SES Local Flood Guide

Riverine flood information for Dunmunkle Creek at Rupanyup



Rupanyup, January 2011



For flood emergency help call VICSES on 132 500

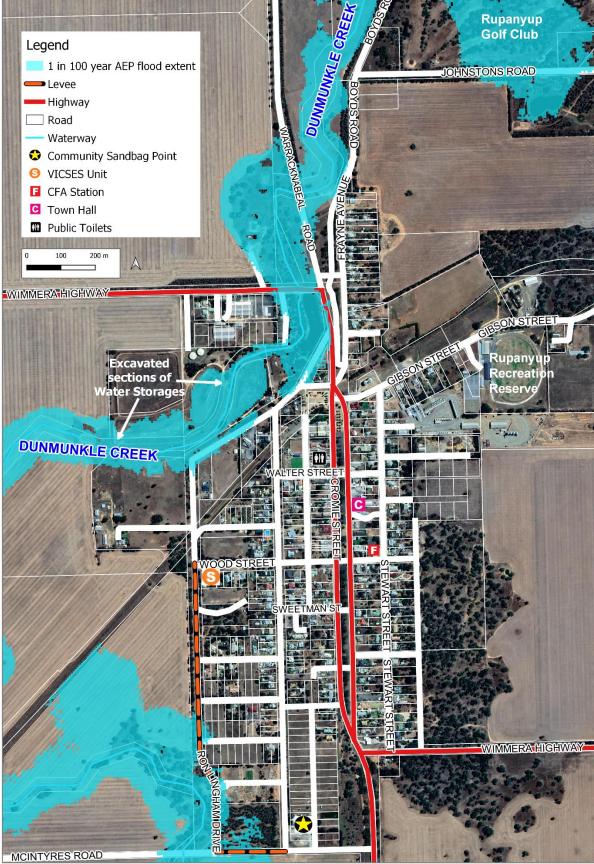






Rupanyup

Rupanyup is located on the Dunmunkle Creek, in the municipality of the Yarriambiack Shire. The map below shows a flood extent similar to the January 2011 flood event, the Glenorchy stream gauge peaked at 5.03m.



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 Wimmera Catchment Management Authority.



Are you at risk of flooding?

Rupanyup is impacted by both riverine flooding from Dunmunkle Creek and stormwater flooding from local rainfall. Flooding in the Dunmunkle Creek is driven by high flows in the Wimmera River.

Rupanyup and Dunmunkle Creek has experienced flooding in 1909, 1916, 1956, 1974, 1975, 1992, 1993, 2010, 2011 and 2016. The largest recent flood event on record was the January 2011 flood event. During this event Rupanyup was significantly impacted by both riverine and stormwater flooding.

Riverine flooding from Dunmunkle Creek began to rise on Sunday the 16th and peaked on Monday the 17th of January. Local reports indicate that 18 buildings were at risk of flooding. Due to sandbagging only seven buildings were flooded above floor these included the old Rupanyup supermarket, Bendigo Bank, Rupanyup Bowels Clubrooms, and the public toilets in Cromie Street. Flooding significantly impacted low lying farmland along Dunmunkle Creek. Flooding cut access to most of the roads and crossings along Dunmunkle Creek and caused significantly damage to infrastructure within Rupanyup and along Dunmunkle Creek. Roads impacted in Rupanyup include the Wimmera Highway, Stawell-Warracknabeal Road, Dyer Street, Boyds Road, Connolly Parade, Walter Street, Taylor Street, Wood Street, Cromie Street, Stewart Street, Westcott Avenue, Simpson Avenue, Gibson Street, Ron Lingham Drive and McIntyres Road.

Historic flood events show that flood travel times between Glenorchy and Rupanyup can take between 28 hours to 123 hours. Flood levels along Dunmunkle Creek in Rupanyup may be high for 2 to 3 days.



Flooding impacting the old Rupanyup Supermarket during January 2011 event.

Rupanyup after flood mitigation works

Since the January 2011 flood event structural flood mitigation works have been undertaken to significantly reduce stormwater and riverine flooding impacts. GWMWater excavated upstream and downstream sections of Rupanyup's water storage embankments, refer to the map on page two for the location of these works. These water storages were significantly constraining flood flows along Dunmunkle Creek. These works significantly reduced flooding in Rupanyup, flooding no longer reaches the railway embankment during a 1 in 100 year Annual Exceedance Probability (AEP) flood. Meaning each year it has a 1% chance of occurring.

The Yarriambiack Shire Council have also undertaken works to construct a levee along Ron Lingham Drive and McIntyres Road to prevent floodwater breaking out of Dunmunkle Creek into the southern section of Rupanyup. Refer to the map on page 2 for the location of the levee. This levee is likely to provide flood protection up to a 1 in 100 year AEP flood event.

While these flood mitigation works have significantly reduced the number of building flooded above floor during a 1 in 100 year AEP flood event from 27 buildings down to only one building. It is estimated that five buildings may be flooded above floor in a 1 in 200 year AEP flood event (Water Technology 2018).



Flooding impacting Dyer Street, Rupanyup during January 2011 event.



Stormwater Flooding

The Rupanyup community reported heavy rainfall Tuesday 11th and Thursday 13th of January with 149mm falling over three days.

Stormwater flooding in Rupanyup can develop quickly from heavy localised rainfall. Urbanised sections of Rupanyup create impervious areas, increasing runoff and causing excess floodwater to accumulate in the road network and low-lying land. During the January 2011 flood event Yarriambiack Shire Council received reports that several buildings in Dyer Street were flooded above floor. Also several buildings in Cromie Street were very close to being flooded above floor.

Flood mapping undertaken in 2018 show that stormwater flooding can impact properties along Cromie Street, Stewart Street, Dyer Street, Beryl Street, Edward Street, Walter Street, Wood Street, Gibson Street and Gordon Street. The warning time available from rainfall to stormwater impacts occurring can range between 2 to 3 hours depending on rainfall intensity.



Flooding impacting the Rupanyup Bowles Club during January 2011 event.

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 594 AM, 107.9 FM 3WM 1089 AM Mixx 101.3 FM	
		SKY NEWS Television	Life-threatening
-	VICSES Social Media	facebook.com/vicses twitter.com/vicsesnews	Emergency 000
•	Preparing for Flood Emergencies	ses.vic.gov.au/get-ready	<u> </u>
•	Creating an Emergency Plan	redcross.org.au/prepare	
•	Wimmera Catchment Management Authority	http://www.wcma.vic.gov.au	(03) 5382 1544
•	Yarriambiack Shire Council	yarriambiack.vic.gov.au/	(03) 5398 0100

How to monitor stream gauge levels

Rupanyup generally floods due to heavy rainfall upstream, within the upper Wimmera River catchment. A key stream gauge along the Wimmera River that provide an indication of the size of the flood event along Dunmunkle Creek at Rupanyup is the Glenorchy Weir Tail Gauge. Monitoring this stream gauge will provide early clues of possible flooding in Rupanyup. To monitor the Glenorchy stream gauge height go to the BoM website bom.gov.au/vic/flood/

River Conditions Select 'River at 04:01PM 24/01/22 Major Flooding Conditions' (above Moderate Flooding Minor Flooding the map) Below Flood Level No Classification **Click on Wimmera** Mallee on the right. Find the Glenorchy lurrayville (above Stawell) gauge and hover over it. Compare stream Birchip **GLENORCHY WEIR TG** height to the stream Station No 579001 Nhill gauge heights in the River Height (m) 0.283 Kaniva Dimbool Time of Obs 24-01-2022 15:00:00 table below to Flood Class Below Flood Level determine if endency Steady lburr flooding is likely. Glenorchy stream gauge Glenelg



Flooding impacting Walter Street, Rupanyup during January 2011.

The table below provides an indication of what flood impacts you can expect in Rupanyup at certain Glenorchy stream gauge heights, including when access to roads may be cut off and when your property may be affected. A key consideration that influences flooding is the wetness of the catchment. The table below assumes the catchment is already wet.

Glenorchy stream gauge height (metres)	Flood Impacts in Rupanyup	
5.05m	More than 5 buildings may be impacted above floor in Rupanyup. More than 1103 properties are impacted by flooding and may houses are isolated along Dunmunkle Creek.	
5.03m	During the January 2011 flood event Rupanyup was impacted by stormwater (localised) and riverine flooding from Dunmunkle Creek causing significant damage to buildings, roads and other infrastructure. Over 149mm fell over 3 days. More than 18 buildings were threatened by flooding. Due to extensive sandbagging only 7 buildings were flooded above floor. Most of the roads in Rupanyup were impacted by flooding. Flood mitigation works undertaken since this flood event has significantly reduced flood risk in Rupanyup (refer to the mitigation works summary on page 4).	
5.01m	Flooding may cut access to 17 buildings along Dunmunkle Creek, more than 937 properties may be impacted by flooding.	
4.96m	Deep flooding may cut access to the Wimmera Highway (north of Rupanyup) and Stawell-Warracknabeal Road (north of Rupanyup), Boyds Road and McIntyres Road. One building may be flooded above floor. Floodwater may break out from Dunmunkle Creek through the Rupanyup Golf Course, north of Rupanyup (0.5m depth).Flooding may cut access to 16 buildings along Dunmunkle Creek, more than 905 properties may be impacted by flooding.	
4.89m	Shallow flooding starts to overtop the Wimmera Highway (north of Rupanyup) and Stawell-Warracknabeal Road (north of Rupanyup). Deep flooding may cut access to Connolly Parade and Ron Lingham Drive. Flooding may cut access to 13 buildings along Dunmunkle Creek, more than 738 properties may be impacted by flooding.	
4.81m	Flooding may reach Rupanyup. Shallow flooding may begin impact roads along Dunmunkle Creek, these include Stawell-Warracknabeal Road, Horsham-Lubeck Roa and C Readings Road.	
4.80m	Major flood level	
4.68m	Flooding along Dunmunkle Creek is driven by high flows in the Wimmera River. Floodwater breaks out into Dunmunkle Creek above the minor flood level. Along the Dunmunkle Creek several stock and domestic channels influence drainage and floodwater.	
4.50m	Moderate flood level	
4.0m	Minor flood level	
3.95m	Minor flooding along low lying land and minor roads along the Wimmera River.	







A Sandbag Collection Point may be opened at the Yarriambiack Shire Council Depot in Rupanyup, 95 Dyer Street.

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

Yarriambiack Shire Council will promote when this collection point is opened through local radio and other media.



Flooding overtopping the Wimmera Highway north of Rupanyup during 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 <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. You can also access this information through our 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 of community impact.

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. Image: Provide the impact of the impac

ADDITIONAL WESSAGES Image: State of the stat

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.

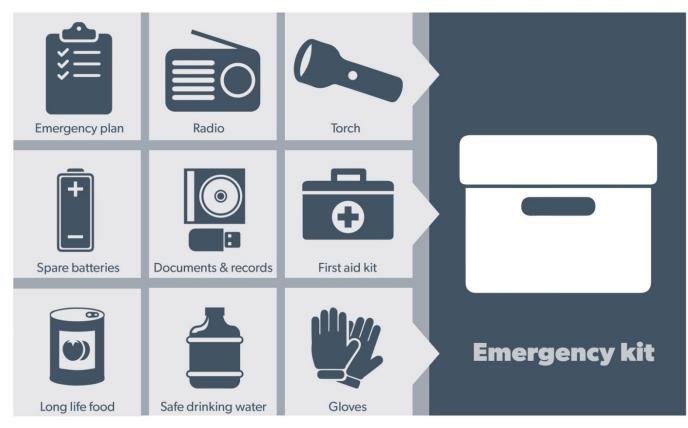
Visit redcross.org.au/prepare start creating your plan.



- 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 <i>(eg, babies, Elderly)</i> 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

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 <u>bom.vic.gov.au</u> and warnings through <u>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.
- □ 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 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.
 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.

