are primary fire responders for those communities. FRNSW have a footprint in most larger communities in the region. Some types of fires may also challenge local resources and require additional specialist Region or State support.</p>	<ul style="list-style-type: none"> • Current MOU with Victorian CFA if cross border assistance is required. Similar assistance may be offered into Queensland and South Australia. • Any EOC established may require Region level support, especially from Functional Areas. • Region level Transport for NSW resources may be required to assess any infrastructure damage. • TfNSW may need to implement existing Traffic Management Plans, or assist with traffic management planning in consultation with Incident Controller for FRNSW. • Damage to utilities may require Region level assistance to contain and/or repair. • Any Evacuation Centre established will require Region support especially with Functional Areas. • Region health support from FWLHD may be required for advice on health impacts as required. • State PIFAC resources may be required to assist media requirements. • Region level EPA resources may be required for environmental pollution advice. • DPI/LLS support for domestic or companion animal welfare issues • Recovery support may be required from the Region or State level. 		<ul style="list-style-type: none"> ➤ Fire Brigades Act ➤ SERM Act ➤ FRNSW Pre Incident Plans and Standard Operational Guidelines.
Fire - Residential	<p>There are very few residential premises in the Far West Region that are more than two stories in height. Generally local resources should manage most residential fires unless the fires spread and become too large to for local resources to cope. Out-of-area or region resources may</p>	<ul style="list-style-type: none"> • Presence of Hazardous materials. May required support from region or state resources. • Are investigators required. May come from out of area. • Current MOU with Victorian CFA if cross border assistance is required. • Less likely to require assistance external to the local area for this particular hazard. • Region assistance may be required if an EOC is necessary, especially with functional areas. 	Balranald Brewarrina	<ul style="list-style-type: none"> ➤ Relevant Local EMPLAN “Residential Fire” CMG ➤ Fire Brigades Act. ➤ SERM act/ Fire Brigades act.

Hazard	Regional Hazards Overview	Key Regional Planning Considerations	LEMCs ³¹	References
	<p>be required for fire-fighting. RFS may be requested to assist FRNSW. Where FRNSW assets do not exist in smaller communities NSW RFS are primary fire responders for those communities. FRNSW have a footprint in most larger communities in the region.</p>	<ul style="list-style-type: none"> • Transport for NSW may be needed to assist with traffic management and/or implementing existing Traffic Management Plans. • Engineers may be required from a Region level to assist with advice on impacted infrastructure. • Region support will be necessary if Evacuation Centre/s are required. • Region health resources may be required for public health advice and warnings. • State level PIFAC may be required to assist with media liaison. • Region level EPA resources may be required for environmental pollution advice. • Region resources may be required from DPI/LLS for assistance with companion or domestic animals. • Recovery support may be required from the Region or State level. 		<ul style="list-style-type: none"> ➤ Site Pre Incident Plans – Accessible electronically by FRNSW staff. ➤ Local Disaster Welfare Plan.
Flood	<p>Riverine flooding in the Far West Region usually affects several Local Government Areas concurrently in a relatively slow rolling impact as flood waters travel along the main river systems and tributaries of the Darling/ Barwon River.</p> <p>Riverine flooding can affect large parts of the Murray Darling River Basin however usually only impacts a relatively small number of people due to the sparsely populated Far West Region. SES are well-practised</p>	<ul style="list-style-type: none"> • Flood may concurrently cross over many different LGA or Region boundaries. • Any Evacuation Centre established will require Region support especially with Functional Areas. • Possibly need to work with Victorian agencies. The Victorian CFA has a good MOU with FRNSW. MOUs are also in place with SES and other ESOs. • Bases for Aerial operations including fuel, security, accommodation or hangars. Will need Region and State assistance with coordination. • Augmentation of local resources from Region locations. • Any EOC established may require Region level support, especially from Functional Areas. • Where to accommodate resources that are brought in from agencies to assist. • DPI/LLS support for domestic or companion animal welfare issues for isolated or quarantined people. • Specialist vehicles may need to be brought in. Consider vehicle capability. May need to be coordinated at the Region level. 	<p>Balranald Bogan Bourke Brewarrina Central Darling Cobar Wentworth</p>	<ul style="list-style-type: none"> ➤ SES Local “Flood” Plan (relevant LGAs). ➤ State “Flood” Plan. ➤ Dept. of Defence – DACC manual.

Hazard	Regional Hazards Overview	Key Regional Planning Considerations	LEMCs ³¹	References
	and prepared to respond to flood events in the region.	<ul style="list-style-type: none"> • Flood Rescue capability may be required from Region Level. • Sewer plant impact – possibly need resources from other LGAs. • If ADF assistance is considered there is a 10 hour lead time plus travel time. Resources will come out of Sydney. Utilise DACC arrangements. Requests through REMC JOSS Liaison. • May need Region support to sustain resources - Fuel, accommodation, replacement staffing etc. • Command and control arrangements. Structure, Liaison, ICT location. Command and Control may be regionalised to cover several LGAs. • May require Region resources to set up evacuation centres if required. • Evacuations may be directed to Dubbo for northern river towns. 		
Hazardous Material	The Far West Region is a main thoroughfare for freight travelling east/west and north/south inter and intrastate. Both road and rail lines in the region carry large tonnages of freight. FRNSW have hazmat capability in locations where they have a footprint and can call on further Region and State resources as required.	<ul style="list-style-type: none"> • Extreme heat on roads may affect response. • Large distances may increase response times. • FRNSW may require additional Region or out-of-area specialist resources. • Any EOC established may require Region level support, especially from Functional Areas. • Region level Transport for NSW resources may be required to assess any infrastructure damage. • TfNSW may need to implement existing Traffic Management Plans, or assist with traffic management planning in consultation with Incident Controller for FRNSW. • Damage to utilities may require Region level assistance to contain and/or repair. • Any Evacuation Centre established will require Region support especially with Functional Areas. • Region health support from FWLHD may be required for advice on health impacts as required. • State PIFAC resources may be required to assist media requirements. 	Balranald Cobar Brewarrina Bourke Broken Hill Wentworth	<ul style="list-style-type: none"> ➤ Relevant Local EMPLAN “Hazardous Material” CMG. ➤ Fire Brigades Act ➤ Site Pre Incident Plans – Accessible electronically by FRNSW staff ➤ State “Hazardous Materials/Chemical, Biological, Radiological and Nuclear” Sub Plan

Hazard	Regional Hazards Overview	Key Regional Planning Considerations	LEMCs ³¹	References
		<ul style="list-style-type: none"> • Region level EPA resources may be required for environmental pollution advice. • DPI/LLS support for domestic or companion animal welfare issues • Recovery support may be required from the Region or State level. 		
Heatwave	<p>All local governments areas in the Far West Region have experience with prolonged extreme heat events and these are experienced significantly more often than a Heatwave Sub-Plan activation occurs. In the main these communities are relatively resilient to heatwave events where, generally, contemporary government and private infrastructure is constructed with extreme heat in mind. Most Far West agencies, especially health, have robust lines of communication with vulnerable community members through the LHD and small Community Health Services. Heatwave Events are considered High Risk!</p>	<ul style="list-style-type: none"> • High temperature events in the Far West are usually more numerous, more severe and last longer than events in the eastern parts of the state. However, they generally do not meet the BoM criteria for a “Heatwave”³². • Most Far West Communities expect prolonged high temperature events each summer and for this reason are relatively resilient in regard to them. • Local Health Services, NSW Ambulance, and other local emergency services, are well informed about members of the community who may be vulnerable to prolonged hot weather and Heatwaves. • Heatwaves will impact on the ability of agencies to respond and sustain operators and equipment into impacted areas. • Historically, communications infrastructure may be impacted by excessive heat causing agencies difficulties with contacting first responders, especially those that rely on mobile phones. 	Nil recognised.	➤ State “Heatwave” Sub-Plan.

³² BoM – “A heatwave occurs when the maximum and the minimum temperatures are unusually hot over a three-day period at a location”.

Hazard	Regional Hazards Overview	Key Regional Planning Considerations	LEMCs ³¹	References
Mine Emergency	There is a variety of underground and open cut hard rock mining in the far west. All commercial operations are well prepared with, generally, their own mines rescue units. Mines are monitored by the Resources Regulator. An underground incident that causes a protracted rescue will result in significant local, state, national and international interest.	<ul style="list-style-type: none"> • A protracted mine emergency will see significant media interest at the site. • Local company rescue resources will likely be quickly overwhelmed in a protracted event requiring specialist support from across the state and the country. • If needed it is likely an EOC will need Region support to function. • In a protracted mine rescue emergency Region, State or Commonwealth support will be required for security, media, health and mental health, welfare, transport, air safety, rescue and more. • Many mine sites contain large storages of industrial chemicals and explosives. Emergencies involving any of these may require Region level support. • Transport of industrial chemicals and explosives to and from mine sites also poses a risk on outback roads. • Hazmat emergencies at or near mine sites may also require specialist Region or state resources to assist. 	Bogan Broken Hill Cobar	<ul style="list-style-type: none"> ➤ Relevant Local EMPLAN “Mine Emergency” CMG. ➤ State Mine Sub Plan
Pandemic	It is recognised that any pandemic will likely impact all local government areas in the Region. Response will be coordinated by the Local Health District as Combat Agency with appropriate support from Local and Regional resources. The general isolation of most communities in the far west may provide some insulation to the impact of the pandemic, or slow down the impact. Conversely agencies should recognise the pandemic may limit effective	<ul style="list-style-type: none"> • Any incident will be controlled by LHD resources, likely to be based in Broken Hill (Far West LHD) or Dubbo (Western LHD). • Region resources may be required to staff any EOC, in particular from Functional Areas. • Police may require Region support to undertake required security measures for isolation and quarantine measures. • Police may require Region support for any necessary border closures if and when considered. • Region Transport for NSW support will be required to support traffic control measures in the case of quarantine or border closures. • Ambulance may require Region support for enhanced transport requirements. • Region DPI/LLS support may be required to monitor animal to human/human to animal transmission. 	Balranald Broken Hill Wentworth	<ul style="list-style-type: none"> ➤ Relevant Local EMPLAN “Pandemic” CMG ➤ NSW Health Influenza Pandemic Plan. ➤ Far West LHD Influenza Pandemic Plan. ➤ State “Health Services (Healthplan) “Supporting Plan.

Hazard	Regional Hazards Overview	Key Regional Planning Considerations	LEMCs ³¹	References
	<p>response due to limited resources and infrastructure in communities. There may be a limit to the ability of region resources to respond if this is a state wide event.</p>	<ul style="list-style-type: none"> • DPI/LLS support for domestic or companion animal welfare issues for isolated or quarantined people. • Region Welfare support for persons in isolation, quarantine or evac centres. • For larger events gas, water and electrical support may be required from out of area resources. • Transport for NSW may be needed to support mass transportation if required. 		<ul style="list-style-type: none"> ➤ NSW Recovery Plan ➤ Aus. Health Manage. Plan for Pand. Influenza. ➤ NSW State EMPLAN.
Storms	<p>Storms affect all areas of the Far West Region to varying degrees. SES, as the combat agency, are well practiced and resourced for storm impacts in the Region and have units in most large towns in each LGA.</p>	<ul style="list-style-type: none"> • Any Evacuation Centre established will require Region support especially with Functional Areas. • Any EOC established may require Region level support, especially from Functional Areas. • Possibly need to work with Victorian agencies. The Victorian CFA has a good MOU with FRNSW. MOUs are also in place with SES and other ESOs. • Bases for Aerial operations including fuel, security, accommodation or hangars. Will need Region and State assistance with coordination. • Augmentation of local resources may be required from Region locations. • Where to accommodate resources that are brought in from agencies to assist. • DPI/LLS support for domestic or companion animal welfare issues for isolated or quarantined people. • Specialist vehicles may need to be brought in. Consider vehicle capability. May need to be coordinated at the Region level. • If ADF assistance is considered there is a 10 hour lead time plus travel time. Resources will come out of Sydney. Utilise DACC arrangements. Requests through REMC JOSS Liaison. • May need Region support to sustain resources - Fuel, accommodation, replacement staffing etc. • Command and control arrangements. Structure, Liaison, ICT location. Command and Control may be regionalised to cover several LGAs if required. 	<p>Bogan Bourke Brewarrina Broken Hill Central Darling Wentworth</p>	<ul style="list-style-type: none"> ➤ Relevant Local EMPLAN "Storm" CMG ➤ State Storm Sub Plan

Hazard	Regional Hazards Overview	Key Regional Planning Considerations	LEMCs ³¹	References
Structural Collapse	A significant collapse of a building(s) or structure(s) requiring a coordinated multi-agency response for search & rescue purposes or to control further collapse / damage and is beyond the capability of the local resources will require additional Region level resources.	<ul style="list-style-type: none"> • A significant structural collapse may require additional USAR resources from Region or state level. • Large distances may increase response times. • FRNSW may require additional Region or out-of-area specialist resources. • Any EOC established may require Region level support, especially from Functional Areas. • TfNSW may need to implement existing Traffic Management Plans, or assist with traffic management planning in consultation with Incident Controller for FRNSW. • Any Evacuation Centre established will require Region support especially with Functional Areas. • State PIFAC resources may be required to assist media requirements. 	Broken Hill Wentworth	<ul style="list-style-type: none"> ➤ Relevant Local EMPLAN “Structural Collapse” CMG ➤ Major Structure Collapse State Sub Plan.
Transport Accident - Air	In an Air Transport Emergency of any significance local emergency resources in Far West communities will be quickly overwhelmed. Local EOC’s may coordinate the response but they will require significant region level resources. The activation of the ROC may be necessary in spite of the distances involved to any impact site.	<ul style="list-style-type: none"> • Any EOC established may require Region level support, especially from Functional Areas. • Damage to utilities may require Region level assistance to contain and/or repair. • Any Evacuation Centre established will require Region support especially with Functional Areas. • Larger events may require liaison with Federal aviation agencies. • State PIFAC resources may be required to assist media requirements. • FRNSW may require additional Region or out-of-area specialist resources. • Ambulance may require out of area or Region support resources for large scale incidents. • Site security may require additional out-of-area police resources. • Recovery support may be required from the Region or State level. 	Balranald Bourke Cobar	<ul style="list-style-type: none"> ➤ Relevant Local EMPLAN “Aircraft Accident” CMG ➤ Relevant Local Airport Emergency Plan. ➤ Evacuation Centre Guidelines ➤ Aviation Emergency Sub Plan
Transport Accident -	The region has a large amount of commercial, industrial, horticultural, stock and mining	<ul style="list-style-type: none"> • A load containing Hazardous Materials may require additional out of area or Region support for F+R NSW. • Heavy lifting for vehicles may need to come from out of area. 	Balranald	<ul style="list-style-type: none"> ➤ Balranald Local EMPLAN “Heavy

Hazard	Regional Hazards Overview	Key Regional Planning Considerations	LEMCs ³¹	References
Heavy Vehicle	freight traversing the area. The Barrier Highway is a major transportation route from east to west on the Barrier Hwy. There is also significant freight hauled north and south on the Kidman Way and Silver City Hwy. Most road freight in the area is hauled using multi trailer configurations and often with complex, oversize or hazardous loads. Stock truck rollovers are not uncommon.	<ul style="list-style-type: none"> • An EOC may be required for a large scale incident. Region resources may be required to staff it. • Region level Transport for NSW resources may be required to assess any infrastructure damage, implement existing Traffic Management Plans, or assist with traffic management planning. • State PIFAC resources may be required to assist media requirements. • Damage to utilities may require Region level assistance to contain and/or repair. • Ambulance may require out of area or Region support resources for large scale incidents. • DPI/LLS support for domestic or companion animal welfare issues • Region LHD support may be required for mental health support. • Any Evacuation Centre established will require Region support especially with Functional Areas. 		<p>Vehicle Accident” CMG.</p> <ul style="list-style-type: none"> ➤ TfNSW existing Traffic Management Plans. ➤ Council Traffic Management Plans. ➤ Evacuation Centre Guidelines.

Part 4 – Sub Plans and Supporting Plans

Responsibility for the preparation and maintenance of appropriate sub and supporting plans rests with the relevant Combat Agency Controller or the relevant Functional Area Coordinator. They form a critical element that outlines the arrangements that are in place to deliver support or control at a Regional and Local level as emergencies arise. There are some specific REMC sub and supporting plans that have also been developed to assist with delivering the outcomes of this EMPLAN. The sub/supporting plans are developed in consultation with the Far West REMC and the community.

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

These plans are accessible by the REMO on behalf of the REMC and public release versions are available on the NSW Emergency Website.

Annexure D – Regional Sub Plan and Supporting Plan Matrices

Major Hazard Facilities

There are no Major Hazard Facilities in the Far West Region.

Sub and Supporting Plans

Matrices Description

- *Combat Agency/Functional Area* – The entity that is responsible for sub plan or supporting plan.
- *Sub-Supporting Plan* – The name/title of the plan.
- *Triggers* – Events or occurrences will result in the activation of the plan.
- *Access* – who from the agency or area will be the contact for activating and maintaining the plan.

Combat Agency Sub Plans

Combat Agency	Sub Plan	Triggers	Access
Fire & Rescue NSW	NSW State Asbestos Emergency Sub Plan	An event involving the release or disturbance of significant amounts of asbestos containing materials requiring a multi-agency coordinated response utilising specialised resources such as occupational hygienists, and licensed asbestos assessors and/or appropriately licensed asbestos removalists.	FRNSW EnvSFAC
EOCON	NSW State Aviation Emergency Sub Plan	An aviation incident requiring application of the special arrangements for the control and co-ordination of the response within the boundaries of New South Wales (including New South Wales waters).	REOCON
NSW Department of Primary Industries	Biosecurity (Animal & Plant) Emergency Sub Plan – Version 5 – 2017.	An event which threatens Animal, Aquatic or Plant Biosecurity or invertebrate and invasive species.	NSW DPI
NSW Rural Fire Service	Bush Fire Plan	Any Class 2 or 3 Bushfire or grassfire.	NSW RFS
NSW State Emergency Service	Flood Sub Plan	An event where a relatively highwater level overtops the natural or artificial banks in any part of a stream, river, estuary, lake or dam, and/or local overland flooding associated with drainage before entering a	NSW SES
NSW Food Authority	Food Industry Emergency Sub Plan	Any event which threatens a food industry emergency such as: Microbial, chemical or physical contamination of food deemed to pose a high risk to consumers; Unsafe levels of natural toxins in food; Contagious zoonotic disease outbreak in animals used for the production of food for human consumption; Bioterrorism, sabotage or extortion involving food products; Food supply shortage due to widespread disruption (eg pandemic influenza).	NSW Food Authority

Combat Agency	Sub Plan	Triggers	Access
Fire & Rescue NSW	Hazardous Materials/Chemical, Biological, Radiological and Nuclear Sub Plan	Any imminent or actual, accidental or deliberate release of a hazardous material.	FRNSW
EOCON	Heatwave Sub Plan	Any heatwave events, or periods of extreme heat where SEOCN considers that activation of this subplan is appropriate and deals specifically with the coordination of information between agencies and to the public in relation to these events.	EOCON
NSW Health	Human Influenza Pandemic Plan	Any threat or actual human influenza pandemic requiring measures and mitigating strategies to protect the community and minimise the impact of an influenza pandemic on NSW. It encompasses government, non-government services, business and the community.	NSW Health
Fire & Rescue NSW	Major Structure Collapse Sub Plan	Any event where the collapse of a building(s) or structure(s) requires a coordinated multi-agency response for search & rescue purposes or to control further collapse / damage and is beyond the capability of the local resources.	REOCN
EOCON	Mine Sub Plan	Any event at a mine where the arrangements detailed in the individual Mine Emergency Plan are inadequate to deal with the event.	REOCN
NSW State Emergency Service	NSW Storm Plan	Any weather event accompanied by wind, tornadoes, intense rain, hail, snow or marine wave/water action of sufficient severity to threaten lives and cause damage to property, vehicles, infrastructure, vegetation and the coastal environment.	NSW SES

Functional Area Supporting Plans

Functional Area	Supporting Plan	Area(s)	Access
Agriculture and Animal Services	DPI Management of livestock transport accident responses	All LGAs in the Far West Region	Primary Industries Biosecurity
	LLS Procedure – Attendance at truck accidents requiring assessment and destruction of injured livestock.	All LGAs in the Far West Region	Western LLS – Operations Manager
	Local Land Services Policy – Livestock Transport Incidents	All LGAs in the Far West Region	Western LLS – Operations Manager
	LLS – Livestock Transport incidents : Cost Recovery	All LGAs in the Far West Region	Western LLS – Operations Manager
	NSW State Agriculture and Animal Services Area Supporting Plan, Ver. 2 - 2017	All LGAs in the Far West Region	Regional AASFAC
Engineering Services	NSW State Engineering Services Supporting Plan	All LGA's in Far West Emergency Management Region	Regional ESFAC
Environmental Services	NSW State Environmental Services (ENVIROPLAN) Supporting Plan	All LGA's in Far West Emergency Management Region	Regional EnvSFAC
	Interim advice regarding animal mass carcass disposal.	All LGAs in the Far West Region	Central West Region Unit Head.
Health Services	Far West Local Health District Health Services Functional Area Supporting Plan	Balranald LGA, Wentworth LGA, Broken Hill LGA, Central Darling LGA, Unincorporated Area of NSW	Far West LHD Disaster Manager.
	NSW State Health Services (HEALTHPLAN) Supporting Plan	All LGA's in Far West Emergency Management Region	Regional HSFAC
Public Information Services	NSW State Public Information Services Supporting Plan	All LGA's in Far West Emergency Management Region	REOCON or Police Commander
Transport Services	NSW State Transport Services Supporting Plan	All LGA's in Far West Emergency Management Region	Regional TSFAC
Welfare Services	NSW State Welfare Services Functional Area Supporting Plan	All LGA's in Far West Emergency Management Region	Regional WELFAC

Functional Area	Supporting Plan	Area(s)	Access
Energy and Utilities Services	NSW State Energy and Utilities Services Supporting Plan	All LGA's in Far West Emergency Management Region	State EUSFAC through REOCON
Maritime Services	N/A	N/A	Not required in the Far West Region.
Telecommunications Services	Telecommunication Services (TELCOPLAN) Supporting Plan	All LGA's in Central West Emergency Management Region	State TelcoFAC through REOCON