

CITY OF YARRA

HEAT PLAN

A sub plan of the City of Yarra Municipal Emergency Management Plan

PUBLIC VERSION

Staff contact details and operational plans have been removed

Version 2.5

Last Amended 11-05-2018

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Version Control

Major changes to this section must be endorsed by the Municipal Emergency Management Planning Committee (MEMPC) and presented to Council for consideration and adoption.

The record below is to be completed by the person making the amendment(s). As amendments occur, the decimal version number will be updated (e.g. from Version 2.1 to Version 2.2). Major changes will require the whole version number to change (e.g. from Version 2.6 to version 3).

| Date | Version | Page # | Description | Amended by |
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| 07-10-2014 | V1.1 | ALL | Complete review proposed to Working Group | Lucy Saaroni |
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| 14-08-2018 | | | Section endorsed by MEMPC | |

The rest of this page is left blank to allow for future amendments

Acronyms

| Acronym | Full Title |
|---------|--|
| BCM | Business Continuity Management |
| BOM | Bureau of Meteorology |
| CALD | Culturally and Linguistically Diverse |
| CEO | Chief Executive Officer |
| CERA | Community Emergency Risk Assessment |
| COY | City of Yarra |
| DHHS | Department of Health and Human Services |
| EMPO | Emergency Management Planning Officer |
| HACC | Home and Community Care |
| HCG | Heatwave Coordination Group |
| HR | Human Resources |
| LGA | Local Government Area |
| MECC | Municipal Emergency Coordination Centre |
| MEMP | Municipal Emergency Management Plan |
| MERC | Municipal Emergency Response Coordinator |
| MERO | Municipal Emergency Resource Officer |
| MFB | Metropolitan Fire Brigade |
| MRM | Municipal Recovery Manager |
| SES | State Emergency Service |
| VICPOL | Victoria Police |

Introduction

Sometimes called the “silent killer”, heatwaves cause the more deaths than any other type of natural disaster in Australia. In addition to causing illness and fatality, heatwaves can also have a harmful effect on our infrastructure, our economy, our agriculture, our social cohesion and our biodiversity. And as the climate continues to warm, heatwaves are becoming hotter, longer and more frequent.

Yarra City’s Municipal Emergency Management Planning Committee identified extreme heatwaves as a **high risk** in the municipality, given that extreme heatwaves will almost certainly occur in Yarra City and given the major consequences associated with this type of hazard.

As a result of this risk rating, the City of Yarra Council determined the need for a specific plan to address issues relating to prolonged or intense spells of heat in the municipality.

This document provides a framework and guidance for Council and other heatwave stakeholders in the municipality to appropriately plan for and effectively respond to emergency heatwave conditions. The Plan is supported by a set of operational documents including a **Council Heatwave Action Plan**, a **Heat Safety Communications Campaign** and a **Quick Guide for Business Continuity in a Heatwave**, which detail specific actions to be conducted by Council staff before, during and after a heatwave.

This document was prepared by Council staff, however, the Council is in the process of engaging with and incorporating input from other municipal heatwave stakeholders to ensure that the plan accurately reflects roles and activities of all people in the municipality.

Policy Context

This document is a sub-plan of the City of Yarra Municipal Emergency Management Plan (MEMP). All background information on the municipality and detailed information on supplementary emergency management arrangements can be found in the MEMP. The Heatwave Sub Plan aligns with and should be read in the context of the following Council policies and plans:

- City of Yarra Council Plan 2013-2017
- Yarra Environment Strategy and Climate Change Adaptation Plan 2013
- City of Yarra Health Plan 2013-2017
- City of Yarra Council Business Continuity Plan
- Working in Excessive Temperatures Policy
- Aged & Disability Services Extreme Heat & Heatwave Policy and Procedures 2009

The Heat Plan aligns with the following State government Plans and documents:

- Victorian State Heat Plan 2015
- Our Environment Our Future Sustainability Action Statement 2006
- Climate Change White Paper: The Implementation Plan 2010

Within a legislative context, this plan complies and aligns with the following legislation:

- Emergency Management Act 1986/2013
- Local Government Act 1989
- Public Health and Wellbeing Act 2008
- Climate Change Act 2010
- Planning and Environment Act 1987

Definition of a heatwave and heatwave emergency

In Victoria, a heatwave is generally understood as a period of unusual and uncomfortably hot weather that could impact on human health, community infrastructure and services.

The Bureau of Meteorology defines a heatwave as ‘three days or more of high maximum and minimum temperatures that are unusual for that location’. This definition is used to determine when an emergency response is required under the State Emergency Response Plan (Part 3 EMMV).

The State Heat Health Alert System and the associated Heat Health Thresholds are used to establish when an unusual temperature has been reached for a particular location, which are likely to impact on the health of a community. The point at which a community is impacted is known as the ‘Heat Health Threshold’. A more detailed explanation of the Heat Health Threshold and how it is calculated is available at [Appendix 1](#).

A heatwave emergency is defined as three or more consecutive days when the heat health threshold is breached and in the City of Yarra the threshold is 30°C.

Heat Plan aims and objectives

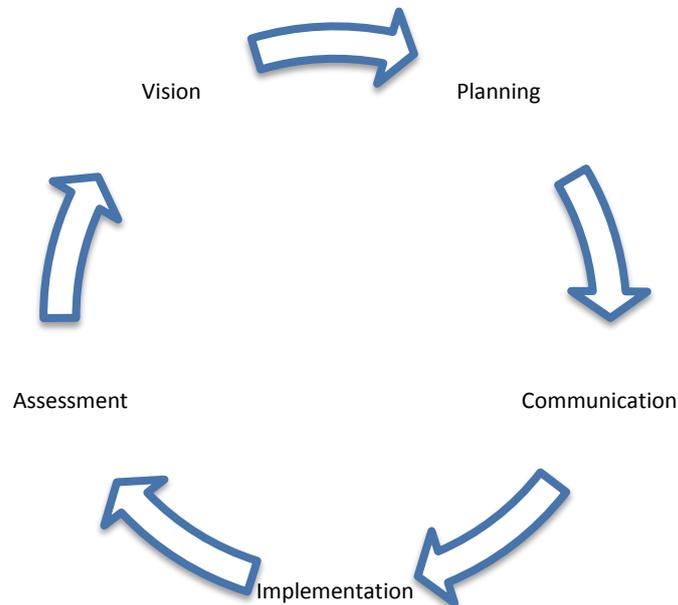
The aim of the Heat Sub Plan is to ensure that Yarra City Council acts appropriately prior to, during and after heatwaves in order to minimise the consequences of heatwaves in the City of Yarra.

The objectives of this plan are to:

- Inform Yarra community members of the risks associated with heatwaves
- Outline actions that the Yarra City Council will take to mitigate the impact of heatwaves
- Outline actions that others can take to diminish the impact of heatwaves
- Complement and support other local, regional and state emergency management plans

Heatwave Planning Framework

The Heat Plan is a sub-plan of the Municipal Emergency Management Plan (MEMP). As such, all structures and processes in the MEMP apply to this Plan. The heatwave planning framework is cyclic and seeks to establish a process that encourages continuous improvement. This framework is illustrated below:



Heatwave Planning Framework illustrated (above) and explained (below)

| Planning Stage | Description |
|-----------------------|--|
| Vision | Develop and agree on the aim, objectives and ways to enhance the plan |
| Planning | Collate evidence, expert advice and end user feedback to write the plan |
| Communication | Discuss the plan with relevant stakeholders and ensure a mutual understanding of stakeholder roles and responsibilities listed in the plan |
| Implementation | Exercise or activate the plan by undertaking actions listed as required |
| Assessment | Evaluate how the plan was implemented; review the plan for relevancy and effectiveness in relation to the aim and objectives |

Review and Evaluation of the Heat Plan

The Heatwave Coordination Group will fully review the Heat Plan every three years during an audit cycle, unless an emergency heatwave event occurs, in which case the plan will be reviewed following the event.

An evaluation of the plan and processes will occur prior to each summer to ensure current processes and systems are appropriate and to remind stakeholders of the plan, their roles and responsibilities, as well as the processes and systems in place.

The DHHS Heatwave Planning Guide and the Plan Review Tool will be used in both the pre Summer evaluation and full plan review process.

Any major changes to the document will be forwarded to the MEMPC for consideration and endorsement.

Heatwave Coordination Group

The Heatwave Coordination Group (HCG) is responsible for ensuring the maintenance and development of the Plan.

The HCG is also responsible for prompting the activation of the plan, ensuring that Council responds appropriately to a heatwave in a coordinated manner. To do this, members of the HCG work together under the leadership of the MRM to enable the availability of adequate resources to meet the demands placed upon the services and functions of Council, especially in regards to maintaining business continuity and complying with emergency management legislation and guidelines.

The Senior Advisor Emergency & Risk Management is the designated secretariat of the Heatwave Coordination Group and has responsibility for coordinating reviews of the plan. The Senior Advisor Emergency & Risk Management will primarily be responsible for document control and input of updates. From time to time, the HCG may co-opt other people (internal and external to the organisation) to participate in the review, testing and development of the heatwave sub plan and its associated procedures.

Heatwave stakeholders in Yarra: roles and responsibilities

In the City of Yarra, a range of stakeholders have important roles and responsibilities regarding heatwave planning, preparedness, response and recovery. These stakeholders are clarified below.

Yarra City Council

To manage the risks and consequences associated with heatwaves, Council commits to:

- Nominating two contacts to receive heat alerts from the department;
- Monitoring the Bureau of Meteorology website for impending heatwaves;
- Activating Council's Heatwave Action Plan as necessary;
- Activating appropriate Council policies and procedures when necessary;
- Evaluating the actions taken during heatwaves at the end of each summer season;
- Maintaining and improving the heatwave plan continuously.

To assist in ensuring Council can and will undertake these functions, Council has developed a specific Heatwave Action Plan [refer to page 17], which details specific actions to be undertaken by Council staff prior to, during and after a heatwave event.

Emergency Management Commissioner

In a heatwave emergency, the Emergency Management Commissioner will be the incident controller with Emergency Management Victoria as the control response agency. As heatwaves may impact infrastructure, such as electricity generation and distribution or transport failure, as well as human health impacts, Emergency Management Victoria will play a key role in ensuring appropriate operational responses are conducted by responsible agencies such as health, infrastructure and transport. The Commissioner will appoint a person to the role of "State Controller – Heat" when conditions reach extreme triggers, to lead the response to the impacts and consequences of heat. The "State Controller – Heat" appointee will work within the State Control Centre.

Departments of Health and Human Services

The Department of Health and Human Services (DHHS) will issue heat health alerts to agencies and individuals who have subscribed to the Chief Health Officer subscription service.

DHHS also posts heat health alerts online: www.health.vic.gov.au/chiefhealthofficer/
 The departments may need to collect data from Yarra City Council during a heat wave, such as details on specific actions undertaken by the Council.

DHHS' high-rise apartment buildings are equipped with electrical generators to operate core functions and elevators to ensure that tenants will be able to safely exit premises in the event of a power outage. DHHS has also identified and prepared community rooms within a number of housing complexes that can be maintained as cool places available to tenants during heatwave periods.

In a heatwave emergency, the Department of Health and Human Services will deliver the following emergency management functions at the regional level:

-
- regional health coordination
- recovery coordination

Ambulance Victoria

At the regional level Ambulance Victoria delivers the emergency management function of regional health command.

Not-For-Profit, Community and Commercial Organisations

Council encourages all not-for-profit community groups, community and commercial service providers delivering services to vulnerable people to develop their own heat management plans.

There are many not-for-profit organisations and community service providers within the City of Yarra that need to ensure that they monitor vulnerable clients during a heatwave and take necessary action in the event that clients suffer heat related illness. These service providers should also ensure that their clients receive appropriate and timely information and advice in the event of a heatwave.

Examples of some not-for-profit, community and commercial organisations with a role to play in mitigating the effects of a heatwave in Yarra are:

- Hospitals, ambulances, medical centres, pharmacies
- Community service groups (e.g. Brotherhood of St Lawrence, St Mary's House of Welcome)
- Cinemas, shops, market organisers, local business associations
- Neighbourhood Houses, community groups (e.g. Seniors, Youth, Cultural, Religious, RSL)
- Local Childcare Centres, Kindergartens, playgroups
- Red Cross, disability services providers
- Libraries, tourism centres, museums, galleries
- Local sporting associations, leisure, health and sports centres

Actions that can be taken by these groups are outlined in the table below:

| Pre-summer (preparation) | During summer (prevention) | In a heatwave (response) |
|--|---|--|
| Revisit actions from the previous summer and identify improvements | Distribute DHHS heatwave information | Contact those listed on the Vulnerable People Register or community register |
| Liaise with other stakeholders to ensure consistency and interoperability of heatwave messaging and activity | Promote heat health messages through internal and external communications channels (e.g. newsletters, meetings) | Develop support plans for heatwave conditions for vulnerable clients |
| Review heat health protocols | Maintain regular contact with | Prioritise tasks (especially |

| Pre-summer (preparation) | During summer (prevention) | In a heatwave (response) |
|--|---|--|
| for the workplace and staff | vulnerable clients or persons | physically demanding tasks) |
| Update any community or agency registers | Identify and organise cool areas | Assess risk for clients and staff |
| Prepare or revise key heat health messages | Subscribe to the Heat Health Alert message system | Reschedule staff work times and service delivery times |
| Develop business continuity plans to cope with heatwaves | Provide staff with access to extra water and breaks | Provide additional fluids and cool places to rest |
| Educate staff of key heatwave risks and messages | Reschedule staff work or business hours | Modify programs |
| Assist vulnerable persons in developing heat health and personal emergency plans | Provide staff with personal protective clothing and equipment | Transport clients during cooler parts of the day if possible |
| Audit client homes (if appropriate) | Modify programs and services | Alter outdoor activities and outdoor play times for children |

Residents and Visitors in the City of Yarra

Everyone in Yarra has a role in preparing for and coping with heatwaves. Prior to periods of heat, residents are advised to prepare in the following ways:

- Plan for hot weather, including assessing whether your home is adequately prepared to cope with forecasted heat;
- Look at the things you can do to make your home cooler such as planting trees or installing awnings, shade cloth or external blinds on the sides of the house facing the sun.
- Think about what you would do if a heatwave caused loss of electricity, disrupted public transport or caused school and workplace closures;
- Check your fans and have your air-conditioner serviced, if necessary;
- Think about how you can help people you know who may need assistance in a heatwave.

During a period of intense heat in Yarra City, residents and visitors are advised to take the following steps:

| Cool your home down | Stay out of the heat | Keep cool and hydrated | Assist Others | Get Help |
|---|--|--|--|--|
| <ul style="list-style-type: none"> • Close windows during the day if they are exposed to the sun; open windows at night when the temperature is cooler • Turn off lights and electrical equipment if they are non-essential • Sleep in the | <ul style="list-style-type: none"> • Keep out of the sun during the hottest part of the day • Avoid intense physical exercise • Wear light, loose fitting clothes • Find an air conditioned place to spend the day (e.g. library, pool) • Avoid outdoor | <ul style="list-style-type: none"> • Drink plenty of water • Avoid caffeine and alcohol as they dehydrate • Take a cool shower • Spray water on your skin or clothes • Keep a damp cloth on the back of your neck | <ul style="list-style-type: none"> • Never leave children or pets in cars • Contact sick family/ neighbours to check they are ok • Recognise the signs of heat related illnesses in others and get help | <ul style="list-style-type: none"> • For 24-hour health advice contact NURSE-ON-CALL: 1300 60 60 24. • For life-threatening emergencies Call: 000. |

| Cool your home down | Stay out of the heat | Keep cool and hydrated | Assist Others | Get Help |
|--------------------------|-----------------------|------------------------|---------------|----------|
| coolest room of the home | travel and activities | | | |

Yarra Community Profile

A detailed profile of the Yarra Community is available in Section 4 of the Municipal Emergency Management Plan. The community profile provides detailed information on the following:

- Population
- Topography and Climate
- Suburbs in the municipality
- Infrastructure and Utilities
- Significant natural and man-made features
- Cultural Heritage
- Groups who are vulnerable in emergencies
- History of municipal emergencies in Yarra

Yarra Heatwave Vulnerability Profile

Technically speaking, everyone is at risk of harm during a heatwave if appropriate precautions are not taken. Heatwaves can cause death and seriously affect thousands of people. As well as the health impacts of a heatwave, there can also be a social and cultural impact (which may mean more or less social contact depending on the person and their situation), an economic impact, a natural and a built environment impact.

Most people have the knowledge, ability and capacity to look after themselves in the heat and will respond appropriately to public health messages. However, many peoples' capacity to respond to the heat is impaired for a variety of reasons. An understanding of who is the most vulnerable to heatwaves allows targeted action to assist those most in need. The following table outlines the most vulnerable groups in the municipality and how heatwaves may affect them:

| Vulnerable People | Reason for vulnerability in a heatwave |
|----------------------------------|--|
| Aged (over 65) | Ability to perceive and adapt to temperature variation declines with age as does perception of hydration resulting in particular vulnerability to heat stress and illness High likelihood to have at least one, if not multiple other vulnerabilities |
| Overweight or Obese | Greater mass to surface ratio makes it harder for the body to cool down |
| Pregnant and breastfeeding women | Greater body mass to cool, higher than normal hydration needs and hormonal variation can affect perception of heat and hydration |
| Babies, Infants, Children | Ability to perceive and adapt to temperature variation is still developing. Children may not be able to undertake adaptive measures on their own. |
| Chronically ill | Ability to perceive and respond (consciously and unconsciously) to environment impaired. Particularly medical conditions that affect the cardiovascular, respiratory, renal and endocrine systems or thermoregulation capacity |
| Limited or poor mobility | Less able to adapt to physical environment to make it cooler or to seek cool respite |

| | |
|---|--|
| People taking certain medications | Some medications may interfere with temperature regulation |
| CALD groups | Multiple and complex barriers in accessing health services and community messages |
| Homeless and housing insecure | Difficulty in accessing relief from the heat (cool places) and health services |
| Outdoor workers and outdoor event goers | Difficulty in accessing relief from the heat (cool places), inaccessibility of water |
| Anyone else who cannot find relief from the heat for at least 2 hours per day | 2 hours relief provides the body with critical recuperation time ¹ . Factors such as poverty and/or social isolation can impair the ability for a person to find relief from the heat for at least 2 hours per day. |

An expanded list of groups susceptible to heat related illness is available from appendix A of the State Heat Plan <http://files.em.vic.gov.au/EMV-web/State-Heat-Plan.pdf>

An extreme (i.e. prolonged) heatwave has the potential to severely affect everyone, especially if there is a parallel hazard affecting the municipality (such as a power outage). A list of vulnerable facilities and the most vulnerable people in Yarra City is maintained by DHHS, Council and associated service providers. In a heatwave emergency the Victoria Police can access these lists for evacuation planning and emergency relief planning purposes.

Risks associated with heatwaves in Yarra

Heatwaves in the City of Yarra can cause significant harm to the City's individuals, groups and communities. The types of harm caused by heatwaves include:

- Illness, injury or fatality
- Displacement of population from housing estates
- Decreased economic activity
- Disruption to public transport and electricity supply (including blackouts and brownouts)
- Increased Council staff absenteeism
- Increased anti-social behaviour
- Increased probability of fires
- Increased severity in the consequences of concomitant emergency events
- Stress to parks and gardens
- Stress and injury to domestic animals and wildlife
- Increased demand on medical and social facilities

Impact on physical health

When the surrounding temperature is higher than skin temperature the only effective heat-loss mechanism is sweating. Therefore, any factor that reduces the effectiveness of sweating can cause the body to overheat. The following table outlines the three types of heat-related illnesses:

Heat-related illnesses

| | |
|-----------------|--|
| Heat cramps | Usually muscle pains or spasms, commonly occurring in the abdomen, arms or legs and may be a symptom of heat exhaustion. Heat cramps may occur after strenuous activity in a hot environment, when the body gets depleted of salt and water. |
| Heat exhaustion | A serious condition that can develop into heat stroke. Someone experiencing |

¹ Heat Health Plans, WHO Europe, 2006

| | |
|-------------|---|
| | heat exhaustion may appear pale and sweating. They may have a rapid heart rate, muscle cramps, weakness, dizziness, headache, nausea, vomiting or fainting. |
| Heat stroke | <u>A life-threatening emergency</u> . It occurs when the body temperature rises above 40.5°C. The symptoms may be the same as for heat exhaustion, but the skin may be dry with no sweating, and the person’s mental condition worsens. They may stagger, appear confused, have a fit or collapse and become unconscious. |

Heatwaves can also aggravate existing medical conditions.

Impact on social behaviour

In a heatwave, people quickly become grumpier, more strained. Tempers flare. Thinking and concentration are impaired. Normal road rage is amplified. Domestic disputes turn nasty more easily. This has costs and consequences: it ties up law enforcement, hospitals, and other critical services.

Higher rates of drug and alcohol misuse, violence, family dissolution, self-harm and suicide are more likely to follow more extreme weather events. Evidence is beginning to emerge that drought and heatwaves lead to higher rates of self-harm and suicide, as much as 8 per cent higher².

Impact on Yarra’s built environment, infrastructure and utilities

Heatwaves place stress on many types of infrastructure including roads, train and tram tracks, and overhead power lines. This includes overhead power lines sagging³, power failures or blackouts impacting the operation of electrified trains, trams and traffic signals.

The risk of extreme heat days is compounded in urban areas due to an effect known as the Urban Heat Island (UHI) effect. Built-up areas experience higher temperatures than surrounding areas due to expanses of exposed concrete, asphalt, and steel which retain heat and release it over longer time periods than vegetation. This can cause average urban daytime air temperatures to be up to 5.6°C higher than the surrounding areas in summer⁴.

Heatwaves place pressure on the provision of essential services such as electricity. This can result from either heat impacts on infrastructure or increased demand. During emergency events, power companies make an assessment of the damage and prioritise repairs to ensure those most in need, such as hospitals, are returned to power first.

Increased use of air-conditioners pushes up demand for power during heatwaves and can potentially outstrip supply leading to power blackouts. This risk has significant flow on implications during a heatwave, particularly for those managing their heat stress with air-conditioning. Mass stranding of public transport passengers may also occur if outages are sufficient to disrupt transport services.

The Department of Climate Change and Energy Efficiency has prepared a document⁵, which outlines the risks to public transport infrastructure and projects that will improve reliability during very hot days.

² Taken from The Climate Institute (2013) *The human impact of heatwaves and extreme weather*

³ Energy Safe Victoria (2014) <http://www.esv.vic.gov.au/About-ESV/Campaigns/Look-up-and-live>

⁴ Akbari, Menon & Rosenfeld 2009 *Global Cooling: increasing world-wide albedos to offset CO2 Climate Change*

⁵ AECOM (2012) [Adaptation of Melbourne’s Metropolitan Rail Network in Response to Climate Change](#)

Impact on Yarra's economy

Extreme heat can restrict the productivity of workers, particularly those working outdoors or in heat-exposed jobs. As heatwaves become even hotter and occur more often, decreased labour productivity will become even more costly and will likely force changes in the workplace, such as a transition to working night shifts⁶.

Agricultural losses, outages of infrastructure and utilities as a result of heatwaves can constrain economic productivity and growth of the economy, as business may suspend or products become unavailable for consumption. Individuals may also find themselves in economic hardship if they are dependent on costly methods of cooling (e.g. air conditioning).

Impact on Yarra's natural landscape

The main remnants of the natural landscape character of Yarra City are located along the waterway corridors. Due to the long period of Yarra's settlement and extent of urbanisation and change, these remnants are relatively small and therefore significant. A heatwave in Yarra City could significantly reduce the health and amount of vegetation along these waterway corridors.

Impact on Yarra's wildlife and pets

Wildlife and pets, like people, are susceptible to heat-related stress and illness. But unlike people, animals do not sweat. Instead of sweating, animals regulate their temperature through the pads of their feet and tongues. Animal owners should consider a range of solutions to prepare and protect their animals during a heatwave.

Actions that can minimise risks associated with harm to pets, animals and wildlife in a heatwave:

- Bring pets inside
- Ensure there is shade outside for animals
- Don't leave animals in garages, sheds or cars on hot days
- Ensure pets have water that is clean, fresh and topped up
- Set aside a bowl of water in your garden for birds and wildlife to drink from
- Refrigerate pet food
- Remember older and long haired animals can be more susceptible to the effects of heat
- If they show signs of lethargy, excessive panting or breathing problems, put pets in a cool (but not icy cold) bath, if they do not improve take them to the vet

Impact on Council Business Continuity

A heatwave could impact on Council operations and service provision levels in a number of ways. A detailed overview of impacts of a heatwave on the organisation is provided at [Appendix 2](#).

The main impacts on Council operations that all branches need to take into account are:

- Increased staff absenteeism
- Staff fatigue and heat stress
- Power outages leading to suspension or cessation of works and service delivery
- High demand on air-conditioned facilities
- High demand on social services

⁶ Climate Council Report (2014): <http://www.climatecouncil.org.au/heatwaves-report>

- Impaired ability to undertake outdoor work
- Cancelled public transport services
- Increase in anti-social behaviour
- Inundation of calls and increased demand on Access Yarra and after hours lines and staff

Council's 2014 Business Continuity Plan addresses the management of these potential impacts, identifying critical services and the arrangements to maintain them. The Plan identifies that a collaborative and coordinated effort between Council's business continuity and emergency management coordination groups is needed in the event of MEMP activation due to an emergency.

In a heatwave emergency, there are specific everyday Council services and functions that may become essential because of its ability to assist the community to cope with the impacts of heat.

[Appendix 2: Quick Council Guide to Business Continuity in Heatwaves](#) outlines business functions and services that need to be prioritised in a heatwave by Council business units. The Appendix offers a quick reference for Council units to use in the event of a heatwave. It should be applied alongside actions listed in the Council Heatwave Action Plan.

Heatwave Communications

The key purpose of a Heatwave Communications is to generate preparedness and improve community resilience to heatwave conditions.

The Department of Health and Human Services (DHHS) has the lead responsibility for preparing messages and general information about management in a heatwave. Fact sheets are provided on the Department's website and the Better Health website. A media toolkit has been prepared for use by local government and is available from <https://www.betterhealth.vic.gov.au/council-media-kit-survive-the-heat>. This toolkit comprises a range of electronic documents that can be used to ensure media releases are localised.

The Emergency Management Commissioner may engage the support of Emergency Management Joint Public Information Committee (EMJPIC) to ensure the state-level messages from all agencies with a role or responsibility in managing the impact and consequences of an extreme heat event are prioritised and included in the key messages to the public. This may also include the integration of messaging across all emergencies, such as fires, storm, etc. If EMJPIC-Heat is convened without the State control function being activated the agency leading the predominate consequence will be responsible for coordinating key messages and agencies/departments will publish these through their normal channels based on the joined-up approach established by EMJPIC-Heat.

Advice relating to heatwaves and heat are prepared by the Chief Health Officer from DHHS and disseminated by DHHS, the Bureau of Meteorology, Ambulance Victoria, service providers, health professionals and local media. Relevant Community Groups are encouraged to subscribe to the DHHS heat alert emails.

The heat health messages currently being promoted by DHHS are:

- **Keep cool in your home**
- **Drink plenty of water**
- **Stay out of the sun**
- **Look after yourself and others**

Council acts as a supporting agency to assist in the localised dissemination of advice and warnings. DHHS messages can be expanded to be a little more comprehensive and tailored to local community audiences.

For the City of Yarra Council, communicating heatwave risk and safety information occurs all year round and is a task undertaken by multiple business areas across the organisation. The Heatwave Action Plan [refer to next page] identifies and assigns communications tasks to specific business units.

In addition to the ongoing communications tasks listed in the Action Plan, Yarra City Council is developing and implementing a special heatwave safety communications campaign, which is tailored each year to target one specific vulnerable group in Yarra City.

Relief and recovery arrangements after a heatwave emergency

Any relief and recovery assistance required following a heatwave emergency will be managed using the relief and recovery arrangements documented in the City of Yarra Municipal Emergency Management Plan (MEMP), The City of Yarra Emergency Relief Sub Plan and The City of Yarra Emergency Recovery Sub Plan.

References and Appendices

Emergency Management Victoria (2015) [State Heat Plan](#)
AECOM (2012) [Adaptation of Melbourne's Metropolitan Rail Network in Response to Climate Change](#)
Akbari, Menon & Rosenfeld (2009) [Global Cooling: increasing world-wide albedos to offset CO2](#)
Climate Council Report (2014) [Heatwaves: Hotter, Longer, More Often](#)
Department of Health (2009) [Heatwave Planning Guide](#)
Department of Health (2011) [Heatwave plan review tool](#)
Energy Safe Victoria (2014) [Look Up and Live](#)
The Climate Institute (2013) [The human impact of heatwaves and extreme weather](#)
WHO Europe (2008) [Heat Health Action Plans: Guidance](#)

Related Council Policies and Procedures

Working in Excessive Temperatures Policy [TRIM D10/8319]
Aged & Disability Services: Heat, Extreme Heat & Heatwave Policy and Procedures [TRIM D14/171036]
Aged & Disability Services: Heat, Extreme Heat & Heatwave Attachments [TRIM D14/171046]
Leisure Services: Excessive Heat & Heat-wave Policy and Procedures
Leisure Services: Dealing with inappropriate behaviour Procedure
Leisure Services: Dealing with difficult customer situations Procedure
Buildings Asset Management Plan [TRIM D13/49758]

Department of Health and Human Services Fact Sheets

Heat health alert systems Information and Guidance:
[http://docs.health.vic.gov.au/docs/doc/22E20DCD0BA4CDC8CA257C0C0082636F/\\$FILE/Heat%20health%20alert%20system_guidance%202013%20-%202014%20Final.pdf](http://docs.health.vic.gov.au/docs/doc/22E20DCD0BA4CDC8CA257C0C0082636F/$FILE/Heat%20health%20alert%20system_guidance%202013%20-%202014%20Final.pdf)

Staying Healthy in the Heat Brochure
[http://docs.health.vic.gov.au/docs/doc/BFB41C1717FDEA1CA257A4400174C2E/\\$FILE/1310013_heatwave_dl_oct13_WEB_A.pdf](http://docs.health.vic.gov.au/docs/doc/BFB41C1717FDEA1CA257A4400174C2E/$FILE/1310013_heatwave_dl_oct13_WEB_A.pdf)

Staying healthy in the heat factsheet for clinicians
[http://docs.health.vic.gov.au/docs/doc/08528C6E74A6B83BCA257A440028E548/\\$FILE/1310012_heatwave_clinicians_info_oct13_WEB.pdf](http://docs.health.vic.gov.au/docs/doc/08528C6E74A6B83BCA257A440028E548/$FILE/1310012_heatwave_clinicians_info_oct13_WEB.pdf)

Staying Healthy in the Heat: Supporting People by telephone
[http://docs.health.vic.gov.au/docs/doc/70D8C0305D98072CCA257A440026D318/\\$FILE/Supporting%20people%20by%20telephone.pdf](http://docs.health.vic.gov.au/docs/doc/70D8C0305D98072CCA257A440026D318/$FILE/Supporting%20people%20by%20telephone.pdf)

Appendix 1: Heat Health Thresholds and Alerts explained

DHHS has identified heat health temperature thresholds for Victoria, above which heat-related illness and mortality increases substantially. These thresholds differ across the nine weather forecast districts in Victoria; in the City of Yarra, the heat health temperature threshold is 30°C. What this means for Yarra residents and visitors is that if the daily minimum and maximum temperatures forecast⁷ for the city average above 30°C degrees, DHHS will issue a heat health alert for the district.

Calculating the average temperature

The average temperature is calculated from the forecast **daily maximum** and the forecast overnight temperature, which is the **daily minimum for the following day**.

An example of this calculation is demonstrated below:

Melbourne

Tuesday

Min: 20°C

Max: 38°C

Average calculation for

Tuesday

$(38+25) / 2 = 31.5^{\circ}\text{C}$

The threshold for Melbourne =
Average of 30°C

Wednesday

Min 25°C

Max: 31°C

The temperature forecast
indicates that the threshold will be
exceeded.

This calculation will be repeated for each of the seven days including in the daily forecast.

Heat health alerts

The heat health alerts aim to notify relevant local government councils and service providers that heatwave conditions are imminent.

The Department of Health and Human Services (DHHS) will issue heat health alerts to agencies and individuals who have subscribed to the Chief Health Officer subscription service.

The heat health alerts are available from the DHHS website

www.health.vic.gov.au/chiefhealthofficer/

Where possible, heat health alerts will be issued by email 3-4 days prior to forecast heatwave conditions and should provide recipients with early warning.

⁷ Forecast by the Bureau of Meteorology

