



Horsham Local Flood Guide

Flood information for the Wimmera River at Horsham



Pryors Road Horsham, January 2011



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





Are you at risk of flooding?

Horsham is located on the banks of the Wimmera River and Burnt Creek and is impacted by both riverine and stormwater flooding. Horsham generally floods due to heavy rainfall in the upper Wimmera River catchment, east of Horsham surrounding the Pyrenees Range near Elmhurst and the northern ranges of the Grampians National Park.

After heavy rainfall in the upper Wimmera River catchment homes and businesses in and around the township of Horsham can flood. The area surrounding Horsham is generally flat. When flooding occurs in the Wimmera River access is cut to a significant number of roads isolating people within Horsham and surrounding areas within the floodplain. Flooding in Horsham can divide Horsham in half. Horsham's urban area and much of the city's infrastructure is located within the floodplain and is affected by flooding.

Horsham has a history of flooding, significant flood events have occurred in 1909, 1915, 1923, 1955, 1956, 1960, 1964, 1974, 1975, 1981, 1983, 1984, 1988, 1996, 2010, 2011 and 2016. In January, 2011, Horsham experienced its largest ever flood, Mount William recorded up to 279 millimetres of rainfall over four days. Flooding in Horsham can last for approximately 2-3 days.

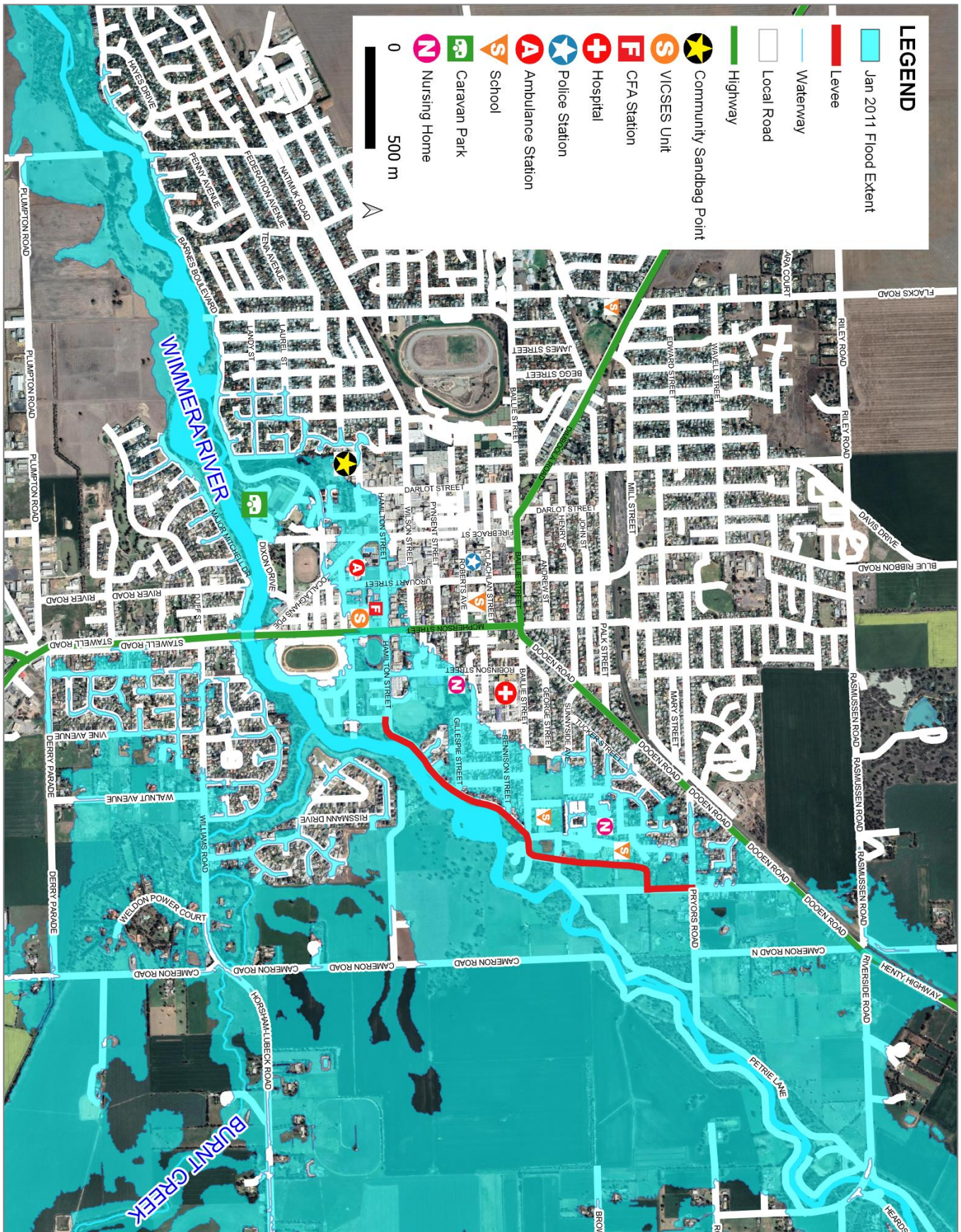
The map below shows the flood extent similar to the January 2011 flood event.



Horsham, January 2011



During the January 2011 flood event the Wimmera River in Horsham, measured 4.27m on the Walmer stream gauge (close to the 1 in 100 year Annual Exceedance Probability, a Walmer stream gauge height of 4.29m).



Disclaimer: this map 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. Flood risk information is provided by Wimmera Catchment Management Authority.



January 2011 flood event

The January 2011 flood event was the largest flood on record measuring 4.27 metres at the Walmer stream gauge. During the January 2011 flood event;

- Access was cut to significant number of rural roads, isolating more than 500 properties
- More than 260 properties experienced power outages
- 570 properties were impacted by flooding
- More than 60 buildings were flooded above floor
- 31 shops were impacted by flooding
- 2 aged care facilities, Sunnyside Lutheran Retirement Village (Trinity Drive), Kurrajong Lodge Retirement Village (Arnott Street) were evacuated
- Several buildings at the Holy Trinity Lutheran College, 289 Campus of the Horsham Primary School and the Horsham Riverside Caravan Park were flooded above floor
- Floodwater was up to one metre deep in Hamilton Street



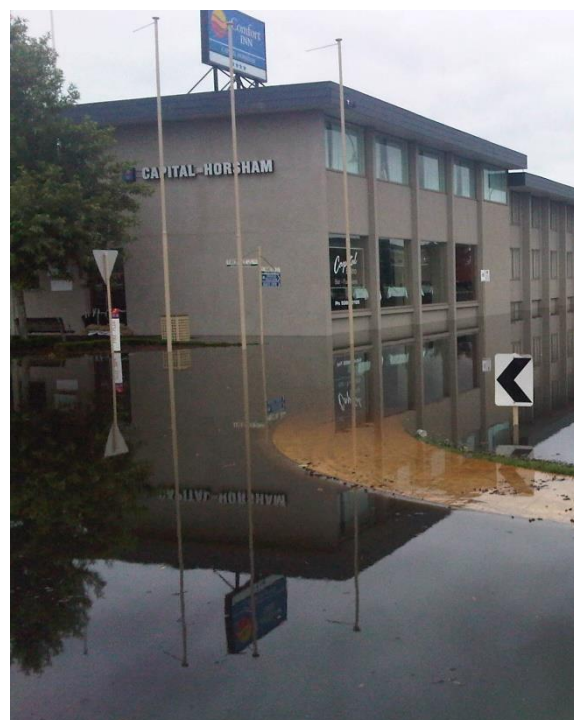
Trinity Drive, January 2011

Stormwater flooding in Horsham can develop quickly from heavy localised rainfall. Urbanised sections of Horsham create impervious areas, increasing runoff and causing excess floodwater to accumulate in the road network and low-lying land. Areas impacted by stormwater flooding during the January 2011 event include;

- Horsham Racecourse in Natimuk Road
- Colonial Drive and MacKenzie Court adjacent to the Horsham Golf Course.
- Ocallaghans Parade
- Horsham Police Paddock area in Rasmussen Road
- Along Dimboola Road and Oconnor Street

Structural flood mitigation measures that exist within the Horsham Council area include:

- Levees along Menadue Street and Peppertree Lane through to Pryors Road
- Retarding basins have been constructed at Wotonga Basin and the Horsham Racecourse. These retarding basins collect water from the north and west of Horsham and release it gradually into the river. These retarding basins reduce the rate of floodwater flowing towards the river.
- Stormwater flap valves at Rose Street and Olympic Street to prevent riverine floodwater flowing back through the stormwater drains.



Firebrace Street, January 2011



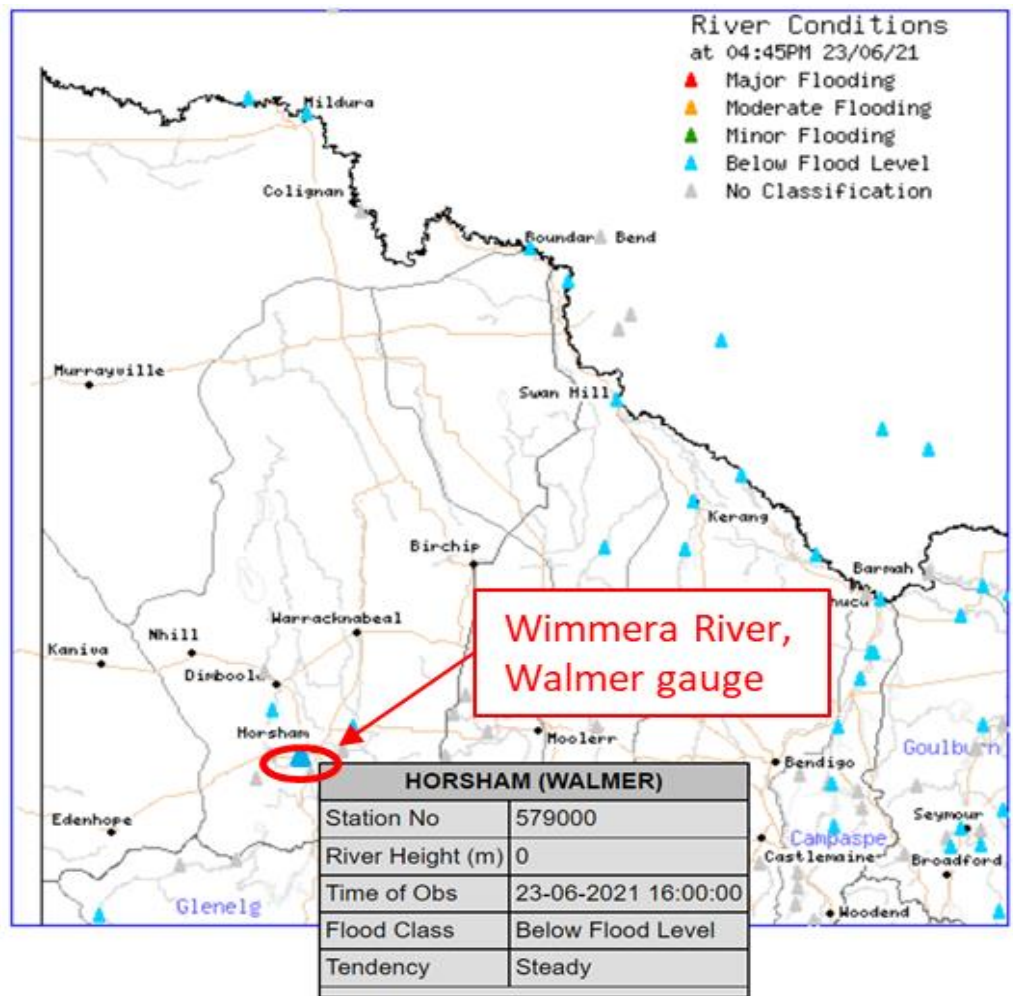
Wimmera River flood levels at Horsham

The timing of flooding can be estimated using upstream stream gauges. There are four main stream gauges within the Horsham area, these include:

- Wimmera River at Eversley (upstream)
- Wimmera River at Glynwylln (upstream)
- Wimmera River at Glenorchy (upstream)
- Wimmera River at Walmer (downstream)

Monitoring these stream gauges will provide early clues of possible flooding. The Bureau of Meteorology (BOM) issues river height predictions for Horsham. To monitor the Walmer stream gauge height go to the BoM website bom.gov.au/vic/flood/

- Select 'River Conditions' (above the map)
- Click on Wimmera Mallee on the right.
- Find the Walmer (Wimmera River) gauge and hover over it.
- Compare river height to the stream gauge heights on the table below to determine if flooding is likely.





The table below provides an indication of what you can expect at certain Walmer stream gauge heights, including when your access may be cut off and when your property may be affected.

Walmer stream gauge height (metres)	Flood Impact
4.40 m	302 buildings are flooded above floor and 890 properties impacted by flooding. Deep flooding may cut access to houses along Barnes Boulevard between Dixon Court and Wotonga Drive.
4.29 m	182 buildings are flooded above floor and 773 properties impacted by flooding. Deep flooding may cut access to Brigid Court and Coughlin Court.
4.27 m	January 2011 flood level (height shown on page 2 map). More than 182 buildings were flooded above floor including buildings at the Holy Trinity Lutheran College, St Brigids College and the 298 Campus of the Horsham Primary School. Several buildings were impacted by stormwater flooding. Access was cut to a significant number of roads, isolating more than 570 properties.
4.15 m	58 buildings are flooded above floor. 578 properties are impacted by flooding. There is extensive flooding through the centre of town, from the Botanic Gardens to St Brigids College. Flooding may impact the 298 Campus of the Horsham Primary School, Holy Trinity Lutheran College, Kurrajong Lodge Retirement Village and the Sunnyside Lutheran Retirement Village. Access may be cut to the CFA Station, SES Unit and Ambulance buildings. Deep flooding may cut access to McPherson Street, Menadue Street, Ocallaghans Parade and Cameron Road.
3.92 m	The Horsham levee is overtopped. One building is flooded above floor in Riverside East Road, and 172 properties are impacted by flooding. Deep flooding may cut access to the Holy Trinity Lutheran College, the Sunnyside Lutheran Retirement Village and St Brigids College (0.5m depth). Extensive flooding may impact the St Brigids College Oval, Coughlin Park Bowls Club and Tennis Courts. Deep flooding may cut access to Hamilton Street, Macbain Street, Gillespie Street, Robinson Street, Trinity Drive and Baillie Street.
3.70 m	111 properties are impacted by flooding, including Barnes Boulevard, Peppertree Lane, Cameron Road. The Wotonga Bason Weir may be overtopped.
3.6 m	Major flood level
3.44 m	74 properties are impacted by flooding, areas impacted include Weldon Power Court, Peppertree Lane, Barnes Boulevard, Pryors Road, Riverside Road and Williams Road. Access is cut to the Adventure Playground (Barnes Boulevard) and the walkway bridge. Flooding impacts low lying sections of the Holy Trinity Lutheran College Ovals, Horsham Show Grounds, Horsham Motorcross Complex and the Horsham Go Kart Club (650 Henty Highway, Dooen). Deep flooding may cut access to Pryors Road, Peppertree Lane, Barnes Boulevard and Eastgate Drive.
3.36 m	September 2010 flood event.
3.33 m	September 2016 flood event. Properties in Horsham start to experience flooding particularly around the Horsham Pony Club and Riverside Recreation Reserve. Shallow flooding may impact Barnes Boulevard, Peppertree Lane and Pryors Road. Deep flooding cuts access to Riverside Road.
3.1 m	Moderate flood level
3.1 m	Flooding occurs through the Wotonga Basin. Heavy localised rainfall may cause stormwater flooding.
2.8 m	Minor flood level
2.47 m	The Horsham Weir will be opened by the Horsham Rural City Council. Flooding starts to impact low lying farmland and roads along the Wimmera River surrounding Horsham.



Horsham CBD, January 2011



Sandbag Collection Point

A Sandbag Collection Point may be opened at the Horsham Council Depot, 17 Selkirk Drive Horsham, if there is potential for flooding in the area.

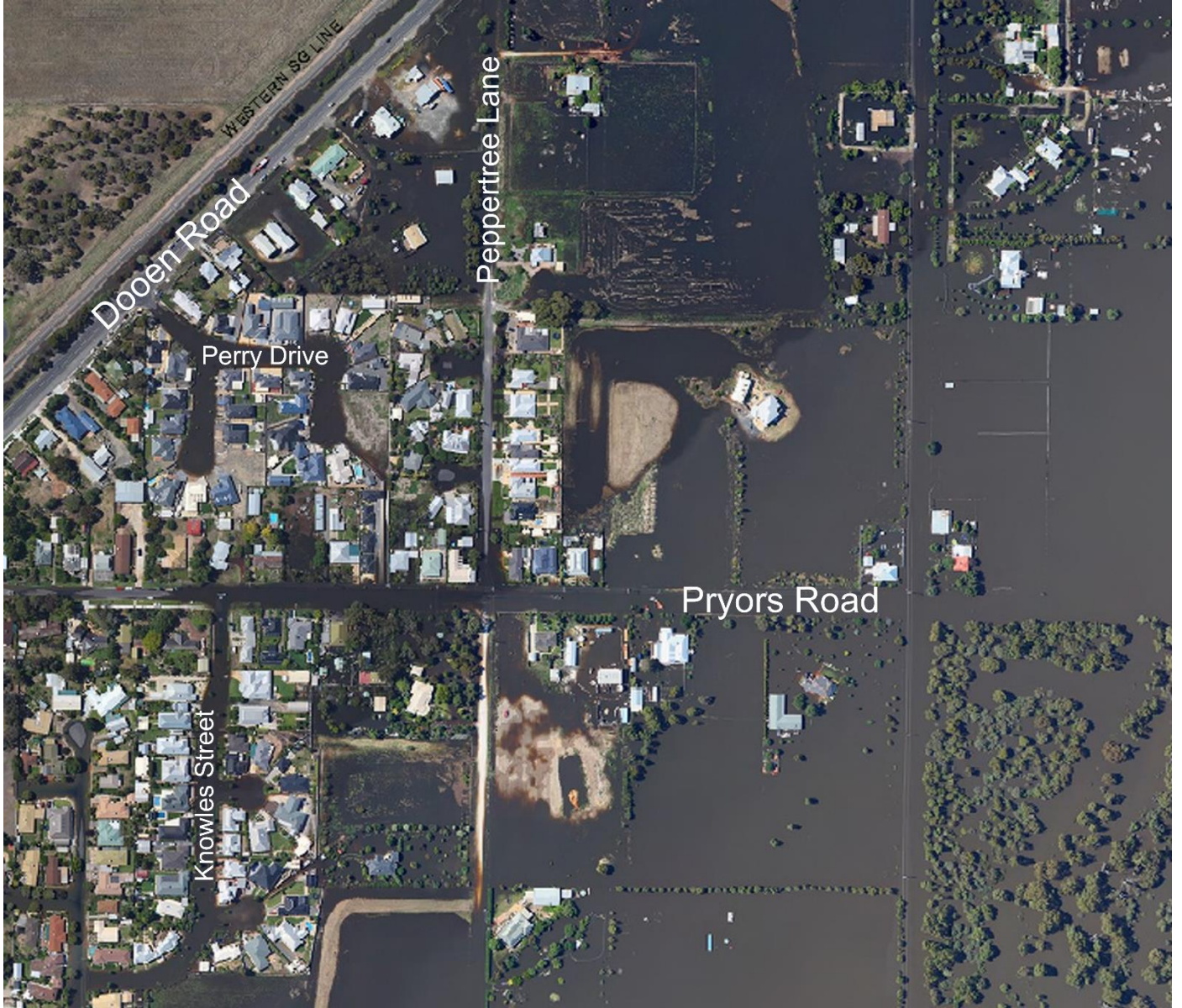
Residents can call in to fill and collect sandbags to protect your home.

Horsham Rural City Council will promote when this collection point is opened through local radio and other media.

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 Local 594 AM
3WM 1089 AM
Mixx 101.3 FM
- 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
- Catchment Management Authority <https://www.wcma.vic.gov.au/> (03) 5382 1544
- Horsham Rural City Council www.hrcc.vic.gov.au (03) 5382 9777

**Life-threatening
Emergency
000**



North east of Horsham, January 2011






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](#).



VICESSES Warnings

VICESSES 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.

VICESSES 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>EMERGENCY WARNING</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>WARNING (WATCH AND ACT)</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>ADVICE</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>PREPARE TO EVACUATE/ EVACUATE NOW</p> <p>An evacuation is recommended or procedures are in place to evacuate.</p>
	<p>COMMUNITY INFORMATION</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>EMERGENCY ALERT</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 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



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://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 [bom.vic.gov.au](https://www.bom.vic.gov.au) and warnings through [emergency.vic.gov.au](https://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.
- 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://www.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.