



BUSHFIRE ALERTS AND WARNINGS

A MARKETING RESEARCH REPORT

Prepared For:

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Background and objectives

Background

- The Department of Fire and Emergency Services (DFES) leads the coordination of emergency services across Western Australia (WA) and responds to a range of hazardous situations, including natural disasters, such as bushfires and other types of emergencies which endanger both lives and property.
- DFES's scope covers prevention of, preparation for, response to and recovery from hazardous situations. As part of its remit, DFES issues community alerts and warnings to inform and help keep the community safe during bushfire incidents. The alerts and warnings are based on the agreed national bushfire warning system adopted by all States and Territories in 2009.
- Within the bushfire warning system, DFES uses a range of bushfire related terminology and language to describe current fire conditions, the levels of risk and danger facing the community, and the actions the community may undertake to prepare and protect themselves.
- Similar language, terminology and format have been used by DFES over the past four bushfire seasons, although they are reviewed annually capturing the lessons learned from each season. DFES is seeking to review its bushfire alerts and warnings to ensure they are as effective as possible.

Objectives

The overall objective of the research is to assess the ongoing effectiveness of DFES' bushfire alerts and warnings' language, terminology and format. Within this overall objective there were a number of areas to explore:

- How does the language and terminology used by DFES compare with that used in other States and Territories?
- To what extent is the community aware of the bushfire warning terminology and language (recall)?
- To what extent does the community understand the bushfire warning terminology and language (comprehension)?
- What, if any, language or terminology does not support community action in response to bushfire warnings?
- How effective is the language used in DFES' bushfire alerts and warnings?

- Which formats more effectively support the overall communication objectives of the bushfire warning system, within the relevant principles and protocols?
- How can community understanding and awareness of the bushfire alerts and warnings be improved?
- How can effectiveness of the bushfire alerts and warnings be improved?

Method and Sample

The research utilised a focus group methodology as follows:

Group	Bushfire planning behaviour	Age	Gender
1	Non-engaged	Younger	Mixed
2	Non-engaged	Older	Mixed
3	Engaged	Younger	Mixed
4	Engaged	Older	Mixed

- 'Non-engaged' were people not actively managing bushfire risk i.e. without a bushfire survival plan in place.
- 'Engaged' were people who are managing the risk of bushfire, with a bushfire survival plan in place.
- Younger groups were aged under 40 and older groups aged over 40.
- A total of 23 respondents participated in the research.
- Respondents were drawn from a number of at risk locations.
- People who had directly experienced a bushfire were excluded.

Group discussions lasted 90 minutes and involved detailed exploration of the language and terminology used by DFES in its 'emergency', 'watch and act' and 'advice' level warnings. Comparison with the format used in Victoria and South Australia (SA) for 'emergency' and 'watch and act' level warnings was also made. All were presented as DFES' approach however, to remove any bias.

- Three different versions of 'emergency' and 'watch and act' level warnings were tested with groups, reflecting the style and approach used by WA, SA and Victoria (see Appendix 1 and 2). Each execution was linked to the same location, typically Kalamunda where the majority lived, however one group was shown a Rockingham based example as the majority of respondents lived in this area.
- The order in which the three approaches were revealed to respondents was rotated to remove any bias.

- 'Advice' level alerts and SMS emergency alerts were tested for WA alone as part of the 'emergency' and 'watch and act' level warnings. Three SMS alerts were tested (see Appendix 1) – one used in WA for emergency warning 'not safe to stay', a possible alternative and a third with a call to 'activate your bushfire plan'.
- Alerts were first read out to respondents and initial thoughts noted e.g. recall, comprehension, effectiveness and propensity to act.
- Respondents were then given hard copies of the alerts to 'edit'.

Focus groups took place on Thursday 13 June in Kalamunda, and Monday 17 June and Thursday 20 June in East Perth. Respondents received a \$70 incentive for taking part in the research.

Summary of Findings

- Overall, there was low recall of the specifics of bushfire terminology and language. A scattering of people across the sample mentioned the Fire Danger Rating signs displayed on roadsides when discussing this topic. Engaged respondents were more likely to describe the process of alerts and warnings in more detail.
- The approach taken by WA in its bushfire alerts and warnings is the preferred approach over the other options tested. This more detailed alerts and warnings format is valued by the community, in particular those who are not well prepared for bushfires, because it gives more specific information about the situation and how to respond.
- In contrast, the more concise approach adopted by other States was often deemed to be lacking in crucial information, leaving the community with more questions than answers and potentially increasing their sense of anxiety in what would be an already emotionally charged situation. The WA style alerts are therefore likely to be more effective in producing action by the community.
- Respondents felt it was important to provide information not only about the threat itself, but what specifically they should do in response, particularly the unengaged people. This is where the WA format had a distinct advantage, for example the detailed 'What do to' checklist which was considered very valuable in guiding people through the things they needed to consider or take. Having more detail around the 'safer place' was also helpful, as well as any evacuation centre available.
- Respondents were aware that they were being given choices about how to respond, although there was pushback about this amongst some people who felt it created a level of ambiguity. They would prefer to be told exactly what to do – leave or stay – especially the unengaged audiences. Again, the WA alerts had an advantage here as it was felt to guide people through their options more clearly and in more detail.
- Terminology and language used within the alerts was largely clear and well understood. Particularly effective components to clearly communicate the issue and motivate action are:
 - Inclusion of a detailed 'What to do' section.
 - Naming specific locations e.g. roads and local landmarks.

- Describing the bushfire and its behaviour reinforces the level of urgency, such as the height of the flames and key terminology such as 'out of control', 'unpredictable' and 'fast moving' (where appropriate) – as well as the direction of the fire, ideally linked to a location rather than just 'north' etc.
- Inclusion of key words and phrases in 'emergency' level alerts such as 'Act immediately to survive', 'You are in danger' and 'Threat to lives and homes'.
- Knowing how to safely leave the area e.g. details of 'safest route' and road closures.
- Details of a 'safer place' – ideally a named location.
- How to stay updated, ideally including specific radio stations and the timing (not just frequency) of updates.
- Aspects to avoid, which limit the sense of urgency and/or confuse people are:
 - Broad statements that assume a level of knowledge which the community do not have e.g. 'Protect yourself from the fire's heat'.
 - Unqualified references to reading/actioning bushfire survival plans – those without a plan need to be given another option.
 - The phrase 'This fire is impacting now' was considered vague.
 - 'Hectares' was also singled out as a term not all could relate to.
- While the WA approach was most popular overall, it was considered rather lengthy which some felt undermined the level of urgency and also risked 'losing' people.
- To reduce the length a number of suggestions were made, such as removing the 'What firefighters are doing' section which was not seen as essential. Although it cannot be said definitively, removing the 'What firefighters are doing' section is likely to be sufficient in reducing the length of the alert, as it is evident that detailed information is valued by the community.

SMS alerts:

- SMS alerts appear an important, but somewhat challenging communication tool within an emergency situation. Some respondents had experienced, or heard about, ineffective SMS alerts, and there was discussion about how to convey enough detail with such a small amount of space.
- However younger audiences were keener on SMS alerts as they felt they would check it immediately, whilst they may miss a TV or radio alert.

- The SMS alert with the most 'power' was the first tested (see Appendix 1). This created a sense of urgency with the wording 'Leave now. Not safe to stay' and directed people to more detailed sources of information. In contrast, the second SMS alert did not convey this urgency, and the third referenced activating your bushfire plan which unengaged audiences did not relate to.
- In addition to the detailed feedback on terminology, the research highlighted a number of issues in relation to broader communication approach and public education, for example:
 - One issue is the general lack of awareness amongst the community of the three levels of warning, particularly unengaged, but also some engaged respondents. With greater awareness there will be more chance that the community quickly grasps and connects with the information being relayed.
 - Another issue was the effectiveness of SMS alerts, as mentioned.
 - Further, some people were unfamiliar with DFES, still referring to FESA (which the Department was called before November 2012) potentially creating confusion, in particular about where to get more information online. It is therefore important that the public can still find the DFES website by searching for FESA.
 - Some felt that the DFES phone number (1300 657 209) was hard to remember and would prefer a three or six digit number.
 - The frequency of updates in the 'watch and act' situation was also singled out, which some felt should be hourly.
 - There was also an appetite for local community engagement on the topic of bushfire risk and planning amongst this sample, along the lines of the approach taken within cyclone risk areas. This included being given information about bushfire risk as a new resident in the area and public education activities. Whether this information should come from DFES or local government was not specified, rather the focus of the discussion was on the need and desire for more information from a variety of sources to increase community awareness and engagement with bushfire risk and planning.
 - The younger and engaged group discussed the Emergency Aus App, which one person was using and others liked the sound of as they thought it would be a convenient and accessible tool to receive information about emergencies.