



Charlton

Local Flood Guide

Flood information for the Avoca River at Charlton



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





Charlton

Charlton is located in North Central Victoria halfway between Melbourne and Mildura, in Buloke Shire. Charlton has a long history of flooding from the Avoca River and Yeungroon Creek.

In Charlton, large floods generally occur after a long period of general rainfall which fills the natural floodplain storage, followed by moderate to heavy rainfall over a period of 12 hours or more. Water level rises usually occur after the rain that has caused the flooding has passed. Typically, the flood peak occurs two or so days after heavy rain has fallen. In addition, sizable but less severe floods result from a number of rain producing cold fronts during winter and spring occurring one after another.

Charlton and its surrounding areas are largely based on agriculture. During times of floods, rural areas as well as more heavily populated areas of Charlton are heavily affected by water. The map below shows the extent of the January 2011 flood at Charlton which measured 8.05 metres on the Charlton Downstream Gauge.



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?



Charlton has experienced recent major flooding including September 2010, November 2010 and January 2011. In January 2011 nearly all of the town was flooded including houses, businesses, the ambulance, police and fire stations, the hospital, aged care facility, maternal health centre and the primary and secondary schools.

During major floods, major roads such as the Calder and Borung Highways, the Charlton-St Arnaud Road and the Boort-Charlton Road and many other smaller roads are closed.

Historically, Charlton has been prone to flooding with other major floods occurring in 1909, 1939, 1956, 1983, September 1988, June 1995 and September 2016. The size and timing of prior floods as well as the density of crops and pasture on the floodplain all influence how a particular flood behaves. The river channel has limited capacity at Charlton and downstream of the town.

Flooding is further influenced by overflows from and into the Yeungroon Creek. This can cause flooding from the south. Within town, the grid network of streets acts as the main flow paths of floodwater.

Did you know?

The January 2011 flood registered at 8.60m on the town gauge, the highest level on the gauge since recorded flood history for Charlton began, causing:

- Nearly 80% of the Charlton township to flood and remain under water for almost three days. With flood affected over 80% of Buloke Shire.
- 369 properties 270 residences experienced flooding over the floor level, driving over 400 people from their homes.
- Flooding of 95% of the businesses located in the main street of Charlton.
- Flooding of the Police, Ambulance and CFA Stations making these facilities unusable, with the services operating from temporary locations for more than six months.
- Significant flooding of the Hospital making it unusable.
- Flooding of the power substation resulting in a loss of power to 85% of Buloke Shire leaving residents unable to refrigerate food. This resulted in the need for food drops in the two days after the flood.
- Loss of telephones, mobile phones and the internet for several days.
- Isolation of the town for almost two days because of floodwater blocking State Highways and major roads leading to surrounding towns.

The September 2016 flood peak registered 7.50m below the September 2010 flood (7.91m) causing:

- 4 properties flooded over- floor
- 7 additional properties to experience flooding around their property
- A power outage that affected 750 Charlton Residents



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



Avoca River flood levels

There are four flood warning gauges in and around Charlton on the Avoca River including one at Archdale Junction, Yawong Weir, Charlton town and Quambatook.

When the Bureau of Meteorology (BoM) issues a flood warning it includes a prediction of the flood height based on a gauge. For Charlton, warnings can be based on the Yawong Weir gauge and Charlton Downstream gauge. While no two floods are the same, the table to the right can give you an indication of what to expect at certain heights, including when your access may be cut off and when your property may be affected at different levels on the gauges.

The table shows the impacts at different heights of the Avoca River at the Charlton Downstream and Yawong Weir Gauge in comparison to the Charlton Town Gauge, located at the James Patterson Bridge.

Charlton Downstream Gauge	Yawong Wier (Coonooer Bridge)	Charlton Town gauge (James Patterson Bridge)	Impact
8.05m	6.09m	8.60m	January 2011 flood level. Record flood level for Charlton. At this level, 369 properties flooded with 270 over floor, flooding of the main street affecting businesses. Community services and infrastructure badly affected including loss of power supply and interruption to phone and internet services. The Calder Highway and many other roads closed. (Refer to map on page 2)
		8.35m	August 1909 flood level
7.30m	5.64m	7.91m	September 2010 flood. At this height, 83 properties flooded as well as the police station. Major roads closed including the Calder Highway and Boort and St Arnaud roads
7.00m	5.30m	7.50m	Major flood level - September 2016 Flood Level
7.20m		7.20m	October 1996 Flood Level
7.09m	5.07m	7.17m	November 2010 flood level. During this flood, two properties were flooded.
5.00m	5.00m	5.90m	Moderate flood level
3.50m	3.00m	4.00m	Minor flood level

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 Horsham 594 AM
ABC Ballarat 107.9 FM
SKY NEWS Television
Flow FM 97.7 FM
- 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
- Buloke Shire Council buloke.vic.gov.au 1300 520 520
- National Relay Service (NRS) relayservice.gov.au

**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. 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.