

## State Emergency Management Documents Amendments List October 2022

The following list identifies amendments to suite of State emergency management documents.

The SEMC approved the revised State Hazard Plan – Heatwave on 13 October, which came into effect 20 October 2022.

On 24 August 2022, the Executive Officer – SEMC approved statement of fact amendments to the State Hazard Plan – Fire to align to the new Australian Fire Danger Rating System. This approval, allowed under State EM Preparedness Procedures 3.4 requires notification to SEMC of minor amendments.<sup>1</sup>

Redactions are shown in red strikethrough text and additions are shown with highlighted underlined text. Please email [semc.policylegislation@dfes.wa.gov.au](mailto:semc.policylegislation@dfes.wa.gov.au) to provide feedback or comment.

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### Generic Amendments to All Updated State Emergency Management Documents

Amendment	Comment
State emergency management documents reissued in new accessible designs.	To comply with accessibility standards.
Version, SEMC resolution number, Date of Approval and Date of Effect added to cover and footers as applicable.	Version control
The Australian Government's Crisis Coordination Centre (CCC) updated to Australian Government National Situation Room (NSR)	Statement of fact amendment
All references to St John Ambulance Australia (Western Australia) Inc. amended to St John Ambulance Western Australia Ltd. (SJA)	Statement of fact amendment
All references to 'Westplan' removed.	Statement of fact amendment
Removal of overuse of acronyms (e.g EM for emergency management). Acronyms for key emergency management proper nouns such as personnel, groups and bodies (e.g. HMA, ISG, OASG, SEC) maintained.	Removal of overuse of acronyms, particularly common terms that are not proper nouns to comply with accessibility.
All tables reformatted to add appropriate header row and header titles and remove merged cells (where possible).	Amended to comply with accessibility standards for tables.

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<sup>1</sup> The accessibility redesign for State Hazard Plan – Fire has not yet been completed. The suite of generic amendments may not apply.  
State Emergency Management Documents Amendment List – October 2022

Amendment	Comment
Alternate text and captions inserted to all figures and table summaries provided for complex tables. Where figures have small print, an appropriate note has been inserted to print on A3 to ensure documents passes print accessibility.	Amendments to meet accessibility standards for tables and figures.
Consistent reference style to legislation and other State emergency management documents applied.	Amended for consistency across all State emergency management documents.
Inclusive language applied where applicable (e.g he/she replaced with they).	Amended to align with the Australian Government Style Manual.
Removal of the use of semicolons within bulleted lists. Where text is directly quoting formal documents such as legislation, semicolons were retained.	Amended to align with the Australian Government Style Manual recommending minimal punctuation for simplification of language.

## Specific Amendments to State Hazard Plan – Heatwave v2.00

Page	Statement/ Section	Amendment	Comment
6	Introduction	The hazard of Heatwave has the potential to result in increased illness, hospitalisation and deaths in the community. Many people in Western Australia are generally acclimatised to living in hot weather and are resilient to hot conditions. This is particularly so in the north and inland locations of the state. Regional locations experience a large turnover in population and many industries employ a fly-in-fly-out workforce where extreme weather acclimatisation is not possible. People may be complacent about extreme heat and don't see themselves as affected or vulnerable. Furthermore, the cumulative effect on health from heat exposure increases, particularly when there is no ability to compensate from a heat event. Combined, this can lead to consequences to human health.	Additional information provided about hazard.
6	1.2 Hazard Definition	<p>For the purpose of this plan and in addition to the above, the heatwave:</p> <ul style="list-style-type: none"> <li>is protracted and forecast to occur for longer than 3 days at a level of extreme</li> <li>requires a significant coordinated response.</li> </ul> <p>Contributing factors on the impact of heatwave include:</p>	Additional hazard definition information.

		<ul style="list-style-type: none"> <li>• maximum daily temperature and the minimum night time temperature</li> <li>• duration of the high temperatures</li> <li>• humidity and air quality</li> <li>• urban and rural design</li> <li>• local acclimatisation</li> <li>• public events and school holidays</li> <li>• successive heat events</li> </ul>	
7	1.4 (new) Bureau of Meteorology	The Bureau of Meteorology (the Bureau) as the Commonwealth weather forecasting service provide the forecasting of heatwaves. The Bureau has developed, tested and made operational a measure of heatwave, the Excess Heat Factor (EHF). The Bureau considers heatwaves to be three or more days of high maximum and minimum temperatures that are uncommon for that location. The Bureau will issue generic heatwave warning information and the HMA will manage the adverse effects of the heatwave emergency across the prevention, preparedness, response and recovery spectrum.	New – information added regarding the Bureau of Meteorology.
7	1.5 Activities Informing the Assurance Process	<p>The WA health system engages with intrastate agency stakeholders and national stakeholders to ensure a consistent approach to heatwave. This plan adopts a nationally consistent heatwave measurement and aligns to the national approach of the Australian Warning System for hazards.</p> <p>A heatwave event has the potential for increased fatalities that often do not present until weeks and months after the event. The heatwave measurement Excess Heat Factor (EHF) is recognised as the effective methodology of measuring heatwaves.</p> <p>In March 2019, the State Government announced a Chief Health Officer Inquiry to investigate the implications of climate change, including more frequent and intense weather events, on health.</p> <p>The Climate Health WA Inquiry report made recommendations for improvement with respect to climate change mitigation and public health adaptation strategies.</p>	<p>Information added regarding alignment to national approaches.</p> <p>Additional information provided.</p>
9	2.1 Responsibility for Prevention and/or mitigation	<p>Urban planning that recognises the Urban Heat Island (UHI) effect and employs best practices to mitigate the effects of severe heat reducing the immediate impact in that location. Furthermore, reducing the UHI will reduce the heat load at a district level.</p> <p>Building codes provide a base line for new construction and asset improvement. Employing contemporary passive design practices can reduce cooling costs during heat events. Where social housing providers support at-risk populations, enabling this cohort to compensate from heatwaves</p>	Additional prevention and/or mitigation information provided.

		via sheltering in place provides broader community resilience.	
11	3.2 Capability Baseline	<p><del>Heatwave events in the metropolitan area do not occur on a frequent basis (when considering the trigger thresholds – see Appendix F).</del></p> <p>Climate modelling indicates heatwaves are going to become more frequent and more severe. Agencies should structure their response based on a protracted heatwave event lasting more than six days. Planning should consider significant workforce non-attendance due to staff fatigue (heat effects) and absenteeism (e.g. as a carer <del>resulting from potential school closures</del>). Public infrastructure and public utilities could also be affected by the same heat event, which may compound the ability of agencies to respond.</p>	
12	3.3 Planning and Arrangements	<p>Communication strategies, internally and for the public, must be developed and tested by organisations to ensure efficient, effective and appropriate distribution of relevant information.</p> <p>Communications by agencies must utilise information released by the Department of Health. The cornerstone of messaging consistently should be:</p> <ul style="list-style-type: none"> <li>• Ensure you have a local plan for heatwave</li> <li>• Stay hydrated</li> <li>• Remain out of the sun, particularly from the middle of the day and into the afternoon.</li> <li>• Keep cool, be this by staying in a cool location or moving to a cool location if safe to do so.</li> <li>• Check on others.</li> </ul> <p>Communications will occur through a tiered approach:</p> <ul style="list-style-type: none"> <li>• To agencies with roles and responsibilities under this plan</li> <li>• To agencies and organisations that provide care and support to vulnerable populations</li> <li>• To the general public.</li> </ul> <p>The activation of the State Support Plan - Emergency Public Information may be considered as required.</p>	
12	3.3.2 (new) National	Jurisdictions around Australia have adopted or are working towards the adoption of the National Heatwave Warning Framework. The framework recognises there is a need for a heatwave metric that	Inclusion of the National

	Heatwave Warning Framework	<p>meet the following criteria:</p> <ul style="list-style-type: none"> <li>is easily measurable, predictable and repeatable</li> <li>can be applied consistently across Australia</li> <li>can be applied to past analysis and future projections</li> <li>is useful as an indicator of impact</li> <li>is supportive of an emergency management and health framework.</li> </ul> <p>This plan is consistent with the national approach</p>	Heatwave Warning Framework.				
12	3.3.3 Resources	Each organisation is responsible for their workforce. Workplace safety legislative requirements on safe working environments are in place, particularly for outside workers.	Additional legislative requirements added.				
12	3.4 Community Education	Identified organisations (see Appendix D) will assist in the distribution of educational material and will work with the communities they service, especially at risk populations/individuals, to help them develop resilience in advance of a heatwave event. Eg. Local Government (LG) and other organisations have strong community relationships through targeted community groups and electronic communication strategies.					
14	4.3 Triggers	<p>Heatwaves are classified into three types based on severity determined by a EHF value between 0 to 3:</p> <table border="1"> <tr> <td>Low-Intensity Heatwaves are the most common type of heatwave and most people can cope during these heatwaves.</td> <td>EHF severity and EHF sev 1</td> </tr> <tr> <td>Severe Heatwaves are less common and are likely to be more challenging for vulnerable people such as older people, particularly those with medical conditions.</td> <td>EHF severity and EHF sev 3</td> </tr> </table>	Low-Intensity Heatwaves are the most common type of heatwave and most people can cope during these heatwaves.	EHF severity and EHF sev 1	Severe Heatwaves are less common and are likely to be more challenging for vulnerable people such as older people, particularly those with medical conditions.	EHF severity and EHF sev 3	Previous text has been replaced with new text, which has been updated to reference the Excess Heat Factor.
Low-Intensity Heatwaves are the most common type of heatwave and most people can cope during these heatwaves.	EHF severity and EHF sev 1						
Severe Heatwaves are less common and are likely to be more challenging for vulnerable people such as older people, particularly those with medical conditions.	EHF severity and EHF sev 3						

		<p>Extreme Heatwaves are rare. They are a problem for people who don't take precautions to keep cool—even for people who are healthy. People who work or exercise out-doors are at greater risk of being affected.</p> <p>The triggers for activating the State Hazard Plan – Heatwave occur when the Bureau Heatwave service is forecasting Extreme Heatwave conditions where the EHF&gt;3. This trigger point has been determined as the threshold for sub-optimal health outcomes for the public and also a trigger point for essential services equipment failure/fatigue.</p> <p>Activation decisions are made using a standard risk assessment of likelihood and impact. For example, a localised heatwave of extreme rating, occurring in an unpopulated area would be unlikely to activate the Plan. Heat Health messaging may still occur without the need to activate a multi-agency approach.</p> <p>For the purpose of clarity, a low-intensity heatwave, a heatwave that is not expected to exceed severe, or a single abnormally hot day for the locality does not constitute the activation of this Plan. However, heat health messaging remains available on the healthywa.gov.au website for other heat related events.</p>	EHF severity >= 3	
14	4.4 (Notifications)	<p>The <del>BoM</del> Bureau will notify the WA health system through a series of communication channels. <del>via their Emergency Services Briefing product, as soon as possible following the prediction of a heatwave event. The information provided will include:</del></p> <ul style="list-style-type: none"> <li><del>• geographic area likely to be affected</del></li> <li><del>• estimated duration and corresponding temperature predictions</del></li> <li><del>• associated weather conditions that may pose an additional hazard (e.g. storms, fire danger ratings, UV index).</del></li> <li>• The Heatwave Decision Support product</li> <li>• Through a geospatial system data feed to internal health Information Systems</li> <li>• Via their duty forecasting service</li> </ul> <p>Health will communicate through a tiered approach:</p>		

		<ul style="list-style-type: none"> <li>To agencies with roles and responsibilities under this plan</li> <li>To agencies and organisations that provide care and support to vulnerable populations</li> <li>To the general public through community alerts.</li> </ul>	
14	4.5 (new) Australian Warning System	<p>The Australian Warning System (AWS) is a national approach to information and warnings for hazards like bushfire, flood, storm, tropical cyclone and extreme heat.</p> <p>The AWS has been developed based on community research and input from Australia’s emergency services and hazard agencies. The goal of the AWS is to deliver a more consistent approach to emergency warnings, no matter where you are in the country. It uses a nationally consistent set of hazard icons to show incidents on websites and apps, supported by calls to action.</p>	Information included to include the Australian Warning System.
14	<del>4.5 Alert</del>	<p><del>A forecast maximum temperature of 40 degrees Celsius or above, on three or more consecutive days, for the Perth metropolitan area will trigger an alert for a potential heatwave event.</del></p> <p><del>The WA health system will disseminate information to agencies detailed in Appendix D indicating that the Alert criteria has been met and there is potential to escalate to Standby.</del></p>	
14	4.6 <del>Standby</del> Community Alerts (new)	<p>Heatwave community alerts will be issued to specific localities/ districts following assessment of forecast severity, the anticipated impact and known issues. Heatwave warnings follow a national warning framework</p> <p>The AWS has three alert levels with associated calls to action.</p> <p>Advice: A severe heatwave has been forecast in a locality and longer-term forecast is indicating an extreme heatwave later in the week. There is no immediate danger. The key message to both the public and heatwave stakeholders is to stay up to date in case the situation changes.</p> <p>Communication measures commence under the auspice of providing advanced notice to allow communities to commence their preparations and consider planning to protect themselves.</p> <p>Watch and Act: There is a heightened level of threat. A severe heatwave has occurred over the preceding days and the extreme heatwave is imminent or has commenced. The public need to modify their plans and behaviours to prevent negative health outcomes. Conditions are changing and you need to start taking action now to protect you and your family.</p> <p>Communication measures will increase rhetoric and are likely to include media briefings and targeted</p>	Replaces previous section.

		<p>messaging that the heatwave threat is imminent/occurring.</p> <p>Emergency Warning: An Emergency Warning is the highest level of warning. You may be in danger and need to take action immediately. The extreme conditions are prolonged at a locality, exceeding 3 days. Heatwave impacts are increasing. Any delay now puts your life at risk.</p>	
15	4.7 Response Activation	<p>While a heatwave can be forecast, they are still unpredictable in behaviour. There may be occasions where a forecast heatwave does not eventuate, or the severity is lower than the initial forecast.</p> <p>Pre-emptive activities will commence prior to the onset of the heatwave. The IC reserves discretion in activating and continuing response arrangements based on:</p> <ul style="list-style-type: none"> <li>• Anticipated severity of the heatwave</li> <li>• Observed maximum and minimum temperatures</li> <li>• Public events and/or public holidays</li> <li>• Longevity of the heatwave</li> </ul> <p>Refer also to section 4.3 triggers.</p> <p>The IC will:</p> <ul style="list-style-type: none"> <li>• Activate the SHICC or Regional Emergency Operations Centre to coordinate the response to the heatwave</li> <li>• Activate the Incident Management Team</li> </ul>	
15	4.8 Stand Down and Debriefs	<p>The IC will determine when stand-down will occur. A stand-down advice may not automatically be called when the extreme heatwave trigger abates when the 3DAT falls below the trigger thresholds. The IC will consider advice from the BoM for the upcoming forecast period along with syndromic surveillance information associated to the heatwave event and observed impacts, along with the concurrence of public events and holidays.</p>	
16	4.10	<b>Incident Level 1</b>	

Heatwave Levels	<ul style="list-style-type: none"> <li>The thresholds for a heatwave are activated with an Extreme Heatwave for a locality/district with a duration of 1-3 days. <del>with the 3DAT of 32 degrees or greater.</del></li> <li>There are minimal impacts on the community with no residual effects to other agencies.</li> <li>Hospitals and health services observe negligible increase in activity commensurate with the incident</li> <li>Community alert messaging may utilise Advice, Watch and Act for day(s) where the heatwave is occurring.</li> </ul> <p><b>Incident Level 2</b></p> <p><del>Weather conditions leading into the heatwave are sub-optimal. The 3DAT of 32 degrees or above continues for approximately six days. The weather event is resulting in some power outages. Hospital activity increases with low number of fatalities.</del></p> <ul style="list-style-type: none"> <li>The Extreme Heatwave forecast for a locality/district continues for approximately 3 - 6 days</li> <li>The weather event is resulting in compounding and longer utility outages that have extended resolution timeframes and there are anticipated impacts on human health and infrastructure</li> <li>Hospital and health service activity increases</li> <li>Community alert messaging utilises Advice, Watch and Act and Emergency Warning.</li> </ul> <p>Level 2 incidents have actions under the State EM Procedure that are required to be completed.</p> <p><b>Incident Level 3</b></p> <p><del>The 3DAT period is protracted, exceeding seven days. Maximum temperatures exceed 45 degrees on multiple days with significantly increased night time temperatures. Public infrastructure is affected, especially power supply, compounding the heatwave and resulting in the public unable to seek respite from the heat. Schools are closing and other businesses close to protect the welfare of their workers.</del></p> <p><del>Tourism is greatly affected with events that were scheduled to be held outside being cancelled. Multiple fatalities are observed particularly for at risk populations.</del></p> <p>The EHF of Extreme period is protracted, exceeding six days.</p> <ul style="list-style-type: none"> <li>Maximum temperatures for the locality are exceeded for what is normally expected and</li> </ul>	
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		<p>multiple days with significantly increased night-time temperatures.</p> <ul style="list-style-type: none"> <li>Public infrastructure is affected, especially power supply outages, compounding the heatwave and resulting in the public unable to seek respite from the heat.</li> <li>Businesses are taking significant actions to protect the welfare of their workers. There are a significant number of anticipated impacts.</li> <li>Public events are greatly affected by where they cannot execute a safe event resulting in cancellations.</li> <li>Abnormally high presentations to hospitals/health services for heat related illness are observed particularly for at risk populations.</li> <li>Community alert messaging utilises Watch and Act and Emergency Warning.</li> </ul>							
21	Appendix A Distribution List	<p>Department of Education</p> <p>Department of Health (Commonwealth), representing both the aged care sector and Aboriginal Community Controlled Health Organisations</p> <p>Local Government (WA Local Government Association to notify)</p>	Additional agencies identified.						
25	Appendix B	<table border="1"> <tr> <td><b>3-Day Average Temperature (3DAT)</b></td> <td>A forward looking average temperate of forecast temperatures for the next three days.</td> </tr> <tr> <td><b>Heatwave Alert</b></td> <td>A forecast maximum temperature of 40 degrees Celsius or above on three or more consecutive days for the Perth metropolitan area.</td> </tr> <tr> <td><b>Heatwave Trigger</b></td> <td>A 3DAT of 32 degrees Celsius or above.</td> </tr> </table>	<b>3-Day Average Temperature (3DAT)</b>	A forward looking average temperate of forecast temperatures for the next three days.	<b>Heatwave Alert</b>	A forecast maximum temperature of 40 degrees Celsius or above on three or more consecutive days for the Perth metropolitan area.	<b>Heatwave Trigger</b>	A 3DAT of 32 degrees Celsius or above.	
<b>3-Day Average Temperature (3DAT)</b>	A forward looking average temperate of forecast temperatures for the next three days.								
<b>Heatwave Alert</b>	A forecast maximum temperature of 40 degrees Celsius or above on three or more consecutive days for the Perth metropolitan area.								
<b>Heatwave Trigger</b>	A 3DAT of 32 degrees Celsius or above.								
27	Appendix C	<table border="1"> <tr> <td><b>Aboriginal Health Council WA</b></td> <td>a. As the peak body of Aboriginal Community Controlled Health Organisations, maintain a register of key contacts for the purpose of communicating heatwave information.</td> </tr> </table>	<b>Aboriginal Health Council WA</b>	a. As the peak body of Aboriginal Community Controlled Health Organisations, maintain a register of key contacts for the purpose of communicating heatwave information.					
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			<p>b. Assist in communicating messages to AHCWA health professionals: before a heatwave, to assist the development of community resilience and during a heatwave emergency to protect the community.</p>	
	Bureau of Meteorology		<p>a. Alert the WA health system to predicted heatwaves, through their Emergency Services Briefings and forecasting products.</p> <p>b. Assist in communication of WA health system's messages to the community.</p> <p>c. Ongoing support to the National Heatwave Policy.</p> <p>d. Participate in ISG, OASG and SECG meetings as requested.</p> <p>e. Provide a liaison officer to the SHICC if required.</p>	
	Department of Education		<p>a. Assist with the provision of information to school leaders, school staff, students and parents</p> <p>b. Liaise with the Catholic Education Office and the Association for Independent Schools in Western Australia to allow a collaborative education sector approach</p> <p>c. Participate in ISG, OASG and SECG meetings as requested</p>	
	Department of Fire and Emergency Services		<p>Assist in communicating messages to the public:</p> <p>i. before a heatwave, to assist the development of community resilience and</p> <p>ii. during a heatwave by providing a capability for the HMA to issue heatwave community warnings on Emergency WA.</p>	
	Department of Health (Commonwealth)		<p>a. Coordinate the flow of information to the residential aged care sector</p> <p>b. Coordinate the flow of information to Aboriginal Community Controlled Health Organisations.</p>	

		<p>Department of Primary Industries and Regional Development</p>	<p>a. Provide relevant information to the HMA for public messaging on welfare of animals during a heatwave when requested.</p> <p>b. Assist in communicating messages to stakeholders on welfare of animals during a heatwave.</p>		
		<p>Local Government</p>	<p>d. Ensure event management plans have effective heat management strategies.</p> <p>e. Negotiate with event organisers relating to incident specific requests.</p> <p>f. Promote heat safety messages to tourists where the LG support tourist information services.</p>		
		<p>Tourism WA</p>	<p>a. Participate in ISG, OASG and SECG meetings as requested.</p> <p>b. Provide advice on key tourism activities that occur during the high threat season.</p> <p>c. Act as liaison with the event organisation.</p>		
		<p>Water Corporation</p>	<p>a. Provide advice to the WA health system in respect to water and wastewater services to Water Corporation customers.</p> <p>b. To Maintain business continuity, including the provision of safe water during heatwave events,</p> <p>c. Minimise the disruption to the water supply and wastewater system, and the impact to people properties and the environment from interruptions, contaminations and overflows.</p> <ul style="list-style-type: none"> <li>• <del>ensure continuity of safe drinking water supply.</del></li> <li>• <del>maintain power interruption contingency plans for pump stations, treatment facilities and other critical infrastructure required to provide water and wastewater services.</del></li> </ul> <p>d. Participate in ISG, OASG and SECG meetings as requested.</p>		

		Western Australian Council of Social Services	<p>a. As the peak body of social services, maintain a register of key contacts for the purpose of communicating heatwave information.</p> <p>b. Assist in the promulgation of messages to key social service agencies: before a heatwave, to assist the development of community resilience and during a heatwave emergency to protect the community.</p>	
30	Appendix F: <del>Three Day Average Temperature (3DAT) Calculation</del> Excess Heat Factor Calculation	Revised Appendix to replace Three day Average Temperature (3DAT) Calculation with Excess Heat Factor Calculation.		

## Specific Amendments to State Hazard Plan - Fire v1.01

Page	Statement/ Section	Amendment	Comment
8	2.27	Agricultural activities are exempt from a TFB; however, a bush fire control officer must impose a Harvest and Vehicle Movement Bans (HVMB) on these activities when the Fire <del>Danger</del> Behaviour Index (FDI- <del>FBI</del> ) <del>for local grasslands</del> is <del>40</del> 35 or above.	Statement of fact amendment to align to Australian Fire Danger Rating System.
27	Glossary	<p><del>Fire Danger Index – This is a measure of fire conditions and has a value between 0 (No Danger) and 100 (Extreme Danger). The index takes into account interaction between temperature, humidity, wind speed and the degree of fuel curing.</del></p> <p>Fire Behaviour Index - This is a measure of fire conditions and has a value between 0 (No Danger) and 100 (Extreme Danger). The index takes into account interaction between temperature, humidity, wind speed and the degree of fuel curing.</p>	Updated definition to align to Australian Fire Danger Rating System.