Economics of natural hazards

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Project team

Researchers

- David Pannell
- Atakelty Hailu
- Michael Burton

Possible post-docs

- Abbie Rogers
- Fiona Gibson
- Veronique Florec
- Maksym Polyakov
- Plus PhD student(s)

Project team

End users

Ed Pikusa

Fire & Emergency
Services Commission, SA

Bruce Telfer

 Department of Fire and Emergency Services, WA

Samantha Ward

 Attorney General's Department, Canberra

Stuart Midgley

Rural Fire Service, NSW

James Holyman

Metro. Fire & Emergency
Services Board, Vic

Sandy Whight

 State Fire Management Council, Tas.

David Launder

Metropolitan Fire Service,
SA

Questions

- Which strategies for managing natural hazards offer the best value for money?
- How can we value social and environmental benefits of management?
- How should emergency budget be set, recognising variability of need? (PhD)
- What are the requirements for sound economic analysis of natural hazard management?

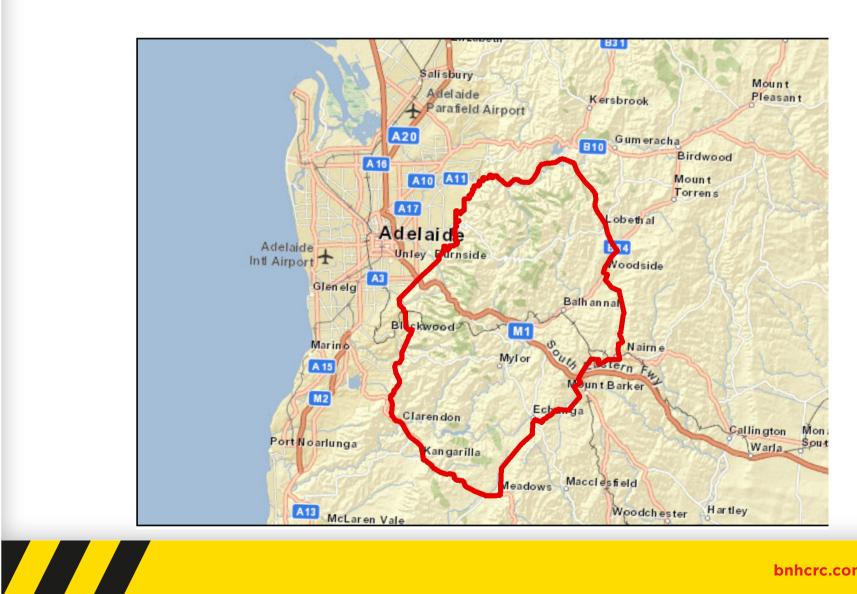
Common factors for decision making about natural hazards

- Complex
- Inherently multi-disciplinary
- High data requirements
- Some impacts relatively intangible
- Cost-constrained
- Under-researched

Economic approach - features

- Integrative
- Long-term
- With versus without management
- Values and trade-offs
- Policy instruments
- Behaviour
- Risks
- Value for money benefits and costs
- The language of treasury

Example: Mt Lofty Ranges



Example: Mt Lofty Ranges

- Prescribed burning (PB)
- Alternative burning strategies
- In different land-use zones



- Provided Benefit: Cost Rations for each option
 - o From 0.05 to 3.1
 - Higher when PB occurs closer to valuable assets
 - Most of the benefits are reduced losses, rather than reduced suppression costs
 - The big losses are from catastrophic fires, but PB makes little difference to them

Major outcomes

- Improved decision making
 - Weighing up alternative management options
 - Better targeting of effort and resources
- Ability to evaluate and justify programs
- Capacity built
 - o PhD
 - Guidelines
 - Models/tools

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