Australian Fire Danger Ratings System
Social Research Project

Research Advisory Forum / Hobart 2019

Fiona Dunstan / SA Country Fire Service
Social Research Project

- Why we are doing it
- How it is being done
- What we have found out
- What it means
- What comes next
Who is Involved

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**Current State**

- Bushfire Scaled Advice and Warnings Framework
  - Fire Danger Ratings
  - Bushfire Warnings
- Australian Tsunami Warning System
- Other hazards – various arrangements for each jurisdiction

**Social Research**

- Public Facing Fire Danger Ratings
- Multi-Hazard Warnings: Fire, Flood, Cyclone, Severe Weather & Extreme Heat

**Future State**

- National Multi-Hazard 3-Tiered Warning System
- National Warnings Frameworks: Fire, Flood, Cyclone, Severe Weather & Extreme Heat etc...
- Implementation 2022
Stages and Timing

Project Immersion
- Desk top review
- All primary and secondary sources
- Analysis & discussion
- Co-development of survey contents and sampling composition

STAGE 1
Benchmark Survey
- Nationwide online survey
- Benchmarking levels of awareness, understanding and response to current Fire Danger Rating System.

STAGE 2
Qualitative Research
- Survey 1 results used to guide the sampling and content of qualitative research.
- Focus Groups, workshops and intercept interviews

STAGE 3
National Survey
- Data from Stages 1&2 used to identify preferred options for testing.
- Identify the systems which result in the highest levels of understanding and positive action

July - August 2018
September 2018
October - November 2018
May 2019
Stage 1 – Quantitative Research

- 5,430 people
- Third largest survey undertaken

Fieldwork run between 14 and 27 September 2018
Data was weighted by age and gender within each jurisdiction
Stage 2 - Qualitative Research

48 locations across Australia

- Focus groups conducted throughout Australia
- October and November 2018
- Locations determined in collaboration with project steering group, included:
  - Medium-High Risk areas, where minor or major incidents have occurred in the past five years
  - Medium-High Risk areas, where no incidents have occurred in the past five years
  - Low-Risk areas
Stage 3 – Quantitative Research

Fieldwork run between 24 May and 9 June 2019
Data was weighted by age and gender within each jurisdiction

5,408 people
Recognise It, Don’t Understand It

Unprompted awareness 72%

Prompted awareness 93%

Understanding of Fire Danger Rating System purpose

- Predicts how likely a fire is to occur: 52%
- Predicts how dangerous a fire could be if it did occur: 39%
- Don’t know: 9%

“The Fire Danger Rating System is confusing”

Agreement that the existing system is confusing is understated, as most are misattributing its purpose.
Total Fire Ban is Well Known

Prompted awareness of Total Fire Ban messaging

93%

% of General Population

A total fire ban is seen as a period of time where you are not allowed to light fires, use power tools and/or machinery or have an open naked flame.

“Don’t light any fires. Don’t use welding equipment or machinery such as farming equipment. Don’t throw your cigarette butts out of car windows. Be alert and stay calm and think before acting.”

“During a total fire ban, you cannot light, maintain or use a fire in the open, or carry out any activity in the open that causes, or is likely to cause a fire.”
# Recall of Elements is Limited

## Scale
Few participants recalled that the system had six levels.

"I think it has 5 levels? It changed after Black Saturday to include a higher danger stage."
- Bannockburn, VIC

## Words
Most familiar ratings recalled: Low-Moderate, High, Extreme, and Catastrophic.

Less than 10 individuals accurately recalled the full range of Fire Danger Ratings used in the system.

"It has labels on it. You know medium, extreme or heavy, light. I can’t remember exactly what they are though."
- Brisbane, Queensland

## Colours
The ‘redder’ the colour the more dangerous the perceived risk rating.

Few were able to recall all colours.

More than half were surprised by the inclusion of blue.

"I think it starts with green or blue and then there’s red at the end."
- Alice Springs, Northern Territory

## Shape
The semi-circle shape is the most well known component of the Fire Danger Rating System, with the majority of participants able to recall it accurately.

"There is the semi circle shaped sign that has an arrow that points to the rating. I’m not sure what the ratings are called though. It always seems to be on something bad though."
- Albany, Western Australia
Change is Needed
Putting This All Together

- Optimised and simplified version of the existing system
- 4 Levels
- Green, Yellow, Orange, Red
- Low, Moderate, High, Extreme
- Include supportive messaging
- Clear, concise and action orientated
What Happens Next?

- Socialise research and project
- AFDRS jurisdictional consultation workshops
- Australian Fire Danger Ratings Board
- National Warnings Group
- ANZEMC and MCPEM
- Let's hear your thoughts ....
- Get ready for 2022