

Local Flood Guide Tungamah



Flood information for the Boosey Creek at Tungamah









About this guide

During a flood, knowing what to do and when to do it can save lives and reduce damage to property. This guide will help you understand what to do before, during and after a flood, and how flooding could impact the Tungamah area.

The Tungamah local area

Tungamah is located in the Moira Shire and has a population of approximately 250 people. Tungamah township is situated on the banks of Boosey Creek and is surrounded by farmland on all sides. Boosey Creek flows through Tungamah towards Katamatite and then joins Broken Creek about two and a half kilometres west of Katamatite.

Tungamah can be impacted by riverine flooding (flooding from a river or creek) from the Boosey Creek system (as in October 1993). Sandy Creek can flood into Boosey Creek up stream of Tungamah, causing water to flow over the creek banks. Tungamah can also be impacted by flash flooding when local heavy rainfall occurs over a short period of time. (March 2012)

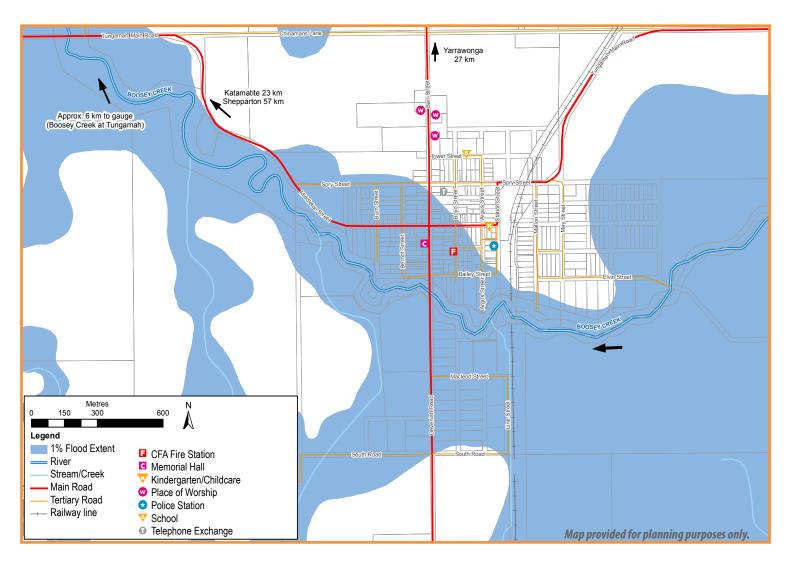
The map below shows the possible impact of a 1% flood from Boosey Creek. A 1% flood means that there is a 1% chance of a flood occurring in any given year. A 1% flood in Tungamah measures about 2.90 metres on the Tungamah Station Gauge.

Your local emergency broadcasters are:

- ABC 97.7 FM
- STAR FM 96.9 FM
- 3SR 95.3 FM
- SKY NEWS Television (Pay TV)

Moira Shire contact details:

Phone: (03) 5871 9222
Web: www.moira.vic.gov.au
Email: webmaster@moira.vic.gov.au



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Your Local Flood Information

Know your risk

Are you at risk of flooding?

Tungamah has a history of flooding, usually from the Boosey Creek after heavy rainfall in the upper Boosey Creek catchment.

This catchment is bound to the south by Winton Wetlands, to the north by the Muckatah Creek, to the west by the Broken Creek and to the east by the Warby Ranges.

The type and effect of flooding that will impact Tungamah depends on the conditions of the Boosey Creek catchment, including how wet the ground already is and how full the creeks are when rainfall occurs.

The February/March 2012 flash flood occurred when 300 millimetres (many local gauges measured much more) of rain fell in the area over three days.

There is no warning system in Tungamah, and so residents did not have any time to prepare before parts of the township were heavily inundated.

When the Boosey Creek floods it spills over in many places including over roads. During floods, major roads closed in the area include.

- Devenish Road
- **Tungamah Road**
- Tungamah Main Road

Based on previous flood history, there will be limited access to the community centre in Barr Street, football and netball recreation reserve, Jubilee Park and access to the local pub during a flood.

Boosey Creek flood levels at Tungamah Station (Downstream of Tungamah)

The following table shows the height in metres (m) of historical flooding in the area based on the Tungamah Station gauge, located on the Boosey Creek at Burramine Road. The Tungamah Station Gauge is not monitored and not used in warnings, but can give you an indication of what to expect once the river reaches a certain height.

2.88 m -	March 2012 flood level.
	1% flood level. Height shown on map on page 2.
2.80 m -	May 1974 flood level.
2.73 m -	October 1993 flood level.
2.46 m -	October 1975 flood level.
2.43 m –	August 1973 flood level.
2.35 m –	July 1981 flood level.
2.31 m –	July 1995 flood level.
0.00 m -	River bed height.
	-

Did you know?

The 1974, 1993 and 2012 floods are the three largest floods in the Broken Creek system in recent history.

The impact of rainfall on the severity of a flood can vary due to a number of factors, including how wet the ground is prior to the rainfall, how quickly it falls and how full the creeks are. In 2012 the ground was very wet before the rain, meaning it couldn't absorb the extra water and this led to flooding.

In a large flood, approximately 10 to 20 properties are at risk of over-floor flooding in Tungamah. In a large flood the new sewer system in Tungamah may flood. The impact of this is unknown as the sewer has not yet been flooded.

A number of properties are at risk of major isolation for four to seven days during a large flood event and deliveries to the town may be cut due to road closures.

In 1974, floodwater entered the pub cellar via the footpath, flooding the building.

2012 flood observations

The following table provides observations from the 2012 flood event. These observations provide information on the expected impacts for Tungamah when certain triggers occur.

Boosey and Sandy Creek behaviour (2012)	Expected impacts	
Sandy Creek flows over Tungamah/ Peechelba Road.	Access to the Tungamah - Peechelba Road is reduced and the flow increases into Boosey Creek, in particular increasing the level of the weir pool located in Tungamah.	
Continual rise of weir pool height in the Boosey Creek at Tungamah.	Rise of weir pool will cause localised flooding of houses in low lying areas in Elvin and Berndt Streets.	
Weir pool height in Tungamah approaches bottom of the bridge on Devenish Road.	Rise of weir pool will cause flooding in Bailey, Burn, Elvin, Berndt, Barr and Middleton Streets.	
Water height hits bottom of the bridge on Devenish Road.	Floodwater continues to invade properties in Barr Street and will flood the remainder of properties in Burn, Berndt, Middleton and Spry Street.	

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.

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

As Tungamah is 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. Tungamah 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 Tungamah 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 Tungamah 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 lifethreatening.

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.



Preparing for Floods

Now - before a flood

- Check if your home or business is subject to flooding. For more information, contact Moira Shire Council.
- 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.

Prepare a plan

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:



During and After a Flood



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

The 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 Emergency Contacts

<i>J</i> /				
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 Moira Shire Council for information and advice.				
For more information visit:				
ses.vic.gov.au				
facebook.com/vicses				

twitter.com/vicseswarnings

Life-threatening emergency Police Fire Ambulance	000	Triple Zero TTY106	
Victoria State Emergency Service For SES emergency assistance	(SES) 132 500		
SES information line Operates during major floods or storms		1300 842 737 1300 VIC SES	
VicEmergency Victorian emergency warnings	emergency.vio	c.gov.au	
Bureau of Meteorology (BoM) Weather information, forecasts, warnings	1300 659 217 bom.gov.au		
National Relay Service (NRS)	relayservice.	gov.au	
The deaf, hearing or speech impaired can call	SES or Triple Zero (000) using	g NRS:	
Speak and Listen (SSR) users phone	DIAL 1300 555 727	THEN ASK FOR 132 500	
■ TTY / Voice users phone	13 36 77	132 500	
Phone: Email: Web:	(03) 5871 9222 webmaster@moira.vic.gov.au moira.vic.gov.au		
Weather District:	North East		
Catchment Management Authority:	Goulburn Broken gbcma.vic.gov.au		
Emergency Broadcasters Emergency broadcasters include ABC Local Radio, designated commercial radio stations across Victoria and SKY NEWS Television.	ABC 97.7 FMSTAR FM 96.9 FM3SR 95.3 FMSKY NEWS Television (Pay TV)		
Complete the following a handy close t	nd keep this information o the phone:		
our electricity supplier:			
Your gas supplier:			
Ooctor:			
/et:			
Insurance			

Policy Number:

Phone Number: