



Local Flood Guide

Benalla

Understand, prepare, and respond effectively to your flood risk.



Victorian State Emergency Service acknowledges Aboriginal Traditional Owners of Country throughout Victoria and pays respect to their cultures and Elders past and present.



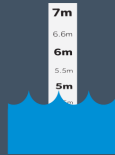
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Local flood information



There have been 13 significant flood events in Benalla between 1916 and 2023.



The largest flood on record was in 1916 when the floodwater reached 5.69 metres.



Flooding can happen within hours, giving people little to no time to prepare and take action.

Why does Benalla flood?

- Benalla is built around the Broken River and parts of town are on the Broken River floodplain, the naturally low lying area close to rivers and creeks. Other nearby waterways like Baddaginnie, Hollands and Blind Creeks also contribute to flooding around Benalla.
- Floods vary depending on how much rain falls, exactly where it falls, which river or creek rises first, and if floodwater from the Broken River and the Creeks reaches Benalla at the same time.
- Rainfall from as far away as Mount Buller can run into the Broken River water catchment and add to flooding in Benalla. You can check Rainfall and River data on the Bureau of Meteorology website under [bom.gov.au/vic/flood](https://www.bom.gov.au/vic/flood).

This type of flooding is called **riverine flooding**.

- Stormwater drainage may not be able to cope with very heavy rainfall, leading to **flash flooding** that may not come from a river, but clears after a few hours.

Riverine flooding and flash flooding can happen separately, or at the same time.

How do floods impact communities?

Floods can impact you in many ways, even if your home or workplace stays dry.



Buildings flooded



Road closures



Drinking water supply and quality affected



Power outages



Mobile and internet network

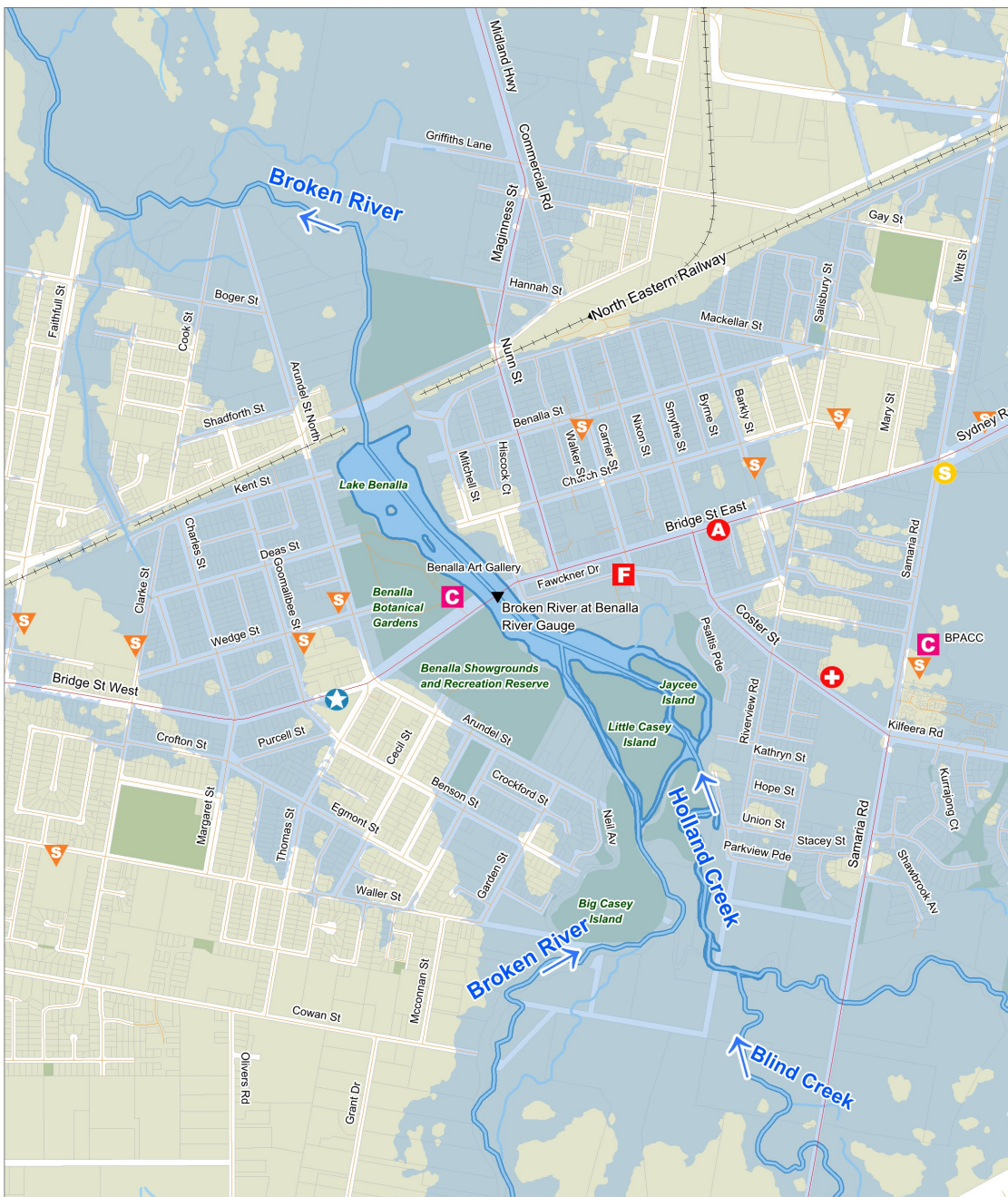


Sewage overflows inside building

What area is at risk in a significant flood?

- This map shows the expected affected area in a significant flood that would measure at least 5.50 metres on the Broken River flood gauge in Benalla.
- This is referred to as a 1% AEP Flood Extent which means there is a 1 in 100 chance (or greater) of this type of flooding happening every year.

- ✓ Check the map if your home and places you go often are impacted.
- ✓ Review the travel routes to these locations and your evacuation point. If they are impacted, consider alternative routes to avoid the risk of driving through floodwater.



Click to enlarge, or visit ses.vic.gov.au/benalla-rural-city-council



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 Goulburn Broken Catchment Management Authority.

What might happen in a flood in your area?

No two floods are the same. It's hard to know what future flooding will look like because the environment is always changing. This often includes more buildings, less green areas and increasing storms or heatwaves due to climate change.

- **Before a flood:** Use the floodwater heights in the table to help you decide when you will need to act to protect yourself and your property in a flood event.
- **During a flood:** When a warning is issued, use the predicted floodwater height, and warning information, to understand what the potential impacts may be for you and your community.



Height of floodwater (metres)^	Potential impacts and recent flood heights*
5.50m	1993 flood event and 1% flood level (area shown on map, page 3) Significantly affected most of Benalla, Baddaginnie, and rural farm areas. 870 homes and 210 businesses are likely to experience above floor flooding.
5.07m	361 homes and 138 businesses are likely to be affected by above floor flooding.
4.70m	Floodwater likely to start entering properties in Carrier St, Walker St, and Smythe St.
4.65m	Floodwater likely to start entering additional properties in Arundel St and Nunn St.
4.50m	Major flood level
4.49m	2022 flood event
4.48m	Floodwater likely to start entering properties in Neil Ave, Arundel St and businesses in Bridge St East CBD. About 36 homes and 21 businesses are likely to be affected by above floor flooding.
4.40m	Floodwater likely to start flowing into the lower areas of the main street, including the bottle shop (old Arnott's Motors), Crockford St, and Market St.
4.30m	Floodwater likely to start entering properties in Psaltis Parade.
4.26m	2010 flood event
3.70m	Moderate flood level
3.68m	Floodwater likely to start covering Bridge St near the Rose Gardens.
3.60m	Floodwater likely to surround the Art Gallery, spread through the Rose Gardens, ovals, and enters the cricket and hardcourt tennis clubrooms.
3.50m	Floodwater likely to threaten the Benalla Basketball Pavilion and the CFA Fire Station.
3.45m	Floodwater likely to enter the Rose Gardens pavilion and over roads in Arundel St South, Market St and Benson St.
3.05m	Floodwater likely to enter area below the Benalla Dunlop Library, nearby carparks, and skate park.
2.74m	Floodwater likely to flow into the Benalla Aquatic Centre outdoor pool and under the Art Gallery.
2.50m	Floodwater likely to start covering roads and paths in the Rose Gardens.
2.20m	Minor flood level
2.20m	Access to Ackerly Ave (Stock Bridge) is cut at both ends. Boardwalks and pedestrian tracks around Lake Benalla are unusable.

[^]The height measurement is at the Broken River gauge at Benalla.

*This table includes information from previous flood events and flood studies, which are scientific models used to predict impacts at different flood heights and flows.

Previous flood impacts

While no two floods are the same, understanding the impacts of past floods can help you anticipate impacts of future flood events.

1993 Flood Event - \$38 million in damage

Photo by Ray Sizer, Shepparton News, 1993



5.50
Metres



2,200
Properties



180
vehicles



4,600
livestock



Never enter floodwater, it may contain dangerous currents, waste, chemicals, and raw sewage which can rise quickly, and may cause death.

Download your free Property Flood Report

Goulburn Broken Catchment Management Authority and several local councils have developed the [Goulburn Broken Community Flood Intelligence Portal](#).

This shows flood mapping in large and small flood scenarios and can provide **some** properties with a Property Flood Report, specific to flood heights.

Go to my.floodreport.com.au/gbcma, a User Guide is available.

Your local services

Include these contacts in your Emergency Plan, see page 6 for more information.

Local Council

Relief support after a flood event.

- **Benalla Rural City Council**
benalla.vic.gov.au | 03 5760 2600

Catchment Management Authority

Property specific flood impact information.

- **Goulburn Broken Catchment Management Authority**
gbcma.vic.gov.au | 03 5822 7700



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Plan and prepare for floods

Floods can happen suddenly, but people who plan and prepare can make informed decisions and recover faster. Follow these steps to **Be Flood Ready**.

1 Stay informed

VicEmergency is Victoria's combined source of emergency information and warnings.

- Set-up watch zone for your area in the app for alerts when warnings are issued.
- Learn about the three different warning levels issued when an emergency is likely to impact you.

 VicEmergency app
emergency.vic.gov.au
 1800 226 226

 vicemergency

 @vicemergency



2 Make an Emergency Plan

Use information from your Local Flood Guide and your Catchment Management Authority, to help you decide;

- What you will do in a flood emergency
- When you will do it
- Who you will inform



Red Cross RediPlan is a free tool that helps you create a simple emergency plan and backs the flood actions you have chosen.

- Visit redcross.org.au/prepare
- Download the [Get Prepared](#) app

3 Prepare an emergency kit

 Phone power bank	 Radio	 Safe drinking water
 Spare batteries	 Documents & records	 First aid kit
 Long life food	 Torch	 Gloves

Emergency kit



You may need to stay safe for 72 hours in a disaster before help arrives. Make sure you have safe drinking water, food, and any special needs or medications for all family.



There will be extra items to be added to your emergency kit in an emergency like clothes, a phone and charger.



Watch a video on how to get your Emergency kit ready.

youtu.be/XgyLnKDMkNo

4 Reduce impacts to your property

- Keep gutters and drains clear of debris including leaves and any other items.
- Check your building and contents insurance, what kind of flooding does it cover?
- Store your valuable possessions up high.
- Back up important files and documents to a cloud storage or USB kept elsewhere.
- Identify higher ground on or around your property, away from the danger area.
- Consider buying sand and sandbags from a hardware store ahead of time, especially if you live in a flood prone area. Refer to our [Sandbag Guide](#) for more information.



For more details and other tips, visit: ses.vic.gov.au/plan-and-stay-safe/emergencies/flood



What to do in a flood emergency

Understanding what to do in emergencies can save lives and help protect your family and property.

Who to call for help



✓ About to flood ✓ Flooding

Call VICSES 132 500

If life threatening call triple zero 000

Stay Informed

Warnings will be issued by VicEmergency when an emergency is likely to impact you.

They will provide information on what is happening and their best advice on what you should do.

- Set-up a watch zone on the app for alerts in your area.

VicEmergency app
emergency.vic.gov.au
 1800 226 226

@vicemergency
 vicemergency

Emergency broadcasters

- **Radio** | ABC 97.7FM, Triple M 95.3FM, Hit FM 96.9 FM
- **TV** | Sky News

If you expect floodwater at your property

1

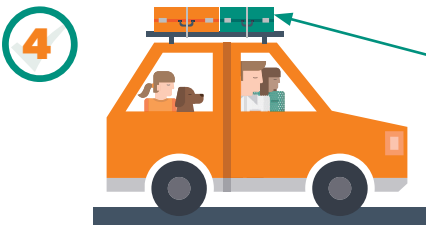
Bag it
Sandbag doorways and low-lying windows to slow floodwater entering your home.

2

Block it
Block toilets, bath and drains using a sandbag ideally placed inside a plastic rubbish bag.

3

Lift it
Put your valuables and electrical items as high as possible. Turn off power, gas, and water at the mains.



Leave

- Leave BEFORE the flood arrives.
- Check warnings from VicEmergency for information like evacuation or relief centres and road closures.
- Go to the home of family or friends away from the flood impact area.

Take your emergency kit and add the items below:

- Phone & charger
- Prescriptions & medication
- Clothes for your family
- Strong shoes
- Pet needs

Never drive through floodwater

Large A Large 4WD can be moved by water only 45cm deep.
A 2.5 tonne car with water flow speed of 3.6km/h

Medium A mid-sized car can be moved by water only 30cm deep.
A 1.5 tonne car with water flow speed of 3.6km/h

Small A small car can be moved by water only 15cm deep.
A 1.05 tonne car with water flow speed of 3.6 km/h



For more details and other tips, visit: ses.vic.gov.au/plan-and-stay-safe/emergencies/flood



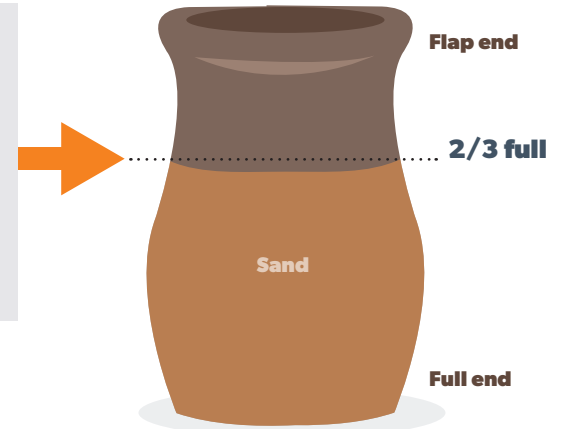
Sandbagging

Protecting your home

Sandbags won't stop the water completely, but can reduce the amount of water entering your home.

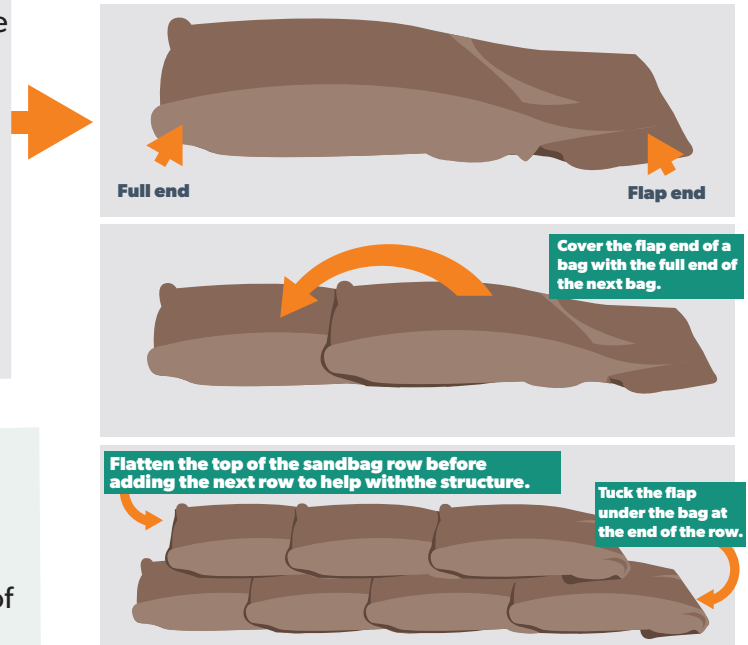
How do I fill a sandbag?

- Only use sand to fill hessian bags. Do not use dirt.
- Only fill sandbag two-thirds full.
- Do not over fill the sandbag as it will be too heavy to carry.
- Do not tie the top of the sandbag.
- Take care when filling and lifting the sandbag, to avoid injury.



How do I lay sandbags?

- Lay sandbags like brickwork. Stagger rows so that the joins do not line up.
- Start at one end and work to the other end.
- Ensure the unfilled part of the bag is covered by the next bag.
- Tuck flap under the bag at the end of the row.
- If the sandbag wall is going to be more than five (5) bags high, you will need to lay two (2) rows wide.



Where do I place the sandbags?

- Place sandbags in plastic bags to cover drainage holes in home (e.g. showers, toilets, sinks) to stop back flow of water.
- Place a small wall across doorways, at least the height of the expected water level. Be careful not to trap yourself inside.
- If available, plastic sheeting may be used under sandbags to reduce the seepage.

Block it

Toilets, bath and all drain holes



Plastic Sheeting



What do I do once I have finished with the sandbags?

- Sturdy gloves should be worn when handling wet sandbags as they can contain chemicals, waste and diseases.
- Sandbags that have been in contact with floodwater need to be thrown away.
- Contact your local council to find out how to dispose of your sandbags safely.





Sandbags and sand

Preparing your home

Having sandbag supplies ready can assist you before a flooding emergency occurs.



What supplies do I need to sandbag my home?

- Sandbags
- Sand
- Plastic sheeting
- Gloves and safety goggles
- Shovel or hand scoop

Where can I purchase these supplies?

- Many sandbag supplies can be purchased from hardware stores or garden centers.
- VICSES do not routinely supply sandbags to households.
- During floods, sandbag distribution points may be established in flood-affected areas.

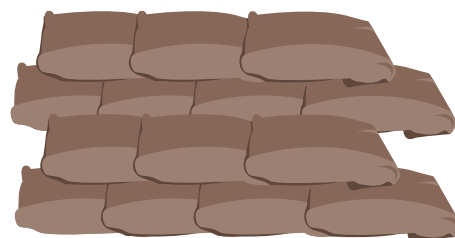


How many sandbags will I need and how much sand?

- Most homes can be protected by less than 25 sandbags.
- The number of sandbags will depend on your local flood risk and availability.
- Sandbags are filled 2/3 full which requires around 15-20kgs of sand per bag.

How do I store my sand and sandbags?

- Filled sandbags only have a short shelf life.
- It is recommended to store sandbags empty.
- Sandbags should be stored in a cool dry area away from UV light.
- Sand should be kept dry and can be stored in water-resistant containers or under a tarp.
- Sand is heavy - ensure it is stored so it can be moved safely.



When should I sandbag my home?

- **You** are best placed to decide if there is a need to sandbag your home, based on local knowledge and past flood events.
- Monitor your local conditions. Stay up-to-date with weather forecasts and warnings by downloading the **BOM Weather** and **VicEmergency** apps, or call the VicEmergency Hotline on 1800 226 226.
- If you think you are at risk, do not wait for an official warning to act.

