



Flood information for Russell's Creek, Merri River and Hopkins River at Warrnambool



The Warrnambool local area

Warrnambool is on the South West coast of Victoria within the Warrnambool City Council area. The Warrnambool township is situated between the Merri River and Hopkins River and is near the Southern Ocean.

There is a risk of flooding to people, properties, animals and infrastructure in and around Warrnambool from the rivers, creek, flash flooding from heavy rain and storm surges.

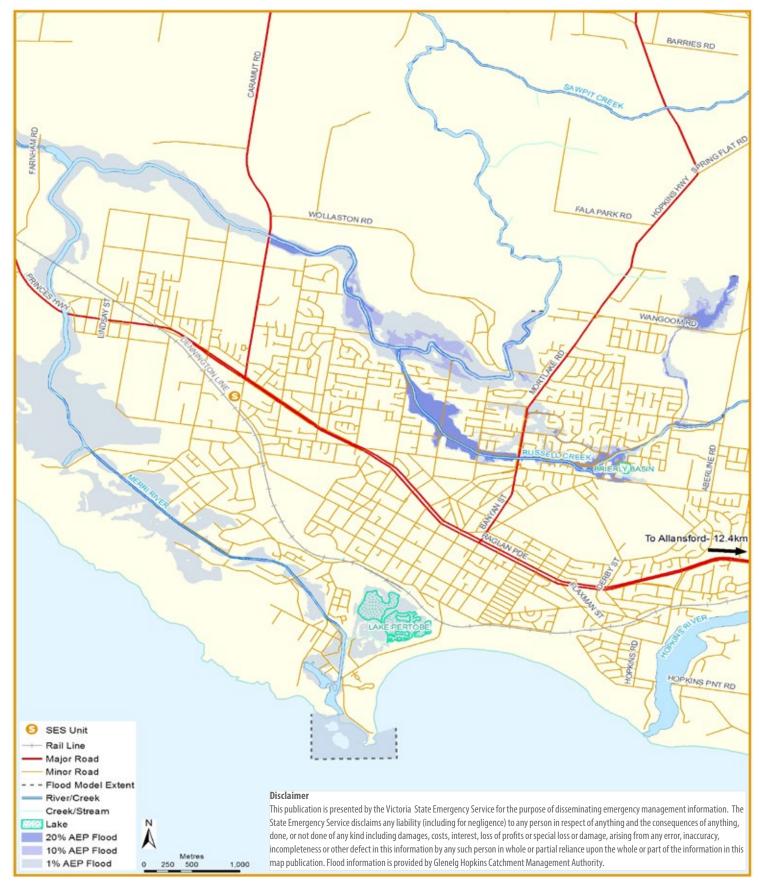
The map below shows the extent of flooding in a 1% flood, a 10% flood and a 20% flood (*see page 3*). While no two floods are the same, the map below shows what areas of Warrnabool are likely to be impacted in a flood of these magnitudes:

Your local emergency broadcasters are:

- ABC Local 1602 AM
- Coast 95.3 FM
- 3YB 882 AM

Warrnambool Council Contact details:

Phone: 03 5559 4800 Email: wbool_city@warrnambool.vic.gov.au Web: www.warrnambool.vic.gov.au



Local Flood Guide

Your Local Flood Information

Are you at risk of flood?

Many homes, businesses and farmland in and around Warrnambool are at risk from flooding from one or more of the below:

- Heavy rainfall causing river and or flash flooding in the surrounding catchments including the Mount Emu, Yangery and Russell's Creeks, Kelly's Swamp, and the Koroit, Macarthur, Woolsthorpe, Hawkesdale, Penshurst, Ellerslie, Warrnambool and Allansford areas.
- Sea level rise or king tides affecting the Merri River.
- Storm surge where sea water is pushed toward the shore by the force of the wind.

Occasionally, the above may combine to increase the effects of flooding. For example, in 1995, high sea levels caused more flooding in areas of South Warrnambool. Past floods in the Warrnambool area have:

- Affected low-lying parks, the Rail Trail and properties
- Closed the Princes Highway at Panmure and Allansford, Hopkins Highway, Mortlake Road and streets including: Bromfield, Queen, Landman and Japan Streets.
- Caused flooding of Queen Street, Whites Road, the northside of Wollaston Road and the former BMX Track as well as other areas such as in 2009.

Warrnambool has experienced flooding in 1946, 1960, 1978, 1984, 1995, 2001, 2009, 2010 and most recently in 2011.

Merri River Flood Levels at the Woodford Bridge Gauge

While no two floods are the same, the following table can give you an indication of what you can expect at certain heights, including when your access may be cut off and when your property may be affected. There are no flood class levels (minor, moderate or major) for Warrnambool and the Woodford Bridge Gauge is not monitoried by the Bureau of Meteorology.

While not monitored, the Woodford Bridge Gauge can still provide you with an indication of what you might experience during a flood as some warnings will give a comparison of a previous flood event in the area.

8.55 m	1946 flood level Largest flood on record. Height of floodwater estimated as it was before gauge installed. Seven deaths, thousands homeless, and livestock and crop losses experienced by farmers plus at least two bridges, Cassidy's and Woodford were washed away.
estimated	1978 August flood level
7.80 m <	August 2010 flood level
estimated	1960 flood level Height unknown as this flood went over the old gauge
7.75 m	August 2001 flood level
7.10 m 🧹	September 1984 flood level
6.67 m	1995 flood level This was a low level flood made worse around South Warrnambool due to high sea levels.

Did you know?

Warrnambool's highest recorded flood in 1946 reached an estimated height of 8.55 metres on the Woodford Bridge Gauge. During this flood, 180-320 millimetres of rain fell over three days. The 1946 flood has been categorised as a one in 500 year flood which means that it is a very serious and rare event. This flood caused:

- Extensive loss of livestock, crops and infrastructure such as Cassidy's Bridge and Woodford Bridge which were washed away.
- Seven fatalities.
- Thousands of people to lose their homes.

The 1946 flood was made worse by a nearly one metre storm surge. Even though every flood is different, a large flood could happen at any time, even one as significant as the 1946 flood.

Average Exceedance Probability

The map on page 2 shows flood height levels based on the Average Exceedance Probability (AEP) of a flood.

AEP is the chance of a flood of that size occurring in any year, for example, a 1% flood has a 1% chance of occurring in any year. A 1% flood is larger than a 20% flood, but is less frequent than a 20% flood which has a 20% chance of occurring in any year.

In Warrnambool:

- A smaller but more likely 20% flood would flood 7 properties over floor and 360 below floor level (*see map page 2*).
- A 10% flood would flood 16 properties above floor level and 423 below floor level (*see map page 2*).
- A larger but less likely 1% flood would flood 151 properties above floor level and 847 below floor level (*see map page 2*).



1946 Warrnambool flood

About Flood Warnings

About flood warnings

Flood Watches and **Weather Warning**s 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. A Flood Watch will be cancelled if it is no longer a threat.

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.

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 the Bureau of Meteorology.

Severe Weather Warnings

These warnings are issued to the community by the Bureau of Meteorology when severe weather is expected that is not directly related to severe thunderstorms and bushfires. Examples of severe weather include damaging winds and flash-flooding.

Flash Flooding happens quickly. There may be little or no warning. The arrival time or depth of a flash flood can usually not be predicted.

Listen to Severe Thunderstorm and Severe Weather warnings for your area. If you hear a warning, check the Bureau of Meteorology and Victoria State Emergency Service for warnings and advice.

Flash flooding occurs because rain falls faster than the ground has the ability to absorb, causing water run-off into low-lying areas and into local drainage systems unable to cope with the volume of water. This results in water rising rapidly and flowing powerfully and quickly.

Flash flooding:

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

Know your Local Environment

If you live in the area, keep an eye on the weather, especially heavy rainfall or sustained rainfall over a number of days. Knowing your local area and making your own observations are a great tool to help your prepare for a potential flood. Keep an eye on local river and creek heights.

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 Warrnambool community through the Emergency Alert telephone warning system. All Emergency Services can use 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.

Warnings for Warrnambool

The Bureau of Meteorology does not issue river height predictions for Warrnambool.

Weather Warnings and Flood Watches issued by the Bureau will provide information about when flooding is possible.

If flooding is likely, tune into emergency broadcasters to watch and listen for information relating to the:

- Merri River,
- Hopkins River
- Glenelg Hopkins Catchment
- South West weather district.

Information about potential floods will also be available from the SES. You can monitor rainfall and river levels on the Bureau of Meteorology website.

The Woodford Bridge Gauge at Warrnambool is not monitored by the Bureau of Meteorology but can still provide you with an indication of what you might experience during a flood (*Merri River Flood Levels at the Woodford Bridge Gauge*).

Preparing for Floods

Your Emergency Plan

Emergencies can happen at any time, with little warning. People who have planned and prepared for emergencies have reduced the impact and recovered 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.

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 services, your insurance company, friends and family.



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

Evacuation

Victoria Police is responsible for coordinating an evacuation in an emergency. During a flood, Police, SES and other emergency services 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. You should prepare to leave.
- **Evacuate immediately** you must leave immediately as there is a risk to lives.

Remember you can leave at any time if you feel unsafe. You do not need to wait to be told to evacuate.

NOW - before a flood

- Check if your home or business is subject to flooding. For more information, contact Warrnambool City 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.

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.

The time for me to evacuate is before:

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:











Clothes for your family

I need to add:

Write your list here. Tick items as you pack them into your kit.

Special needs	
Photos	
Family Keepsakes	
Valuables	
Documents	
Other	

During and After a Flood

During a flood

When flooding has begun:

- Never drive, ride, swim or walk through floodwater.
- Floodwater can be deep and damage 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 000 (triple zero).
- 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 power lines electricity travels easily through water.
- Be aware that animals, snakes, rats, spiders and other pests may be on the move during a flood - they can come into houses and other buildings or hide around sandbags.
- Keep in contact with neighbours.
- Be prepared to leave early.

When you leave early or evacuate:

- Leaving early is always the safest option, leave well before roads are closed by floodwater.
- Take your emergency kit and three days supply of clothing with you.
- Turn off the electricity, gas and water as you leave.
- Take your pets with you. Do not leave them behind. Dogs should be muzzled and cats caged.
- Go to a relief centre or to stay with friends or family in higher areas.

If activated, Relief Centres can help you with:

- Temporary accommodation
- Financial help
- Personal support
- Drinks and meals
- Basic clothing and personal needs
- Help to contact family and friends.

If you choose to shelter with a friend or relative, tell authorities where you are staying.

After a flood

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

Drive, Ride or Walk Through Floodwater

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

Once you return to your home:

- 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.
- When entering the building, use a torch to light your way - never use matches, cigarette lighters or any other flame as there may be gas inside.
- Keep the electricity and gas off until checked and tested by a professional.
- Take photographs of all damage for insurance.
- Clean your home straight away to stay healthy.

How SES helps the community

The Victoria State Emergency Service (SES) is a volunteer based emergency service. Although our SES volunteers attempt to reach everyone prior to or during an emergency, at times this is not possible. 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 a SES Home Emergency Plan by visiting **www.ses.vic.gov.au**.



Emergency Checklist

NOW: Flood preparation

- Check if your insurance policies cover flooding.
- Keep this list of emergency numbers near the telephone.
- Put together an Emergency Kit and prepare a home or business Emergency Plan, see www.ses.vic.gov.au.

When 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.

When flooding may happen soon (a Flood Warning)

- Make sure your family members and neighbours are aware of what is happening.
- Be ready to evacuate. Act early, conditions change rapidly, roads and escape routes can be covered or blocked. Don't forget to take pets and your medicine with you.
- 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. Raise chemicals and oils well above the predicted flood height.
- Move pumps, machinery, hay and livestock to higher ground.

During the flood

- For emergency assistance, call 132 500 for SES.
- 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.
- Stay away from drains, culverts and waterways, water can flow quickly and have strong currents.
- Stay well clear of fallen trees, power lines and damaged buildings.

After the flood: recovery

- If your property has been flooded, check with Warrnambool Council for information and advice.
- Have all electrical and gas equipment professionally tested before use.

For more information visit:

www.ses.vic.gov.au

www.facebook.com/vicses

Emergency Contacts

Life threatening Emergency

For flood / storm emergency calls

Victoria State Emergency Service (SES)

Police fire ambulance

Triple Zero

TTY106

000

132 500

ror nood / storm emergency cans					
SES Information Line Operates during major floods or storms	1300 842 737 1300 VIC SES www.ses.vic.gov.au				
Bureau of Meteorology (BoM) Weather Information, forecasts, warnings	1300 659 217 www.bom.gov.au				
National Relay Service (NRS) www.relayservice.com.au					
The deaf, hearing or speech impaired can call S	ES or 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.com.au/call/ then enter: 132 500 or 000				
VicRoads Road closures and hazard reporting service	13 11 70 www.vicroads.vic.gov.au				
Warrnambool Council Contact Det	aile				
Phone: 03 5559 4800					
Email:	wbool_city@warrnambool.vic.gov.au				
Web:	www.warrnambool.vic.g	ov.au			
Weather District:	South West				
Catchment Management: Information about flooding in your area	Glenelg Hopkins www.ghcma.vic.gov.ay planning@ghcma.vic.gov.au				
Emergency Broadcasters Emergency broadcasters include ABC Local Radio, designated commercial radio stations across Victoria and SKY NEWS Television.	ABC Local 1602 AMCoast 95.3 FM3YB 882 AM				
Complete the following an handy close to	nd keep this information the phone:				
Your electricity supplier:					
Your gas supplier:					
Doctor:					
Vet:					
Insurance					
Policy Number:					
Phone Number:					

For the latest version of this publication visit www.ses.vic.gov.au

Checklist and Contacts