



Institute of Actuaries of Australia

# XVth GENERAL INSURANCE SEMINAR

*Evolution of the Industry*

## Flood Insurance

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## Overview

- **ICA and its priorities**
- **Why has Flood been an issue?**
- **International experience**
- **How big is the problem?**
- **Where to from here?**



## Who is ICA?

- **Peak industry body for general insurance**
- **Membership (insurers & reinsurers) represents 90% of total premium**

***Mission to influence, ethically and expertly, the political, social, business and economic environment in order to promote members' role in providing insurance protection and security to the community***

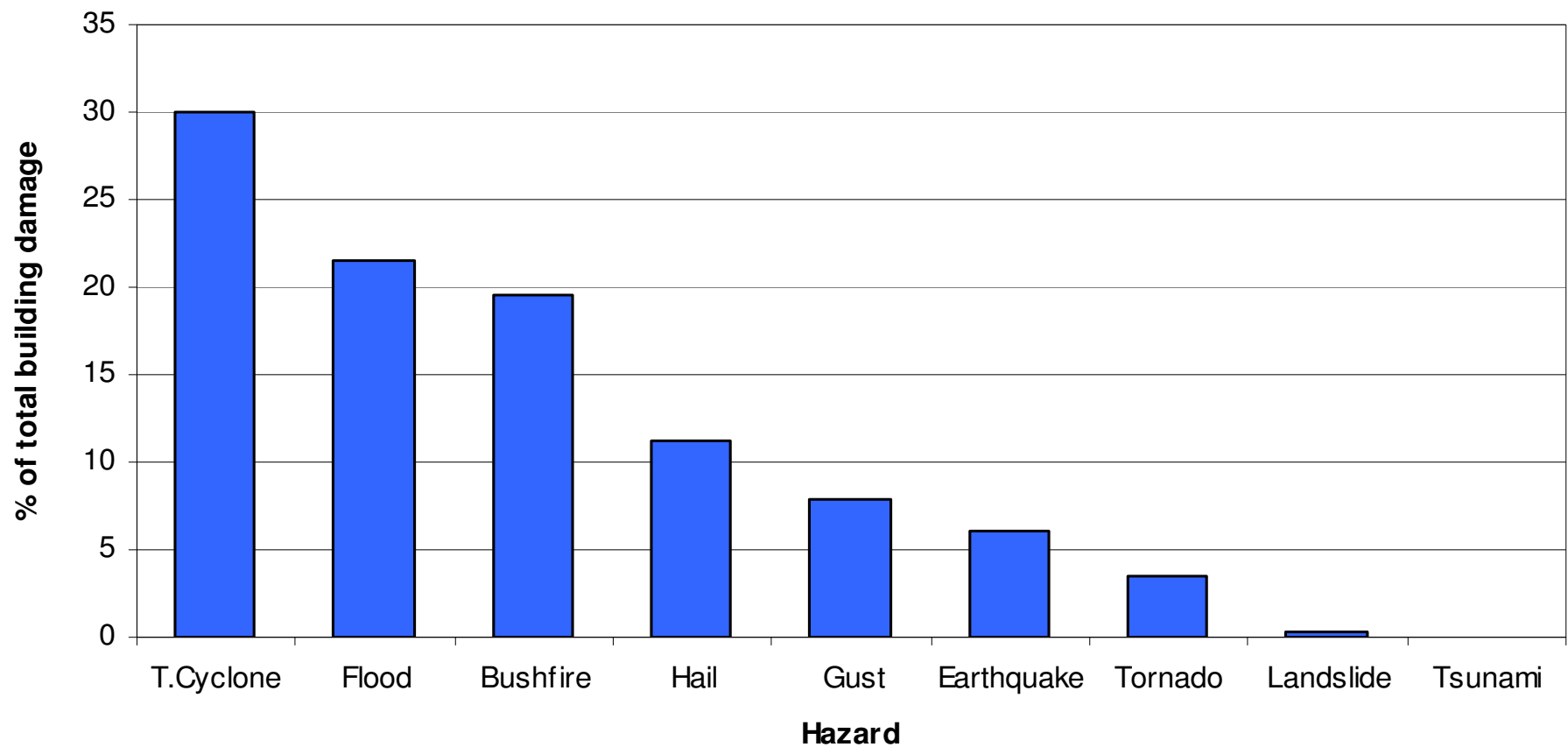


## ICA Priorities

- **Flood**
- **Tort Reform**
- **Code of Practice**
- **Data**
- **Tax**
- **Regulation – APRA / ASIC**
- **Long Term Care**



# Building damage – 20th century



Source: Risk Frontiers



# Flood Issues

- **Data**
- **Awareness**
- **Universality**
- **Definition**
- **Mitigation/land use**
- **Affordability**



## International Experience

- **We are not alone**
- **First step is definition**
- **Second step is national maps**
- **No perceived market advantage**
- **Government always there**



## For Example...

- **United Kingdom**
- **United States – FEMA**
- **France**
- **New Zealand**





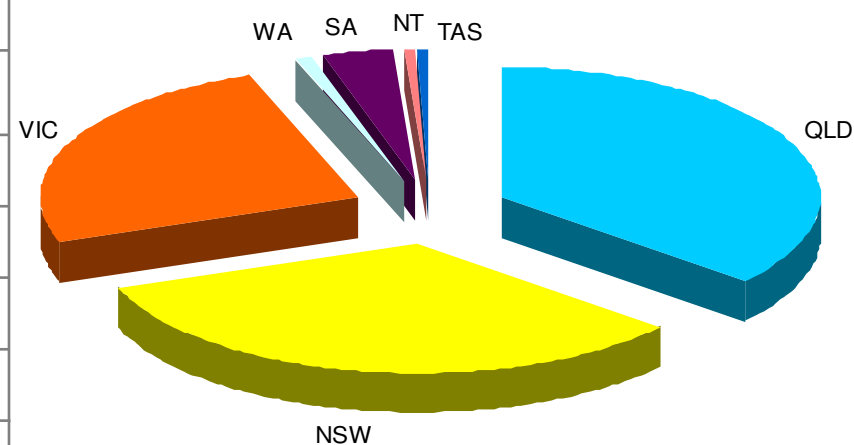
## Size of the Problem

- **Riverine flood only**
- **Limited Data on other Risks**
- **Risk Frontiers research project**
- **ARI 100-year threshold over ground flooding adopted as prime measure**
- **Ground up approach**
- **Total over 170,000 homes at risk to greater than 1% likelihood of flood**



# Breakdown by State

State	Risks below ARI 100yr flood	Proportion
QLD	62,130	36.1%
NSW	57,592	33.4%
VIC	43,162	25.0%
WA	1,142	0.7%
SA	6,582	3.8%
NT	990	0.6%
TAS	723	0.4%
<b>TOTAL</b>	<b>172,321</b>	<b>100%</b>



Source: Risk Frontiers



## The Top 10

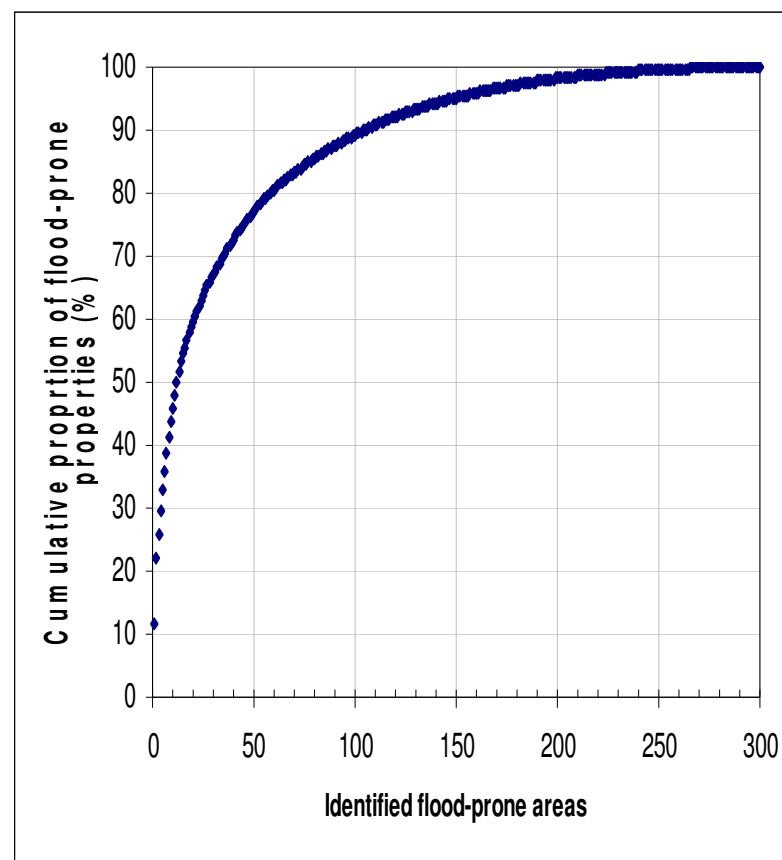
Region or City	State	Number of flood-prone properties	Proportion of national total
Gold Coast	Qld	20,128	12%
Brisbane & Ipswich	Qld	18,010	10%
Shepparton	Vic	6,572	4%
Melbourne	Vic	6,000	3%
Mackay	Qld	5,924	3%
Brown Hill & Keswick Creeks (Adelaide)	SA	5,000	3%
Hawkesbury-Nepean floodplain (Sydney)	NSW	4,862	3%
Wyong & Tuggerah Lake	NSW	4,651	3%
Grafton	NSW	4,167	2%
Lismore	NSW	3,917	2%

Source: Risk Frontiers



## Concentration of Risk

- **300 flood-prone cities/areas identified**
- **Half of all properties below ARI 100-year flood level in 12 areas**
- **80% contained in 60 areas**



Source: Risk Frontiers



## The Price

- **Rough actuarial analysis**
- **Conservative average cost estimate of \$207 million per year**
- **Risk Premium**
  - **>10% likelihood -> \$3,500**
  - **>5% likelihood -> \$2,400**
  - **>1% likelihood -> \$1,150**
- **Does not consider catastrophic loss**



## Where to from here?

- **Flood is number one ICA priority**
- **Research underway**
  - **What is the role of government (COAG)**
  - **Defining the risk**
  - **Understanding data availability/quality**
  - **International best practices**
  - **How to achieve affordability**



## **We can't do it alone!**

- **Governments must be partner in solution and its development**
  - **International experience**
  - **Benefits of insurance to economy**
  - **Mitigation and land use planning**
  - **Disaster relief**
  - **Affordability for existing high risk areas**



## Conclusion

- **Environment is improving – but has created some other problems**
- **Complex issue**
- **Industry is committed**
- **Governments are important partners**
- **Stakeholder engagement is first step**