# Understanding intangible flood costs and impact

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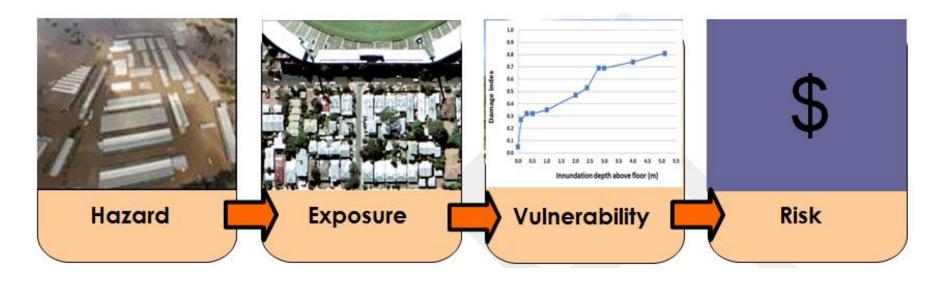
Stephen Yeo

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# **Understanding flood costs and impact**



Risk Assessment Framework





# **Understanding flood costs and impact**



**Caravan Parks** 





Clean-up







## **Research Questions**

- o What is the impact of flooding to caravan parks?
- O What are the clean-up costs?
- O What are the intangible impacts of flooding?





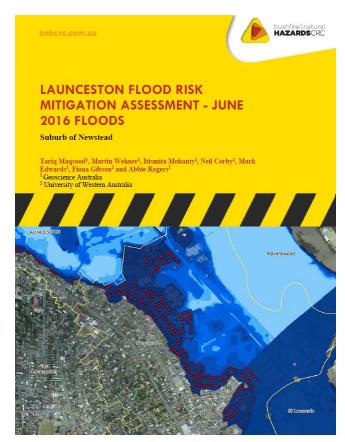
## **Intangible Impacts of floods**

The research on the intangible impacts of flooding remains sparse particularly regarding measurable psychological and social outcomes.

#### This research will assess:

- the types of intangible impacts of flooding,
- the methodologies to assess intangible impacts (how can they be measured), and
- how intangible impacts should be integrated into flood risk management strategies to improve long-term resilience.



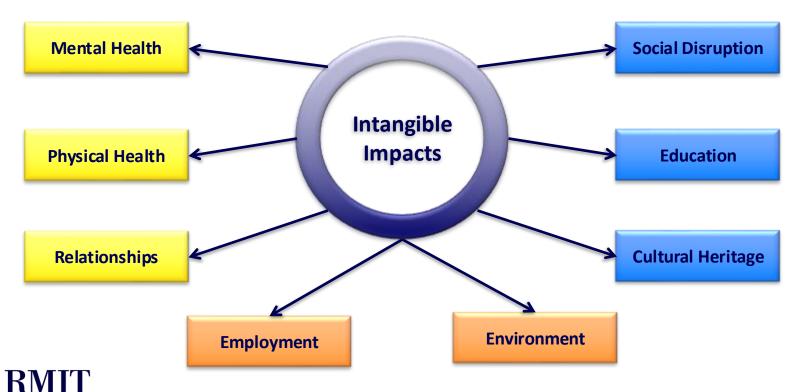








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#### Mental Health

- Flooding produces far-reaching psychological effects that persist well past the completion of physical cleanup and recovery efforts.
- Mental health issues may include Post-Traumatic Stress Disorder (PTSD), anxiety, depression, and general distress.

#### Physical Health

- People may sustain injuries from debris and strong currents during floods.
- o In extreme cases, fatalities could also result.





#### Social Disruption

 Flood may result in relocation or separation from social groups which leads to the destruction of essential social connections and networks.

#### Educational Continuity

Disruptions in educational institutions due to flooding impact both students and teachers.
 These impacts could include temporary school closures due to repair or fewer attendance (students and staff) due to lack of access or relocation.

#### Memorabilia and emotional impacts

- Flooding may result in emotional distress due to loss of personal items or memorabilia that hold significant sentimental value.
- These objects often represent memories, family history, and cultural identity, and their destruction can lead to profound grief and psychological trauma.





#### Employment and economic impacts

 People may lose their job due to business disruption/closure and/or may experience loss of income when local industries cease operations temporarily or move permanently.

#### Cultural Heritage

- Flooding can damage historical and cultural landmarks and sacred sites which can impact communities as they represent their identity and heritage.
- Floods that destroy cultural resources create deep feelings of loss and displacement which subsequently impact emotional healing of communities.





### Research Plan

- Literature review
- Workshops with end-users
- Data collection and field surveys
- Interviews and community engagement
- Assessing intangible impacts
- Assessing costs for caravan parks
- Assessing clean-up costs, and

The research outputs will help to improve quality and rigor of flood damage assessments and to better understand future risk from flooding in Australian communities.





# **Thanks**

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