Murrabit and Benjeroop Local Flood Guide

Flood information for the Loddon and Murray Rivers at Murrabit and Benjeroop

For flood emergency assistance call VICSES on 132 500

GANNAWARRA SHIRE COUNCIL

NORTH CENTRAL Catchment Management Authority
Connecting Rivers, Landscapes, People

VICTORIA

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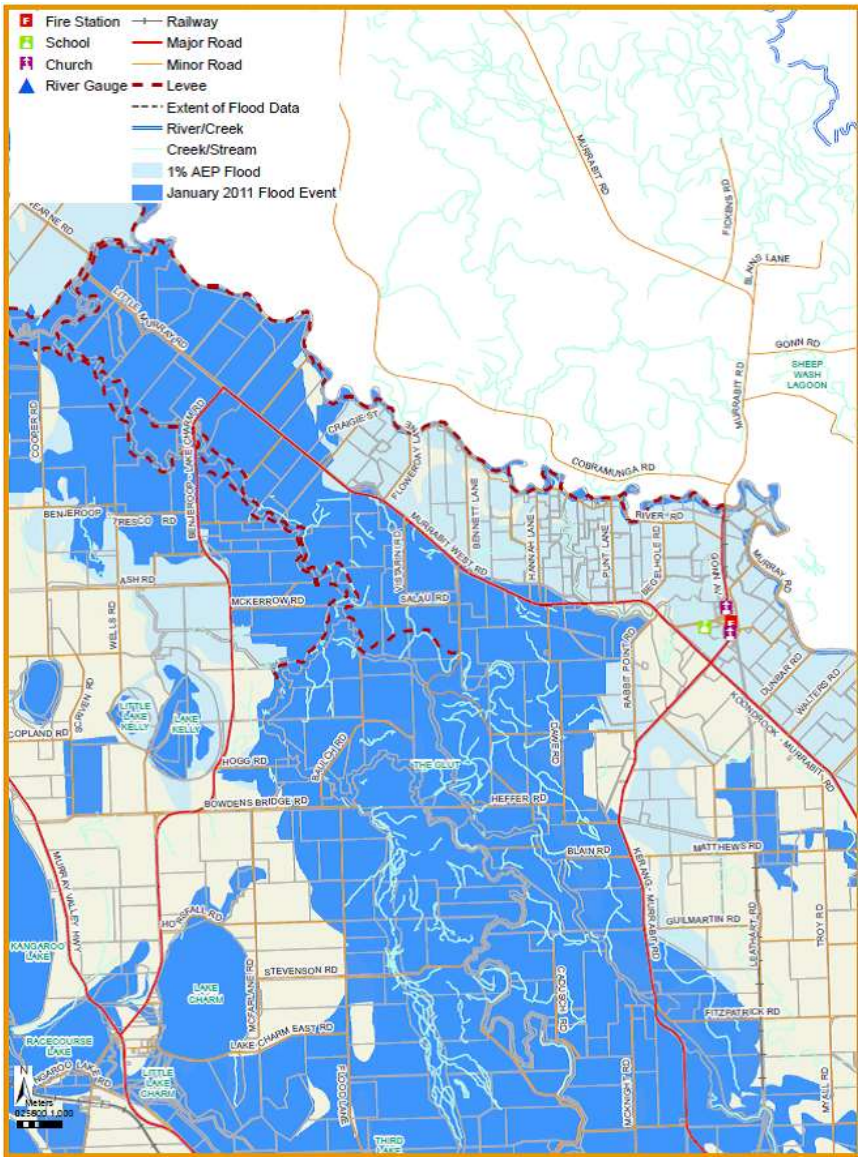
The Murrabit and Benjeroop local area

Murrabit, Benjeroop and the surrounding rural areas are located on the floodplain of the lower Loddon River and are prone to widespread flooding. Although the township of Murrabit is located on higher ground and has levees providing some protection, large floods can still cause damage within the township and no levee is guaranteed flood proof.

The land around Murrabit and Benjeroop is very flat, which means that if either the Loddon or Murray River floods, extensive areas across the district can be inundated for an extended period of time. Levees are located throughout the floodplain, a significant number of these are unmaintained, however levees are not guaranteed and parts of the region may still be prone to flooding.

The map below shows the extent of flooding in the area during the 2011 flood event and the expected flooding from a 1% Annual Exceedance Probability (AEP) flood of the Murray River.



Disclaimer

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Are you at risk of flood?

Murrabit and Benjeroop are located on the lower Loddon River floodplain near the Murray River. The chance of flooding increases when both the Loddon and the Murray Rivers are in flood at the same time. Major flooding of the Avoca River can also contribute to flooding of the Lower Loddon floodplain area.

Significant flooding has occurred throughout the region since settlement, and property owners have constructed a series of earthen levees throughout the floodplain over the last hundred years. Many of these levees are in poor condition, are located on private land and cannot be relied on to protect from riverine flooding.

Murrabit township is located on higher ground, and is protected by a series of levees; however extensive rural areas around the township including Benjeroop are at risk of extensive and long term inundation. No levee is flood proof, including the many levees built on private land. It is likely that large parts of the district will be inundated in future flood events.

Did you know?

The Murrabit and Benjeroop area has a history of flooding, including large floods in 1909, 1956, 1975 and from late 2010 to early 2011. The 2011 flood measured 7.50 metres on the Laanecoorie Gauge and peaked at 78.00m at the Kerang Gauge five days later, with floodwater slowly spreading across the landscape as it moved down the Loddon floodplain towards the Murray River.

No two floods are the same, floods like this or worse could occur again.

If you live in a low-lying area you may be at risk of flooding or need to detour around flooded areas.

Knowing what to do can save your life and help protect your livestock and property

Record flood levels in the Avoca River also contributed to the widespread inundation of the Murrabit and Benjeroop area. The fact that the Murray River did not exceed minor flood level at the time prevented more widespread inundation, however many rural properties were under water for weeks or even months.

As a result:

- 15 houses experienced flooding.
- 10,000 hectares of farmland were under water for over three months.

In 2016 the Murray River was in a moderate to major flood. The peak was monitored as it went through the river system from the Goulburn catchment through the different Murray River townships to Mildura. This was contained between the current levee banks. This event took 100 days to get through to the South Australian border.

Staying Informed and Further Information

Current warnings (VicEmergency)	emergency.vic.gov.au	1800 226 226
Bureau of Meteorology (BoM)	bom.gov.au/vic/warnings	1300 659 217
VicRoads Traffic	traffic.vicroads.vic.gov.au	
Emergency Broadcasters	ABC Local Radio 102.1 FM SKY NEWS Television Mixx 98.7 FM	**Life-threatening Emergency 000**
VICSES Social Media	facebook.com/vicses twitter.com/vicsesnews	
Preparing for Flood Emergencies	ses.vic.gov.au/get-ready	
Creating an Emergency Plan	redcross.org.au/prepare	
Catchment Management Authority	nccma.vic.gov.au	03 5448 7124
Gannawarra Shire Council	gannawarra.vic.gov.au	03 5450 9333
National Relay Service (NRS)	relayservice.gov.au	

Murray and Loddon Rivers flood levels

When the Bureau of Meteorology (BoM) issues Flood Warnings they include a prediction of the flood height based on a river gauge. As Murrabit and Benjeroop can be impacted by flooding from both the Murray and Loddon Rivers, there are a number of gauges which can give residents an indication of what to expect at certain heights, including:

- Loddon River at Laanecoorie
- Loddon River at Appin South
- Loddon River at Kerang (Murray Valley Highway Gauge)
- Murray River at Torrumbarry
- Murray River at Barham

The following tables show historical flood events on each of these gauges. You can use this information to help you prepare.

Loddon River Gauges

Laanecoorie (metres)	Appin South (metres)	Kerang* (metres)	Impact/level
7.80m			August 1909 flood level
7.50m		78.00m	January 2011 flood level (height shown in map page 2).
6.35m			November 2010 flood level
6.34m			September 1975 flood level
5.93m			1956 flood level
5.83m			September 1993 flood level
5.67m		77.84m	1981 flood level
5.50m	3.30m	77.80m	Major flood level 1988. Flood Level
5.28m			1996 flood level
		77.60m	1993 flood level
3.00m	3.10m	77.50m	Moderate flood level. 1945 flood level
		77.40m	December 2010 flood level
1.50m	2.80m	77.00m	Minor flood level. 1963 flood level

*The Murray Valley Highway Bridge Gauge at Kerang is measured based on the Australian Height Datum (AHD) which assumes sea level is Zero metres. The Gauge Zero is 73.46 metres.

Murray River Gauges

Barham (metres)	Torrumbarry (metres)	Impact/level
	8.20m	1% flood (height shown in map page 2).
	8.16m	2% flood
	8.11m	4% flood
	8.10m	August 1909 flood level (5% flood)
	7.86m	September 1993 flood level
	7.81m	1981 flood level
6.10m	7.80m	Major flood level - 2016 Flood level /1988 Flood Level
5.80m	7.60m	Moderate flood level. 1945 flood level
5.50m	7.30m	Minor flood level. 1963 flood level

Flood warnings and emergency checklist

Bureau of Meteorology Warnings

Warnings are issued by the Bureau of Meteorology (BoM) to tell people about possible flooding.

A **Flood Watch** means there is a developing weather pattern that might cause floods in one or two days. This service covers the whole state.

A **Flood Warning** means flooding is about to happen or is already happening. There are minor, moderate and major flood warnings. This service is only available where flood warning systems are in place.

 **A Minor Flood Warning means floodwater can:**	 **A Moderate Flood Warning means floodwater can:**	 **A Major Flood Warning means floodwater can:**
Spill over river banks and cover nearby low lying areas.	Spill over river banks and cover larger areas of land.	Cause widespread flooding.
Come up through drains in nearby streets.	Reach above floor levels in some houses and buildings.	Many houses and businesses are inundated above floor level.
Require the removal of stock in some cases.	Require evacuation in some areas.	Cause properties and whole areas to be isolated by water.
Cover riverside camping areas and affect some low-lying caravan parks.	Affect traffic routes.	Closes major roads and rail routes.
Cover minor roads paths, tracks and low level bridges.	Require the removal of stock in rural areas.	Require many evacuations.
Affect backyards and buildings below floor level.		Affect utility services (power, water, sewage etc.).

Severe Thunderstorm Warnings

Thunderstorms are classified as severe when there is potential to cause significant localised damage through wind gusts, large hail, tornadoes or flash flooding. Severe Thunderstorm Warnings are issued to the community by BoM.

Severe Weather Warnings

These warnings are issued to the community by BoM when severe weather is expected that is not directly related to severe thunderstorms or bushfires. Examples of severe weather include damaging winds and flash flooding.

Flash Flooding

- Flash Flooding can occur quickly due to heavy rainfall. You may not receive an official warning.
- Stay informed - monitor weather warnings, forecasts and river levels at the BoM website and warnings through VicEmergency.

VICSES Warnings

VICSES utilises the VicEmergency app, website and hotline to distribute flood warnings and emergency information in Victoria. You can also access this information through our social media channels and emergency broadcasters.

VICSES warnings aim to provide you with information to help you make good decisions to protect yourself and your family.

The warning level is based on severity, conditions and the likelihood of community impact.

WARNING LEVELS

	**EMERGENCY WARNING** You are in imminent danger and need to take action immediately. You will be impacted. A Major flood warning usually fits into this category.
	**WARNING (WATCH AND ACT)** An emergency is developing nearby. You need to take action now to protect yourself and others. A Moderate flood warning usually fits into this category.
	**ADVICE** An incident is occurring or has occurred in the area. Access information and monitor conditions. Can also be used as a notification that activity in the area has subsided and is no longer a danger to you. A Minor flood warning or Flood Watch usually fits into this category.

ADDITIONAL MESSAGES

	**PREPARE TO EVACUATE/ EVACUATE NOW** An evacuation is recommended or procedures are in place to evacuate.
	**COMMUNITY INFORMATION** Updates for communities affected by an emergency. Can also be used as a notification that an incident has occurred but there is no threat to community.
	**EMERGENCY ALERT** During some emergencies, communities may be alerted by the sounding of a local siren, or by sending an SMS to mobile phones or a voice message to landlines.

Your emergency plan

Emergencies can happen at any time, with little warning. People who plan and prepare for emergencies reduce the impact and recover faster.

Taking the time to think about emergencies and make your own plan helps you think clearly and have more control to make better decisions when an emergency occurs.

Visit redcross.org.au/prepare start creating your plan.

- **Remember, you may not receive any official warning.**
- **Emergency assistance may not be immediately available. Be aware of what is happening around you to stay safe.**
- **Never wait for a warning to act.**

Emergency Kit

Visit Emergency Toolkit for more information

Every home and business should have a basic emergency kit with a supply of 3 days:

Check your kit often. Make sure things work. Replace out of date items.

When a warning is issued, have ready for use or pack into your kit:

I need to add:

Write your list here. Tick items as you pack them into your kit

- Special needs *(eg, babies, Elderly)* _____
- Photos _____
- Family keepsakes _____
- Valuables _____
- Other _____

Emergency Checklist

- ☐ Check if your insurance policy covers flooding.
- ☐ Keep this list of emergency numbers in your mobile phone
- ☐ Download the Vic Emergency app on your mobile phone.
- ☐ Put together an emergency kit and prepare a home or business emergency plan, see **redcross.org.au/prepare**

Before Flooding

- ☐ **Leaving early before flooding occurs is always the safest option. Evacuating through floodwater is very dangerous and you may be swept away.**
- ☐ Stay informed- monitor weather warnings, forecasts and river levels at **bom.vic.gov.au** and warnings through **emergency.vic.gov.au.**
- ☐ Secure objects likely to float and cause damage.
- ☐ Listen to the radio and check the VICSES website for information and advice.
- ☐ Go over your emergency plan. Pack clothing and other extra items into your emergency kit and take this with you if you evacuate.
- ☐ If you are staying in a caravan, move to higher ground before flooding begins.

During Flooding

- ☐ Make sure your family members and neighbours are aware of what is happening.
- ☐ Conditions change rapidly; roads and escape routes can be covered or blocked.
- ☐ Put household valuables and electrical items as high as possible.
- ☐ Turn off water, gas and electricity at the mains.
- ☐ Seek shelter indoors, away from floodwater.
- ☐ If floodwater comes inside, move to a higher point such as a kitchen bench or second storey.
- ☐ Stay away from trees, drains, low-lying areas, creeks, canals, culverts and floodwater.

Evacuating in Flooding

- ☐ **Flood water is dangerous. Stay safe by never entering flood water. It can take just 15cm of water to float a car.**
- ☐ Find alternative travel routes if roads or underpasses are flooded.
- ☐ Be aware of driving hazards, such as mud, debris, damaged roads and fallen trees. If driving conditions are dangerous, safely pull over away from trees, drains and floodwater.

After Flooding

- ☐ For recovery information, contact your local council, go to the VicEmergency Relief and Recovery- **emergency.vic.gov.au/Relief** page or call the VicEmergency Hotline (1800 226 226).
- ☐ Have all electrical and gas equipment professionally tested before use.
- ☐ Stay away from damaged and flooded buildings, fallen trees and powerlines, and damaged roads. Drive slowly, obey all road signs and never drive through floodwater.
- ☐ When cleaning, protect your health and safety. Wear strong boots, gloves and protective clothing.

For VICSES emergency assistance, call 132 500, or Triple Zero (000) in life threatening emergencies.