



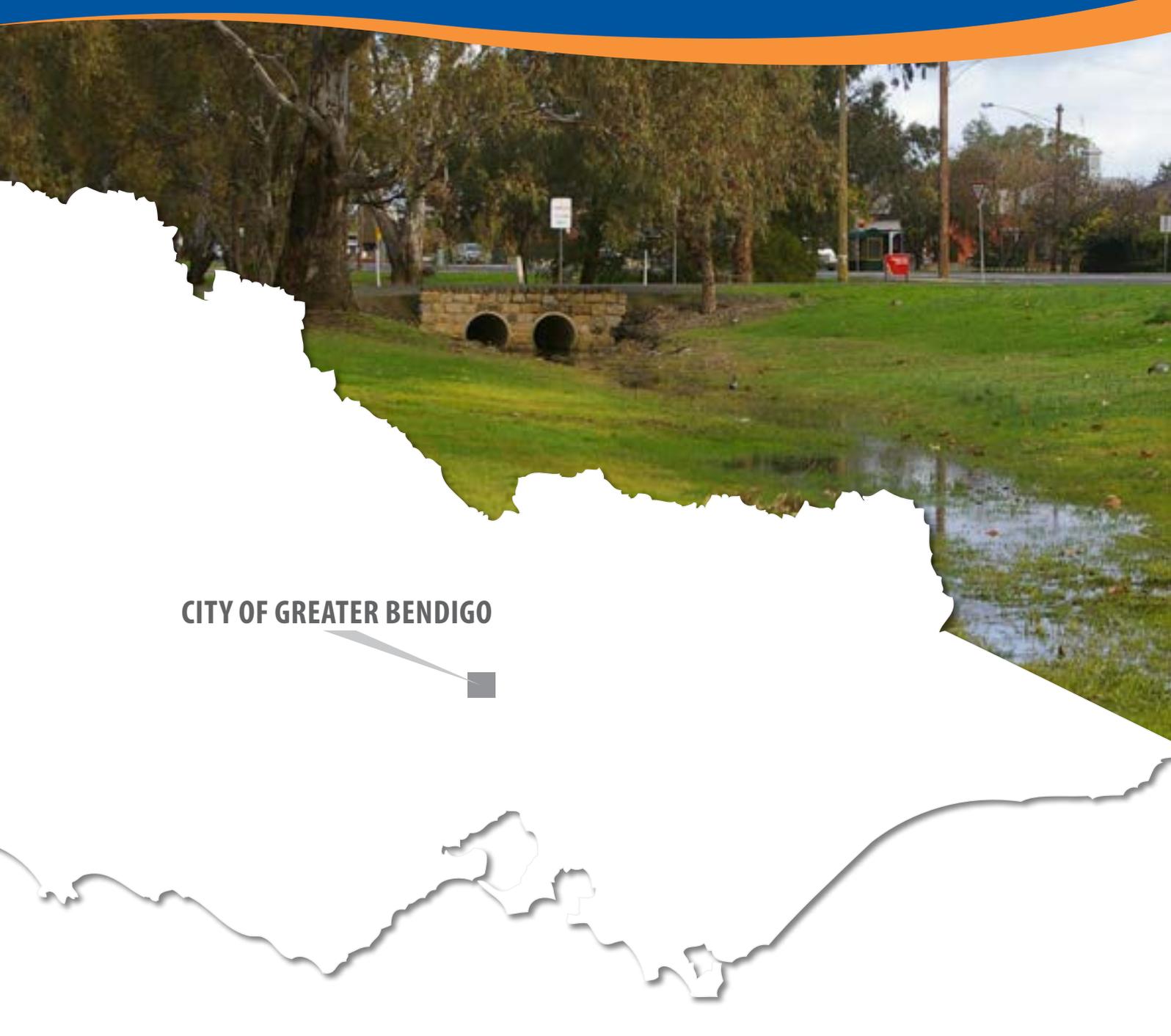
Local Flood Guide



FloodSafe

Golden Square and Kangaroo Flat

Flash flood information for the Bendigo Creek



CITY OF GREATER BENDIGO



NORTH CENTRAL
Catchment Management Authority
Connecting Rivers, Landscapes, People



FLOOD STORM
EMERGENCY **132 500**

For more information visit
ses.vic.gov.au

The Golden Square and Kangaroo Flat local area

The City of Greater Bendigo has a history of severe flash flooding.

Located near the top of the Bendigo Creek catchment, Golden Square and Kangaroo Flat have a history of flash flooding from heavy rainfall occurring over a short period of time during thunderstorms causing waterways to overflow into surrounding areas.

Flash flooding can reach full peak in only a few minutes, with no warning.

North Central Catchment Management Authority has developed an online mapping tool, Flood Eye that enables you to obtain a free report that contains flood information specific to your property.

Flood information is useful for

- Residents/ businesses wanting to understand the risks and prepare for future flood events;
- People looking to buy or rent a property;
- Property owners looking to renovate their house or build an extension;
- Developers looking to subdivide a property; and
- Farmers looking to undertake works on their property or develop a whole farm plan.

Further information including maps and details of the Bendigo Urban Flood Study can be found on the NCCMA website at nccma.vic.gov.au

This map is provided for planning purposes only.

Your local emergency broadcasters are:

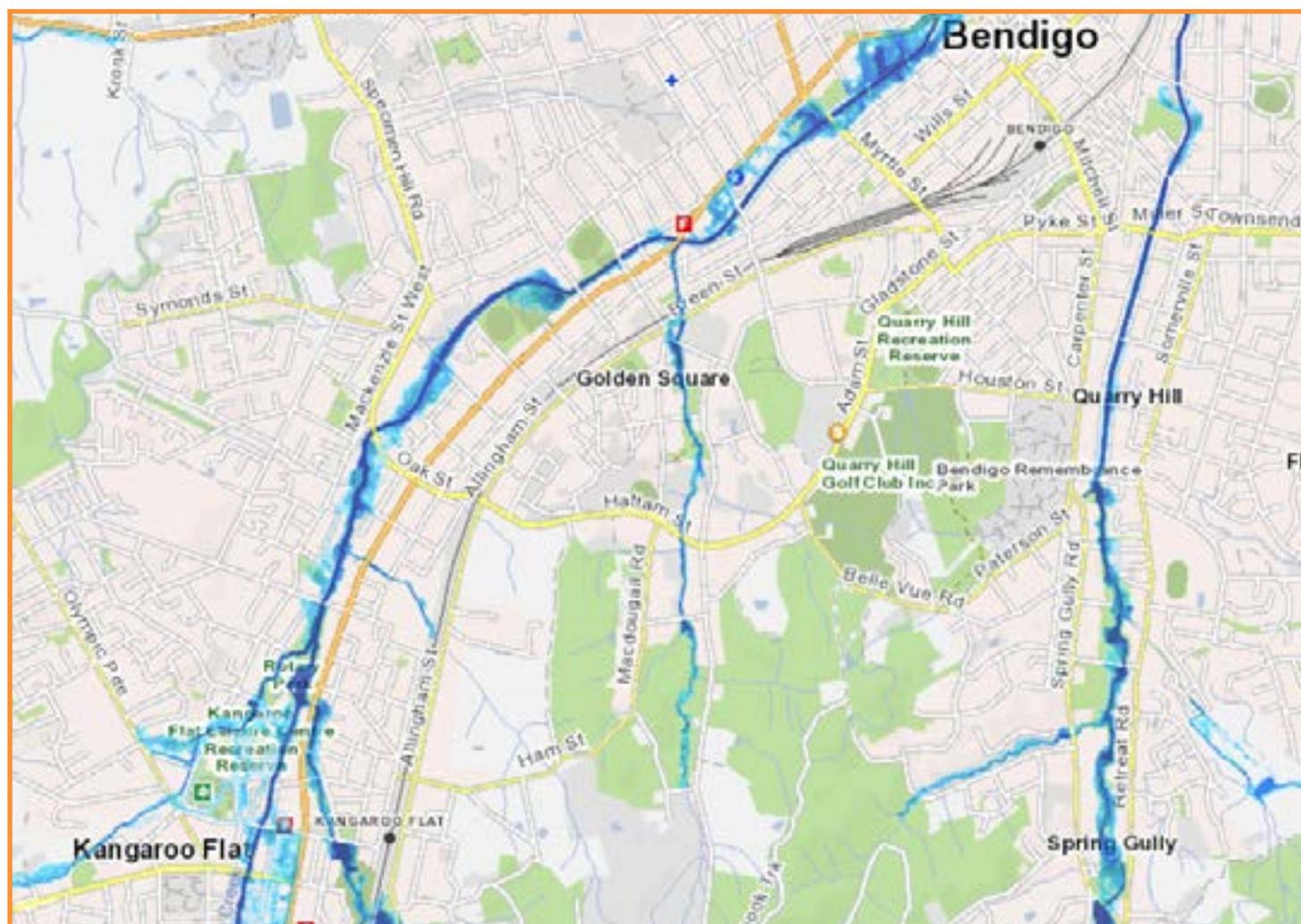
- ABC Local 91.1 FM
- 3BO 93.5 FM
- KLFM 96.5 FM
- Gold 107.1 AM
- Gold 98.3 FM
- Star 91.9 FM
- Phoenix FM 106.7 FM
- SKY NEWS Television

City of Greater Bendigo:

Phone: (03) 5434 6000

Web: bendigo.vic.gov.au

Email: enquiries@bendigo.vic.gov.au



Disclaimer

This map publication is presented 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 or for any action taken by any person in reliance upon it. Flood information is provided by North Central Catchment Management Authority

Are you at risk of flooding?

Flash flooding has historically occurred in low-lying areas along the creeks and gullies throughout Golden Square and Kangaroo Flat.

Many properties in Bendigo are located close to the city's natural waterways, leaving a number of properties and people at risk of the effects of flooding from overflows of the waterways.

During storm events, heavy rainfall is dumped into the creeks and drainage systems in the area and then overflows into surrounding areas. A number of things influence the impact of flash flooding; including how quickly the rain falls and how wet the ground is before the rain.

It is important to assess the risk of flooding around your property to see where runoff water may come from, where it will impact your home, and where the water will go once on your property.

The NCCMA in partnership with the City of Great Bendigo Council has undertaken a flood study for the urban areas of Bendigo. The Bendigo Urban Flood study provides detailed flood information for a range of flood events, assists future land use planning, development decisions and helps authorities and the community to prepare for and respond to flood events. Further information including maps and details of the Bendigo Urban Flood Study can be found on the NCCMA website at:

nccma.vic.gov.au



Did you know?

The Golden Square and Kangaroo Flat area have a history of flooding and is especially prone to flash flooding with recorded floods occurring since settlement in 1850.

- The 1857 flood is one of the largest on record and occurred following 82mm of rain fell in under 24 hours, causing significant flooding along the Bendigo and Back Creeks.
- In November 1933 the Bendigo Creek overflowed its banks at Kangaroo Flat flooding 100 houses in High street and washing away a bridge in Alder Street.
- In 1951, Bendigo received 80.2mm of rain over two days resulting in half a mile of railway line washed away. In Kangaroo Flat the water was waist deep.
- In January 1996 heavy thunderstorms resulted in many shops and residences flooding throughout Kangaroo Flat.
- During March 2010 approximately 80mm was recorded in 3 days with a maximum burst of around 40mm in 2 hours.
- In September 2010 around 80mm in 1 day with 40mm over approximately 10 hours.
- The February 2011 flood saw a total of 100mm recorded over 3 days with approximately 50mm in a 5 hour burst.

What you can do:

Even if your property isn't situated close to a waterway it could still be at risk of flooding.

Recent urban development has changed the natural flow of the excess water runoff. It is common for properties in these areas to be flooded from water travelling down streets and driveways.

If you live or work close to a creek, river or low-lying area you may be at risk. It is important for families, business and locals to be aware of the risks, be prepared and have your emergency plans ready for when an emergency occurs.



About Flood Warnings

What warnings mean

Warnings are issued by the Bureau of Meteorology (BoM) to inform people about the possibility of flooding.

A **Flood Watch** means there is a developing weather pattern that might cause floods in one or two days.

Victoria State Emergency Service (SES) will give information about how floodwater might affect people and properties. This includes safety messages to remind you what to do.

As Golden Square and Kangaroo Flat are prone to flash flooding, Severe Weather Warnings and Severe Thunderstorm Warnings are your earliest triggers to activate your Home Emergency Plan.

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 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 results in water rising rapidly and flowing powerfully and quickly. Golden Square and Kangaroo Flat residents should listen out for warnings with flash flooding and remember that flash flooding:

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

Listen to Severe Thunderstorm Warnings and Severe Weather Warnings for your area. If you hear a warning, check the BoM and SES websites for information and advice. You can monitor river and rainfall conditions on the BoM website at bom.gov.au.

Know your local environment

If you live in the Golden Square or Kangaroo Flat 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 way to help you prepare for future floods.

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 Golden Square and Kangaroo Flat community through the Emergency Alert telephone warning system. All emergency service providers can use an 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.

During flash flooding

When flash flooding is likely, if you decide to leave, do so **well before** flooding occurs. Leaving early before flooding occurs is always the safest option. You may decide to shelter with neighbours, family or friends in a safer area.

Evacuating through floodwater is very dangerous and you may be swept away. **Never** drive, ride or walk through floodwater.

If you do not leave early enough and become trapped by rising floodwater inside your home or business, stay inside your building and seek the highest part such as a second storey.

Stay there and call Triple Zero (000) if your emergency is life-threatening.

If you are staying in a caravan or temporary dwelling, move to higher ground **before** flooding begins.

Safety in flash flooding

Driving through floodwater is the number one cause of adult deaths during floods. Never walk, ride, swim or drive through floodwater.

Playing in floodwater is the number one cause of death during floods for children and teenagers. Floodwater is filled with unseen dangers, harbouring hidden debris such as broken glass, shattered timbers and twisted metals as well as sewage, putrid food waste and toxic chemicals.

Floodwater is toxic. Never allow your children to play or swim in floodwater.

Now – before a flood

- Check if your home or business is subject to flooding. For more information, visit bendigo.vic.gov.au
- 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.
- Stay alert for weather warnings and heavy rainfall.

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.

Your emergency plan

Emergencies can happen at any time, with little warning. People who have planned and prepared for emergencies will reduce the impact and recover faster.

Taking the time to think about emergencies and make your own plan helps you think clearly, have more control and 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 service providers, your insurance company, friends and family.



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

Evacuation

During a flood, police, SES, and other emergency service providers 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. Be ready to leave your property.
- **Evacuate immediately** – you must leave immediately as there is a risk to lives. You may only have minutes to evacuate in a flash flooding situation.

Do not return to your home until you are sure it is safe to do so. You do not need to wait to be told to evacuate.

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:



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

Never
Drive, Ride or Walk
Through Floodwater

During a flood

When flooding has begun:

- **Never drive, ride, swim or walk through floodwater.**
- Remember that floodwater can be deeper than you think and can hide damaged roads and bridges.
- Never 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 Triple Zero (000).
- For SES emergency assistance during floods and storms call 132 500.
- Stay away from all waterways including drains and culverts.
- Stay away from fallen powerlines as electricity travels easily through water.
- Be aware that animals such as snakes, rats, spiders and other pests may be on the move during a flood. These animals can come into houses and other buildings or hide around sandbags.
- Keep in contact with neighbours.
- Be prepared to act quickly.

After a flood

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

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

Once you return to your home:

- Investigate the structural safety of your building.
- Keep the electricity and gas off until checked and tested by a professional.
- When entering a building, use a torch to light your way. Never use matches or cigarette lighters as there may be gas inside.
- Take photographs of all damage for insurance.
- 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.
- Clean your home straight away to prevent disease.

How SES helps the community

Victoria State Emergency Service (SES) is a volunteer based emergency service. Although SES volunteers attempt to reach everyone prior to or during an emergency, at times this is not possible, especially during flash flooding which occurs so quickly. 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 the SES Home Emergency Plan by visiting 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 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.
- Leave early if you intend to evacuate.

When flooding may happen soon (heavy rainfall)

- 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. 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.
- If you are staying in a caravan or temporary dwelling, move to higher ground BEFORE flooding begins.

During the flood

- For SES emergency assistance, call 132 500.
- 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 as water can flow quickly and have strong currents.
- Stay well clear of fallen trees, powerlines and damaged buildings.
- If you are trapped inside a building, stay inside and shelter in the highest place. Call Triple Zero (000) in a life-threatening emergency.

After the flood: recovery

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

For more information visit:

- ses.vic.gov.au
- [facebook.com/vicses](https://www.facebook.com/vicses)
- twitter.com/vicseswarnings

Emergency Contacts

Life-threatening emergency Triple Zero
Police Fire Ambulance **000** TTY106

Victoria State Emergency Service (SES) **132 500**
For SES emergency assistance

SES information line **1300 842 737**
Operates during major floods or storms **1300 VIC SES**

VicEmergency **emergency.vic.gov.au**
Victorian emergency warnings

Bureau of Meteorology (BoM) **1300 659 217**
Weather information, forecasts, warnings bom.gov.au

National Relay Service (NRS) relayservice.gov.au

The deaf, hearing or speech impaired can call SES or Triple Zero (000) using NRS:

| | DIAL | THEN ASK FOR |
|---|---------------------|----------------|
| ■ Speak and Listen (SSR) users phone | 1300 555 727 | 132 500 |
| ■ TTY / Voice users phone | 13 36 77 | 132 500 |

Internet Relay users log into iprelay.com.au/call/
then enter: **132 500 or 000**

VicRoads **13 11 70**
Road closures and hazard reporting service vicroads.vic.gov.au

City of Greater Bendigo Contact Details

Phone: (03) 5434 6000
Email: enquiries@bendigo.vic.gov.au
Web: bendigo.vic.gov.au

Weather District: Northern Country

Catchment Management Authority: North Central Catchment Management Authority

Emergency Broadcasters

Emergency broadcasters include ABC Local Radio, designated commercial radio stations across Victoria and SKY NEWS Television.

- ABC Melbourne 91.1 FM
- 3BO 93.5 FM
- KLFM 96.5 FM
- Gold 107.1 AM
- Gold 98.3 FM
- Star 91.9 FM
- Phoenix FM 106.7 FM
- SKY NEWS Television

Complete the following and keep this information handy close to the phone:

Your electricity supplier: _____

Your gas supplier: _____

Doctor: _____

Vet: _____

Insurance

Policy Number: _____

Phone Number: _____