SES Local Flood Guide

Riverine flood information for the Goulburn River at Murchison





For flood emergency assistance call VICSES on 132 500



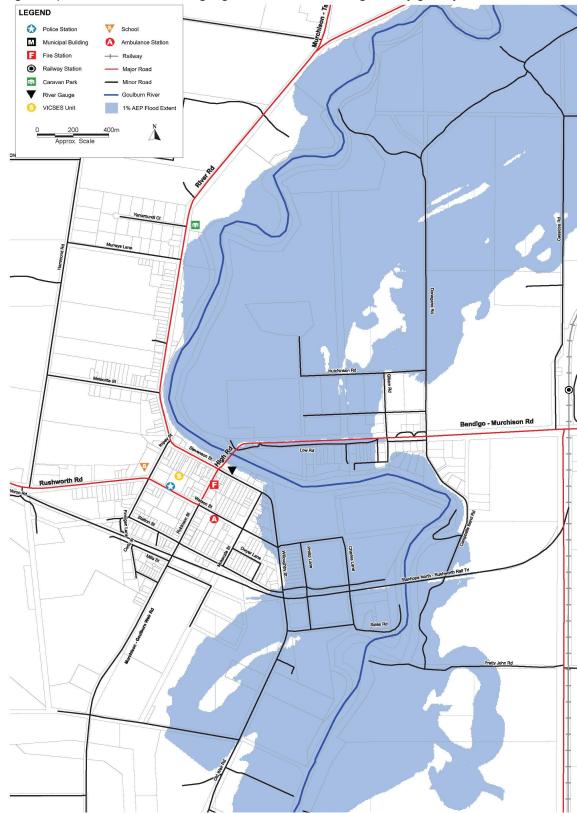






Murchison

A small rural town located on the Goulburn River 40 km from Shepparton in the Greater Shepparton City Council. It is surrounded by countryside which contains orchards, vineyards and dairy farms. The major flood risk is from the Goulburn River flooding which lasts from one (24hrs) to three days (72 hrs). When floods affect areas around Murchison, road access in and out of the area can be compromised, resulting in isolation for some areas. The following map shows the expected flooding in a 1% flood in Murchison. A 1% flood means that there is a 1% chance of a flood measuring 11.72m (or greater) on the Goulburn River gauge near Murchison Bridge in any given year.



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 Goulburn Broken Catchment Management Authority.

Are you at risk of flood?

Most of the Murchison township is believed to be safe from flooding except during very large floods. However, low-lying properties, farmland, fishing spots and camping areas can often be affected by minor to moderate flooding.



River levels can rise within several hours of heavy rain, and during floods, floodwater can travel from Goulburn Weir to Murchison in 12-15 hours and from Seymour to Murchison in three to three and a half days. Be aware that floods can affect your property before the peak arrives and no two floods are the same.

During a major flood, the main bridge and rail trail as well as roads to Shepparton, Violet Town and Bendigo may be closed or damaged. Several homes in the Willoughby Street area and low-lying properties along Phillip Lane, High, Hutchison and Gillam Roads may be flooded or isolated. In addition, the River Haven Caravan Park, Murchison Caravan Park and farms close to the river may be flooded or isolated.

Community facilities that may also be at risk of flooding include the Murchison swimming pool, low-lying areas of the cemetery, and the camping and fishing spots north of the Bridge.

Goulburn Broken community Flood Intelligence Portal

A key role of the Goulburn Broken Catchment Management Authority (GBCMA) is to find out how far a flood might reach and how high floodwater might rise. Councils also have a responsibility to consider land subject to flooding in planning, zoning, and development approvals. Sharing flood risk information with communities

is key to improving flood resilience. GBCMA, Greater Shepparton City and other nearby councils have funded this web portal where community can:

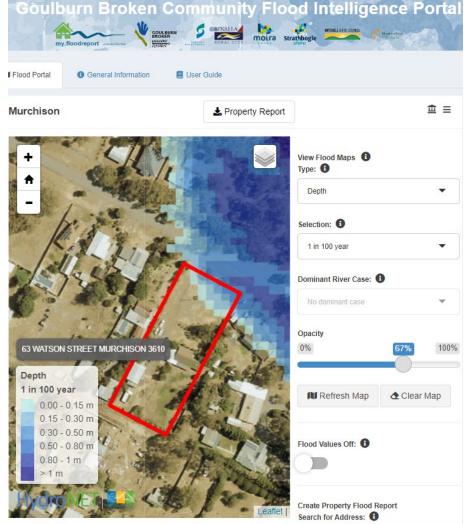
- Search for a property of interest.
- Download Property Flood Reports to help you manage your flood risk.
- View Flood Maps based on:

Flood Data and Mapping relative to flood gauge heights to assist with preparedness and useful with height predictions in flood warnings and; **Design floods** like a "1% flood" which means there is a 1 in 100 chance (or greater) of this type of flood happening every year.

To get started, go to:

my.floodreport.com.au/gbcma

Disclaimer: This information does not replace the need for planning permits under the Municipal Planning Schemes, nor written advice from Catchment Management Authorities. Use of this web portal is subject to terms and conditions, which can be read and downloaded in the portal. By using this web portal, you are agreeing with these terms and conditions.



Did you know?

Local Flood Guide

Murchison's highest recorded flood was in 1916 when up to a metre of water flowed down the main street. Other floods above the major flood level (10.7m on the Murchison Gauge) have occurred in the region in 2022, 1974, 1939, 1934 and 1917.

Lake Eildon built in 1956, and water diversions at Goulburn Weir now control most water flows including irrigation into the lower Goulburn River. Although Lake Eildon and Goulburn Weir were not specifically designed for flood mitigation, these storages have reduced how often minor and moderate floods affect Murchison and the damage these cause. However, in a major flood these two weirs may not be able to reduce the impact of severe flooding on Murchison.

Extreme heavy local rainfall between Lake Eildon and Murchison can also result in floods, such as in 2022, the highest flood since Lake Eildon was created.

Flood Levees

A levee is an embankment usually along-side a river or creek designed to protect property from floodwater. Levees can reduce the frequency of flooding but no levee is guaranteed to be flood proof. A levee is designed to control a certain amount of floodwater. If larger floods occur, water will flow over



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 property

the levee into lower areas. Floodwater may also damage the levee, allowing floodwater to flow through an opening or break. Flood levees are to protect property, not people. If the levee is in danger of failing you will be advised to evacuate flood prone areas. It is important that you follow this advice.

In Murchison, there is a 200 m long earthen (soil) levee, approximately 600 mm in height, along the bank of the Goulburn River north from High Street to the back of the playground. The levee protects the town from main stream flooding from the Goulburn River up to the 1% flood level.

Preparing your Home for Flooding

There are practical steps you can take to reduce damage to your home if you expect to be flooded. If you live or work in a high-risk flood area, consider keeping dry sand and about 25-30 bags for your own use in an emergency. This is about the right number of sandbags to protect an average home. Watch the 60 second Bag It, Block It, Lift It & Leave video: https://youtu.be/IImy2Lwv9wY

Bag it

- Sandbag doorways and low-lying windows to slow floodwater entering your home.
- Learn how on the last page or go to https://www.ses.vic.gov.au/plan-and-stay-safe/sandbag-guide

Block it

Block toilets, bath and drains using a sandbag within a plastic rubbish bag, if you have one.

Lift it

Lift your irreplaceable and valuable items up high.

Leave

Turn off power, gas, and water at the mains and go to higher ground away from the flooded area, like the home of family or friends or an emergency relief centre.



Goulburn River flood levels at the Murchison gauge

Six Goulburn River flood level gauges in and around Murchison can provide flood information for the town: one at Murchison Bridge and others upstream at Goulburn Weir, Seymour, Trawool, Ghin Ghin and just below the Lake Eildon dam. There is also another gauge on Hughes Creek at Tarcombe Road Avenel and a rain gauge at Tamegong which can provide early indications of rainfall intensity east of Seymour.

When the Bureau of Meteorology (BOM) issues Flood Warnings they include a prediction of the flood height at Goulburn River gauge at Murchison. 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 or your property may be affected.

Height (metres)	Impact/level				
12.22 m	September 1916 Largest flood known (approx.). If this level occurred today it would cause significant numbers of rural properties to be isolated and more properties would have above floor flooding along Station, Hutchinson, Gillam and Willoughby Streets, Phillip Lane, and High and River Road.				
12.06 m	October 2022 – Largest flood since Lake Eildon was constructed in 1956.				
11.72 m	1% flood level (height shown on map pg 2). A flood of this height could cause flooding in low lying areas including Phillip Lane, Willoughby, Hutchison and Gillam Streets, High Road, the town swimming pool and cemetery.				
11.33 m	May 1974.				
11.28 m	1917.				
11.25 m	1934.				
10.80 m	Levee near River Haven Caravan Park overflows flooding the area.				
10.70 m	Major flood level				
10.66 m	October 1993.				
10.57 m	September 1993.				
10.20 m	Moderate flood level				
10.15 m	September 2010. People were moved to Murchison Relief Centre in Watson Street and caravans were moved to higher ground.				
9.93 m	January 2011. No significant impacts were experienced in Murchison.				
9.81 m	December 2010. No significant impacts were experienced in Murchison.				
9.42 m	November 2011. No significant impacts were experienced in Murchison.				
9.00 m	Minor flood level. Low-lying rural properties upstream and downstream of Murchison likely to be				
	flooded which may require the moving of stock and equipment to higher ground and the closure of				
	some local roads and camping and fishing spots north of the Bridge.				
7.12 m	March 2012.				
5.62 m	December 2017.				



Staying Informed

A **Flood Watch** means there is a developing weather pattern that may cause floods in a day or two.

A **Flood Warning** means flooding is about to happen or is already happening. There are minor, moderate, and major flood warnings. Flood warning systems are not in place everywhere.

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

Severe Weather Warnings

These warnings are issued to the community by the Bureau of Meteorology (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 <u>BOM website</u> and warnings through <u>VicEmergency</u>.

Remember, you may not receive any official warning, so never wait for a warning to act.

Emergency assistance may not be immediately available.

Be aware of what is happening around you to stay safe.



Australian Warning System on VicEmergency

SES issues warnings to provide you with information to help you make decisions to protect yourself and your family. Warning levels are based on severity, local conditions, and the likelihood of community impact.



Flood warnings are published to the VicEmergency website, smartphone app and announced on nominated emergency radio broadcasters like ABC **97.7FM**, 3SR **95.3 FM** & STAR **96.9FM**.

To hear warnings in English, call the VicEmergency hotline **1800 226 226**.



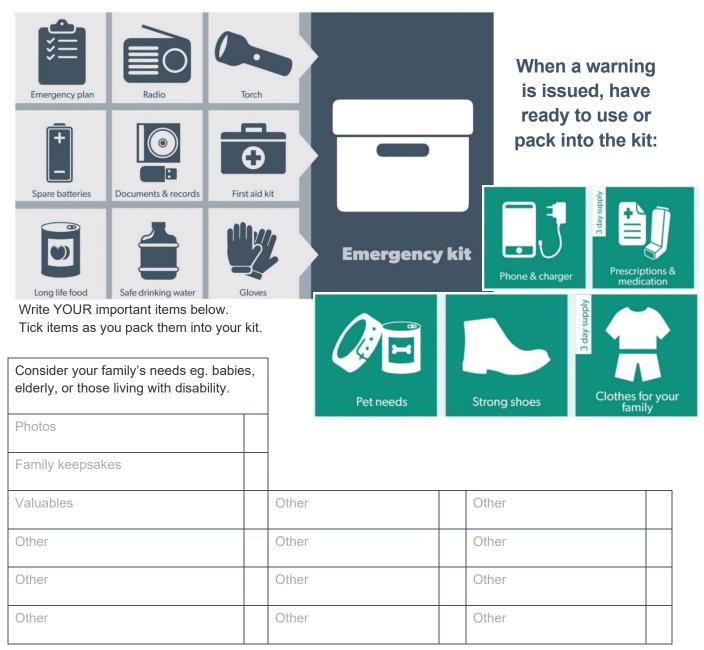
For warnings in other languages, call the national Translating and Interpreting Service (TIS) on **131 450** and ask for the VicEmergency hotline.

WARNING LEVELS

A	EMERGENCY WARNING					
	You are in imminent dange	er and need to take action now. You will be impacted.				
	A Major flood warning usually fits into this category.					
^	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.					
٨	ADVICE					
	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.					
EVACUATION			-			
f an evacuation	s recommended, you will be	guided to do so in the action	on statement in the	warning.		
PREPARE TO EVACUATE/ EVACUATE IMMEDIATELY						
<i>z</i> i⇒	An evacuation is recommended or procedures are in place to evacuate.					
ADDITIONAL M	ESSAGES					
	COMMUNITY INFORMATION					
i	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.					
A	EMERGENCY ALERT					
EMERGENCY ALERT. BE WARNED. BE INFORMED.	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.					
Current warnings (VicEmergency)		emergency.vic.gov.au	1800 220			
Bureau of Meteorology (BoM)		bom.gov.au/vic/warnings 1300 659 217				
VicRoads Tr		traffic.vicroads.vic.gov.au ABC 97.7 FM				
Emergency Broadcasters		STAR 96.9 FM	Life-threatening	000		
		3SR 95.3 FM	Emergencies Triple Zero	000		
		SKY NEWS TV				
VICSES Social Media		facebook.com/vicses	·			
		twitter.com/vicsesnews				
	r Flood Emergencies Emergency Plan	ses.vic.gov.au/get-ready				
•	Anagement Authority	redcross.org.au/prepare gbcma.vic.gov.au/ (03) 5822 7700				
	pparton City Council		greatershepparton.com.au/ (03) 5832 9700			
	ay Service (NRS)		relayservice.gov.au			
		<u>enayeer noongornau</u>				

Emergency Kit

Every home and business should have a basic emergency kit with supplies for 3 days. Watch the emergency kit video at: <u>https://youtu.be/XgyLnKDMkNo</u> Check kit often and replace out of date items.



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.



Flood checklist

Get ready, have a plan, know what to do...

Taking the time to plan for emergencies helps your think more clearly, have a greater sense of control, and make better decisions when an emergency happens.

Make sure you'll receive warnings and emergency information in Victoria

- O Install the VicEmergency App and create a Watch Zone
- O Use emergency.vic.gov.au: for all hazards, all emergencies
- O Note the VicEmergency Hotline: 1800 226 226
- Note your local Emergency Broadcaster e.g. ABC Radio 97.7FM/106.5FM

Find local flood information

- Find Local Flood Guides for most flood prone communities at ses.vic.gov.au/get-ready
- Connect with neighbours, other locals, or your local SES Unit to learn about past floods.
- Contact your Catchment Management Authority (CMA) for localised flood information <u>floodvictoria.vic.gov.au/</u> prepare-prevent/risks (Select from map of CMAs)

Plan and Prepare

- Install the Red Cross Get Prepared Smart phone app and follow the steps or complete the Australian Red Cross RediPlan booklet at redcross.org.au/prepare
- Keep a emergency kit with enough for 3 days in an emergency.
- Food, water, protective gloves, masks, medications and prescriptions, first aid and personal hygiene items, a waterproof torch, toilet paper, chargers, battery powered radio, batteries, reading glasses, essentials for babies and pets, spare clothing, and comfort items, especially for children and people with a disability.
- COVID-Normal* Don't forget sanitiser, soap and face coverings.

□ Take action to reduce impacts at your property

- Keep gutters and drains clear of debris, outdoor furniture, toys etc.
- Check your building and contents insurance. What type of flooding does it cover?
- Put your most valuable possessions up high, above possible floodwater height.
- Backup important files and documents to a USB kept elsewhere, or to cloud storage.
- Identify higher ground on your property or further away from the danger area.
- Learn about sandbagging at <u>ses.vic.gov.au/get-ready</u>
- Consider buying sand and sandbags at home ahead of time, especially if you live in a flood prone area.

When a flood emergency happens

- Monitor VicEmergency warnings and information.
- Never drive through floodwater this is the No.1 killer in floods. It takes just 15cm of floodwater to float a small car.
- Watch what is happening around you and activate your plan.
- Bag it, block it, lift it, and leave
- Take your emergency kit and identification e.g.. Drivers licence, passport
- If you are impacted, register at the Relief Centre or with your local council, to get the help you need.
- Monitor VicEmergency for when it's safe to return and for Recovery information.



FLOOD STORM 132 500

ses.vic.gov.au



Sandbagging

Sandbags won't stop the water completely, but can reduce the amount of water entering your home.

How do I fill a sandbag?

- Only use sand to fill hessian bags. Do not use dirt.
- Only fill sandbag two-thirds full.
- Do not over fill the sandbag as it will be too heavy to carry.
- Do not tie the top of the sandbag.
- Take care when filling and lifting the sandbag, to avoid injury.

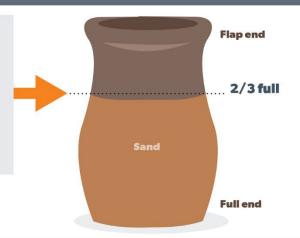
How do I lay sandbags?

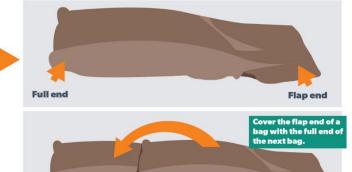
- Lay sandbags like brickwork. Stagger rows so that the joins do not line up.
- Start at one end and work to the other end.
- Ensure the unfilled part of the bag is covered by the next bag.
- Tuck flap under the bag at the end of the row.
- If the sandbag wall is going to be more than five (5) bags high, you will need to lay two (2) rows wide.

Where do I place the sandbags?

- Place sandbags in plastic bags to cover drainage holes in home (e.g. showers, toilets, sinks) to stop back flow of water.
- Place a small wall across doorways, at least the height of the expected water level. Be careful not to trap yourself inside.
- If available, plastic sheeting may be used under sandbags to reduce the seepage.









What do I do once I have finished with the sandbags?

- Sturdy gloves should be worn when handling wet sandbags as they can contain chemicals, waste and diseases.
- Sandbags that have been in contact with floodwater need to be thrown away.
- Contact your local council to find out how to dispose of your sandbags safely.