

CAR23/017 HEAT HAVENS

S003-T00022

Responsible Officer: Kathy Arthur - Director Community, Arts and Recreation Services
Attachments: Nil
Community Goal: 2 Our community that welcomes, celebrates, and supports everyone
Community Strategy: 2.2 Encourage community spirit and enable healthy lifestyles
Delivery Program Link: 2.2.2 Provide and manage quality community facilities to meet the needs of the current and future communities
Operational Plan Link: 2.2.2.1 Maintain and manage community halls

EXECUTIVE SUMMARY

On 15 August 2023 the following Notice of Motion (NOM) was put to Council and endorsed:

THAT a report be prepared for consideration by Council at its 21 November 2023 meeting on the need and suitability of council public facilities, including public halls, to be used as heat havens. The report is to provide discussion on options, costs, possible funding sources, and what facilities could be reasonably made available as heat havens for the future.

In responding to the NOM, consideration and analysis has been undertaken in relation to the need and suitability of Council facilities as Heat Havens, the prevalence of heatwaves and hot days, heatwave emergencies and the level of hazard heat poses in our community.

Further, the report examines the existing provision of Heat Havens and 'cool places' in our shire, the cost and possible funding sources for capital and operational components, and the facilities and options it would be reasonable to make available within this framework.

Councillors received a briefing on 12 September regarding emergency management and the role of combat agencies, inclusive of a discussion on Heat Havens, and a briefing regarding the Heat Haven NOM report findings on 14 November. Additionally, a similar briefing was provided to the Eurobodalla Climate Change Advisory Committee on the 9 November 2023.

RECOMMENDATION

THAT Council:

1. Consider the establishment of a protocol to extend the opening hours at existing services on very hot days, including libraries and swimming pools.
2. Promotes Health NSW Beat the Heat website and resources when heatwaves are forecast.
3. Not establish designated Heat Havens or associated Heat Haven services at Council halls and facilities.

CONSIDERATIONS

Heat as a Hazard

Heat as a hazard is generally focused on heatwave conditions and/or heat in association with bushfires. In some instances, it also concerns heat impacts within a particular context, rather than the temperature itself, such as unseasonal weather conditions.

CAR23/017 HEAT HAVENS

S003-T00022

Heatwaves

In preparing this report it has become apparent that heatwaves are defined differently, depending on the agency and the circumstances.

The Bureau of Meteorology (BOM) defines heatwaves as “three days of high maximum and minimum temperatures, that are unusual for that location.” (State Heatwave Subplan, page 20).

The www.myclimateview.com.au website (developed by Australian Dept. Agriculture, Fisheries and Forestry, BOM and CSIRO) defines heatwaves as 3 consecutive days of 35 degrees+.

The BOM and State Heatwave Subplan (latest iteration endorsed in June 2023) identify three heatwave levels of intensity:

- Low intensity heatwave – the bulk of heatwaves, with most people expected to have adequate capacity to cope with this level of heat.
- Severe Heatwave – less frequent. Will be challenging for vulnerable people.
- Extreme heatwave – rare. Will impact normally reliable infrastructure, such as power and transport, and are a risk to anyone who does not take precautions.

Heatwave and Australia

It is clear from the information, articles and links included in the NOM report and provided elsewhere, that there may be climate impacts going forward for Australia, with an increase in the number of hot days and heatwaves.

In identifying the need for Heat Havens in our community, we should examine available climate data and information specific to Eurobodalla, rather than more general information.

The question is - are hot days and heatwaves frequent and severe enough in the Eurobodalla, particularly in the next 5-10 years, to require Council halls to be upgraded and for Council to provide a new Heat Haven service on designated heatwave/very hot days?

Identifying the need for Heat Havens

Hot days can impact our community. The extent of heatwaves and heatwaves as a hazard within the Eurobodalla context, noting that emergency management remains the jurisdiction on the NSW Government, not Council, should inform any decision to allocate capital and operational resources.

NSW Government and emergency agencies, including Reconstruction NSW, consulted in the preparation of this report, have not indicated that heat is a priority hazard in their planning for Eurobodalla.

The Resilience Blueprint (Decision Guide and local strategy guidance – ESC, CRJO) identifies eight natural hazards affecting Eurobodalla, including heatwave. However, it identifies the primary hazards for Eurobodalla going forward as being greater exposure and frequency of storm and flood (page 17). This is based on Eurobodalla specific climate modelling undertaken by Risk Frontiers as part of the project.

CAR23/017 HEAT HAVENS

S003-T00022

The document includes analysis of historical data for the region, identifying flood, storm, hail and bushfire as having the greatest impact on people and property over the past 120 years, with flood having the most significant impact overall (pages 15 and 16).

The risk/impact of heatwaves and hot days

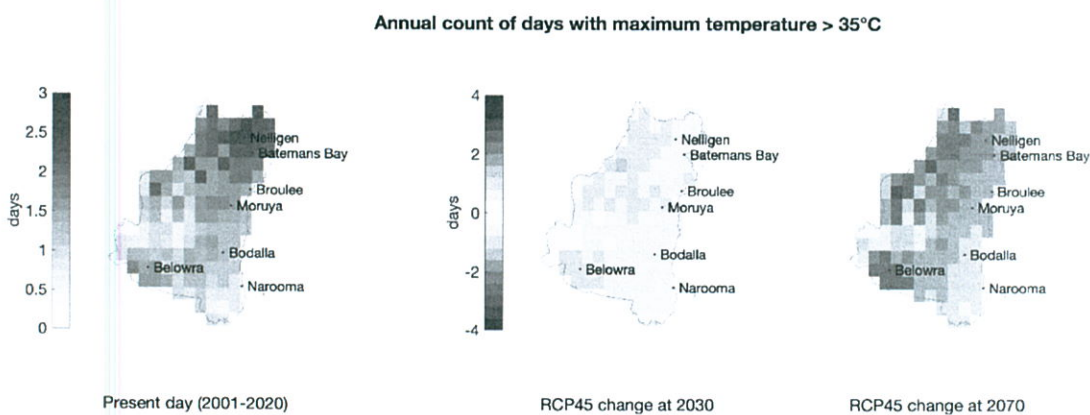
The Resilience Blueprint modelling does not predict the number of heatwaves Eurobodalla will experience. However, the following is an excerpt relating to Hot Days, defined in the report as days per year with temperatures greater than 35 degrees Celsius (page 17).

Climate hazard	Year 2010	Year 2070
Hot days	1.4	3.2 (137%)

The projected increase (137%) is high. However, it is coming off a very low base in 2010, with fewer than 2 days per year predicted by 2030 and 3.2 days by 2070 in Eurobodalla.

The CRJO document also graphs the impact of hot days for Eurobodalla (page 17), with the report indicating that the issue of increasingly hot days will have a more significant impact in the long term (2070), rather than short term (2030), as illustrated in Table 1.

Table 1



The www.myclimateview.com.au website provides climate data, including future projections (eg. rainfall, temperature, humidity impacts) for specific locations. The site was recommended for use by the BOM, after specific enquiries regarding Eurobodalla were made as part of this report preparation.

This site has definitions of various heat conditions - heatwaves, heat stress, maximum daily temperatures. In one search parameter it defines heatwaves as 3 or more consecutive days when the maximum temperature is greater than or equal to 34 degrees Celsius and the minimum temperature is greater than or equal to 22 degrees Celsius between 1 January and 31 December.

A search of towns within Eurobodalla on the site map in relation to heatwaves, using a high emissions scenario parameter for a full year, has a projected outcome of zero for the period 2016-2065 (under that definition).

CAR23/017 HEAT HAVENS

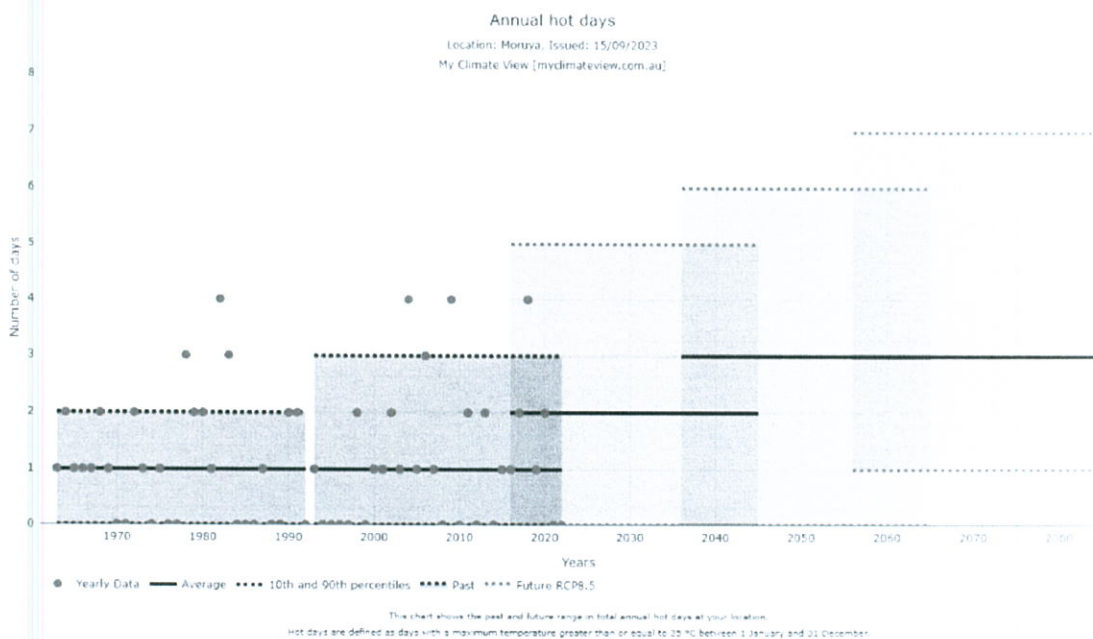
S003-T00022

Hot days

A further search of the www.myclimateview.com.au site in relation to hot days, defined on the site in this instance as a maximum daytime temperature greater than 35 degrees Celsius between 1 January and 31 December, indicates an average of 2 days per year (2016- 2045 period) and 3 days per year (2036-2065 period) is predicted, as Table 2 indicates:

Table 2

Table 2 My Climate View, high Emissions Scenario : Moruya : Annual Hot Days



The data suggests an increase in the number of hot days, escalating in the coming decades. However, the data does not suggest a significant increase in the short term.

Heatwave emergency

The BOM may identify a heatwave, but it is important to note that few heatwaves are declared a heatwave emergency. Such a declaration is decided by state agencies and emergency services, with advice from the BOM, NSW Health and other lead agencies.

In the event of a heatwave emergency being declared, the State Emergency Operations Controller (SEOC) will activate the plan and be responsible for the response to the heatwave emergency.

The activation may be for the whole state or for part, depending on which areas are affected by extreme heat or a heatwave event.

NSW Health arranges for public health information to be disseminated. At a state level, Emergency Services, Functional Areas and other agencies are responsible for providing regular reports to the SEOC, assist in distribution of information and assist as requested by the SEOC.

CAR23/017 HEAT HAVENS

S003-T00022

At a local level, the Local Emergency Operations Controller (LEOCON Senior NSW Police Officer) is responsible for maintaining awareness of conditions and needs, as well as considering the opening of an Emergency Operations Centre (EOC) if additional resources are required.

The subplan includes clear emergency management roles and responsibilities.

Under 4.3 of the Subplan it states that, during a heatwave emergency, community resilience will be supported by agencies via community information strategies and the provision of 'cool places', such as libraries, community halls and shopping centres.

However, the plan does not include designated Heat Havens as a component of state planning and there is no indication that if facilities were identified as Heat Havens by Council, or the local community, that they would be included in the emergency response.

Heatwaves and hot days early in the season

Heatwaves can also be declared by the BOM when weather is unseasonal, even if the most common BOM heatwave definition (35+ more 3 consecutive days or more) is not experienced.

For example, Eurobodalla experienced several very hot days during September 2023. On 18 September the BOM's Heatwave warning site described the weather as, "maximum temperatures reaching the low to mid 30s with overnight minimum temperatures in the mid to high teens. These temperatures are around 10 to 15 degrees above average and persist for an unusually prolonged period for this time of year."

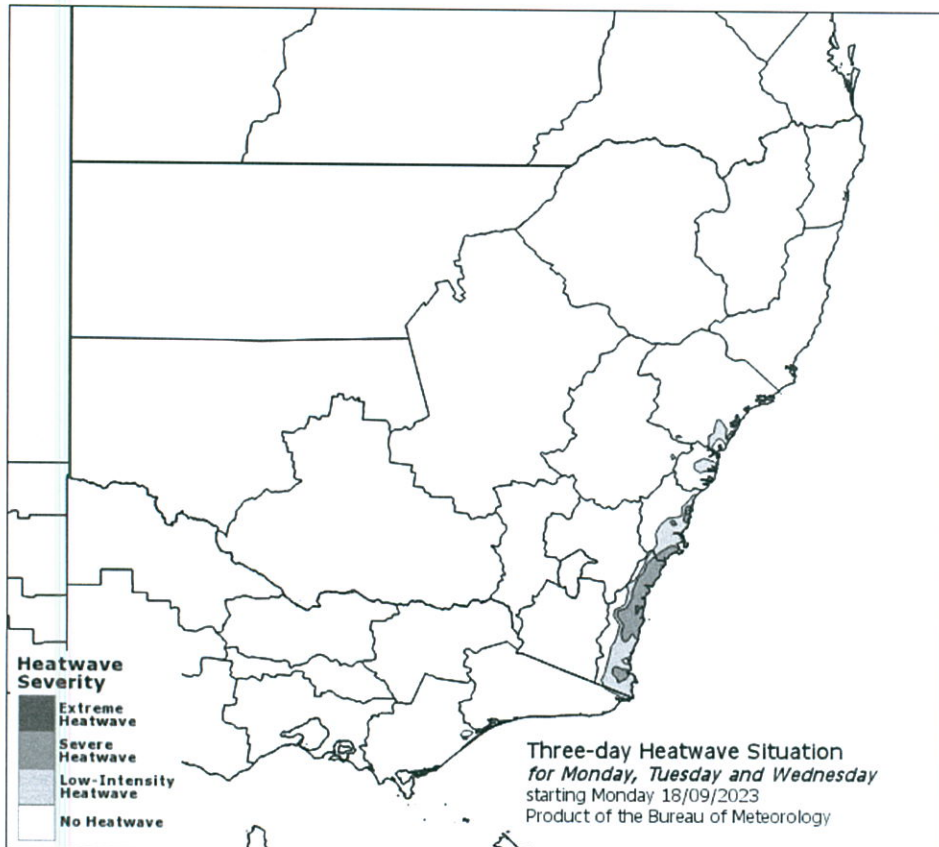
The temperatures were extreme for the time of year. They did not fit the 35 degree celsius and above days normally used to define a heatwave even though a heatwave was declared. The issue on this occasion was the disparity between average temperatures for September and the high temperatures experienced (around 10-15 degrees hotter). The impact was more significant, occurring early in the season before people had acclimatised to the summer season.

CAR23/017 HEAT HAVENS

S003-T00022

The BOM mapped this, as indicated in **Table 3**.

Heatwave Situation for 3 days starting Monday 18th September 2023



During this heatwave, Low intensity and Severe heatwave conditions were experienced, as defined by the BOM, with the seasonal anomaly factored in.

A heatwave emergency was not declared. NSW Health provided information and resources, including a heatwave preparation checklist, on the NSW Health website and publicised in the media.

Existing facilities, such as libraries, the Bay Pavilions and Narooma pool, cinemas and shopping centres were available to the community, with normal opening hours in place.

Due to a Catastrophic fire danger rating, the majority of south coast schools closed on Tuesday 19 September as determined by the NSW Department of Education, along with after school care services, as per guidelines.

Council was not asked to provide any additional services by state agencies, such as extended opening hours for libraries or the opening of additional facilities or halls for community use as Heat Havens.

NSW Health were contacted after the event to ascertain the health impact of the severe/extreme heatwave. They advised that both hospitals had a cluster of heat related illnesses including near fainting, fainting and dehydration mostly reported in vulnerable age brackets, the elderly and children. There were also a few individual cases of people who have

CAR23/017 HEAT HAVENS

S003-T00022

outside labourer jobs having similar presentations exhibiting symptoms of heat stroke. All cases were mild and received appropriate care.

Existing Heat Havens (cool places)

The State Heatwave Subplan does not describe Heat Havens. However, it defines “cool places” as being publicly accessible airconditioned spaces such as libraries, community halls and shopping centres (page 9).

Under this definition, the Eurobodalla community already has access to Heat Havens, including 19 community-based facilities; 3 libraries, 2 cinemas, 3 swimming pools and 11 local recreation/service clubs across the shire, with opening hours ranging from early morning to late evening and weekends. NSW Health also promotes people staying in their own homes as a viable option. Table 4 highlights existing facilities, their location and opening hours.

Table 4

Facility	Suburb	Opening hours
Batemans Bay Library	Batemans Bay	Mon-Fri 10am - 5pm, Saturday 9:30am to 12pm, Closed Sunday and Public Holidays
Bay Pavilion	Batemans Bay	Mon - Fri 6am - 9pm, Sat-Sun 7am-7pm, Public holidays 8am-7pm
Batemans Bay Soldiers Club	Batemans Bay	Mon - Fri 10am - 11pm, Sat 10am-12am, Public holidays (except Good Friday)
Bay Cinema	Batemans Bay	Daily sessions
Club Catalina	Catalina	Mon-Wed 9am - 11am Thurs -Sat 9am - 12am Sun 8am - 11pm
Club Malua	Malua Bay	Mon-Wed 9am - 11pm Thurs -Sat 10am - 12am Sun 10am - 11pm
Tomakin Sports Club	Tomakin	Mon - Tues 10am - 10pm, Wed - Thurs - 110am - 11pm, Fri - Sat 10am - 12am, Sunday 10am - 10pm
Moruya Library	Moruya	Mon-Fri 10am - 5pm, Sat- Sun 10am to 4pm, Closed Public Holidays
Moruya Pool (Summer Extended Hrs)	Moruya	Mon-Tues & Thurs 6am - 7pm, Wed 6am - 6pm, Fri 6am - 4pm, Sat 8am - 4pm, Sun 10am -4pm
Moruya Golf Club	Moruya	Opens 9am daily
Moruya Bowling Club	Moruya	Mon-Tues 10am - 10pm, Wed 10am-11pm, Fri - Sat 10am-12pm Sun 10am-10pm
Club Tuross	Tuross	Mon- Tues 12pm-10pm, Wed - Sun 10am-10pm
Bodalla Bowling Club	Bodalla	Mon-Fri 12pm - close Sat-Sun 11am-close
Club Dalmeny	Dalmeny	Mon-Tues 11am-7pm, Wed 11am-9pm, Thurs 11am - 10pm, Fri-Sat 11am-10pm
Club Narooma	Narooma	Mon-Wed 10am-10am, Thurs 10am - 11pm Fri-Sat 10am-11:30pm, Sun 10am-10pm
Narooma Golf Club	Narooma	Mon-Wed 10am-10pm, Thurs 10am-11pm, Fri-Sat 10am-12am, Sun 10am-10pm
Narooma Library	Narooma	Mon-Fri 10am - 5pm Sat 9:30 - 12pm Sun closed
Narooma Pool	Narooma	Mon-Wed 6am-7pm, Thurs 6am-6pm, Fri 6am-4pm, Sat 8am-4pm, Sun 10am-4pm
Narooma Kinema	Narooma	Daily Sessions

CAR23/017 HEAT HAVENS

S003-T00022

The 19 existing community-based facilities are well distributed across the shire, as Table 5 highlights:

Table 5



CAR23/017 HEAT HAVENS

S003-T00022

Benefit of using existing facilities and staffed services

The benefit of existing facilities as cool places includes:

- People staying in their own home and putting time into preparing cool rooms, ice packs, appropriate medication, food and plenty of drinks etc is supported by NSW Health's 'Beat the Heat' advice.
- Existing facilities and clubs are already open and operating, so no significant additional costs or risks to consider.
- Existing services are established, well-known and familiar (Eg. Public libraries, shopping centres). They are supported by appropriately qualified and vetted staff (eg Working with Children Check clearance), with well understood policies, procedures, service parameters and expectations, of both staff and the community, in place.
- Existing facilities have established staffing and teams, ensuring certainty of service delivery, compared to staff that might be required for occasional/sporadic Heat Haven service provision.
- Existing cool places are accessible, with adequate parking, seating, accessible toilets, refreshments (eg club restaurants, swimming pool canteens), passive surveillance, activities and spaces to suit a range of needs.
- There is already transport available to/from many recreation/service clubs.

Private and community-based provision of Heat Havens by third parties

The Southcoast Health and Sustainability Alliance (SHASA) has prepared a Heatwave and Bushfire Haven Strategy and pursued several successful grants to upgrade private and community-based facilities in the community, including a preschool, church buildings and a CWA Hall, as Heat Havens.

Council is supportive of general improvements to community-based facilities, particularly upgrades that improve resilience, environmental outcomes and cost effectiveness. This is evident in the support provided for previous grant applications. However, while the upgrades have been beneficial, it is unclear how upgraded community-based facilities might operate as Heat Havens.

In order to understand this, Council wrote to several organisations who have received funding and upgrades, asking if the facility will be made available to the general community as a Heat Haven, and if so, under what circumstances?

Two organisations responded. The first advised that the facility would retain its primary function. Further, there was still a lot of discussion within the organisation about how/if they might make the facility available, manage risks and staff/operate a Heat Haven type service. While no final decision had been made, in this case the facility is unlikely to be open to the general community. Rather, they might assist individuals and families that attend the service or are directly associated with the organisation.

CAR23/017 HEAT HAVENS

S003-T00022

In addition, there is currently no link between this facility and emergency management planning or operations. This was discussed and Council advised that it could facilitate such a link through its Local Emergency Management Officer if the service wishes to pursue this option at any point in the future.

The second organisation advised that they are opening the church hall as a Heat Haven, with protocols for doing so currently under development. They will notify Council further once the finer details are in place. Again, Council will endeavour to facilitate a link between this organisation and emergency management planning if they wish to pursue this option.

At this stage, no further information has been received from community-based facilities/organisations on how and if they plan to operate as a Heat Haven, or under what circumstances.

Public monies (via grants) have been utilised to support upgrades as Heat Havens. As such, clarity must be sought on what role these grant funded facilities will play during a dedicated emergency.

Council halls and community facilities

Council has a range of halls and sporting facilities for community use. A search of Council's website provides details of availability/partial availability, amenities and equipment (eg AC, kitchen, accessible toilet, projector) for each venue and existing bookings and classes/activities at different sites. Each facility is different, in size, range of amenities and purpose, with venues distributed across the shire.

While some Council facilities might be suitable for use as a Heat Haven, with suitable amenities in place, some sites would require a capital outlay. Council would need to consider actual need and the operational cost of running a Heat haven, not just the provision of a venue.

Providing additional Heat Havens

Providing additional Heat Havens would require significantly more than a capital outlay.

Providing designated facilities as Heat Havens, in locations where no existing service operates, such as a community hall, is about providing a new service, requiring staff, refreshments and possibly transport, all operating with clear policies and procedures in place.

The provision of a Heat Haven service would require parameters, in relation to what is offered, where and under what circumstances, and the level of care and support provided at the facility.

Unlike an evacuation centre (designated, paid for and operated by the state government at various locations during a declared emergency eg. bushfire or flood), where the assumption is that community members will go to a specific facility as a last, temporary option, the provision of a Heat Haven service, possibly operating for several days in multiple Council facilities, and paid for by the Eurobodalla community, would operate outside of emergency management arrangements and may, in fact, simply duplicate some of the benefits of existing 'cool places'.

Given the infrequent and unpredictable nature of heatwaves and hot days, the provision of a staffed Heat Haven service would need to be managed using existing Council personnel, trained and remunerated to provide an agreed additional service, as required, at specific locations.

CAR23/017 HEAT HAVENS

S003-T00022

Estimated Heat Haven service costs

The following scenario provides indicative costs and service assumptions to provide a low risk, quality Heat Haven service:

1. A Council community hall (eg Bodalla Hall) is designated as a Heat Haven.
2. The designation of the Hall as a Heat Haven assumes that no existing booking is in place on the heatwave/hot day and the facility is available.
3. The Heat Haven service operates from 8am to 6pm when a heatwave is declared by the BOM.
4. Council has paid for a capital outlay of \$120K to upgrade Bodalla Hall as a Heat Haven, including air conditioning, HEPA filters, LED lighting and a water tank.
5. Service provision assumes that the majority of people requiring the Heat Haven have some level of vulnerability (health, financial, personal circumstances), with limited resources. Therefore, in this scenario Council would need to factor in refreshments, seating, activities, resources and, in some cases, transport.
6. Given the sporadic and unpredictable nature of heatwaves, existing staff would need to be utilised, so overtime would be factored into cost estimates for possible weekend events.
7. In line with existing, comparable service provision, total staff costs would range from up to \$1,100 per day on weekdays to a maximum of \$2,100 per day on weekends, with 2 staff at each location at all times. This range includes 2 staff for 10 hours plus oncosts, and factors in weekend loading and overtime for weekends. It also assumes staff availability.
8. Staff rostered would need to have a first aid certificate and WWWC and Police check clearances, given the potential health issues/risks of community members and the fact that children may be present.
9. Staff availability on weekdays may impact existing work requirements. For example, OOSH staff, customer service staff still need to provide services as part of BAU.
10. Refreshments would need to be provided, including tea/coffee, water, morning tea, lunch and afternoon tea to ensure people are hydrated. Assuming 50 people @ \$20 per head (factoring in dietary requirements), this equates to \$1,000 per day.
11. If transport was to be provided via Council's Community Transport service, individuals would need to be registered with the service prior to transport being provided. If we assume up to 50 people using the Heat Haven, we could also assume approx. 15 requiring transport. CT costs are based on kilometres travelled, which could be from \$600 - \$1,000, depending on which CT vehicles are required to meet individual access needs, where required vehicles are housed (starting point) and the location of people requiring transport.

CAR23/017 HEAT HAVENS

S003-T00022

12. Activities, seating and ancillary equipment and resources, including activities and resources for children, first aid kit and hydration supplements would need to be provided. Assuming an upcoming event, this would require Facilities staff to do a site visit prior to the heatwave day/s, delivering equipment, seating, resources etc, as required, and then collecting after the event.

Further issues to be considered include:

- A risk assessment of the facility prior to the event would be required. A risk assessment of individuals requiring access to the Heat Haven might also be required if the person has complex needs (eg. health, behavioural).
- Managing numbers. The provision of a Heat Haven might result in few people attending (but costs still incurred) or significant numbers attending, with a range of inherent risks and issues arising, for example managing and prioritising support.
- Managing potential antisocial behaviour. This would require the development of policies and procedures to ensure risks are mitigated.
- Managing expectations and service parameters. For example:
- Would a Heat Haven be provided close to an existing 'cool place' such as a club or library?
- How many Heat Havens might Council run during an event and why?
- How would the service be promoted?
- Would some community members be a priority, and if so, how does Council communicate this and manage this on the day?

Financial

Funding the capital improvement of Council facilities to provide a Heat Haven could be funded from Council funds or via grants, as appropriate.

However, operating a Council run Heat Haven would need to be funded from Council's budget as a new expense, as there are rarely (if ever) grants available for operational programs and services. As such, Council would be required to allocate a budget for this purpose, having agreed on the trigger point/s for activation, the number of Heat Havens to be provided and where, as well as an annual budget.

CONCLUSION

In responding to the NOM, this report has considered the need for Heat Havens, including heat as a hazard and the level of risk posed, as well as existing 'cool places' across the shire. In addition, the cost and assumptions inherent in the provision of a quality Heat Haven service has been articulated, as well as funding sources.

Given the infrequent, sporadic nature of heatwaves/significantly hot days generally in the shire, the number of existing 'cool places' that already provide a Heat Haven to the community, and the costs and issues involved in providing a low risk, quality Heat Haven service, the provision of Council run Heat Havens as a service is not recommended.