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How do Residents in Bushfire Prone Areas View the Bushfire Risk of their Local Area and their Homes?

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RESEARCH SCOPE



- 1. Residents perception of the bushfire risk of their local area and their own property
- 2. Which parts of their homes would residents seek shelter in during a bushfire and which parts would they avoid.
- 3. What improvements do residents believe might improve the ability of their home to respond to the local bushfire risk?



LARGER STUDY



Locations (178 responses)

8 places in two regions:

- Blue Mountains, NSW: Mount Wilson, Linden, Lapstone, Emu Plains
- Central Coast, NSW: Pretty Beach, Wagstaffe, Hardys Bay, Killcare

Resident Groups (74 responses)

Representing:

- Mothers with dependent children
- Elderly / retirees
- Able bodied
- > Able minded

252 Responses in Total

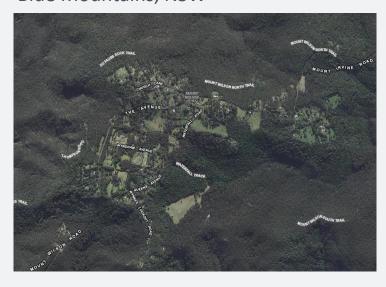




THE SAMPLE SITES



Mount WilsonBlue Mountains, NSW



Pretty BeachCentral Coast, NSW

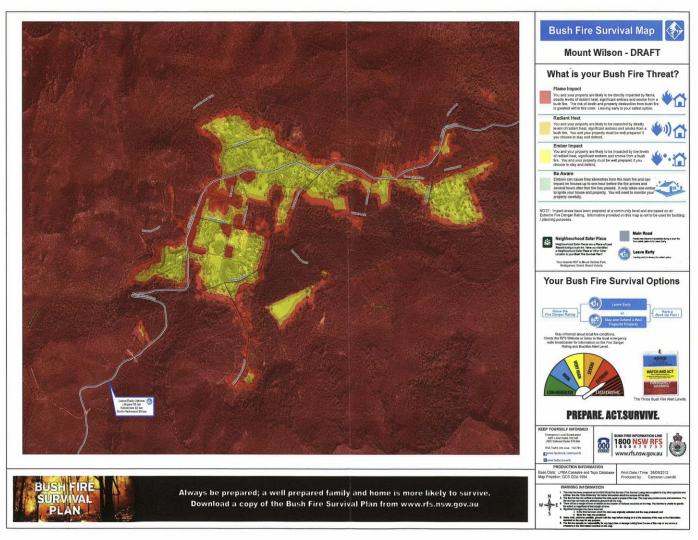




MOUNT WILSON

NSW RFS, COMMUNITY PARTICIPATION PROGRAM OPEN DAY 28 JULY 2012





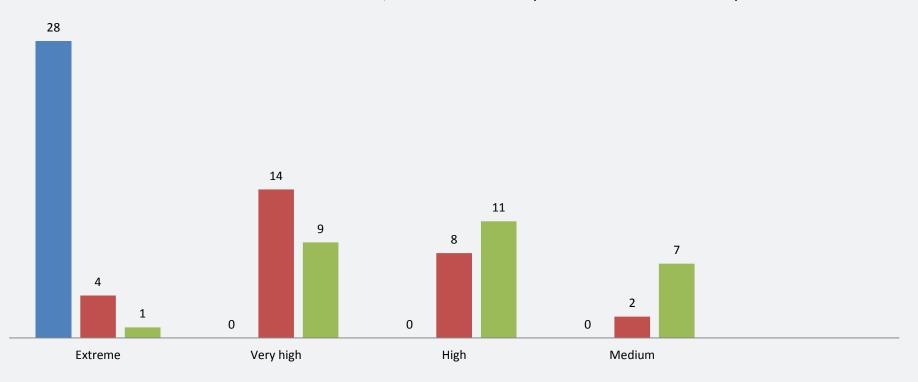


MOUNT WILSON RESPONSES



Mount Wilson

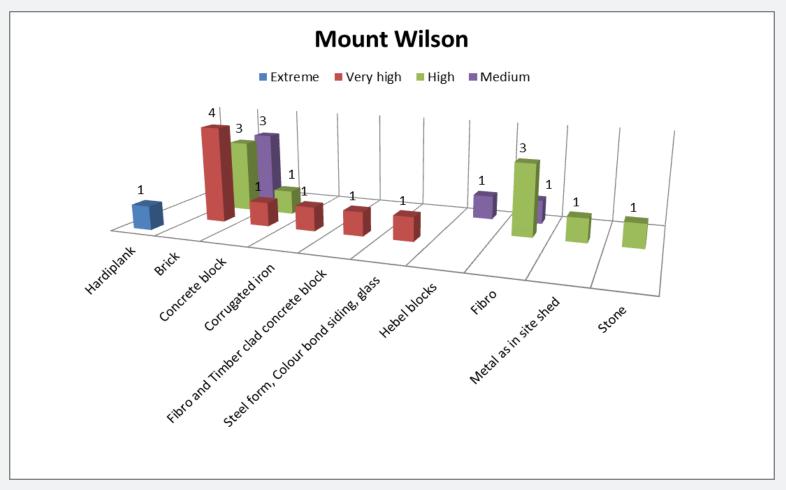
- RFS Rate the Bushfire Risk
- Residents Rate the Bushfire Risk, Question 6: How do you rate the risk of bushfire in this locality?
- Residents Rate the Bushfire Risk for their homes, Question 13: How do you rate the risk of bushfire to your current home





MOUNT WILSON WALL CONSTRUCTION AND RISK







MOUNT WILSON

RESIDENTS PERCEPTION OF THE BUSHFIRE RISK OF THEIR OWN PROPERTY



Factors in the surrounding area (18 out of 28)

- Lack of a hazard reduction for years
- Proximity to the National Park
- Bushland
- Steep slopes
- Closeness of trees to their homes
- Anticipated fire threat direction

Their bushfire preparation activities (7 out of 28)

- Regularly mown grass
- Cleared areas around house
- No overhanging trees
- Sprinklers with access to water tanks and generators

Construction of their house (3 out of 28)



PRETTY BEACH









WAGSTAFFE, PRETTY BEACH, HARDYS BAY

NO MIXED BOUNDARY (1 RESIDENTIAL ASSET)





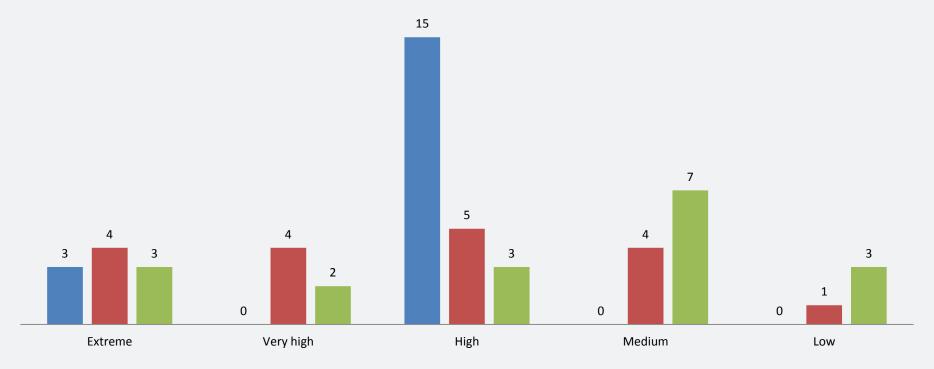


PRETTY BEACH RESPONSES



Pretty Beach

- RFS Rate the Bushfire Risk
- Residents Rate the Bushfire Risk, Question 6: How do you rate the risk of bushfire in this locality?
- Residents Rate the Bushfire Risk for their homes, Question 13: How do you rate the risk of bushfire to your current home?

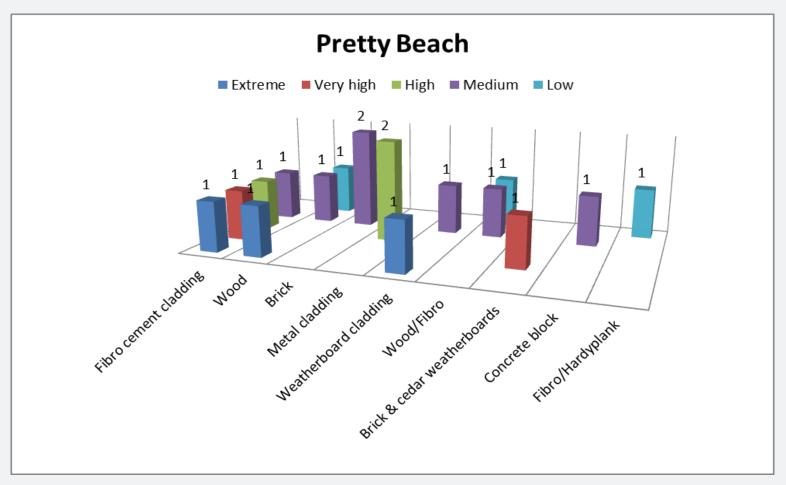




PRETTY BEACH

WALL CONSTRUCTION AND RISK







PRETTY BEACH

RESIDENTS PERCEPTION OF THE BUSHFIRE RISK OF THEIR OWN PROPERTY



Recent bushfire (7 out of 18)

- Not being damaged by it
- Almost being damaged by it

Factors in the surrounding area (6 out of 18)

- Proximity to the National Park
- Bushland
- Steep slopes
- Neglect of maintenance by neighbours

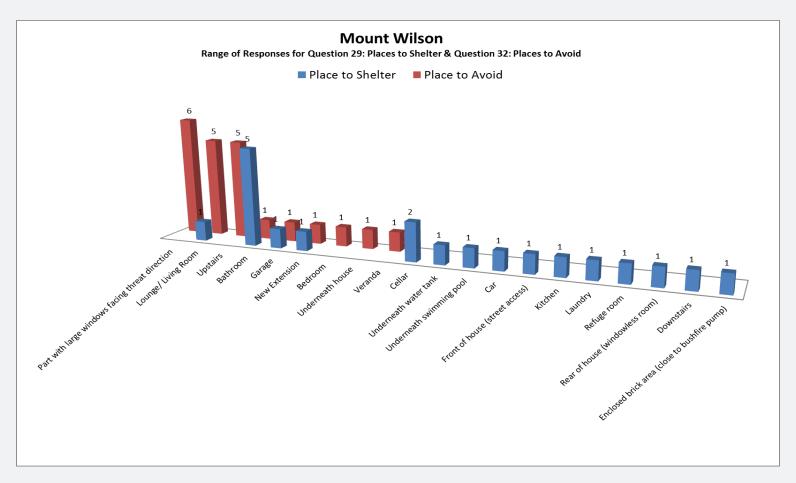
Construction of their house (2 out of 18)



MOUNT WILSON

RANGE OF RESPONSES FOR 'PLACES TO SHELTER' & 'PLACES TO AVOID'



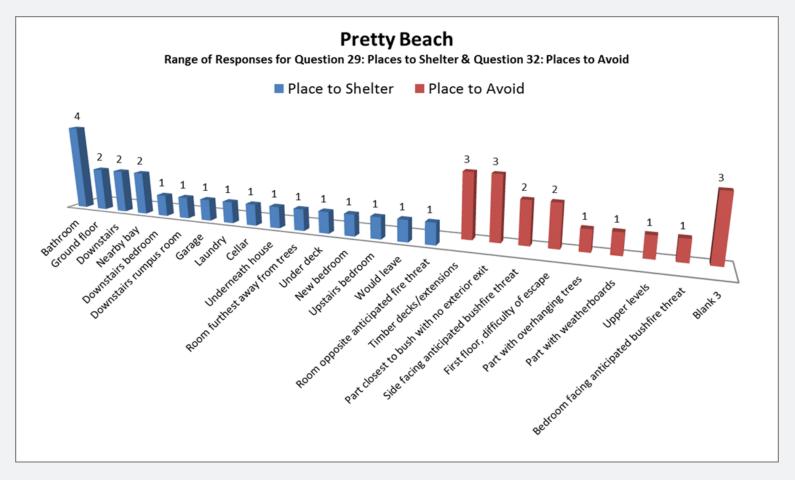




PRETTY BEACH

RANGE OF RESPONSES FOR 'PLACES TO SHELTER' & 'PLACES TO AVOID'



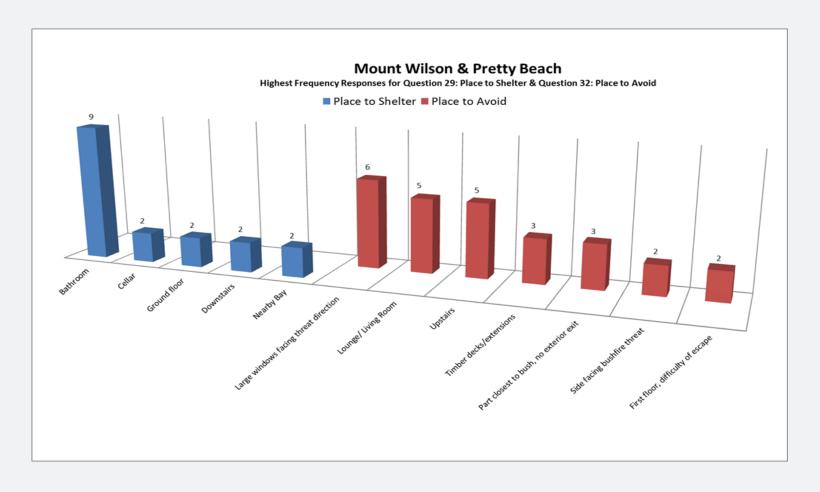




MOUNT WILSON & PRETTY BEACH

HIGHEST FREQUENCY RESPONSES FOR 'PLACES TO SHELTER' / 'PLACES TO AVOID'







WHICH PARTS OF THEIR HOMES WOULD RESIDENTS SEEK SHELTER IN DURING A BUSHFIRE AND WHICH PARTS WOULD THEY AVOID



For **Place to Shelter** the bathroom (9 out of 46) was the most popular choice. While there was a focus on the ground floor to facilitate escape.

Place to Avoid responses fall into four categorises:

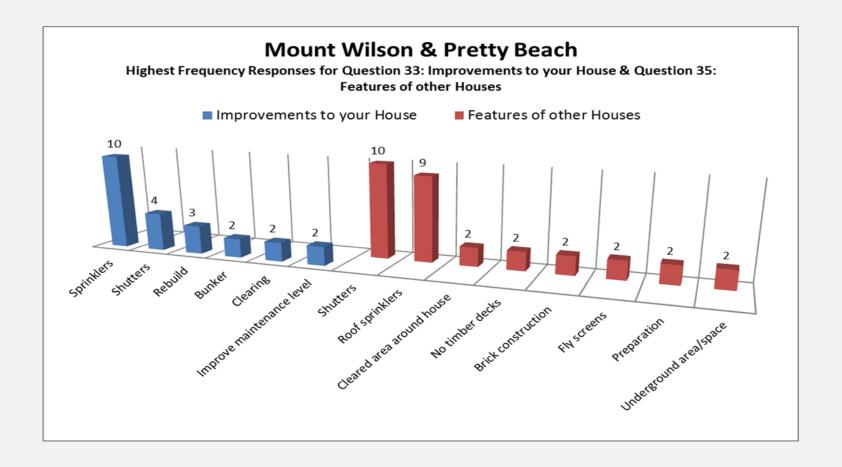
- Spaces with large amounts of glass facing fire threat (6 out of 46)
- Lounge/Living room (5 out of 46)
- Upstairs (limited escape) (5 out of 46)
- Parts/sections closest to the direction of the anticipated bushfire threat (5 out of 46)



MOUNT WILSON & PRETTY BEACH

IMPROVEMENTS TO YOUR HOUSE / FEATURES OF OTHER HOUSES







WHAT IMPROVEMENTS/FEATURES OF OTHER HOUSES DO RESIDENTS BELIEVE MIGHT IMPROVE THE ABILITY OF THEIR HOME TO RESPOND TO THE LOCAL BUSHFIRE RISK?



While a range of suggestions were given, there were primarily two architectural improvements to their homes that residents of Mount Wilson & Pretty Beach favoured.

They were:

- Roof and other sprinkler systems (19 out of 46)
- Bushfire shutters (14 out of 46)



FINDINGS / CONCLUSIONS



- 1. Residents overwhelmingly give their area a lower bushfire risk rating than the NSW RFS.
- 2. For their homes they either matched the risk rating they had allocated to their local area or gave it a lowest ranking.
- 3. There is no difference between the way that residents living in newer homes attributed the risk to their homes and those living in older homes.
- 4. Previous experience of a bushfire did not significantly affect the way residents allocated the risk rating to their homes.
- 5. It was generally not the materials used in the construction of their homes that residents used to ascertain the bushfire risk of their home; rather it appeared to be factors in the surrounding area.
- 6. There were commonalities in the spaces residents suggested they would take shelter and avoid in their own house during a bushfire.



IMPLICATIONS / APPLICATIONS



- 1. This research gives a clearer indication of the gap (after a CPP Open Day and a recent bushfire) between the bushfire risk ratings of the NSW RFS and residents of Mount Wilson and Pretty Beach, NSW.
- 2. Because residents often plan to shelter in bathrooms during a bushfire, new building construction may need to take greater care in the design and placement of bathrooms and ensuites in homes built in bushfire prone areas.
- 3. As residents living in AS 3959 compliant homes do not feel safer, it may appear to them that there is little justification in the additional expense this compliance costs.
- 4. If money became available for improving the bushfire performance of existing (non AS3959 compliant) buildings in bushfire prone areas, the following innovations are more likely to be viewed as valid by residents of those areas: roof and other sprinkler systems; bushfire shutters. These would need to be verified as viable bushfire prevention measures.



QUESTIONS





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