



# Melbourne CBD

## Local Flood Guide

Flash Flood information for Melbourne CBD



*Elizabeth Street drain*



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





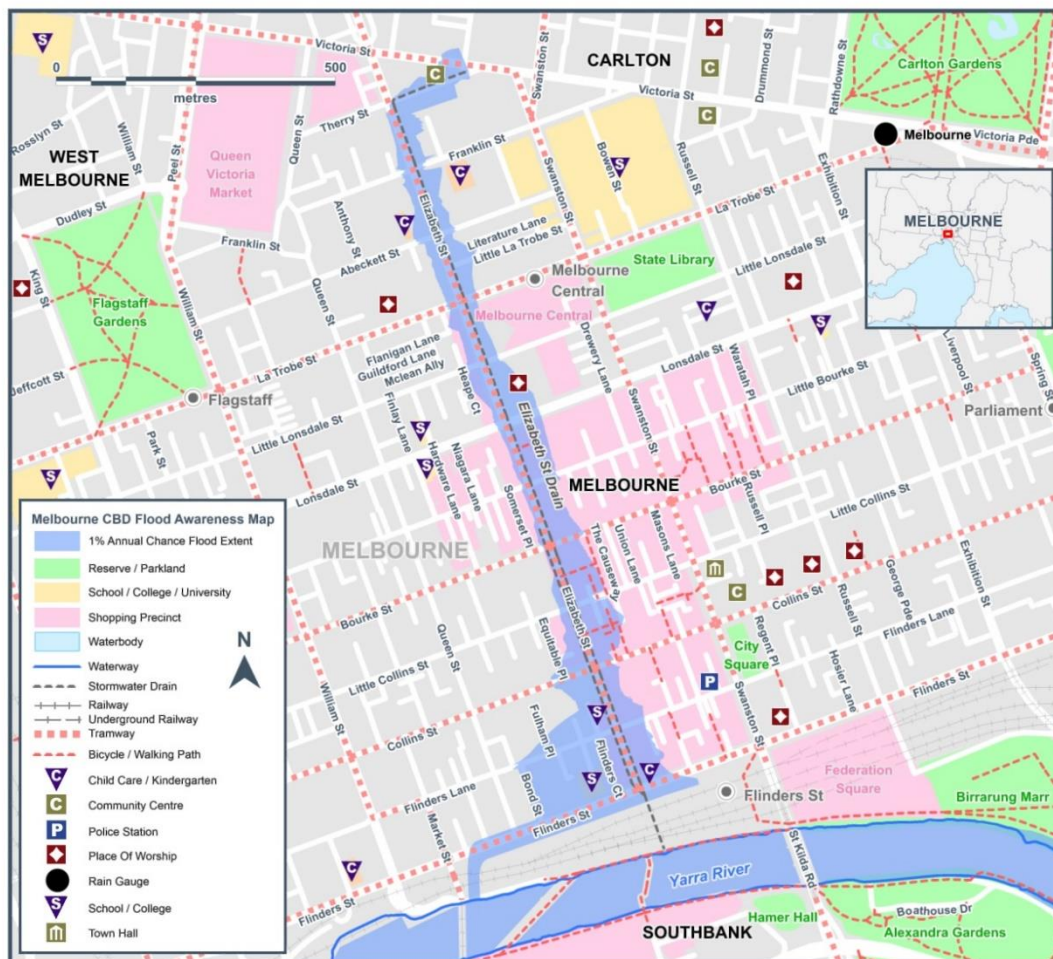
### Melbourne CBD

This guide focusses on Melbourne’s Central Business District (CBD), including the grid of central city streets which are bordered to the south, by the Yarra River and to the North, by Victoria Street. Home to retail, financial, legal, administrative, recreational, tourist and entertainment facilities, the central city operates 24 hours a day, serving a wide variety of residents, workers and visitors.

The area is prone to flooding during heavy rainfall events, resulting in dangerous conditions for pedestrians and commuters, with potential road closures, damage to private properties, and special challenges for high-rise workers and residents, as well as those ‘sleeping rough’.

This guide provides an overview of the localised risk of flood and includes information that can help you be more prepared in case of an emergency. It covers key agencies that can provide assistance, where to find flood warning and storm information, helpful websites, and practical tips for packing an Emergency Kit.

### Map of potential flood extent



The map above shows the possible flood impact of a 1 in 100-year flood (1% chance of occurring in any given year) within the Melbourne CBD area

#### 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 Melbourne Water



## Are you at risk of flood?

Most areas within the municipality of Melbourne experience some level of flooding during an extreme storm event. Suburbs with buildings and street systems constructed prior to the 1970's tend to experience greater impacts.



Because the CBD is highly developed, when it rains, very little of the water can be absorbed into the ground and instead tends to run off towards lower lying areas. Elizabeth Street is the lowest point in the CBD. It has an underground drain to collect the stormwater from Carlton and the CBD to release into the Yarra River. During times of very heavy rain over a short period of time, the Elizabeth Street Drain can be overwhelmed and this can result in flash flooding.

This risk can be heightened if the storm coincides with high tide for the Yarra River or if rubbish and debris block the main drains.

### Streets likely to be impacted by flooding (if a 1% flood event occurs) within Melbourne CBD:

- Elizabeth Street
- Therry Street
- Flinders Street
- Franklin Street
- Little La Trobe Street
- Bourke Street
- Flinders Lane



*Flinders Street // Market Street, Melbourne – 6<sup>th</sup> March 2010*

### Transport and infrastructure that may be impacted by flooding in the Melbourne CBD include:

- Tram services along Elizabeth Street (Routes: 19, 57 and 59)
- Tram services along Flinders Street (Routes: 70, 75 and City Circle)
- Flinders Street Station Pedestrian Underpass
- St Francis Catholic Church
- Bourke Street Mall near Elizabeth Street
- Elizabeth Street



### Did you know?

- On the 14<sup>th</sup> December 2018, 30 millimetres of rain fell on Melbourne and surrounds in just 15 minutes. This resulted in chaotic scenes of flooded roads, businesses and significant delays and cancellations to public transport. SES responded to 720 calls for assistance including many for people trapped in their cars on flooded roads.
- On 6<sup>th</sup> March 2010, a flash flood occurred when 47 millimetres of rain fell on the CBD in an hour. It resulted in floodwaters along Elizabeth Street at car-door level, a number of buildings flooded and tram, train and road networks were impacted. 20 people were also treated by paramedics from injuries sustained by golf ball sized hailstones.
- Other significant flooding events that have occurred in recent years in the Melbourne CBD include February 2011, July 2008, January 2004 and January 1998.



No two floods are the same. Floods like this or worse could occur again.

If you live in a low-lying area you may be at risk of flooding or need to detour around flooded areas.

Knowing what to do can save your life and help protect your property.

If you require assistance during a flood or storm, contact SES on 132 500.

### Staying Informed and Further Information

■ Current warnings (VicEmergency)	<a href="http://emergency.vic.gov.au">emergency.vic.gov.au</a>	1800 226 226
■ Bureau of Meteorology (BoM)	<a href="http://bom.gov.au/vic/warnings">bom.gov.au/vic/warnings</a>	1300 659 217
■ VicRoads Traffic	<a href="http://traffic.vicroads.vic.gov.au">traffic.vicroads.vic.gov.au</a>	
■ Emergency Broadcasters	ABC 774 AM SKY NEWS Television	
■ VICSES Social Media	<a href="https://facebook.com/vicses">facebook.com/vicses</a> <a href="https://twitter.com/vicsesnews">twitter.com/vicsesnews</a>	
■ Preparing for Flood Emergencies	<a href="http://ses.vic.gov.au/get-ready">ses.vic.gov.au/get-ready</a>	
■ Creating an Emergency Plan	<a href="http://redcross.org.au/prepare">redcross.org.au/prepare</a>	
■ Melbourne Water	<a href="http://melbournewater.com.au">melbournewater.com.au</a>	131 722
■ City of Melbourne	<a href="http://Melbourne.vic.gov.au">Melbourne.vic.gov.au</a>	9658 9658

**Life-threatening  
Emergency  
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# Flood warnings and emergency checklist

## Understanding Weather and Emergency Warnings

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 riverbanks and cover nearby low-lying areas.	Spill over riverbanks 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.
Cover minor roads paths, tracks, and low-level bridges.	Require evacuation in some areas.	Cause properties and whole areas to be isolated by water.
Affect backyards and buildings below floor level.	Affect traffic routes.	Closes major roads and rail routes.
		Require many evacuations.
		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. Communities can also access this information through VICSES 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 that the emergency could impact on the community.

WARNING LEVELS	
	<p><b>EMERGENCY WARNING</b></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><b>WARNING (WATCH AND ACT)</b></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><b>ADVICE</b></p> <p>An incident is occurring or has occurred in the area. Access information and monitor conditions.</p> <p>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><b>PREPARE TO EVACUATE/ EVACUATE NOW</b></p> <p>An evacuation is recommended or procedures are in place to evacuate.</p>
	<p><b>COMMUNITY INFORMATION</b></p> <p>A newsletter containing updates for communities affected by an emergency.</p> <p>Can also be used as a notification that an incident has occurred but there is no threat to community.</p>
	<p><b>EMERGENCY ALERT</b></p> <p>During some emergencies, we may alert communities by sounding 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 and with little warning. People who plan and prepare for emergencies can reduce the impact and recover faster.

Taking the time to think about emergency scenarios and making your own plan helps you to think clearly, have more control and make better decisions when an emergency occurs.



Visit [redcross.org.au/prepare](https://redcross.org.au/prepare) to develop your plan today.

- Remember, you may not receive any official warning. Never wait for a warning to act.
- Emergency assistance may not be immediately available.
- Be aware of what is happening around you to stay safe.



### Pack an Emergency Kit

Visit [Emergency Toolkit](#) for more information

Every home and business should have a basic emergency kit with supplies for 3 days.

Check your kit regularly. Keep it in a high place. Make sure things work. Replace out of date items.



#### Tips:

- Large plastic zip-lock bags are useful for keeping your important documents and photos dry.
- You may also like to pack a book, earphones, a deck of playing cards or colouring books to help pass time, if you're required to wait in a Recovery Centre for an extended period.
- When a warning is issued, be ready to pack additional personal items such as medications, pet food and care products.

#### 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 and people with a disability)	
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 <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 the <http://www.bom.gov.au> and warnings through [www.emergency.vic.gov.au](http://www.emergency.vic.gov.au)
- Secure objects likely to float and cause damage.
- Consider sand-bagging the property entrance doors, low windows and drains.
- 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.

## 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.
- Do not use lifts or escalators, as electrical systems may be damaged, and you risk electrocution.
- Stay away from trees, drains, low-lying areas, creeks, canals, culverts, and floodwater.

## Evacuating in Flooding

- Flood water is dangerous. Never enter floodwater. 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, visit - [emergency.vic.gov.au/Relief](http://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 until authorities advise it is safe to do so.
- 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 and wash your hands and clothes regularly.

For VICSES emergency assistance,  
call **132 500**, or **Triple Zero (000)**  
in life threatening emergencies.