Local Emergency Management Plan

15 October 2020 FINAL

(Revised Welfare Contacts to Restricted Section – 24 November 2020)

Murray River Council
PO Box 906, Moama NSW 2710
p 1300 087 004
f 03 5884 3417
e admin@murrayriver.nsw.gov.au
w www.murrayriver.nsw.gov.au

murray river council

Table of Contents

Part 1 – Administration

Authority

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

APPROVED

.....

Chair: Scott Barber
Murray Local Emergency Management Committee
Dated: 15 October 2020

ENDORSED

.....

Chair
Riverina Murray Regional Emergency Management Committee
Dated: 15 October 2020

Local Emergency Management Plan

murray river council

Purpose

The Murray River Council ('Council') Local Emergency Management Plan ('the Plan') details the arrangements for, prevention of, preparation for, response to and recovery from emergencies within the Murray River Council Local Government Area (LGA).

It encompasses arrangements for:

- emergencies controlled by combat agencies;
- emergencies controlled by combat agencies and supported by the Local Emergency Operations Controller (LEOCON);
- emergency operations for which there is no combat agency; and
- circumstances where a combat agency has passed control to the LEOCON.

Objectives

The objectives of this Plan are to:

- define participating organisation and functional area roles and responsibilities in preparation for, response to and recovery from emergencies;
- set out the control, coordination and liaison arrangements at the Local level;
- detail activation and alerting arrangements for involved agencies; and
- detail arrangements for the acquisition and co-ordination of resources.

Scope

The Plan describes the local arrangements to prevent, prepare for, respond to and recover from emergencies and also provides policy direction for the preparation of sub-plans and supporting plans:

- Arrangements detailed in this Plan assume 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 insufficient, they are augmented by those at regional level.

c) Control of emergency response and recovery operations is conducted at the lowest effective level.

d) Agencies may deploy their own resources from their own service from outside the affected local area or region if they are needed.

e) The Local Emergency Operations Controller (LEOCON) is responsible, when requested by a combat agency, to coordinate 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 Regional Emergency Operations Controller (REOCON) and agreement of the combat agency and the appropriate level of control.

f) Emergency preparation, response and recovery operations should be conducted with all agencies carrying out their normal functions wherever possible.

g) Prevention measures remain the responsibility of authorities/agencies charged by statute with the responsibility.

Test and Review Process

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

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

Part 2 – Community Context

Annexure A – Community Profile

General

The local government area of Council encompasses an area of 11,865km^2, is home to approximately 12,118 (2018) residents and is in the Southern Riverina, at least 800km south west of Sydney and 205km north of Melbourne. The LGA includes 33 towns and settlements as presented in Table 1

Table 1: ABS Populations for Towns and Settlements in Murray River Council

Main Population Centers	**Population** **2016 Census**	**Settlements**	**Population** **2016 Census**
Barham	1,516	Dhuragoon	25
Koraleigh	354	Dilpurra	22
Mathoura	940	Gonn	43
Moama	6,165	Goodnight	97
Moulamein	438	Kyalite - East	63
Murray Downs,	271	Mallan	52
Tooleybuc	276	Mellool	46
Wakool	301	Niemur	33
Settlements	**Population** **2016 Census**	Noorong	14
Bullatale	39	Speewa	96
Burraboi	65	Stony Crossing	14
Caldwell	31	Tantonan	25
Calimo	70	Thule	35
Cobramunga	30	Tullakool	72
Cunninyeuk	33	Waugorah	11
Cummerangunja	100-150	Womboota	107
Deniliquin - West	207	Yanga	31

Source: https://www.communityprofile.com.au/murrayriver/population/age#!bar-chart;i=0

Council has a wealth of physical features including sweeping plains, stands of Redgum forests and is almost surrounded by the Murray River and its tributaries.

The area's natural assets prove to be a large attraction for locals and visitors alike and form the backdrop to many recreational activities. With tourism, industry and an idyllic rural lifestyle, Murray River Council is a growing region with much to offer.

In the eastern part of the Council, are the wards of Greater Murray and Moama with the largest ward of Greater Wakool found to the west. Murray River Council borders onto 8 other Councils in NSW and VIC as shown in Table 3.

Table 2: Bordering Councils – NSW and VIC

Council - NSW	**Address**	**Telephone**
Balranald Shire Council	70 Market Street Balranald	(03) 5020 1300
Hay Shire Council	134 Lachlan Street Hay	(02) 6990 1100
Edward River Council	180 Cressy Street Deniliquin	(03) 5898 3000
Berrigan Shire Council	56 Chanter Street Berrigan	(03) 5888 5100
Council - Victoria	**Address**	**Telephone**
Moira Shire	44 Station Street Cobram	(03) 5871 9222
Campaspe Shire Council	4 Heygarth Street Echuca	1300 666 535 (03) 5481 2200
Gannawarra Shire Council	47 Victoria Street Kerang	(03) 5450 9333
Swan Hill Rural City Council	45 Splatt Street Swan Hill	(03) 5036 2333

The village of Kyalite, in the Greater Wakool ward, straddles the border with Balranald Shire and has implemented local arrangements for incidents and emergencies in the area which are carried out by Balranald Shire rescue units.

The township of Moama, with its Victorian neighbour Echuca, services a population of well over 20,000 people, as well as approximately two million visitors every year. The township of Deniliquin is an important community, providing the residents of the Greater Murray Ward with a range of services.

The Victorian city of Swan Hill sits just over the state border from the village of Murray Downs and many of the residents of the Greater Wakool ward utilise the services it provides.

Table 3: Border Towns

Border Towns	**Joint Population**	**Partner Councils**
Echuca - Moama	21,252	Campaspe Shire Council
Barham – Koondrook - Kerang	6,400	Gannawarra Shire Council
Swan Hill – Murray Downs	11,374	Rural City of Swan Hill

Landform and Topography

The area covered by Council is almost surrounded by the Murray River and its tributaries.

Council's southern border is formed by the Murray River, with the Edward, Wakool, Murrumbidgee and Niemur Rivers crossing the landscape in the northern parts. The Gulpa Creek is another important waterway which leaves the Murray and flows past Mathoura. The Cadell Fault, which changed the course of the Murray River about 30,000 years ago, traverses the area from north to south.

The terrain is largely flat floodplain country, consisting predominately of agricultural land. The Council area includes wetlands of international significance and part of the largest river red gum forest in Australia, the Murray Valley Regional and National Parks (NSW) and the adjoining Barmah National Park (VIC). There are also a number of National Parks within the LGA with one of the largest being Yanga in the far north-west.

Soil types vary; however, the dominant types are red brown earths, grey, brown and red clays and soil complex associated with ancestral streams.

Climate

According to the Bureau of Meteorology (BoM), the climate of the Murray River Council can be described as winter dominant rainfall, hot winter drought grassland, with more hours of sunshine than the Gold Coast.

The Riverina Murray region has a strong seasonal cycle, with cold winters and hot summers. BoM records indicate that it is considered likely to be one of the regions of New South Wales most severely impacted by climate variability and change because of increasing temperatures (0.4-0.6°C per decade from 1980-2018), changes in the volume and distribution of rainfall, reduced snowfalls, and decreases in river flows.

The *Impacts of Climate Change on Natural Hazards Profile-State Overview* 2010 report identifies that:

> Daily maximum temperatures are projected to rise across all seasons by an average of 1.5–3°C, with the greatest increase in winter and spring (2–3°C). Nights are also projected to be warmer by an average 0.5–2°C, with the greatest increase in spring (1–2°C).
>
> Rainfall is projected to shift from winter to summer dominance with overall total falls declining, especially in the winter growing season. This decline is projected to be 20–50%, with the greatest reduction in southern parts of the region.
>
> Spring and autumn are projected to be similar to winter with rainfall decreasing by up to 50%, and the largest decreases occurring in the south and west. Evaporation is projected to increase in these seasons, exacerbating the dry conditions. Projected increases in the severity of short, medium and longer-term droughts are likely to lead to a decrease of up to 15% in total runoff. El Niño years experienced in the region are likely to continue to result in an increased probability of lower than average rainfall and become hotter. La Niña years experienced in the region are likely to continue to result in an increased probability of higher than average rainfall and become warmer, with storms producing heavy downpours likely to become more frequent.

Projections indicate that despite water stress overall becoming more intense, there is a risk that flood-producing rainfall events are likely to become more frequent and more intense with increased summer rainfall in La Niña years in the Riverina Murray region which includes extensive floodplains and wetlands.

Table 4: Modelled Change in Annual Temperature and Rainfall

Area	Year 2030	Year 2050	Year 2090
MRC (temp, rainfall)	+0.9°C, 0% rain	+1.2°C, +1% rain	+2.0°C, -4% rain

Model run: RCP4.5 (conservative CO_2 controls into the future), Maximum Consensus
CSIRO – Climate Change in Australia: Projections for Australia's NRM Areas
https://www.climatechangeinaustralia.gov.au/en/climate-projections/climate-analogues/analogues-explorer/

Land Use

The main form of land use in the LGA is agriculture.

The region boasts a rich agriculture based on irrigation including rice, livestock, citrus, cereal crops, dairy, walnuts, olives and vineyards.

Table 5: Land Use Zones of Murray River Council

Land Use Zone / Type / Classification	Area (km^2)	% of LGA
RU1 Primary Production	10,080.08	85.00%
RU3 Forestry	413.06	3.48%
RU5 Villages	4.86	0.04%
R1 General Residential	7.83	0.07%
R2 Low Density Residential	0.83	0.01%
R5 Large Lot Residential	5.276	0.04%
B2 Local Centre	0.32	0.00%
B6 Enterprise Corridor	0.40	0.00%
IN1 General Industrial	4.19	0.04%
SP1 Special Activities	1.40	0.01%
SP2 Infrastructure	16.82	0.14%
SP3 Tourist	1.13	0.01%
RE1 Public Recreation	1.19	0.01%
RE2 Private Recreation	3.88	0.03%
E1 National Parks and Nature Reserves	1,215.86	10.25%
E3 Environmental Management	21.93	0.18%
W1 Natural Waterways	72.70	0.61%
W2 Recreational Waterways	6.962	0.06%

Population and People

Murray River Council has a balanced gender ratio, with an ageing population, with a high proportion of English-speaking residents as per Table 6.

Table 6: Demographics of Murray River Council (2016)

Gender Diversity		
Total persons (excluding overseas visitors)		12,118
Males		6,031
Females		6,087
Medium age (years)		47.9
Age		
0-4 years	7%	668
5-14 years	13%	1,524
15-24 years	9%	1,135
25-54 years	31%	3,781
55-64 years	15%	1,847
65 years and over	25%	3,163
Household Type		
Family Household		3,088
Lone Person Household		1,292
Group Household		88
Average household size (no. of persons)		2.3
Income (population aged 15 years and over)		
Median individual income (annual)		$39,013
Language		
People who speak a language other than English at home - Italian 0.6%, Dutch 0.3%, Filipino 0.3%, Punjabi 0.3%, Cantonese 0.2%, German 0.2%, Welsh 0.1%, Russian 0.1% and Japanese 0.1%.		2.5%
Employment		
People who reported being in the labour force in the week before Census night		4,994

In 2016, when the census was completed the following employment details were gathered for the Council area and the results in Table 7 showed the area's diversity.

Table 7: Most Common Occupations within Murray River Council

Most Common Occupations	Murray River Council
Managers	24.1%
Technicians and Trades Workers	12.6%
Professionals	14.0%
Community and Personal Service Workers	9.6%
Clerical and Administrative Workers	10.1%
Machinery Operators and Drivers	6.5
Sales Workers	8.3%.
Labourers	13.2%
Other	1.6%

Transport Routes and Facilities

Council has the following highways traversing the Council area:

- Cobb Highway running north-south through it from Deniliquin to Echuca
- Stuart Highway running east-west through it from Hay to Balranald

Other main routes include;

- Barmah Road
- Perricoota Road from Moama
- Yanga Way
- Deniliquin to Barham Road
- Moulamein to Swan Hill Road
- Moulamein to Barham Road
- Tooleybuc to Sturt Hwy just south of Balranald
- Moulamein to Balranald Road

Murray River Council also has the greatest number of NSW/VIC crossings over the Murray River of any Council;

NSW GOVERNMENT Transport for NSW

Victoria / New South Wales Border Crossings

Local / State Rd	Crossing	Road name	Nearest Location	LGA	Av. Annual Daily Traffic	Daily Heavy Vehicles %
Local	Tooleybuc Bridge	Tooleybuc Road	Tooleybuc-Piangil	Murray River Council	1188	16%
Local	Nyah Bridge	Speewa Road	Nyah-Koraleigh	Murray River Council	650	1%
Local	Speewa Ferry	Speewa Ferry Road	Speewa	Murray River Council	80	2%
Local	Swan Hill Bridge	Swan Hill Road	Swan Hill-Murray Downs	Murray River Council	4034	9%
Local	Gonn Crossing	Murrabit Road	Murrabit	Murray River Council	215	3%
Local	Barham Bridge	Thule Street	Barham	Murray River Council	3685	11%
State	Echuca-Moama Bridge	Cobb Highway	Moama	Murray River Council	21047	4%
Local	Barmah Bridge	Barmah Road	Barmah	Murray River Council	907	15%

Source: Transport for NSW, July 2020.

Convenient transport options are available, including a passenger bus service running several times a day to Melbourne and many regional centres. Train services between Echuca/Bendigo/Melbourne and Swan Hill/Kerang/Bendigo/Melbourne operate daily. Residents also benefit from advanced highway infrastructure and an all-weather airport located in Echuca. There is also a good system of local area buses in Moama and taxis operating in Moama and Barham. Victorian Railways run freight only rail lines through the Murray River from Echuca to Deniliquin.

Mobility, Vehicles Per Dwelling/Travel to Work

On the day of the 2016 Census, the method of travel to work for employed people was predominately by car with 69% of those attending work when by car as a driver or passenger.

Economy and Industry

Murray River Council has a strong and diverse business base. Key industries include agriculture, accommodation and food services, manufacturing, construction retail and health care.

The Murray River and its tributaries, red gum forests, the historic Port of Echuca, an abundance of supporting tourism product, major events and a wonderful climate ensure these consistently popular destinations.

During holiday season, the population of Murray River Council can increase up to five times the normal due to the popularity of the area as a holiday destination. Golf and other sporting events, river activities, including water skiing, camping, fishing and riding the mighty paddle steamers attract large volumes of people.

Local Government Area - Waterways, Water storages and Lakes

Murray River Council LGA includes a number of rivers and creeks which provide some of the most reliable water within the Murray-Darling Basin. This provides both benefits and risk to residents.

Main Water Bodies	**Water Storages**
Murray River	Barham Potable Water reservoir Punt Road
Edward River	Barham Raw Water reservoir Gonn Street
Wakool River	Wakool Potable water plant Burraboi Road
Murrumbidgee River (separate catchment)	Perricoota – James Street Mathoura
Niemur River	Moulamein – Pretty Pine Road
	Murray Downs Potable & Raw water reservoirs Murray Downs Drive
	Tooleybuc Potable water plant Grant Street
	Koraleigh Potable water plant Koraleigh Road
	Moulamein Potable water reservoir Barrata Street

Annexure B– Hazards and Risks Summary

A Local Emergency Risk Management (ERM) Report (2012) has been undertaken by the Murray River Council Local Emergency Management Committee (LEMC) identifying the following hazards as having risk of causing loss of life, property, utilities, services and/or the community's ability to function within its normal capacity.

These hazards have been identified as having the potential to create an emergency and evaluated against Murray River Council Risk Management Framework (CTL/17/35). LEMC to review during the next 12 months.

Hazard	Risk Description	Likelihood Rating	Consequence Rating	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.	Possible	Major	Medium	Department of Primary Industries
Bridge Collapse	Failure of a major or Council bridge structure with or without warning owing to structural failure or as a result of external/ internal events or other hazards/ incidents.	Unlikely	Extreme	High	LEOCON
Communicable Disease (Human)	Pandemic illness that affects, or has potential to affect, large portions of the human population.	Unlikely	Extreme	High	Department of Health
Rural Fire Districts	Major fires in areas of bush or grasslands.	Possible	Moderate	Medium	NSW RFS
Urban Fire Districts	Major fires in areas of residential and industrial.	Possible	Major	Medium	FRNSW
Flood (Riverine)	River flows exceed the capacity of normal river systems resulting in flood waters escaping and inundating river plains.	Rare	Extreme	Medium	NSW SES
Hazardous Materials Incident	Hazardous material incident as a result of an incident or accident.	Possible	Moderate	Medium	FRNSW
Heatwave	Three or more days of high maximum and minimum temperatures that are unusual for that location.	Possible	Major	Medium	SEOCON

Hazard	Risk Description	Likelihood Rating	Consequence Rating	Risk Priority	Combat / Responsible Agency
Storm	Severe storm with accompanying lightning, hail, wind, and/or rain that causes severe damage and/or localised flooding (includes tornado).	Possible	Moderate	Medium	NSW SES
Transport Emergency (Road) (Rail)	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.	Possible	Moderate	Medium	LEOCON
Transport Emergency (Air)	Aircraft crashes in LGA resulting in fatalities, injuries and/or damage to property.	Rare	Major	Medium	LEOCON
Transport Emergency (Waterways)	A major accident that results in environmental damage and major recovery operation.	Rare	Major	Low	TFNSW LEOCON
Utilities Failure	Major failure of essential utility including water supply for unreasonable periods of time as a result of a natural or man-made occurrence.	Possible	Moderate	Medium	LEOCON

Source: Echelon Australia February 2008 (updated 23 July 2012 and 11 June 2020)

Annexure C – Local Sub Plans, Supporting Plans and Policies

Responsibility for the preparation and maintenance of appropriate sub and supporting plans rest with the relevant Combat Agency Controller or the relevant Functional Area Coordinator.

The sub/supporting plans are developed in consultation with the Murray LEMC and the community.

The plans listed below are supplementary to this EMPLAN. The sub/supporting plans have been endorsed by the LEMC and are determined as compliant and complimentary to the arrangements listed in this EMPLAN. These plans are retained by the LEMO on behalf of the LEMC and public release versions are available on the Murray River Council Website.

Plan/Policy	Purpose	Combat / Responsible Agency	Plan Location
Cummeragunja Community Action Plan	To prepare, contain and/or eliminate a pandemic spread within Cummeragunja Community.	NSW Health and NSW Police	Link
Moonahcullah Community Action Plan	To prepare, contain and/or eliminate a pandemic spread within Moonahcullah Community.	NSW Health and NSW Police	Link
Wamba Wamba Community Action Plan	To prepare, contain and/or eliminate a pandemic spread within Wamba Wamba Community.	NSW Health and NSW Police	Link
Murray River Emergency Risk Management (ERM) Report (July 2008, updated 2012, 2020)	Addresses Natural, Technological and Biological risks that may affect the Murray River community.	Local Emergency Operations Controller	Link
Draft Mid-Murray Bush Fire Risk Management Plan	Covers preparedness measures, the conduct of response operations and the coordination of immediate recovery measures from bush fire within the Murray River Council area.	NSW Rural Fire Service	Link
Murray River Flood Emergency Sub Plan (yet to be adopted by the Committee)	Covers preparedness measures, the conduct of response operations and the coordination of immediate recovery measures from flooding within the Murray River Council area.	NSW State Emergency Service	Link

Plan/Policy	Purpose	Combat / Responsible Agency	Plan Location
Murray River Crossings – Incident Response Sub-Plan of the Murray District (2009)	To assist in the management of traffic in the event of a closure of one of the Transport NSW (TfNSW) managed Murray River crossings (Echuca- Moama, Tooleybuc-Piangil, Swan Hill-Murray Downs, Barham-Koondrook Bridges)	TfNSW	Link
Moama Sewer and Sewerage Treatment Plant Pollution Incident Response Management Plan	Protection of the Environment Operations Act (1997) requires licensees to prepare, implement and test pollution-incident management plans (that include community notification and communication protocols) for each of their licensed activities according. Smoke/fire, chemical spill, unusual odours, incapacitated persons or wildlife Flood, pump station failure	EPA Fire & Rescue SES	Link
COVID-19 Summer Action Plan	To highlight actions to be taken to mitigate COVID-19 risks which may present during the Summer months. The plan identifies the consultation process and is aligned with the National Health Directives with the flexibility to move with the government recovery stepped process.	NSW Police	Link