



Echuca

Local Flood Guide

Flood information for Campaspe and Murray Rivers at Echuca



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





Echuca

Echuca has three main rivers either bordering or near the township:

- the Murray River to the north,
- the Campaspe River to the west, and,
- the Goulburn River which joins the Murray north east about 15 kilometres upstream towards Barmah.

These river systems make Echuca and its surrounding areas prone to flooding with major floods affecting people, animals and property since flood records began in 1867.

Are you at risk of flood?

With three main rivers either bordering or near the township, Echuca and its surrounding areas are vulnerable to cross country overflows of water because of the flat nature of the local countryside.

- There have been more than 16 significant floods since 1867 in the Campaspe Shire, caused by overflows from the Campaspe, Murray and Goulburn rivers.
- Flooding can occur on one river or be caused by a combination of all three rivers. Historically the worst floods are from a combination of the flooded rivers rather than just one.
- Up to 300 properties in East Echuca (e.g. Bynan Street and Goulburn Road), parts of Echuca to the West of the Campaspe River and rural areas surrounding Echuca are at greater risk of flooding.
- Areas of Echuca to the West of the Campaspe River are located on the natural floodway and are susceptible to flooding from both the Campaspe and Murray Rivers. Flooding can also occur at Echuca Village from the Southern Cross Channel.

Some of the town's levees were constructed at Echuca between 1989 and 1992 to provide some protection to the town's central business district and the water treatment plant from most large floods.

However, no levee is flood proof and parts of the town with and without levees are still prone to flooding.

The Echuca Wharf Gauge is measured based on the Australian Height Datum (AHD) which assumes sea level is 0 metres. The map over the page shows the predicted effects of a flood reaching 95.6 AHD on the Echuca Wharf Gauge.



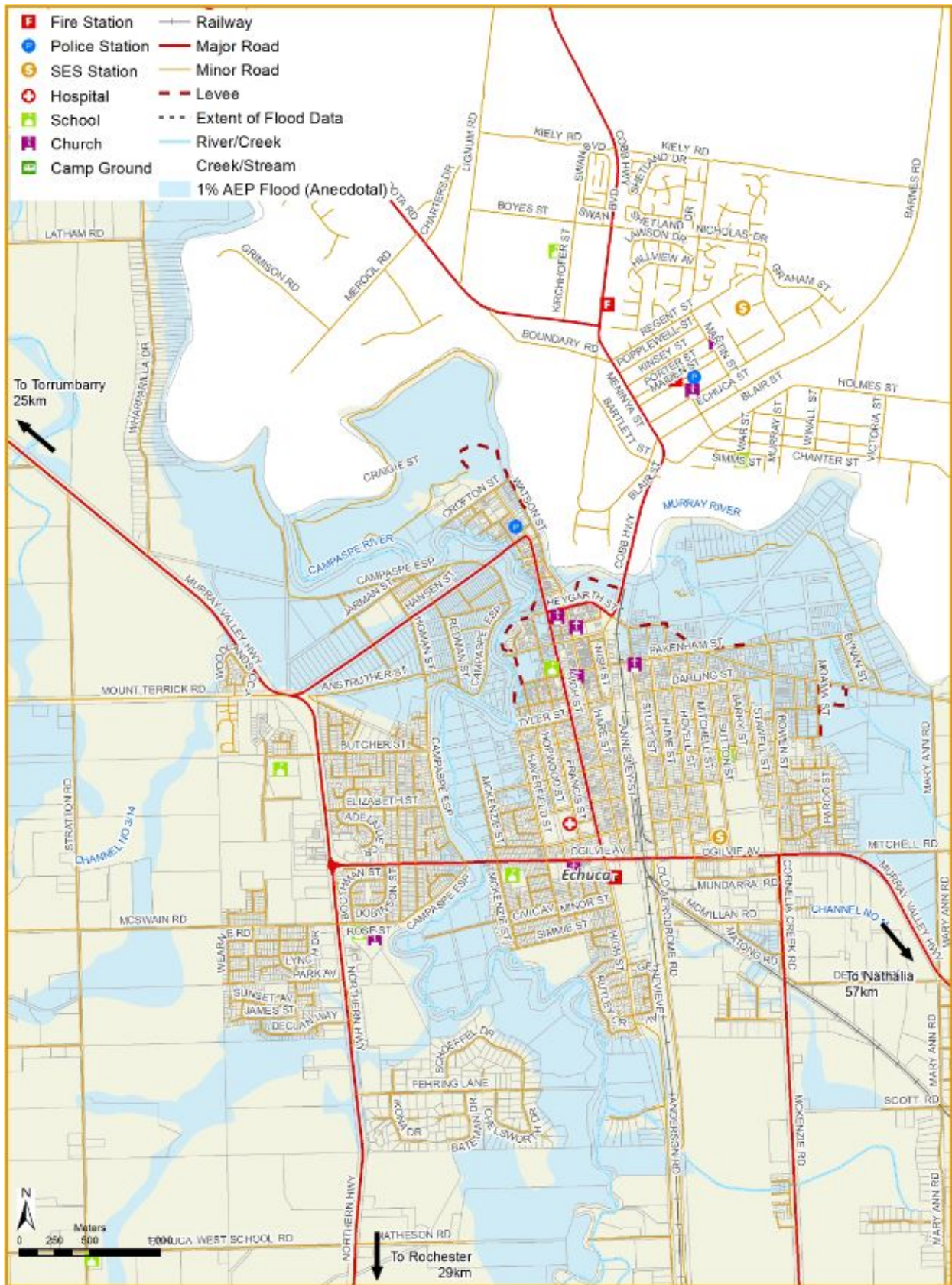
No two floods are the same. Floods like this or worse could occur again.

If you live or work close to a creek, river or low-lying area you may be at risk from floods. Even if you are not directly affected, you may still have to detour around flooded areas.

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



Echuca



Disclaimer

This map publication is presented by Victoria State Emergency Service for the purpose of disseminating emergency management information. The contents of the information have 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 information is provided by North Central Catchment Management Authority.



Murray River flood levels at the Echuca Wharf Gauge

When the Bureau of Meteorology (BoM) issues Flood Warnings they include a prediction of the flood height at Echuca Wharf Gauge. While no two floods are the same, the following table can give you an indication of what you could expect at certain flood heights, including when your access may be cut off and when your property may be affected.

Height (metres AHD)	Impact/level
96.20m	1870 flood - Highest recorded flood
95.6m	Height shown on map at page 2 (1% AEP*)
95.35m	At this level, flooding has reached the top of bank of the Echuca levee system.
95.00m	Floodwater begins to wet properties in the area bounded by Ogilvie Avenue, Bowen and Snowden Streets.
94.90m	Properties at the river end of Martin Street along with properties on the west side of the Ogilvie Avenue bridge would start getting wet.
94.77m	October 1993 flood
94.75m	October 1975 flood
94.70m	Some flooding of Haverfield and Eyre streets with water encroaching on the rear of properties in Rutley Crescent. Water would also encroach into properties at the river end of streets in the area to the west of Dickson Street and north of Cohuna – Echuca Road.
94.60m	There would be flooding into McBride Place from the Campaspe River and water over Etona Avenue and Mary Anne Road likely to be impassable from Ogilvie Avenue to the Murray River.
94.52m	May 1974 flood
94.4	Major flood level
94.3m	There would be areas of deep flooding in parts of Echuca to the West of the Campaspe River. It's likely Hansen Street and the river end of Jarman Street would be surrounded by water and all other streets west of the Campaspe would be flooded. The Campaspe River end of Martin Street would be flooding, as well as the Southern Cross Drain near the intersection of Pakenham and Bynan Streets with Mary Anne Road getting wet.
94.2m	October 1992 flood
93.9m	Moderate flood level
93.6m	Flooding becomes established in some parts of Echuca to the west of the Campaspe River and the lower end of the Campaspe Esplanade would become impassable.
93.50m	Minor flood level
92.85m	January 2011 flood This was predominately a Campaspe River flood that caused some backing up of the Murray River. Flooding occurred in parts of Echuca to the west of the Campaspe River and to the east of the Campaspe River south of the Murray Valley Highway.

*AEP: Annual Exceedance Probability refers to the probability of a flood event occurring in any year.



Did you know?

Echuca has a history of flooding, including its worst flood in 1870 where extensive parts of Echuca and its surrounding rural areas were flooded.

Between September 2010 – February 2011:

- Ten houses were flooded, most near Ogilvie Avenue bridge and around Chelsworth Drive during January 2011 with many others isolated by floodwater.
- Falling trees damaged boat ramps and pontoons in the Port of Echuca and along the river frontage to the north near the houseboat moving area.
- Public areas near the Campaspe and Murray Rivers were flooded and remained closed for a period of time due to the risks of falling trees.
- Many roads, community facilities and private properties were damaged.



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 97.7 FM
ABC Local 91.1 FM
2QN 1521 AM
Classic Rock 102.5 FM
SKY NEWS Television | |
| ■ 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/ | (03) 5448 7124 |
| ■ Campaspe Shire Council | campaspe.vic.gov.au/Home | (03) 5481 2200 |

**Life-threatening
Emergency
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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 immediately. You will be impacted. A Major flood warning usually fits into this category</p>
	<p>WARNING (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.</p> <p>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.</p>

ADDITIONAL MESSAGES

	<p>PREPARE TO EVACUATE/ EVACUATE NOW</p> <p>An evacuation is recommended or procedures are in place to evacuate.</p>
	<p>COMMUNITY INFORMATION</p> <p>A newsletter containing updates for communities affected by an emergency.</p> <p>Can also be used as a notification that an incident has occurred but there is no threat to community.</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.



ARE YOU READY?
DO ONE SIMPLE THING TO MAKE YOU SAFER

- 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.

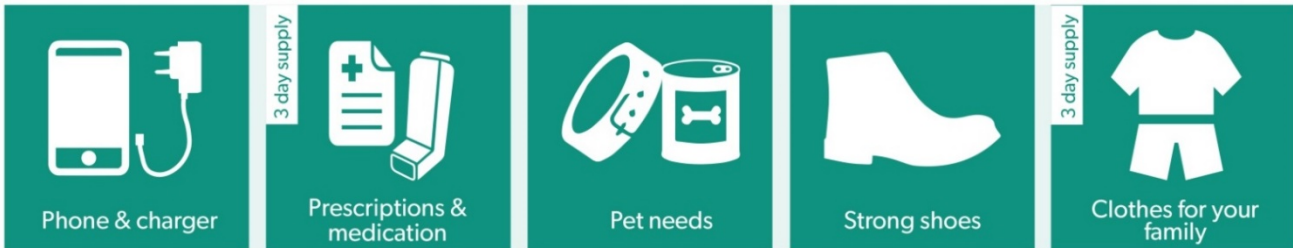


Emergency Kit

Visit [Emergency Toolkit](#) for more information



Every home and business should have a basic emergency kit with supplies for 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 (e.g. items for 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
- Prepare a Home or Business Emergency plan, see <https://www.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 the <http://www.bom.gov.au> and warnings through www.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.

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.
- If you are staying in a caravan, move to higher ground before flooding begins.
- 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. Never enter floodwater. 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 until authorities advise it is safe to do so.
- 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 and wash your hands and clothes regularly.

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