

SES Genoa Valley

Local Flood Guide

Flood information for the Genoa Valley





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







Flood risk in the Genoa Valley

The Genoa Valley includes the main population centres of Genoa, Gipsy Point and Mallacoota. All three communities can be impacted by flood events. Genoa is a small rural township on the Princes Highway with a rest area that provides space for overnight camping. Gipsy Point is a small hamlet on the upstream shoreline of Mallacoota Inlet and is popular for boating and fishing.

Mallacoota is a popular holiday destination and the population swells during the Christmas and Easter holidays, filling the large caravan park on the foreshore. Although the community is relatively self-reliant, closure of the sole road access by flooding can trap holidaymakers, significantly disrupt supply chains and cut access to essential services.

The Genoa River rises in southern NSW near Bombala and flows about 85km through the Genoa Gorge and the Genoa floodplain before entering Mallacoota Inlet. The 1950km² Genoa catchment is largely forested and sparsely populated.

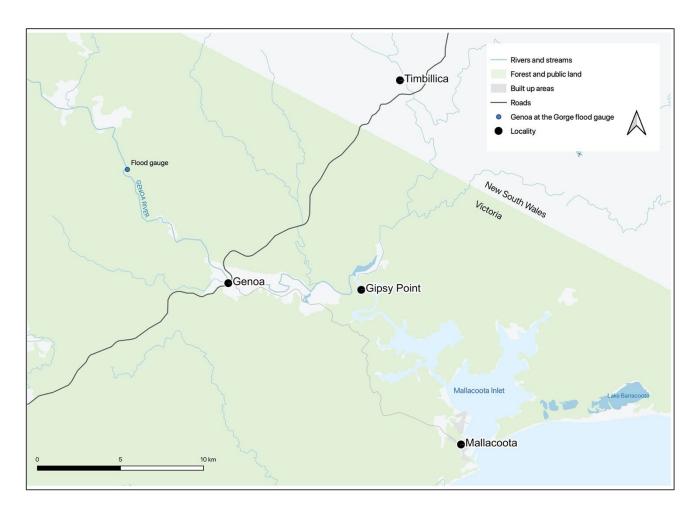


Figure 1: The lower Genoa River and Mallacoota Inlet

Are you at risk from a flood?

The Genoa, Wangarabell, Gipsy Point and Mallacoota communities are all impacted by riverine floods. The most common impacts are inundation of low-lying farming land and road closures. Gipsy Point and Mallacoota are isolated by closure of the Genoa-Mallacoota Road in larger flood events. There are also roads and low-lying infrastructure that can be inundated in Mallacoota. Most property infrastructure in the valley is built on higher ground so direct impact is reduced.

The largest recorded flood in the Genoa Valley was in June of 1978, although there is evidence of a larger event in 1971. Floods occur in the area because of the relatively high rainfall in Eastern Victoria and the narrow floodplain. Floods can come and go quite quickly, due to the steep catchment and the short distance downstream to the Genoa floodplain. You may not have much warning of a pending flood so it is important to keep an eye on rain upstream in the catchment.

When considering impacts of a potential flood, those living on rural properties usually allow plenty of time to move stock and machinery located on the floodplain. Hay bales are stored on high ground to avoid being washed away by flood waters. (Refer to the Genoa Flood Levels table below for further details of flood impact at major, moderate and minor levels.)



Figure 2: An example Watch and Act alert issued for the Genoa River



Figure 3: Wangarabell farmland impacted by Genoa River during a flood (ABC Gippsland, 2021)



Did you know?

The Genoa River has a history of flooding. Flood events happen on average twice a decade. Historically, a 'major' flood event occurs at or above 3.50 metres at The Gorge gauge, and occurred in 1975, 1978, 1983 and 1985. Moderate flood events occur at or above 2.90 metres and occurred in 1974, 1983, 1992, 1998, 2011, 2022 and 2023.



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

The largest flood event recorded at The Gorge was in 1978 with a larger flood event in 1971. Although there was no recorded information, local reports indicated that in Genoa, the floodwaters reached the top of the counter in the General Store and the first step from the ground on the east side of the Genoa Hotel.

Each flood over the years has been different, flood extent can be influenced by a range of factors such as level of vegetation cover, seasonal impacts, catchment moisture levels, rainfall patterns and duration, tributary impacts, estuary effects.

Flood maps

Flood class levels (minor, moderate and major) are used by the Bureau of Meteorology to categorise flood events and to broadly describe the impact.

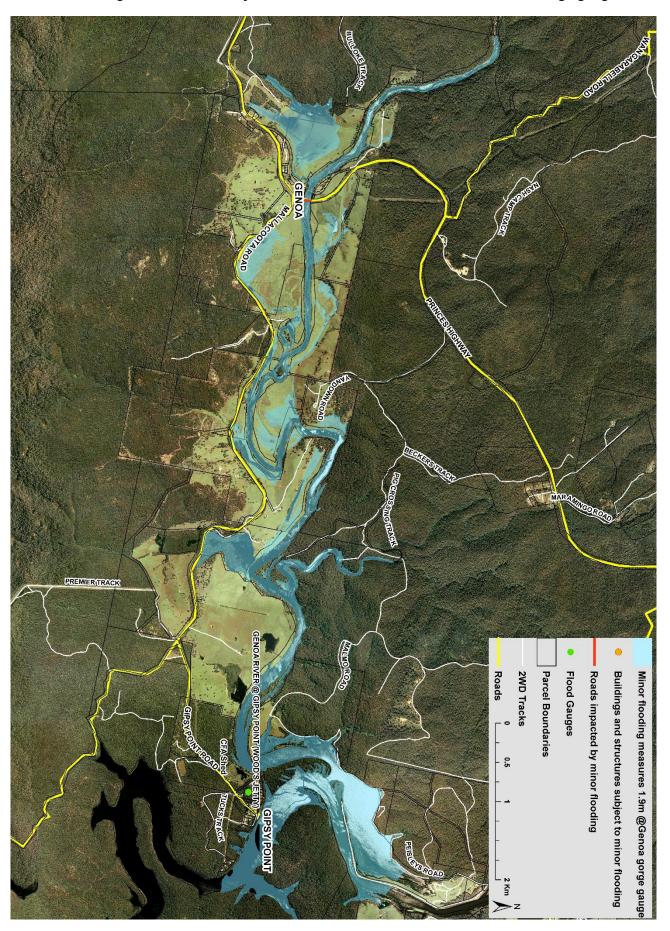
Properties located near rivers and creeks may experience flooding due to heavy rainfall. This rainfall may have occurred upstream, but eventually the runoff enters the river/creek and arrives downstream. The extent of damage depends upon the maximum height that the river/creek peaks at.

You can check what the expected general impacts can be from minor, moderate and major flooding in the table below in the section titled *Flood Warnings and Emergency Checklist*.

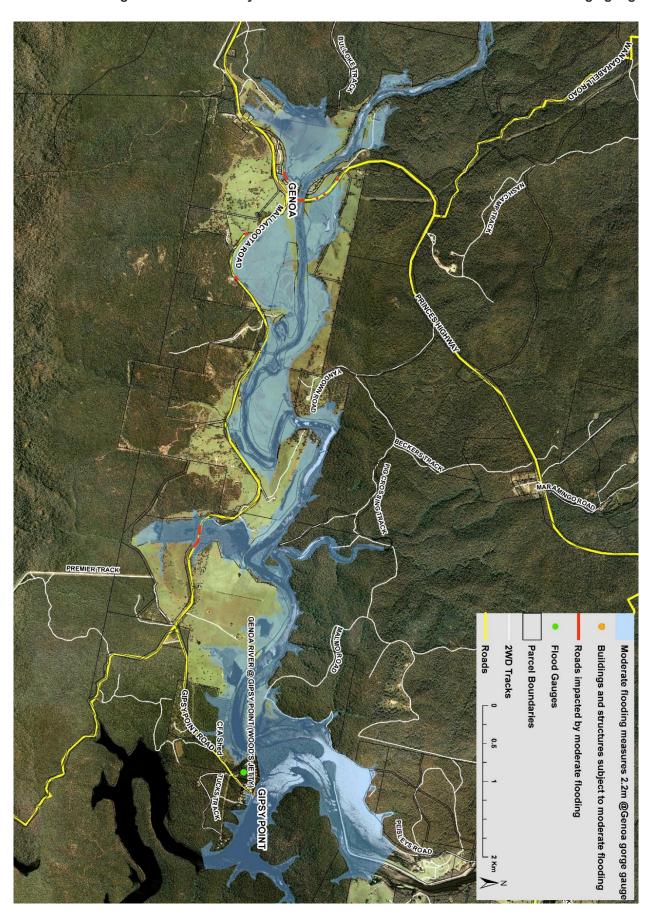
The following series of maps (Figures 4 to 6) show the expected flooding in a minor, moderate and major flood in the Genoa Valley, which have been derived from a recent rapid flood study¹ for the Genoa River developed in 2017 and a review of these extents in December 2023.

¹ East Gippsland Floodplain Management Strategy Resource Document: Flood Risk Report – Genoa Valley (Water Technology, 2017)

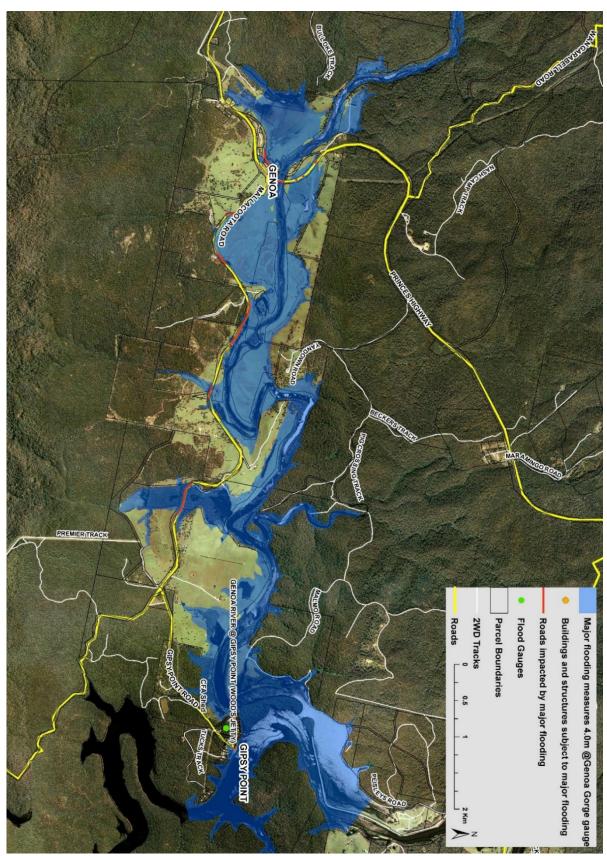
Minor flooding in the Genoa Valley - a minor flood measures 1.9 metres on The Gorge gauge.



Moderate flooding in the Genoa Valley - a moderate flood measures 2.2 metres on The Gorge gauge.



Major flooding in the Genoa Valley - a major flood measures 4.0 metres on The Gorge gauge.



Disclaimer

These map publications presented by Victoria State Emergency Service are 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.



Genoa flood levels at The Gorge gauge

The Bureau of Meteorology provides warnings for the Genoa River using The Gorge gauge, which is approximately 15 km upstream of Genoa. The Bureau takes their information from the catchment rainfall to calculate the predicted height to be reached at this gauge. It is very important to keep an eye on rain gauges for your own circumstances during a significant rain event.

You can also go online to check local gauges to guide your response to potential flooding. Go to <u>The Bureau of Meteorology - East Gippsland Rain & River Data</u> and identify 'Genoa R at The Gorge' – Select 'plot' for current flood height information.

The following table can give you an indication of what you could expect in your area when water levels reach certain flood heights, 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 Genoa River gauge heights.

Flood event	Height (metres)	Impact/level
MINOR	1.9	 Inundation occurring to the west of Genoa township, at the confluence of Genoa Creek and Scrubby Creek.
		 Breakouts engaging the floodplain extent on both the north and southern banks of Genoa River downstream of the Princes Highway bridge. Roads unaffected.
		 No observed building impact, however widespread flooding of agricultural property is likely. Low-lying properties should consider moving assets and equipment. Local access roads and paddock tracks may be inundated.
		One property driveway is inundated possibly isolating the property.
		 Water levels approximately 500 mm below floodway on Mallacoota- Genoa Rd (at Mangan Lake).
		 Gipsy Point boat ramp and public jetty area may be inundated. Other waterway assets may be blocked off and unsafe including private jetties.
MODERATE	2.2	 Road access along Mallacoota-Genoa Road is cut with approximately 250 mm depth across the floodway at Mangan Lake. Above this level, depths over the floodway rise significantly cutting access for larger vehicles.
		 Inundation extends either side of Genoa River downstream of the Princes Highway bridge, approaching the Mallacoota-Genoa Road in multiple locations however no other cuts are expected at this stage.
		 River-fronting portions of properties are potentially inundated including outlying structures such as sheds and tanks.
		 Gipsy Point public carpark and rear portions of selected properties impacted, no direct building impact is observed.
MAJOR	4.0	 Several residential properties are inundated, including two in Genoa township, two near Mangan Lake, and two at Gipsy Point. Genoa Campground is also inundated.
		 Mallacoota-Genoa Road is cut in multiple locations, isolating a further eight properties between Genoa and the intersection with Gipsy Point Road. Properties east of this intersection, including Gipsy Point and Mallacoota, are cut off from Princes Highway.
		 Bass Court southwest of Genoa is cut, isolating five residential properties. Alexanders Road is also cut here, isolating one property.

Flood event	Height (metres)	Impact/level	
		 Large areas of private land are inundated, including a farm north-west of Genoa township. Depths across the floodplain exceed five metres in some locations. 	
	6.5 – 7.0	The flood would inundate Alexanders Road and Bass Court, along the Wallaraugh River foreshore, Macdonald Street, Park Road, and as above Peisleys Road and Mallacoota-Genoa Road. Several buildings would be inundated and would be at risk of flooding above floor level, including:	
		 Properties on the western side of Genoa, along Alexanders Road, including the post office. 	
		 Along Park Road on the northern side of Genoa River (west of Princes Highway), including the Genoa Campground. 	
		 A property north of Mangan Lake midway between Genoa and Gipsy Point. 	
		 Those adjacent the lake along Gipsy Point Road and Anglers Drive, including the Gipsy Point Lakeside caravan park. 	

NB. It should be noted that the flood modelling information does not include elevated water levels in the Wallagaraugh Estuary, which if high at the time of flooding, may exacerbate the flood levels.



Figure 7: The Gorge flood gauge, Genoa River.



Staying Informed and Further Information

Current warnings (VicEmergency) emergency.vic.gov.au 1800 226 226

Keep a watch on emergencies near you by tapping the 'create watch zone' blue box and follow instructions.

Bureau of Meteorology (BoM) <u>bom.gov.au/vic/warnings</u> 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

egcma.com.au

VICSES Social Media <u>facebook.com/vicses</u>

twitter.com/vicsesnews

Preparing for Flood Emergencies <u>ses.vic.gov.au/get-ready</u>

Creating an Emergency Plan <u>redcross.org.au/prepare</u>

East Gippsland Catchment Management

Authority

East Gippsland Shire www.eastgippsland.vic.gov.au

National Relay Service NRS relayservice.gov.au

Life-threatening Emergency 000

(03) 5152 0600

(03) 5153 9500



Flood warnings and emergency checklist

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 <u>BoM website</u> and warnings through <u>VicEmergency</u>.

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.



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 now. You will be impacted. A Major flood warning usually fits into this category.



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. A Minor flood warning or Flood Watch usually fits into this category.

EVACUATION

If an evacuation is recommended, you will be guided to do so in the action statement in the warning.



PREPARE TO EVACUATE EVACUATE IMMEDIATELY

An evacuation is recommended or procedures are in place to evacuate.

ADDITIONAL MESSAGES



COMMUNITY INFORMATION

Can be used as a notification that an incident has occurred but there is no threat to community; or to issue a newsletter containing updates for communities affected by an emergency.



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 Council has worked with many communities to develop Local Incident Management Plans which are activated by the community in emergency events. For further information go to eastgippsland.vic.qov.au.

Taking the time to think about emergencies and make your own plan, it will help you think clearly, have more control and make better decisions when an emergency occurs.

Visit <u>redcross.org.au/prepare</u> 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
- o If safe to do so, communicate with your neighbours.
- Secure objects likely to float and cause damage.
- o 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.
- If you are staying in a caravan, move to higher ground before flooding begins.

During Flooding

- o 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.
- o 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.
- o 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. Stay safe by never entering floodwater. It can take just 15cm of water to float a car.
- o 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 Recoveryemergency.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.
- o 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.

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

