



bushfire&natural
HAZARDSCRC

RESEARCH DRIVING CHANGE

Showcase 2017

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Australian Government
Department of Industry,
Innovation and Science

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Cooperative Research
Centres Programme

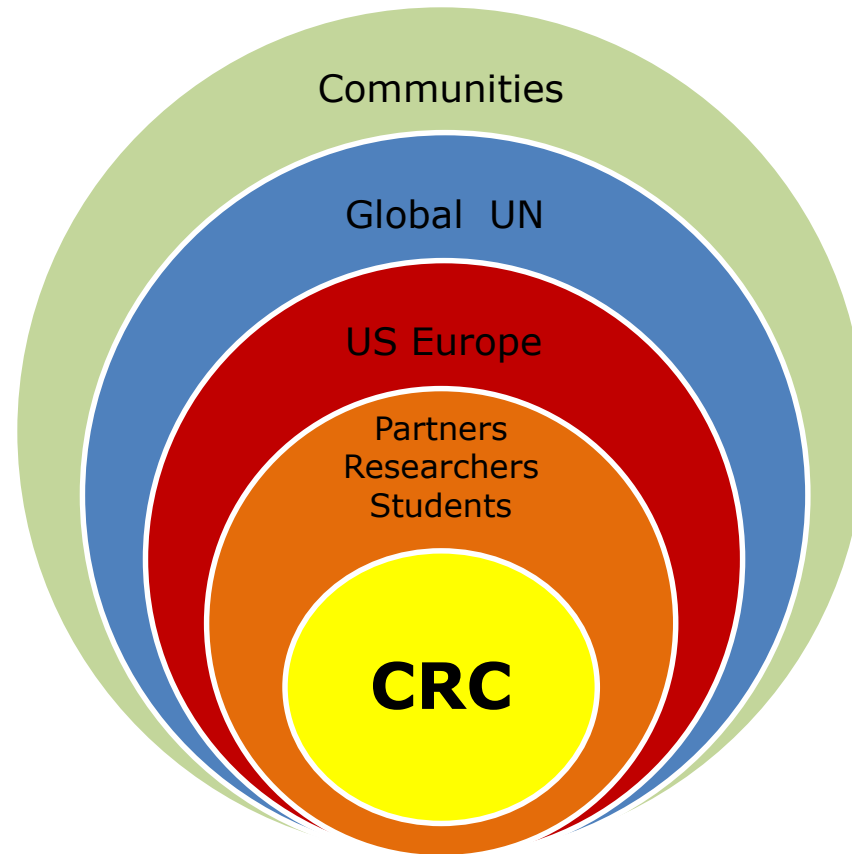




COLLECTIVE STRENGTH

LOCAL NETWORKS

GLOBAL LINKS



A FORUM OF KNOWLEDGE



*“We are still talking about getting **Research** into **Operations**.
You guys are doing the full loop with **Research** to **Operations**
and back into **Research**.”*

Ron Steffens, International Association of Wildland Fire



EMERGENCY WARNINGS



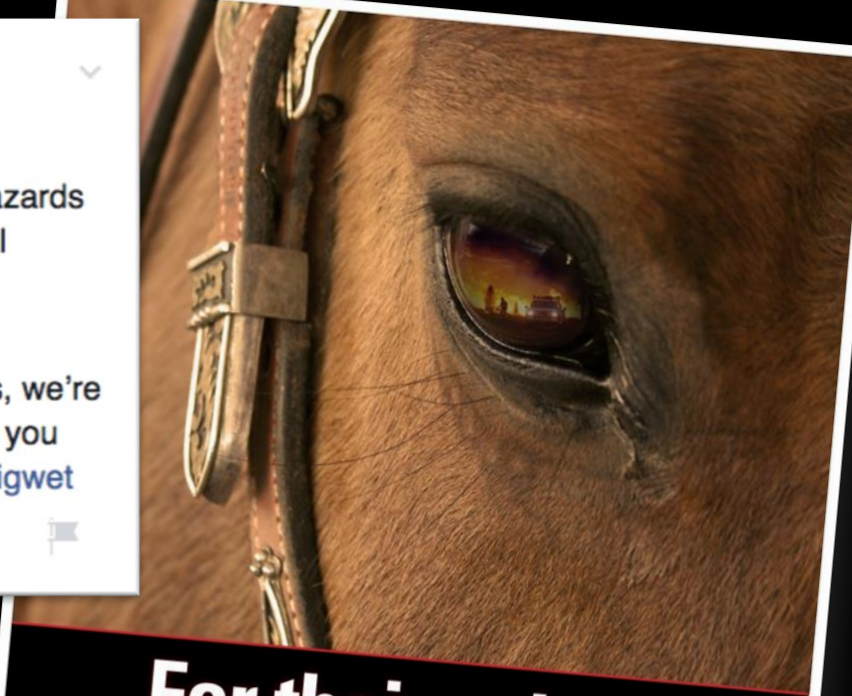
Queensland Fire and Emergency Services - QFES

1 hr · 🌐

If you're in the path of #TCMarcia, there is likely to be a number of hazards including fallen trees, power lines, debris and even possible structural damage to infrastructure and it is vital you do not explore collapsed buildings or go sightseeing.

As the severe weather passes and people begin to leave their homes, we're asking everyone to pay attention to traffic signs and road closures so you don't become stranded across a flooded road. #ifitsfloodedforgetit #bigwet

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For their sake...

Know your bushfire risk...
and make a plan for all your family.

For more information visit www.cfs.sa.gov.au
Bushfire Information Hotline 1300 362 361 (TTY 133 677)



PREPARE. ACT. SURVIVE.



EDUCATE THE CHILD EDUCATE THE COMMUNITY



VOLUNTEERS



MITIGATION

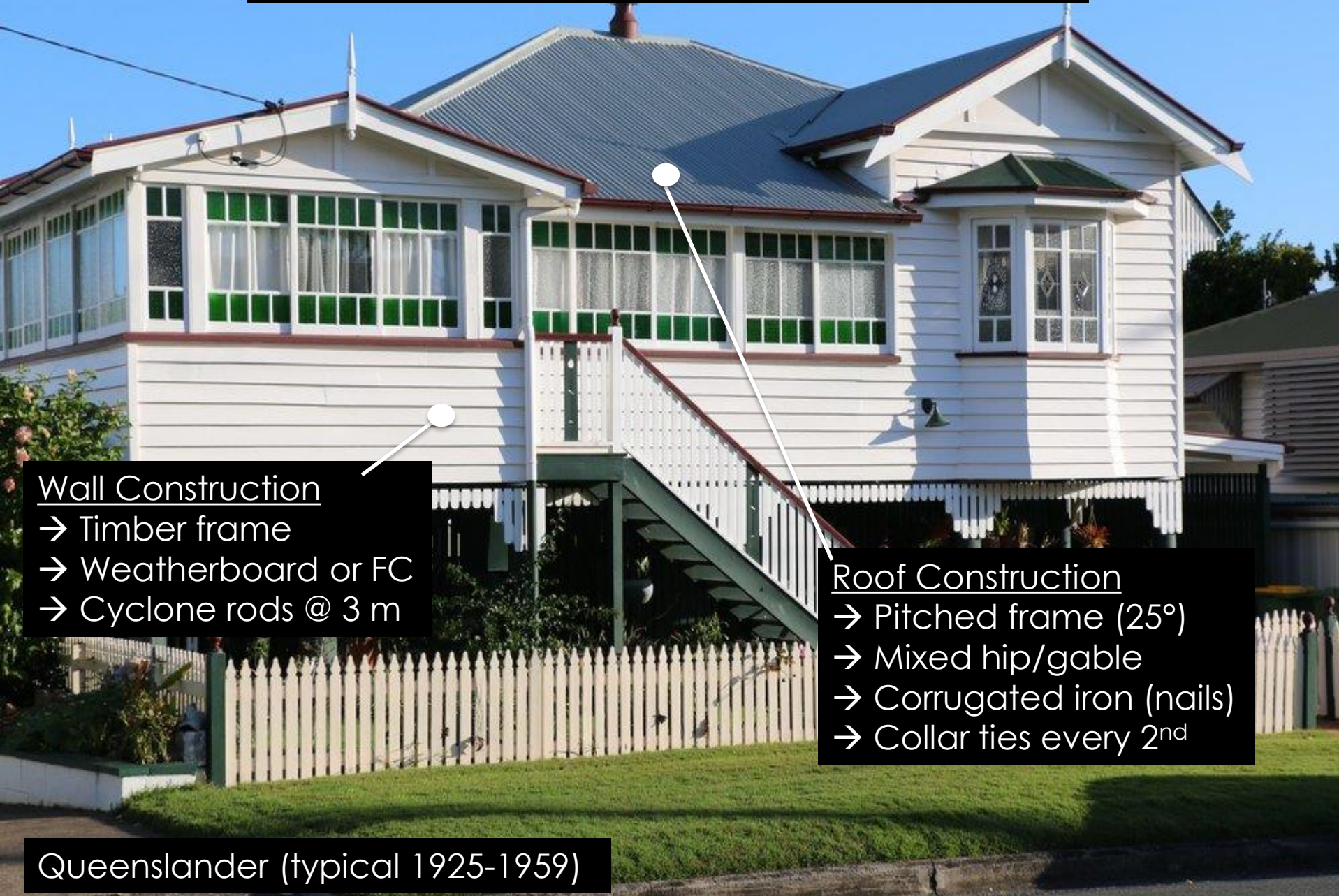


COMMUNITY





CYCLONIC HOUSING MODEL



Wall Construction

- Timber frame
- Weatherboard or FC
- Cyclone rods @ 3 m

Roof Construction

- Pitched frame (25°)
- Mixed hip/gable
- Corrugated iron (nails)
- Collar ties every 2nd

Queenslander (typical 1925-1959)

POST EVENT STUDIES

HAZARD NOTE

ISSUE 004 FEBRUARY 2015
TOPICS IN THIS EDITION | COMMUNITY SAFETY | RISK

CAPTURING COMMUNITY BUSHFIRE READINESS: POST-BUSHFIRE INTERVIEW STUDIES 2009-2014



CONTEXT
Most Australian bushfire scientists predict that there will be more frequent severe bushfires threatening life and property, for two reasons: (a) climate change resulting in reduced

Above: THE BUSH MEETS THE URBAN INTERFACE IN THE NEW BLUE MOUNTAINS IN OCTOBER 2015. AFTER THE FIRES, CRC RESEARCHERS INTERVIEWED LOCAL RESIDENTS. PHOTO: GARY P. HAYES, PROVIDED BY NSW RFS.

SUMMARY

While governments will continue to fund fire and land management bushfires, there is now an expectation that residents should take their own safety and property protection. Fire agencies expect community bushfire safety education. One way to review this is to interview residents who experienced a serious bushfire. This Hazard Note summarises overall findings from seven post-bushfire studies conducted since 2009. A significant percentage of residents that they were at-risk and neither planned nor prepared for a bushfire. Many reported having a plan, written versions of such plans, and a percentage of residents whose plan was to leave had not prepared to implement their plan safely. Very few residents self-evacuated during danger weather predictions. New approaches to promoting a bushfire safety culture need to be developed, trialled and evaluated.

ABOUT THIS PROJECT

The studies described in this Hazard Note were conducted by CRC and Bushfire CRC researchers, and involved interviews with residents in Victoria, Western Australia and Queensland. The studies were conducted at the request of the states, and their purpose was to inform agencies about how

HAZARD NOTE

ISSUE 008 JULY 2015
TOPICS IN THIS EDITION | CYCLONE | FUEL REDUCTION | RISK MANAGEMENT

ESTIMATING FUEL LEVELS POST-CYCLONE



Above: FUEL LEVELS IN A FIELD AFTER A CYCLONE. PHOTO: COLLEEN MARRAS, PROVIDED BY NSW RFS.

SUMMARY

This study examined the dynamics of fuel quantity and hazard following Tropical Cyclone Marcia in February 2015 in Queensland. The findings have been used to develop a visual fuel guide that complements the existing fuel hazard guides (Olmes et al. 2010; Gould et al. 2012; 2015). Among the key findings are that increased fuel loading and hazard caused by tropical cyclones can impact access to fire lines and increase fire spread and fire line intensity by 15 and 2.5-fold respectively. These additional insights, combined with the existing fuel hazard guides, are applicable to a variety of fire management strategies for fire burning in cyclone-damaged vegetation, including planning hazard reduction burns, fire insurance, fire management and suppression strategies for fire burning in cyclone-damaged vegetation. The guide will be an available tool that could be readily adopted by field crews. It can be applied quickly and provides data of sufficient accuracy to input into fire models. Information may also be used to assess the potential impacts of other storm-related fire impacts.

ABOUT THIS PROJECT

The Hazard Note summarises the research results from a descriptive study commissioned by the Queensland Fire and Emergency Services (QFES). It focused on five cyclone-damaged locations on the central Queensland coast over four weeks in the aftermath of severe Tropical Cyclone Marcia. The study would not have been possible without the field work assistance of QFES staff and volunteers.

AUTHOR

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All Hazard Notes are available at www.bnhcrc.com.au/hazardnotes

bnhrcr.com.au



CAPTURING COMMUNITY MEMBERS' BUSHFIRE EXPERIENCES: INTERVIEWS WITH RESIDENTS FOLLOWING THE 12 JANUARY 2014 PARKERVILLE (WA) FIRE

Report for the Department of Fire and Emergency Services Western Australia



Jim McLennan
La Trobe University

bnhrcr.com.au



RAPID RESPONSE REPORT: STUDY OF HEATWAVE IMPACTS ON NSW NORTHERN RIVERS REGION 2017

Tofa, M., Gissing, A., Van Leeuwen, J. and Smith, C.
Risk Frontiers, Macquarie University, Sydney, NSW







KOROMIKO



NATIONAL RESEARCH PRIORITIES

What are the big research questions across fire and natural hazards for the next decade?



National research priorities for natural hazards emergency management



Issues, priorities, directions