

Riverine flood information for the Mitchell River at Woodglen Lindenow and Hillside.



Wuk Wuk Bridge (foreground) and Lindenow (background), viewing east-southeast (DELWP, 29th June 2007).



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







The Victoria State Emergency Service respectfully acknowledges Aboriginal and Torres Strait Islander people as the Traditional owners of the land throughout Victoria and acknowledges their ancestors and elders, past, present and emerging.

# The Local Area

The townships of Woodglen, Lindenow and Hillside are located on the Gippsland Plain, approximately 15 kilometres west-northwest of Bairnsdale. They sit close to the Mitchell River, which is formed by the Wentworth and Wonnangatta rivers joining approximately 35 kilometres upstream.

The Mitchell River regularly breaks its banks through this region (once every few years). When this occurs, there is a risk to public safety from deep waters, road closures (limiting access to hospitals and schools), damage to agricultural assets and financial impacts to landowners.

# Are you at risk of flood?

You may be at risk of being impacted by a flood in the Woodglen – Hillside region if you live or work at a property situated low in the floodplain, or you require access through a road/bridge which is located near the river or low-lying floodplain. Even areas far from the river may be at risk if the flood event is large enough to cause significant flooding. You should familiarise yourself with the maps of your local area and read further to understand key roads and areas which may be impacted. Not every road or property can be listed, and it is important to be aware of your surroundings whenever the Bureau of Meteorology and VicSES have issued a flood warning.

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The Mitchell River flows down from the mountains quickly and slows when it reaches the relatively flat Lindenow Valley on the Gippsland Plain. As the water backs up, it spills over the banks and onto the floodplain.

Flood waters recede slowly due to the flat land and engages old river channels and small creeks.

Areas at risk of flooding include the approaches to the Wuk Wuk (cover photo) and Calulu bridges; potentially blocking safe access to Bairnsdale and the nearest major hospital.

Access along low-lying local roads are first at risk from flood waters, while access along raised roads may be lost during larger events.

# Did you know?

The land around Woodglen, Lindenow and Hillside have a history of flooding, including flooding in 1990, 1998, 2007, and 2016.

A '*major*' event occurs at or above 5.5 m on the Glenaladale gauge and a 1% event measures 9.3 m. In 2007, the flood measured 7.3 m. This flood caused an estimated \$116 million in damages and had region wide impacts on:

- 1000 homes
- 700 primary producers
- 200 businesses



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.

The map below shows the expected flooding extent of a 1% flood event along the Mitchell River. A 1% flood means that there is a 1% chance of a flood of this size occurring in any given year. The 1% is slightly larger than the 2007 flood, equal to 8.3m on the Glenaladale gauge.



Woodglen

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Lindenow

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#### Hillside

#### Disclaimer

These map publications are 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 information is provided by the East Gippsland Catchment Management Authority.

0.75

1.5

3 km

# Mitchell River flood levels at the Glenaladale gauging station

When the Bureau of Meteorology (BoM) issues Flood Warnings they include a prediction of the flood height at the Glenaladale streamflow gauge.

While no two floods are the same, the table below can give you an indication of what you could expected in your area when water levels reach certain heights at this gauge; including when your access may be cut off and when your property may be affected.

The level of a flood event is shown on the left column, followed by the Glenaladale gauge heights.

The below table does not describe impacts for all events or flooding larger than a 1% event. It is important to monitor your local gauges to guide your response to potential flooding. This can be done by going to <a href="http://www.bom.gov.au/vic/flood/east\_gippsland.shtml">http://www.bom.gov.au/vic/flood/east\_gippsland.shtml</a> and hovering your mouse over the grey circles located on the map around Bairnsdale to select the correct gauge.

#### Impacts to property, buildings, roads, and features of interest, that may arise from various flood levels.

Flood Event	Height (metres)	Impact/level
MINOR	3.0	
50%	3.9	Water well confined to the river channel from Lindenow through to Woodglen. Minor flooding around the Lindenow-Glenaladale Rd and Bairnsdale-Dargo Rd intersection.
MODERATE	4.5	
20%	5.4	Several breakouts of flooding from Lindenow through to Hillside, with low level wetlands and floodplain now inundated. Flooding of Lindenow-Glenaladale Road on southern side of river in multiple locations from the river to Bairnsdale-Dargo Road.
MAJOR	5.5	
JUL 2016	6.3	Region wide damages ~\$4.8 million. 150 farms affected; losses include about 100 stock, at least 20 km of boundary fencing, about 40 tonnes of stored fodder, 40 ha of crop, two farm sheds and four irrigation pumps.
10%	6.4	Widespread flooding across the Lindenow Flats, with buildings isolated in the Bulmers, Windmill, Settlement and Soldiers Road area.
5%	7.3	Widespread inundation and further isolation of properties in the Lindenow / Woodglen / Walpa area.
JUN 2012	7.4	Region wide damages ~\$17M.
APR 1990	7.6	Region wide damages ~\$20M, 7 homes inundated in Lindenow, 1 loss of life
JUN 1998	7.9	Region wide damages ~\$78M, one loss of life.
JUN 2007	8.3	Region wide damages ~\$116 million; 1000 homes, 700 primary producers and 200 businesses impacted region wide.
2%	8.4	Widespread inundation and isolation along the full reach the Lindenow Flats. Flows breaking out into old creeks and channels across the Lindenow / Woodglen / Hillside area re-joining the main channel downstream.
1%	9.3	Sections of Bon Accord Road and Alexanders Road inundated. Buildings off Bon Accord Road isolated. Several local roads inundated, including Woodglen Road and Marshalls Road which are possibly inundated from flooding to the north of the river.



Glenaladale gauging station.

Warnings for the areas Woodglen, Lindenow and Hillside are issued when flood levels reach certain heights on your local river gauge at Glenaladale. This information can be helpful when reviewing the map and table of flood information in this document.

#### **Staying Informed and Further Information** Current warnings (VicEmergency) 1800 226 226 emergency.vic.gov.au 1300 659 217 Bureau of Meteorology (BoM) bom.gov.au/vic/warnings VicRoads Traffic traffic.vicroads.vic.gov.au **Emergency Broadcasters** ABC Gippsland 828AM Life-threatening SKY NEWS Television 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 East Gippsland Catchment Management egcma.com.au (03) 5152 0600 Authority East Gippsland Shire Council eastgippsland.vic.gov.au (03) 5153 9500 National Relay Service NRS relayservice.gov.au



# 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 our social media channels and emergency broadcasters.

VICSES warnings aim to provide you with as much 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				
	<b>EMERGENCY WARNING</b> 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.			
<u>/i</u>	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.			
1	<b>COMMUNITY INFORMATION</b> 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. BE WARNED. BE INFORMED.	<b>EMERGENCY ALERT</b> 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.

East Gippsland Shire Council has worked with many communities to develop Local Incident Management Plans which are activated by the community in emergency events.

For further information go to <u>eastgippsland.vic.gov.au</u>.

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:

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	

# **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 plan.
- Emergency plan, see <u>https://www.redcross.org.au/prepare</u>.

# **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 <u>http://www.bom.gov.au</u> and warnings through <u>www.emergency.vic.gov.au</u>.
- □ 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. 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 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 they are safe.
- 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.