Cost-effective mitigation strategy development for flood prone buildings

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Project Outputs

Classification of Australian Buildings (Completed)
Literature Survey of Flood Mitigation Options for Buildings (Completed)
Costing of All Appropriate Mitigation Strategies (Completed)
Experimental Testing of Building Materials/Components (Completed)
Vulnerability Assessment for Current and Retrofitted Building Types (Completed)
Benefit vs Cost Analysis for Key Mitigation Options (In Progress)
Utilisation

Launceston Study (Completed 2017)

- End-users included:
  - City of Launceston
  - Launceston Flood Authority
  - Tasmanian Dept of Premier and Cabinet
  - Northern Midlands Council
  - Tasmanian SES

- Outcomes quoted/referenced in the Independent Review into the Tasmanian Floods of June and July 2016 (Blake, 2017)

- Newstead component of this work was the first time the project team incorporated intangible losses (through collaboration with BNHCRC project Economics of Natural Hazards)

- Opportunity to extend this work
Utilisation

NFRAG Flood Damage Models (in progress)

- End-users include:
  - National Flood Risk Advisory Group
  - Floodplain Management Australia
  - Australian Institute for Disaster Resilience (AIDR)
  - Local Government
  - Insurance Industry (IAG & ICA)
  - Consulting Industry

- Outputs include generalised flood vulnerability curves for use by those without access to detailed exposure information

- Curves will allow consistent comparisons to be made across jurisdictions benefitting decision makers in comparing flood impact and risk

- Broad stakeholder group suggests impact should be widespread, particularly with dissemination through AIDR
Utilisation Opportunities

Revisit Launceston Study

- Flood hazard has been reassessed following 2016 floods
- Hazard has reportedly increased
- Reassessment of cost benefit analysis of flood mitigation works is a logical extension to the original work
- Preliminary discussions have commenced
Utilisation Opportunities

Core Project Outputs

• Information on flood retrofit options suitable for Australian building types
• Associated cost-benefit analysis on retrofit options for a range of catchment characteristics
• The above will provide an evidence-base to inform decision-making on the mitigation of community risk posed by Australian residential buildings located in flood plain environments
Utilisation Opportunities

Core Project Outputs – Dissemination Mechanisms

• Stakeholder Workshops
• Reports through BNHCRC
• Conference Publications
  • BNHCRC/AFAC
  • Floodplain Management Australia Annual Conferences
  • Insurance/Reinsurance Industry Conferences
• Journal Articles
Utilisation Opportunities

Core Project Outputs – Potential End Users

• Local Government
• State Government
  • Emergency Services, Floodplain managers, Planners
• Federal Government
  • EMA, AIDR
• National Flood Risk Advisory Group
• Floodplain Management Australia
• Insurance/reinsurance industries
• Consultants
• Risk/Loss/Impact Modellers
• Academics and other researchers
Questions?