# **ECONOMICS OF NATURAL HAZARDS**

# Integrated assessment



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HOW CAN WE GET THE BEST VALUE FOR MONEY FROM PUBLIC INVESTMENTS IN NATURAL HAZARD MANAGEMENT? THIS PROJECT INTEGRATES TECHNICAL, BIOPHYSICAL, SOCIOECONOMIC AND POLICY INFORMATION TO ADDRESS KEY DECISION PROBLEMS RELATING TO NATURAL HAZARD PREVENTION AND MITIGATION.

#### THE ISSUE

- Decision makers face the challenging task of allocating scarce resources effectively among different management options
- ▶ To identify the most efficient allocation of resources, they need information about the implications of different uses of these resources
- However, there is very little information about the costs and benefits of different management options and the trade-offs between them

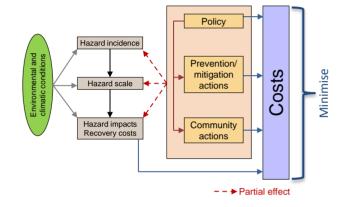


### **RESEARCH QUESTIONS**

- Which options provide the best value for money? (e.g. prevention vs. response)
- How should the various management/policy options be combined?
- If we change the management/policy, how are the different objectives affected? (financial, social, environmental)
- Do we have sufficient public resources available for managing natural hazards?

#### FRAMEWORK FOR THE ANALYSIS

- Our project integrates technical, social, biological, financial and policy information within an economics framework
- This approach requires a high level of collaboration with a variety of specialists and stakeholders to obtain and analyse the relevant information



## **EXPECTED PROJECT BENEFITS**

- This research will provide insights into how limited resources can be allocated among different management/policy options in order to optimise the overall outcomes
- This approach will provide a mechanism for bringing research results into decision making about policy and management
- The benefits of the approach will be demonstrated through two case studies. One of the case studies will evaluate flood mitigation measures in WA in collaboration with the State Risk Project (WA).



#### PROJECT INFORMATION

For more information, email David Pannell at david.pannell@uwa.edu.au











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