Flood and Storm Sub-Plan

A Sub-plan of the Municipal Emergency Management Plan

City of Yarra

Version 13

Reviewed July 2025

Acknowledgement of Traditional Owners

The City of Yarra Municipal Emergency Management Planning Committee respectfully acknowledges the Traditional Owners of the land and waters of City of Yarra. We pay our respects to Elders past, present and emerging, and are committed to working with Aboriginal and Torres Strait Islander communities to achieve a shared vision of safer and more resilient communities.

Authority

The Flood and Storm Sub-plan has been prepared by Victoria State Emergency VICSES) on behalf of, and in collaboration with the City of Yarra Municipal Emergency Management Planning Committee (MEMPC). It was prepared in accordance with and complies with the requirements of the *Emergency Management Act 2013* including having regard to the guidelines issued under section 77, *Guidelines for Preparing State, Regional and Municipal Emergency Management Plans (the Guidelines)*.

It was endorsed by the City of Yarra Municipal Emergency Management Planning Committee on 13 January 2026 as a Sub-plan to the City of Yarra Municipal Emergency Management Plan (MEMP). A Statement of Assurance for this plan was approved by the North West Metro Regional Emergency Management Planning Committee on 15 May 2026.

This Sub-plan was published on the VICSES website on 27 October 2026.

Any printed hard copies of this Flood and Storm Sub-plan are considered 'uncontrolled documents' and may not reflect the most current or updated version.

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1. Introduction

1.1. Aim

The aim of this MEMP Flood and Storm Sub-plan (MFSSP or the 'Sub-plan') is to detail the local arrangements for before, during and after flood and storm incidents within the Yarra Municipal footprint.

1.2. Objectives

The objectives of this Sub-plan are to:

- Align with and reflect the state emergency management planning framework and wider emergency management planning arrangements and associated documentation.
- Identify and *assess the flood and storm risks* which may impact on the people, property, and/or the environment in the municipal area.
- Support the implementation of measures to avoid or *minimise future risks* and *reduce existing risks* giving consideration to the causes and consequences of storm and flood incidents within the municipal area.
- *Manage residual risks* with a focus on how access to better information can reduce the consequences of flood events.

1.3. Authorising environment

This is an updated version of this City of Yarra MEMP Flood and Storm Sub-plan (MFSSP). It replaces and supersedes the City of Yarra MEMP Flood and Storm Sub-plan September 2020.

This plan is a Sub-plan of and aligns with the City of Yarra Municipal Emergency Management Plan (MEMP). It is consistent with the State Emergency Management Plan (SEMP) and in alignment with the core capabilities of the Victorian Preparedness Framework.

Comments and feedback on this Sub-plan are welcome and should be sent to: ust.nwmetro@ses.vic.gov.au

The City of Yarra MEMPC is the owner of this MEMP Flood and Storm Sub-plan (MFSSP), pursuant to *Part 6A of the Emergency Management Act 2013* (as amended).

To the extent possible, this Sub-plan does not conflict with, or duplicate, any other plans in relation to emergency management that are currently in force within Australia as per the *Emergency Management Act 2013 60AC(c).*

Section 60AI (2) of the Emergency Management Act 2013 allows the MEMPC and Emergency Management Victoria to exclude information that is related to critical infrastructure, personal information or information that is of a commercially sensitive nature.

In accordance with its roles and responsibilities set out in the State Emergency Management Plan (SEMP), the Victoria State Emergency Service (VICSES) has prepared this Sub-plan in collaboration with the

MEMPC. It takes into account the outcomes of the Community Emergency Risk Assessment (CERA) process undertaken by the MEMPC.

Engagement with communities through the update of this Sub-plan has primarily taken place through the Yarra Municipal Flood Plan Working Group (MFPWG), along with input from community representatives serving on the MEMPC.

Membership of the Flood and Storm Planning Committee (MFSPC) comprises of the following representatives from the following agencies and organisations:

- VICSES Operations Officer Emergency Management
- VICSES Heidelberg Unit Controller
- VICSES Malvern Unit Controller
- City of Yarra (Municipal Emergency Management Officer)
- Victoria Police (Municipal Emergency Response Coordinator)
- Melbourne Water
- Department of Families, Fairness and Housing (DFFH)
- Fire Rescue Victoria (FRV)
- Emergency Management Victoria (ERV)

1.4. Exercise, evaluation and review

This Sub-plan will be reviewed and updated at least every three years, with consideration given to earlier revisions as required to ensure the Sub-plan provides for a current, integrated, coordinated, and comprehensive approach to flood emergencies, and consideration of potential escalation of climate-related hazards.

Earlier reviews may be triggered by this Sub-plan being applied in a major emergency or exercise or following a flood study, a significant change in flood mitigation measures, a substantial change to relevant legislation or arrangements, including the SEMP.

1.4.1. Exercise

The MEMPC is responsible for organising exercises to test this plan, which should be conducted within the Sub-plan's lifecycle. Ideally, these exercises will be scheduled shortly before the period of highest risk for floods and storms, typically during winter and spring.

This Flood and Storm Sub-plan was tested as part of the future flood and/or storm events and lessons from these events have been embedded into this Sub-plan.

Event	Exercise Type	Date
Victorian Flood event	Tested	October 2022
Storm Events - 2023	Activation of Regional operations Centre (ROC) @ Sunshine Incident Control Centre	08/07, 11/12, 26/12
Storm Events – 2024	Activation of ROC	03/01, 01/03, 27 & 28/08
Storm Events - 2025	Activation of ROC	01/12, 23/02, 26/05, 22/10

1.5. Audience and linkages

1.5.1. Audience

The audience of this Sub-plan is local government and agencies within the emergency management sector in City of Yarra Municipal, including business and community groups who hold a significant role in the management of the flood and storm emergencies. Although the wider community is not the primary audience, community members may find the contents of this Sub-plan informative.

1.5.2. Linkages

This Sub-plan does not operate in isolation. It is integrated within the broader emergency management planning framework that guides flood and storm management at the State, Regional, Municipal and Local level.

This Sub-plan refers to a range of existing resources related to floods and storms, aligns with the direction set by relevant plans and policies, and includes links to further information for the reader.

Access to operationally sensitive information may require a login. This includes documents stored on the Emergency Management Common Operating Picture (EM-COP), such as Joint Standard Operating Procedures (JSOPs). Documents stored on the VICSES Intranet, such as Standard Operating Procedures (SOPs) and restricted information can be obtained by contacting a VICSES representative.

The Sub-plan is consistent with and supports:

- State Emergency Management Plan (SEMP)
- SEMP Flood Sub-plan, SEMP Storm Sub-plan
- North West Metro (Central) Regional Emergency Storm Plan
- North West Metro (Central) Regional Emergency Flood Plan
- The Municipal Emergency Management Plan (MEMP)
- Community Local Flood Guides (LFGs):
  - City of Yarra LFG is under development.

1.5.3. Supporting operational information

The following documents support and supplement this Sub-plan. The Annexes listed below contain restricted operational or sensitive information and can be obtained through a VICSES representative as required:

Restricted Document(s)
Flood Intelligence and VICSES Response Arrangements for Flood and Storm in the City of Yarra:
▪ Annex A – Flood and Storm Threats for Municipality
▪ Annex B – Typical Flood Peak Travel Times
▪ Annex C – Localities and At-Risk Communities
▪ Annex D – Maps and Schematics
▪ Annex E – Storm Damage and Specific Response Arrangements
▪ Annex F – Flood and Storm Warning Systems

1.5.4. Hyperlinks

Documents or resources that are referred to frequently throughout this Sub-plan (such as the SEMP) may not be hyperlinked in each instance.

All hyperlinks were accurate at time of publication and currency of the linked content remains the responsibility of the host agency.

2. The Emergency Context

2.1. Risks

Yara Municipality is located 3km north-east of the Melbourne CBD and covers a total land area of 19.5km2. A culturally, economically and socially and socially diverse municipality, Yarra has a population of approximately 90,114, containing 49,966 households.

Yarra municipality includes the suburbs of Abbotsford, Burnley, Clifton Hill, Collingwood, Cremorne, Fitzroy, North Carlton, North Fitzroy, Princes Hill and Richmond and parts of Alphington and Fairfield. Yarra is bounded by the Yarra River to the east and south, Merri Creek and Heidelberg Road to the north and Melbourne City Council (Punt Road, Nicholson Street and Princes Park) to the west. Housing density in Yarra has increased significantly over the latter half of the 20th century, resulting in the municipality being over 80% residential (Yarra Municipal FEP 2012). There are no green-field sites for further residential development – rather, development had come from the retrofitting of factories and rezoning of industrial land to residential. The Yarra Municipality has over 260 hectares of open space, including sporting and recreation areas, parkland, gardens, reserves and golf courses.

The drainage network contains some major historic brick drains and relies heavily on overland flow paths when floods exceed the pipe network capacity (Yarra FMP). The City of Yarra Road Management Plan (2009) suggests that only 30% of the drainage network can cope with a 5-year Average Recurrence Interval(ARI) flood.

Large severe floods within the Yarra Municipality generally occur as a result of a moist warm airflow from northern Australia bringing moderate to heavy rainfall over a period of 12 hours or more following a prolonged period of general rainfall. The period of general rainfall “wets up” the catchments and (partially) fills both the on-stream dams and the natural floodplain storage. These combine to increase the runoff generated during the subsequent period of heavy rainfall.

For more detailed information refer to **Annex A** (restricted) in the Flood Intelligence and VICSES Response Arrangements for Flood and Storm in City of Yarra.

2.1.1 Riverine flooding

Within the Yarra Municipality, large severe floods generally occur as a result of a moist warm airflow from northern Australia bringing moderate to heavy rainfall over a period of 12 hours or more following a prolonged period of general rainfall. The period of general rainfall “wets up” the catchments and (partially) fills both the on-stream dams and the natural floodplain storage. These combine to increase the runoff generated during the subsequent period of heavy rainfall.

Flooding on the Merri Creek tends to rise and fall quickly. Large but less severe floods result from sequences of cold fronts during winter and spring that progressively wets up the catchments and fill the on-stream dams and the natural floodplain storage. Prolonged moderate to heavy rain leads to major flooding.

2.1.2 Flash flooding

Short-duration, high-intensity rainfall (usually associated with thunderstorms) can also cause localised flooding within the Yarra Municipality, along overland flow paths when the local urban drainage system surcharges. Such events, which are mainly confined to the summer months, do not generally create

widespread flooding since they only last for a short time and affect limited areas. Flooding from these storms occurs with little warning and localised damage can be severe.

High-intensity rainfall, such as associated with thunderstorms giving average rainfall rates of more than 20mm/hour for an hour or more, is likely to lead to flash flooding and/or overland flows across the urbanised parts of the Yarra Municipality.

Blocked or capacity impaired stormwater drains can also lead to overland flows and associated flooding: the drain surcharges and excess water flows above ground.

2.1.3 Severe weather and storms

Severe thunderstorms and associated extreme weather conditions, such as tornadoes or microbursts, can have significant impacts on the community, built environment and essential services. While severe thunderstorms may affect large areas, tornadoes and microbursts in Victoria are typically highly localised, often impacting only one or two suburbs. Despite their limited geographic footprint, these events can cause intense and concentrated damage.

Typical consequences of severe storm events include:

- Wind damage to residential and commercial buildings
- Uprooted or fallen trees causing property damage and blocking roadways
- Localised flash flooding
- Large Hail
- Road damage and temporary road closures
- Power outages
- Discharge/overflow of sewer systems
- Disruption to telecommunications services
- Discharge/overflow of sewer systems
- Waste collection bins content discharged into waterways and storm water systems
- Impacts on critical infrastructure (e.g. health, water, energy, transport)
- Entrapment of people in homes or vehicles due to fallen trees or floodwater
- Epidemic Thunderstorm Asthma (ETSA)

2.1.4 Tidal flooding and storm surges

Moderate to heavy rainfall, coupled with a high or incoming tide from Port Phillip Bay can exacerbate flooding within the Municipality or create areas of flooding in and around the drainage network. Due to the proximity of the Municipality to Port Phillip Bay and its flat terrain, tidal flows may reduce the capacity of the stormwater drains to discharge runoff back into Port Phillip Bay, while extreme storm events can cause backflow to the point where water surcharges back above ground around the drainage pits and channels.

This tidal influence can be expected to affect the Yarra River upstream to Dights Falls in Kew.

2.2. History of municipal flood and storm emergencies

The MEMP details a brief history of all major emergencies that has happened within the Yarra Municipality.

Historically, the Yarra Municipality was significantly impacted by flooding from the Yarra River. In the Great Flood of 1891, for example, the Yarra River rose 14 metres above its normal level in some areas. It flooded many riverside suburbs including Richmond and Cremorne causing extensive damage. There was also extensive flooding along the Yarra River in 1934. Since the 1891 flood, extensive remedial work has been carried out on the lower Yarra River, including widening and redirecting its course to Port Phillip Bay. As a result, the impact of riverine flooding on the community has now been substantially reduced.

A flood in December 2018 saw large areas across the Yarra Municipality affected. This storm caused significant basement flooding with some evacuations of residential and commercial property with Glass and Newry Streets as well as Highett Street and Swan Street particularly impacted. The last notable flood event within the Yarra Municipality was in January 2022 when large areas across the Municipality were affected. This storm most heavily affected roads and properties between the Lygon Street Main Drain in Carlton North to the corner of Gertrude and Hoddle streets in Collingwood. Both of these storms also affected public areas and infrastructure.

Significant floods (with high flood gauge levels and/or likely flooding consequences to property and infrastructure) that have occurred within the Yarra Municipality are as follows in the table below. It is rare that a storm will affect all catchments in the Municipality in the one event except in the most extreme situations. Results below highlighted in black indicate when either stream level rise was significant enough to cause riverine flooding or when rainfall was significant enough to cause flash flooding; while results in grey indicate either stream level rise or rainfall that was unlikely enough to contribute to flooding at or around the gauge location. These results have been included however to show the relationship between these catchments and others that were recorded to indicate flooding.

Note that the % Annual Exceedance Probability (AEP) Frequency Results are for rainfall. It is expected that some rainfall ‘losses will occur meaning that not all rain will translate to an equivalent level % AEP flood level event. Use the % AEP rainfall as a guide only for the area around the gauge location. The colours associated with the % AEP Frequency also are independent of the colours for Minor, Moderate and Major Flood Class Warning Levels.

2.2.1 Dam spilling/failure

The Department of Energy, Environment and Climate Action (DEECA) is the control agency for dam safety incidents. This includes breach, failure or potential breach/failure of a dam. However, VICSES is the control agency for any resultant flooding.

DEECA has developed Dam Safety Response Plan to assist in managing its obligations associated with dam safety incidents.

For the list of major dams with potential to cause structural and community damage within the municipality refer to **Annex A** in the Flood Intelligence and VICSES Response Arrangements for Flood and Storm in City of Yarra.

%AEP Frequency	1EY or more	50% AEP	20% AEP	10% AEP	5% AEP	2% AEP	1% AEP	Less than 1% AEP

Event	Yarra River at Alphington (229143B)		Yarra River at Abbotsford (229622A)	Yarra River at Hawthorn (229687A)	Yarra River at Burnley (229621A)		Merri Creek at Northcote (229149A)		Darebin Creek at Ivanhoe (229403A)
	Rainfall at Gauge	River Level	Tide Level	Tide Level	Rainfall at Gauge	Tide Level	Rainfall at Gauge	Creek Level	Creek Level
Normal Water Level		0.5m	0.5m to 1.0m	0.3m to 0.8m		0.1m to 0.7m		0.2m	0.2m
Minor Flood Class		3.0m	2.7m	-		-		3.2m	-
Moderate Flood Class		6.0m	6.7m	-		-		3.8m	-
Major Flood Class		8.7m	8.9m	-		-		5.0m	-
13th July 1891	-	12.38m	**12.60m**	-	-	**7.38m**	-	-	-
20th October 1901	-	9.14m	9.53m	-	-	3.98m	-	-	-
14th June 1911	-	7.48m	-	-	-	-	-	-	-
23rd September 1916	-	8.58m	9.37m	-	-	3.96m	-	4.51m	-
23rd October 1920	-	6.02m	-	-	-	-	-	-	-
11th October 1923	-	9.76m	-	-	-	-	-	-	-
1st December 1934	-	**13.05m**	12.55m	-	-	5.55m	-	**4.85m**	3.06m
18th October 1937	-	8.17m	7.98m	-	-	2.70m	-	2.76m	-
13th July 1952	-	9.45m	9.75m	-	-	-	-	4.48m	2.99m
22nd September 1952	-	9.40m	9.23m	-	-	-	-	-	-
10th November 1954	-	-	-	-	-	-	-	4.25m	-
9th November 1971	-	8.44m	-	-	-	3.12m	-	3.51m	-
14th May 1974	-	8.87m	-	-	-	3.25m	-	4.74m	2.84m
26th October 1975	-	5.44m	-	-	-	-	-	3.36m	-
16th October 1976	-	3.46m	-	-	-	-	-	1.86m	-
8th April 1977	-	4.58m	-	-	-	-	-	4.46m	-
19th June 1977	-	4.67m	-	-	26mm / 72hrs	1.45m	-	3.39m	-
1st July 1977	-	4.94m	-	-	-	-	-	2.76m	-
10th August 1978	-	3.69m	4.23m	-	65mm / 7days	1.40m	-	2.55m	-
20th November 1978	-	4.28m	5.19m	-	48mm / 12hrs	1.91m	-	3.31m	-
6th October 1979	-	2.28m	2.75m	-	41mm / 24hrs	1.29m	-	2.24m	-
16th October 1983	-	3.17m	-		59mm / 24hrs	1.55m	86mm / 34hrs	3.18m	-

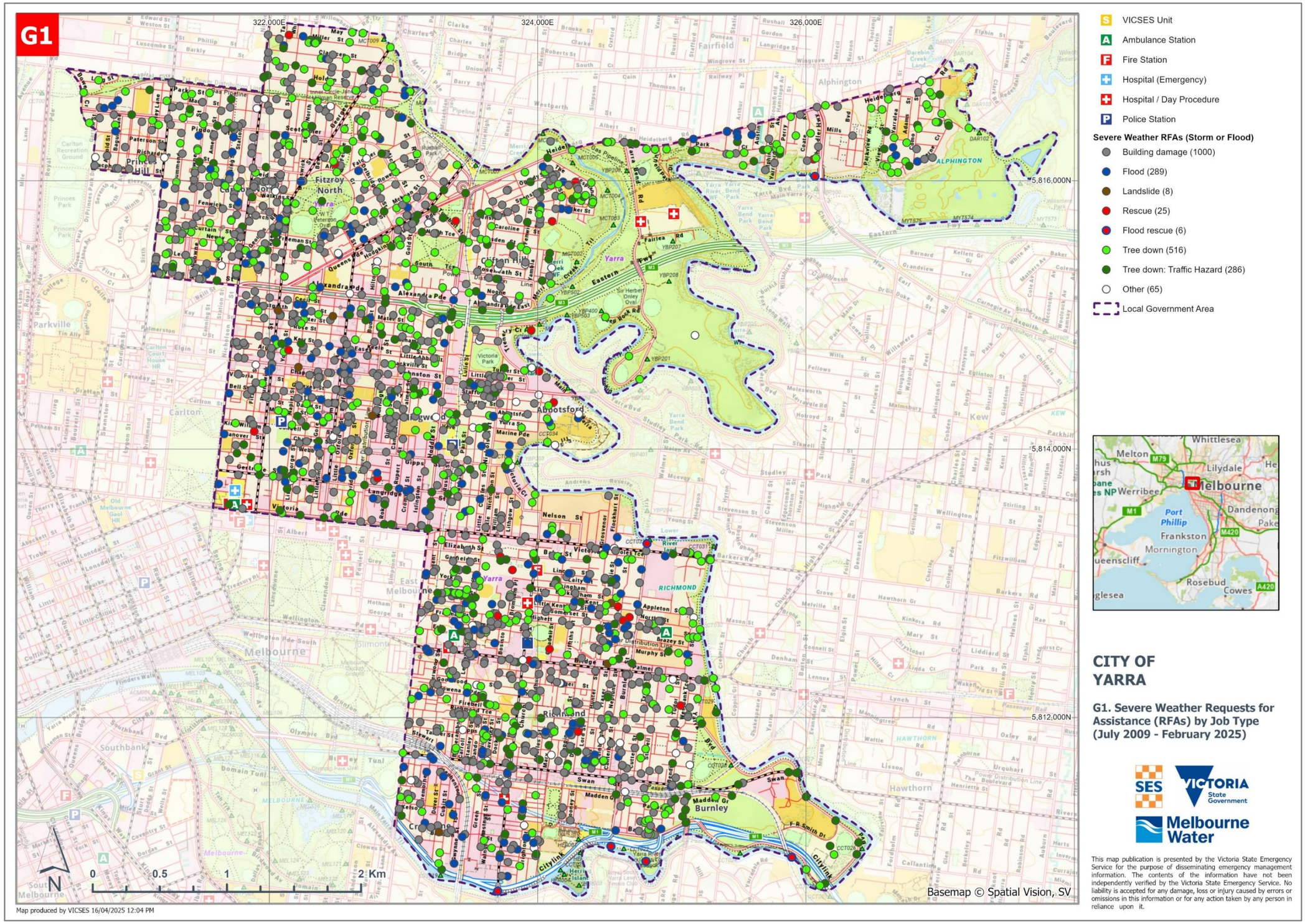
%AEP Frequency	1EY or more	50% AEP	20% AEP	10% AEP	5% AEP	2% AEP	1% AEP	Less than 1% AEP

Event	Yarra River at Alphington (229143B)		Yarra River at Abbotsford (229622A)	Yarra River at Hawthorn (229687A)	Yarra River at Burnley (229621A)		Merri Creek at Northcote (229149A)		Darebin Creek at Ivanhoe (229403A)
	Rainfall at Gauge	River Level	Tide Level	Tide Level	Rainfall at Gauge	Tide Level	Rainfall at Gauge	Creek Level	Creek Level
Normal Water Level		0.5m	0.5m to 1.0m	0.3m to 0.8m		0.1m to 0.7m		0.2m	0.2m
Minor Flood Class		3.0m	2.7m	-		-		3.2m	-
Moderate Flood Class		6.0m	6.7m	-		-		3.8m	-
Major Flood Class		8.7m	8.9m	-		-		5.0m	-
19th September 1984	98mm / 6days	5.33m	-	-	40mm / 6hrs	2.20m	-	2.38m	-
30th July 1987	48mm / 48hrs	5.15m	6.02m	3.14m	51mm / 48hrs	1.92m	59mm / 33hrs	3.91m	-
22nd November 1988	-	-	4.11m	2.99m	-	1.38m	-	2.97m	-
11th June 1989	49mm / 48hrs	5.39m	5.94m	3.09m	43mm / 72hrs	1.87m	32mm / 23hrs	3.98m	-
18th July 1990	42mm / 6hrs	3.42m	4.47m	2.39m	47mm / 6hrs	1.60m	46mm / 7hrs	3.27m	-
12th October 1990	43mm / 24hrs	3.25m	3.87m	2.04m	40mm / 24hrs	1.40m	-	2.53m	-
19th September 1991	25mm / 48hrs	3.91m	3.35m	1.99m	-	1.58m	-	1.13m	-
26th September 1992	18mm / 24hrs	4.00m	3.99m	2.02m	20mm / 12hrs	1.18m	-	2.22m	-
11th October 1992	27mm / 5days	4.95m	5.13m	2.67m	22mm / 6days	1.63m	-	2.11m	-
19th September 1993	29mm / 24hrs	3.68m	3.59m	1.96m	-	1.28m	-	2.71m	-
27th December 1993	90mm / 48hrs	3.40m	4.83m	2.72m	79mm / 48hrs	1.68m	125mm / 38hrs	2.95m	-
8th March 1995	47mm / 6hrs	1.63m	3.03m	2.12m	42mm / 3hrs	1.43m	-	3.02m	-
19th April 1996	24mm / 48hrs	3.34m	3.42m	-	17mm / 48hrs	1.28m	-	1.38m	-
25th June 1996	48mm / 24hrs	3.94m	4.32m	-	28mm / 24hrs	1.60m	-	2.74m	-
1st August 1996	35mm / 48hrs	4.90m	4.92m	2.58m	31mm / 48hrs	1.73m	-	2.36m	-
27th December 1999	24mm / 1hr	2.95m	3.93m	2.09m	49mm / 1hr	1.43m	41mm / 1hr	2.87m	-
26th October 2000	47mm / 24hrs	3.33m	3.85m	1.85m	17mm / 12hrs	1.39m	52mm / 24hrs	2.88m	1.32m
3rd December 2003	102mm / 12hrs	3.62m	5.38m	3.43m	36mm / 2hrs	1.99m	50mm / 30min	4.13m	2.14m
13th November 2004	31mm / 6hrs	5.01m	5.52m	2.82m	31mm / 6hrs	1.83m	32mm / 6hrs	2.37m	1.72m
3rd February 2005	116mm / 24hrs	5.70m	6.50m	**4.46m**	122mm / 24hrs	2.94m	124mm / 24hrs	4.28m	2.59m
1st November 2010	40mm / 6hrs	3.42m	3.25m	1.49m	42mm / 6hrs	0.92m	40mm / 6hrs	2.01m	1.41m
5th February 2011	69mm / 12hrs	4.55m	4.53m	2.35m	104mm / 12hrs	1.27m	30mm / 1hr	3.08m	2.19m
12th April 2011	51mm / 6hrs	3.30m	3.71m	1.99m	54mm / 6hrs	1.29m	64mm / 12hrs	2.75m	1.58m
27th November 2011	52mm / 24hrs	3.82m	3.46m	1.72m	52mm / 24hrs	1.01m	48mm / 24hrs	2.07m	1.36m

%AEP Frequency	1EY or more	50% AEP	20% AEP	10% AEP	5% AEP	2% AEP	1% AEP	Less than 1% AEP

Event	Yarra River at Alphington (229143B)		Yarra River at Abbotsford (229622A)	Yarra River at Hawthorn (229687A)	Yarra River at Burnley (229621A)		Merri Creek at Northcote (229149A)		Darebin Creek at Ivanhoe (229403A)
	Rainfall at Gauge	River Level	Tide Level	Tide Level	Rainfall at Gauge	Tide Level	Rainfall at Gauge	Creek Level	Creek Level
Normal Water Level		0.5m	0.5m to 1.0m	0.3m to 0.8m		0.1m to 0.7m		0.2m	0.2m
Minor Flood Class		3.0m	2.7m	-		-		3.2m	-
Moderate Flood Class		6.0m	6.7m	-		-		3.8m	-
Major Flood Class		8.7m	8.9m	-		-		5.0m	-
26th December 2011	43mm/ 6hrs	3.63m	4.19m	1.96m	38mm / 6hrs	0.94m	46mm / 6hrs	3.33m	2.71m
1st June 2013	62mm / 6hrs	3.98m	5.25m	2.84m	52mm / 12hrs	1.69m	64mm / 6hrs	3.85m	**3.21m**
29th December 2016	96mm / 48hrs	3.08m	3.95m	1.88m	18mm / 2hrs	1.03m	29mm / 3hrs	3.89m	2.57m
3rd December 2017	-	2.67m	3.19m	1.87m	73mm / 48hrs	1.17m	104mm / 48hrs	2.54m	1.36m
6th November 2018	-	1.94m	2.90m	1.96m	40mm / 2hrs	1.24m	43mm / 2hrs	2.90m	1.38m
14th December 2018	30mm / 1hr	1.45m	1.77m	1.08m	39mm / 30min	0.78m	25mm / 1hr	1.75m	1.29m
5th March 2020	41mm / 6hrs	2.37m	3.08m	1.70m	48.80mm / 6hrs	1.02m	43mm / 6hrs	2.87m	1.65m
4th April 2020	94mm / 96hrs	2.71m	3.42m	1.74m	93mm / 96hrs	1.19m	85mm / 72hrs	2.92m	1.78m
23rd August 2020	37mm / 48hrs	2.69m	2.86m	1.42m	40mm / 48hrs	1.00m	33mm / 24hrs	1.78m	1.13m
13th June 2021	7mm / 3hrs	3.09m	2.83m	1.28m	8mm / 3hrs	0.81m	4mm / 3hrs	1.80m	1.16m
6th September 2021	30mm / 6hrs	2.86m	2.91m	1.31m	33mm / 6hrs	0.84m	31mm / 6hrs	2.10m	1.35m
16th October 2021	47mm / 72hrs	3.10m	3.00m	1.51m	52mm / 72hrs	1.13m	49mm / 72hrs	2.27m	1.39m
7th October 2022	20mm / 2hrs	2.37m	3.34m	2.02m	17mm / 1hr	1.25m	13mm / 15min	3.13m	1.73m
14th October 2022	56mm / 72hrs	5.40m	5.81m	2.96m	52mm / 48hrs	1.79m	51mm / 48hrs	4.04m	1.91m
30th October 2022	3mm / 3hrs	5.03m	4.95m	2.50m	8mm / 30min	1.58m	21mm / 2hrs	2.68m	1.52m
21st November 2022	25mm / 48hrs	2.98m	3.02m	1.73m	16mm / 12hrs	1.35m	10mm / 3hrs	2.19m	1.28m
8th January 2024	47mm / 24hrs	4.15m	4.20m	2.03m	49mm / 12hrs	1.23m	50mm / 24hrs	2.59m	1.43m

Table A2 – Selection of Historical Flood and Storm Events along the Yarra River, Merri Creek & Darebin Creek



- VICSES Unit
- Ambulance Station
- Fire Station
- Hospital (Emergency)
- Hospital / Day Procedure
- Police Station

Severe Weather RFAs (Storm or Flood)

- Building damage (1000)
- Flood (289)
- Landslide (8)
- Rescue (25)
- Flood rescue (6)
- Tree down (516)
- Tree down: Traffic Hazard (286)
- Other (65)
- Local Government Area

CITY OF YARRA

G1. Severe Weather Requests for Assistance (RFAs) by Job Type (July 2009 - February 2025)

SES VICTORIA State Government

Melbourne Water

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G2

322,000E 324,000E 326,000E

5,816,000N 5,814,000N 5,812,000N

- VICSES Unit
- Ambulance Station
- Fire Station
- Hospital (Emergency)
- Hospital / Day Procedure
- Police Station

Severe Weather RFAs (Storm or Flood)
(Where greater than 20 requests received)

- 12th February 2010 (20 requests)
- 1st - 2nd October 2013 (36 requests)
- 10 September 2014 (26 requests)
- 10 October 2016 (25 requests)
- 3rd December 2017 (23 requests)
- 15th December 2018 (86 requests)
- 29th October 2021 (23 requests)
- 8th - 9th January 2022 (82 requests)
- 26th August 2024 (22 requests)
- Local Government Area



N 0 0.5 1 2 Km

Basemap © Spatial Vision, SV

Map produced by VICSES 16/04/2025 11:58 AM

CITY OF YARRA

G2. Severe Weather Requests for Assistance (RFAs) by Weather Event (July 2009 - February 2025)

SES VICTORIA State Government Melbourne Water

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3. Managing Flood and Storm Emergencies

3.1 State Emergency Management Priorities

The State Emergency Management Priorities that are outlined in the SEMP guide all decisions before, during, and after any emergency, and apply to all aspects of this Sub-plan.

3.2 Roles and responsibilities

An agency that has a role or responsibility under this Sub-plan must act in accordance with the Sub-plan.

There are a few agencies with specific roles that will act in support of VICSES and provide support to the community in the event of a serious storm or flood within the City of Yarra Municipality. These agencies will be engaged through the Incident Emergency Management Team (IEMT).

The general roles and responsibilities of supporting agencies are as detailed in the MEMP, SEMP, SEMP Flood Sub-plans and SEMP Storm Sub-plan.

3.3 Mitigation and preparedness

3.3.1 North West MetroFloodplain Management Strategy

The Victorian Floodplain Management Strategy sets the policy and accountability framework for flood related mitigation activities in Victoria. The Floodplain Management Strategy for Port Phillip and Westernport sets out the implementation of flood mitigation activities for the Region, including for the Yarra Municipality.

3.3.2 Structural flood mitigation measures

Structural flood mitigation measures are any physical construction to reduce or avoid possible impacts of flood hazards, or the application of engineering techniques or technology to achieve flood hazard resistance and resilience in structures or systems.

For more detailed Flood Intelligence and VICSES Response Arrangements surrounding structural flood mitigation measures refer to **Annex C** in the Flood Intelligence and VICSES Response Arrangements for Flood and Storm in Yarra Municipality (restricted).

3.3.3 Planning Scheme Controls

Flood mitigation within the Municipality is supported through planning scheme controls such as the Land Subject to Inundation Overlay (LSIO), Floodway Overlay (FO), and Special Building Overlay (SBO), which guide development in flood-prone areas. These overlays help manage flood risk by ensuring appropriate building siting, floor levels, and drainage requirements. The planning scheme controls work alongside building regulations and the National Construction Code to support safer, more resilient development across the Municipality.

3.4. Community resilience

A resilient community is socially connected and has infrastructure that can withstand disaster or shocks and foster community recovery. Resilient communities promote individual and community wellbeing, use of available resources and cohesiveness to strengthen their communities for every day, as well as extreme challenges.

3.4.1 Flood and storm specific community engagement and programs

Community education and engagement is a vital component in the community understanding risks and preparing for emergencies. The development of relevant and appropriate community accessible resources and activities empower the community and enhance their resilience through being well informed and therefore being equipped (emotionally and physically) for an emergency.

VICSES with the support of the MEMPC and other emergency management services/agencies will coordinate and collaborate targeted community flood and storm community engagement programs through:

- Community programs and projects
- Community events
- Media (e.g., social media, VICSES website, print and publications)
- Yarra Municipality Local Flood Guides (LFG) is under development.
- Targeted events will be planned when funding becomes available and communicated through City of Yarra Council and VICSES

As with all hazards, the effects of floods and storms on the community cannot be fully mitigated. As such, it is imperative that there is a shared and individual responsibility for action and all of society taking responsibility for preparing for disasters, which for community members may include:

- Being aware of their flood risk and undertaking preparedness activities such as developing a home emergency plan and emergency kit –refer to VICSES website.
- Staying informed and following advice from emergency services when responding to warnings.
- Developing Community Emergency Management Plans (CEMPs).

Refer to the MEMP for more detailed Municipal level community engagement programs.

3.4.2. Public information and warnings for flood and storm emergencies

The SEMP Flood Sub-Plan and the SEMP Storm Sub-Plan detail the arrangements for public information and warnings for flood and storm. VICSES SOP008 Severe Weather Notification and Activation Process and VICSES SOP009 Flood Notification and Activation Process outline in detail the actions that VICSES will undertake upon receipt of a Severe Weather Warning or Flood Watch/Flood Warning from the Bureau of Meteorology.

Details on warnings issued by VICSES through VicEmergency and VICSES channels, including for areas or impacts not covered by a Bureau of Meteorology warning, are outlined in **Annex F** in the Flood and Storm Intelligence and VICSES Response Arrangements for the City of Yarra (restricted).

The Incident Controller (IC), through the Public Information Unit established at the Incident Control Centre (ICC), will manage public information and warnings. If the ICC is not established, the VICSES Regional Duty Officer (RDO) and VICSES Regional Agency Commander (RAC) are responsible for managing all public communication. The City of Yarra Council will work with the IC/VICSES to assist with the dissemination of public messaging and/or warnings to ensure that consistent and timely messaging occurs.

The table below summarises the flood and storm warnings issued on VicEmergency. Visit the Australian Warning System (AWS) website for further information.

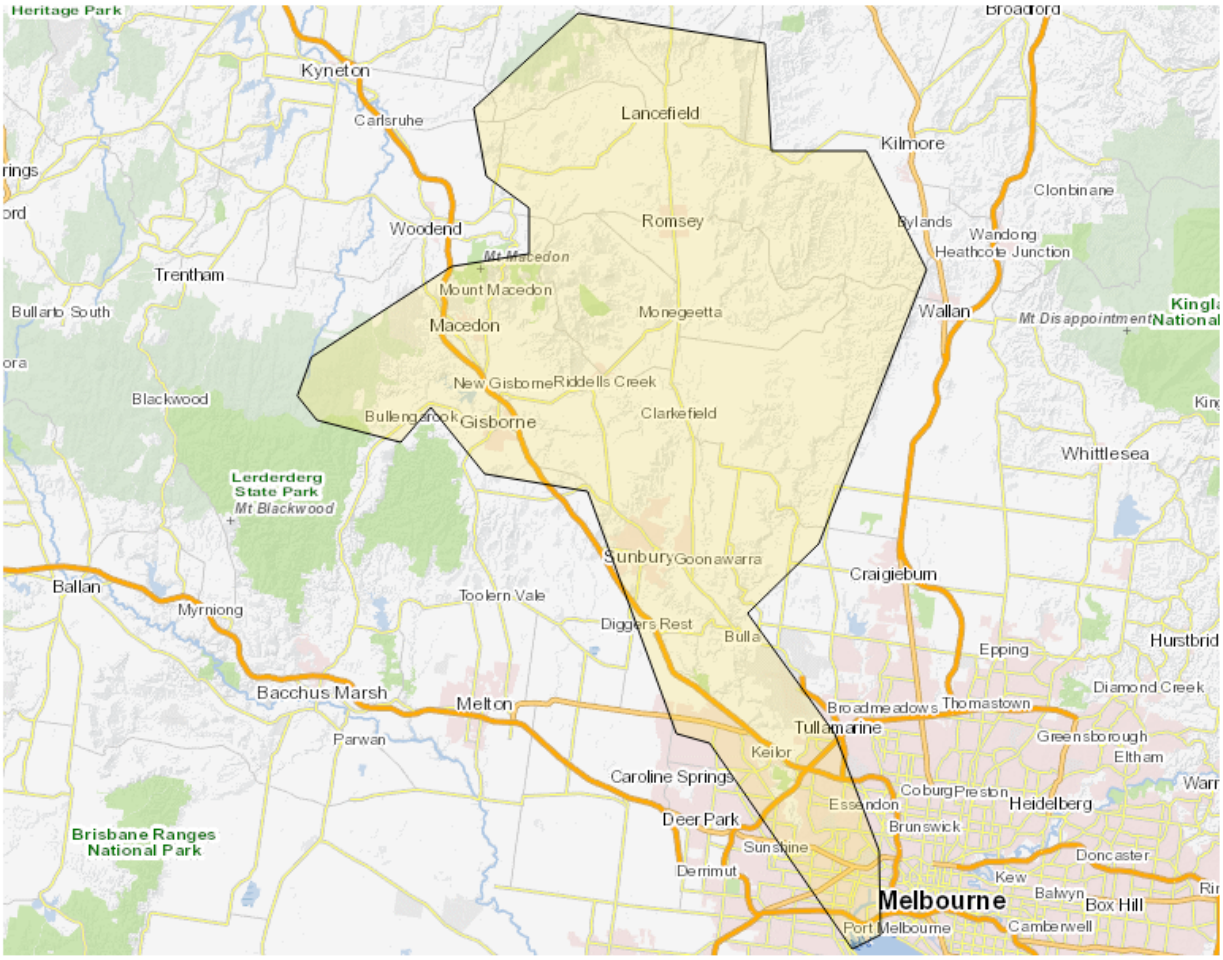
Flood Symbol	Storm Symbol	Warning Level	Meaning	Agency/Community Action
		Advice (yellow)	Flood or storm possible; no immediate danger.	An incident has started. There is no immediate danger. Stay up to date in case the situation changes
		Watch and Act (Orange)	Flooding or severe storm likely; may impact safety and property.	There is a heightened level of threat. Conditions are changing and action is required now to protect community safety.
		Emergency Warning (Red)	Severe flooding or dangerous storm occurring or imminent.	An emergency warning is the highest level of warning. Action needs to be taken immediately; any delays puts life at risk.

3.4.3. BoM flood warning example

ADVICE - FLOOD

Incident Location: Maribyrnong
Incident Name: MaribyrnongFloodSept2016
Issued: Set at publish time
Next Update Expected:

Map



Message

This **Minor Flood Warning** is being issued for Maribyrnong River.

- The Maribyrnong River catchment has received rainfall averaging about 31mm since 0900am yesterday. Rainfall totals of 5mm have been forecast for the catchment in the next 2 hours.
- Water levels of the Maribyrnong River and its tributaries at various locations are rising in response to the rain.
- The level of the Deep Creek at Darraweit Guim is currently 5.41m and rising. It is expected to peak above the Minor Flood Level (5.50m) this morning.
- Minor flooding in the Deep Creek and Maribyrnong River catchment is expected to affect low lying areas adjacent to the waterway. Minor roads may be closed.

The river heights at 08.14am 14/09/2016 were:

- Deep Creek at Doggetts Bridge, Lancefield: 2.22 metres, rising
- Deep Creek at Darraweit Guim: 5.47 metres, falling
- Deep Creek Creek at Konagaderra: 3.62 metres, falling
- Bolinda Creek at Clarkefield: 1.19 metres, rising
- Deep Creek at Bulla: 2.39 metres, falling
- Rosslynne Reservoir, Head Gauge: 38.52 metres, rising
- Jacksons Creek at Sunbury: 2.13 metres, rising
- Steele Creek at Keilor East: 1.19 metres, rising
- Maribyrnong River at Keilor North: 3.58 metres, rising
- Maribyrnong River at Keilor: 1.84 metres, rising
- Maribyrnong River at Maribyrnong: 0.04 metres, rising

Stay informed - monitor your local conditions and remain alert.

What you should do:

- Be prepared to act if your situation changes.
- You should stay informed by listening to emergency broadcasters and monitoring warnings.
- Monitor weather forecasts and river levels. Go to www.bom.gov.au/vic/warnings.
- Floodwater is dangerous - never drive, walk or ride through floodwater.

Impacts in your area:

- Flooding above floor level of a single story home is likely to occur in some locations.
- Local roads may be closed and low bridges may be underwater.
- Areas around rivers and streams may be flooded.

This message was issued by State Emergency Service.

The next update is expected by 4PM this afternoon or as the situation changes.

Flood information:

- For river heights check www.bom.gov.au or phone 1300 659 217.
- For urgent animal welfare issues call Agriculture Victoria on 136 186 or your local vet.

3.4.4. Flood Intelligence

Flood intelligence supports decision making and planning for flooding by providing reliable and accurate information relating to:

- The expected level, depth, and velocity of floodwater and its consequences.
- Determination of actions to be undertaken in response to the identified consequences.

The Department Energy, Environment and Climate Action (DEECA) maintains the FloodZoom flood intelligence platform. Inquiries regarding FloodZoom access should be directed to accounts@floodzoom.vic.gov.au.

For more detailed Flood Intelligence and VICSES Response arrangements refer to **Annex C** in the Flood Intelligence and VICSES Response Arrangements for Flood and Storm in City of Yarra (restricted).

3.4.5. Cross-border collaboration and area of operations

The North West Metro Emergency Management Collaboration may recognise there is a high proportion of similar or shared flood and storm issues, risks, and memberships leading to opportunities for cross-border municipal collaboration.

The area of operations concept is detailed within the SEMP and provides flexibility to managing flood and storm response when it is geographically located across several municipalities. It encourages collaboration between municipalities as part of the Victoria's Emergency Management Planning Framework and the Victorian Preparedness Framework.

3.5. Local knowledge

As the control agency for flood and storm in Victoria, VICSES is committed to ensuring the incorporation of local knowledge in decision making before, during and after incidents. This is guided by the VICSES policy 10.02 Local Knowledge.

Local knowledge is a critical element of planning. The community and other organisations can provide valuable local information about hazards, incidents and how they may evolve. This information is commonly referred to as local knowledge. This Sub-plan aims to ensure that planners and responders capture appropriate local knowledge before, during and after incidents.

As a Flood and Storm incident escalates from local control to a larger incident management structure, it is essential that local knowledge capability is retained within the overall structure. This should include how local subject matter experts are embedded into divisional and sector command structures.

3.5.1 Field Observers

Field Observers provide local knowledge to VICSES and the Incident Control Centre regarding local insights and the potential impacts and consequences of an incident and may assist with the dissemination of information to community members.

Both Heidelberg and Malvern Units have trained Field Observers who can be deployed to gather intelligence in areas impacted by both flood and storm events.

VICSES SOP073 outlines the role of the Field Observer and process for their activation which is via the VICSES RDO.

3.6 Response (including relief)

3.6.1 Activation of response

VICSES may be notified of flood and storm incidents through several sources, but the most common source is calls received via VICSES number (132 500) or if the emergency is life threatening, Triple Zero Victoria (000). Other sources are via other emergency management agencies and local government. In most cases, these events are of a small scale (a level 1 incident), which local VICSES units manage without significant outside support.

In the case of more significant Level 2 (regional level) or Level 3 (an incident that has high complexity and may have statewide implications) Flood and storm response arrangements may be activated by the RDO VICSES North West Metro Region or Regional Agency Commander (RAC).

The VICSES IC/RDO/RAC will activate agencies as required as documented in the SEMP Flood Sub-plan or SEMP Storm Sub-plan.

3.7. Concept of Operations

The SEMP defines the responsibilities of the Incident Controller (IC), Incident Control Centre (ICC), Incident Management Team (IMT) and Incident Emergency Management Team (IEMT).

3.7.1 Control

Sections 5(1)(b) and 5(1)(c) of the Victoria State Emergency Service Act 2005 detail the authority for VICSES to respond to storms and floods.

The Role Statement within the SEMP identifies VICSES in its response functions as the Control Agency for flood and storm. It identifies DEECA as the Control Agency responsible for dam safety as well as reticulated water and wastewater (sewerage) service.

All flood and storm response activities within the City of Yarra including those arising from a dam failure or detention basin / levee bank failure incident will therefore be under the control of the appointed Incident Controller, or delegated representative.

3.7.2 Incident Control Centre (ICC)

The ICC may be activated in advance based on the severity of warnings and in accordance with VICSES readiness arrangements:

- VICSES readiness and activation levels – flood.
- VICSES readiness and activation levels – severe weather.

3.7.3 Escalation

Resourcing and event escalation arrangements are described in the SEMP.

3.8. Considerations for operating with other agencies and stakeholders

As other agencies are deployed to assist the IC should consider the following actions:

- Establish a communications plan to enable the tasking of other agency resources which should be included in briefings.
- Embedding and determining an agreed response to downed powerlines as this is often a predominant hazard for storm events.
- Ensuring other agency personnel who are undertaking the Emergency Management Liaison Officer (EMLO) roles have access to EM-COP.
- Preparing a briefing to support in-coming other agency resources to identify:
    - Staging area location and any safety issues with accessing it (closed roads/powerlines down)
    - Resources available such as re-supply of consumables (tarps/sandbags)
    - Welfare arrangements
    - Duty time limitations (these should be consistent with VICSES SOP003 Fatigue Management and Duty Time Limitations)

3.8.1 Natural and cultural considerations for response

Response activities will identify and consider areas of cultural significance. Where emergency works have the potential to impact culturally sensitive sites, the Incident Controller will seek advice from a Country Advisor. Given that these events often affect areas of high cultural sensitivity, early engagement is important to inform decision-making. The most significant impacts are typically experienced during the recovery phase (refer to the recovery section below).

3.9. Initial impact assessment

As part of the Victorian Preparedness Framework, the SEMP and SEMP Storm and flood sub-plan outline agency responsibilities and core capabilities for flood and storm impact assessments.

3.10. Storm Response Arrangements

In the initial response phase, VICSES Units will receive Request for Assistance (RFA's) direct from Triple Zero Victoria and will typically respond in a business-as-usual mode, typically attending events in order of receipt or priority. This is in accordance with the VICSES Operations Management Manual.

For more detailed storm damage specific response arrangements refer to **Annex E** in the Flood and Storm Intelligence and VICSES Response Arrangements for the City of Yarra (restricted) and Yarra Municipal.

3.11. Evacuation Arrangements

Under the SEMP, Victoria Police (VicPol) has the responsibility for evacuation (Evacuation Manager) – in consultation with the control agency and other expert advice.

The IC is responsible for making a decision in consultation with VicPol as to whether evacuation is a safe option for communities and individuals.

In making this decision the IC may seek advice from other agencies or communities, as detailed in JSOP 03.12 – Planned Evacuation for Major Emergencies.

3.12. Response to flash flooding

Flash flooding can be defined as flooding that occurs within six hours or less of the flood-producing rainfall within the affected catchment. This may result in isolation of individuals and communities as time to warn and respond to flash flooding is limited. The safest place to be in a flash flood is well away from the affected area. Accordingly, pre-event planning for flash floods should commence with an assumption that evacuation is the most effective strategy, provided evacuation can be safely implemented.

Emergency management response to flash flooding should be consistent with the SEMP Storm Sub-plan.

3.13. Evacuation and relocation

The IC is responsible for making a decision in consultation with VicPol as to whether evacuation is a safe option for communities and individuals.

In making this decision the IC may seek advice from other agencies or communities, as detailed in JSOP 03.12 – Planned Evacuation for Major Emergencies.

Refer to the Yara Municipal for additional local evacuation considerations for the Municipality.

3.14. Flood rescue

Under Victoria's Emergency Management Arrangements, rescue is considered separately to the relocation of people who are stranded or isolated by floodwater. Where the water is either fast or swift flowing and/or the people being assisted are facing actual or threatened danger of physical harm, the response escalates from relocation to rescue.

Under the SEMP Response table 9 the control agency for rescue from land and water is VicPol, who operate the State Police Search and Rescue Coordination Centre (SPSARCC). VICSES is a support agency for search and rescue on land and water evacuations and incidents involving mass casualties.

To conduct water rescues during a flood, VicPol will often require assistance of appropriately trained and equipped personnel from support agencies including VICSES, Volunteer Marine Search and Rescue Organisations, CFA, FRV and Life Saving Victoria. VicPol will coordinate with these agencies to ensure operational readiness for activation.

On occasion, VicPol may opt to respond a field capability of its Rescue Coordination Centre to a location near the emergency. It may also work with the Triple Zero Victoria to deploy its dispatch capability to the

same location to enhance rescue coordination and dispatch. Details in this plan may assist VicPol and Triple Zero Victoria in undertaking this function in the field or from the primary SPSARCC.

Refer to **Annex C** for known high-risk areas/communities (such as low-lying islands) where rescues might be required in the Flood and Storm Intelligence and VICSES Response Arrangements for the City of Yarra (restricted).

3.15. Aircraft management

Aircraft can be used for a variety of purposes during flood operations including evacuation, resupply, reconnaissance, intelligence gathering and emergency travel.

3.16 Animal welfare

Matters relating to the welfare of livestock and companion animals (including feeding, water and rescue) are to be referred to DEECA - Agriculture Victoria.

Requests for emergency supply and/or delivery of fodder to stranded livestock or for livestock rescue are passed to DEECA - Agriculture Victoria.

Matters relating to the welfare of wildlife are also to be referred to DEECA who has developed the Victorian Emergency Animal Welfare Plan.

3.17 Essential community infrastructure and property protection

Essential community infrastructure and property such as residences, businesses, roads and utilities may be affected in the event of a flood.

VICSES maintains a stockpile of sandbags, City of Yarra Council does not supply them. The IC will determine the priorities related to the use of sandbags, which will be consistent with the strategic priorities.

The VICSES Operations Management Manual sets out the principles for sandbag use and allocation to the community. These principles do not apply to the use of sandbags by VICSES to construct and/or alter a levee. Refer to Sandbag filling and collection point guide and SOP036 Construction, Removal or Altering of Levee and Removal of Debris for further detail.

The IC will ensure that owners of essential community infrastructure are kept advised of the flood situation. Essential community infrastructure providers must keep the IC informed of their status and ongoing ability to provide services.

https://www.ses.vic.gov.au/plan-and-stay-safe/sandbag-guide for the most current sandbag guidelines or download it from the IMT Toolbox in EMCOP-Operations.

For more specific details of essential infrastructure requiring protection and location of sandbag collection point(s) refer to **Annex C** in the Flood & Storm Intelligence and VICSES Response Arrangements for the City of Yarra (restricted).

3.17.1 Disruption to services

Disruption to services other than essential community infrastructure and property can occur in flood and storm events.

For more detailed arrangements of likely disruption to services and proposed arrangements to respond to service disruptions refer to **Annex C** in the Flood & Storm Intelligence and VICSES Response Arrangements for the City of Yarra (restricted).

3.17.2 Traffic management

City of Yarra Council and Department of Transport and Planning (DTP) will continue to carry out their formal road management functions where safe to do so, including surveillance, placement of warning signs, and supporting overall traffic management arrangements in conjunction with VICPOL and the Incident Controller.

Supporting agencies will liaise with Victoria Police where possible to develop a traffic management plan. This plan may include traffic diversion routes, which should be established further away from the immediate flooded or storm-affected area to minimise traffic congestion and avoid vehicles needing to turn around.

City of Yarra Council will provide public information on road closures, with updates available on the VIC Traffic website: VicTraffic

For detailed arrangements relating to potential road closures, refer to **Annex C** in the Flood & Storm Intelligence and VICSES Response Arrangements for the City of Yarra Council (operational use only).

3.17.3 Traffic Management Plan

Traffic management will be undertaken in accordance with JSOP 03.10 Traffic Management at Major Emergencies. The IC, who has overall responsibility for incident control, will consult with Victoria Police and, where possible, the responsible road authority to develop, implement, and monitor a Traffic Management Plan. Within City of Yarra, DTP is responsible for the arterial road network, while City of Yarra Council is responsible for local and regional roads, bridges, and trails. Victoria Police will coordinate the restriction of access to affected areas as directed by the IC and may support the enforcement of closures and roadblocks.

Traffic management arrangements must ensure safe egress for affected residents and businesses, and access for emergency services. For emergency services, this will include effective movement of vehicles along the length of the flooded area.

3.18 Access to technical specialists

VICSES manages contracts with private specialists who can provide technical assistance in the event of flood operations or geotechnical expertise. The Regional Controller or delegate (e.g. VICSES RDO or IC) should make a formal request to the VICSES State Duty Officer (SDO) for the engagement of a Flood Analyst or Technical Specialist. VICSES SOP061 outlines this detail, including the procedure for accessing technical specialists.

These services may be required particularly where Melbourne Water or Local Government staff are unable to assist in an Incident Control Centre. Specifically, they can provide the following key professional services:

- Flood intelligence (Flood Analysts)
- Geotechnical assessments.

3.19 Relief

Relief is the provision of assistance to meet the essential needs of individuals, families and communities during and in the immediate aftermath of an emergency.

Suitable relief facilities identified for use during storms and/or floods, along with the associated relief arrangements are considered restricted information. This information can be obtained by agencies through the City of Yarra Council Senior Emergency Management Coordinator (SEMC) or the Municipal Emergency Response Coordinator (MERC). Community will be advised of the location and relevant details once a facility has been activated during a flood and/or storm event.

As per the role statement for municipal councils within the SEMP, municipal councils are responsible for Municipal relief coordination.

Refer to the relief and recovery sub-plan for more detailed arrangements for the City of Yarra.

3.19.1 Activation of emergency relief

Refer to the SEMP Roles and Responsibilities - Relief for more detail of services that may be provided and the responsible coordinating agencies.

Arrangements for relief from a flood and/or storm event within the City of Yarra are detailed in the City of Yarra MEMP.

3.19.2 Resupply

Communities, neighbourhoods or households can become isolated during floods and in some cases, storms. This can be as a consequence of road closures or damage to roads, bridges and causeways. Under such circumstances, the need may arise to resupply isolated communities/properties with essential items.

When predictions/intelligence indicates that communities, neighbourhoods and/or households may become isolated, VICSES will advise businesses and/or households that they should stock up on essential items.

After the impact, VICSES can support isolated communities through assisting with the transport of essential items to isolated communities and assisting with logistics functions.

Resupply operations are to be included as part of the emergency relief arrangements with VICSES working with the relief agencies to service communities that are isolated.

For more detailed arrangements/information refer to **Annex C** in the Flood and Storm Intelligence and VICSES Response Arrangements for the City of Yarra (restricted).

3.20 Recovery

As per the role statement for municipal councils within the SEMP, Municipal councils are responsible for coordinating local level recovery activities. They are also the lead agency to coordinate post emergency needs assessment to determine long term recovery needs (Post Emergency Needs Assessment).

Arrangements for recovery from a flood and/or storm event within the City of Yarra are detailed in the City of Yarra MEMP.

3.20.1 Transition from response to recovery

The SEMP sets out the transition to recovery arrangements. During the response phase, the IC will ensure they develop a plan for transition from response to recovery. The IC at the municipal tier should take a lead role in facilitating transition to recovery, working with the Municipal Recovery Manager (MRM), as it marks the end of the response phase which the IC leads and manages.

3.20.2 Environmental and cultural heritage recovery

Local recovery planning will recognise and respect culturally significant places, Country, and the health and wellbeing of Aboriginal communities. Recovery activities should support the involvement of Traditional Owner organisations and Cultural Heritage Advisors to enable culturally informed approaches that minimise harm to Country, culture, and community.

At the municipal level, Council coordinates recovery activities and will engage with the Traditional Owner organisations as appropriate. This supports culturally informed recovery outcomes and aligns with Victoria's commitment to self-determination.

Emergency Management Victoria (Relief and Recovery) provides regional coordination and may support engagement with Traditional Owners, particularly during larger or multi-municipality events.
DEECA is the lead agency for environmental recovery and works with relevant stakeholders, including Traditional Owners, to support environmental restoration and rehabilitation.

The integration of Traditional Owner knowledge, cultural values, and practices within flood recovery planning will continue to evolve as partnerships, policy, and guidance develop over time

3.21 After action review – Lessons Management

Lessons management is the critical process of learning from how we worked before and during an event, to improve the system for next time.

Depending on the size and scale of the flood or storm event, VICSES will normally coordinate a debrief or after-action review of flood or storm operations as soon as practical following an event. Under the VicPol SEMP role statement, it is the responsibility of the Municipal Emergency Response Coordinator (MERC) to ensure that this occurs.

When the flood or storm is being managed as a level 3 event, Emergency Management Victoria (EMV) in consultation with VICSES may assume responsibility for debriefing.

All agencies involved in the flood or storm incident should be represented at the debrief or after-action review.