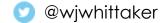
Householder preparedness and defence in the 2018 Reedy Swamp (Tathra) fire

BNHCRC Research Forum 2019

Dr Josh Whittaker / University of Wollongong











Business Cooperative Research Centres Programme



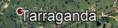
Householder preparedness and defence

- Householders can protect buildings by extinguishing ignitions before they develop into larger fires (e.g. Barrow 1945; McArthur 1968; Wilson and Ferguson 1984; Ramsay et al 1987).
- High degree of planning and preparation required to defend esp. water supply, pumps and generators (Penman et al. 2013; Wilkinson and Eriksen 2015).
- Changes to policy and messaging since Black Saturday greater emphasis on leaving; risks of staying to defend (Teague et al. 2010).
- Many people remain committed to staying to defend houses and property (McLennan et al. 2015; Whittaker and Taylor 2018; Whittaker 2019).









Bega

Black Range

e Earth

E.

Doctor George Mountain

Reedy Swamp

Jellat Jellat

Nelson

Chinnock

Kalaru

∧ N

1

athra

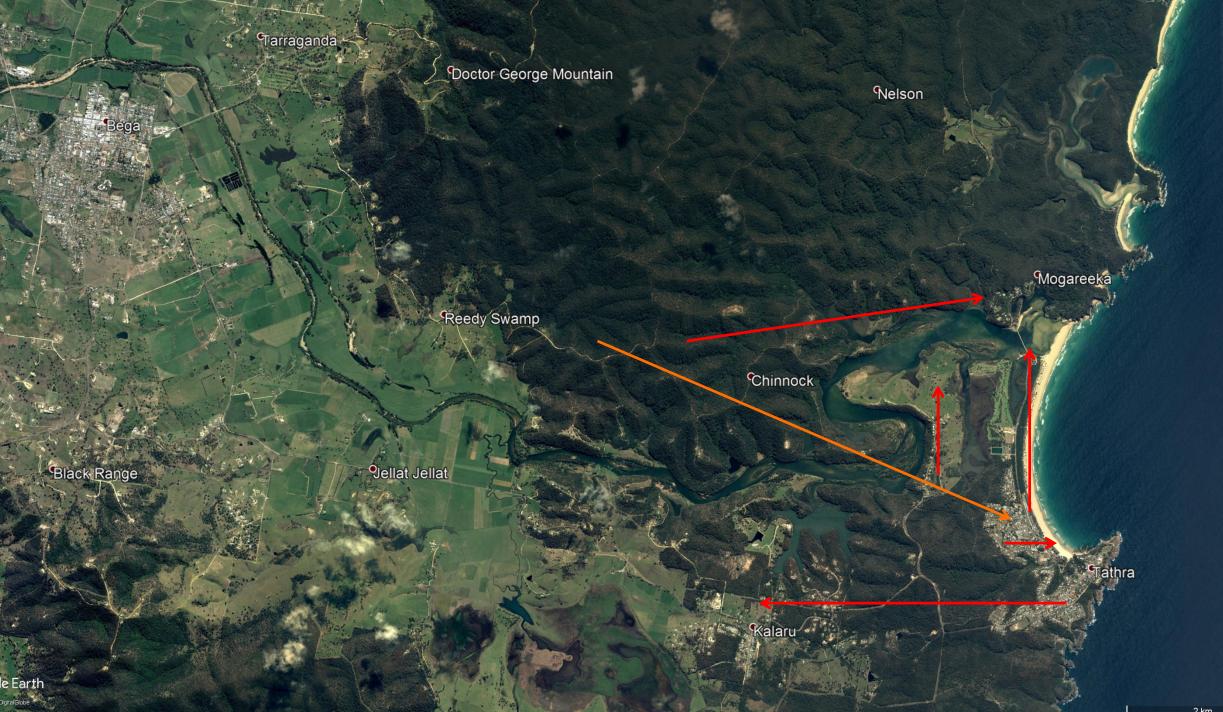
Mogareeka

youtube.com/watch?v=-PcYHKHNrLM

10

Cruisin

Conserva-



∧ N



Methods

Data collection:

- 87 interviews with 120 people
- Residents of Reedy Swamp and Tathra
- Local businesses, accommodation providers and clubs

Data analysis:

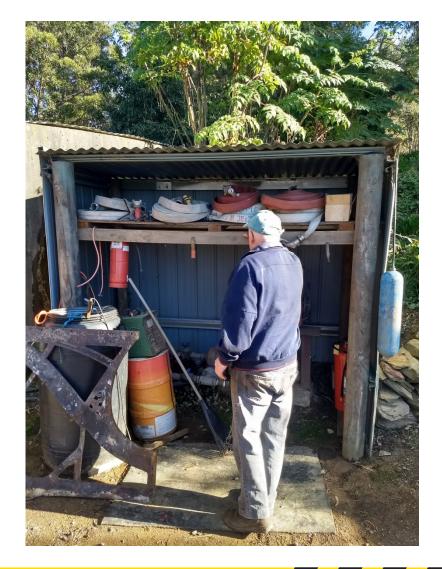
- 1300 pages of interview transcript
- Qualitative data using Nvivo 11
- Each transcript was read and reread to sort (code) information and derive key findings (Thomas 2006)





Preparedness for defence

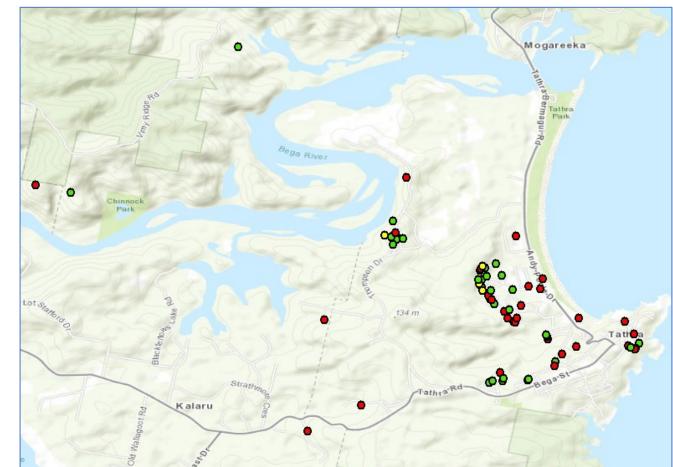
- Lack of awareness of bushfire risk, esp. within Tathra township.
- Preparation described as activity that occurs when a fire threatens.
- Limited evidence of fuel mgt. on private property (beyond general maintenance)
- Few had dedicated firefighting equipment and resources (e.g. pumps, generators, PPE).





Defensive actions

- At least 48% of houses in the interview sample were defended by householders*
- Some interviewees defended multiple properties (e.g. where neighbours evacuated)



Evidence of defence

- MAYBE
- NO
- YES





Defensive actions

- Some planned to stay and defend. Others carried out 'impromptu' defence with domestic equipment.
- Mains water supply was critical for interviewees who improvised their defence and did not have an alternative water supply, pumps and generators for firefighting.
- Many noted their good fortune that mains water pressure was sufficient during the fire.









Implications and conclusions

- Lack of awareness of potential for embers to carry fire into urban/suburban settings, which translated into low levels of preparedness.
- Many householders stayed to defend their own and others' houses despite limited planning and preparation.
- Householder defence prevented greater house loss, but outcome would have been different had mains water supply/pressure failed.
- Next step is to combine interview and BIA data to gain a fuller picture of householder defence and its relationship with house loss and survival.



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