



Halls Gap Local Flood Guide

Flood information for Stoney Creek and Fyans Creek at Halls Gap



Stoney Creek, January 2011



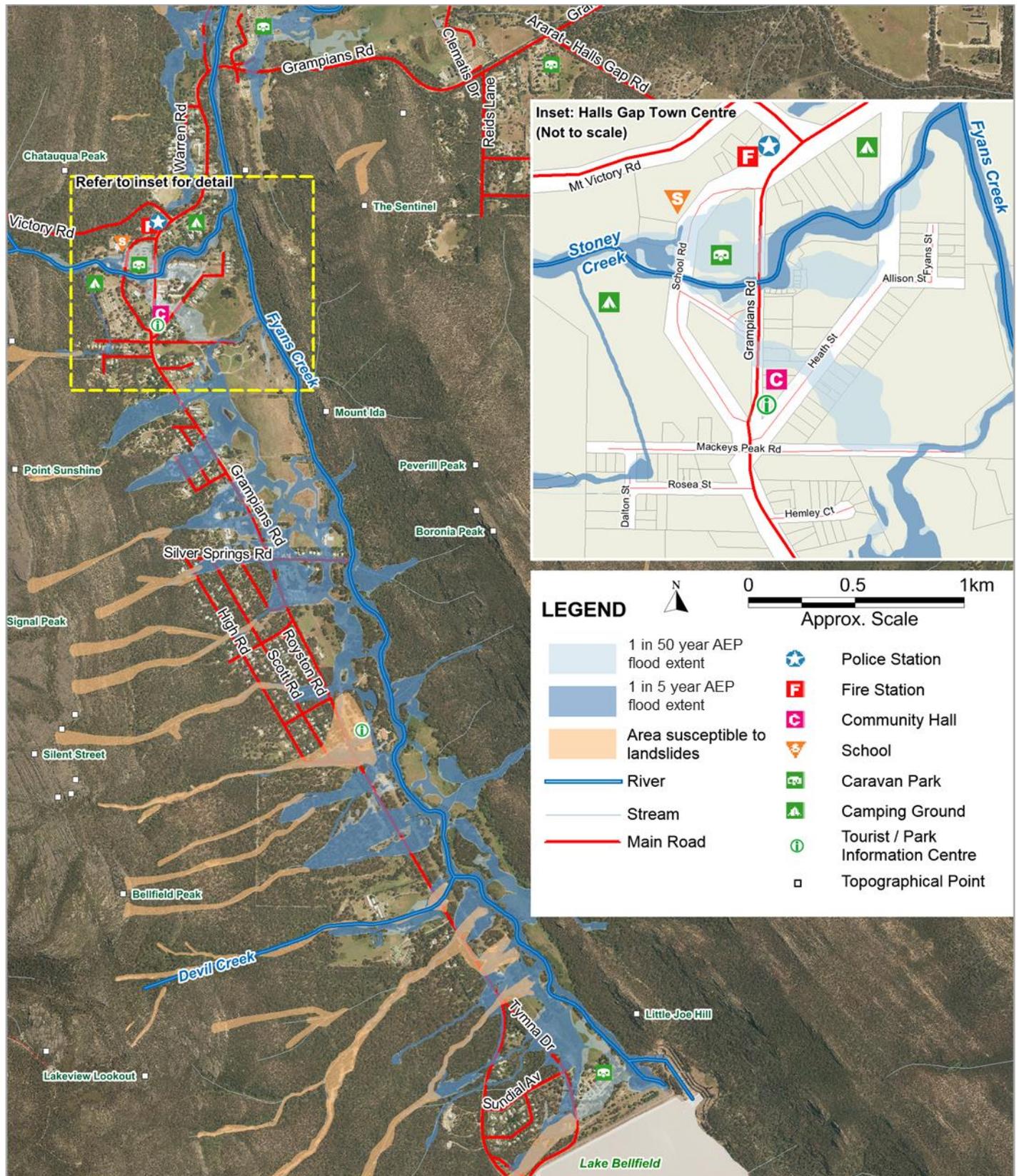
For flood emergency help call
VICSES on **132 500**





Halls Gap

Halls Gap is located in the municipality of Northern Grampians Shire Council, surrounded by the Grampians National Park mountain ranges. Numerous gullies along the Mt Difficult Range flow from west to east through Halls Gap into Fyans Creek. The map below shows the 1 in 5 and 1 in 50 year AEP (Annual Exceedance Probability) flood extents.



Disclaimer: this map 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. Flood risk information is provided by Wimmera Catchment Management Authority.



Are you at risk of flooding?

Halls Gap is subject to flash flooding due to its position at the bottom of a steep mountain range. Small gullies from the Mt Difficult Range (western side of Grampians Road) present the highest risk of flash flood for Halls Gap. From these gullies floodwater can cut access to Grampians Road, flooding and impacting additional properties on the eastern side of Halls Gap (refer map on page 2). Stoney Creek is the largest of the gullies coming into Halls Gap from the west and often overflows during small flood events inundating the Halls Gap Caravan Park (in the town centre).

Halls Gap can experience significant flood impacts during small flood events. The steep terrain contributes to the rapid generation of significant overland runoff volumes from intense rainfall events. Flooding usually occurs following heavy rainfall, resulting in fast moving water flowing down the steep slopes. Anecdotal reports suggest that during flood events the force of flooding along the gullies can be so powerful floodwater can move small cars.

Fyans Creek has a larger capacity than Stoney Creek but similar to Stoney Creek, can overflow during relatively minor rainfall events, initially breaking out between the Halls Gap Hotel (north of Halls Gap) and Delley's Bridge.



Flooding impacting Mt Victory Road in Halls Gap, January 2011



Did you know?

Halls Gap has a history of flooding, significant flood events have occurred in 1973, 1975, 1976, 1983, 1984, 1985, 1986, 1992, 1996, 2000, 2001, 2010, 2011 and 2016. The January 2011 flood event was the largest recent flood event, recording 297mm of rainfall, 146.6mm falling on the 14th of January. This flood event caused significant damage to buildings, roads and other infrastructure, including;

- Eight shops, the Brambuk Cultural Centre, Parks Victoria office buildings, the Grampians Caravan Park and the Big 4 Caravan Park.
- 14 houses were flooded above floor in Grampians Road, Warren Road, Tymna Drive, Scott Street, Heath Street, High Road, and Mt Zero Road.
- The power supply and water sewer mains north of Halls Gap were cut.
- Flooding caused landslides to occur throughout Halls Gap and the Grampians National Park.



Parks Victoria office building flooded, January 2011 (Parks Victoria).

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 594 AM
3WM 1089 AM
Mixx 101.3 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 | |
| ▪ Catchment Management Authority | http://www.wcma.vic.gov.au | (03) 5382 1544 |
| ▪ Northern Grampians Shire Council | ngshire.vic.gov.au | (03) 5358 8700 |

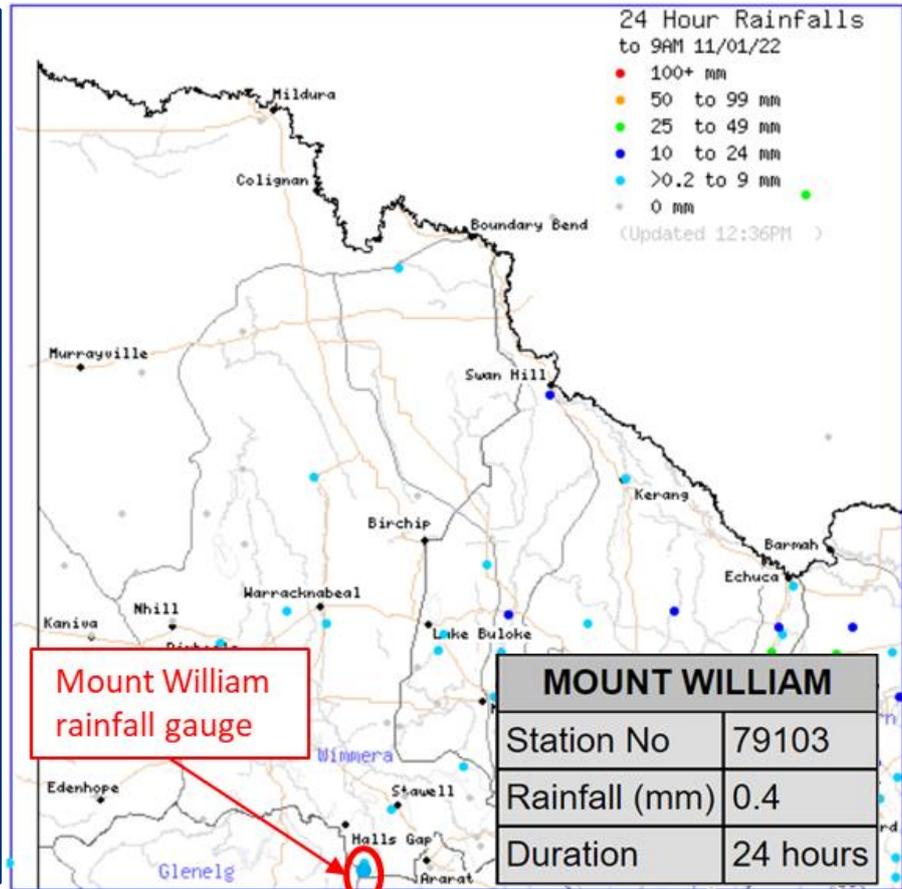
**Life-threatening
Emergency
000**



Mount William rainfall gauge near Halls Gap

Halls Gap generally floods due to heavy rainfall in the surrounding Grampians National Park. There are two rainfall gauges in Halls Gap and at Mount William. Monitoring these rainfall gauges will provide early clues of possible flooding in Halls Gap. To monitor the Mount William rainfall gauge height go to the BoM website bom.gov.au/vic/flood/

- Select '24 Hour Rainfalls' (above the map)
- Click on Wimmera Mallee on the right.
- Find the Mount William (below Halls Gap) gauge and hover over it.
- Compare rainfall height to the rainfall gauge heights in the table below to determine if flooding is likely.



Flooding impacting the Brambuk Cultural Centre car park, January 2011 (Parks Victoria).



The table below provides an indication of what you can expect at certain Mount William rainfall gauge heights, including when your access may be cut off and when your property may be affected. A key consideration that influences flooding is the wetness of the catchment. The table below assumes the catchment is already wet.

Mount William Rainfall Gauge Height (mm in 12 hours)	Flood Impact
286 mm over 5 days	January, 2011 flood event (1 in 50 year AEP flood extent shown on map page 2). Flooding impacted many buildings, including 8 shops and 14 houses above floor. Extensive landslides occurred, more than 200 landslides in the Grampians National Park, some were over 200m wide and 3km long.
93.7 mm	More than 20 buildings and 50 properties are likely to be impacted by flooding. Flooding may cut access to Heath Street and Grampians Road.
94 mm	Proposed Major flood level
93.7 mm	Significant flooding may occur at the Grampians Caravan Park.
77.8 mm	Houses close to gullies may be impacted by flooding. Shallow flooding may overtop Heath Street.
67mm	Proposed Moderate flood level
66.6 mm	The Halls Gap Oval may be impacted by flooding. Shallow flooding may impact Grampians Road, High Road and School Road.
56 mm	Proposed Minor flood level
55.7 mm	Minor flooding may start to impact the Grampians Caravan Park, Big 4 Caravan Park, Tandara Lutheran Camp buildings, Brambuk Cultural Centre, and Park Victoria office buildings. Flooding may cut access to Warren Road and Tandara Road.

Sandbag Collection Point



A Sandbag Collection Point may be opened at the back of the Halls Gap Centenary Hall (15 Grampians Road), in Heath Street, if there is potential for flooding in the area.

Residents can call in to fill and collect sandbags to protect your home.

Northern Grampians Shire Council will promote when this collection point is opened through local radio and other media.



Landslides in the Grampians National Park

Landslides also occur in Halls Gap. During the January 2011 flood event;

- More than 200 landslides occurred in the Grampians National Park.
- Costing over \$400 million in damages.
- Some were over 200m wide and 3km long. Large trees were uprooted and washed away like matchsticks.
- Bridges, culverts, drains, roads, houses, walking tracks were damaged.
- Roads impacted included Grampians Road, Mt Victory Road and Silverband Road.

Refer to the map below for the areas impacted by landslides during the January 2011 flood event.

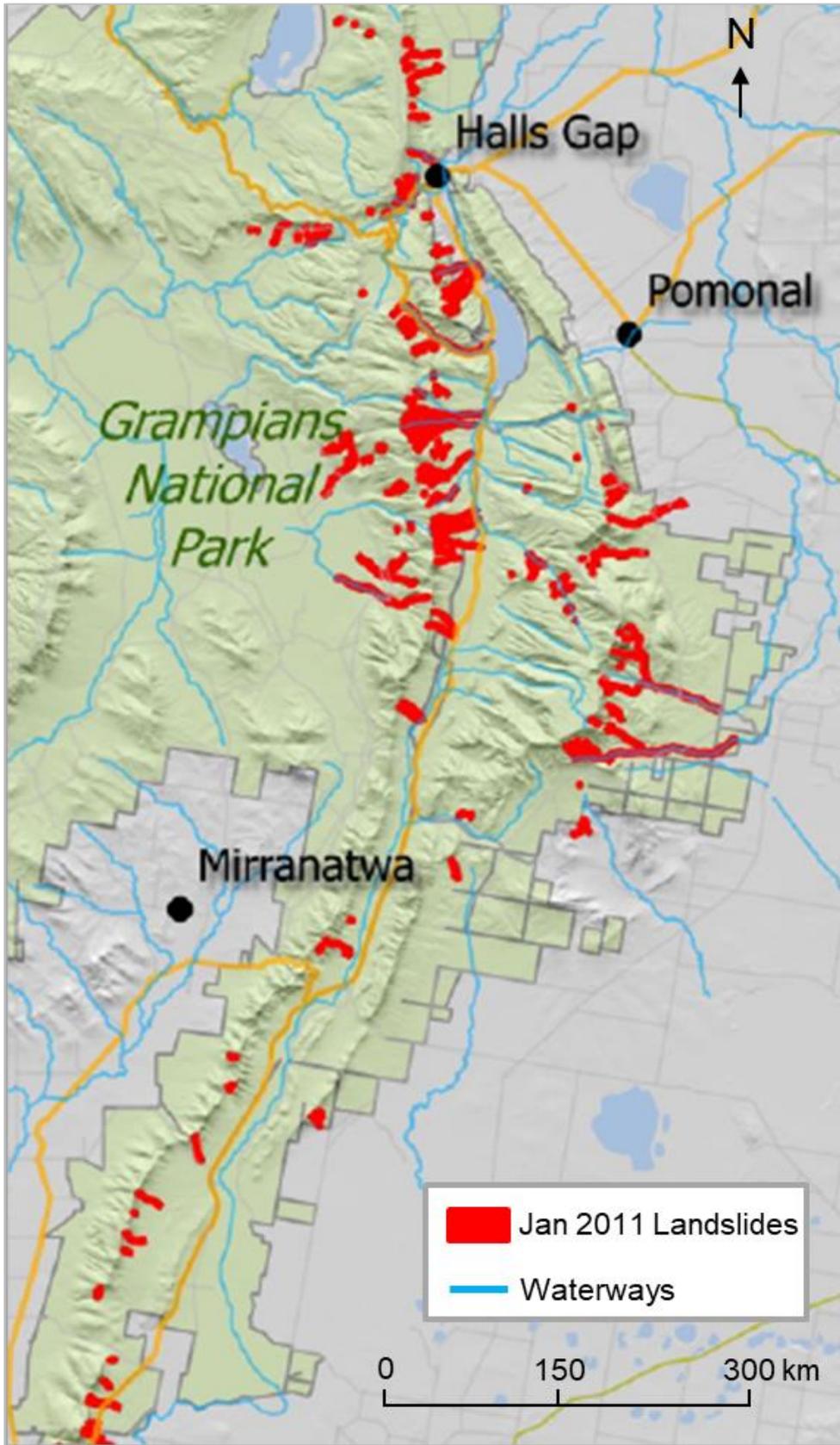
Landslides are likely when heavy rainfall occurs on a wet catchment, and often occurs along gullies. Following significant rainfall, landslides pose a risk to properties on the western (uphill) side of Grampians Road. Refer to the map on page 2 for the landslide risk area in Halls Gap. Landslides pose a risk to life and can result in significant damage to property both on and below the land slip area. Landslides cause debris (rocks, sediment and vegetation) and large boulders also move with the landslide. Refer to the photos below.



South of Halls Gap, access to Grampians Road was cut by a landslide, January 2011 (Parks Victoria).



Landslide boulders and debris cut access to Grampians Road, January 2011 (Parks Victoria).





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

	<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. 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>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.</p>
	<p>EMERGENCY ALERT</p> <p>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.</p>

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](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 [bom.vic.gov.au](https://www.bom.vic.gov.au) and warnings through [emergency.vic.gov.au](https://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.
- 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](https://www.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.