

# Harrow Local Flood Guide

Flood information for the Glenelg River at Harrow



RSL building in Bair Street, Harrow in December 2010



For flood emergency help call VICSES on 132 500

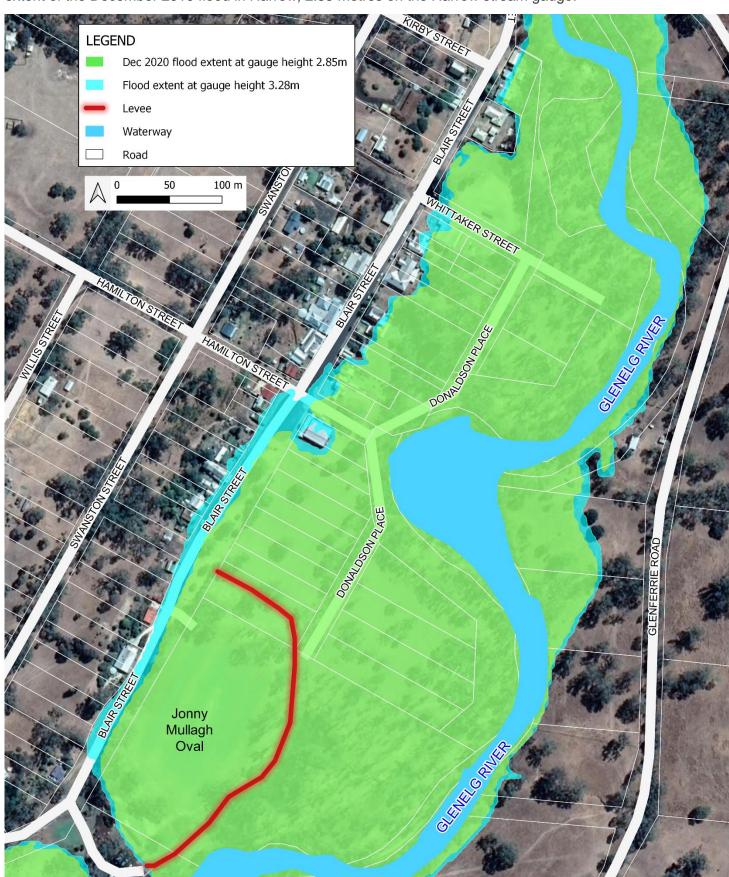






# **Harrow**

Harrow is located on the Glenelg River in West Wimmera Shire Council. The map below shows the extent of the December 2010 flood in Harrow, 2.85 metres on the Harrow stream gauge.



**Disclaimer:** this map 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. Flood risk information is provided by Glenelg Hopkins Catchment Management Authority.



# Are you at risk of flooding?

Harrow is located on the Glenelg River with several small tributaries in close proximity, the most significant of these is Salt Creek, flowing into the Glenelg River immediately upstream of Harrow. Harrow has been subject to extensive and frequent riverine flooding from the Glenelg River. The Glenelg River begins in the Grampians National Park, and flows into Rocklands Reservoir. The Rocklands Reservoir is a significant storage that has significantly altered the flow regime of the Glenelg River, 75 km upstream of Harrow. The area surrounding Harrow is agricultural land drained by the Glenelg River.

Harrow generally floods due to heavy rainfall upstream. When flooding occurs in Harrow, homes, businesses, and buildings in Blair Street are most at risk. Floodwater rises very quickly in Harrow, houses can be impacted by flooding within 24 after heavy rainfall. Floodwater can remain high for two days before receding.

# Did you know?

Harrow has a history of flooding, significant flood events have occurred in 1956, 1975, 1979, 1981, 1983, 1984, 1988, 1991, 1992, 1996, 2010, 2011, and 2016. In December, 2010, areas surrounding Harrow experienced its largest recent flood when the catchment received 172 millimetres of rainfall (recorded at the Balmoral rainfall station) over three days. The flood level recorded at the Harrow Stream gauge for this flood event was 2.85 metres. This flood event cause considerable damage to buildings, roads and bridges.

- It took approximately 24 hours for floodwater to travel from the upper Glenelg River catchment to Harrow.
- Flooding cut access to roads for several days in and surrounding Harrow, including Blair Street, Whittaker Street and Donaldson Place.
- The town levees were overtopped flooding the Johnny Mullagh Oval.
- Buildings impacted by flooding include the RSL Hall, the Telephone Exchange. Several buildings were flooded below floor and the Library and Mechanics Institute Hall were isolated by floodwater.
- The Harrow stream gauge peak (highest recorded river level) was 2.85 metres.
- Further upstream, the Fulham stream gauge peaked at 2.74 metres.



The RSL building in Blair Street, Harrow in December 2010



Flooding overtopping the Moree Bridge, downstream of Harrow in December 2010



The RSL building in Blair Street, Harrow in December 2010

# **Staying Informed and Further Information**

Current warnings (VicEmergency)

Bureau of Meteorology (BoM)

VicRoads Traffic

**Emergency Broadcasters** 

VICSES Social Media

Preparing for Flood Emergencies

Creating an Emergency Plan

**Catchment Management Authority** 

West Wimmera Shire Council

National Relay Service (NRS)

emergency.vic.gov.au

bom.gov.au/vic/warnings

traffic.vicroads.vic.gov.au

**ABC 594 AM** 3WM 1089 AM

Mixx 101.3 FM

facebook.com/vicses twitter.com/vicsesnews

ses.vic.gov.au/get-ready

redcross.org.au/prepare

https://www.ghcma.vic.gov.au/ (03) 5571 2526

www.westwimmera.vic.gov.au

relayservice.gov.au

1800 226 226

1300 659 217

Life-threatening **Emergency** 000

13 99 72

# Glenelg River flood levels at Harrow

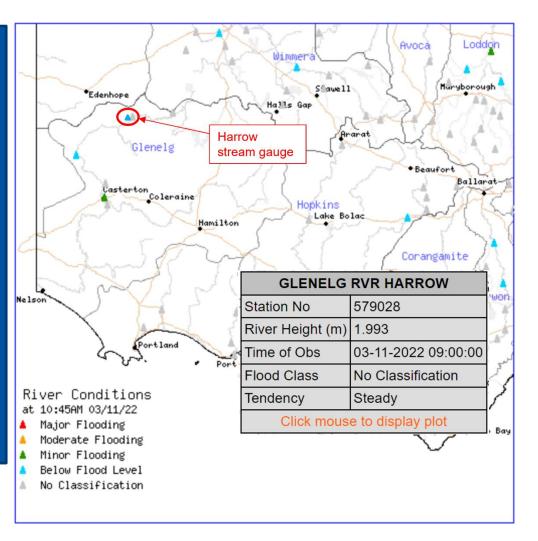
Harrow generally floods due to heavy rainfall upstream, surrounding the Black Range State Forrest and the western ranges of the Grampians National Park.

There are four rainfall/river stream gauges within the Harrow area, these include:

- Rainfall gauge located at Balmoral
- Rainfall gauge located at Kanagulk
- River height and rainfall gauge on the Glenelg River at Fulham
- River height gauge on the Glenelg River at Harrow

Monitoring these rainfall and stream gauges will provide early clues of possible flooding. The Bureau of Meteorology (BoM) does not issue river height predictions for Harrow. To monitor the Harrow stream gauge height go to the BoM website <a href="mailto:bom.gov.au/vic/flood/">bom.gov.au/vic/flood/</a>

- Select 'River Conditions' (above the map)
- Click on Glenelg Hopkins on the right.
- Find the Harrow (Glenelg 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 Harrow stream gauge heights, including when your access may be cut off and when your property may be affected.

Harrow Stream Gauge Height (metres)	Flood Impact
3.28 m	The Harrow Hall (Mechanics Institute) may be flooded above flood.
3.23 m	Seven buildings in Blair Street may be impacted by below floor flooding and isolated by floodwater.
3.17 m	Flooding is deeper in Harrow across Blair Street and surrounding areas Flooding is breaking out across Blair Street.
3.09 m	Three additional buildings may be flooded above floor in Blair Street, these include the Pivot Shed, the toilet block beside the Hall. The Whittaker Street flood depth is up to 2m. Flooding may cut access to Blair Street next to the Harrow Hall (Mechanics Institute).
3.09 m 20 yr	Proposed Major flood level
3.09 m 20 yr 2.85 m	Proposed Major flood level  December 2010 flood event caused significant flood impacts to buildings, roads and bridges. The RSL building in Blair Street was at risk of flooding and was sandbagged. There were several houses and businesses that were impacted by below floor flooding.
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2.85 m	December 2010 flood event caused significant flood impacts to buildings, roads and bridges. The RSL building in Blair Street was at risk of flooding and was sandbagged. There were several houses and businesses that were impacted by below floor flooding.
2.85 m 2.94 m	December 2010 flood event caused significant flood impacts to buildings, roads and bridges. The RSL building in Blair Street was at risk of flooding and was sandbagged. There were several houses and businesses that were impacted by below floor flooding.  Proposed Moderate flood level  January 2011 flood event. The levees surrounding the Johnny Mullagh Oval were overtopped. Flooding surrounded the Harrow Hall (Mechanics Institute) and Library,

# **Sandbag Collection Point**



Currently there is no sandbag collection point for Harrow.

Sandbags are available to the Harrow community and surrounding areas via calling VICSES on 132 500. Or by contacting the West Wimmera Shire Council.

If a sandbag collection point is needed VICSES will organise the point with the West Wimmera Shire Council and will promote when this collection point is opened through local radio and social media channels.



Harrow, December 2010



# 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>.



# **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, 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 <u>redcross.org.au/prepare</u> start creating your plan.

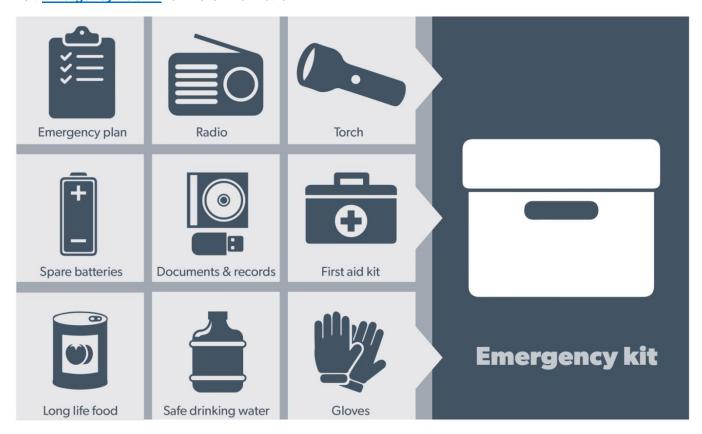
- Remember, you may not receive any official warning.
- Emergency assistance may not be immediately available. Be aware of what is happening around you to stay safe.
- Never wait for a warning to act.

RE YOU READ

NE 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 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
	re Flooding
Ш	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 and warnings
	through emergency.vic.gov.au.
	If safe to do so, communicate with your neighbours.
	Secure objects likely to float and cause damage.
	Listen to the radio and check the VICSES website for information and advice.
Ц	Go over your emergency plan. Pack clothing and other extra items into your emergency kit and take
П	this with you if you evacuate.  If you are staying in a caravan, move to higher ground before flooding begins.
_	in you are staying in a caravan, move to riigher ground before needing begins.
<b>Durin</b>	g 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.
_	otay away from trood, draind, low lying aroad, drooted, dariald, darvoite and floodwater.
Evac	uating in Flooding
	• • • • • • • • • • • • • • • • • • • •
	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.
	Flooding
	For recovery information, contact your local council, go to the VicEmergency Relief and Recovery-
	<ul> <li>emergency.vic.gov.au/Relief page or call the VicEmergency Hotline (1800 226 226).</li> <li>Have all electrical and gas equipment professionally tested before use.</li> </ul>
_	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.