Communicating Risk

Information Processing Under Stress: Community Reactions

Annual Report July 2012 – December 2013



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Project Overview

The Information Processing Under Stress: Community Reactions project sits within the research stream called 'Communicating Risk'. The project has a focus on increasing our understanding of how residents living in bushfire prone areas can be motivated to prepare better for the bushfire season and make better decisions when a fire threatens their community. The project entails a variety of research phases that aim to answer questions such as 'Why do so many people anticipate responding indecisively when a fire threatens their community?', 'Why do people fail to properly prepare for the fire season even when they intend to do so at the start?', 'How can information and feedback regarding residents' preparedness best be presented to them to motivate them to prepare further?' and 'Does the effectiveness of certain message framings in heightening preparedness levels depend on person characteristics?'.

More specific, the project contains 8 phases of quantitative research, which all focus on different factors, both situational (e.g., message framing) and personality (e.g., high versus low anxiety individuals) based, that may be linked to people's motivation, expectations, and information processing, and influence their subsequent decision making and actions. The main goal of these 8 phases of research is to gather a better understanding of what preparedness is, how different types of information may influence people's willingness to prepare, and how different people may react differently to the same piece of information.

Phase 1: Measuring Preparedness – This Phase will focus on defining preparedness, and distinguishing between different types of preparedness. It will contain a review of preparedness brochures and the preparatory actions mentioned therein, and will aim to construct a measurement tool that is able to measure preparedness for a variety of actions such as defending versus evacuating from a bushfire.

Phase 2: Bridging the intention--behaviour gap through the link between anxiety and inaction — This Phase will focus on how the personality trait referred to as Trait Anxiety influences people's tendency to refrain from psychologically planning for bushfires, even though they intend to do so. It will examine two separate routes to

inaction, namely Anxiety -> Indecisiveness -> Perceived Inability -> Inaction and Anxiety -> Worry -> Inaction. This will help us gain an understanding of why highly trait-anxious individuals who *intend* to carry out preparatory actions might still refrain from doing so.

Phase 3: Understanding Competing Priorities (Predicting Anticipated Indecisiveness) – This Phase will focus on understanding why many people anticipate responding indecisively when a fire threatens their community (e.g., Waiting and seeing before deciding; defending until it gets dangerous, then leaving). Based on theories around decision avoidance, this phase sets out to pinpoint the potential reasons why people end up in indecision. Doing so will allow agencies to construct more effective strategies to overcome this problematic behaviour.

Phase 4: The Influence of Past Goal Pursuit Interpretation on Future Goal Pursuit: An Experimental Analysis – This Phase examines how the amount of preparatory behaviours someone has already completed may be used as a motivator for additional behaviours and how those who have done very little to prepare may need a different approach from those who have completed a substantial number of behaviours already. This will help increase the effectiveness of more targeted communications, for example by delivering different messages to moderately prepared households, when compared to unprepared households.

Phase 5: To what extent do bushfire expectations, as reported in the P.A.S. brochures, contribute to increased bushfire preparedness? A correlational study – This Phase will examine how the expectations as raised by the P.A.S. brochures relate to bushfire preparedness.

Phase 6: To what extent do bushfire expectations, as reported in the P.A.S. brochures, contribute to increased bushfire preparedness? An experimental field study – This Phase will examine whether *changing* people's expectations with regard to expecting a loss of services during a bushfire will increase their intentions to prepare and/or preparedness behaviours.

Phase 7: Does message effectiveness vary as a function of goal focus: A field study – This Phase looks at how interpreting past behaviours in terms of commitment versus progress influences people's intentions to complete additional preparatory behaviours.

Phase 8: Does message effectiveness vary as a function of perceived task difficulty: A field study – This Phase looks at how letting people focus on the three easiest versus three most difficult uncompleted preparatory actions first influences their intentions to complete the uncompleted preparatory actions, and influences their preparedness levels 2 months later.

Between July 2012 and June 2013 data were collected for Phases 1, 7 and 8. Our initial research into Phase 1 in 2011-2012 revealed that measuring preparedness accurately is more complicated than we had anticipated. As such, on the basis of findings in the data we had initially collected for Phase 1 and several other exercises we have undertaken, we decided to continue data collection for this Phase in the period July 2012 – June 2013.

State of Knowledge

Before starting this project, knowledge on how to motivate people to prepare better for the bushfire season, and understanding residents' decision making when it comes to making their fire plan and deciding on their intended fire response were fairly non-existent. Although agencies across Australia have been aiming to increase residents' preparedness and decision making for a long time through brochures, bushfire ready groups, and marketing campaigns, their strategies and approaches in designing the content of such communications had not been evaluated empirically. In general, upon reviewing the literature on how people can be motivated to prepare for bushfires at the start of the current project, it was found that much of the extant literature was qualitative and tended to focus on single case studies of communities. Although there were notable exceptions, it became evident that the quantitative literature had limited itself mainly to perceptions of risk and responsibility (Beringer, 2000; Martin, Bender, & Raish, 2007; Martin, Martin, & Kent, 2009; McCaffrey et al, 2011), or had focused on measuring levels of preparedness and response after a bushfire had already occurred (e.g. Handmer et al, 2010).

Progress made between July 2012 and December 2013

Study sites

In order to collect data for Phases 1, 7, and 8 we set up a major 3-wave field study (see Appendix A for surveys) across 6 different states/territories in Australia, namely WA, SA, VIC, NSW, ACT, and TAS. Data was collected by the use of a panel company called ORU. To ensure all participants lived in bushfire prone areas, they received a screener survey at the start of Wave 1, which assessed their proximity to bushfire risk areas. Only participants who lived on a property that was less than 100m away from the closest bushland, who were at least 18 years old, and who were at least moderately involved in bushfire safety related decisions in their household were allowed to participate in the study.

Surveys

Wave 1. Timing of the first wave survey was such that all participants received a unique Internet link to complete the first survey two weeks after the announcement of the bushfire danger period in their local area. Fire agencies and emergency services websites were consulted to find out when local councils and governments were declaring the bushfire danger period (during which properties were most at risk of bushfire). Within some states there was variability in the degree to which local councils and government officially announced the commencement of bushfire danger across Australia. State Departments in South Australia, Victoria and Tasmania staggered the commencement date for the bushfire danger period across local councils according to their proximity to bushfire risk. The first surveys for these states were launched on October 29th (S.A.), November 15th (Vic) and December 17th (TAS). For NSW and WA no differentiation was made according to regions, and all participants received the Wave 1 survey on October 24th and December 17th respectively.

Wave 2. Participants who indicated they were prepared to receive a follow up questionnaire received the Wave 2 survey approximately 10 weeks after receiving the Wave 1 survey.

Wave 3. Participants who indicated they were prepared to receive a follow up questionnaire at the end of Wave 2 received the Wave 3 survey approximately 2 weeks after receiving the Wave 2 survey.

Workshop. In addition to the use of ORU, we also collected data for Phase 1 through a workshop with experts in the bushfire preparation domain.

Phase updates

Phase 1: A paper was completed and submitted to the International Journal of Wildland Fire. It has been invited for a revised resubmission. In addition, a fire note has been prepared on the preparedness measure, and this should be published next year.

[Paper: Preparing... for what? Developing multi-dimensional measures of community wildfire preparedness for researchers and practitioners]

Phase 2: A paper on this Phase was completed and submitted to the Journal of Personality. It is currently under review.

[Predicting Risk-Mitigating Behaviors from Indecisiveness and Trait-Anxiety: Two Cognitive Pathways to Inaction]

Phase 3: A paper on this Phase was submitted and accepted for publication by the International Journal of Wildland Fire. In addition, a Fire note has been published on its content.

[Paper: Predicting Delay in Residents' Decision on Defending versus Evacuating through Antecedents of Decision Avoidance]

Phase 4: Completed in 2011-2012, and a report was submitted to the Bushfire CRC

[Report: The Effects of Past Behaviour Interpretations and Task Difficulty on Goal Pursuit – An Experimental Pilot]

Phase 5: A paper was revised and accepted for publication by Risk Analysis. In addition, a Fire note has been published on its content.

[Paper: Expecting the Unexpected: Predicting Physiological and Psychological Wildfire Preparedness from Perceived Risk, Responsibility, and Obstacles]

Phase 6: A report was prepared on the results of this Phase. Unfortunately results showed that the intervention based on changing people's expectation regarding loss of utilities during fires did not influence their preparatory actions.

[Report: Understanding Community Bushfire Resilience: Investigating the Relationship between Utility Loss Expectations and Household Bushfire Preparedness Expectations]

Phase 7: The results of Phase 4 – 'The Influence of Past Goal Pursuit Interpretation on Future Goal Pursuit: An Experimental Analysis' showed that letting people interpret past behaviour in terms of their commitment towards a goal versus progress towards a goal will not be an effective manner of motivating people to perform additional goal related behaviour if this perceived commitment versus progress is not translated into intentions first. Past research of commitment versus progress interpretations and their influence on the performance of additional behaviours (for an overview see Fishbach, Zhang, & Koo, 2009) has shown promising results in both the health domain (where the goal is to live healthy) and academic performance domain (where the goal is to achieve good grades). In Phase 7 we therefore tested whether the inclusion of an explicit translation of commitment versus progress towards a bushfire preparedness goal into intentions to perform additional bushfire preparedness actions would be effective. Data analyses revealed that perceived commitment led to higher intentions to complete Property Preparations than perceived progress. There was no influence on actual preparatory actions completed at Wave 2 (2 months later). A combined report of Phase 7 and 8 has been submitted to the Bushfire CRC.

Phase 8: Data analyses revealed that having people focus on the three easiest uncompleted tasks led to greater intentions to complete Psychological Planning actions than focusing on the three most difficult uncompleted tasks. There was no influence on actual preparatory actions completed at Wave 2 (2 months later). A combined report of Phase 7 and 8 has been submitted to the Bushfire CRC.

[Report 7 & 8: Testing the Effectiveness of Task Difficulty, Behaviour Interpretation, and Social Comparison Interventions on Bushfire Preparedness – An Experimental Field Study]

References

Beringer J. Community fire safety at the urban/rural interface: The bushfire risk. Fire Safety Journal, 2000; 35:1-23.

Fishbach A, Zhang Y, Koo M. The dynamics of self-regulation. European Review of Social Psychology, 2009; 20: 315-344.

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Martin WE, Martin IM, Kent B. The role of risk perceptions in risk mitigation process: The case of wildfire in high risk communities. Journal of Environmental Management, 2009; 91:489-98.

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Appendix A: Surveys Wave 1, 2, and 3



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Email <u>david.morrison@uwa.edu.au</u> <u>david.morrison@murdoch.edu.au</u>

Understanding Community Bushfire Resilience

Dear resident.

We are asking you to participate in a project in which we are interested in your bushfire plans and goals, as well as some of your beliefs and expectations with regards to bushfires, and some of your general experiences and thoughts. The project is led by the UWA School of Psychology in conjunction with the Bushfire Cooperative Research Centre (Bushfire CRC). The Bushfire CRC undertakes research on behalf of all Australian fire and emergency service agencies. The results of this survey will form a part of the knowledge base that these agencies will use to help to improve community bushfire safety. By telling us about your experiences, plans, actions, and expectations, you will be making an important contribution to the prevention of future bushfire disasters.

The project will run over a period of approximately six months and we are planning to run two surveys in that time across members of multiple communities in Australia. The survey that has been sent to you is the first survey in this project. It has been sent to a sample of households in areas that could be affected by bushfire.

Participation in this survey is voluntary. All information collected will remain confidential, subject to legal constraints. This project has been approved by the UWA University Human Research Ethics Office. Details of the project, ethical issues and risks, and confidentially are set out in the statement on the next screen.

Should you require further clarification please contact Professor David Morrison on (08) 6488 3240 or david.morrison@uwa.edu.au.

Yours sincerely,

Professor David Morrison, University of Western Australia/Murdoch University

You are being invited to participate in a project being conducted by the School of Psychology and the Bushfire Cooperative Research Centre (CRC).

The Bushfire CRC is a major national coordinating centre for fire research and receives funding from all Australian fire and land management agencies, universities, CSIRO, the Bureau of Meteorology and the federal government.

This information screen describes the project. Please read this screen carefully and be confident that you understand its contents before deciding whether to participate.

Why have you been contacted?

You have been invited to take part because your property lies in or near an area that could potentially be affected by bushfire.

Which member of the household should complete the surveys?

Any member of the household who is over the age of 18 can complete the surveys.

What is involved in participating?

Completing the surveys is **voluntary.** You are not required to answer any questions you don't want to, and you can end participation at any time. The surveys will ask you about your thoughts and actions before, during and after a fire. We will send out a survey twice over the next 6 months (the current survey and one much shorter follow-up survey).

This current survey we have sent you normally takes around 30 minutes to complete. **The survey** is to be completed online. It is important that both the first and second survey are filled out by the same person.

What will happen to the information I provide?

Our intentions are to undertake this research longitudinally. In other words, we wish to contact the same participants twice in the next 6 month period. By doing so, we will be better able to use your feedback, and put the information you provide to us to better use.

Please note that no report or document produced from this study will contain any single person's identifying information. All data will be de-identified before analyses are undertaken. As such, for reporting and analysis purposes, your responses to the survey will remain **anonymous** at all times and you will not be identified in any research output. General demographic information will be used to draw comparisons across groups (e.g. age or postcode) but again, no single individual will be identifiable.

Your address can only be disclosed to others if (1) it is to protect you or someone else from harm, (2) a court order is produced, or (3) you provide the researchers with written permission. The results of the survey will be used to produce a report on experiences, behaviours, and responses in relation to bushfires for the Bushfire CRC.

Because we are using a survey, we are not obtaining written informed consent. We assume that by completing the survey you are giving your consent to participate.

What are my rights as a participant?

You have the right to: i) withdraw your participation at any time; ii) have any unprocessed data withdrawn and destroyed (provided it can be reliably identified); and iii) have any questions answered at any time.

Who should I contact if I have any questions?

You can contact David Morrison via email (<u>david.morrison@murdoch.edu.au</u>), or Dr Richard Thornton of the Bushfire CRC on (03) 9412 9600.

Yours sincerely.

Professor David Morrison

Section 1

Information about You and Your Household

In this section we would like to find out about you and your household. We are interested in collecting this information so we can make comparisons between different groups of individuals, different households, and different geographical areas.

IT IS IMPORTANT THAT YOU ANSWER ALL OF THE QUESTIONS IN THIS SURVEY IN RELATION TO THE MAIN PROPERTY YOU LIVE IN/ON.

	the street name, suburb, and po nclude your street or lot numbe		e of your property?	(please	
Street:					
Suburb:			Postcode:		
What typ	pe of property is it?				
Apartment	or unit on residential block		House on residential blo	ock	
House on a	a hobby farm -or small acreage		House on a large farm of property	or other large	
Other (plea	ase specify)				
How mu	ch of your time do you spend li	ving o	n this property?		
	Full time	Pa	rt time (e.g., you spend a time living els		mount of
How long	have you lived in this property?				
now long	nave you lived in this property:				years
How long	have you been living in this town or s	uburb?			years
What are	e your current living arrangeme	nts in	this property?		
Own/in pro	cess of buying house or property				
Renting – S	Single person or family household				
Renting – S	Share house				
Other (plea	ase specify)				

What is the composition of your household (that lives/spends time at this property)?

Couple with children or other dependents	
One adult with children or other dependents	
Couple without children or other dependents	
One person household	
Shared house with other adults	
Other (please specify)	

Section 2 Bushfire Responses and Community Expectations

Your Intended Bushfire Response

Given your current situation, which ONE of the following do you think you will MOST LIKELY do on a day where a bushfire threatens your locality?

Please select ONE response only

Tidase select one response only	
Will try to protect your property throughout the fire, taking shelter in the property if necessary.	
Will do as much as possible to protect your property but leave if the fire threat becomes too large. Follow up question: We would like to know what you mean by 'if the fire threat becomes too large'. Please indicate which of the situations listed below would be enough to prompt you to leave (multiple answers possible): - You see smoke on the horizon (>20km away) and the fire is currently heading in your direction. - You see a red glow of fire on the horizon (>20km away) and the fire is currently heading in your direction. - The fire is less than 10km away and heading in your direction. - The fire is less than 10km away and, even though it is currently not heading in your direction, it could if the wind were to change. - The fire is less than 1km away and, even though it is currently not heading in your direction, it could if the wind were to change. - The fire is less than 1km away and heading in your direction. - The fire is less than 20 minutes away and heading in your direction. - The fire is on your property. - The roof of your home has just caught fire. - Your whole house is on fire. - Other, namely:	
Your decision whether to stay and defend or leave depends on what the situation on the day of the fire is like. Follow up question 1: We would like to know more about what sorts of situations would influence your decision to defend your property or evacuate. Please indicate whether or not the following factors would influence your decision on the day of a fire (multiple answers possible): - It would depend on which household members are present - It would depend on the Fire Danger Rating on the day of the fire - It would depend on the characteristics (e.g., size, speed, intensity) of the fire It would depend on other factors, namely:	
 Follow up question 2: We would also like to know to what extent you have already decided when (i.e. combinations of factors indicated above) you would stay to defend your property and when you would evacuate? Please indicate which of the following is most true for you (pick one option only): You have already decided on in which situations you will defend and in which you will leave, and have written them down in your fire plan. You have already decided on in which situations you will defend and in which you will leave, but you have not written this down anywhere. 	

You have a good idea of in which situations you will defend and in which you will leave, but will

 leave the actual decision making until the day of the fire. You have a rough idea of in which situations you will defend and in which you will leave, but will leave the actual decision making until the day of the fire. You haven't thought about it. 	
Will wait for police, fire or other emergency services to tell you what to do on the day.	
Will evacuate the property without attempting to defend it (also tick this box if you intend to leave before the fire threatens your locality). Follow up question: We would like to know when you would leave exactly. Please indicate which of the situations listed below would prompt you to leave (multiple answers possible): - You realize the Fire Danger Rating for the day is Severe, but there is no fire threatening your locality yet. - You realize the Fire Danger Rating for the day is Extreme, but there is no fire threatening your locality yet. - You realize the Fire Danger Rating for the day is Catastrophic/Code Red, but there is no fire threatening your locality yet. - You hear about a fire (e.g. from a friend or on the radio) that might threaten your locality. - You see smoke on the horizon (>20km away) and the fire is currently heading in your direction. - You see a red glow of fire on the horizon (>20km away) and the fire is currently heading in your direction. - The fire is less than 10km away and heading in your direction. - The fire is less than 10km away and heading in your direction. - The fire is less than 1km away and heading in your direction. - The fire is less than 1km away and heading in your direction. - The fire is less than 10km away and heading in your direction. - The fire is less than an hour away and heading in your direction. - The fire is less than 20 minutes away and heading in your direction. - The fire is less than 20 minutes away and heading in your direction. - The fire is less than 10km away and heading in your direction. - The fire is less than an hour away and heading in your direction. - The fire is less than an hour away and heading in your direction. - The fire is less than an hour away and heading in your direction. - The fire is less than an hour away and heading in your direction. - The fire is less than an hour away and heading in your direction. - The fire is less than an hour away and heading in your direction.	
Haven't thought about it.	
Other (please specify):	
Your Bushfire Expectations How likely is it that a bushfire will threaten <i>your district</i> in the next fire	

season?

Definitely won't happen	Very unlikely to happen	Somewhat unlikely to happen	Possibly / possibly not	Somewhat likely to happen	Very likely to happen	Definitely will happen

How likely is it that a bushfire will threaten <u>you/your property</u> in the next fire season?

Definitely won't happen	Very unlikely to happen	Somewhat unlikely to happen	Possibly / possibly not	Somewhat likely to happen	Very likely to happen	Definitely will happen			
If a bushfire were to occur in your district, how severe do you think the negative consequences of it would be for your district?									
				-	hink the				
				-	think the	Extremely severe			
negative co	nsequences	of it would be	for your dis Average	trict? Somewhat		-			

<u>If</u> a bushfire were to threaten <u>you/your property</u>, how severe do you think the negative consequences of it would be *for you/your property*?

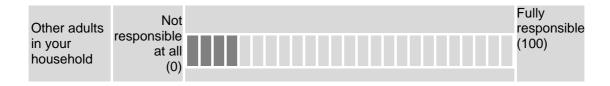
Not severe at all	Low severity	Somewhat low	Average severity	Somewhat high	High severity	Extremely severe

If a bushfire threatened you/your property, to what extent would you hold the following parties responsible <u>for any property damage you</u> experience?

We appreciate that this might depend on the cause of the fire, but for now, please assume that none of these parties were responsible for causing the fire (e.g., a lightning strike started fire).

Out of a possible 100 points, please indicate how responsible you believe each party below is. The value for each party can be changed by clicking and dragging each bar. When the total of responsibility points reaches '100', it will need to be reduced by shortening one of the bars if you wish to allocate additional responsibility to another party. The sum of all the categories combined must equal 100 points.

Government (i.e. Fire & Rescue, emergency agencies, council, etc.)	Not responsible at all (0)	Fully responsible (100)
You	Not responsible at all (0)	Fully responsible (100)
Fate/Chance	Not responsible at all (0)	Fully responsible (100)



If a bushfire threatened you/your property, to what extent would you hold the following parties responsible <u>for any injuries you suffer</u>?

Again, we appreciate that this might depend on the cause of the fire, but for now, please assume that none of these parties were responsible for causing the fire (e.g., a lightning strike started fire).

Out of a possible 100 points, please indicate how responsible you believe each party below is. The value for each party can be changed by clicking and dragging each bar. When the total of responsibility points reaches '100', it will need to be reduced by shortening one of the bars if you wish to allocate additional responsibility to another party. The sum of all the categories combined must equal 100 points.

Government (i.e. Fire & Rescue, emergency agencies, council, etc.)	Not responsibl e at all (0)	Fully responsibl e (100)
You	Not responsible at all (0)	Fully responsibl e (100)
Fate/Chanc e	Not responsibl e at all (0)	Fully responsibl e (100)
Other adults in your household	Not responsible at all (0)	Fully responsibl e (100)

Section 3

General Experiences, Motivation, and Feelings

In this section of the survey, we would like to learn a bit more about your personality, motivation, and feelings, both in general and in relation to bushfires. This will help us understand how and why different community members may react differently to a fire threat.

General

This first set of questions asks you about some general experiences and goals in your life. Please indicate your answer to each question by ticking the appropriate box to the right of it.

	Very untrue of me – 1	Moderately untrue of me – 2	Slightly untrue of me -3	Slightly true of me – 4	Moderately true of me – 5	Very true of me – 6
Even if something bad is about to happen to me, I rarely experience fear or nervousness.						
I go out of my way to get things I want.						
When I'm doing well at something I love to keep at it.						
I'm always willing to try something new if I think it will be fun.						
When I get something I want, I feel excited and energised.						
Criticism or scolding hurts me quite a bit.						
When I want something I usually go all-out to get it.						
I will often do things for no other reason than that they might be fun.						
If I see a chance to get something I want I move on it right away.						
I feel pretty worried or upset when I think or know somebody is angry at me.						
When I see an opportunity for something I like I get excited right away.						

I often act on the spur of the moment.		Very untrue of me − 1	Moderately untrue of me − 2	Slightly untrue of me -3	Slightly true of me – 4	Moderately true of me − 5	Very true of me − 6
If I think something unpleasant is going to happen I usually get pret "worked up."	ty						
When good things happen to me, it affects me strongly.							
I feel worried when I think I have done poorly at something.							
I crave excitement and new sensations.							
When I go after something I use a "no holds barred" approach.							
I have very few fears compared to my friends.							
It would excite me to win a contest.							
I worry about making mistakes.							
The following set of questions asks you HOW FREQUE events actually occur or have occurred in your life. Plea answer to each question on the scale.							
	1-Never or Seldom	2	3-Sometimes	4	5-Very Often		
Compared to most people, are you typically unable to get what you want out of life?							
Growing up, would you ever "cross the line" by doing things that your parents would not tolerate?							
How often have you accomplished things that got you "psyched" (i.e. motivated) to work even harder?							

	1-Never or Seldom	2	3-Sometimes	4	5-Very Often
Did you get on your parents' nerves often when you were growing up?					
How often did you obey rules and regulations that were established by your parents?					
Growing up, did you ever act in ways that your parents thought were objectionable?					
Do you often do well at different things that you try?					
Not being careful enough has gotten me into trouble at times.					
When it comes to achieving things that are important to me, I find that I don't perform as well as I ideally would like to do.					
Please indicate the extent to which the following are fals	se or t	rue fo	or you		
	1-Certainly False	2	ယ	4	5-Certainly True
I feel like I have made progress toward being successful in my life.					
I have found very few hobbies or activities in my life that capture my interest or motivate me to put effort into them.					

Now please read each of the following statements and decide how much you agree with each.

	Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
I don't mind doing things even if they involve extra effort.						
I never evaluate my social interactions with others after they occur.						
I am a "workaholic".						
I feel excited just before I am about to reach a goal.						
I enjoy actively doing things, more than just watching and observing.						
I spend a great deal of time taking inventory of my positive and negative characteristics.						
I like evaluating other people's plans.						
I am a "doer".						
I often compare myself with other people.						
I don't spend much time thinking about ways others could improve themselves.						
I often critique work done by myself and others.						
When I finish one project, I often wait awhile before getting started on a new one.						
I often feel that I am being evaluated by others.						
When I decide to do something, I can't wait to get started.						
I am a critical person.						
I am very self-critical and self-conscious about what I am saying.						
By the time I accomplish a task, I already have the next one in mind.						
I often think that other people's choices and decisions are wrong.						

	Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
I am a "low energy" person.						
Most of the time my thoughts are occupied with the task that I wish to accomplish.						
I rarely analyse the conversations I have had with others after they occur.						
When I get started on something, I usually persevere until I finish.						
I am a "go-getter".						
When I meet a new person, I usually evaluate how well he or she is doing on various dimensions (e.g., looks, achievements, social status, clothes).						
In the next set of questions, we would like to learn a bit meganeral thinking style and day-to-day worries. Please sel response to show how much you, yourself, have had tho months about the following:	ect th	ne app	oropri			
In the past 3 months	Not at all)	> 	Moderately	A great deal	All the time
I have worried about bad/negative things that might happen to me] [
I have thought that someone or something might create positive opportunities or outcomes in my life] [
I have worried that I feel insecure] [
I have worried about bad/negative things that might happen to people I care about] [
I have thought that I might make some good/positive things happen to people I care about] [
I have worried that I can't afford to pay bills] [

In the past 3 months	Not at all	A little	Moderately	A great deal	All the time
I have worried that someone or something will mess up things in my life					
I have worried that other people would disapprove of me					
I have had thoughts about good/positive things that might happen to me					
I have worried that I would leave work unfinished					
I have worried that someone or something will mess up things in the lives of people I care about					
I have thought about creating positive opportunities or outcomes for people I care about					
I have worried that I'll never achieve my ambitions					
I have worried that I might cause bad/negative things to happen to me					
I have thought that I might make some good/positive things happen to me					
I have worried that I will lose close friends					
I have worried that I might cause bad/negative things to happen to people I care about					
I have had thoughts about good/positive things that might happen to people I care about					
I have worried that I am not able to afford things					
I have worried about messing up things for myself					
I have thought about creating positive opportunities or outcomes for myself					
I have worried that I would not keep my workload up to date					
I have worried about messing up things for people I care about					
I have worried that I lack confidence					
I have thought that someone or something might create positive opportunities or outcomes in the lives of people I care about					
I have worried that I haven't achieved much					

Bushfire Related

The next set of questions asks you about some of your experiences and goals in relation to preparing for bushfires. Please read each of the following statements and decide how much you agree with each.

When it comes to preparing for bushfires	Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
I tend to spend a lot of time on assessing what is best for my household's specific situation.						
I find it motivating to focus on the things I can prevent by being prepared (e.g., avoiding damage to my property or avoiding injuries).						
I find it important to be successful in accomplishing preparatory actions.						
I tend to spend a lot of time on actively doing things that will increase my household's preparedness.						
I find it motivating to focus on the gains and advancements I can make from preparing (e.g., a clean and pretty yard).						
I find it important to keep busy and get things done.						
I find it important to carry out my responsibilities to prepare.						
I find it important to evaluate alternative activities to prepare to determine which should have priority over others.						

Finally, this last set of questions asks you about your feelings in relation to the fact that you live in an area that is at risk of bushfires.

Now, please read each statement and tick the box that indicates how much the statement applies to you in relation to the fact that you are living in an area that is at risk of bushfires. There are no right or wrong answers. Try not to spend too much time on any statement.

	Does not apply to me at all		Applies to me to some degree		Applies to me to a considerable degree		Applies to me very much
When thinking about the fact that I live in a bushfire prone area	_	N	ω	4	Ŋ	6	7
S1- I find it hard to wind down.							
A1- I am aware of dryness of my mouth.							
D1- I can't seem to experience any positive feeling at all.							
A2- I experience breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion).							
D2- I find it difficult to work up the initiative to do things.							
EXTRA 1 - I feel helpless.							
S2 - I tend to overreact to situations.							
A3 - I experience trembling (e.g., in the hands).							
S3 - I feel that I am using a lot of nervous energy.							
A4 - I worry about situations in which I might panic and make a fool of myself.							
D3 - I feel that I have nothing to look forward to.							
S4 - I find myself getting agitated.							
EXTRA 2 - I feel hopeless.							
S5 - I find it difficult to relax.							
D4 - I feel downhearted and blue.							
S6 - I become intolerant of anything that keeps me from getting on with what I was doing.							
A5 - I feel myself getting close to panic.							
D5 - I am unable to become enthusiastic about anything.							
D6 - I feel I'm not worth much as a person.							
EXTRA 3 - I feel paralysed.							
S7 - I feel rather touchy.							
A6 - I become aware of the action of my heart in the absence of physical exertion (e.g., sense of heart rate increase, heart missing a beat).							

	Does not apply to me at all		Applies to me to some degree		Applies to me to a considerable degree		Applies to me very much
When thinking about the fact that I live in a bushfire prone area	_	N	ယ	4	Ω	0	7
A7 - I feel scared without any good reason.							
D7 - I feel that life is meaningless.							
EXTRA 4 - I feel unmotivated.							

Section 4 Current State of Bushfire Preparedness

In this section you will see a list of actions that people might take so as to better prepare themselves and/or their households for a bushfire. Please indicate which of the following is true for you and/or your household, at the time you started filling out this survey. In other words, what you have done so far to prepare for bushfire? Please do not count activities that you plan to do or that are only partly completed.

If an action is not applicable to you, given your current situation and/or property (e.g., for the item 'your external house timbers all have a sound coat of paint'-your house does not contain timbers), then please select the N/A option (please only use this option when the item is really not applicable to your situation such as in the example provided).

Which of the following are <u>currently</u> true (i.e. true when you started filling out this survey) for you/your household?	Currently true for me / my household	Currently not true for me / my household	N/A
Fine fuels (e.g., leaves, twigs and long grass) are cleared for a distance of at least 20m around the house.			
The bushfire risk to your house, such as identifying potential fire risks like timber decking, has been assessed by an expert.			
All of your roof coverings fit tightly so that there are no openings for sparks.			
You have formed a household bushfire emergency plan.			
There is a minimum two metre gap between your house and tree branches or shrubs.			
Your external house timbers all have a sound coat of paint.			
There is metal flywire mesh on all vents to keep sparks and embers out.			
You have considered how your actions could depend on the situation on the day (e.g., some members not being at home, the Fire Danger Rating, etc.) and have integrated this into your bushfire emergency plan.			

Which of the following are <u>currently</u> true (i.e. true when you started filling out this survey) for you/your household?	Currently true for me / my household	Currently not true for me / my household	N/A
Flammable and combustible materials such as firewood, boxes, gas cylinders, and wooden garden furniture are stored away from the house.			
There is gutter protection installed on your house.			
You have thought carefully about what each person in your household would need to do in the event of a bushfire.			
Your home and contents insurance is adequate.			

Which of the following are <u>currently</u> true (i.e. true when you started filling out this survey) for you/your household?	Currently true for me / my household	Currently not true for me / my household	N/A
All gaps and vents are covered in order to reduce the risk of embers entering the house or cavities (e.g. floor spaces, in the roof space, under eaves, external vents, skylights, evaporative air conditioners, chimneys, and wall claddings).			
Leaf litter and twigs under trees are raked.			
All household members are aware of the fire plan.			
Underfloor spaces are covered so as to prevent embers and flames from entering.			
Roof gutters and valleys are clear of leaves and bark.			
Seals and/or draft protectors have been installed around windows and doors.			
You have installed a roof-mounted sprinkler system.			
Long grass and dense scrub is cut and well-watered.			
A sprinkler system is installed around the property.			
Shutters to all external windows are installed.			
Bushes and plants overgrowing and growing under fences have been removed.			
You have listed important things to do and remember in case of a fire (written or typed on computer, phone, etc.).			
Within the last 6 months you had conducted controlled burning on your property to reduce the fuel load.			
All the trees on or near your property are away from overhead utility lines / lines are buried and not susceptible to fire.			
All household members are comfortable with the intended fire plan.			
Vegetation along the boundary of your property is clear such that it creates a fire break.			
Your neighbours know about the intended fire plan of your household.			
You have had your local fire department do a fire safety inspection at your home and property.			

	ollowing are <u>cu</u> y) for you/your l		true when you sta	arted filling	Currently true for me / my household	Currently not true for me / my household	N/A	
A fire-resistan composition).	t roof is current	ly installed on	your house (e.g. r	netal, tile,				
Shrubs and si removed.	mall trees unde	r and between	larger trees have	all been				
Tree branches	s up to 2m off th	ne ground are	pruned.					
There is no tir	mber, rubbish, c	or old junk lying	around your prop	perty.				
Your relatives	know about the	e intended fire	plan of your hous	ehold.				
Please indicate how prepared your household currently is to respond to a bushfire:								
1 - Not at all	2	3	4 - Moderately	5	6	3	7 - Ve	ery well
							[

[New page	[New page with list of uncompleted activities]									
Now, <u>out of the activities that you have not yet done</u> , which would you say are the <u>3 most difficult things to do/3 easiest things to do</u> ? Please rank the top-3 most difficult things you haven't done yet below. Assign the most difficult item a '1', the second most difficult item a '2', and the third most difficult item a '3':										
1	2	3								
Previous research into community preparedness for bushfires in Australia has shown that many households in bushfire prone areas complete around 25%/75% of the activities listed on the previous pages. What would your guess have been?										
Much less the 25%/75%	han Some	what less than 5%/75%	Around 25%/75%	Somewhat than 25%		Much more than 25%/75%				
]					
how much	•	ı feel you ha	st of things you ve put into pre		•					
1 - No effort	2	3	4 - Moderate effort	5	6	7 - Great deal of effort				
Also, based on the above, to what extent would you say you agree or disagree with the following statement?										
'I have made a lot of progress towards being prepared for bushfires.'/'I am very committed to be prepared for bushfires.'										

Neither agree nor disagree

Moderately agree

Strongly agree

Slightly agree

Strongly disagree

Moderately disagree

Slightly disagree

Taking your progress/commitment towards being prepared into account, please indicate to what extent you intend to complete the 3 actions you listed earlier within the next 4 weeks (and keep things such as 'clearing fine fuels' up for the rest of the fire season)?

How likely is it that you will have carried out each activity listed below within the next 4 weeks (and keep things such as 'clearing fine fuels' up for the rest of the fire season)?

	Definitely Not	Very Probably Not	Probably Not	Possibly/Possibly Not	Probably	Very Probably	Definitely will do (but have not yet done it)
[action 1]							
[action 2]							
[action 3]							

Section 5

Future Intentions to Prepare for Bushfires

We are also interested in your intentions with regards to the other actions that you haven't completed yet. Please indicate, using the response options below, how likely it is that you will have carried out each activity listed below within the next 4 weeks (and keep things such as 'clearing fine fuels' up for the rest of the fire season). If an activity is not applicable to you given your current situation and/or property, or if you have indicated above that you have already taken this action, please select the Not Applicable/Already done option.

How likely is it that each of the activities listed below will have been carried out by you and/or your household within the next 4 weeks (and that ongoing activities such as 'clearing fire fuels' will be kept up for the rest of the fire season)?	Definitely Not	Very Probably Not	Probably Not	Possibly/Possibly Not	Probably	Very Probably	Definitely will do (but have not yet done it)	Not Applicable / Already done this
Fine fuels (e.g., leaves, twigs and long grass) are cleared for a distance of at least 20m around the house.								
The bushfire risk to your house, such as identifying potential fire risks like timber decking, has been assessed by an expert.								
All of your roof coverings fit tightly so that there are no openings for sparks.								
You have formed a household bushfire emergency plan.								
There is a minimum two metre gap between your house and tree branches or shrubs.								
Your external house timbers all have a sound coat of paint.								
There is metal flywire mesh on all vents to keep sparks and embers out.								
You have considered how your actions could depend on the situation on the day (e.g., some members not being at home, the Fire Danger Rating, etc.) and have integrated this into your bushfire emergency plan.								

How likely is it that each of the activities listed below will have been carried out by you and/or your household within the next 4 weeks (and that ongoing activities such as 'clearing fire fuels' will be kept up for the rest of the fire season)?	Definitely Not	Very Probably Not	Probably Not	Possibly/Possibly Not	Probably	Very Probably	Definitely will do (but have not yet done it)	Not Applicable / Already done this
Flammable and combustible materials such as firewood, boxes, gas cylinders, and wooden garden furniture are stored away from the house.								
There is gutter protection installed on your house.								
You have thought carefully about what each person in your household would need to do in the event of a bushfire.								
Your home and contents insurance is adequate.								
All gaps and vents are covered in order to reduce the risk of embers entering the house or cavities (e.g. floor spaces, in the roof space, under eaves, external vents, skylights, evaporative air conditioners, chimneys, and wall claddings).								
Leaf litter and twigs under trees are raked.								
All household members are aware of the fire plan.								
Underfloor spaces are covered so as to prevent embers and flames from entering.								
Roof gutters and valleys are clear of leaves and bark.								
Seals and/or draft protectors have been installed around windows and doors.								
You have installed a roof-mounted sprinkler system.								
Long grass and dense scrub is cut and well-watered.								

How likely is it that each of the activities listed below will have been carried out by you and/or your household within the next 4 weeks (and that ongoing activities such as 'clearing fire fuels' will be kept up for the rest of the fire season)?	Definitely Not	Very Probably Not	Probably Not	Possibly/Possibly Not	Probably	Very Probably	Definitely will do (but have not yet done it)	Not Applicable / Already done this
A sprinkler system is installed around the property.								
Shutters to all external windows are installed.								
Bushes and plants overgrowing and growing under fences have been removed.								
You have listed important things to do and remember in case of a fire (written or typed on computer, phone, etc.).								
Within the last 6 months you had conducted controlled burning on your property to reduce the fuel load.								
All the trees on or near your property are away from overhead utility lines / lines are buried and not susceptible to fire.								

How likely is it that each of the activities listed below will have been carried out by you and/or your household within the next 4 weeks (and that ongoing activities such as 'clearing fire fuels' will be kept up for the rest of the fire season)?	Definitely Not	Very Probably Not	Probably Not	Possibly/Possibly Not	Probably	Very Probably	Definitely will do (but have not yet done it)	Not Applicable / Already done this
All household members are comfortable with the intended fire plan.								
Vegetation along the boundary of your property is clear such that it creates a fire break.								
Your neighbours know about the intended fire plan of your household.								
You have had your local fire department do a fire safety inspection at your home and property.								
A fire-resistant roof is currently installed on your house (e.g. metal, tile, composition).								
Shrubs and small trees under and between larger trees have all been removed.								
Tree branches up to 2m off the ground are pruned.								
There is no timber, rubbish, or old junk lying around your property.								
Your relatives know about the intended fire plan of your household.								

Thank you for completing this survey!

Should you require further clarification please contact Professor David Morrison on (08) 9360 6788 or david.morrison@murdoch.edu.au. If you are not redirected, please click on the link below:



Professor David Morrison School of Psychology Mailbag M304 The University of Western Australia 35 Stirling Highway, Crawley WA 6009

Phone 08 6360 6788 Fax 08 6488 1006
Email david.morrison@uwa.edu.au
david.morrison@murdoch.edu.au
(Note that David Morrison is now at Murdoch

University)

Understanding Community Bushfire Resilience – Wave 2

Dear resident.

We have contacted you because we received a completed online survey from you during the first wave of our research project, Understanding Community Bushfire Resilience, which you will have received at the beginning of the bushfire season (approximately 10 weeks ago). This project is led by the School of Psychology at the University of Western Australia in conjunction with the Bushfire Cooperative Research Centre (Bushfire CRC).

At this point, we would like to, again, thank you very much for your participation in the first wave of our project. We received a fantastic response from community members such as yourself and we greatly appreciate the time you all took to complete your initial survey.

We would now like to invite you to participate in the second wave of this project. Participation in this second wave involves completing the following survey.

We are aware of the fact that the first survey was long, but we would like to note that this questionnaire is shorter than the last one. It is very important to our research that we receive your second response, as it will significantly improve our understanding of the bushfire related behaviour of residents across the entire fire danger period.

Of course, participation in this survey remains voluntary. All information collected will remain confidential, subject to legal constraints. This project has been approved by the UWA University Human Research Ethics Committee. Details of the project, ethical issues and risks, and confidentially are set out in a statement on the following screen.

Should you require further clarification please contact Professor David Morrison on (08) 9360 6788 or david.morrison@uwa.edu.au.

Yours sincerely,

Professor David Morrison, University of Western Australia

This research is funded by the Bushfire Cooperative Research Centre

Section 1 Information about You and Your Household

In the last survey, we asked you for some information about you and your property. We would like to ask just a few more questions here. Some of the questions will be the same as last time but we have repeated them here to see if anybody's situation has changed since the last survey.

IT IS IMPORTANT THAT YOU ANSWER ALL OF THE QUESTIONS IN THIS SURVEY IN RELATION TO THE MAIN PROPERTY YOU LIVE IN/ON.

What is the street name, subu	rb, and postco	ode of your pro	perty?				
Street:							
Suburb:		Postcode:					
Is this address the same as when you completed the first survey?							
Ye	es es	No					
]						
(N.B. Those who selected 'No' did not complete the rest of the survey)							
What type of property is it?							
Apartment or unit on residential block		House on resid	dential block				
House on a hobby farm -or small acrea	age	House on a lar property	ge farm or oth	er large			
Other (please specify)							
How much of your time do you	u spend living	on this proper	ty?				
Full time		Part time (e.g., you time	spend a cons living elsewhe		nount of		
How long have you lived in this prop	perty?				years		

How long have you been living in this town or suburb?	years
What are your current living arrangements in this property?	
Own/in process of buying house or property	
Renting – Single person or family household	
Renting – Share house	
Other (please specify)	
What is the composition of your household (that lives/spends time this property)?	ne at
Couple with children or other dependents	
One adult with children or other dependents	
Couple without children or other dependents	
One person household	
Shared house with other adults	
Other (please specify)	
Are you male or female?	Female
Please specify your age in years:	

Between answering the first survey (roughly were there any fires in or near your suburb/a threatened your household, given the right c	rea that could have

Yes	No	
(N.B. If 'yes' was selected, partic	cipants completed the following que	estion).
Did the fire threaten yo	our property?	
Yes	No	
(N.B. If 'yes' was selected, partic	cipants completed the following que	estion).
Please provide a brief fires, if there were mor		rience during that fire (or
fires, if there were mor	e than one). mage and/or loss of pro	
Did you experience da	e than one). mage and/or loss of pro e than one)?	
Did you experience da fires, if there were mor	e than one). mage and/or loss of prope than one)?	

Section 2 General Experiences, Motivation, and Feelings

The following set of questions are asked so that we can learn a bit more about your experiences, motivation, and feelings. This will help us understand how and why different community members may react differently to a fire threat. Please read each statement and select the response which indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement.

	1-Did not apply to me at all	2-Applied to me to some degree, or some of the time	3-Applied to me to a considerable degree, or a good part of the time	4-Applied to me very much, or most of the time
I found it hard to wind down				
I was aware of dryness of my mouth				
I couldn't seem to experience any positive feeling at all				
I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion)				
I found it difficult to work up the initiative to do things				
I felt helpless				
I tended to overreact to situations				

I experienced trembling (e.g., in the hands)				
I felt that I was using a lot of nervous energy				
	1-Did not apply to me at all	2-Applied to me to some degree, or some of the time	3-Applied to me to a considerable degree, or a good part of the time	4-Applied to me very much, or most of the time
I was worried about situations in which I might panic and make a fool of myself				
I felt that I had nothing to look forward to				
I found myself getting agitated				
I felt hopeless				
I found it difficult to relax				
I felt down- hearted and blue				
I was intolerant of anything that kept me from getting on with what I was doing				
I felt I was close to panic				
I was unable to become enthusiastic about anything				

I felt I wasn't worth much as a person		
I felt paralysed		
I felt that I was rather touchy		
I was aware of the action of my heart in the absence of physical exertion (e.g., sense of heart rate increase, heart missing a beat)		

	1-Did not apply to me at all	2-Applied to me to some degree, or some of the time	3-Applied to me to a considerable degree, or a good part of the time	4-Applied to me very much, or most of the time
I felt scared without any good reason				
I felt that life was meaningless				
I felt unmotivated				

Section 3 Bushfire Responses and Community Expectations

Your Intended Bushfire Response

Given your current situation, which ONE of the following do you think you will MOST LIKELY do on a day where a bushfire threatens your locality? (We have asked this question before, but we are interested to see whether anything has changed in the meantime).

Please select ONE response only

Will try to protect your property throughout the fire, taking shelter in the property if necessary.	
Will do as much as possible to protect your property but leave if the fire threat becomes too large. Follow up question: We would like to know what you mean by 'if the fire threat becomes too large'. Please indicate which of the situations listed below would be enough to prompt you to leave (multiple answers possible): - You see smoke on the horizon (>20km away) and the fire is currently heading in your direction. - You see a red glow of fire on the horizon (>20km away) and the fire is currently heading in your direction. - The fire is less than 10km away and heading in your direction. - The fire is less than 10km away and, even though it is currently not heading in your direction, it could if the wind were to change. - The fire is less than 1km away and, even though it is currently not heading in your direction, it could if the wind were to change. - The fire is less than 1km away and heading in your direction. - The fire is less than 20 minutes away and heading in your direction. - The fire is less than 20 minutes away and heading in your direction. - The fire is on your property. - The roof or some other part of your home has just caught fire. - Your whole house is on fire. - Other, namely:	
Your decision whether to stay and defend or leave depends on what the situation on the day of the fire is like. Follow up question 1: We would like to know more about what sorts of situations would influence your decision to defend your property or evacuate. Please indicate whether or not the following factors would influence your decision on the day of a fire (multiple answers possible): - It would depend on which household members are present - It would depend on who might be visiting (e.g., grandparents, friends from elsewhere) - It would depend on the Fire Danger Rating on the day of the fire - It would depend on other factors, namely: - It would depend on other factors, namely:	
Follow up question 2: We would also like to know to what extent you have already decided when (i.e. combinations of factors indicated above) you would stay to defend your property and when you would evacuate? Please indicate which of the following is most true for you (pick one option only): - You have already decided on in which situations you will defend and in which you will leave, and	

 have written them down in your fire plan. You have already decided on in which situations you will defend and in which you will leave, but you have not written this down anywhere. You have a good idea of in which situations you will defend and in which you will leave, but will leave the actual decision making until the day of the fire. You have a rough idea of in which situations you will defend and in which you will leave, but will leave the actual decision making until the day of the fire. You haven't thought about it. 	
Will wait for police, fire or other emergency services to tell you what to do on the day.	
 Will evacuate the property without attempting to defend it. Follow up question: We would like to know when you would leave exactly. Please indicate which of the situations listed below would prompt you to leave (multiple answers possible): You realize the Fire Danger Rating for the day is Severe, but there is no fire threatening your locality yet. You realize the Fire Danger Rating for the day is Extreme, but there is no fire threatening your locality yet. You realize the Fire Danger Rating for the day is Catastrophic/Code Red, but there is no fire threatening your locality yet. You hear about a fire (e.g. from a friend or on the radio) that might threaten your locality. You see smoke on the horizon (>20km away) and the fire is currently heading in your direction. You see a red glow of fire on the horizon (>20km away) and the fire is currently heading in your direction. The fire is less than 10km away and heading in your direction. The fire is less than 10km away and heading in your direction. The fire is less than 1km away and heading in your direction. The fire is less than 1km away and heading in your direction. The fire is less than 1km away and heading in your direction. The fire is less than 10 minutes away and heading in your direction. The fire is on your property. Your roof, or some other part of your house has just caught fire. Your whole house is on fire. Other, namely: 	
You would not be at home because you intend to leave your property and stay somewhere else on days of high catastrophic fire danger.	
Haven't thought about it.	
Other (please specify):	

Section 4

Bushfire Experiences, Motivation, and Feelings

The next set of questions ask you about some of your experiences and goals in relation to preparing for bushfires. Please read each of the following statements and indicate the extent to which you agree with each. You may remember that we asked some of these questions in the first survey, but we are asking them again here to see if anything has changed.

Bushfire Related

The next set of questions asks you about some of your experiences and goals in relation to preparing for bushfires. Please read each of the following statements and indicate the extent to which you agree with each. You may remember that we asked some of these questions in the first survey, but would like to see if anything has changed.

When it comes to preparing for bushfires	Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
I tend to spend a lot of time on assessing what is best for my household's specific situation.						
I find it motivating to focus on the things I can prevent by being prepared (e.g., avoiding damage to my property or avoiding injuries).						
I find it important to be successful in accomplishing preparatory actions.						
I tend to spend a lot of time on actively doing things that will increase my household's preparedness.						
I find it motivating to focus on the gains and advancements I can make from preparing (e.g., a clean and pretty yard).						
I find it important to keep busy and get things done.						
I find it important to carry out my responsibilities to prepare.						

When it comes to preparing for bushfires	Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree	
I find it important to evaluate alternative activities to prepare to determine which should have priority over others.							

The following set of questions asks you about your feelings in relation to the fact that you live in an area that is at risk of bushfires.

Now, please read each statement and select the response that best indicates how much the statement applies to you in relation to the fact that you are living in an area that is at risk of bushfires. There are no right or wrong answers. Try not to spend too much time on any statement.

	Does not apply to me at all		Applies to me to some degree		Applies to me to a considerable degree		Applies to me very much
When thinking about the fact that I live in a bushfire prone area	_	2	ω	4	5	6	7
I find it hard to wind down.							
I am aware of dryness of my mouth.							
I can't seem to experience any positive feeling at all.							
I experience breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion).							
I find it difficult to work up the initiative to do things.							
I feel helpless.							
I tend to overreact to situations.							
I experience trembling (e.g., in the hands).							
I feel that I am using a lot of nervous energy.							

When thinking about the fact that I live in a bushfire prone	Does not apply to me at all		Applies to me to some degree		Applies to me to a considerable degree		Applies to me very much
area	_	N	ယ	4	S ₁	6	7
I worry about situations in which I might panic and make a fool of myself.							
I feel that I have nothing to look forward to.							
I find myself getting agitated.							
I feel hopeless.							
I find it difficult to relax.							
I feel downhearted and blue.							
I become intolerant of anything that keeps me from getting on with what I was doing.							
I feel myself getting close to panic.							
I am unable to become enthusiastic about anything.							
I feel I'm not worth much as a person.							
I feel paralysed.							
I feel rather touchy.							
I become aware of the action of my heart in the absence of physical exertion (e.g., sense of heart rate increase, heart missing a beat).							
I feel scared without any good reason.							
I feel that life is meaningless.							
I feel unmotivated.							

Between completing the first survey (approximately 10 weeks ago) and now, how much attention have you paid to the media coverage of seasonal bushfires (e.g., television, newspaper, radio, internet sources) in your area?

I wasn't aware of any media coverage of bushfire events	
I've paid no attention at all	
I've paid a little attention to it	
I've paid a moderate amount of attention to it	
I've paid a lot of attention to it	
Between completing the first survey (roughly 10 weeks ago) and r how much attention have you paid to the media coverage of seaso bushfires (e.g., television, newspaper, radio, internet sources) in to of Australia?	onal
I wasn't aware of any media coverage of bushfire events	
I wasn't aware of any media coverage of bushfire events I've paid no attention at all	
I've paid no attention at all	

Section 5 Current State of Bushfire Preparedness

In this section you will see a list of actions that people might take so as to better prepare themselves and/or their households for a bushfire. Please indicate which of the following is true for you and/or your household, at the time you started filling out this survey. In other words, what you have done so far to prepare for bushfire?

Again, we realise that we have asked you questions about this list before, but it is very important that we get an accurate estimate of which actions currently have been completed.

Please do not count activities that you plan to do or that are only partly completed. If an action is not applicable to you, given your current situation and/or property, then please select the N/A option.

Which of the following are <u>currently</u> true (i.e. true when you started filling out this survey) for you/your household?	Currently true for me / my household	Currently not true for me / my household	N/A
Fine fuels (e.g., leaves, twigs and long grass) are cleared for a distance of at least 20m around the house.			
The bushfire risk to your house, such as identifying potential fire risks like timber decking, has been assessed by an expert.			
All of your roof coverings fit tightly so that there are no openings for sparks.			
You have formed a household bushfire emergency plan.			
There is a minimum two metre gap between your house and tree branches or shrubs.			
Your external house timbers all have a sound coat of paint.			
There is metal flywire mesh on all vents to keep sparks and embers out.			
You have considered how your actions could depend on the situation on the day (e.g., some members not being at home, the Fire Danger Rating, etc.) and have integrated this into your bushfire emergency plan.			
Flammable and combustible materials such as firewood, boxes, gas			

Which of the following are <u>currently</u> true (i.e. true when you started filling out this survey) for you/your household?	Currently true for me / my household	Currently not true for me / my household	N/A
There is gutter protection installed on your house.			
You have thought carefully about what each person in your household would need to do in the event of a bushfire.			
Your home and contents insurance is adequate.			

Which of the following are <u>currently</u> true (i.e. true when you started filling out this survey) for you/your household?	Currently true for me / my household	Currently not true for me / my household	N/A
All gaps and vents are covered in order to reduce the risk of embers entering the house or cavities (e.g. floor spaces, in the roof space, under eaves, external vents, skylights, evaporative air conditioners, chimneys, and wall claddings).			
Leaf litter and twigs under trees are raked.			
All household members are aware of the fire plan.			
Underfloor spaces are covered so as to prevent embers and flames from entering.			
Roof gutters and valleys are clear of leaves and bark.			
Seals and/or draft protectors have been installed around windows and doors.			
You have installed a roof-mounted sprinkler system.			
Long grass and dense scrub is cut and well-watered.			
A sprinkler system is installed around the property.			
Shutters to all external windows are installed.			
Bushes and plants overgrowing and growing under fences have been removed.			
You have listed important things to do and remember in case of a fire (written or typed on computer, phone, etc.).			
Within the last 6 months you had conducted controlled burning on your property to reduce the fuel load.			
All the trees on or near your property are away from overhead utility lines / lines are buried and not susceptible to fire.			
All household members are comfortable with the intended fire plan.			
Vegetation along the boundary of your property is clear such that it creates a fire break.			
Your neighbours know about the intended fire plan of your household.			
You have had your local fire department do a fire safety inspection at your home and property.			

	ollowing are <u>cu</u> y) for you/your		true when you sta	arted filling	Currently true for me / my household	Currently not true for me / my household	N/A	
A fire-resistan composition).	t roof is installe	ed on your hous	se (e.g. metal, tile,	,				
Shrubs and si removed.	mall trees unde	r and between	larger trees have	all been				
Tree branches	s up to 2m off the	he ground are լ	oruned.					
There is no tir	mber, rubbish, d	or old junk lying	around your prop	perty.				
Your relatives	know about the	e intended fire	plan of your hous	ehold.				
Please indica bushfire:	cate how prep	pared your ho	ousehold curre	ntly is to re	spond	to		
1 - Not at all	2	3	4 - Moderately	5	6	6	7 - Ve	ery well
							[

Section 6 Intended Up-keeping of Bushfire Preparedness

Thinking about what you have done to prepare for bushfires this season, to what extent would you agree/disagree with the statement below:

'I have made a lot of progress towards being prepared for bushfires.'/'I am very committed to be prepared for bushfires.'

Strongly disagree	Moderately disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Moderately agree	Strongly agree

Below is a list of actions that people might take so as to better prepare themselves and/or their households for a bushfire.

We realise that we have asked you questions about this list before, but it is very important that we get an accurate estimate of which preparedness items you intend to maintain throughout the remainder of this fire season.

Taking your progress/commitment towards being prepared into account please indicate, using the response options below, to what extent you intend to keep up the following items during the remainder of the fire season? In other words, how likely is it that the following will remain true of your household/property throughout the rest of the fire season?

	Definitely Not	Very Probably Not	Probably Not	Possibly/Possibly Not	Probably	Very Probably	Definitely	Not Applicable
Leaf litter and twigs under trees will be raked regularly								

	Definitely Not	Very Probably Not	Probably Not	Possibly/Possibly Not	Probably	Very Probably	Definitely	Not Applicable
Long grass and dense scrub will be regularly cut and well-watered								
All household members are kept aware of the fire plan								
Fine fuels (e.g., leaves, twigs and long grass) are kept clear for a distance of at least 20m around the house								
There is no timber, rubbish, or old junk lying around your property								
Roof gutters and valleys are kept clear of leaves and bark								
Flammable and combustible materials such as firewood, boxes, gas cylinders, and wooden garden furniture are stored away from the house								
Bushes and plants are prevented from overgrowing and growing under fences have been removed								
A minimum two metre gap is maintained between your house and tree branches or shrubs								
Vegetation along the boundary of your property is kept clear such that it creates a fire break								

Thank you for completing this survey!

Future research into bushfires would benefit greatly from your participation. You may decline future contact regarding bushfire related studies by selecting the appropriate box below.

Should you require further clarification please contact Professor David Morrison on (08) 9360 6788 or david.morrison@murdoch.edu.au.

If you are not redirected, please click on the link below:

http://wraparound.theoru.com.au/Results.aspx?JOB=1472a&ST=4673&PXY2 = awry

Пт	do not wish to	be contacted	about future b	ushfire related	l research



Professor David Morrison School of Psychology Mailbag M304 The University of Western Australia 35 Stirling Highway, Crawley WA 6009

Phone 08 6360 6788 Fax 08 6488 1006
Email david.morrison@uwa.edu.au
david.morrison@murdoch.edu.au
(Note that David Morrison is now at Murdoch

University)

Understanding Community Bushfire Resilience – Wave 3

Dear resident.

We have contacted you because we received a completed online survey from you during the first and second waves of our research project, Understanding Community Bushfire Resilience. This project is led by the School of Psychology at the University of Western Australia in conjunction with the Bushfire Cooperative Research Centre (Bushfire CRC). You would have received the first survey at the beginning of the bushfire season (approximately 14 weeks ago). The second survey was sent to you approximately 2-3 weeks ago.

At this point, we would like to, again, thank you very much for your participation in the first and second waves of our project. We received a fantastic response from community members such as yourself and we greatly appreciate the time you all took to complete both surveys.

We would now like to invite you to participate in the third wave of this project. Participation in this third wave involves completing the following survey.

We would like to note that this questionnaire is shorter than the last one. It is very important to our research that we receive your third response, as it will significantly improve our understanding of the bushfire related behaviour of residents across the entire fire danger period.

Of course, participation in this survey remains voluntary. All information collected will remain confidential, subject to legal constraints. This project has been approved by the UWA University Human Research Ethics Committee. Details of the project, ethical issues and risks, and confidentially are set out in a statement on the following screen.

Should you require further clarification please contact Professor David Morrison on (08) 9360 6788 or david.morrison@uwa.edu.au.

Yours sincerely,

Professor David Morrison, University of Western Australia

Section 1

Information about You and Your Household

In the last survey, we asked you for some information about you and your property. We would like to ask just a few more questions here. Some of the questions will be the same as last time but we have repeated them here to see if anybody's situation has changed since the last survey.

IT IS IMPORTANT THAT YOU ANSWER ALL OF THE QUESTIONS IN THIS SURVEY IN RELATION TO THE MAIN PROPERTY YOU LIVE IN/ON.

What is the street name, suburb, and postcode of your property? (please do not include street or lot number) Street: Suburb: Postcode: Is this address the same as when you completed the second survey (approximately 2-3 weeks ago)? Yes No (N.B. Those who selected 'No' did not complete the rest of the survey) What type of property is it? Apartment or unit on residential block House on a hobby farm -or small acreage House on a large farm or other large property
Is this address the same as when you completed the second survey (approximately 2-3 weeks ago)? Yes No (N.B. Those who selected 'No' did not complete the rest of the survey) What type of property is it? Apartment or unit on residential block House on a hobby farm -or small acreage House on a large farm or other large property
Is this address the same as when you completed the second survey (approximately 2-3 weeks ago)? Yes No (N.B. Those who selected 'No' did not complete the rest of the survey) What type of property is it? Apartment or unit on residential block House on a large farm or other large property House on a hobby farm -or small acreage
Yes No (N.B. Those who selected 'No' did not complete the rest of the survey) What type of property is it? Apartment or unit on residential block House on a hobby farm -or small acreage House on a large farm or other large property
Yes No (N.B. Those who selected 'No' did not complete the rest of the survey) What type of property is it? Apartment or unit on residential block House on a hobby farm -or small acreage House on a large farm or other large property
Yes No (N.B. Those who selected 'No' did not complete the rest of the survey) What type of property is it? Apartment or unit on residential block
(N.B. Those who selected 'No' did not complete the rest of the survey) What type of property is it? Apartment or unit on residential block House on a hobby farm -or small acreage House on a large farm or other large property
What type of property is it? Apartment or unit on residential block House on a hobby farm -or small acreage House on a large farm or other large property
What type of property is it? Apartment or unit on residential block House on a hobby farm -or small acreage House on a large farm or other large property
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Apartment or unit on residential block House on a hobby farm -or small acreage House on a large farm or other large property
Apartment or unit on residential block House on a hobby farm -or small acreage House on a large farm or other large property
property
Other (please specify)
How much of your time do you spend living on this property?
Full time Part time (e.g., you spend a considerable amount of time living elsewhere)

How long have you lived in this property? (Please speed.g. "12 years, 4 months").	cify years and months,		years
How long have you been living in this town or suburb? and months, e.g. "12 years, 4 months").	P (Please specify years		years
What are your current living arrangements in	this property?		
Own/in process of buying house or property			
Renting – Single person or family household			
Renting – Share house			
Other (please specify)			
What is the composition of your household (t this property)?	hat lives/spends tim	e at	
Couple with children or other dependents			
One adult with children or other dependents			
Couple without children or other dependents			
One person household			
Shared house with other adults			
Other (please specify)			
Are you male or female?	Male	Female	
Please specify your age in years: (please use numbers: e.g. 23)			

Between answering the second survey (roughly 2-3 weeks ago) and today, were there any fires in or near your suburb/area that could have threatened your household, given the right conditions?					
Yes	No				
		(N.B. If 'yes' was selected, participants completed the following question).			
Did the fire threaten yo	our property?				
Yes	No				
(N.B. If 'yes' was selected, partic	cipants completed the following o	question).			
Please provide a brief of fires, if there were mor		perience during that fire (or			
(N.B. If participants completed the	ne text response they answered	the following question).			

Did you experience damage and/or loss of property during that fire (or fires, if there were more than one)?

Yes, house/property was destroyed

Yes, house/property was damaged but not destroyed

No

Section 2 Bushfire Responses and Community Expectations

Your Intended Bushfire Response

Given your current situation, which ONE of the following do you think you will MOST LIKELY do on a day where a bushfire threatens your locality? (We have asked this question before, but we are interested to see whether anything has changed in the meantime).

Please select ONE response only

Will try to protect your property throughout the fire, taking shelter in the property if necessary.	
 Will do as much as possible to protect your property but leave if the fire threat becomes too large. Follow up question: We would like to know what you mean by 'if the fire threat becomes too large'. Please indicate which of the situations listed below would be enough to prompt you to leave (multiple answers possible): You see smoke on the horizon (>20km away) and the fire is currently heading in your direction. You see a red glow of fire on the horizon (>20km away) and the fire is currently heading in your direction. The fire is less than 10km away and heading in your direction. The fire is less than 10km away and, even though it is currently not heading in your direction, it could if the wind were to change. The fire is less than 1km away and, even though it is currently not heading in your direction, it could if the wind were to change. The fire is less than an hour away and heading in your direction. The fire is less than 20 minutes away and heading in your direction. The fire is on your property. The roof or some other part of your home has just caught fire. Your whole house is on fire. Other, namely: 	
Your decision whether to stay and defend or leave depends on what the situation on the day of the fire is like. Follow up question 1: We would like to know more about what sorts of situations would influence your decision to defend your property or evacuate. Please indicate whether or not the following factors would influence your decision on the day of a fire (multiple answers possible): - It would depend on which household members are present - It would depend on who might be visiting (e.g., grandparents, friends from elsewhere) - It would depend on the Fire Danger Rating on the day of the fire - It would depend on the characteristics (e.g., size, speed, intensity) of the fire It would depend on other factors, namely: Follow up question 2: We would also like to know to what extent you have already decided when (i.e. combinations of factors indicated above) you would stay to defend your property and when you would evacuate?	
Please indicate which of the following is most true for you (pick one option only): - You have already decided on in which situations you will defend and in which you will leave, and	

have written them down in your fire plan. You have already decided on in which situations you will defend and in which you will leave, but you have not written this down anywhere. You have a good idea of in which situations you will defend and in which you will leave, but will leave the actual decision making until the day of the fire. You have a rough idea of in which situations you will defend and in which you will leave, but will leave the actual decision making until the day of the fire. You have a rough idea of in which situations you will defend and in which you will leave, but will leave the actual decision making until the day of the fire. You have not thought about it. Will wait for police, fire or other emergency services to tell you what to do on the day. Will evacuate the property without attempting to defend it (also tick this box if you intend to leave before the fire threatens your locality). Follow up question: We would like to know when you would leave exactly. Please indicate which of the situations listed below would prompt you to leave (multiple answers possible): You realize the Fire Danger Rating for the day is Severe, but there is no fire threatening your locality yet. You realize the Fire Danger Rating for the day is Extreme, but there is no fire threatening your locality yet. You realize the Fire Danger Rating for the day is Catastrophic/Code Red, but there is no fire threatening your locality yet. You see smoke on the horizon (>20km away) and the fire is currently heading in your direction. You see a red glow of fire on the horizon (>20km away) and the fire is currently heading in your direction. The fire is less than 10km away and heading in your direction. The fire is less than 10km away and heading in your direction. The fire is less than 1 km away and heading in your direction. The fire is less than 1 km away and heading in your direction. The fire is less than 1 km away and heading in your direction. The fire is less than 1 km away and heading in your direction.		
Will evacuate the property without attempting to defend it (also tick this box if you intend to leave before the fire threatens your locality). Follow up question: We would like to know when you would leave exactly. Please indicate which of the situations listed below would prompt you to leave (multiple answers possible): You realize the Fire Danger Rating for the day is Severe, but there is no fire threatening your locality yet. You realize the Fire Danger Rating for the day is Extreme, but there is no fire threatening your locality yet. You realize the Fire Danger Rating for the day is Catastrophic/Code Red, but there is no fire threatening your locality yet. You hear about a fire (e.g. from a friend or on the radio) that might threaten your locality. You see smoke on the horizon (>20km away) and the fire is currently heading in your direction. You see a red glow of fire on the horizon (>20km away) and the fire is currently heading in your direction. The fire is less than 10km away and heading in your direction. The fire is less than 10km away and heading in your direction. The fire is less than 1km away and heading in your direction. The fire is less than 1km away and heading in your direction. The fire is less than 1 km away and heading in your direction. The fire is less than 20 minutes away and heading in your direction. The fire is on your property. Your roof, or some other part of your house has just caught fire. Your whole house is on fire.	 You have already decided on in which situations you will defend and in which you will leave, but you have not written this down anywhere. You have a good idea of in which situations you will defend and in which you will leave, but will leave the actual decision making until the day of the fire. You have a rough idea of in which situations you will defend and in which you will leave, but will leave the actual decision making until the day of the fire. 	
the fire threatens your locality). Follow up question: We would like to know when you would leave exactly. Please indicate which of the situations listed below would prompt you to leave (multiple answers possible): You realize the Fire Danger Rating for the day is Severe, but there is no fire threatening your locality yet. You realize the Fire Danger Rating for the day is Extreme, but there is no fire threatening your locality yet. You realize the Fire Danger Rating for the day is Catastrophic/Code Red, but there is no fire threatening your locality yet. You hear about a fire (e.g. from a friend or on the radio) that might threaten your locality. You see smoke on the horizon (>20km away) and the fire is currently heading in your direction. You see a red glow of fire on the horizon (>20km away) and the fire is currently heading in your direction. The fire is less than 10km away and heading in your direction. The fire is less than 10km away and heading in your direction. The fire is less than 1km away and heading in your direction. The fire is less than 20 minutes away and heading in your direction. The fire is less than 20 minutes away and heading in your direction. The fire is on your property. Your whole house is on fire. Other, namely: Haven't thought about it.	Will wait for police, fire or other emergency services to tell you what to do on the day.	
-	the fire threatens your locality). Follow up question: We would like to know when you would leave exactly. Please indicate which of the situations listed below would prompt you to leave (multiple answers possible): - You realize the Fire Danger Rating for the day is Severe, but there is no fire threatening your locality yet. - You realize the Fire Danger Rating for the day is Extreme, but there is no fire threatening your locality yet. - You realize the Fire Danger Rating for the day is Catastrophic/Code Red, but there is no fire threatening your locality yet. - You hear about a fire (e.g. from a friend or on the radio) that might threaten your locality. - You see smoke on the horizon (>20km away) and the fire is currently heading in your direction. - You see a red glow of fire on the horizon (>20km away) and the fire is currently heading in your direction. - The fire is less than 10km away and heading in your direction. - The fire is less than 10km away and, even though it is currently not heading in your direction, it could if the wind were to change. - The fire is less than 1km away and heading in your direction. - The fire is less than 1km away and heading in your direction. - The fire is less than 20 minutes away and heading in your direction. - The fire is less than 20 minutes away and heading in your direction. - The fire is on your property. - Your roof, or some other part of your house has just caught fire. - Your whole house is on fire.	
Other (please specify):	Haven't thought about it.	
	Other (please specify):	

Section 3 Up-keeping of Bushfire Preparedness

Below is a list of actions that people might take so as to better prepare themselves and/or their households for a bushfire.

We realise that we have asked you questions about this list before, but it is very important that we get an accurate estimate of which preparedness items you maintained over the past few weeks.

Please indicate, using the response options below, to what extent you kept up the following activities over the past few weeks (since you did the last survey)?

	Not at all	To some extent	To a great extent	All the time	Not applicable to my household situation
Leaf litter and twigs under trees were raked regularly					
Long grass and dense scrub was regularly cut and well-watered					
All household members were kept aware of the fire plan					
Fine fuels (e.g., leaves, twigs and long grass) were kept clear for a distance of at least 20m around the house					
There was no timber, rubbish, or old junk lying around your property					
Roof gutters and valleys were kept clear of leaves and bark					
Flammable and combustible materials such as firewood, boxes, gas cylinders, and wooden garden furniture were stored away from the house					
Bushes and plants were prevented from overgrowing and growing under fences were removed					
A minimum two metre gap was maintained between your house and tree branches or shrubs					

Vegetation along the boundary of your property was kept clear such that it creates a fire break	Not at all	To some extent	To a great extent	All the time	Not applicable to my household situation	
Between completing the second survey (appr and now, how much attention have you paid t seasonal bushfires (e.g., television, newspape in your area? I wasn't aware of any media coverage of bushfire events	o the	media	cove	erage	of	
I've paid no attention at all						$\overline{\Box}$
I've paid a little attention to it						
I've paid a moderate amount of attention to it						$\overline{}$
I've paid a lot of attention to it						
Between completing the second survey (roug now, how much attention have you paid to the seasonal bushfires (e.g., television, newspape in the rest of Australia?	e med	ia cov	erage	of		
I wasn't aware of any media coverage of bushfire events						
I've paid no attention at all						
Due poid a little attention to it						
I ve paid a little attention to it						
I've paid a little attention to it I've paid a moderate amount of attention to it						

Section 4 Current State of Bushfire Preparedness

In this section you will see a list of actions that people might take so as to better prepare themselves and/or their households for a bushfire. Please indicate which of the following is true for you and/or your household, at the time you started filling out this survey. In other words, what you have done to prepare for bushfire?

Again, we realise that we have asked you questions about this list before, but it is very important that we get an accurate estimate of which actions currently have been completed.

Please do not count activities that you plan to do or that are only partly completed. If an action is not applicable to you, given your current situation and/or property, then please select the N/A option.

situation and/or property, then please select the WA option.			
Which of the following are <u>currently</u> true (i.e. true when you started filling out this survey) for you/your household? If an action is not applicable to you, given your current situation and/or property, then please select the N/A option.	<u>Currently true</u> for me / my household	Currently not true for me / my household	N/A
You have raked up leaf litter and twigs under trees in the area 20m or further away from the house			
You have cut long grass in the area 20m or further away from the house			
You have cut dead material (e.g. detached branches or bark) on at least 50% of the area 20m or further away from the house			
You have removed flammable shrubs and small trees under and between larger trees to create clumps, instead of a continuous wall of trees, in the area 20m or further away from the house .			
You have isolated clumps of shrubs and small trees from one another by at least 10 metres to avoid continuous wall of trees, in the area 20m or further away from the house .			
You have planted trees and shrubs that are less likely to ignite due to their low oil content, in the area 20m or further away from the house.			
You have retained established trees in the area 20m or further away from the house to trap embers and reduce wind speeds.			
Within the last 6 months you had conducted controlled burning on your property in the area 20m or further away from the house to reduce the fuel load.			

Which of the following are <u>currently</u> true (i.e. true when you started filling out this survey) for you/your household? If an action is not applicable to you, given your current situation and/or property, then please select the N/A option.	Currently true for me / my household	Currently not true for me / my household	N/A
You have cleared dry grass, leaf litter, bark and twigs around the house			
You have ensured there is no flammable mulch in the area within 20m of the house			
You have cut long grass in the area within 20m of the house			
You have removed flammable shrubs from under and between trees in the area within 20m of the house			
You have pruned lower tree branches (up to 2m off the ground) in the area within 20m of the house			
You have thinned a 4-metre space between tree crowns in the area within 20m of the house			
You have made sure that no large shrubs are next to or below a window			
You have maintained a minimum two metre gap between the house and tree branches.			
You have ensured that no trees are overhanging the roofline			
You have removed flammable vines from the walls of the house			
You have replaced all highly-flammable plants with low-flammability plants in the area within 20m of the house			
You have chemically treated the area around outbuildings and sheds to prevent the regrowth of vegetation			
You have removed any wood piles, timber, fuel containers, flammable rubbish and old junk lying 20 metres around the house			
You have kept gas cylinders on the side of the house furthest away from the likely direction of a fire (where the bush is)			
You have ensured the areas around gas cylinders near to the house are clear of ground fuel			
You have ensured that the pressure relief valves on LPG cylinders in the area within 20m of the house face outwards (so flame is not directed toward the house)			
You have ensured the areas around gas cylinders near to the house (i.e. within 20m) are clear of ground fuel			
You have kept the gas grill and propane tank at least 5 meters from house, and cleared an area of 5 meters around the grill			
You have ensured that all the trees on or near my property are away from overhead utility lines			

Which of the following are <u>currently</u> true (i.e. true when you started filling out this survey) for you/your household? If an action is not applicable to you, given your current situation and/or property, then please select the N/A option.	Currently true for me / my household	Currently not true for me / my household	N/A
You have cleared vegetation along the boundary of your property to create a firebreak			
You have established a landscaped garden, vegetable garden, cultivated soil or gravelled areas within 20m of the house on the fire-prone side of the home			
You have built wide paths, paving, driveways, or a tennis court within 20m of the house that can provide fuel breaks			
You have located any dams, pools and any effluent disposal areas within 20m of the house on the side of buildings facing the most likely direction of fire			
You have created radiation shields and windbreaks such as stone or metal fences and hedges using low-flammability plants within 20m of the house			
You have ensured that roof gutters and valleys are clear of leaves and bark			
You have installed non-flammable (e.g.metal) gutter protection			
You have cleared vegetation and debris in all supporting posts, columns, stumps, piers, and poles in the flooring system and beneath the floor			
You have cleared leaves, bark and combustible materials in the area under decking			
You have sealed roof junctions, gaps around roof lights, ventilators and evaporative cooler with non-combustible materials			
You have sealed gaps in all joins between external walls and cladding			
You have sealed gaps around window frames			
You have maintained the paint on window sills so there is no flaking or exposed wood			
You have sealed gaps around external doors using non-combustible weather strips and draught stoppers			
You have ensured that garage doors are tight fitting to door frame if a garage is attached to the house			
You have enclosed eaves and sealed all gaps between fascias or rafters			
You have ensured that external house timbers have a sound coat of paint			
You have enclosed under floor spaces with screens or shutters			

Which of the following are <u>currently</u> true (i.e. true when you started filling out this survey) for you/your household? If an action is not applicable to you, given your current situation and/or property, then please select the N/A option.	Currently true for me / my household	Currently not true for me / my household	N/A
You have blocked all vents and weepholes (e.g. chimneys, stovepipes) with wire mesh screens 1.5mm (not aluminium)			
You have ensured that windows exposed to radiant heat sources (e.g. vegetation, sheds and woodpiles) are protected by window shutters			
You have covered windows not protected by shutters by wire mesh screens 1.5mm (not aluminium)			
You have installed wire mesh screens 1.5mm (not aluminium) over all external doors			
You have installed a fire-resistant roof on the house (e.g. metal, tile, composition)			
You have installed non-combustible sarking (lining) under roofing			
You have fitted the roller shutters with an ember guard at the top of the garage door if the garage is attached to the house			
You have ensured that decking is made of fire-retardant timber or non-combustible materials			
You have ensured that decking has a minimum 8mm gap between timber			
You have ensured that there is no combustible material between the deck and the house			
You have ensured that shade cloth is made from non-combustible materials, or removed the shade cloth when there is a fire danger			
For pipes that are essential to water delivery, you have ensured that they are metal; or non-metal pipes buried to a depth of at least 300mm below the finished ground level			
You have had a non-combustible doormat, or removed the doormat when there is a fire danger			
You have displayed a prominent house number			
You have ensured there is adequate access for fire trucks to your property – 4 metres wide by 4 metres high with a turn-around area			
You have reduced vegetation loads along the access path			
You have had a fire shelter or bunker built in the home which can provide shelter for people. (It must comply with building regulation for private bushfire shelters, regarding things such as accessing and exiting the shelter and tenability of air supply.)			
You have acquired fire fighting equipment (e.g. firefighting hoses and pump) and ensured it is operational			

Which of the following are <u>currently</u> true (i.e. true when you started filling out this survey) for you/your household? If an action is not applicable to you, given your current situation and/or property, then please select the N/A option.	<u>Currently true</u> for me / my household	Currently not true for me / my household	N/A
You have acquired long fireproof hoses that can reach all parts of your house			
If the diesel or petrol firefighting pump is not portable or mobile, you have covered it or placed it where it can be protected from radiant heat and direct flame contact			
You have acquired a generator for use as a backup power supply in using an electric pump			
You know the maximum operating temperature as specified for the pump by the manufacturer			
You have acquired at least one fire extinguisher inside the home			
You have obtained and prepared equipment to put out spot fires and sparks, such as rakes, shovels, and mops			
You have acquired ladders that are long enough to allow for checking the roof cavity and eaves and put out spot fires sparks on the roof			
You have ensured that smoke alarms are fitted on every level of the house			
You have prepared knapsack spray or garden backpack spray to help you put out spot fires. If using a garden backpack make sure it has been cleaned out before using it in a bushfire			
You have obtained a minimum of 10,000 litres of water for firefighting purposes only, such as tank, dam or pool			
You have prepared buckets that allow you to move water quickly and easily			
You have located water tanks (particularly plastic) away from vegetation and other combustible materials, or cleared vegetation and combustible materials away from tanks.			
You have installed a sprinkler system around the property			
You have installed a roof-mounted sprinkler system			
You have obtained an emergency supply of drinking water (3L per person per day for four days)			
You have obtained canned or dried food to last four days			
You have obtained a water container suitable for washing or cooking			
You have obtained a can opener, portable cooking gear and eating utensils			

Which of the following are <u>currently</u> true (i.e. true when you started filling out this survey) for you/your household? If an action is not applicable to you, given your current situation and/or property, then please select the N/A option.	<u>Currently true</u> for me / my household	Currently not true for me / my household	N/A
You own a portable battery operated AM/FM radio			
You own a waterproof torch			
You own new spare batteries			
You own a first aid kit with manual			
You own woollen blankets/towels			
You own mops or other tools to put out spot fires			
You own full length protective clothing (wool, cotton) for all the family members who are staying to defend. This should include gloves, eye protection, smoke mask, work boots, and a broad brimmed hat			
Your home and contents insurance is adequate			
You have selected a suitable planned destination for evacuation			
You have mapped out an evacuation route			
You have ensured that all household members know the evacuation route to be used			
You have discussed how road closures and fire directions might impact on your evacuation plan, and have identified alternative evacuation routes.			
You have identified specific trigger(s) for evacuating (e.g. smell smoke, hear warning on radio)			
You have made a list of what documents and personal effects (e.g., photos, laptop, cameras) you would take in case of evacuating the house.			
You have prepared emotionally for the possibility that their home may be destroyed if you leave			
You have a suitable evacuation outfit (i.e., long sleeves and pants made out of non-synthetic materials, closed shoes, a hat) ready for each household member who is evacuating.			
You have all important documents stored together, for easy collection in case of evacuation.			

Which of the following are <u>currently</u> true (i.e. true when you started filling out this survey) for you/your household? If an action is not applicable to you, given your current situation and/or property, then please select the N/A option.	<u>Currently true</u> for me / my household	Currently not true for me / my household	N/A
You have kept important documents/belongings that are to remain in the house stored in an appropriate fire-proof place (either off-site or in a fire safe compartment).			
You possess an 'evacuation box' containing blankets, water, and first aid kit and medication.			
You have planned exactly how to evacuate under different circumstances, including when different householders are at different locations (e.g., one is at home, one is at work), or when certain householders may not have access to a vehicle (e.g., due to another householder using it and not being home).			
You have agreed on a means for all household members to contact each other after evacuating, in case people are, or become, separated			
You have formed an emergency plan of what each household member will do (i.e., defend or evacuate) in response to a fire threat			
You have ensured that all household members are aware of and agree with the plan of the other members			
You have ensured that all household members are comfortable with the household's emergency plan			
In case your response to a fire depends on the situation on the day, all household members have identified (and discussed) under what specific circumstances they would defend and under what specific circumstances they would leave.			
You have taken into account atypical or unexpected situations (e.g., family members not all being at home, or in the same location, or other friends/family visiting who are not physically fit enough to defend), and have ensured all members of the household have agreed on who will do what in such situations.			
You have listed important things to do and remember in case of a fire (written or typed on computer, phone, etc).			
You have made relatives and/or friends aware of the household's fire plans.			
You are fully committed to defending the home			
You have taken into consideration the size of your house and the number of adults that will be needed to undertake active defence			
You have taken into account that active defence could last from many hours to days			
You have prepared yourself emotionally for the possibility that your home may still be destroyed, even if you defend it			

out this surve	y) for you/your	household? If a	true when you sta an action is not ap perty, then please s	plicable to	Currently true for me / my household	Currently not true for me / my household	N/A	
You have prepared yourself emotionally for the possibility that staying and defending your home may cause emotional trauma, injury and death								
You have decided beforehand under which specific conditions (e.g. the fire danger rating, whether or not there are visitors over) you will defend and under which you will evacuate.								
You have ensured that every person who intends to stay and defend (under pre-defined conditions) is clear on and has practiced the fire response plan together with other household members who will be defending								
You have planned what will be done with pets and/or livestock								
You have prepared a contingency plan for if the initial plan to defend fails, including an appropriate spot where you can shelter-in-place.								
Your neighbours know about your household's intended fire plan								
Please indicate how prepared your household currently is to respond to a bushfire:								
1 - Not at all	2	3	4 - Moderately	5	6		7 - Very we	

Thank you for completing this survey!

Future research into bushfires would benefit greatly from your participation. You may decline future contact regarding bushfire related studies by selecting the appropriate box below.

Should you require further clarification please contact Professor David Morrison on (08) 9360 6788 or david.morrison@murdoch.edu.au.

If you are not redirected, please click on the link below:

http://wraparound.theoru.com.au/Results.aspx?JOB=1496a&ST=4693&PXY2 =feaw

do not wish to be contacted about future bushfire related researc	h