

Bushfire risk at the rural–urban interface

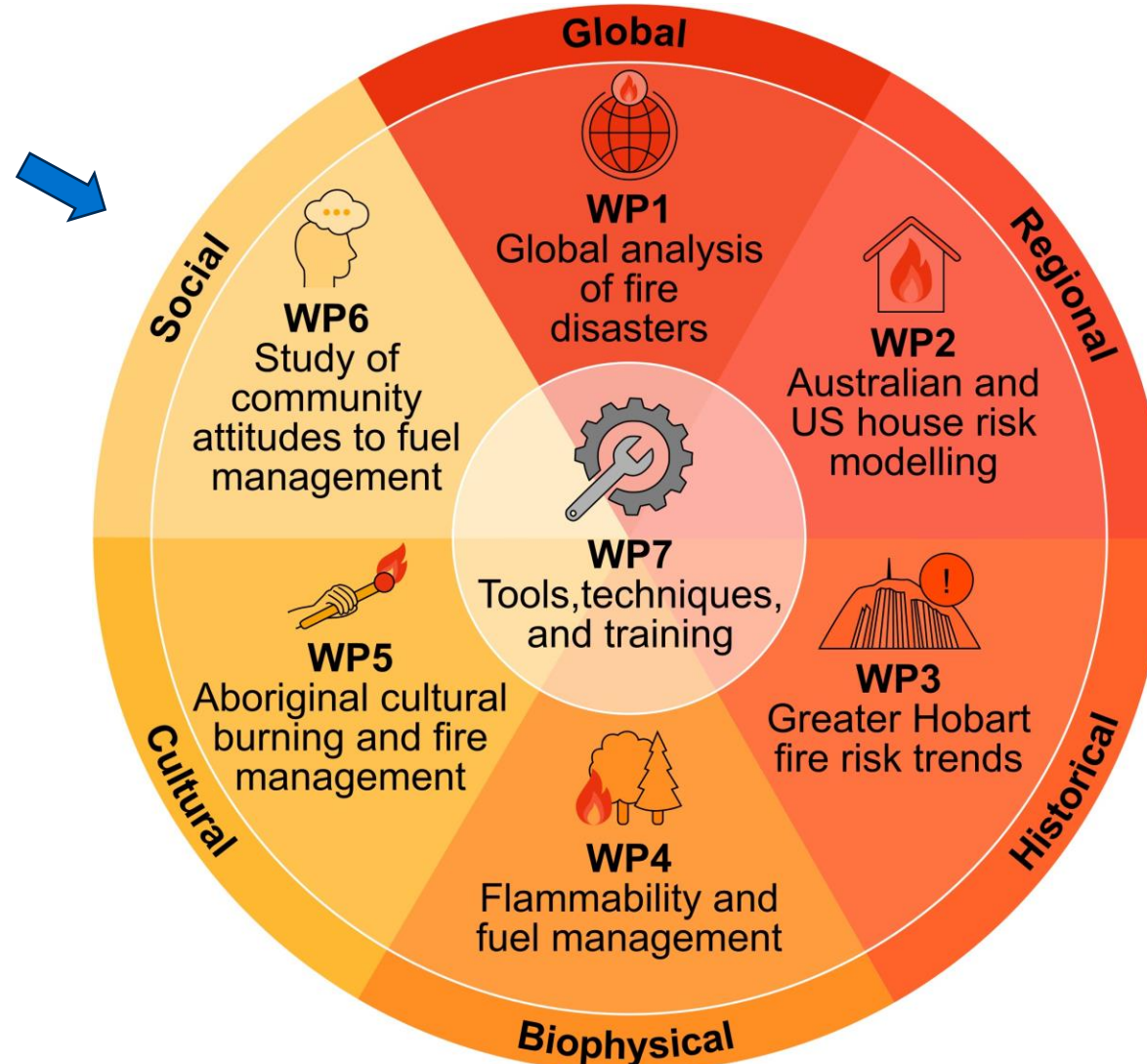
Bushfire behaviour and mitigation
strategies

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T2-A5: Bushfire risk at the rural-urban interface



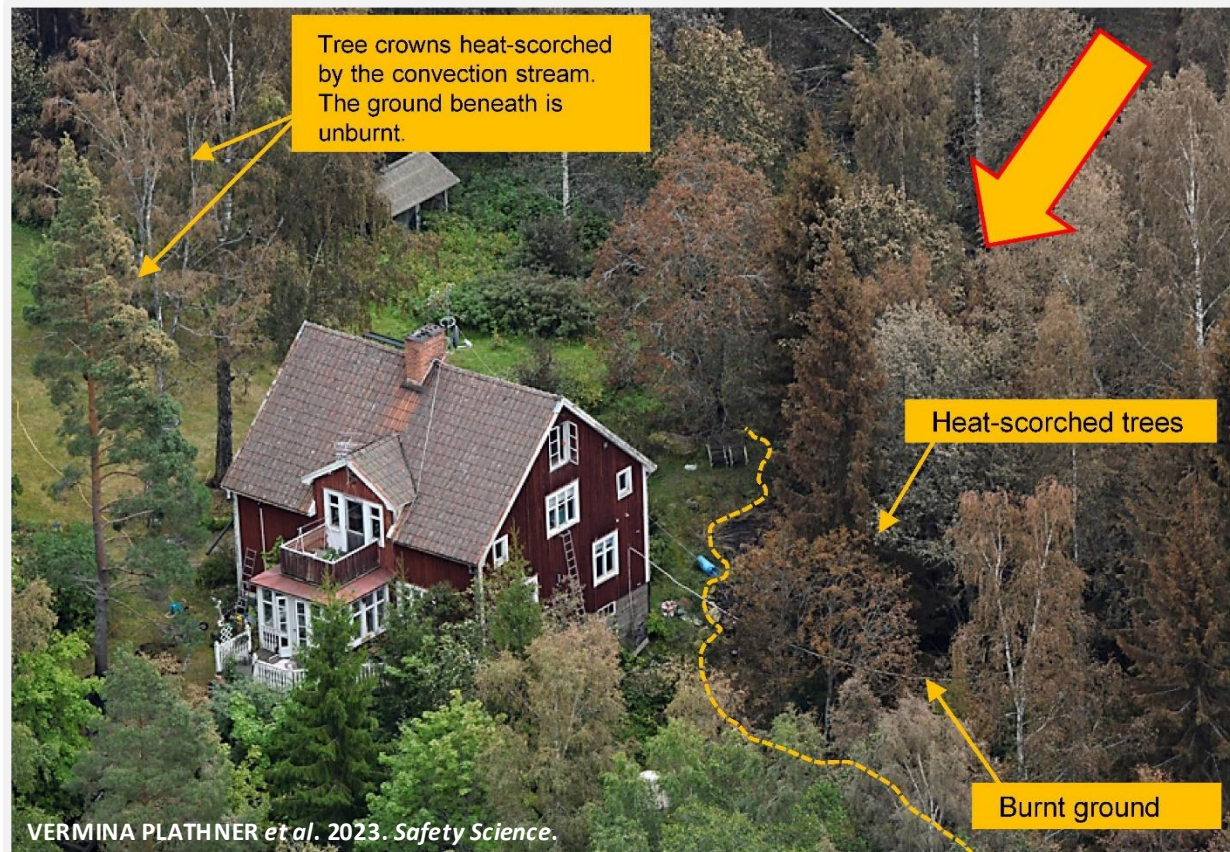
Social Perspectives

- Garden values
- Attitudes to Fuel Management
- Tasmanian Bushfire Survey
- Bushfire Places of Last Resort
- Community Centred Risk Reduction



The defensible space

Sweden



Hawaii



Defensible space – emotional preparedness



Figure 4.1: The successful defence of this property from the bushfire was attributed to the creation and maintenance of the APZ.

"...physical preparedness alone is not enough to adequately prepare an individual for a fire. Central to the successful defence of properties during the October 2013 fires was a level of emotional preparedness."

Wilkinson, Eriksen, Penman, Dun, Gill. 2014.
Lessons from the State Mine Fire: a post-fire analysis of preparedness and risk in the Blue Mountains, NSW in Social construction of fuels in the interface



Landscape



We really need to be ready!

Accurate understanding of landscape fire hazard

Garden



Underestimated garden fire hazard

At least my garden is safe!



Defensible space and garden owner attitudes

*“If you want to mitigate bushfire garden hazard you can't find the **information**, it's really prohibitive.”*

*“My biggest challenge I face making my property more fire safe is] trying to get the **right advice** about what to chop down and what to leave”*



Garden bushfire mitigation



International Journal of Disaster Risk
Reduction

Volume 121, 15 April 2025, 105424



An expert system to quantify wildfire hazards in gardens and create effective defensible space

Stefania Ondei ^{a b} ✉, Grant J. Williamson ^{a b}, Scott Foyster ^{a b},
David M.J.S. Bowman ^{a b}

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Garden design can reduce wildfire risk and drive more sustainable co-existence with wildfire

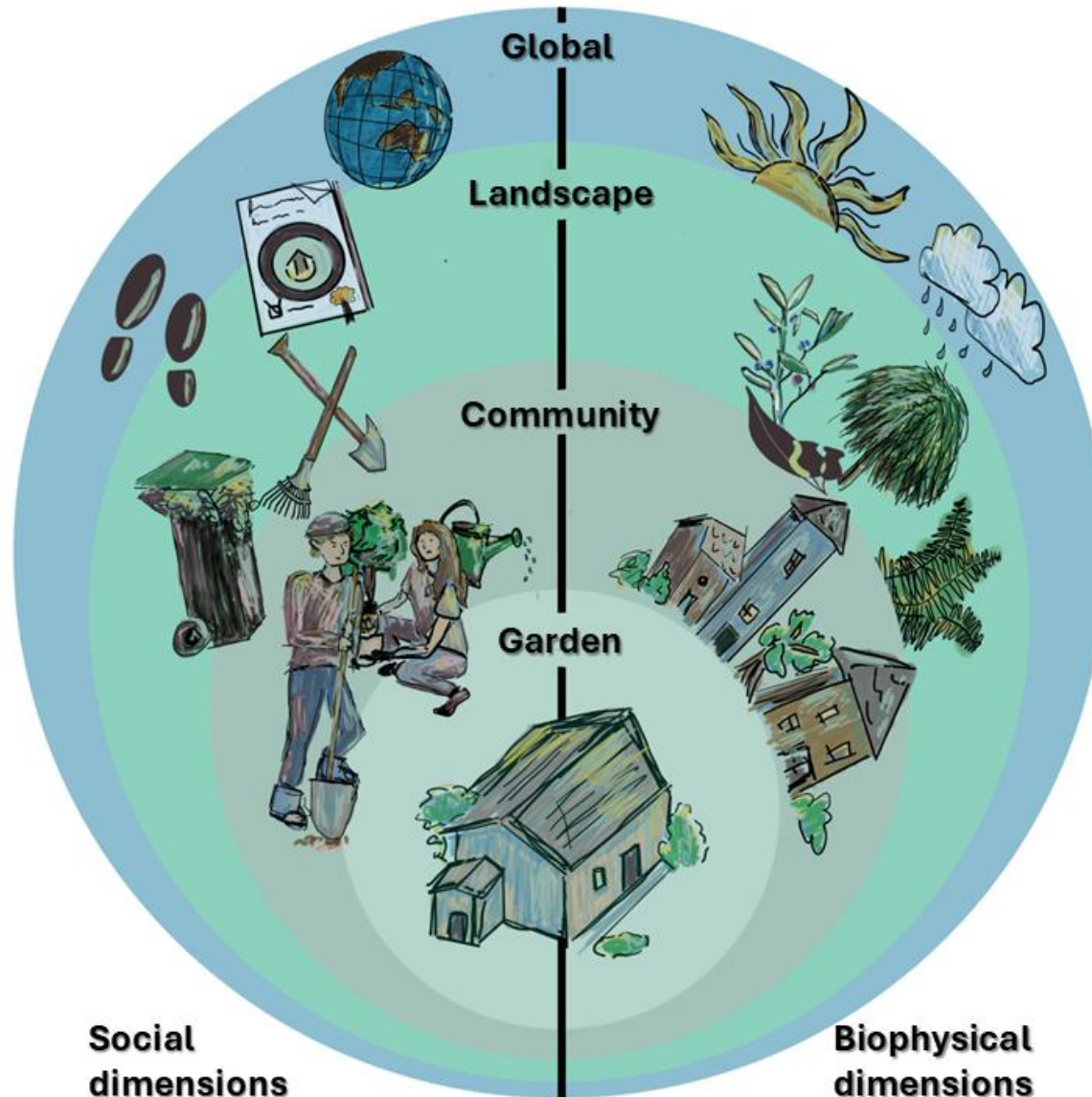
[Stefania Ondei](#) ✉, [Owen F. Price](#) & [David M.J.S. Bowman](#)

[npj Natural Hazards](#) 1, Article number: 18 (2024) | [Cite this article](#)

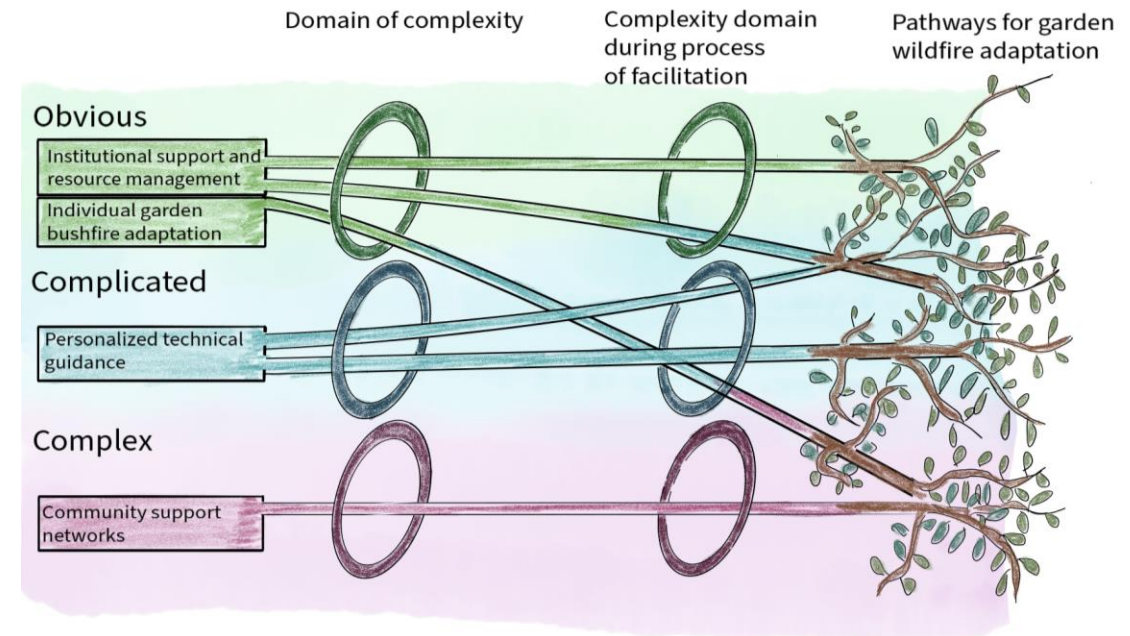
5487 Accesses | 1 Citations | 72 Altmetric | [Metrics](#)



Residential bushfire adaptation

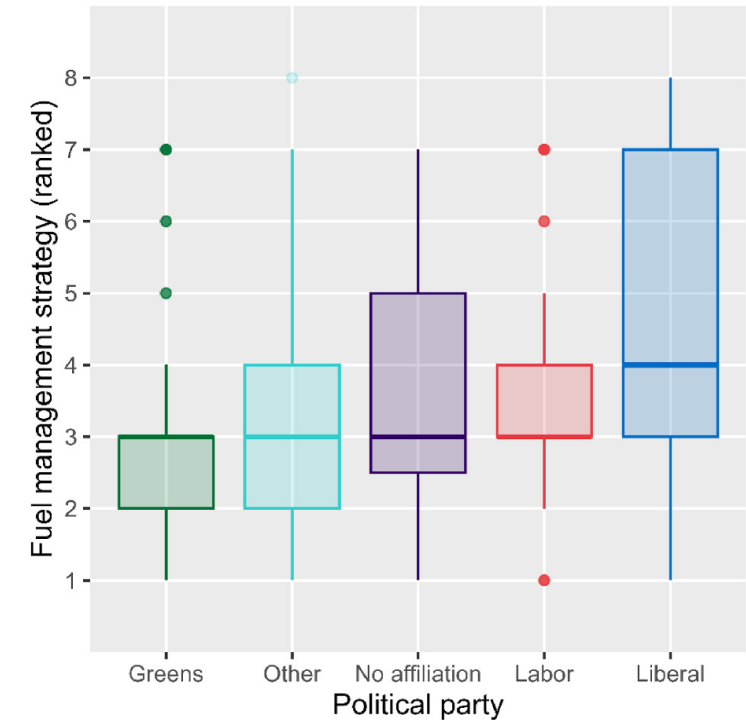
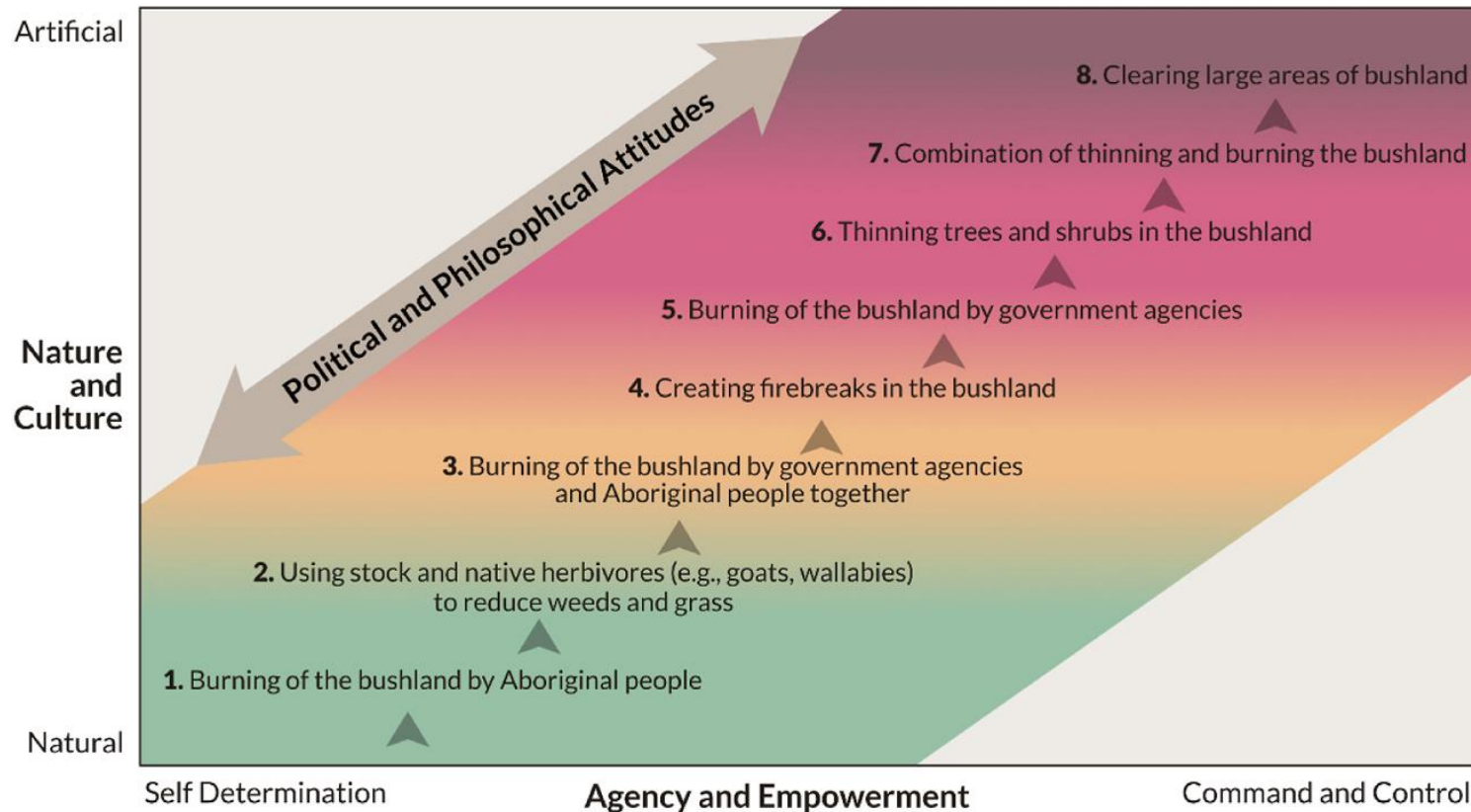


Garden fire adaptation is not merely a technical challenge but a complex socio-ecological process requiring coordinated efforts across multiple scales that interact in complex ways.



Attitudes to fuel management

Led by Dr Ami Seivwright



Seivwright, A., Onde, S., Gjedrem, A., Lester, L., & Bowman, D. M. (2025). Political orientation shapes attitudes to fuel management in the wildfire disaster prone island of Tasmania, Australia. *International Journal of Disaster Risk Reduction*



Archetypes and change in wildfire risk perceptions

- Understanding of wildfire risk perceptions and self-evacuation intentions among residents
- Rural vs Urban; men vs women have different risk appetites to bushfire threat
- All are becoming more risk averse



International Journal of
WILDLAND FIRE

RESEARCH PAPER
<https://doi.org/10.1071/WF24105>

International Association
of Wildland Fire

Archetypes and change in wildfire risk perceptions, behaviours and intentions among adults in Tasmania, Australia

Sharon L. Campbell^{A,*} , Grant J. Williamson^B , Fay H. Johnston^{A,C} and David M. J. S. Bowman^B

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Social and health factors influence self-reported evacuation intentions in the wildfire-prone island of Tasmania, Australia

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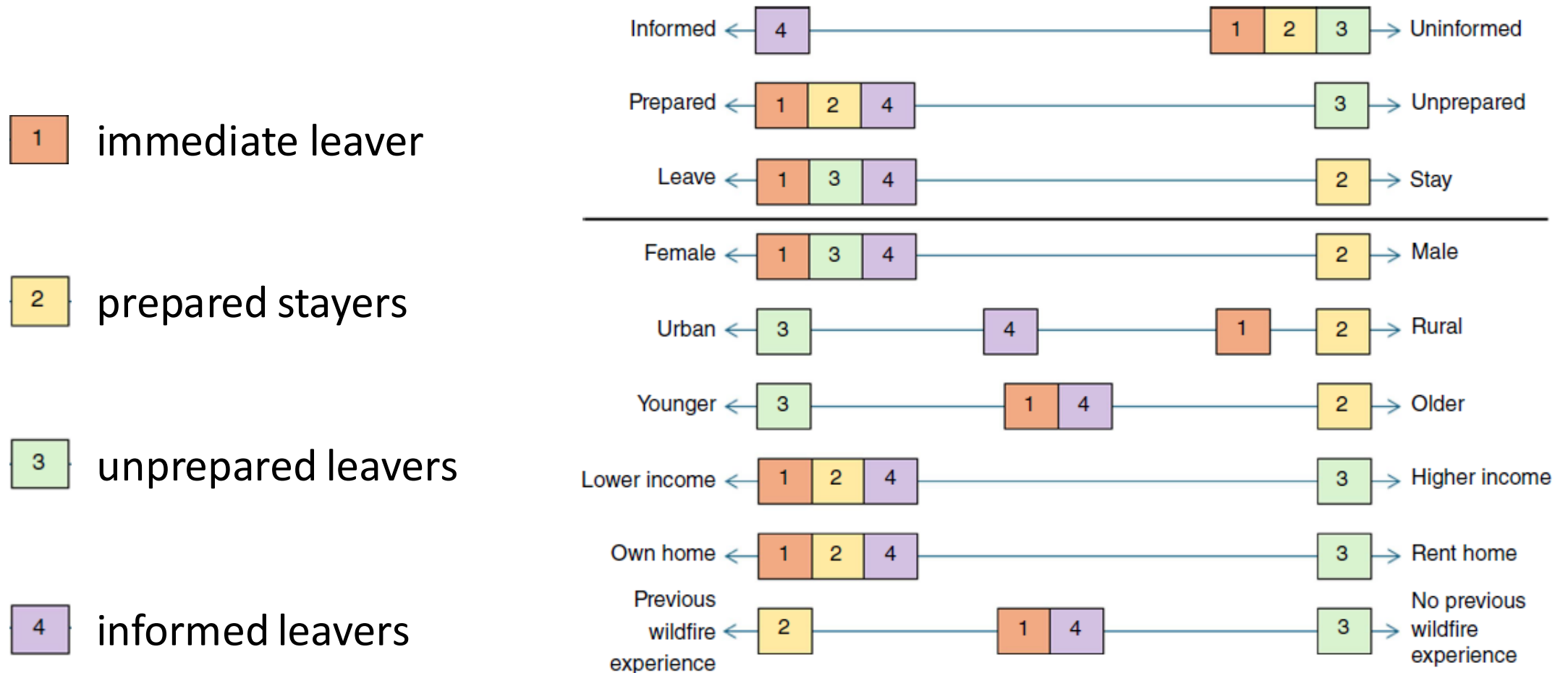
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^c Public Health Services, Department of Health, Tasmania, PO Box 125, Hobart, Tasmania, 7001, Australia



Archetypes and change in wildfire risk perceptions

Led by Dr Sharon Campbell



Bushfire Places of Last Resort (Nearby Safer Places) in Tasmania now and in the future

Co-lead research project

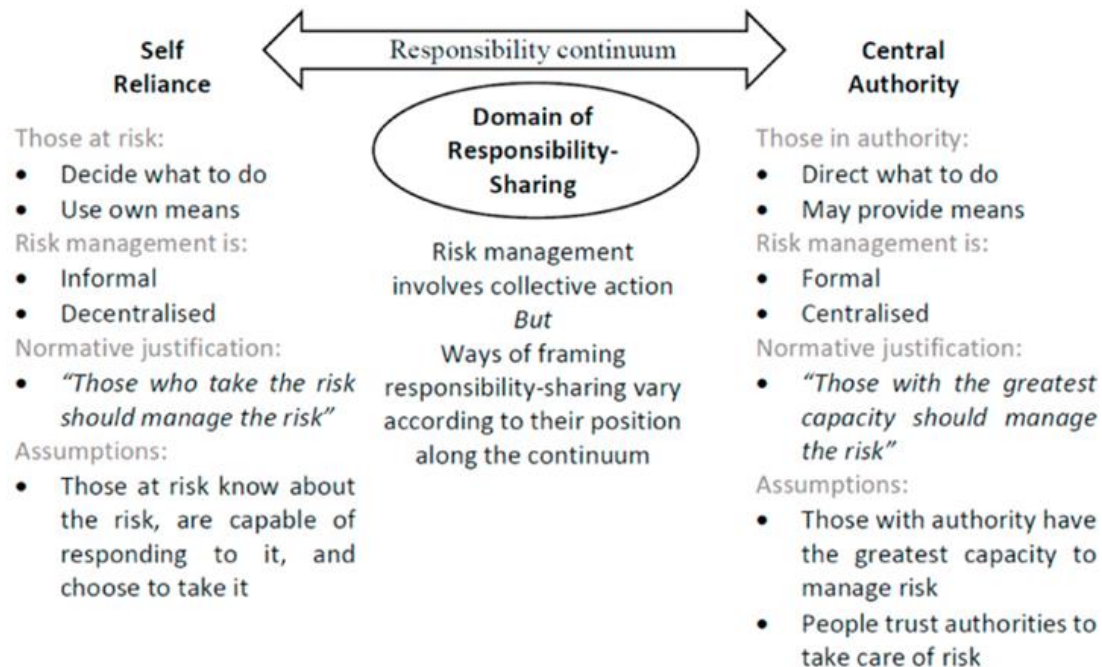


Tasmania Fire Service



Shared responsibility for bushfire risk management

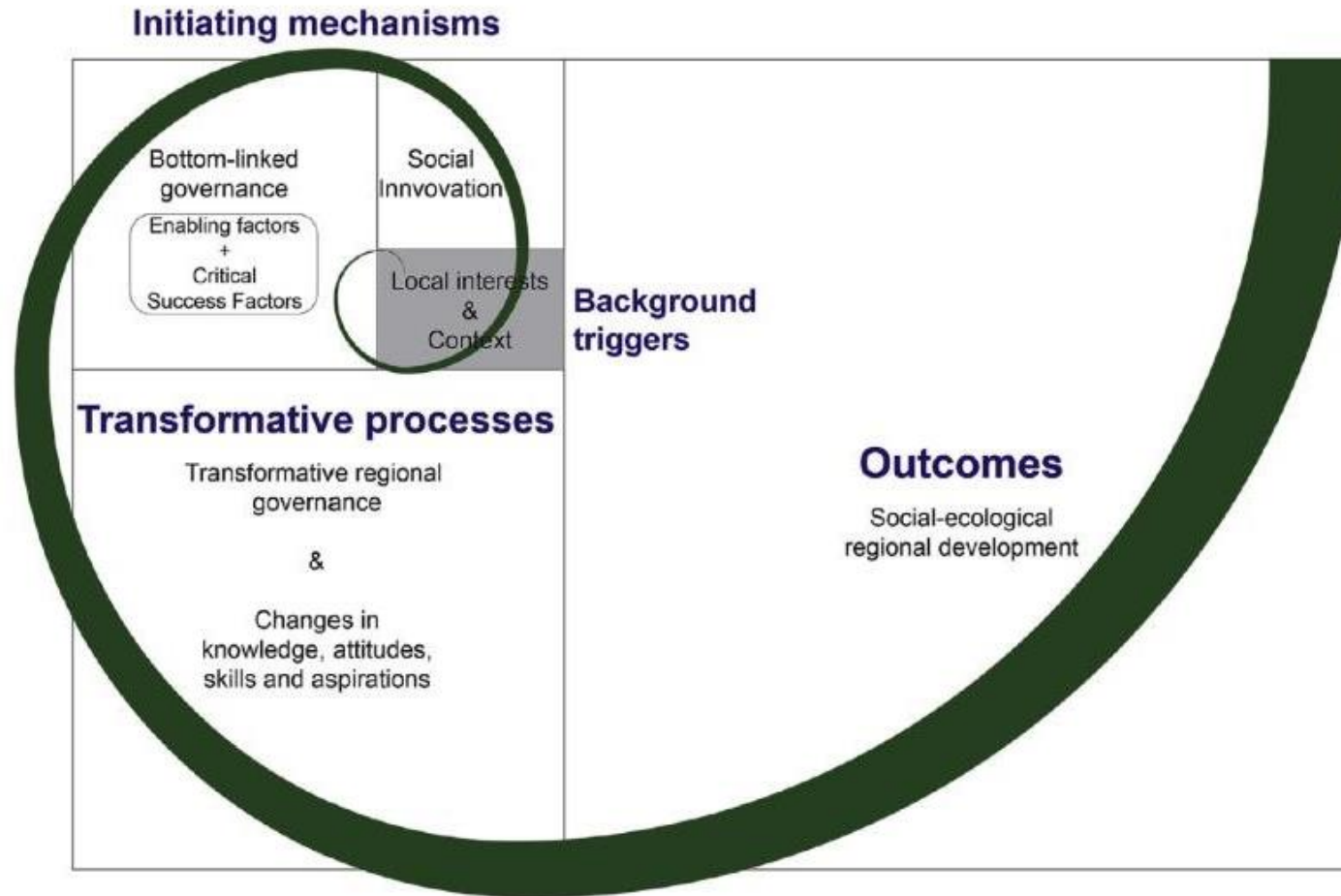
A literature survey of 27 research papers on ‘shared responsibility for bushfire disaster management in Australia’ highlights few academic papers investigate the notion of ‘shared responsibility’ through the lens of grassroots organizations’ perspectives and actions.



From B. J. McLennan and J. Handmer (2012): Changing the rules of the game: Mechanisms that shape responsibility-sharing from beyond Australian fire and emergency management



Community centred / led risk reduction

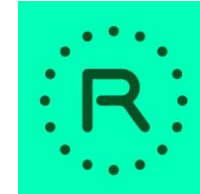


From Castro-Arce and Vanclay (2020): *'Transformative social innovation for sustainable rural development: An analytical framework to assist community-based initiatives'*.



Help us identify groups and organisations

*Relevant to the Tasmanian context (or nation wide) and bushfire management



Thank you!
(Tusen takk!)

