

# Heatwave Plan 2012-2015



**CORANGAMITE  
SHIRE**



**December 2012**

*Council acknowledges the assistance of the Glenelg Shire Council in the development of this plan.*

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## Introduction

Local governments across Victoria have been asked to prepare heatwave plans to support their local communities to adapt to heatwave conditions. By developing our own plan, we can use our understanding of local conditions and resources to better prepare-for, respond-to and recover-from heatwave conditions, taking action to support the community to reduce health impacts where possible.

High temperatures can seriously impact on the health of people in our area. We need to be well prepared in advance to make sure our community has the necessary tools to cope in times of extreme heat.

By having a *Heatwave Plan*, we can:

- ensure that health information and support is readily available to our community
- increase the capacity of our community to respond during heatwaves
- manage a heatwave emergency more effectively and
- develop long term changes in our behaviour to improve our health and wellbeing.

The aim of our *Heatwave Plan* is to:

- protect the health of the Corangamite community by reducing harm from heatwaves.

We will achieve this by:

- identifying vulnerable population groups in our community and the risks they face during heatwaves
- developing partnerships with local organisations to better coordinate a response to heatwaves
- outlining effective strategies and actions to implement in the event of a heatwave and
- building practices to evaluate the ongoing effectiveness of the plan.

Importantly, the strategy outlines a plan of action for staff to better prepare for, respond to and prevent heatwave related harm. A four staged approach will apply.

- Phase 1: Pre summer preparation
- Phase 2: During summer prevention
- Phase 3: Heatwave response
- Phase 4: Heatwave recovery

The *Corangamite Shire Council Heatwave Plan* is underpinned by a long term approach by Council to reduce the scale of climate change and decrease its impact by adapting the built environment. Council promotes sustainable living by encouraging all residents to take practical action and reduce their ecological footprints.

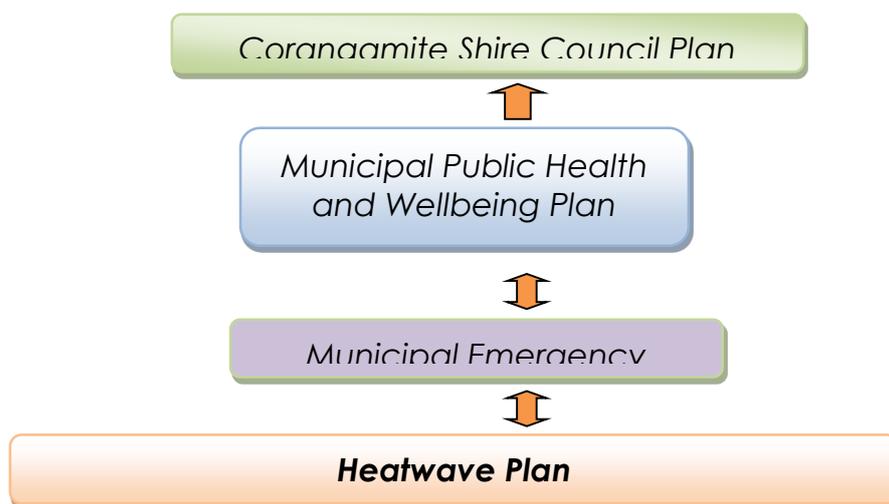
## Policy context

The *Heatwave Plan* has been written to:

- be consistent with legislation, departmental guidelines and other Council planning frameworks relevant to heatwaves. These include:
  - *Heatwave Plan for Victoria* (2011);
  - *Public Health and Wellbeing Act 2008*;
  - *Emergency Management Act 1986*;
  - *Taking action for Victoria's future: Climate Change White Paper – The implementation plan*;
  - *Climate Change Act 2010*;
  - *Planning and Environment Act 1987*; and
  - *Local Government Act 1989*.
- outline health and community actions and response arrangements to heatwave alert
- identify vulnerable persons within the Corangamite Shire
- propose a clear communication strategy to initiate alert, response and recovery phases of the plan
- describe key stakeholder roles and recommend stakeholder actions and
- promote a community awareness and education component.

The *Corangamite Shire Council Heatwave Plan* is an important part of a suite of Council publications that provide consistent community-wide messages around how to stay healthy. This plan informs existing frameworks by outlining a coordinated, municipal wide approach to better understanding the health impacts of heatwaves.

Figure 1: Planning responsibilities of local



## Heatwaves and health

As temperatures rise, so does the risk of contracting a heat related illness - a medical condition that results from the body's inability to cope with heat and cool

itself. If left untreated, a heat illness can lead to serious complications, even death. In fact, heat kills more people than tornadoes, hurricanes, lightning and flash floods – combined.

Heat-related illness can range from mild conditions, such as a rash or cramps, to very serious conditions, such as heat stroke, which can be fatal. Heatwaves can also exacerbate existing medical conditions including heart and kidney disease. Heat-related illness can make people feel uncomfortable, not so much because they feel hot, but rather because they sense how difficult it has become to lose body heat at the rate necessary to keep their inner body temperature close to 37°C. The body responds to this stress progressively through three phases.

1. Heat cramps - muscular pains and spasms caused by heavy exertion. Although heat cramps are the least severe phase they are an early signal that the body is having trouble with the heat.
2. Heat exhaustion - typically occurs when people exercise heavily or work in a hot, humid place where body fluids are lost through heavy sweating. Blood flow to the skin increases, causing a decrease of flow to the vital organs. This results in mild shock with symptoms of cold, clammy and pale skin, together with fainting and vomiting. If not treated the victim may suffer heat stroke.
3. Heat stroke - is life threatening. The victim's temperature control system, which produces sweating to cool the body, stops working. The body temperature may exceed 40.6°C potentially causing brain damage and death if the body is not cooled quickly.

High temperatures can also be linked to increased hospital admissions relating to heat stress, dehydration, or as a result of heat exacerbating existing conditions; increased number of work-related accidents and reduced work productivity; and decreased sporting performance.

To help prevent the onset of a heat related illness, people in the Corangamite Shire are advised to follow the four key health messages promoted by the Department of Health (DoH).

- Keep cool
- Drink plenty of water
- Stay out of the sun
- Look after yourself and others.

General care for heat emergencies includes cooling the body, giving fluids and minimising shock.

## Heatwaves and the Corangamite Shire

People in the Corangamite Shire are generally accustomed to living in hot weather and are known to be resilient in hot conditions. For this reason, many of us can become complacent about extreme heat events and don't believe we could be susceptible to heat-related health impacts.

The events of the January 2009 heatwave in Victoria resulted in an estimated 374 excess deaths compared with the average rate in the same week over the previous five years, and serves as a reminder that the impact of heatwaves on human health is real and life threatening<sup>1</sup>. Our region experienced heat of unprecedented intensity and duration with maximum temperatures 12 to 15°C above normal for much of the area. The temperature was above 43°C for three consecutive days from 28 to 30 January reaching a peak of 45.1°C on 30 January 2009.

Research tells us that climate change is expected to increase the frequency and intensity of such heatwaves in our area. During the last decade, average daily maximum temperatures in our region have been recorded as 0.3°C warmer than the 30 year (1961 to 1990) average<sup>2</sup>. The future climate of our area is expected to be hotter and drier than it is today. By 2030, average annual temperatures will be around 0.8°C warmer and the number of hot days (days over 30°C) will continue to increase. Extreme weather events are predicted to become more frequent and severe in the years to come.

Very hot days are usually associated with hazardous fire weather conditions in the region. The fire threat is increased when thunderstorms develop causing lightning that provides the ignition for fires. This is particularly the case when thunderstorms cause little or no rain, as is sometimes the case in our Shire.

1. Victorian Office of the Chief Health Officer (2009). Office of the Chief Health Officer Report

2. Victorian Government of Sustainability and Environment (2008). Climate Change in Corangamite

### Heat health alert

DoH has developed a state-wide Heat Health Alert System to notify councils, hospitals, and health and community service providers of forecast heatwave conditions which are likely to affect human health. Research tells us that when our area reaches a heat health temperature threshold of 30°C or above, heat-related illness and mortality increases substantially.

Our threshold is calculated by the Bureau of Meteorology (BoM). It determines the daily average temperature: the average of the forecast daily maximum temperature and the forecast overnight temperature (which is the daily minimum for the following day).

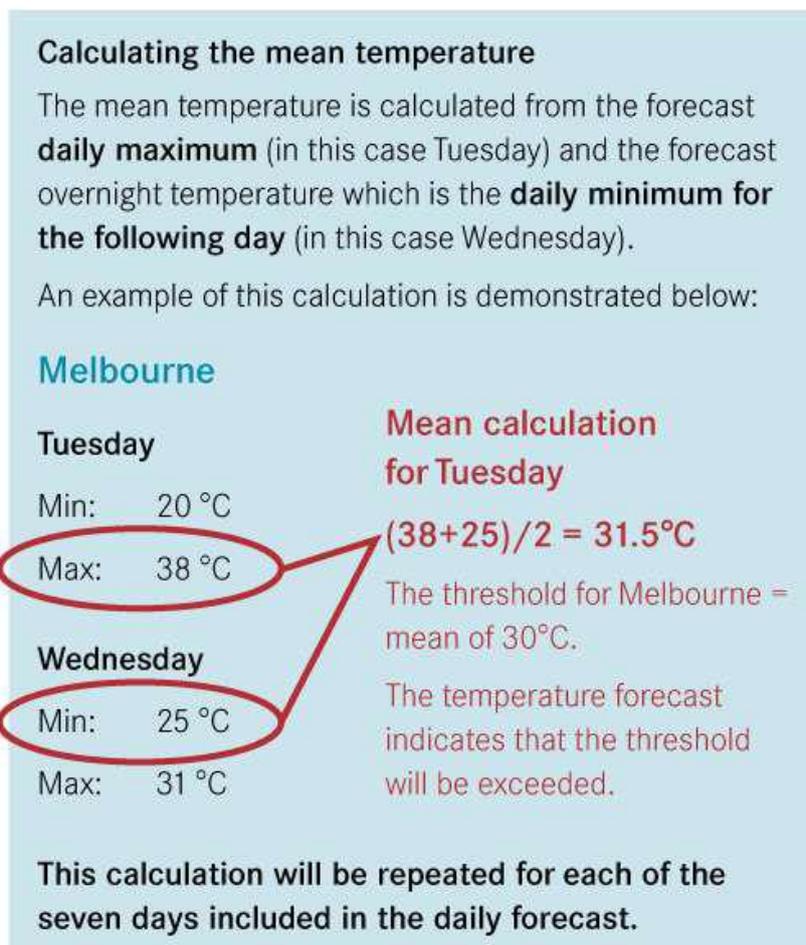
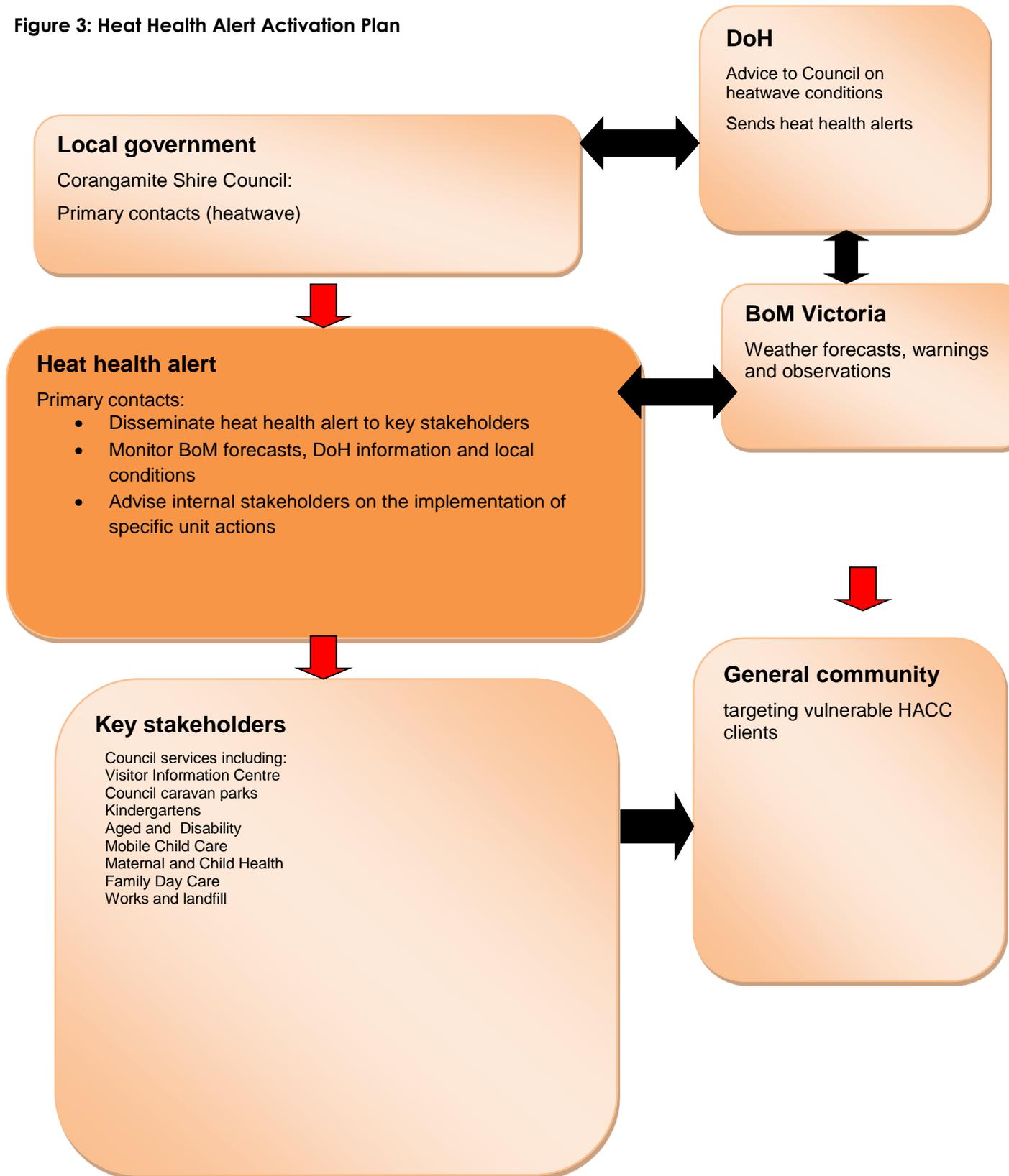


Figure 2: Calculating Heat Health Alert thresholds

When forecast average temperatures are predicted to reach or exceed the heat health temperature threshold, which is 30 degrees for the Corangamite Shire, the department will issue a heat health alert to designated contacts, including our Council primary contacts.

Efficient response to heat health alerts is dependent upon the Corangamite Shire Council informing all key stakeholders of their responsibilities to enact their own heatwave actions via email, fax or telephone. An activation plan will be followed to ensure this process is carried out smoothly and effectively (see Figure 3).

**Figure 3: Heat Health Alert Activation Plan**



## People most at-risk to heatwaves

Heatwaves can affect anybody, including the young and healthy; however, there are certain population groups that are more at risk than others. These include the elderly, infants and young children, people with a disability, people with a pre-existing medical condition and people who are socially and economically disadvantaged. Other groups at risk to heat include people who are overweight, people who over exert during work or exercise and people confined to bed and unable to care for themselves.

While the Corangamite Shire Council *Heatwave Plan* plans for a whole-of-community response, it particularly focuses upon the following groups:

- The elderly: People over 65 years of age

Most studies have found that heat-related mortality is highest in those over 65 years of age. In Victoria's January 2009 heatwave, reportable deaths for those 65 years and older more than doubled<sup>3</sup>. Corangamite Shire's population, like most parts of Australia, is ageing. This ageing trend is projected to continue, but at a higher rate as the baby boomers enter old age. In 2009, 18.1% of our population was aged 65 years or older, compared to 13.6% state-wide. By 2026, the percentage of the population in our municipality over 65 is projected to increase to 19.8%<sup>4</sup>.

- Council staff as carers, or in service delivery and outdoor work

Council employees undertaking outdoor tasks in the sun, people working in hot, stuffy and poorly ventilated buildings, and staff travelling in non air conditioned vehicles for long periods of time without adequate breaks, shade or water can face serious dehydration and risk of a heat-related illness. It is a legislative requirement and the responsibility of Council to ensure it provides a safe and healthy work environment. This means workers must have adequate access to amenities such as water and wear suitable clothing.

- People with a disability and low mobility

Many people with a disability, particularly those with a severe physical or mental impairment, are amongst the most vulnerable and disadvantaged in our society. They can be badly affected by prolonged periods of hot weather. The incidence of disability increases with age, peaking in the 55 to 74 years age group.

3. Victorian Office of the Chief Health Officer 2009. Office of the Chief Health Officer Report

4. Forecast id – Corangamite Shire

## Key Council Areas

Community Services

Recreation

Emergency Management

Tourism

Community Relations

Facilities

Human Resources

Works

Each of these Council areas has an important role to play in the planning for a heatwave and in the event of a declared heatwave. Recommendations around what stakeholders can do in times of extreme heat are summarised in the following action plan.

## What we are going to do

To be better prepared for heatwave conditions this summer, Corangamite Shire Council is going to:

- include heatwave preparation, response and recovery into existing municipal plans
- make use of existing community registers
- use our community services and organisations to support vulnerable populations
- engage in a communication and media campaign using heatwave messages consistent with DoH materials

- respond to the state activated heat alert system in a planned and considered way.

### ***Our action plan***

Our action plan is not just about responding to a pending heatwave; instead, it provides guidance all-year-round as we prepare our community in advance for very hot summers. Our actions then can be divided into four phases.

- Phase 1: Pre summer preparation
- Phase 2: During summer prevention
- Phase 3: Heatwave response
- Phase 4: Heatwave recovery

Each phase is characterised by a set of key actions (see Figure 4).

<b>Phase 1</b> <b>Pre summer preparation</b> <b>April 1 to November 30</b>	To build capacity within Corangamite Shire communities leading up to the summer months
<b>Phase 2</b> <b>During summer prevention</b> <b>December 1 to March 31</b>	To further build resilience amongst Corangamite Shire residents during the summer months
<b>Phase 3</b> <b>Heatwave response</b> <b>Trigger: DoH heat health alert</b>	To respond to a state activated heat alert system in a planned and considered way
<b>Phase 4</b> <b>Heatwave recovery</b>	To review heatwave actions after each heatwave event or at the end of summer

**Figure 4: Summary of heatwave plan actions**

## **Pre- Summer Preparation -What we will do in Phase 1**

Phase 1 includes a range of actions to build capacity within Corangamite Shire communities leading up to the summer months. It identifies and engages all key stakeholders. This phase is implemented between April 1 and November 30 each year.

Action	Responsibility	Timeline	Resources
Update general heatwave information, material and resources <ul style="list-style-type: none"> <li>Check for new resources/materials published by Department of Health or other organisations to support heatwave planning</li> <li>Check for policy/legislation changes that may now affect actions</li> <li>Distribute updated information to relevant Council departments</li> <li>Provide information to update web pages</li> <li>Discard outdated information</li> <li>Review and update internal policies, procedures and plans relating to health and wellbeing during heat events</li> <li>Review and update heat health alert contacts</li> </ul>	M.C.S./C.A.D.S.  M.C.S./C.A.D.S. M.C.S./C.A.D.S. M.C.S./C.A.D.S. M.C.S./C.A.D.S. All Managers  All Managers	April, May	Staying Healthy in the Heat packs
Implement 'Before Summer' Communications Campaign <ul style="list-style-type: none"> <li>Re-order general heatwave information, materials and resources</li> <li>Revisit events calendar to target new events that could support heatwave messages</li> <li>Plan potential media articles/topics/photo shoots</li> <li>Provide suitable brochures to vulnerable groups</li> </ul>	M.C.R. All Managers M.C.R. C.A.D.S.	April to November	
Identify and engage local stakeholders <ul style="list-style-type: none"> <li>Revisit and update local stakeholder email list for Heat Health Alert days</li> <li>Provide local sporting clubs and caravan parks with DoH Heat Health information to enable them to develop heat health actions in line with this Heatwave Plan</li> <li>Ensure event organisers are informed of appropriate heat health alert actions</li> <li>Develop and maintain a contact list for council operated caravan parks</li> </ul>	M.C.S./M.E.E./C.A.D.S M.C.R. M.E.D.T/M.C.R. M.E.E.	April to November	
Review vulnerable groups and update community registers <ul style="list-style-type: none"> <li>Develop/update client databases and community registers</li> <li>Assess client vulnerability to heat related illness</li> </ul>	C.A.D.S C.A.D.S.	April to November	
Educate internal staff <ul style="list-style-type: none"> <li>Revisit staff awareness and first aid training relating to heat and health</li> <li>Organise pre summer emergency management meeting</li> </ul>	M.H.R. M.E.E.	April to November	

## What key stakeholders can do in Phase 1

In Phase 1, key stakeholders will be advised by Council to consider:

- revisiting their actions from the previous summer and evaluate their levels of effectiveness;
- meeting with other stakeholders to revise and amend key heatwave messages and actions;
- updating their community registers;
- collecting general heatwave information from Council;
- educating any new staff of key heatwave messages; and
- auditing client homes (if appropriate).

### Key

M.C.S.	Manager Community Services
M.E.E.	Manager Environment and Emergency
M.E.D.T.	Manager Economic Development and Tourism
M.C.R.	Manager Community Relations
M.H.R.	Manager Human Resources
M.F.R.	Manager Facilities and Recreation
M.W.	Manager Works
C. A.D.S.	Coordinator, Aged and Disability Services

## ***During Summer Prevention -What we will do in Phase 2***

Phase 2 includes a range of actions to further build resilience amongst Corangamite Shire residents during the summer months. It directly involves the actions of most key stakeholders. This phase is implemented between December 1 and March 31 each year.

Action	Responsibility	Timeline	Resources
Implement 'During Summer' Communications Campaign <ul style="list-style-type: none"> <li>• Coordinate media articles</li> <li>• Ensure web information is live</li> <li>• Draft heatwave heat health alert messages on standby for Phase 3</li> <li>• Advise Councillors of campaign</li> </ul>	M.C.R. M.C.R. M.C.S M.C.R.	December	
Disseminate heat health information <ul style="list-style-type: none"> <li>• Send education materials and heat health messages to internal and external Council staff including MEMPC and relief/recovery committee</li> <li>• Display heat health messages/posters in Council facilities and premises</li> <li>• Distribute heat health information to local stakeholders</li> <li>• Distribute heat health information to clients</li> <li>• Distribute heat health information to event organisers</li> </ul>	M.C.S.  M.C.R. All managers A.D.S,FDC,MCC and EY Co-ordinators M.C.R./M.R.	December	
Advise local stakeholders of roles and responsibilities <ul style="list-style-type: none"> <li>• Host stakeholder workshops where appropriate around heatwave preparation</li> <li>• Include Heatwave information in Council's induction program</li> <li>• Inform any new event organisers of their responsibilities during hot conditions</li> <li>• Revisit heat health alert actions and ensure activation procedures are in place</li> </ul>	All Managers M.H.R. M.C.R./M.R./M.E.D.T. All Managers	December	
Check procedures and resources <ul style="list-style-type: none"> <li>• Remind staff of Phase 3 heat health alert actions</li> <li>• Revisit telephone script template</li> <li>• Check local stakeholder email distribution list for Heat Health Alert days</li> <li>• Ensure generic email message for Heat Health Alert days is ready to go</li> </ul>	M.C.R. M.C.R. All managers M.C.R.	December	

## **What key stakeholders can do in Phase 2**

In Phase 2, key stakeholders will be advised by Council to consider:

- distributing heatwave information to clients
- identifying cool areas
- keeping in regular contact with vulnerable clients
- modifying client /staff programs; and

### **Key**

M.C.S.	Manager Community Services
M.E.E.	Manager Environment and Emergency
M.E.D.T.	Manager Economic Development and Tourism
M.C.R.	Manager Community Relations
M.H.R.	Manager Human Resources
M.W.	Manager Works
C. A.D.S.	Coordinator Aged and Disability Services
C.F.D.C	Coordinator Family Day Care
C.M.C.C.	Coordinator Mobile Child Care
C.E.Y.	Coordinator Early Years

### **Heatwave Response- What we will do in Phase 3**

Phase 3 is triggered when imminent heatwave temperatures are predicted by BoM for the Corangamite Shire. Council will know to move to this phase when it is notified by DoH. Council's nominated Primary Contacts will receive an email Heat Health Alert when forecasted temperatures are expected to exceed threshold levels. It will then be up to Council to continue to monitor forecast temperatures and notify the relevant stakeholders to activate specific actions in Phase 3 of this Heatwave Plan.

Action	Responsibility	Timeline	Resources
Alert local stakeholders of Heat Health Alert <ul style="list-style-type: none"> <li>• Convene Heatwave Planning Committee Meeting</li> <li>• Send generic Heat Health Alert email message to local stakeholders using distribution list</li> <li>• Monitor BoM forecasts, DoH information and local conditions</li> </ul>	M.C.S. M.E.E.M. All Managers	Heat Health Alert	
Implement 'Heatwave Response' Communications Campaign <ul style="list-style-type: none"> <li>• Coordinate media alert</li> <li>• Update home page on Council website</li> <li>• Post heat health alert message to all staff on intranet</li> <li>• Brief customer service on messages for general public especially around cancelled events</li> </ul>	M.C.R. M.C.R. M.C.R. M.C.R.	Heat Health Alert	
Prioritise tasks and modify programs <ul style="list-style-type: none"> <li>• Contact vulnerable clients</li> <li>• Reschedule home/site visits to cooler parts of the day</li> <li>• Consider replacing home/site visits with telephone consultations</li> <li>• Consider rescheduling afternoon appointments for vulnerable clients</li> <li>• Prioritise tasks to ensure essential services are carried out</li> <li>• Modify centre based activities and programs</li> <li>• Ensure staff are informed about need to be adequately hydrated</li> <li>• Consider cancelling/modifying Council events and informing stakeholders</li> </ul>	All Managers C.A.D.S/C.F.D.C/C.E.Y. C.M.C.C.	Heat Health Alert	

### **What key stakeholders can do in Phase 3**

Prompt action by stakeholders during Phase 3 will ensure the impacts of heat on vulnerable groups are kept to a minimum. Key stakeholders will be advised by Council to consider:

- contacting vulnerable clients
- prioritising tasks especially for those involving physical exertion
- assessing risk for clients and staff
- rescheduling staff work times and hours where appropriate
- modifying client programs
- transporting clients in cooler parts of the day and
- altering children's outdoor activities and play times.

### **Key**

- M.C.S. Manager, Community Services
- M.E.E. Manager Environment and Emergency
- M.E.D.T. Manager Economic Development and Tourism
- M.C.R. Manager Community Relations
- M.H.R. Manager Human Resources
- M.F.R. Manager Facilities and Recreation
- M.W. Manager Works
- C. A.D.S. Coordinator Aged and Disability Services
- C.F.D.C. Coordinator Family Day Care
- C.M.C.C. Coordinator Mobile Child Care
- C.E.Y. Coordinator Early Years

### **Heatwave Recovery -What we will do in Phase 4**

Phase 4 ensures Corangamite Shire’s Heatwave Plan remains relevant and meets the changing needs of our community. Council will review heatwave actions in this phase after each heatwave event or at the end of summer and use any amendments to inform an updated Heatwave Plan every four years. All relevant stakeholders will actively participate in the evaluation. The following questions will be addressed.

- Were the actions in Phase 3 appropriate and timely?
- What worked/What didn’t work?
- Was information communicated effectively to stakeholders and the general community?
- What could we do differently next summer?

Action	Responsibility	Timeline	Resources
Implement ‘Heatwave Post Event’ Communications Campaign <ul style="list-style-type: none"> <li>• Remove heat health alert communications material/messages</li> <li>• Alter web messages</li> <li>• Plan media article containing post event information</li> </ul>	M.C.R. M.C.R. M.C.R.	After heatwave event	
Review heatwave actions <ul style="list-style-type: none"> <li>• Consult with internal stakeholders to review procedures and actions</li> <li>• Consult with external local stakeholders to review procedures and actions</li> <li>• Identify improvements to the procedures, policies and plans in a summary of key findings</li> </ul>	Heatwave Planning Committee	Post summer	
Modify <i>Heatwave Plan</i> according to recommendations <ul style="list-style-type: none"> <li>• Update Heatwave Plan to include key findings of review</li> <li>• Distribute new plan to stakeholders</li> </ul>	Heatwave Planning Committee	Post summer	

### **What key stakeholders can do in Phase 4**

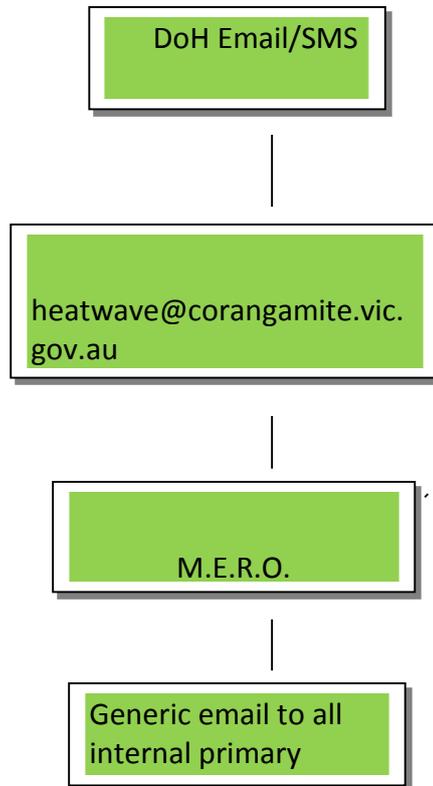
In Phase 4, key stakeholders will be advised by Council to consider:

- participating in Council’s evaluation of the *Corangamite Shire Council Heatwave Plan*;
- reviewing their own actions during prolonged periods of hot weather
- making recommendations to modify their own plans.
- 

### **Key**

- M.C.R.            Manager, Community Relations

## PRIMARY CONTACT COMMUNICATION TREE



\* The [heatwave@corangamite.vic.gov.au](mailto:heatwave@corangamite.vic.gov.au) goes to the MERO group (Manager, Environment & Emergency; Manager Works and Services and Municipal Emergency Management Officer ) and also to the Manager Community Services and Coordinator, Aged and Disability Services.

### PRIMARY CONTACT LIST-INTERNAL

- Manager Community Services:
- Manager Economic Development & Tourism:
- Manager Environment & Emergency:
- Manager Community Relations:
- Manager Human Resources:
- Manager Facilities and Recreation:
- Manager Works:
- Coordinator, Aged and Disability Services:
- Coordinator Family Day Care:
- Coordinator Mobile Child Care:
- Coordinator Early Years:

### GENERIC INTERNAL EMAIL TO BE SENT BY MERO TO ALL INTERNAL PRIMARY CONTACTS

**“The Department of Health has issued a Heatwave Alert for ..... Please activate your responsibilities under the Corangamite Shire Heatwave Plan”.**