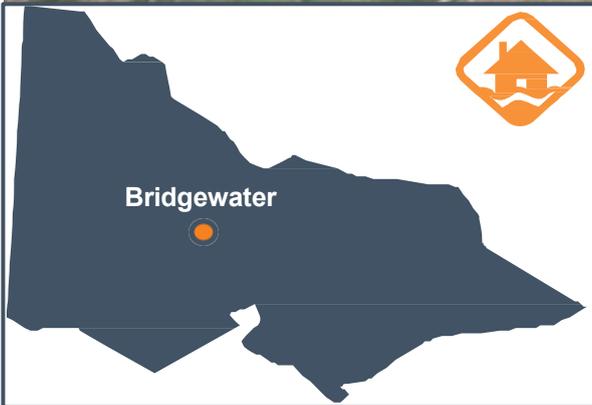




Bridgewater

Local Flood Guide

Riverine flood information for the Loddon river at Bridgewater



For flood emergency assistance call
VICSES on **132 500**



NORTH CENTRAL
Catchment Management Authority
Connecting Rivers, Landscapes, People





Bridgewater

The Loddon flows from the Great Dividing Range in the south to the Murray River in the north of Victoria, with most its catchment located on the traditional land of the Dja Dja Wurrung Aboriginal nation. Bridgewater is a rural township on the Calder Highway where it crosses the Loddon River, 35 kilometres north west of Bendigo, and approximately 40 kilometres downstream of Laanecoorie Reservoir.

The following map shows the expected flooding in a major flood in Bridgewater. A major flood measures 5.5 metres at the gauge named Loddon River downstream Laanecoorie.



Disclaimer

This map publication is presented by Victoria State Emergency Service for the purpose of disseminating emergency management information. The contents of the information has not been independently verified by Victoria State Emergency Service. No liability is accepted for any damage, loss or injury caused by errors or omissions in this information or for any action taken by any person in reliance upon it. Flood risk information is provided by North Central Catchment Management Authority.



Are you at risk of flood?

The Loddon Shire is located on a flood plain and is therefore subject to flooding from time to time, while engineering strategies have been implemented within some towns to reduce the impact of flooding, it is your responsibility to make sure you are prepared for the occurrence of flood.



Did you know?

August 1909

The highest flood on record at Laanecoore Reservoir was the 1909 flood event, similar in magnitude to the January 2011 flood event, however during the 1909 flood event the dam wall of Laanecoore Reservoir failed and washed away.



September 1983

The September 1983 flood event was a result of heavy rainfall in the catchment falling over a 4 day period, during which Bridgewater received 49mm, with a maximum daily rainfall total of over 20mm. The upper catchment received significantly more rainfall, with totals greater than 100 mm recorded.

September 2010

Flooding in September 2010 was a result of over 43mm rainfall on the already wet catchment over a 4 day period, with the heaviest falls of 39mm on the 4 September. Laanecoore Reservoir peaked at on 5 September after a rapid rise from zero flow the preceding day.

January 2011

In January 2011 the flood was said to be 90 kilometres long and 50 kilometres wide, at its peak, water volumes recorded at the Laanecoore Reservoir spillway reached 194 gigalitres per day. To put this number into context, Melbourne uses 460 gigalitres of water per year. In Bridgewater the river flooded homes and businesses including the hotel, post office and caravan park. The police station was flooded and roads severely damaged, and destroyed the green at the local bowling club and damaged the clubhouse.





Loddon flood levels at the Loddon River Downstream Laanecoorie gauge

When the Bureau of Meteorology (BoM) issues Flood Warnings they include a reading of the flood height at the gauge named Loddon R D/S Laanecoorie. While no two floods are the same, the following table can give you an indication of what you could expect at certain heights, including when your access may be cut off and when your property may be affected.

Height (metres)	AEP*	Impact/level
9.30	1% January 2011 August 1909	<ul style="list-style-type: none"> Approximately 35 homes and businesses inundated, including caravan park, motel, hotel and other businesses in Main Street Sloans Road on Bullabul Creek is overtopped by 0.1 m Serpentine Road on Bullabul Creek is overtopped by 1.79 m Bridgewater-Dunolly Road is inundated and properties on the south eastern side of Bridgewater-Dunolly Road are inundated Significant breakout between Bullabul Creek and Loddon River across the floodplain connecting the two floodplains Approximately 2 km of the Calder Highway between Loddon River and Bullabul Creek is overtopped The majority of the township on the south eastern side of the Calder Highway is inundated Water breaks out from the eastern side of the Loddon River, travelling north east across farmland and through the township via Calder Highway
8.57	2%	<ul style="list-style-type: none"> Breakouts from the Loddon River to the north west at Pondage Road Water flows in a north-westerly direction down the Calder Highway to Lyndhurst Street (from Bridgewater-Maldon Road) Approximately 1.5 km of the Calder Highway between Loddon River and Bullabul Creek is overtopped Water is level with the bridge deck at Sloans Road The Serpentine Road crossing on Bullabul Creek is overtopped by 1.2 m Properties east of the Loddon River, between the railway and Calder Highway (up to Erskine St) are inundated up to 0.5 m
7.49	5%	<ul style="list-style-type: none"> Water breaks from the Loddon River to the north-east approximately 4 km upstream of Bridgewater, flowing along Bridgewater-Maldon Road and then overland to the north-west, re-joining the Loddon near the caravan park. Floodplain between Bullabul Creek and the Loddon River is widely inundated with flows breaking out of the Loddon River, resulting in flow across both the Newbridge-Bridgewater Road and Bridgewater-Dunolly Road (depths up to 0.6 m) The Serpentine Road crossing on Bullabul Creek is overtopped by 0.2 m There is some inundation of properties east of the Loddon River, between the railway and Calder Highway (up to the bowling club)
6.66	10%	<ul style="list-style-type: none"> Bullabul Creek and Loddon River flows reach farmland along the Bullabul Creek floodplain between the Bridgewater-Dunolly Road, Bridgewater-Newbridge Road, and the Calder Highway. The caravan park is inundated. Breakouts from the Loddon River to the west begin to inundate properties along the Bridgewater-Dunolly Road.
6.57	September 1983	<ul style="list-style-type: none"> Lower portion of Caravan Park affected
6.35	November 2010 September 1975	<ul style="list-style-type: none"> Approximately two thirds of the caravan Park inundated
6.13	September 2010	<ul style="list-style-type: none"> Lower portion of Caravan Park affected
5.82	September 1993	<ul style="list-style-type: none"> Lower portion of Caravan Park affected
5.80	20%	<ul style="list-style-type: none"> Flood is generally confined to the Loddon River The south-western corner of the caravan park and approximately 70 m of the western end of Peppercorn Lane becomes inundated up to depths of 2.5 m
5.5	Major	1988 flood level
3	Moderate	1945 flood level
1.5	Minor	1963 flood level

*The table above shows both the Loddon River downstream Laanecoorie gauge and the Annual Exceedance Probability (AEP) index which uses the probability of an event that size occurring in any given year i.e. 1% in any given year or 20% in any given year.



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 Central Victoria 91.1 FM SKY NEWS Television	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	
North Central Catchment Management Authority	nccma.vic.gov.au	5440 1824
Loddon Shire Council	loddon.vic.gov.au	5494 1200
National Relay Service (NRS)	relayservice.gov.au	



 Flooding throughout the Loddon river district is characterised by large slow moving water, and due to the extremely flat terrain even minor flooding can inundate areas within the region.





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. Communities can also access this information through VICSES 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 that the emergency could impact on the community.

WARNING LEVELS	
	<p>EMERGENCY WARNING</p> <p>You are in imminent danger and need to take action now. You will be impacted. A Major flood warning usually fits into this category.</p>
	<p>WATCH AND ACT</p> <p>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.</p>
	<p>ADVICE</p> <p>An incident is occurring or has occurred in the area. Access information and monitor conditions. A Minor flood warning or Flood Watch usually fits into this category.</p>

EVACUATION	
If an evacuation is recommended, you will be guided to do so in the action statement in the warning.	
	<p>PREPARE TO EVACUATE/ EVACUATE IMMEDIATELY</p> <p>An evacuation is recommended or procedures are in place to evacuate.</p>

ADDITIONAL MESSAGES	
	<p>COMMUNITY INFORMATION</p> <p>Can be used as a notification that an incident has occurred but there is no threat to community; or to issue a newsletter containing updates for communities affected by an emergency.</p>
	<p>EMERGENCY ALERT</p> <p>During some emergencies, we may alert communities by sounding a local siren, or by sending an SMS to mobile phones or a voice message to landlines.</p>

Your emergency plan

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

Taking the time to think about emergencies and make your own plan helps you think clearly,, have more control and 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 and people with a disability)	
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.