

Local Flood Guide Clunes



Flood information for the Creswick Creek at Clunes









The Clunes local area

Clunes is situated on Creswick Creek, north of Ballarat. The Creswick Creek catchment upstream of Clunes includes the farming areas and forests lying between Clunes and Glendaurel, Learmonth, Coghills Creek, Allendale, Dean, Wattleflat, and Glenpark. When Creswick Creek floods, low-lying areas in Clunes are impacted, including Purcell Street, Fraser Street, the football oval and the caravan park.

Following the September 2010 and January 2011 floods, mitigation works have been undertaken to remove exotic trees and weeds from Creswick Creek in order to reduce the expected level of floodwater through Clunes.

The map below shows the spread of flooding during the September 2010 flood as well as the expected extent of a 1% AEP flood, which means a flood this size has a 1% chance of occurring in any year.

Your local emergency broadcasters are:

- ABC Radio 774 AM or 107.9 FM
- Voice FM 99.9 FM
- 3BA Radio 102.3 FM
- Power FM 103.1 FM
- SKY NEWS Television

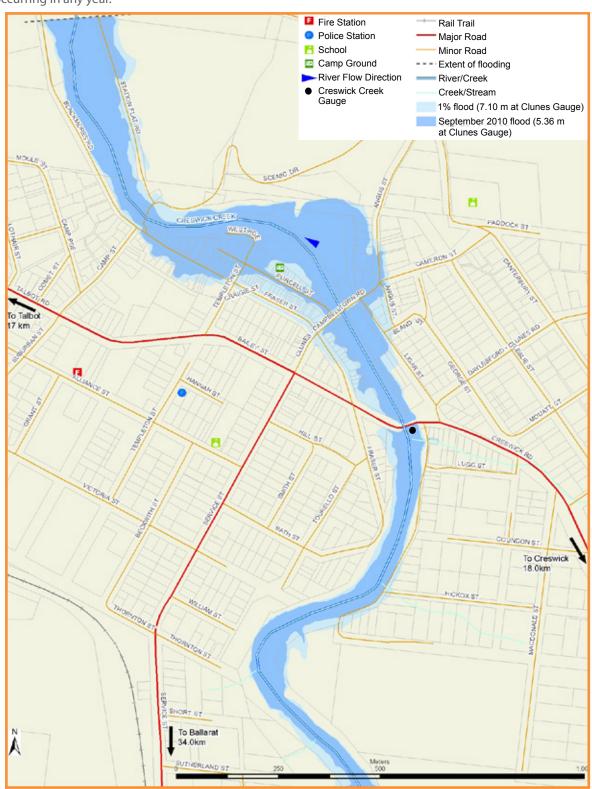
Hepburn Shire contact details:

Phone: (03) 5348 1633

Email: shire@hepburn.vic.gov.au Web: www.hepburn.vic.gov.au

VicEmergency - Emergency Warnings

emergency.vic.gov.au



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Your Local Flood Information

Know your risk

Are you at risk of flooding?

Within the township of Clunes, there are numerous homes, businesses and properties at risk from floods. Creswick Creek is prone to flash flooding which results from heavy rainfall over a short period of time overwhelming the creek's capacity and causing it to overflow into parts of the township. Clunes can also experience minor localised flash flooding from the smaller gullies and low-lying areas around the town.

The earliest indicator of flooding in Clunes is when water breaks out of the creek moving west towards Purcell Street.

Records of the 2010, 2011 and other historical floods show that low-lying areas including parts of Purcell Street, Fraser Street and the Clunes football oval and caravan park are prone to flooding following significant rainfall.

Creswick Creek Flood Levels at the Clunes Gauge

Whilst the Bureau of Meteorology (BoM) does not provide flood warnings for Clunes, a river level guage is located on Creswick Creek near Bailey Street. While no two floods are the same, the following table provides an indication of what may be expected at different gauge heights. This information can be used to plan your response to flooding.

- 7.10 m-Water overtops in Fraser Street between Templeton and Service Street, flooding commercial shops and buildings. An additional 18 properties (total of 70) are affected and up to 48 of these properties are flooded above floor.
- 6.67 m-Properties along Fraser, Ligar and Purcell Streets, the caravan park and lower bowling green are flooded. There are likely to be 52 properties affected, with 26 of these properties flooded above floor.
- January 2011 flood. 200 millimetres of rain fell in four days. Slightly 6.39 mdeeper water than September 2010 flood event, same areas impacted as September 2010. Service Street Bridge was overtopped by water, bowling club flooded and water impacted the commercial buildings along Fraser Street.
- 5.36 m-**September 2010 flood**. During this flood, 85.4 millimetres fell over two days. Flooding impacted Purcell Street, the sports stadium, caravan park and many properties between the creek and Fraser Street.
- 4.48 m-At least 23 properties are impacted by widespread flooding downstream of Service Street including the old Butter Factory, football oval and swimming pool.
- 3.46 m-Creswick Creek is at full capacity and close to breaking its banks.

Did you know?

Clunes has a history of flooding, with significant floods occurring in 1869, 1870, 1871, 1893 and 1933. Clunes was impacted in both September 2010 and January 2011, and while the two events flooded a similar area, the January 2011 event was recorded at 6.39 metres on the Creswick Creek at Clunes gauge, approximately 300 - 400 millimetres higher than the September 2010 flood.

During the January 2011 flood, 200 millimetres of rain fell over four days, causing:

- Drains along Service Street, Templeton Street, Fraser Street and Purcell Street to overtop.
- Flooding of the football oval and nearby properties.
- Flooding of low-lying properties near Camp Street and the site of the old Butter Factory at the start of Cameron Street.
- Floodwater breaking out of the creek bank at the caravan park, resulting in water flowing towards the Ballarat-Maryborough Road.
- Water to overtop Ligar Street, inundating the swimming pool, sports stadium and properties along the lower end of Fraser Street.
- Purcell Street creek side properties to be affected.
- The Service Street Bridge to overtop, inundating Service Street and part of the bowling club.
- Floodwater to extend to the southern side of Fraser Street between Templeton and Camp Streets, inundating commercial buildings.



Clunes football oval, January 2011

About Flood Warnings

What warnings mean

Warnings are issued by the Bureau of Meteorology (BoM) to tell people about possible flooding. While Clunes will not recieve an offical warning, there are some general weather warnings that can provide an indication of flooding in Clunes.

A **Flood Watch** means there is a developing weather pattern that might cause floods in one or two days.

The Victoria State Emergency Service (SES) will give information about how the floodwater might affect people and properties. This includes safety messages to remind you what to do.

As Clunes is prone to flash flooding, Severe Weather Warnings and Severe Thunderstorm Warnings are your earliest triggers to activate your Home Emergency Plan.

Severe Thunderstorm Warnings

Thunderstorms are classified as severe, due to their 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 results in water rising rapidly and flowing powerfully and quickly. Flash flooding:

- Occurs so fast that it is difficult to provide a detailed warning. Often it arrives without any warning.
- Usually results from heavy rainfall during short severe storms.

Listen to Severe Thunderstorm Warnings and Severe Weather Warnings for your area. If you hear a warning, check the BoM and SES websites for information and advice. You can monitor river and rainfall conditions on the BoM website at **bom.gov.au.**

Know your local environment

If you live in the Clunes area, keep an eye on the weather, especially sustained rainfall over a number of days. In Clunes, rainfall of 50 millimetres on wet land can cause flash flooding.

If a Flood Watch is issued or a weather forecast predicts rain of above 50 millimetres for the North Central weather district, Clunes residents should plan for flooding.

Clunes residents should also take note of conditions in Creswick. Once flooding commences in Creswick, it may take as little as 90 minutes for Clunes to be impacted by the same floodwater.

It may take anywhere from two to five hours from the peak of rainfall to when flooding commences in Clunes.

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 Alert

SES may provide alerts to the Clunes community through the Emergency Alert telephone warning system. All emergency service providers can use an Emergency Alert to warn communities about dangerous situations by voice message to landline telephones or text message to mobile phones.

If you receive a warning, make sure that all family members, people at work and your neighbours are aware of the situation.

If you receive an Emergency Alert you should pay attention and act. It could mean life or death.

If you need help to understand a warning, ask a friend, neighbour or family member.

During flash flooding

When flash flooding is likely, if you decide to leave, do so **well before** flooding occurs. Leaving early before flooding occurs is always the safest option. You may decide to shelter with neighbours, family or friends in a safer area.

Evacuating through floodwater is very dangerous and you may be swept away. NEVER drive, ride or walk through floodwater.

If you do not leave early enough and become trapped by rising floodwater inside your home or business, stay inside your building and seek the highest part such as a second storey.

Stay there and call Triple Zero (000) if your emergency is life-threatening.

If you are staying in a caravan or temporary dwelling, move to higher ground **before** flooding begins.

Safety in flash flooding

Driving through floodwater is the number one cause of adult deaths during floods. Never walk, ride, swim or drive through floodwater.

Playing in floodwater is the number one cause of death during floods for children and teenagers. Floodwater is filled with unseen dangers, harbouring hidden debris such as broken glass, shattered timbers and twisted metals as well as sewage, putrid food waste and toxic chemicals.

Floodwater is toxic. Never allow your children to play or swim in floodwater.

4 Local Flood Guide

Preparing for Floods

NOW - before a flood

- Check if your home or business is subject to flooding. For more information, contact the Hepburn Shire Council.
- Develop an emergency plan.
- Check if you could be cut off by floodwater.
- Know the safest way to go if you decide to leave your property and plan an alternative route.
- Check your insurance policies to ensure your equipment, property and business are covered for flood damage.
- Keep a list of emergency numbers near the telephone.
- Put together an emergency kit.
- Stay alert for weather warnings and heavy rainfall.

When a flood is likely

- Take action. Follow your emergency plan.
- Listen to your radio for information and advice.
- Check your neighbours are safe and know about the flood.
- Stack possessions on benches and tables with electrical goods in the highest places.
- Anchor objects that are likely to float and cause damage.
- Move rubbish bins, chemicals and poisons to the highest place.
- Put important papers, valuables, photos and other special personal items into your emergency kit.
- Business owners should raise stock, business records and equipment onto benches and tables.
- Rural property owners should move livestock, pumps and machinery to higher ground.
- If you are likely to be isolated, have enough food, drinking water, medicine, fuel and other needs to last at least three days.
- Do not forget pet food and stock feed.

Prepare a plan

Your emergency plan

Emergencies can happen at any time, with little warning. People who plan and prepare for emergencies will 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.

Your emergency plan should identify:

- The types of emergencies that might affect you.
- How those emergencies might affect you.
- What you will do before, during and after an emergency.
- Where to get more information.
- Where you will go if you evacuate and the best way to go in different circumstances.
- A list of phone numbers you will need, including emergency service providers, your insurance company, friends and family.



Visit **ses.vic.gov.au** to obtain a copy of your Home Emergency Plan workbook

Evacuation

During a flood, police, SES, and other emergency service providers may advise you to evacuate to keep you safe. It is important that you follow this advice.

There are two types of evacuation notices that may be issued via your emergency broadcaster during a flood:

- Prepare to evacuate means you should act quickly and take immediate action to protect your life and property. Be ready to leave your property.
- **Evacuate immediately** you must leave immediately as there is a risk to lives. You may only have minutes to evacuate in a flash flooding situation.

Do not return to your home until you are sure it is safe to do so. You do not need to wait to be told to evacuate.

Emergency Kit

Every home and business should have a basic emergency kit:



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:



During and After a Flood



During a flood

When flooding has begun:

- Never drive, ride, swim or walk through floodwater.
- Remember that floodwater can be deeper than you think and can hide damaged roads and bridges.
- Do not let your children play or swim in floodwater. It is dirty, dangerous and deadly.
- Tune in to your emergency broadcasters: ABC Local Radio, Commercial Radio, designated Community Radio Stations and SKY NEWS Television.
- In life-threatening emergencies, call Triple Zero (000).
- For emergency help from the SES in floods and storms call 132 500.
- Stay away from all waterways including drains and culverts.
- Stay away from fallen powerlines as electricity travels easily through water.
- Be aware that animals such as snakes, rats, spiders and other pests may be on the move during a flood. These animals can come into houses and other buildings or hide around sandbags.
- Keep in contact with neighbours.
- Be prepared to act quickly.

After a flood

Flood dangers do not end when the water begins to fall. To make sure you stay safe:

- Keep listening to local emergency broadcasters.
- Do not return home until you are sure that it is safe.

Once you return to your home:

- Investigate the structural safety of your building.
- Keep the electricity and gas off until checked and tested by a professional.
- When entering a building, use a torch to light your way. Never use matches or cigarette lighters as there may be gas inside.
- Take photographs of all damage for insurance.
- Drink bottled water or boil all drinking water until advised that the water supply is safe.
- Throw away any food or medicines that may have been in contact with floodwater or affected by power outages.
- Clean your home straight away to prevent disease.

How SES helps the community

The Victoria State Emergency Service (SES) is a volunteer based emergency service. Although SES volunteers attempt to reach everyone prior to or during an emergency, at times this is not possible, especially during flash flooding which occurs so quickly. Therefore it is advisable for you to be prepared for emergencies so that you can share responsibility for your own wellbeing during those times. In a flood, SES assistance may include:

- Giving flood advice
- Protecting essential services
- Helping to protect infrastructure
- Rescuing people from floodwater
- Advising of an evacuation

To assist your preparation, it is recommended that you obtain a copy of the SES Home Emergency Plan by visiting **ses.vic.gov.au**.



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NO	W: Flood preparation		
П	Check if your insurance policies cover flooding.		
$\overline{\Box}$	Keep this list of emergency numbers near the telephone.		
$\overline{\Box}$	Put together an emergency kit and prepare a home or business		
	emergency plan, see ses.vic.gov.au.		
Wh	en you hear a Flood Watch or weather warning		
	Listen to Severe Weather Warnings for flash flood.		
	Listen to radio and check the SES website for more 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. Leave early if you intend to evacuate.		
Wh	en flooding may happen soon (heavy rainfall)		
П	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. Don't forget to take pets and your medicine with you.		
П	Put household valuables and electrical items as high as		
	possible.		
	Turn off water, gas and electricity at the mains.		
	Secure objects likely to float and cause damage.		
	If you are staying in a caravan or temporary dwelling, move to higher ground BEFORE flooding begins.		
Dui	ring the flood		
	For SES emergency assistance, call 132 500.		
	DO NOT drive, ride, swim or walk through floodwater. This is the main cause of death during floods.		
	NEVER allow children to play in floodwater. This is the main		
_	cause of death during floods for children and young people.		
Ш	Stay away from drains, culverts and waterways as water can flow quickly and have strong currents.		
	Stay well clear of fallen trees, powerlines and damaged buildings.		
	If you are trapped inside a building, stay inside and shelter in the highest place. Call Triple Zero (000) in a life-threatening emergency.		
Aft	er the flood: recovery		
	Have all electrical and gas equipment professionally tested before use.		
	If your property has been flooded, check with Hepburn Shire Council for information and advice.		
For more information visit:			
	ses.vic.gov.au		
	facebook.com/vicses		

twitter.com/vicseswarnings

Emergency Checklist Emergency Contacts

Life-threatening emergency Police Fire Ambulance	000 TTY1	e Zero 06	
Victoria State Emergency Service (For SES emergency assistance	(SES) 132 500		
SES Information Line Operates during major floods or storms	1300 842 1300 VIC ses.vic.gov.au		
Bureau of Meteorology (BoM) Weather Information, forecasts, warnings	1300 659 bom.gov.au	217	
National Relay Service (NRS)	relayservice.g	ov.au	
The deaf, hearing or speech impaired can call	SES or Triple Zero (000) using	NRS:	
■ Speak and Listen (SSR) users phone	DIAL 1300 555 727	THEN ASK FOR 132 500	
TTY / Voice users phone	13 36 77	132 500	
Internet Relay users log into	www.iprelay.cc then enter: 132 5 0		
VicRoads Road closures and hazard reporting service	13 11 70 vicroads.vic.go	13 11 70 vicroads.vic.gov.au	
Hepburn Shire Contact Details Phone: Email: Web:	(03) 5348 1633 shire@hepburn.vic.gov.au www.hepburn.vic.gov.au		
Weather District:	North Central		
Catchment Management Authority:	North Central www.nccma.vic.gov.au		
Emergency Broadcasters Emergency broadcasters include ABC Local Radio, designated commercial radio stations across Victoria and SKY NEWS Television.	ABC Radio 774 AM o Voice FM 99.9 FM 3BA Radio 102.3 FM Power FM 103.1 FM SKY NEWS Television		
Complete the following a handy close t	and keep this information to the phone:		
Your electricity supplier:			
Your gas supplier:			
Doctor:			
Vet:			
Insurance			
Policy Number:			

Phone Number: