

Experiences of members of community-based, environmentally focused groups following the 2019–20 bushfires

Peer reviewed

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Introduction

Disasters have wide ranging impacts and cause considerable disruption to individuals, communities and environments. The large-scale 2019–20 bushfires resulted in significant loss and damage across multiple states in Australia. Within Victoria, 5 people were killed directly in the fires, with estimations of an additional 120 deaths from bushfire smoke exposure (Australian Institute of Disaster Resilience 2020), more than 450 residences were damaged or destroyed (Inspector-General for Emergency Management 2020) and 1.5 million hectares of land burned (Australian Institute of Disaster Resilience 2020). Nationally, over 3 billion animals were estimated to be displaced or killed as a result of the fires (Australian Institute of Disaster Resilience 2020), with ongoing changes to their habitats, food and shelter sources (Abbas Khan et al. 2019; Filkov et al. 2020; Ward et al. 2020; Dickman 2021). Many of the Victorian communities affected by the 2019–20 bushfires had experienced multiple disasters in the decade prior (O'Rourke et al. 2024).

This article focuses on the experiences of members of Victorian community-based environmentally focused groups after the 2019–20 bushfires. We offer a brief summary of literature relevant to connection to the environment, the role of social connection after disasters, community-led approaches to recovery and psychosocial intervention principles before outlining the findings of this study.

Abstract

The 2019–20 summer bushfires in Australia resulted in significant loss and damage across Australia. This article focuses on the experiences of community-based, environmentally focused groups in the East Gippsland and northeast regions of Victoria after the fires. Qualitative interviews with 21 group members and a focus group with 12 industry stakeholders were undertaken. We identified that despite disaster recovery not being a core function of these groups, they had recovery related benefits in post-disaster settings. This included supporting connection to the natural environment, benefits of group membership that aligned with the mass trauma intervention principles, and the ability to help amplify the work of government and other organisations. The findings from this study indicate that community-based, environmentally focused groups can positively contribute to both social and environmental recovery after disasters such as bushfires.



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Connection to the natural environment

There is a growing body of research indicating that the way people are connected to the natural environment may influence their experience of disaster events. Existing research has recognised the concept of ‘urgent biophilia’ in post-disaster contexts, whereby both individuals and communities actively pursue connection with nature and restorative practices to support their own resilience (Tidball 2012). In Australia, research following the 2009 Victorian bushfires indicated that people with a strong connection to the natural environment experienced profound grief at disaster-related destruction, but also drew solace from environmental regeneration. These strong connections were also positively associated with mental health and wellbeing for these individuals (Block et al. 2019). Aboriginal and Torres Strait Islander peoples may experience disaster events differently to non-Aboriginal people, attributed to deep intersections between connection to Country and experiences of systemic marginalisation (Williamson et al. 2020; Williamson et al. 2021).

Social connections

The importance of social capital in disaster recovery is well established (Aldrich 2012). It has been argued that levels of social capital affects communities’ ability to mobilise, access resources and respond both during and following a disaster event (Aldrich 2011, 2012; Aldrich and Meyer 2015; Akbar and Aldrich 2017). Pre-existing community groups are recognised as an important aspect of social infrastructure in disasters (Aldrich 2012; Gallagher et al. 2019). Group identity and moderate levels of group membership may be protective for the psychological wellbeing of participating individuals (Gallagher et al. 2019; Cruwys et al. 2023) and those within their wider communities in the years following large-scale bushfire events (Gallagher et al. 2019).

Engaging with and for nature provides opportunities for individuals to build social connections through shared interests. Social connection and sense of community have been identified as important themes within research into nature-based activities and the role of green spaces both generally (Abraham et al. 2010; Husk et al. 2016; Keniger et al. 2013) and within the post-disaster context specifically (Chan et al. 2015; Li et al. 2021; Mabon 2019; Miller and Management 2020; Shimp et al. 2019).

Community-led approaches

There is an established body of research that identifies the importance of community-led approaches to disaster recovery (Olshansky 2005; Alesch et al. 2009; Cretney 2016; Easthope 2018; Dibley et al. 2019), and *using community-led approaches* is one of the national principles for disaster recovery in Australia (Australian Institute of

Disaster Resilience 2018). The wide range of approaches of citizen participation in decision-making is well documented in both sociological and political economy research, and acknowledges that there is a broad spectrum of types of community engagement (Arnstein 1969; Bishop and Davis 2002; IAP2 2014).

Although much existing literature emphasises the importance of community-led recovery, there are also recognised challenges to this approach. A review of the 2019–20 bushfire recovery undertaken by the Inspector-General of Emergency Management in Victoria noted that there is little agreement regarding the term ‘community-led recovery’ and that community members actively involved in recovery processes may be faced with very high workloads at the same time that they may be facing personal recovery challenges or supporting others to recover (Inspector-General Emergency Management 2021). Despite community-led approaches being recognised as a core principle by governments in Australia, the ways governments approach community-led recovery is widely varied, even within jurisdictions (Young et al. 2021; Brady et al. 2023). Preliminary findings in recent research identifies an inconsistent and varied understanding of community-led approaches by community members and recovery workers, indicating the importance of understanding community context in post disaster settings (Brady et al. 2023).

Intervention principles

The mental health and psychosocial effects of disasters are well established (Beaglehole et al. 2018; Bryant et al. 2020; Newnham et al. 2022) and there is a growing body of evidence that indicates that people affected by multiple and cascading disaster events may experience poorer mental and physical health outcomes than people exposed to single events (Leppold et al. 2022). In 2007, Hobfoll and colleagues published the influential *Five Essential Elements of Immediate and Mid-Term Mass Trauma Intervention: Empirical Evidence* (2007). These principles were developed to guide short to mid-term interventions and support wellbeing following disasters and underpin widely used interventions, including Psychological First Aid (Bisson and Lewis 2009, 2009; Shultz and Forbes 2014). The principles are grounded in existing evidence and expert consensus and emphasise the promotion of (1) a sense of safety, (2) calming, (3) a sense of self and collective efficacy, (4) connectedness, and (5) hope following a disaster event (Hobfoll et al. 2007).

This paper presents findings from a study undertaken during 2021–22 in partnership with Landcare Australia looking at the role of community-based, environmentally focused groups in Victoria, Australia following the 2019–20 bushfires. We draw on the existing evidence related to

both nature-based recovery, the roles of groups in recovery and recognised psychosocial intervention principles.

Method

During 2021–22, a team from the University of Melbourne and Federation University undertook a qualitative study funded by the Australian Government *Bushfire recovery program for wildlife and their habitat*, administered through Landcare Australia. The aims of the study were to explore:

- the contribution of local groups to environmental and biodiversity recovery after bushfires
- how involvement in natural environmental recovery activities affects group members' wellbeing and social resilience
- factors likely to enhance and/or inhibit the capacity of community-based environmental groups to contribute to environmental and social resilience after a bushfire.

The team used a purposive sampling approach to recruit 21 participants located in East Gippsland and the northeast regions of Victoria who were members of a community-based, environmentally focused group and also affected by the 2019–20 bushfires. The study was promoted through the existing networks of community-based, environmentally focused groups. Landcare facilitators in East Gippsland and northeast Victoria played a key role in recruitment by notifying existing network members about the study and participation options. Personal disaster experiences identified by participants included evacuation, separation from loved ones, total property loss, injury, smoke-related affects and changes to livelihoods.

Semi-structured, qualitative interviews were undertaken by 3 of the researchers between January and March 2022 via telephone or video (due to COVID-19 pandemic restrictions), which were recorded and transcribed for analysis. Interview data were coded qualitatively using an inductive, thematic analysis approach to identify emergent themes (Clarke and Braun 2017) that were then aligned with existing evidence, theory and principles. Data analysis occurred simultaneously with data collection. The data were coded iteratively, building on themes identified in earlier interviews and discussions between the interviewing researchers and then re-analysed as new themes emerged in later interviews. This iterative approach allowed interviewers to interrogate some of the emerging themes raised in early interviews with some of the later participants.

An additional online workshop was undertaken in March 2022 with researchers and 12 stakeholders who were all involved in environmentally focused recovery work following the bushfires in paid professional roles. Workshop participants were asked to reflect on a presentation of the initial themes identified in the interviews and given

the option to discuss their professional observations of recovery. These observations were integrated into the thematic analysis of the interview data.

Ethics approval was granted by the University of Melbourne Human Research Ethics Committee number 22709.

Results

The findings from 21 individual semi-structured interviews and one workshop with 12 participants were analysed together and are presented in Table 1.

Table 1: Participant characteristics - interviews.

Gender	Number
Female	13
Male	8
Landholder type	
Productive	8
Lifestyle	13
Land size	
<10 acre	9
10–40 acres	6
40+ acres	6

Participant characteristics – professional workshop

Organisations represented at the workshop included Agriculture Victoria, Victorian Department of Environment, Land, Water and Planning, East Gippsland Catchment Management Authority, East Gippsland Conservation Management Network, Far East Gippsland Landcare Network, North East Catchment Management Authority, Parks Victoria and the Rendere Trust.

Nature of group activities

Participants identified a wide range of motivations for their membership in community-based, environmentally focused groups and a breadth of activities they had undertaken to support environmental recovery on their own properties and communities. This included monitoring and reporting wildlife through visual identification and the use of motion sensor cameras on their properties, installing interim habitat shelters (some fitted with heat sensing technology to support monitoring), participating in citizen science activities including collecting water samples and recording sightings of fauna and regrowth of flora, weed control activities and undertaking considerable revegetation efforts. Many of these activities were undertaken in partnership with government, not-for-profit organisations and research institutions and were able to expand on work

being undertaken on public land to private land in the fire affected regions. This was especially notable during COVID-19 restrictions where some research and agency staff could not physically travel to monitor activities.

Almost all of the participants had been members of these groups prior to the 2019–20 bushfires. All participants said that they would recommend joining a community-based, environmentally focused group to people in a similar position to themselves.

Multi-disaster exposure

One of the clearest and most consistent points raised by participants in the interviews was that the 2019–20 bushfires was only one of many disasters and disruptions they were grappling with. The East Gippsland and northeast Victorian regions had experienced a number of disaster events over the decade prior, including fires, floods, storms and drought (Young et al. 2021; O'Rourke et al. 2024) and industry changes, resulting in considerable economic, agricultural and environmental stress. The 2019–20 bushfires, and shortly after, an avian flu outbreak and COVID-19 presented new challenges and amplified existing ones.

Relevance of mass trauma intervention principles

When asked to describe the benefits of their group membership, participants identified a range of elements including feeling as though there was a sense of collective achievement:

So at the end of the year, you look back and say 'yep, we achieved that. We had fun doing it, we had a few really good social days, but we actually achieved this,' and that could be proving that there's platypus in the river or doing the fox program or seeing more live numbers next year on our cameras or even seeing the hill all planted up with trees.

Participants described how group membership fostered a sense of connection both to other people in their community and to the surrounding environment:

I think it's connection and place perhaps, purpose... I guess it's a sense of connection and community in a way, with a huge value underpinning it.

They reflected on the breadth of changes and challenges they had faced in the aftermath of the fires and spoke of a sense of hope that participation in activities through the groups was able to instill:

...that little bit of hope, and I think giving people that little bit of control over how things come.

Some participants noted that, even in times of stress, the trust and connection among the group members meant they were generally able to maintain harmony:

...it's been so easy to keep it harmonious, I think it's been really good for a group... We had a few laughs, we had a wine, or some of us had a wine afterwards, and a bit of a laugh, and we planned to do the next 2 or 3 months of what we're going to do.

Participants were able to identify a variety of ways the groups had been beneficial, with elements identified resonant to existing literature.

Challenges and benefits of community-led recovery

Participants in the interviews and focus group discussed the benefits and challenges to contributing to community-led recovery approaches in nuanced ways. Strong, trusted relationships that pre-dated the bushfires were identified as helpful for offering and accessing support:

I think probably one of the advantages of being in a community at that time was that the network existed and the contact between people existed already. So, you were in a position to respond probably more quickly than other agencies were, and in a personal kind of way, personal contact kind of way.

These pre-existing relationships extended beyond group membership. As an example, despite not being included in formal pre-event recovery planning, the Landcare facilitator in East Gippsland was invited to participate in government-led recovery committees after the fires and was able to use this platform to act as a conduit between 'outsiders' and their communities and advocate for needs that group members had identified:

Being invited even to be on that [recovery committee] as a not-for-profit was so valuable. And being able to shout out, if you like, for private landholders, I found really beneficial. And really empowering for Landcare I think. Being recognised that way.

The benefits identified from the inclusion into the formal recovery processes highlight an opportunity for inclusion of community-based environmentally focused groups in local and state government recovery plans.

The community-based, environmentally focused groups that had been able to undertake substantial, long-term strategic planning prior to the bushfires identified that they were able to take advantage of recovery grants to progress existing plans. As much of the planning had already been undertaken, these groups seized the opportunity of unanticipated funding to 'leapfrog' activities and programs that otherwise would have taken longer or been more difficult to fund without available disaster funding.

Despite being able to point to the benefits of community-led recovery approaches, participants articulated significant challenges. A number of participants identified that disaster-related stress compromised group members' ability to lead recovery efforts. They also discussed that there was a tension in how community-led approaches were understood and enacted by different government organisations in a range of ways. Some participants emphasised that while the overwhelming nature of disasters meant they did not always have capacity to lead activities, this did not mean that they wanted to be cut out of the planning altogether:

We need government to take more of a lead. Community-led is a nice idea but when community is just busy holding itself together, it's difficult... local people know what needs to be done, but don't have the energy and time to do it. We need to be able to direct others to do what needs to be done, not have to do it all ourselves.

There were frustrated reports from participants that, in instances where community members were not in a position to take the lead, source funding or drive activities, that their ideas, needs and priorities were often ignored or overlooked by government. Participants expressed disappointment and irritation with the structure of grants processes that forced disaster-affected communities to compete with each other:

It's full on, and then the government came along and made these communities compete with each other for funding. And that sense that the answer was this market mechanism overlaid over a disaster has had a cost...

The bureaucratic nature of available funding was also a point of significant frustration. Some participants expressed dismay at the complexity of the application and acquittal processes for funding:

Funding applications! They are deliberately made complicated... You couldn't believe how difficult it can be made to apply for some of the grants... I do feel that they're made so that they [government] can appear to be giving funding grants when they make an announcement, but they make it so complicated that the money's not taken up... it's almost cruel.

Interview participants noted that organisations from outside the affected communities had more capacity to manage these requirements than local groups in fire-affected areas that were managing significant disruption and demands and had less time and energy to navigate the complexity of the funding processes.

Alarmingly, concerns were raised by some participants that the rigid parameters set by grant funders created perverse incentives to implement actions that would potentially create more problems in the future for communities. One

participant gave the example of a grant timeframe that resulted in reduced biodiversity for their region:

There was money for replanting, but the timing was all out [of synch]. [The funder's] deadlines drove things, not when the seeds and seedlings were ready. It's affecting the biodiversity of the area too because we didn't have the seeds for a broader range [of species that were native to the area] but we needed to spend the money in a short period of time so we had to plant other species that were ready.

Several participants also noted that the post-disaster activities and funding drew new organisations to the affected regions on a temporary basis. These groups were better resourced than local groups, but didn't necessarily have established relationships or ongoing presence in the community:

I guess it was making us feel a bit invisible and that the work we've done previously hasn't been acknowledged. And with the new groups coming in, there was this overall sense... that, 'Oh gosh, it's a honeypot. Here come the bees'.

The issues raised by participants speaks to the benefits, complexity and challenges of community-led approaches to recovery.

Discussion

This qualitative study explored the experiences of people involved in community-based, environmentally focused groups who were also personally affected by disasters, with additional insights from professionals involved in natural environment disaster recovery.

Benefits of membership

Participants were able to identify a range of benefits to group membership. Despite the interview participants not considering disaster recovery as a core business for their groups, the benefits described were very closely aligned with existing evidence of the benefit of connections to nature (Abraham et al. 2010; Husk et al. 2016; Block et al. 2019; Corazon et al. 2019) and the five essential elements of mass trauma interventions, that is, promoting a sense of safety, calm, connectedness, self and collective efficacy and hope (Hobfoll et al. 2007).

This finding indicates that while these groups may not see post-disaster support for members as core business, these groups can nonetheless play an important support role for disaster-affected group members. Pre-existing levels of trust and reciprocity before a disaster, as well as the nature of the activities the groups undertake, positions them to provide support in line with the existing evidence base for psychosocial support after disasters.

Amplification of public programs

An important finding of this research is that community-based, environmentally focused groups were able to partner with and amplify the work of other organisations, including government, not-for-profit organisations and research institutions. This was achieved in a range of ways, including citizen science efforts, harnessing volunteer groups to help operationalise activities planned by other organisations, monitoring activities at a time where agencies were constrained by COVID-19 pandemic restrictions and through spanning the boundaries between public and private lands to enable more wholistic regional approaches. This occurred despite limited pre-disaster planning for these partnerships to take place. This finding indicates important opportunities for future partnerships between community-based, environmentally focused groups and other organisations to plan for ways to cross public and private land divisions in order to scale conservation and environmental rehabilitation activities in future disasters.

Challenges and benefits of community-led recovery

These findings contribute to the growing body of work exploring the nuance of community-led approaches to recovery (Dibley et al. 2019; Inspector-General Emergency Management 2021; Brady et al. 2023). Participants identified a number of benefits to community-led approaches, including being able to draw on pre-existing networks, local knowledge and existing trust. Additional benefits included being able to rely on acts of reciprocity, being able to act as a conduit for community-based groups to the formal recovery system (even if this was done inconsistently) and to harness new funding to accelerate pre-disaster plans.

Participants were able to clearly identify the challenges of community-led recovery approaches already documented (Inspector-General Emergency Management 2021) (including intense demands on disaster-affected community members at a time of high workloads and fatigue) and to point to a number of ways the formal recovery system was often at odds with community-led approaches that are supposed to underpin recovery policy and practice in Australia. These included treating the bushfires as a discrete disaster event rather than considering it in a broader context of community disruption and multi-disaster exposures. This indicates that disaster recovery services and policies are not yet reflecting the increased exposure of Australian communities to multiple disaster events (Richardson et al. 2023). Other challenges included short-term funding that often needed to be applied for before communities and groups were ready, competitive and complex grant

processes that favoured groups from outside the affected areas that were not struggling with disaster-related disruptions, governance processes that placed a high burden of administrative demands on disaster-affected people, development of new committees and groups rather than supporting existing groups and project timeframes based on funder requirements that created perverse incentives in communities in order to retain funding support.

Implications

The findings from this study indicate that community-based, environmentally focused groups can positively contribute to the social and environmental recovery after disasters such as bushfires. This study identified that there were barriers for these groups to participate in formal recovery efforts that are likely to be issues for similar groups in other parts of the country. Actions taken by community-based, environmentally focused groups related to planning and capacity before a disaster that are likely to help these groups to be better prepared to support their members and take advantage of available funding after disasters. This includes medium- and long-term strategic plans for groups and identifying organisations and committees to partner with. Recovery planners should consider including these groups in community recovery planning and should consider incorporating findings relating to short-term, restrictive, burdensome and competitive funding.

Further insights and recommendations can be found in the published project report.¹

Study limitations

This study relied on a participant sample recruited through existing established networks. Recruitment and data collection took place during a time of COVID-19 related travel and in-person meeting restrictions and high demands on participants relating to disaster recovery, making community engagement in the lead-up to the study especially challenging. Future studies may be able to capture views of people in smaller or less formalised community-based, environmentally focused groups and may be able to design for comparison groups (e.g. non-environmentally focused community-based groups) to be included.

Despite these limitations, the findings of this study align with established evidence and theory, which may speak to the generalisability beyond the context of the current study.

1. *The overwhelm of black and the joy of green*, at https://mispgh.unimelb.edu.au/___data/assets/pdf_file/0020/4170242/Landcare-Project-Report-Final90.pdf.

Conclusion

In this qualitative study of the experiences of members of community-based environmentally focused groups in East Gippsland and northeast Victoria following the 2019–20 bushfires, we identified that these groups offered significant benefits in post-disaster settings despite disaster recovery not being their core function. The benefits reported by participants included supporting connection to the natural environment, group membership experiences that aligned with the promotion of safety, calm, connectedness, self and collective efficacy and hope (i.e. the essential elements of mass trauma intervention) and the ability for these groups to help amplify the work of other organisations including governments and not-for-profit organisations. These findings point to the importance of medium and long-term strategic plans prior to disasters for these groups and the need for recovery planners to integrate community-based, environmentally focused groups into recovery plans and to support them to participate and deliver. The findings also point to the complexity, challenges and benefits of community-led approaches in post disaster settings.

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