

# **SES** Newstead

# **Local Flood Guide**

Riverine information for the Loddon River at Newstead





# For flood emergency assistance call VICSES on 132 500







#### Newstead

The Mount Alexander Shire is located in Central Victoria and is home to more than 18,000 people across 1,529 square kilometres, with population centres around Castlemaine, Harcourt, Newstead and Maldon. The shire sits within the catchments of two river systems, the Loddon and Campaspe Rivers, and there are numerous creeks that feed both of these rivers.

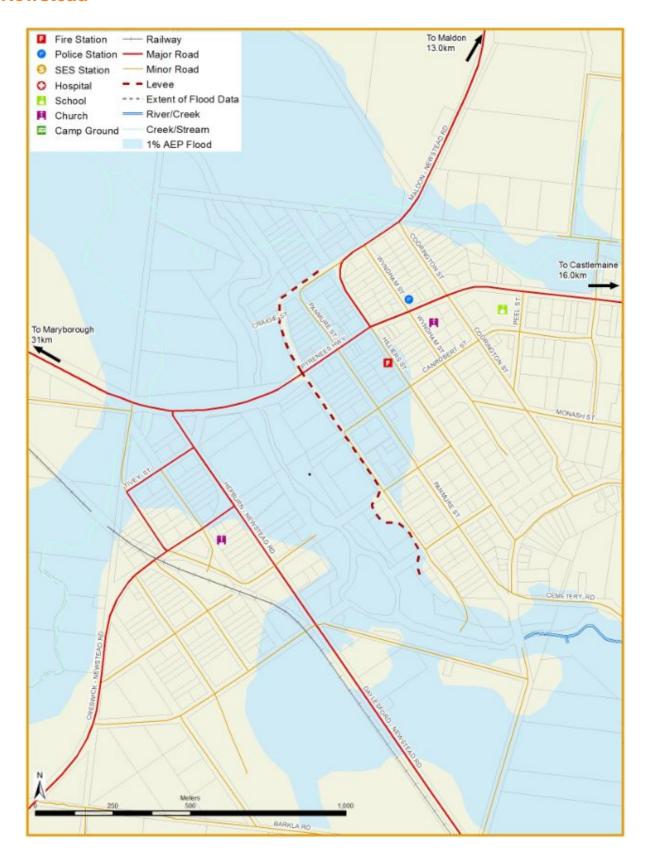
Newstead is about 15 kms west of Castlemaine, situated on the banks of the Loddon River, the second longest river in Victoria. The Loddon River flows from south to north through the town. Newstead is to the south east of the Cairn Curran Reservoir, and Muckleford Creek joins the Loddon River south east of the town.

Newstead has a long history of riverine flooding from prolonged rainfall in the Loddon catchment and can experience flash flooding from heavy rainfall occurring over a short period of time. Newstead can become isolated and subject to transport disruption at a time of flood, with the Midland Highway at Newstead likely to be cut by even a minor flood, depending on the flow of the river. Having an emergency plan in place is key to staying safe if you become isolated during a flood due to flood water or road damage.



The following maps show the potential extent of flooding in a 1% Annual Exceedance Probability (AEP) event. A 1% AEP flood means there is a 1% chance of a flood of this size occurring in any year.

#### **Newstead**



#### 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 North Central Catchment Management Authority.

# Are you at risk of flood?

The Loddon River rises in the mountains between Daylesford and Kyneton and flows northwest passing through the townships of Guildford and Newstead before entering Cairn Curran Reservoir. A number of creek systems join the Loddon River upstream of Newstead. These include Campbells Creek, Jim Crow Creek, Green Gully Creek, Mia Mia Creek and Muckleford Creek. Heavy rainfall in these waterways can lead to flooding in Newstead.

Newstead has a long history of flooding and as a result, a levee bank was built on the east side of the river in the 1920's. While the formal protection level of the levee is unknown, the levee has protected the town during recent flood events; September 2010, September 2016 and January 2011. However a number of properties are outside the levee and were inundated during the floods of 2010-2011.

A Flood Watch or Flood Warning for Newstead is predicted from a series of gauges located in the Loddon River catchment: Vaughan, Newstead, Yandoit on the Jim Crow Creek, and Muckleford on the Muckleford Creek. How long it takes to flood from the time it starts raining will depend on how wet the rivers, creeks and soil already are, the amount of rainfall and how quickly it falls.

## Did you know?

The January 2011 flood event is believed to be the highest, or close to the highest, flood on record with 147.6mm of rain falling over three days.

- In 1890 there was a large flood following 36mm of rain over 36 hours. The depth of water was 900mm at the Post Office.
- Flooding in 1909 was 1.2 metres high for two blocks on both sides of the main street and reached the steps of the bank building.



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

- In October 1934, heavy rainfall occurred in the district late in the afternoon, causing the creeks to rise rapidly. At Newstead, very heavy rain fell, totalling 208mm in three hours. The road between Castlemaine and Newstead was flooded. The water of the Loddon River at Newstead was within 300mm (a foot) of the top of the levee bank.
- October 24 2000: In the 48 hours from Monday to Wednesday of that week, readings taken at 9.00am each day showed a total rainfall of 103.7mm (394 points). The surging water covered the river flats, cutting off any access from the western end of the bridge.
- In January 2011 the Loddon River peaked at 5.89 metres at Newstead. The southern section of the levee started to overtop during this flood event but was sandbagged to prevent this.
- Newstead can also be affected from overland flows on the east side of town. This water can get caught behind the levee while the Loddon River is high and as a result the area between Hilliers St and Dundas Street and the levee bank may be flooded.

# **Loddon River flood levels at the Newstead Township**

When the Bureau of Meteorology (BoM) issues Flood Warnings they include whether the impact is likely to reach Major, Moderate or Minor flood levels for the Loddon River at the Newstead gauge.

Due to the locality of Newstead, the information provided in a Flood Watch or Warning may be very general in nature. Monitoring the catchment conditions and weather is very important to your plan in an emergency.

The latest River Height Data can be accessed through bom.gov.au

Height (metres)	Flood level
	Height shown on map (page 3)
5.89	January 2011
5.68	September 2010
5.63	November 2010
5.60	Major flood level
4.91	September 2010
4.78	October 2016
4.50	Moderate flood level
3.00	Minor flood level

Staying Informed and Furthe	r Information	
<ul><li>Current warnings (VicEmergency)</li><li>Bureau of Meteorology (BoM)</li><li>VicRoads Traffic</li></ul>	emergency.vic.gov.au bom.gov.au/vic/warnings traffic.vicroads.vic.gov.au	1800 226 226 1300 659 217
■ Emergency Broadcasters	ABC Local 91.1 FM Hit 91.9 FM Triple M 93.5 FM KLFM 96.5 FM Gold 98.3 FM Phoenix FM 106.7 FM Gold 1071 AM SKY NEWS Television	Life- threatening Emergency 000
■ 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	
<ul><li>North Central Catchment Management Authority</li></ul>	nccma.vic.gov.au/	(03) 5448 7124
Mount Alexander Shire Council	http://www.mountalexander.vic.gov.au	(03) 5471 1700



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

### **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 Home 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.

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.

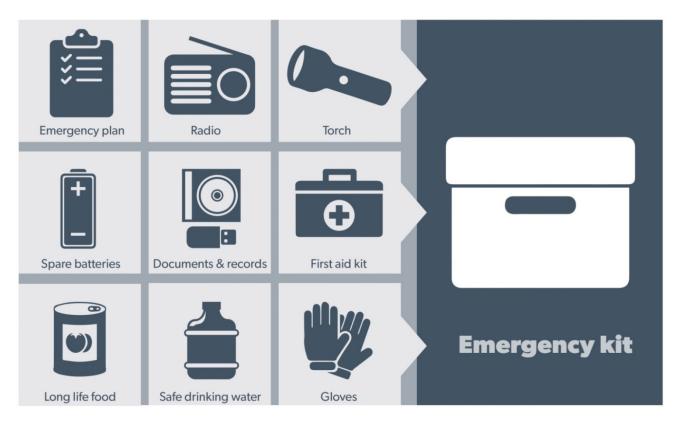
- Remember, you may not receive any official warning.
- Emergency assistance may not be immediately available. Be aware of what is happening around you to stay safe.
- Never wait for a warning to act.

RE YOU READY

ONE SIMPLE THING TO MAKE YOU SAFER

# **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 (e.g. Items for babies, elderly and people with a disability)	
Photos	
Family keepsakes	
Valuables	
Other	



Er	nergency Checklist
	Check if your insurance poli
	Many this list of amounts

cy 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 <a href="http://www.bom.gov.au">http://www.bom.gov.au</a> 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 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 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.