

Weighing up the risks — the decision to purchase housing on a flood plain

Vogt, Willis & Vince interviewed residents in Launceston to better understand community perceptions of flood risk.

Abstract

This paper examines how residents living in a flood plain perceive risk. Sixty residents in Invermay/Inveresk in Launceston, Tasmania, were interviewed in a study conducted by Launceston City Council and the University of Tasmania to identify their level of worry, flood preparedness and risk communication strategies. In order to explore ideas of voluntary and involuntary risk, this paper analyses the views of those residents who were owners and/or renovators in the flood-prone area. We argue that risk decision-making is a complex undertaking involving the consideration and weighing-up of a range of factors. In addition, we found that just as people may be viewed as 'risk takers', they are also 'at risk' and they see broader social factors such as development in the area as contributing to their risk.

Introduction and Background

Launceston is a flood prone municipality. The suburbs of Invermay and Inveresk, built on a floodplain, are significant flood prone areas in Launceston. The last major flood occurred in 1929 when approximately 4000 people were made homeless overnight. If a similar flood to the 1929 flood occurred today, Invermay would be most affected, with approximately 3000 residents and 270 commercial properties being considered at risk. In addition, it is envisaged that a flood of this magnitude would cause significant damage to infrastructure of state significance such as Aurora Sports Stadium, the Queen Victoria Museum and Art Gallery, and the University of Tasmania's Inveresk Campus. Such damage would incur significant financial loss and require both immediate and long term economic and social recovery.

Despite this risk, Invermay and Inveresk are considered by many to be areas offering a lifestyle suitable to their needs. People entering the property market, including those cognisant of the area's flood risk, similarly value what the area has to offer and continue to invest there. With this and other factors in mind, the Launceston City Council and the University of Tasmania embarked on a collaborative research project aimed at assisting Council to better understand community perceptions of flood risk. The information gained from this study will assist the Council in developing effective risk communication strategies. It will also assist Council to work with the community to develop future policies and plans for the area in a way that appropriately balances flood risk considerations with the needs and wishes of residents.



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1929 Flood where 4000 people were made homeless overnight.

Approaches to Risk

In contemporary society the word 'risk' is so commonly referred to that it pervades almost every part of our lives (Kemshall, 2002, p. 3; Tulloch & Lupton, 2003, p. 1). Moreover there have been changes in the way that risk is conceptualised. Early references to risk were largely neutral and spelt mainly in terms of both loss and gain (Kemshall, 2002, p. 3; Lupton, 1999, p. 12). Risk is now viewed and discussed in negative terms, with the probability of loss constituting its prime focus.

(Botterill & Mazur, 2004, p. v; Durodie, 2004, p. 14; Lupton, 1999, p. 12).

The language of risk as it directly refers to the public has also changed. Whereas earlier conceptions of risk as value neutral tended to position the public as self-governing 'risk takers', contemporary conceptions more commonly position the public as dependently 'at risk' (Furedi, 2005, p. 79), with language use referring to voluntary or involuntary risk. This shift is notable. While the former conceives people as autonomous agents, the latter more resolutely and paternalistically conceives people as the vulnerable and inert subjects of risk (Furedi, 2005, p. 79). From this perspective, 'risk' rather than 'people' is the active and objectified agent with the suggestion being that people lack the capacity to navigate their way in the landscape of today's risk society (Furedi, 2005, p. 79). In constructing the public as 'at risk', risk is distinctively involuntary in that it is determined not by people, but instead by controlling agents external to them (Sjoberg, 1987, p. 134). Risk is more something that 'happens to you', suggesting all that is possible is a reactive response to forces that are beyond control (Durodie, 2004, p. 14).

Lupton (1999) and Kemshall (2002) argue that an understanding of risk must take account of humans as capable of being active negotiators of risk. While risk language relies on rational, objective and scientific terms, these authors claim that people make choices about acceptable levels of risk, negotiating and managing the risks associated with contemporary life. Lupton (1999) points out that these decisions do not occur in a vacuum. Taking a sociocultural approach to risk, she shifts the emphasis from the individual as an involuntary subject and situates voluntary approaches to risk within the context of broader social beliefs and values. In arguing that we must take account of both individual action and the broader socio-political environment, Tierney's (1999; 2007) work identifies the links between risk exposure and government and public policies. She argues that risk and power are related and this affects risk exposure, risk knowledge and risk identification. While natural disasters may be real events, the way in which they are positioned and responded to on the public agenda are the result of social processes. In this way, Tierney (1999) argues that risks are socially constructed.

Thus the concepts of voluntary and involuntary risk, being a 'risk taker' or 'at risk' provided a framework for examining how residents in Invermay and Inveresk perceived the risk of flood. We were keen to explore the extent to which these categories fitted with how residents themselves perceived their risk situation. As indicated in our findings (detailed below) clear cut divides between these seemingly opposite concepts do not resonate with those living on the flood plain.

Method

We used a qualitative interview method to understand community perceptions of flood risk. Qualitative methods allow a thorough exploration of the 'personal experiences, meanings and interpretations' (Sarantakos 2005:48) and are best suited to areas 'where there is a need to study reality from the inside...from the point of view of the subject' (Sarantakos 2005:134). They also gain a deeper understanding of beliefs, values and perceptions. This method allowed a focus on applying an interpretive approach to understanding community perceptions of flooding and flood risk. This approach sees that it is only through individuals' perceptions of events, the reasoning they apply to everyday life, and an understanding of the broader social context, that an understanding of beliefs and behaviours surrounding flood risk is possible.

We undertook individual semi-structured interviews with 60 residents living in the suburbs of Invermay and Inveresk. The semi-structured interview format ensured that information on the key areas of research was gained, at the same time providing flexibility by allowing residents to discuss as little or as much as they wished in response to the questions. A broad cross section of the community was recruited for this research. Participants ranged in age from 19 to 93 years of age. Each age grouping comprised participants who were single, married, and apart from participants aged 70 years or older, living in families with children.

Over half the sample own, or are purchasing, their own home (31 participants) and it is this group that is the focus of the research reported here. As one of the older suburbs in Launceston, the area has become popular with renovators who wish to restore the older buildings. Of the sample, nine were currently, or had recently, renovated their home. We were interested in exploring how those people with a substantial investment in the area perceived the risk of flood – whether it affected their decision to live in the area. We were also interested in gaining a sense of whether their living in a flood prone area was a case of voluntary risk taking.

Findings

All but two of the residents who were home owners/renovators claimed to be aware of the flood risk prior to moving into the area. Almost one third of home owners have resided in the area for a considerable length of time (eighty years in one case), with a small portion of those having inherited the home from family. Whilst a portion of residents did not directly cite reasons for having moved to the area, many (over one third) stated that lifestyle factors such as accessibility, sense of place and community, easy access to transport and other services, were important factors in choosing to live in the area. A smaller but nonetheless significant portion of residents

cited housing affordability as a key reason for living in the area illustrating that Invermay and Inveresk offers an important (and sometimes sole) means for people to enter the housing market.

These findings provide interesting insights concerning community perceptions of flood risk, particularly regarding how the community calculates risk, formulates risk decisions and trades-off risk with other factors. Equally, they shed light on people's perceptions regarding determinants of risk.

Voluntariness and Risk

In order to gain a picture of whether home owners voluntarily chose to live in a flood risk area, residents were asked if in investing there they had given prior consideration the risk of flooding. Many residents indicated that they were aware of the flood risk prior to their making an investment. Their responses indicate that risk decision-making involves a complex weighing up of multifarious factors. Emerging home owners citing housing affordability demonstrate this point well.

For Danni, flood risk was part of the choice that she made:

“Well obviously there’s risk involved in it, but when you want to get into the property market I guess, then that was just one of those things that I don’t know, you look at it and you weigh it up, and I just decided to go ahead.”

Susie expressed a similar sentiment:

“...the price was right...there was certain things I wanted when I was buying a home and I couldn’t afford to live in all the areas...[I was]...limited...and this one came up.” (Susie)

Whilst Danni and Susie's choice to invest in the area signals voluntariness in risk decision-making, Con demonstrates that such decisions are not so straight forward. Citing housing affordability as a reason for entering the Invermay/Inveresk housing market, he stated:

“...well this place came up and at the cost. We wanted to buy and we needed somewhere because a child was on the way at the time and we just needed to have somewhere.”

Jolene similarly demonstrates the complexity of risk decision-making. Whilst conceding that she chose to live in the area, again housing affordability was cited as a key reason. However, fourteen years later, changing life circumstances (i.e. age, income, health factors) impinge greatly on her ability to voluntarily move out of the area.



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Despite the flood risk, Invermay and Inveresk are considered by many to be areas offering suitable lifestyle choices.

“I’d hate to have to start again now that I’m older...I’m on a limited income...[I have]...no real wish in me to ever have to work full-time again because I don’t think I could...It’s a really good place to live but now I have to question...my decision back then...but I don’t have the luxury of turning that around anymore.” (Jolene)

The complexity of risk decision-making is further evidenced in people's citing of lifestyle factors as a part of their weighing up process. The following statements demonstrate that sense of place and quality of life play an important role. They also demonstrate people's capacity to trade-off risk in order to attain their desired lifestyle.

“...we’re here, and we really love it and it’s the choice that you make... I love my business; I love where I live, really enjoy it, so it’s a quality of life thing.” (Leon)

“We thought nothing of floods or anything like that when we first moved in. I mean, we always knew that it was prone to flooding, but it didn’t really come into consideration...No, it was just good, flat land, central, they style of the house was what we wanted; the character...and it had potential...” (Bruce)

People's perception that risk is a part of everyday life also factored in the decision-making process for many residents. Flood risk was just one of the many events that expose people to risk, as Joe and Bruce stated:

“... [An]... airplane could crash into the house and kill ya... Yeh, you are taking a risk every day of your life...when you get out in your car, anything. Why worry about it.” (Joe)

“It’s a bit like, you know, do I worry we’re in the flight path of a plane falling down. Do I worry about walking out onto Invermay Road and getting hit by a bus? You know, lightning strikes! Really, you know it’s there; it could happen, but it’s not like, gee, I got to get out of here.” (Bruce)

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The 1929 flood in the Launceston municipality.

These comments point to a pervasive belief that life and risk are synonymous. This highlights that in making risk decisions, people are required to not only identify and assess a variety of factors, but must do so in an environment wherein risk is not easily separated from everyday life. Thus, determining the voluntariness of people's risk decisions is not a straightforward process.

We also found that perceptions of risk are often accompanied by a sense of inescapability. For some, this is expressed in terms of the inevitability of flood risk; others hold a more fatalist view.

"It's only one bloke that knows about...[the risk of flooding in Invermay]...and that's ah, his nibs upstairs...You can't do nothing about it." (Joe)

"I sometimes worry about it but if something happens, something happens. What can you do?" (Tanya)

"There's nothing we can do about it; it's out of our hands." (Leon)

Notably, each of these residents acknowledged that living with flood risk is a part of the choice they made. Despite this, their comments signal that residents hold a concurrent belief that the potential consequences of this choice are substantially less within their control. In this sense, voluntariness intersects with involuntariness in a way that sees people both as risk takers and as 'at risk'.

Whilst the inevitability of flood risk provides an important theme, it is significant that roughly one quarter of residents convey a belief that it is the actions of people as well as nature that determine flood risk. While flood risk is an act of nature, flood disasters are, at least in part, symptomatic of human-made problems; they are socially constructed (Tierney, 1999, p. 236; Britton & Clark, 1999, p. 3). Whilst many residents perceive flood risk as inevitable or fatalistic, they also were aware that their vulnerability to natural hazards is neither accidental nor fatalistic. Illustrative of this widespread view are the comments by Kevin, Leon and Sally:

"...if no-one built here...there wouldn't be a flood issue...[Our actions]...change what will occur; you know, the likelihood of floods...because we make the situation for ourselves..." (Kevin)

"...because they've chosen to put the levee banks up and approve residential living and industrial living in these areas, you would have to then say that...[flood risk in the area is]...man made because they've already decided to hold back nature by putting people in a below sea level area. So, therefore, It'd have to be man made – the disaster." (Leon).

"...Flooding...is a natural occurrence. Look through history and there's always been floods and whatnot... but obviously, knowing that...[when]...cities are built and such, then they need to consider that and look at where boundaries should be or whatever." (Sally)

Conclusion

Our analysis of the views of homeowners in Invermay and Inveresk indicates that risk decision-making is a complex process: one that involves the identification and calculation of multifarious factors (risk; lifestyle; other). Responses from residents in the area demonstrate that flood risk is not easily separated from other risks that form a part of people's everyday lives. The analysis also reveals that in some cases, voluntariness in risk taking is at times less to do with choice, and more to do with lack of choice (affordable housing being an example of this). It may also be to do with the 'risk trade-offs' that people are prepared to make in their 'whole of life' decisions. As modern day risk takers then, people are required to consider a complex array of factors in a way that sees them engaging not simply in a voluntary risk taking, but more in terms of intricately balancing and trading off risk. Significantly, this research demonstrates that despite people's demonstrated capacity to take a risk, in specific relation to the potential consequences of living in a flood risk area, many see themselves as 'at risk'. They attribute their risk to both the inevitability of natural disasters – that the natural world is unable to be controlled - at the same time as identifying social causes such as development as shaping their risk exposure. While these two positions may be viewed in some ways as contradictory, they comprise part of a complex web of ideas, values and beliefs that shape residents' perceptions of risk. Residents' perceptions of risk, including their capacity to see risk as a trade-off, defy conventional categories of voluntary or involuntary risk, thus requiring policy makers to deepen their understanding of how risk is constituted by residents who may be simultaneously 'risk-takers' and 'at risk'.

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