

Riverine flood information for Hovells Creek at Lara

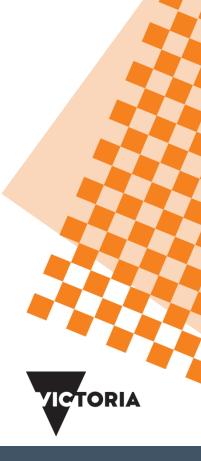




For flood emergency assistance call **VICSES on 132 500** 





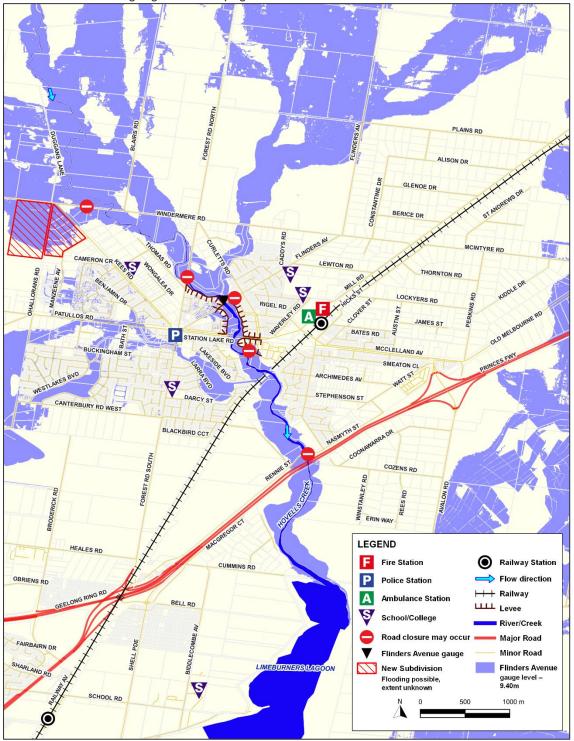


### Lara

Lara is a major township located 15 kilometres north of Geelong and has been identified as a growth area for residential, commercial, and industrial development.

Hovells Creek runs through the centre of town, north of Windermere Road to Rennie Street in the south until it meets Limeburners Lagoon at Corio Bay. The Melbourne-Geelong Railway and the Princes Freeway cross Hovells Creek.

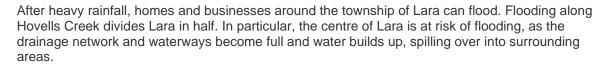
The following map shows the expected riverine flood extent in Lara, when Hovells Creek measures 9.40m at the Flinders Avenue stream gauge. Refer to page 5 for more information on different size flood events.



**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 Corangamite Catchment Management Authority.

## Are you at risk of flood?

Lara is located on the banks of Hovells Creek and is impacted by flooding from Hovells creek as well as stormwater and flash flooding.





Stormwater or flash flooding in Lara can develop quickly from heavy localised rainfall. Impacts of stormwater or flash flooding will greatly depend on the location and level of rain received.

Rapid rises in floodwater within Hovells Creek can occur within 2-8 hours of rainfall. Floodwater may peak within 3-10 hours. Due to the particularly flat nature of the landscape of Lara, flooding in the town lasts for a number of days.

## Did you know?

Hovells Creek has a history of flooding, usually occurring between the months of November and February. Flooding during these months has typically been characterised by high-intensity, short-duration rainfall.

Significant flooding in the area has occurred in 1933, 1973, 1978, 1983, 1988, 2001 and in 2010.

The 1988 flood is the largest on record and measured 9.40m on the Flinders Ave Gauge, Hovells Creek.

During this flood, 120 millimetres of rain fell on already wet ground in just five hours causing:



No two floods are the same. Floods like this or worse could occur again.

If you live close to a creek, river or 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.

Floodwater is dangerous. Never enter floodwater.

- Water to spill over the levee bank at the rear of Ponds Drive
- Flooding of 78 properties, with 60 buildings flooded above floor
- Flooding of the Station Lake Road Bridge, Flinders Avenue and Rennie Street, impacting access in and out of Lara
- Essential services, including power, phone and gas were disrupted
- Damage to rural areas and farmland in surrounding area



Flinders Avenue - 1988



Station Lake Road - 1988

## **Flood Mitigation and Localised Warning Services**

Following a significant flood in 1973, flood mitigation works in the Lara area commenced. These works included the construction of levees along sections of Forest Road, Flinders Avenue, Wingara Drive and Melrose Street to protect the residential properties. These levees were breached during the 1988 flood event and had to be repaired. Since then, some of these levees have been raised by approximately 600mm. Floodwater starts to spill over the top of these levees when the Flinders Avenue stream gauge reaches a height of 9.42m.

Following the 1988 flood, the City of Greater Geelong also developed a flood warning system for Hovells Creek. The warning system consists of three gauges in the Hovells Creek catchment area that transmits rainfall information to a base station which is then analysed to determine if there is a flood threat to residents. This network was built and is maintained by the Council and provides the potential for residents to receive a warning for flooding.

The installation of a new flood warning system on Rennie Street at Hovells Creek was completed in 2018 as part of the broader Hovells Creek flood warning system. This system includes flashing lights which are activated when water reaches the road level as well as road closure gates. The system was installed to improve driver safety in the area.

There are no flood class levels (minor, moderate or major) for Lara and the Bureau of Meteorology does not issue river height predictions for Hovells Creek in Lara. Warnings issued by BoM may provide information about when flooding is possible in the town, but the warning is not specific, and does not include the expected height of the river peak for riverine flooding. You may not receive any warning for flooding in Lara.



Rennie Street Signage



Rennie Street Signage



Lara Levee at Station Lake Road



Flinders Avenue Gauge



# Hovells Creek flood levels at the Flinders Avenue Gauge

The map on page 2 shows the expected riverine flood extent in Lara when the Flinders Avenue stream gauge reaches a height of 9.40m. While no two floods are the same, the map, along with the table below can give you an indication of what you could expect at certain river heights measured on the Flinders Avenue Gauge.

The flooding extent and associated impacts are based on flooding over the broader Hovells Creek Catchment. It does not consider concentrated storms over the Lara Township itself. Localised flooding on roads and around properties will occur in these events.

For specific information on the risk of floodwater impacting your property, you can contact the City of Greater Geelong or the Corangamite Catchment Management Authority (contact details page 6).

Flinders Avenue Gauge Height (m)	Impact
9.42m	<ul> <li>Floodwater may start to spill over levees within Lara.</li> <li>12 houses may be flooded above floor level in Melrose Street, Flinders Avenue, Minyip Road, Park Avenue, Bacchus Marsh Road, Goulburn Park Drive, Patullos Road &amp; Benjamin Drive.</li> <li>Over 3,500 properties may be impacted.</li> </ul>
9.40m	December 1988 flood levels
9.19m	<ul> <li>8 houses may be flooded above floor level in Melrose Street, Flinders Avenue, Minyip Road, Park Avenue, Bacchus Marsh Road and Goulburn Park Drive.</li> <li>Over 3,500 properties may be impacted.</li> <li>Shallow flooding may impact Station Lake Road &amp; Princes Freeway Southbound.</li> <li>Access may be cut to the Princes Freeway Northbound.</li> </ul>
9.05m	February 1973 flood levels
8.83m	<ul> <li>6 houses may be flooded above floor level in Melrose Street, Flinders Avenue, Minyip Road, Park Avenue and Bacchus Marsh Road.</li> <li>Shallow flooding may impact the Princes Freeway Northbound.</li> </ul>
8.49m	<ul> <li>Over 3,000 properties may be impacted.</li> <li>Significant flooding occurs upstream of Hovells Creek, north of the town and in Lara East.</li> <li>Several major and minor roads are impacted by flooding including Old Melbourne Road, Forest Road North, and Lime Crescent.</li> </ul>
8.33m	February 2005 flood levels
7.90m	<ul> <li>4 houses may be flooded above floor level. Over 2,500 properties may be impacted.</li> <li>Areas impacted include West Gateway and around the Flinders Reserve South areas.</li> <li>There is extensive flooding throughout farmland in Lara.</li> </ul>
7.06m	<ul> <li>A house may be flooded above floor level. Up to 2,500 properties may be impacted.</li> <li>Areas impacted include Walkers Road, Flinders Avenue, Melrose Street, Thomas Street &amp; Station Lake Road.</li> <li>Flooding of the Elcho Drain begins to inundate private property.</li> <li>Elcho Park Golf Course &amp; North Geelong Soccer Club grounds impacted.</li> <li>Water begins to spill over Duggans Lane &amp; Kees Road.</li> <li>Flooding cuts access to Flinders Avenue, Windermere Road, Ohallorans Road &amp; Peak School Road.</li> </ul>
6.84m	April 2017 flood levels
6.84m	Hovells Creek water level is at road level on Flinders Ave.
6.60m	<ul> <li>Flinders Avenue Floodway Gates Closed</li> <li>Access to Rennie Street cut, depth may be above 0.3m</li> </ul>
5.80m	Rennie Street Floodway gates closed due to deep flooding



# Flood warnings and emergency checklist

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 is no BOM Flood Warning Service for Lara so you may receive a generalised Flood Warning or advice from VICSES. You may also receive information about potential flooding from the City of Greater Geelong. It is important to remember that you may not receive any warning.

## **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 and stormwater flooding can occur quickly due to heavy rainfall. You may not receive an official warning.

Stay informed - monitor weather warnings, forecasts and rainfall levels at the BoM website and warnings through VicEmergency. Take notice of Flood Watches, Severe Weather Warnings or Thunderstorm Warnings that may relate to high rainfall for Lara.

# **Staying Informed and Further Information**

Current Warnings (VicEmergency) 1800 226 226 emergency.vic.gov.au Bureau of Meteorology (BoM) bom.gov.au/vic/warnings 1300 659 217

VicRoads Traffic traffic.vicroads.vic.gov.au

ABC Radio 774 AM **Emergency Broadcasters** Life-threatening

Watch and listen for warnings relating to: Bay FM 93.9 Hovells Creek or Barwon, Leigh & Moorabool K-Rock FM 95.5

Rivers SKY NEWS Television

**Storm and Flood** Corangamite Catchment Emergency: 132 500

Central Weather District

facebook.com/vicses

twitter.com/vicsesnews Preparing for Flood Emergencies ses.vic.gov.au/get-ready

Creating an Emergency Plan redcross.org.au/prepare

Corangamite Catchment Management Authority 1800 002 262 ccma.vic.gov.au

City of Greater Geelong geelongaustralia.com.au 03 5272 5272

VICSES Social Media

**Emergency** 000



# **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 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.

# **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 (eg, babies, elderly and people with a disability)	
Photos	
Family keepsakes	
Valuables	
Other	



	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 <a href="https://www.redcross.org.au/prepare">https://www.redcross.org.au/prepare</a>
Ве	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 <a href="http://www.bom.gov.au">www.emergency.vic.gov.au</a>
	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.
Du	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.
	<b>racuating in Flooding</b> 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.
Af □	ter Flooding For recovery information, contact your local council, go to the VicEmergency Relief and Recovery-
	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 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.