



BRUTHEN

LOCAL FLOOD GUIDE

Riverine flood information for the Tambo River at Bruthen



Bruthen floodplain, viewing north towards Jennings Rd bridge (DELWP, June 2012).



For flood emergency assistance call
VICSES on 132 500



EAST GIPPSLAND
CATCHMENT
MANAGEMENT
AUTHORITY





Bruthen



Bruthen is a small rural town in East Gippsland. The township sits above the floodplain and is intersected by the Great Alpine Road, while the lower agricultural areas are fringed by the Tambo River and the Old Tambo River Course (which is periodically engaged during floods).

The Bruthen township is not susceptible to flooding, but the low-lying rural land to the south is subject to flooding when the capacity of the Tambo River at Tambo Upper is exceeded. South of the town, the Tambo River flows through Tambo Upper, Swan Reach and Johnsonville before flowing into the Gippsland Lakes at Lake King, west of Metung. When the Tambo River floods, water quickly begins to pool in the floodplain south of Bruthen and the depth of floodwater in the floodplain increases as the water builds up downstream.

Are you at risk from a flood?

Flooding in Bruthen is most common on the low-lying farmland on the Tambo River floodplain between Bruthen in the North and Tambo Upper in the south. This flooding may isolate several properties and dwellings.

Road closures do not pose a threat of isolation to the towns in the area due to the availability of alternative routes, except in extreme circumstances.

Flooding of the Tambo River (upstream of Bruthen) has been known to cause closure of the Great Alpine Road due to landslips. High river levels erode the banks of the Tambo River, making the Great Alpine Road unstable. As a result, this can isolate the upper catchment communities of Ensay, Swifts Creek and Omeo.

When considering the impacts of a potential flood, those living on rural properties should allow plenty of time to move stock and machinery located on the floodplain. Hay bales should be stored on high ground to avoid them being washed away by flood waters. Access across the river via private bridges should be made with extreme caution during times of flood, and if the bridge deck is inundated, crossing the bridge should be avoided.

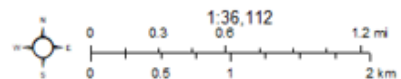
- The following map shows the area expected to flood during a 1% flood event along the Tambo River. A 1% flood means that there is a 1% chance of a flood to that size occurring in any given year. A 1% is similar to the flood experienced in June 1998 (12.0 metres).



Flood extent for a gauge height 11.9m (a 1% flood extent) in the Bruthen area.



Tambo River Water Technology 2016 Extent - 1 in 100 years ARI



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 East Gippsland Catchment Management Authority



Did you know?

Bruthen has a history of flooding, including in 1998, 2007, 2012 and 2016. The June 1998 flood is the largest flood on record. It was recorded as a major flood at a level of 12.0 meters at the Tambo River gauge, downstream of Ramrod Creek. Flooding could occur again in and around the Tambo River with similar or greater consequences including:

- Roads closed
- Rural properties becoming isolated
- Loss off livestock
- Fallen trees and limbs
- Landslips
- River channel erosion

Rain can be falling heavily in the Tambo River catchment without the knowledge of residents in downstream townships such as Bruthen, Wiseleigh, Mossiface, Tambo Upper and Swan Reach. Although it may be raining in the Bruthen district, localised rain may not have an impact on whether the Tambo River will flood. It is important to be aware of weather conditions up stream to ensure appropriate preparation for potential flood events.



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.



Bank erosion at the Greg Ridsdale Memorial Caravan & Camping Park, downstream from the Bruthen-Nowa Nowa bridge (DELWP, 1998).



Tambo River flood levels at downstream of Ramrod Creek

When the Bureau of Meteorology (BoM) issues Flood Warnings they include a prediction of the flood height at the downstream Ramrod Creek gauging station.

While no two floods are the same, the following table can give you an indication of what you could expect in your area when water levels reach certain heights at this gauge; including when your access may be cut off and when your property may be affected.

The level of a flood event is shown on the left column, followed by the Ramrod Creek gauge heights.

It is important to monitor your local gauges to guide your response to potential flood impacts. This can be done by going to http://www.bom.gov.au/vic/flood/east_gippsland.shtml and hovering your mouse over the grey circles located on the map around Bairnsdale to select the correct gauge.

Impacts to property, buildings, roads, and features of interest, that may arise from various flood levels.

Flood Event	Height (metres)	Impact/level
Minor	4.1	<p>Causes inconvenience. Low-lying areas next to watercourses are inundated. Minor roads may be closed and low-level bridges submerged. In urban areas inundation may affect some backyards and buildings below the floor level as well as bicycle and pedestrian paths. In rural areas removal of stock and equipment may be required.</p> <p>The Evans Track bridge (Ramrod Bridge) will be submerged and water will be spilling across the rural land of the river flats below Bruthen. Tambo River may break out into the old course, and another break out may occur east of Curtis Lane leading to flooding of the southern end of Curtis Lane; Blumes Lane may also become inundated at the sag in the road.</p> <p>If flood waters are expected to rise, thought will need to be given to evacuate the Bruthen Caravan Park and lengthening of mooring lines of boats located at jetties throughout the Tambo River watercourse.</p>
Moderate	6.9	<p>In addition to the above the area of inundation is more substantial. Main traffic routes may be affected. Some buildings may be inundated above the floor level. Evacuation of flood affected areas may be required. In rural areas removal of stock is required.</p> <p>A building off Hoffmans/Curtis Lane intersection may be impacted with depths above 0.3 metres, with several others isolated by floodwaters across these roads. Access of properties to/from The Great Alpine Rd via driveways may be inundated.</p> <p>Tambo River will break out into the floodplain in many locations between Curtis Lane, Hoffmans Ln and Tambo Upper Rd.</p>
10%	8.2	<p>The East Gippsland Rail Trail will be unpassable through the section east of Barkly St, adjacent to the old Trestle Bridge.</p> <p>The floodplain directly north east of the Bruthen-Nowa Nowa Tambo Rd bridge will fill with water, inundating lower sections of Main St.</p>
5%	9.5	<p>Two properties are threatened by flood water on Old Orbost Road with another house under threat on Main Street Bruthen.</p> <p>Bruthen Recreation Reserve is impacted by flood water with some points up to 1.6 meters under water.</p> <p>Up to 5 buildings may be impacted by flood levels greater than 0.1 metre along the roads named above.</p> <p>The following additional roads may now be impacted: Tambo Upper Rd east of Bruthen may begin to flood. Curtis Lane at Mossiface, Great Alpine Road – 1 km east of Wiseleigh. This has the potential to cut off access to Bairnsdale.</p>
2012	9.7	<p>Infrastructure, such as bridges, roads and recreational areas (including caravan parks) were damaged in the 2012 flood. Some locations east of Bairnsdale temporarily lost power and landline phones. There was significant rural inundation, including crop losses and more than 1,500 Gippsland farmers were impacted (across the region).</p>



Major	10.0	In addition to the below, extensive rural areas and/or urban areas are inundated. Many buildings may be affected above the floor level. Properties and towns are likely to be isolated and major rail and traffic routes closed. Evacuation of flood affected areas may be required. Utility services may be impacted. 10 buildings now at risk around the old Tambo River course and the Bruthen floodplain: these are mostly farm sheds however any building on the floodplain may be at risk as water levels continue to rise.
2%	11.0	Bruthen recreational reserve completely inundated, with access to/from the caravan park cut by floodwaters. Extremely hazardous flood depths span across the Bruthen to Swan Reach floodplain. 13 buildings may be impacted by flood, particularly around the Bruthen recreational reserve and old Tambo River watercourse.
1%	11.9	Flood extent shown in map (Error! Reference source not found.). Already impacted areas will now increase in flood depth. 14 buildings may be facing flood depths greater than 0.1 m. Great Alpine Road inundated in several locations between Wiseleigh and Bruthen. Initial flooding occurs on Bruthen-Buchan Rd at the Bruthen Recreation Reserve.
1998	12.0	During the 1998 flood event the Princes Hwy was closed including many local/unnamed roads, with access to emergency vehicles limited for up to 24hours after the event. The 1998 flood event caused widespread damage to businesses, residential property, rural fencing, and agricultural land. Impacts include those listed above for the 1% event.
0.5%	12.8	Nearly the entire floodplain is inundated between Wiseleigh and Bruthen; significant flooding will impact Tambo Upper Rd, Great Alpine Rd and Swan Reach Rd. 15 buildings may be facing flood depths greater than 0.1 m, including the Pandella Place Rail Trail Accommodation. Pilgrims Rd may become inundated from floodwaters backing up the floodplain combined with creek flows. It is important to understand that floods of this magnitude will be rare, but not impossible. Larger floods may occur under extreme circumstances. In a worse-case-scenario, the following roads may also be impacted by floodwaters reaching well over 12.8 m at the river gauge: Donnelly St, Jackson Rd, King St, Mill St, Seehusen Av and Stock St. In extreme floods above this level, up to 112 buildings in the Bruthen area may be flooded above 0.1 metre depths.

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 Gippsland 100.7FM or 828AM SKY NEWS Television REGFM 105.5 TRFM 99.9	
■ 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	
■ East Gippsland Catchment Management Authority	egcma.com.au	(03) 5152 0600
■ East Gippsland Shire Council	eastgippsland.vic.gov.au	(03) 5153 9500
■ National Relay Service NRS	relayservice.gov.au	

**Life-threatening
Emergency
000**






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](#).
- 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.



ARE YOU READY?
DO ONE SIMPLE THING TO MAKE YOU SAFER









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	
	EMERGENCY WARNING You are in imminent danger and need to take action immediately. You will be impacted. A Major flood warning usually fits into this category
	WARNING (WATCH AND ACT) 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.
	ADVICE 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.

ADDITIONAL MESSAGES	
	PREPARE TO EVACUATE/ EVACUATE NOW An evacuation is recommended or procedures are in place to evacuate.
	COMMUNITY INFORMATION A newsletter containing 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.
	EMERGENCY ALERT 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.

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.

East Gippsland Shire has worked with many communities to develop Local Incident Management Plans, which are activated by the community during an emergency.

Go to <https://www.eastgippsland.vic.gov.au/community/emergency-management-plans> for the Bruthen Community Local Incident Management Plan.

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.

Visit redcross.org.au/prepare start creating your plan.





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 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 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
- ☐ 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.

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.
- ☐ If you are staying in a caravan, move to higher ground before flooding begins.
- ☐ 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. 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, go to the VicEmergency Relief and Recovery-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.