

Local Flood Guide

Tarwin Lower & Venus Bay

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

West Gippsland Catchment Management Authority

South Gippsland Shire Council

SES FLOOD STORM EMERGENCY 132 500

000 EMERGENCY
If life threatening call triple zero 000

Contents

- **Local flood information** Page 3
  - Why do Tarwin Lower and Venus Bay flood? Page 3
  - Check your home, work, and travel routes for floodwater Page 4
  - What might happen during a riverine 1% AEP flood? Page 5
  - What might happen during a coastal 1% AEP flood? Page 5
  - Severe weather and severe thunderstorm warnings Page 5
  - Flash flood warnings Page 5
  - Emergency warnings Page 6
  - What might happen in a flood in your area? Page 6
  - What roads are likely to flood? Page 7
  - How do floods impact communities? Page 7
  - Previous flood impacts Page 8
  - View flood information for your property Page 8
  - Your local services Page 8
- **Plan and prepare for floods** Page 9
- **What to do in a flood emergency** Page 10
- **Sandbag Guide** Page 11

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

Disclaimer: Victoria State Emergency Service assumes no responsibility or liability for any errors or omissions for any of the content in this document.

Content reviewed: August 2026

Cover: Inverloch-Venus Bay Road, 2022. Ken Griffiths, SES Leongatha Unit.

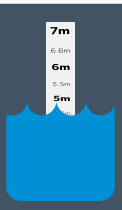
For more information visit: ses.vic.gov.au/plan-and-stay-safe

This material/publication was produced with funding provided by the Australian Government in partnership with the States and Territories under the National Partnership Agreement for Disaster Risk Reduction.

Tarwin Lower & Venus Bay Local Flood Guide

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

Flooding can be influenced by storm surges, abnormally high tides and strong winds at Anderson Inlet.



Flood events have occurred in Venus Bay or Tarwin Lower in 2001, 2012, 2022 and 2024.

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

Why do Tarwin Lower and Venus Bay flood?

The area is at risk of **riverine flooding and flash flooding** which can occur separately or at the same time.

Riverine flooding

- Tarwin Lower is built along the Tarwin River, and parts of the town are on the floodplain, the naturally low-lying areas more likely to be impacted in a flood.
- Rainfall from as far away as the Strzelecki Ranges can end up flowing into the Tarwin River and other smaller creeks, potentially causing, or adding to flooding of the Tarwin River.

Generally, the Tarwin River level begins to rise after 18-24 hours of heavy rain
During a large flood, the Tarwin River can peak after 30 hours of heavy rain.

- An abnormally high tide is a higher-than-usual tide that can worsen existing flooding or increase the risk of flooding in low-lying coastal areas.
- Low-lying coastal areas surrounding Anderson Inlet may flood due to storm surges caused by strong winds and low pressure during storms, resulting in an abnormal rise in sea level and the formation of large waves. This generally occurs with persistent south-westerly or southern winds that push the water onto the land and restrict the flow of water out of Anderson Inlet.
- A rising tide occurring when the Tarwin River flows quickly can lead to the flow changing direction, creating dangerous conditions at Inverloch-Venus Bay Road, south of the Tarwin River Bridge.

The Tarwin River level falls 3 times slower than it rises into flood. Storm surges and high tides can also slow the rate the floodwater lowers.

Flash flooding

Intense rainfall can cause flash flooding. This can happen quickly and you may not receive an official warning. Although these floods only last a short time, they can cause severe damage.

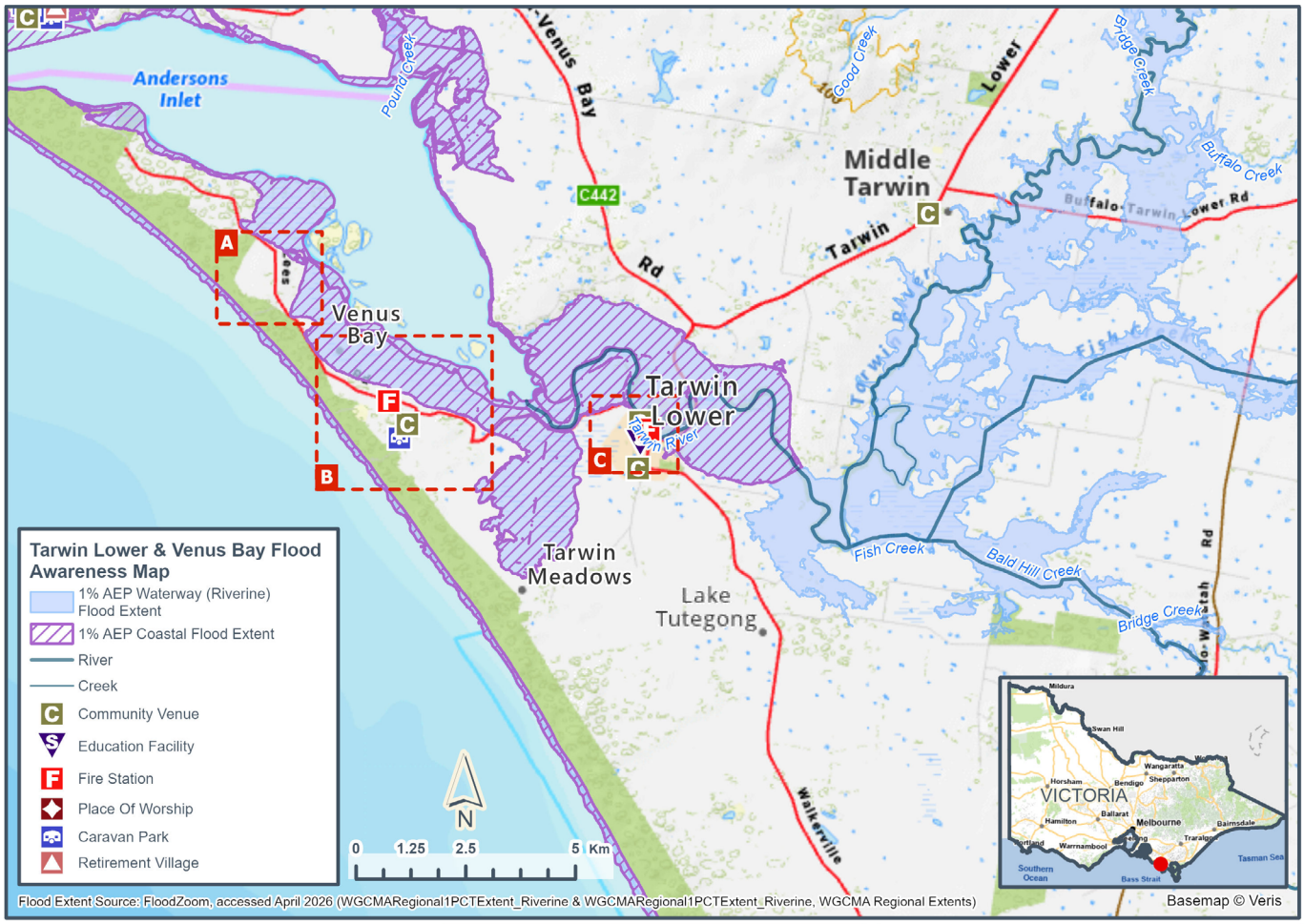
- The ground may be unable to absorb the amount of rainfall naturally causing the water to pool. More buildings and less green spaces can impact this.
- Stormwater drainage may not be able to drain the amount of rainfall, causing drains to overflow and water to pool.

Check your home, work, and travel routes for floodwater

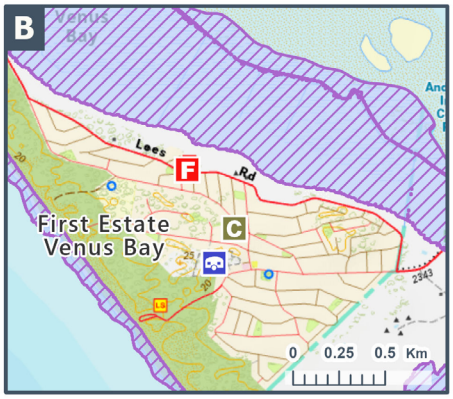
If this map shows potential flood risk for you, ensure you take action to **plan and prepare for floods.** See page 9 for more information.

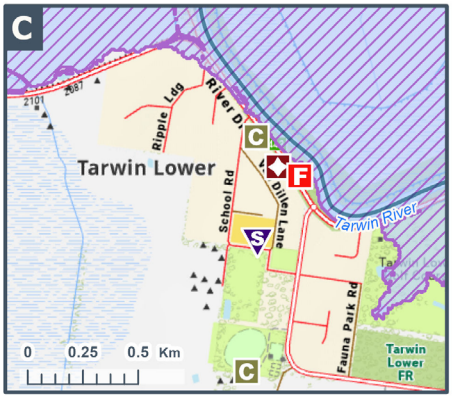
- This map shows the area likely to flood in a significant coastal flood and riverine flood event.
- This is referred to as a 1% Annual Exceedance Probability (AEP), which means there is a 1% chance of this size flood (or greater) happening in any year.

View an interactive version of this map using West Gippsland Catchment Management Authority's Community Flood Portal, see page 8 for more information.









What might happen during a 1% AEP Riverine Flood?

A 1% Annual Exceedance Probability (AEP) means there is a 1% chance of this size riverine flood (or greater) happening in any year.

- Riverine flooding generally affects the Tarwin Lower area.
- The northern floodplain is widely affected by deep floodwater.
- Floodwater can build up behind the North Western Levee, restricting flow out to Anderson Inlet and causing floodwater to pool, and affect low lying areas of roads.

What might happen during a 1% AEP Coastal Storm Surge Flood?

A 1% Annual Exceedance Probability (AEP) means there is a 1% chance of this size coastal storm surge (or greater) happening in any year.

- Coastal storm surge flooding generally affects the Venus Bay area.
- The southern floodplain and areas downstream of Tarwin lower are affected by floodwater.
- Tarwin Lower Road, between Arnott Street and Venus Bay is affected by floodwater. The floodwater height is also affected by tidal influences.
- Storm surge water can flow up the Tarwin River and when combined with riverine flooding the flow will move west to the northern floodplain and be contained in the North West Levee.

Severe Weather and Severe Thunderstorm Warnings

The Bureau Of Meteorology issues both Severe Thunderstorm Warnings and Severe Weather Warnings and both can identify a risk of heavy rainfall, flash flooding, abnormally high tides and unusually large waves.

These warnings are the earliest notification a community will receive that flash flooding or storm surges may occur in their area.

BOM

You can check weather warnings at Bureau Of Meteorology website, by downloading the BOM app or by calling 1300 659 210. See page 9 for more information.

Flash Flood Warnings

Flash flooding is challenging to predict. Victoria State Emergency Service uses VicEmergency to send emergency warnings about flash flooding. An emergency warning is usually issued after receiving reports from the public or emergency service workers who observe the flooding.

SES FLOOD STORM EMERGENCY 132 500

000 EMERGENCY
If life threatening call triple zero 000

Stay informed of emergency warnings through VicEmergency website, by downloading the VicEmergency app or calling 1800 226 226. See page 9 for more formation.

Emergency Warnings

The Tarwin River and Anderson Inlet do not have a gauge with a Minor, Moderate or Major Flood Warning Service.

The Tarwin River @ Meeniyan gauge provides information on river level height to assist in predicting possible flooding effects downstream at Tarwin Lower and Venus Bay.

An emergency flood warning containing generalised flooding information for South Gippsland Rivers is issued when Tarwin Lower or Venus Bay is likely to experience flooding.

What might happen in a flood in your area?

Although no two floods are the same and the environment is constantly changing, the below provides an idea of what to expect for different flood sizes.
Flooding of the Tarwin River can impact the water conditions of Andersons Inlet.



Water Condition

- Debris including trees and objects can be a risk to water-based activities.
- Wildlife such as snakes and rodents can be transport by floodwater.
- There is an increased risk of hazardous material and contaminants affecting the quality of water and wildlife.
- Muddied water and sediment can impact the river and inlet environment including water visibility.



Minor impacts

- Water spilling over river banks and nearby low lying areas.
- Water coming up through drains in nearby streets.
- Boat ramps, jetties and river or beachside areas can be unusable.
- Water will cover minor paths, tracks, and low level bridges.
- Some backyards and buildings impacted below floor level.
- Waterside camp areas impacted.
- Relocation of stock required in some cases.
- Floodwater may reduce septic system performance.



Moderate impacts

- Water spilling over riverbanks and covering large areas of land.
- Water above floor level in some houses and buildings.
- Evacuation may be required in some areas.
- Impact to roads and traffic routes.
- Floodwater may overload or block septic systems, causing sewage backflow, overflow, or contamination.



Major impacts

- Widespread flooding.
- Many houses and businesses are inundated above floor level.
- Properties and whole areas may be isolated.
- Major roads and rail routes closed.
- Many evacuations required.
- Impact to utility services (water, power, septic systems).

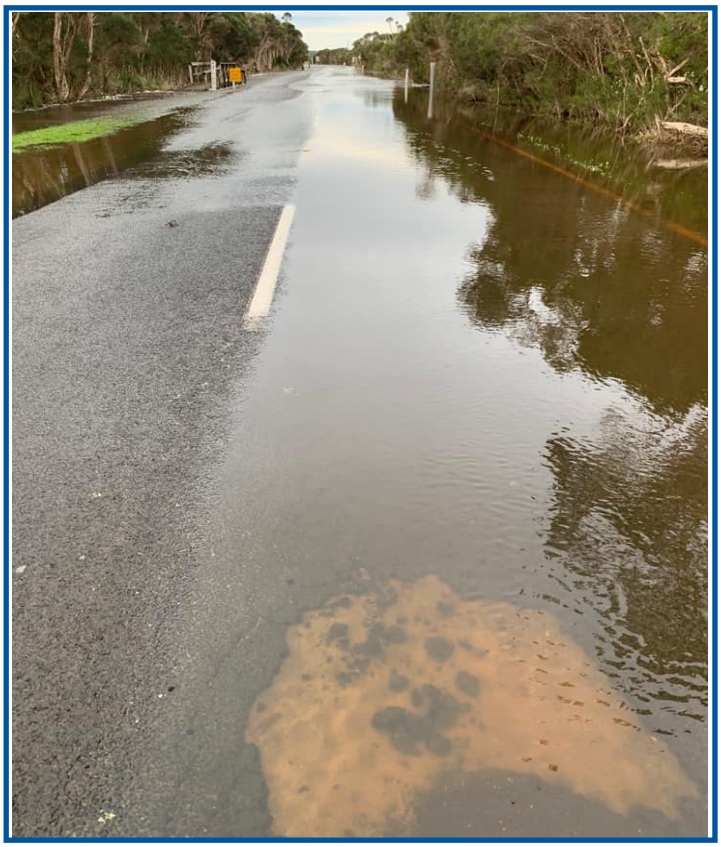
What roads are likely to flood?

During a flood, the roads listed below may flood and could be closed, and may isolate the townships of Venus Bay and Tarwin Lower.

For current road closures, check VicTraffic. VicEmergency may include road closures in its warnings, see page 9 for more information.

Low lying areas of roads are likely to be impacted by floodwater first.

- Arnott Street, Tarwin Lower
- Buffalo-Tarwin Lower Road, Middle Tarwin
- Burrows Way, Tarwin Lower
- Cumberland Court, Tarwin Lower
- Fishermans Road, Venus Bay
- Fishers Road, Tarwin Lower
- Inverloch-Venus Bay Road between Tarwin Lower and Tamarama Close, Tarwin Lower
- Inverloch-Venus Bay Road between Tarwin Lower and Venus Bay.
  Significant coastal flooding happening at the same time the Tarwin River is flooding can isolate Venus Bay. This is shown in the map on page 4.
- Ripple Landing, Tarwin Lower
- River Drive at School Road, Tarwin Lower
- School Road, Tarwin Lower
- Van Dillen Lane, Tarwin Lower



Damaged road surface during flooding at Inverloch-Venus Bay Road. Cheree Dobson. August 2022.



Stay safe by never driving through floodwater. It can take just 15cm of flowing water to float a car, that's the height of an average pen.

How do floods impact communities?

Even if your home or workplace stays dry, floods can impact you in many ways.



Building flooded

Road closures

Drinking water supply and quality affected

Power outages

Mobile and internet network outage

Sewage overflows inside building

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.

August 2022 Flood Event

On Monday 15 August 2022, rain gauges throughout the Tarwin River catchment recorded more than 100mm of rain over a 24 hour period, and VicEmergency provided an Advice Warning for flooding in the Tarwin and Venus Bay areas.

On Tuesday 16 August 2022 floodwaters had affected the floodplains and roads, resulting in the closure of Inverloch-Venus Bay Road that required a significant detour lasting another four days.



Inverloch—Venus Bay Road. South Gippsland Times. August 2022.

The Victoria State Emergency Service received requests for assistance through the region, including the rescue of a person from their vehicle after driving into floodwater at Buffalo-Tarwin Lower Road, Middle Tarwin

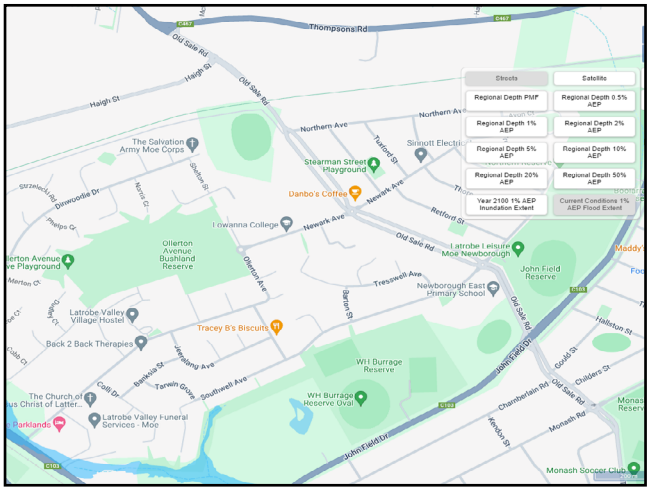
6.7 Metres^

100mm rainfall*

1 rescue

^Tarwin River @ Meeniyan river height gauge peak.
*Boolarra South rain gauge 24 hour record.

View flood information for your property



The Community Flood Portal, developed by the West Gippsland Catchment Management Authority, is a tool for residents and businesses to assess their flood risk.

- Use the portal to zoom in on your property and see if it's likely to be affected in a large flood event.

Go to flood.wgcma.vic.gov.au.

Your local services

Catchment Management Authority

For flood advice and information on flood levels or depths when developing your property.

- **West Gippsland Catchment Management Authority**
  wgcma.vic.gov.au | 03 5175 7800

Local Council

For relief and recovery support after a flood event.

- **South Gippsland Shire Council**
  southgippsland.vic.gov.au | 03 5662 9200

Plan and prepare for floods

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

1 How to 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.

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 that supports the flood actions you have chosen.

- Visit redcross.org.au/prepare.
- Download the Get Prepared app

3 Prepare an 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

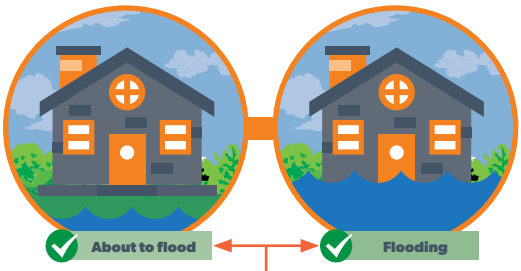


- [ ] Keep gutters and drains clear of debris including leaves and any other items.
- [ ] Check your building and contents insurance, what kind of flooding does it cover?
- [ ] Move your valuable possessions up high.
- [ ] Back up important files and documents to a cloud storage or USB kept elsewhere.
- [ ] 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, 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

Who to call for help



Flood emergency assistance Call **VICSES 132 500**

If **life threatening** call triple zero **000**

Stay informed

Emergency warnings will provide information on what is happening and advice of what you should do.

You may or may not receive an official warning before a flood.

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

- Set up a watch zone for alerts for your area

Bureau of Meteorology

Monitor rainfall, river levels, weather forecasts/warnings.
bom.gov.au/vic/flood/west_gippsland.shtml

Emergency broadcasters

- **Radio** | ABC Local 774AM and 82 AM
- **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



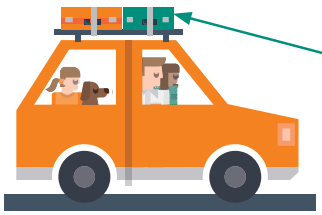
Block it
Block toilets, bath and drains using a sandbag ideally placed inside a plastic rubbish bag.

3



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

4



Leave

- Leave **before** the flood arrives.
- Check warnings from VicEmergency for important 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:



Never drive through floodwater

Large



A Large 4WD can be moved by water only 45cm deep.

Small



A small car can be moved by water only 15cm deep.

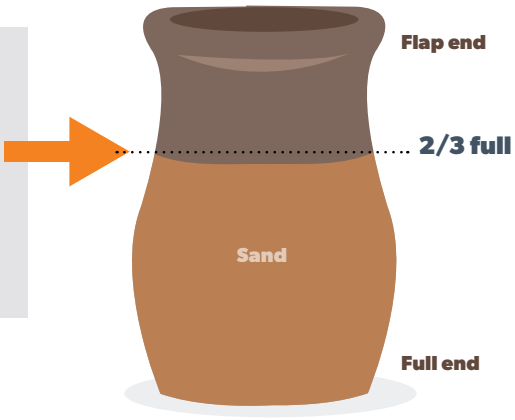
For more details and other tips, visit:
ses.vic.gov.au/flood

Sandbagging

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

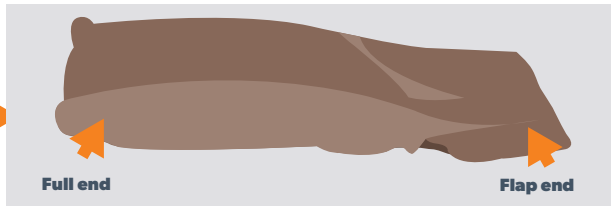
How do I fill a sandbag?

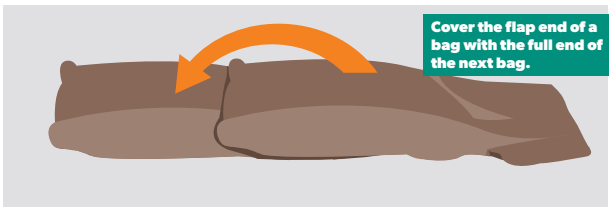
- Only use sand to fill hessian bags. Do not use dirt.
- Only fill sandbag two-thirds full.
- Do not over fill the sandbag as it will be too heavy to carry.
- Do not tie the top of the sandbag.
- Take care when filling and lifting the sandbag, to avoid injury.

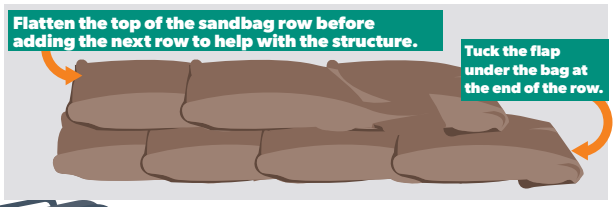


How do I lay sandbags?

- 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.

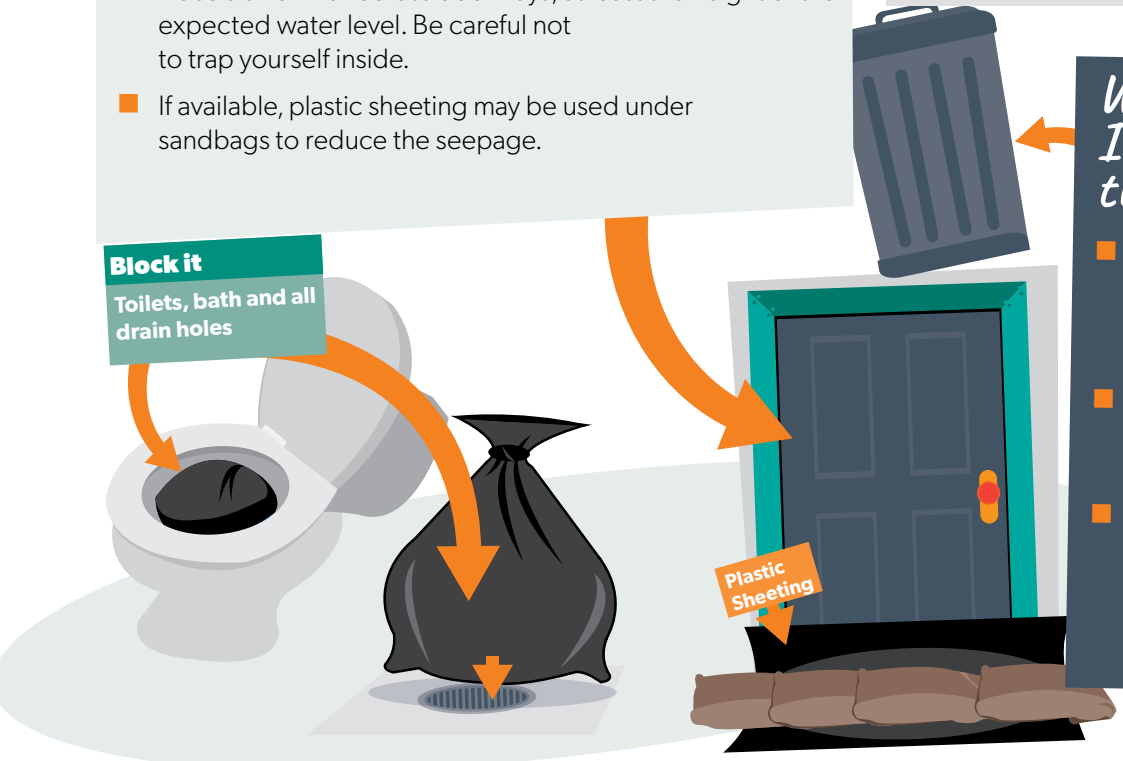






Where do I place the sandbags?

- 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.



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.



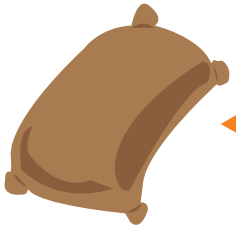
What supplies do I need to sandbag my home?

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

Where can I purchase these supplies?

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



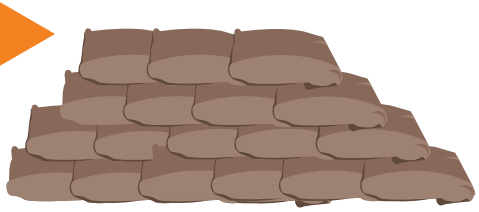


How many sandbags will I need and how much sand?

- 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?

- **<u>You</u>** 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.