



# Kerang

# Local Flood Guide

Riverine information for Loddon River at Kerang



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





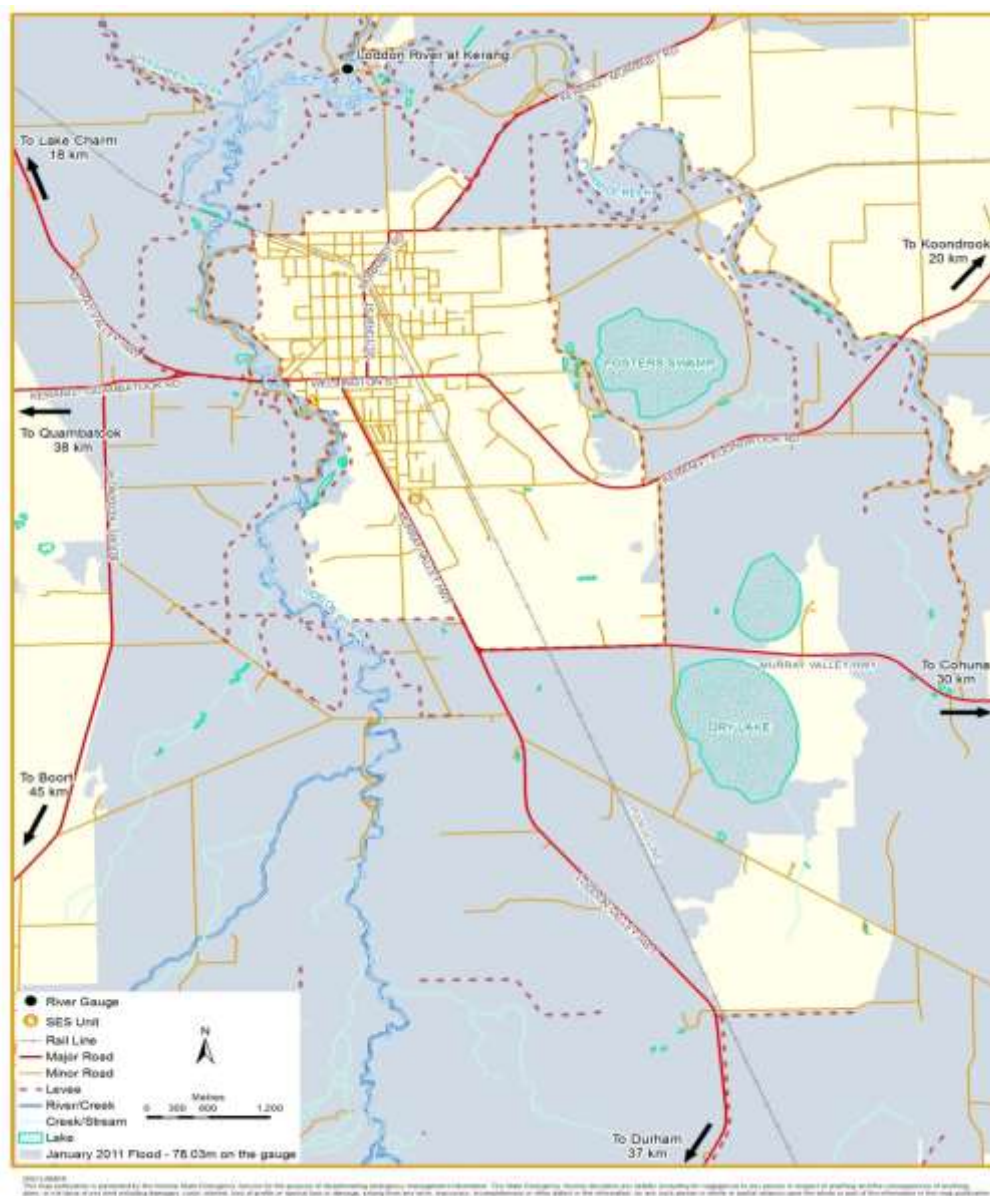
## Kerang

Kerang is located within the Shire of Gannawarra on the Loddon River, a few kilometres north of the intersection of the Murray Valley and Loddon Valley Highways. Kerang's main river is the Loddon River but it often receives overflows from other rivers and creeks such as Pyramid Creek. Properties in the town, surrounding rural areas and essential infrastructure including the nearby electricity sub-station are at risk of flooding.

The area around Kerang is prone to being isolated by floodwater when any or all of the Murray Valley and Loddon Valley Highways, Koondrook Road and Kerang-Quambatook Road are closed.

The township of Kerang is surrounded by well-maintained levees, most of which were built between 1980 and 1996 as part of a flood mitigation scheme. However, no levee is flood proof and parts of the town may still be prone to flooding.

The map below shows the extent of the January 2011 flood which measured 78.03m on the Murray Valley Highway River Gauge:



### 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 risk information is provided by North Central Catchment Management Authority.



## Are you at risk of flood?

Due to the flat nature of the landscape and its close proximity to the Loddon River, Kerang and its surrounding areas are vulnerable to overland flows of water. Within the Loddon catchment there are a number of creeks and river run offs.



Significant floods have been recorded in Kerang in 1909, 1916, 1933, 1975, 1981, 1993 and 2011. The 2011 flood followed an extensive period of wet weather with major flooding through the lower Loddon and Avoca Rivers in September, December 2010 and September 2016

Widespread flooding in Kerang led to a number of mitigation works in the area during 1980-1996 to help reduce the impact of floods. Kerang's levees run for 17 kilometres and include part of the Murray Valley Highway to the south of the town.

Properties start to become isolated to the north and south of Kerang when the Murray Valley Highway Bridge Gauge reads 77.20 metres, just above minor flood level of 77.00 metre.

During the 2011 flood, floodwater overtopped the Pyramid Creek levee. However, the township of Kerang was saved from the full extent of the flooding by a combination of the levee on the Loddon River and a temporary levee built on the southern side of Kerang. Kerang's levees have reduced the level of risk associated with flooding in some areas of the town, however no levee is flood proof and some houses and businesses inside and outside of the town were flooded.



**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**

## Did you know?

Prior to 2011, the worst flood occurred in 1909. In 2011, the flood reached the highest levels ever recorded causing significant damage to the surrounding rural areas.

Water inundated:

- 13 houses and 1 shop in East Kerang, and 28 houses and 4 businesses in West Kerang.
- Rural properties surrounding the town isolating them for days.
- Main transport routes and other roads, disrupting traffic.
- Community facilities and other private properties.

During the 2011 flood, widespread power outages for Victorian communities were avoided by emergency sandbagging at the electricity substation, south of the Kerang Township. If you live or work close to a creek, river or low-lying area you may be at risk from floods. Even if you are not directly affected, you may still have to detour around flooded areas.

During the September 2016 flood which was similar to the December 2010 flood due to the flood level peaking at 77.40m at the Murray Valley Highway gauge, properties started to become isolated to the north and south of Kerang.



## Loddon River Flood Levels at the Murray Valley Highway Bridge Gauge

When the Bureau of Meteorology (BoM) issues flood warnings they include a prediction of the flood height at a particular gauge. While no two floods are the same, the following table can give you an indication of what you can expect at certain heights, including when your access may be cut off and when your property may be affected.

Height (metres)	Impact/level
78.03	19 January 2011 flood During the January 2011 flood, Kerang was protected by town levees but many properties, roads and levees were damaged in the surrounding area as outlined above. The extent of flood inundation is shown on page 2.
77.90	Design level for Kerang flood levee.*
77.84	1981 flood – before the town levees were completed.
77.80	Major flood level
77.60	September 1993 flood.
77.50	Moderate flood level
77.40	10 December 2010 flood/September 2016 Flood
77.20	Properties start to become isolated to the north and south of Kerang.
77.00	Minor flood level

\*Note: The design level is the height that a levee was designed to provide protection. This is lower than the top of the levee which is why the Kerang levee did not overtop in the 2011 flood. This is called the freeboard of a levee. Freeboard should NEVER be relied on to provide protection in a flood.

### Staying Informed and Further Information

- Current warnings (VicEmergency) [emergency.vic.gov.au](http://emergency.vic.gov.au) 1800 226 226
- Bureau of Meteorology (BoM) [bom.gov.au/vic/warnings](http://bom.gov.au/vic/warnings) 1300 659 217
- VicRoads Traffic [traffic.vicroads.vic.gov.au](http://traffic.vicroads.vic.gov.au)
- Emergency Broadcasters  
ABC Local 102.1 FM  
SKY NEWS Television  
Mixx 98.7 FM
- VICSES Social Media  
[facebook.com/vicses](https://facebook.com/vicses)  
[twitter.com/vicsesnews](https://twitter.com/vicsesnews)
- Preparing for Flood Emergencies [ses.vic.gov.au/get-ready](http://ses.vic.gov.au/get-ready)
- Creating an Emergency Plan [redcross.org.au/prepare](http://redcross.org.au/prepare)
- North Central Catchment Management Authority [nccma.vic.gov.au](http://nccma.vic.gov.au) (03) 5448 7124
- Gannawarra Shire Council [gannawarra.vic.gov.au](http://gannawarra.vic.gov.au) (03) 5450 9333
- National Relay Service (NRS) [relayservice.gov.au](http://relayservice.gov.au)

**Life-threatening  
Emergency  
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# 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.

 <b>A Minor Flood Warning means floodwater can:</b>	 <b>A Moderate Flood Warning means floodwater can:</b>	 <b>A Major Flood Warning means floodwater can:</b>
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](#).






## VICSES Warnings

VICSES utilises the VicEmergency app, website and hotline to distribute flood warnings and emergency information in Victoria. You can also access this information through our 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 of community impact.

### 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. 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>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.</p>
	<p><b>EMERGENCY ALERT</b></p> <p>During some emergencies, communities may be alerted by the sounding of 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, with little warning. People who plan and prepare for emergencies reduce the impact and recover faster.

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

Visit [redcross.org.au/prepare](http://redcross.org.au/prepare) start creating your plan.



- 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 Kit

Visit [Emergency Toolkit](#) for more information



Every home and business should have a basic emergency kit with a supply of 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)
- | Photos
- | Family keepsakes
- | Valuables
- | Other

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## 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 [redcross.org.au/prepare](https://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 [bom.vic.gov.au](https://bom.vic.gov.au) and warnings through [emergency.vic.gov.au](https://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.
- If you are staying in a caravan, move to higher ground before flooding begins.

### 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.
- 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 flood water. 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](https://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. 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.**