Learning from the locals: The role of stakeholder engagement in building tourism and community resilience.

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ABSTRACT

This article explores the role of stakeholder engagement in building resilience to the impacts of bushfire. The discussion is informed by a study of Harrietville - a nature-based tourism destination in NE Victoria, Australia, that was affected by a major bushfire in 2013. Harrietville is a small town that acts as the gateway to premier ski fields and provides access to abundant nature-based attractions including iconic bushwalks, touring routes and rivers. The research aim was to investigate the impact of bushfire on the tourism economy and was based on a visitor survey and in-depth interviews with representatives from across stakeholder groups. A Destination Sustainability Framework (DSF) was applied to identify key vulnerability and resilience characteristics of the town as well as to identify opportunities for adaptation to future fires. Fragmented stakeholder communications and a lack of community engagement in planning for bushfire prevention, emergency management and recovery are identified as a key vulnerability. In response, government has successfully implemented initiatives to strengthen stakeholder relationships and engage the community in emergency planning processes. The article provides an important case study of resilience building by small tourism destinations as well as highlighting the importance of connecting with local knowledge in bushfire management.

Keywords

Nature-based tourism, community resilience, bushfire, stakeholder engagement, regional development.

Introduction

Throughout Australia, many small regional economies are dependent on nature based tourism. As a result of global warming, however, the increasing frequency and severity of bushfire represents a major threat to communities reliant on incomes and employment generated by visitors drawn by nature-based attractions. The resilience of such destinations, and the communities that tourism spending supports, is therefore deeply reliant on sympathetic planning and actions of multiple land managers and emergency services responsible for fire prevention, emergency response and recovery.

This paper draws on the findings of a study conducted with the aim to assess the economic value and vulnerability of nature based tourism of a destination affected by four bushfire events since 2003. The case-study destination is Harrietville - a small town based in the Australian Alpine Region located on the Great Alpine Road between the regional centre of

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Bright and Mt Hotham, one of Victoria's premier ski resorts. Despite its small population of around 400 residents, the town provides immediate access to abundant natural attractions including a national park and state forest, rivers, ski-fields and iconic touring routes for walkers, cars, motor-bikes and cyclists. One implication of this diversity of resources is that the tourism system and governance processes are highly complex despite the smallness of the destination. Key stakeholders include tourism operators, multiple land management authorities, emergency services and social and community services. The local residential community is also enmeshed with both the tourism system and governance bodies both directly through property, employment and/or business interests, and indirectly through community networks and an investment in the character of the locality.

The impetus for this study emerged in the context of the most recent bushfire, which started on 21 January 2013 and was ignited through a lightning strike at Smoko, a locality around four kilometres north-east of Harrietville. While the fire was named 'the Harrietville Fire', the fire actually travelled around Harrietville to within 100 meters of Mt Hotham and across the Great Alpine Road. The result was that 37,000 hectares of Alpine National Park were burnt over a period of 55 days leading to the tragic death of two firefighters. The fire was also followed by heavy rains, which coupled with the after-effects of the fires, caused considerable flooding and water contamination in the township. The combined effects of fire and flood also caused mud slides forcing road closures between Harrietville and Mt Hotham. These events resulted in at least partial road closures to Harrietville for twelve weeks during 2013. As a result, the town suffered a loss of income from visitors or transit tourists for effectively three months of 2013. Further, damage was caused to parkland and many walking and four-wheel drive trails through parkland were either damaged, closed for safety reasons or difficult to access. A compounding issue was the reputational damage caused by misleading media coverage of the fire events.

The impact of the fire prompted a multi-agency government response primarily led by the state Emergency Management Authority. A key strategy was the support and facilitation of a community forum comprised of representatives of tourism operators, general community members and community groups and services such as the Country Fire Authority (CFA). The forum provided the communication mechanism for a number of projects designed to support Harrietville's planning, emergency response and recovery for future fire events. The study of tourism values in the area was part of this effort and one of the key resilience factors identified was the success of stakeholder engagement efforts, and the positive impacts this has made to community preparedness and response to fire events. At the same time, the process had been undertaken from an emergency management perspective and tourism values of the area have been a secondary, rather than a central focus of stakeholder engagement efforts. By taking a perspective focussed on the tourism economy, the study revealed important gaps in stakeholder recognition and engagement that have negatively impacted on both the integrity of the nature-based resources on which tourism relies and consequently, the resilience of the area as a tourism destination. Visitors, future visitors and to a lesser extent, tourism operators, have been particularly overlooked as a stakeholder in the process of fire prevention and recovery.

Informed by a Destination Sustainability Framework (DSF) (Calgaro, Lloyd, & Dominey-Howes, 2014), this paper presents the key vulnerabilities and resilience characteristics identified through the tourism values study. Drawing on stakeholder theory (Bourne, 2008; Byrd, 2007; Sautter & Leisen, 1999), the role of stakeholder engagement and communications in bushfire prevention, management and recovery is discussed. In particular, the intersections and interests between emergency management authorities and local tourism economies are highlighted.

The tourism resilience and stakeholder nexus

Harrietville is surrounded by expanses of bushland and bushfire risk is accepted as a part of life. However, the frequency and severity of bushfires in Australia are expected to increase (Hughes & Steffen, 2013) and in recent years, several major bushfires events have occurred in the Harrietville region in close proximity. These included the bushfire events of 2003, 2006/07, 2009 and 2013.

Traditionally risk analysis (see for example, ISO Guide 73, 2009) has been a top down approach identifying individual risks and estimating the likelihood of the risk occurring and the severity of its impact should it occur, to gain a quantitative, if relative, estimate of risk. More recently a more bottom up approach has come to the fore based around estimating a communities' vulnerability to a broad range of risks. To account for this change, this study approached the vulnerability assessment from a climate adaptation perspective where 'adaptation' refers to adaptive actions to reduce vulnerability and increase resilience to the potential adverse impacts of climate extremes (IPCC, 2012).

Tourism has unique challenges and opportunities in regards to climate adaptation. Not only is tourism demand sensitive to changes in climate (for example skiing destinations that rely heavily on a conducive climate), climatic changes also pose risks to the appeal of a destination, transport infrastructure, the resource base (natural and human), tourist satisfaction, safety and health, as well as the sustainability of tourist facilities (Jopp et al. 2010). The adaptive capacity also varies between tourism stakeholders (Scott et al., 2008). For example, accommodation providers, attraction operators and communities generally have a low adaptive capacity as they are bound to their geographic area, whilst their customers (tourists) are mobile and can simply choose a different destination to suit their individual needs.

To address individual climate change risks, a wide range of adaptations are used by tourism stakeholders around the world, including technological, managerial, policy and behavioural adaptation (Scott et al., 2008) and a number of adaptation frameworks have been proposed in the literature. These include the Regional Adaptation Framework (Jopp et al., 2010; Jopp, De Lacy, Mair, & Fluker, 2012), the vulnerability assessment methodology of Moreno and Becken (2009), the vulnerability scoping diagrams (VSD) of Polsky, Neff and Yarnal (2007) and the Climate Change Vulnerability/Resilience Framework of Klint (2012). For this study, the Destination Sustainability Framework (Calgaro, Dominey-Howes, & Lloyd, 2014; Calgaro, Lloyd, & Dominey-Howes, 2014) was selected as the most appropriate methodology

as it was developed in the context of a natural disaster (the Tsunami of 2006) and has since been applied in adapted forms in a number of destinations in the South Pacific including Samoa and Vanuatu (Klint et al., 2012; Jiang et al., 2014). The framework focuses on exposure, sensitivity and adaptive capacity as the key elements of vulnerability and incorporates feedback loops that highlight the inter-dependencies of the drivers within the system.

Whilst not an explicit part of the model, the DSF illuminates the role that stakeholder engagement plays in the vulnerability and resilience of a destination (Calgaro, Dominey-Howes, & Lloyd, 2014; Calgaro, Lloyd, & Dominey-Howes, 2014). As such, the approach has commonalities with the literature highlighting the importance of stakeholders in achieving sustainability (e.g. Waligo, Clarke & Hawkins, 2013). Identifying who the stakeholders are, and how to engage with them, plays a critical role in resilience building of a destination.

Stakeholder theory has its roots in the works of Freeman (1984, p.4), who identified stakeholders as "any group or individual who can affect or is affected by the achievement of the organization's objectives." Since then, the literature has evolved and justified the concept in a variety of contexts, which has included sustainable tourism (e.g. Bramwell & Sharman, 1999; Byrd, 2007; Fletcher, 2009; Sautter & Leisen, 1999; Waligo et al., 2013) and disaster risk reduction (e.g. Gaillard & Mercer, 2012; Mercer et al., 2012; Mercer, Kelman, Taranis, & Suchet-Pearson, 2010; Palttala, Boano, Lund & Vos, 2012). Tourism, in its myriad of forms, provides a unique stakeholder context as it involves people travelling to a destination outside their usual environment. This gives tourism destinations a complex multi-stakeholder nature and the literature often identifies six tourism stakeholder types: tourists, industry, local community, government, special interest groups and educational institutions (e.g. Waligo et al., 2013). However, in the context of vulnerability and resilience of a destination, stakeholders also include the emergency and recovery services and others depending on the context. Culture and traditional knowledge, for instance, have been shown to play a critical role in disaster risk reduction and the vulnerability of a destination (Bird, Gísladóttir & Dominey-Howes, 2011; Gaillard & Mercer, 2012; Mercer et al., 2012; Mercer, Kelman, Taranis, & Suchet-Pearson, 2010). However, effective stakeholder collaboration between each of these groups can be complex and very difficult to achieve. Different stakeholders often have disparate interests and/or perspectives, while the engagement process is influenced by the quality of leadership, quality of information and accessibility, stakeholder involvement capacity stakeholder relationships and implementation priorities (Waligo et al., 2013). This is particularly the case in the tourism context where the mix of stakeholder groups is highly heterogeneous with diverse interests.

Method

Informed by the DSF (Calgaro, Lloyd, & Dominey-Howes, 2014), a vulnerability/resilience (V/R) assessment of tourism in Harrietville was conducted to reveal the risks (shocks and stressors) for Harrietville's tourism system in the context of bushfire, the constraining factors increasing its vulnerability, and the enabling factors increasing its resilience. A mixed method

approach was adopted in order to gather relevant data, both primary and secondary, to undertake the V/R analysis. Specific data collection methods included visitor survey and in-depth interviews with relevant stakeholders.

A survey of visitors to Harrietville was conducted over the 2014 Easter period. With reference to relevant literature, (Tourism Research Australia, 2014; Sanders et al., 2008), the survey included 22 questions across three sections: purpose and motivations for visiting Harrietville, understanding of bushfire risks and impacts, and demographic details. A total of 285 usable surveys were completed and analysed using SPSS. The survey findings were used to inform the V/R analysis which considers visitors as an essential component of the tourism system and a key tourism stakeholder. Visitors' are potentially exposed to bushfire risks, and their understanding of and preparedness for bushfire risks and impacts have significant implications for determining a tourism destination's level of vulnerability and resilience.

A total of 25 semi-structured face-to-face in-depth interviews were also conducted with a range of tourism stakeholders, who were identified to ensure representation by a cross-section of people connected with the Harrietville tourism system. Major stakeholder groups interviewed included: private tourism businesses, community members, relevant government agencies at state, regional, and local levels, and other peak tourism and event management organisations. The interview data was analysed to identify categorical themes (Patton, 2002) reflecting the detailed components featured in the (Calgaro, Lloyd, & Dominey-Howes, 2014).

The DSF provides a conceptual framework to understand *who* is vulnerable or resilient, to *what* and *why* (Calgaro, 2010). The process of analysis revealed how different stakeholders in the tourism system collectively contribute to economic, social, environmental, legal and political conditions that determines vulnerability and resilience. In the context of bushfire risk, it is crucial to understand how different stakeholders interact with each other in the complex governance processes related to tourism development, natural resources management, disaster preparedness and reduction, and emergency management. To this end, the V/R assessment highlighted the role of stakeholder engagement and communications in building resilient tourism destinations. With a particular focus on stakeholder communications, the following section describes key themes to emerge from the interviews and survey findings in relation to the V/R categories of analysis.

Key findings

Shocks and stressors

As indicated, the first stage of a V/R analysis is the identification of shocks (immediate impacts) and stressors (slow onset impacts). In this case, the key shock was a severe fire that caused extensive damage to 37,000 of national parkland over a period of 55 days as well as leading to the tragic death of two firefighters (Hallowes, 2013). Immediately following the fire was a period of flooding rain causing further shocks to the system. With little vegetation left, burnt mountain areas are particularly susceptible to erosion, when the "first lot of rain sends all the silt, all the ash, all the soot, everything else down and kills fish, kills whatever

wildlife is left" as one of the respondents pointed out. The heavy rains consequently resulted in landslides, one of which severed the only road connecting Harrietville with Mt Hotham. The Ovens River, already clogged with post-fire debris became completely blocked, eventually flooding parts of the town. Some properties and tourism businesses were badly affected, including washed-away bridges and footpaths, as well as flooded rooms and destroyed gardens - requiring what are effectively major clean-up operations for small businesses with only a few employees and affecting their ability to trade as normal. The ash and debris run-off caused considerable water pollution with impacts on the visual amenity (e.g. dead fish and platypus caught in sticks) and death to fish stocks.

A number of additional stressors, however, were identified as exacerbating the impacts of the fires. A key issue was sensationalised and misleading news coverage which continued throughout the course of the fire, and then immediately stopped when the fire had stopped with little public communications to explain that Harrietville was not damaged and that it was safe to return. A particular source of community frustration was that the fire had been named the "Harrietville Fire", thereby impacting tourism visitation even when it was safe to return and that the fire had not actually affected the township.

Further stress was placed on the town due to fire-fighting operations based in Harrietville as well as road and track closures that blocked access to the town and surrounding bushland. While such actions were understood as unavoidable and necessary to both contain the fire and to ensure public safety, they were nonetheless part of the wider context that impacted on the local community and tourism system. This was particularly the case given that fire operations continued for over six weeks, and local road closures continued for ten. Given that access to the town was so limited, so too was any tourism spending. As one respondent said, "…so really, from the 24th January to Easter, the town basically had no income". Road works also limited access for the myriad of other services a tourism business relies on, such as the delivery of goods, as well as repair and maintenance services, often conducted at that time of year. A further effect was a loss of work for those in the community that work at Mt Hotham. The stress of road closure was compounded by the use of road signage that was misleading, limiting the existing access even further as it did not give exact details of closure points, opening times or reasons how and why it was closed. Signage was easily interpreted as if it was not possible to reach Harrietville when in fact it was - thereby confusing potential visitors even further. Finally, repeated road closures over the long term may become an image problem for the destination, as "…there is a fear that visitors will start to see Harrietville as unreliable and travel to Hotham via Omeo".

Other key related stressors include those related to climate change. The increasing incidences of summer heat waves act as a deterrent to visitors in itself as well as create the conditions for fires. A related stressor is unreliable snow seasons where poor snowfalls in the ski fields further discourage winter visitation. However, climate change is an underlying factor in each of the identified, bushfire-related shocks and stressors. Fire seasons are expected to lengthen into the future, further reducing the opportunities for safe hazard reduction burning (Hughes & Steffen, 2013).

Vulnerability

Vulnerability can be defined as "the degree to which an exposure unit [households, human groups, ecosystems, and communities] is susceptible to harm due to exposure to a stress, and the ability (or lack thereof) of the exposure unit to cope, recover, or fundamentally adapt" (Kasperson, Turner, Schiller, & Hsieh, 2001, p. 7). It is a property of the coupled human-environment system that is determined by three interconnected dimensions: exposure, sensitivity and system adaptiveness (Calgaro, Lloyd, & Dominey-Howes, 2014).

On each of these dimensions, Harrietville can be identified as being vulnerable to the incidence of shocks such as a fire. First, the town is highly exposed with bushfire risk being generated by steep terrain and heavy vegetation on all sides (CFA, 2014, p.2). Heavy vegetation and topography create the potential for severe ember attack and direct fire into the town environs with properties located higher in the valley being particularly vulnerable due to the tendency of fire to travel rapidly up-hill.

While tourism offerings have become increasingly diversified in recent years, visitation is primarily driven by the nature-based assets in the area. As identified by the visitor survey, bushwalking, picnicking, driving tours, cycling and fishing are the main activities undertaken by visitors. In the absence of other industry besides forestry, Harrietville's economy is economically dependent on nature-based tourism as well as tourism transit (primarily to Mt Hotham but also as part of a number of car, bike, walking and four wheel drive routes). All of Harrietville's tourism activity can therefore be affected by bushfire for extended periods of time - and long past the time when emergency response operations have been completed. After the 2013 bushfire, tourism revenue was significantly affected for several months (Pyke et al., 2015).

The environment is also highly sensitive. The succession of intense fires approximately every three years since 2003 has, in particular, had severe consequences for a number of plant species. The most substantial impact has been on the regeneration of the tall Alpine Ash (Eucalyptus delegatensis), a species that is an 'obligate seeder' and needs to mature before it can regenerate. Large areas of Alpine Ash were lost in 2013 and attempts to re-seed have been only partially successful. This is a particular concern from a tourism perspective as it is the bushland that is the major asset for Harrietville's tourism system.

As a small town with few services and overshadowed by the 'hero destinations' (NE Victoria Tourism Board, 2012) of Mt Hotham to the south and Bright to the north, Harrietville has a particularly sensitive image. This sensitivity was particularly highlighted by the effects of media coverage surrounding the fire. According to the visitor survey, more than 60 per cent of tourists learnt about fires thought general media, which tended to sensationalise the fire events, and may have altered tourist's choices and preferences of destinations. One interviewee expressed the concern about the effect of this on future visitation by saying,

> I guess the other area we don't know is, is it changing people's perceptions on visiting not only Harrietville but anywhere in the bush in the summer time? Is that perception changing? I don't know but we do know that we were having cancellations right

through the year based on the fact that they thought that things would be different [after the fire].

Tourism development and services in the town is also limited and vulnerable due to gaps in internet coverage and the lack of a town sewerage system which limits building development due to planning restrictions. The greatest vulnerability, however, is that there is only one road through the town. If this is closed, as it was in 2013, there is no visitor access. Overall, while the smallness of the town, and its low-key image contribute to the appeal of the area to visitors, limited services, communications infrastructure and gaps in services, means that the town is highly sensitive to negative visitor perceptions which may or may not be informed by accurate information.

One of the primary vulnerabilities that were exposed by the 2013 fire emerged due to poor communications between governance agencies and the community. As discussed, responsibility for land management for the parks, emergency management services and the town lies with multiple organisations and agencies. Interview results revealed some on-going concerns by the community and private sector in relation to a perceived lack of co-ordination, communication and community engagement by government agencies concerning land and fire risk management. For example, interviewees sited instances where four wheel drive tracks have been closed without community consultation and such measures have impacts on visitors and business operators. At the same time, planning, governance and land management officers highlight the challenges of implementing national or state policy within the area, with limited human and financial resources, and in a large and geographically diverse region. Concerns were also expressed by government officers about the difficulties in managing some inherent conflicts between the necessary implementation of safety or conservation measures and the interests of varied tourism business operations that rely on nature-based tourism assets. The effects of these communication gaps were also exacerbated by the social and emotional strain of living in a bushfire-risk area where tensions run high over extended periods and variously impact on different sectors within the community. As one community member commented,

> I think that is something that is undermined, that the communities that live up here are often so heavily involved [ ] in the community support networks.... You can literally go weeks and weeks and weeks and weeks in these communities up here and it's just women in town or its single mums all struggling because husbands are away fighting fires. [ ] That has a massive impact on people's ability to be resilient and to think clearly. They're exhausted…

A further communication gap was revealed in relation to fire awareness and preparedness. A concern of local government officers and land management agencies was community complacency in relation to fire planning. While awareness was heightened immediately following a fire, over the longer term, few tourism businesses are actively planning for the expected increases in risk and continue as 'business-as-usual'. This has implications for visitors whose primary source of information about local conditions is through tourism operators. Without a well thought out visitor communications strategy, many visitors are

vulnerable. This is particularly the case for first-time visitors and those who stay in holiday homes making them harder to reach. Visitor communications is particularly important given visitor survey results which showed that more than half of the visitors surveyed (51.8%), were not aware of any information about what to do in case of a bushfire in the area.

Combined, the research findings showed that the tourism system in Harrietville is exposed to bushfire risk, is sensitive to a number of effects from fire, and governance, structural and communications issues work to prevent comprehensive adaptation to the increasing frequency and intensity of fires. At the same time, the events of 2013 were not overwhelming due to some key strengths or resilience factors that support the recovery of tourism following the shock of bushfire and its after-effects.

Resilience

Through the lens of the DSF, resilience is understood as 'the ability of a social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity for self-organisation, and the capacity to adapt to stress and change' (IPCC, 2007, p. 880) and is a direct expression of the strength of a coupled human-environment system (Carpenter, Walker, Anderies, & Abel, 2001). Harrietville exhibits a number of characteristics that enable the town to absorb and adapt to shocks. Much of this resilience can be attributed to strengths in the tourism system, community resources and governance arrangements that have adapted by making efforts to strengthen stakeholder relationships and communications systems.

A key resilience factor is that there are multiple nature-based attractions and activities accessible from Harrietville, low seasonality, an increasingly diversified visitor base and high rates of repeat visitation. As revealed by the visitor survey, visitors engage in a wide range of activities, appreciate the area for its beauty and relaxing atmosphere, and a high proportion (74.6%) had visited Harrietville at least once before (Pyke et al. 2015). While traditionally, the main reasons for visitation was for skiing at Mt Hotham in winter, or bushwalking in the warmer months, the motivations for visiting have expanded with the popularity for the area for food and wine experiences, cycling and four-wheel driving (Alpine Shire Council, 2013). This growth has been promoted through strong tourism planning at a regional and local government level.

One of Harrietville's key strengths is its community that was widely described as politically savvy, organised, tenacious and well-resourced. As identified by a recent regional business survey (Alpine Shire Council, 2011), the key motivation for operating a business in the area is the lifestyle that it offers and there is a strong community pride in being self-sufficient and community spirit is deeply valued. Given the exposure to bushfire risk, residents are also accepting of the need to adapt to the conditions. As one interviewee commented, "…you can't just ring the CFA, they might be busy and the ambulance is half an hour away." There is a clear sense within the community of needing to accept the realities of fire, and to "...just pull your socks up, get stuck in and just keep going." The community is concerned but not afraid of future fires and is strongly immersed with community organisations and initiatives.

A third key resilience factor is trust in, and engagement with emergency response processes and agencies. For instance, there is great community trust in the Harrietville CFA. There is also considerable appreciation of the role of local, state and regional agencies. For example, the risk of water contamination during the 2013 floods was averted through the provision of portable water and chlorine filter treatment. The perceived strength of Victoria's overall emergency response system provides a platform on which resilience for tourism can be built. Until recently, tourism was not a priority in immediate emergency response but awareness is growing and new systems and processes are being put in place with the establishment of a community forum that provides a mechanism for improved communication between the community and emergency management agencies. As one community member commented,

> … in terms of the emergency response side of things for bushfire suppression, I'd say the planning has been quite adequate but as we talked about before, it's about bringing the community on with them.

While this is an ongoing process, immediate emergency responses are widely recognised as highly successful in the protection of life and property. Both the system in itself, as well as community trust in this system, is an important dimension of the capacity of the system to adapt to future fire risks.

Further to the emergency response planning, there have also been adaptations with the aim to improve relationships, communications and engagement for all aspects of emergency planning, management and recovery. A Community Emergency Management Plan (CEMP) for Harrietville, for instance, has been developed by Victoria's fire agencies, emergency services partners and the community. It aims to support people in Harrietville to be better prepared and manage the risks from bushfire, flood and landslide events before, during and after emergencies. This project was a key strategy to build government and community relationships through collaborative emergency management planning.

Overall, Harrietville can be identified as having strong capacity for adaptation yet the underlying stressor of climate change will mean that resilience capacity will be increasingly tested with the predicted increase in fire intensity and frequency. As a consequence, and in the interests of long term sustainability, the vulnerabilities revealed and lessons learned through the fires need to be addressed.

Discussion

Through undertaking a V/R analysis, a number of key factors that limit the adaptive capacity of the tourism economy were revealed. Fragmented stakeholder communications is a key limitation which arises not so much due to weaknesses within each of the stakeholder groups themselves. Rather, it is the disconnection between some stakeholders and limited recognition of the role that the community and the tourism industry play in the context of fire planning, emergency management and recovery by authorities that contribute to future vulnerability. In particular, there has been little recognition of visitors and future visitors as a stakeholder group who are essential to future social and economic resilience.

Stakeholder theory is underpinned by two main arguments. First, is the practical claim that diverse stakeholder interests and perspectives need to be identified, understood and managed in the interests of sustainability of a given context such as an organisation or, in this case, a small destination tourism economy (Byrd, 2007). This practical imperative arises given that stakeholders have a legitimate interest in aspects of the functioning of the tourism system, giving the stakeholder power to affect economic performance and/or has a stake in performance (Sautter & Leisen, 1999, p. 313). Thus, the system or organisation is made vulnerable where stakeholder relationships are fragmented and/or conflictual due to stakeholder perspectives being overlooked, undervalued or misunderstood. The second argument is normative. That is that all stakeholders, with legitimate interests in an organisation or organisational system, deserve consideration for, '…its own sake and not merely because of its ability to further the interests of some other group, such as the shareowner.' (Donaldson and Preston, 1995, p. 67).

The V/R analysis of Harrietville following the 2013 bushfire is revealing in relation to the practical importance of engagement with, and communication between, all tourism industry stakeholders as partners in maximising the effectiveness of emergency planning, response and recovery. As discussed, the key vulnerabilities brought to light occurred due to misunderstandings, gaps in communication and a lack of appreciation of each stakeholder's role in preserving nature-based assets and the tourism values of the area. While there is little disagreement about the need for emergency management to be completely focussed on the safety of lives and property, better planning, in consultation with all stakeholders, could have minimised reputational damage to the town and some of the stressors and costs experienced by community members and business operators. Similarly, tourism operators could better appreciate the limitations of government and take greater responsibility for bushfire preparedness. Further, better planning and communications with visitors and future visitors may have minimised the reputational damage to the town and decreased the risks faced by particular groups of visitors.

As identified by Sautter et al. (1999, p. 315), stakeholder theory requires the identification of stakeholders and their interests in the tourism system. In the case of Harrietville, key stakeholders can be usefully summarised within five key stakeholder groups, each with a particular interest in the tourism economy. As illustrated in Figure 1 below, key stakeholders include first, the community which comprises Harrietville residents, community associations and residents employed within the tourism industry. The tourism industry is seen to comprise tourism business operators, suppliers and tourism planning authorities. Visitors and future visitor are a key stakeholder given that visitor spending drives the tourism economy. Government and land management authorities are responsible for town governance and the management and preservation of the nature-based assets of the area. Emergency planning, response and recovery in the state of Victoria is the responsibility of multiple agencies, both government and volunteer with the primary interest of protecting lives and property. As such, Figure 1 illustrates Emergency Services as being closely, yet indirectly connected to the tourism economy. While emergency services have a direct impact on tourism assets and people engaged in tourism, the tourism industry, per se, is not the central focus. Figure 1 also

illustrates the communications flow in relation to emergency planning, response and recovery as a means to illustrate the potential blockages in information flow in relation to tourism management.

 FIGURE ONE GOES HERE

As shown, communications between stakeholders prior to the events of 2013 in Harrietville lacked integration. The decisions and actions of emergency management services are planned and undertaken by government, yet have been made largely in isolation from the broader community and tourism industry. This is despite the impacts that all emergency management actions have on the tourism economy. Similarly, there is little communications with visitors who are largely reliant on information provided by tourism operators and, to a lesser extent, community members. This lack of communication means that many visitors are vulnerable to being exposed unnecessarily to bushfire risk and are less likely to be able to interpret the accuracy and reliability of messages generated by media. Most important is that each stakeholder group previously operated separately with little opportunity for collaboration.

As discussed, government agencies have since supported the development of mechanisms to improve stakeholder engagement and joint participation in planning. The major initiative is the establishment of the Harrietville Community Forum which is led by an elected committee made up of community members and tourism operators. This is the mechanism for community participation in government planning and policy development and to build community resilience. The evolution of the forum was widely identified as a success. As one forum member commented,

> Out of this fire came the Harrietville community forum and out of that a decision was made that we needed to repair and build the relationships with agencies. The Harrietville Community Forum is now an incorporated body, which is important because people in the town then become members and we work closely with the other agencies. That's probably the biggest single advance that we've made is with the cooperation, collaboration and working alongside of all of the other agencies that work here – you know, firefighters, emergency services, Parks & Wildlife, State Forest, Victoria Roads, council – all of those people.

Overall, the need for improved stakeholder engagement has been widely recognised as central to building the resilience of the town, and of sustaining the long term viability of the nature-based tourism economy.

Conclusion

The effects and aftermath of 'the Harrietville fire' in 2013 provide an important case study in terms of understanding vulnerability and resilience of the tourism economy to a major shock to the system. Through the lens of the DSF, a number of factors contributed to vulnerability. Fragmented stakeholder communications and integration in planning was a key factor that impeded recovery and contributed to the impacts of the event.

The need for improvements in this regard has been widely recognised and significant actions have been undertaken to strengthen engagement by key stakeholders. The tourism industry, community members, governance authorities and emergency management agencies now have a forum through which to engage in collaborative planning and policy development in relation to emergency planning, response and recovery. While this forum is a 'work in progress', it is a measure that has been deemed to be highly successful and has given cause for optimism by all stakeholders. The extent to which the interests of visitors are represented or understood, however, remains tenuous. While visitors can be represented by tourism industry representatives, effective understanding of, and collaboration with, visitors continues to represent a gap in stakeholder engagement. How this is most effectively approached requires further examination and research.

In addition to the specific findings, this case study has wider implications for nature-based destinations elsewhere, as it offers a model for replication in other communities and contexts. The study also highlights the great value of 'bottom up' approaches to planning and, in the interests of sustainability, the crucial importance of connecting with the 'local' as deeply as possible. This is in contrast to the traditional and widely used 'top down' approach, of assessing risk by external, quantitative means and imposing risk abatement strategies from above on communities.

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Figure 1: Tourism stakeholders and communication flows