



What Does Economics Have to Offer?

Linking economic analysis to fire management & policy

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Increased demand for economics

- **Integration of economic information:**

Increased occurrence of damaging bushfires, and the prospect of climate change worsening this situation, has heightened discussion of bushfire policy and management decision-making, with calls for increased integration of economic information to help inform decisions.

- **Multiple approaches:** Our research suggests multiple roles for economic analysis on top of those most often promoted (i.e. costing of fire impact and cost-benefit analysis of fire programs or fire-fighting technology) need to be matched carefully to the context and the decisions to be made.

What we aim to achieve

- **Review and appraise:** The aim is to advance understanding of bushfire economics, and identify where different methods can be brought to bear on policy and management problems faced across diverse decision-making contexts.



March 2009 (Geoff Cary)

Melbourne water supply catchment and Kinglake National Park, Victoria
Protecting multiple assets (water catchments, national parks, private homes etc.) should consider social values, priorities and tradeoffs. Economic decision-support systems can help to negotiate this challenge.

Linking decisions, policy & method

We have developed a review framework to link fire management and policy challenges with relevant economic modes of analysis.

This combines three perspectives:

1. Locating decisions

Identifying where decisions are made across the policy-institutional system

- Decision-scale:** Macro, Meso, Micro, Multi scale
- Policy/institutional system:**
 - **Government:** Central executive (federal & state), local, agency-level, judiciary
 - **Legislature :** Parliament, parliamentary inquires
 - **Private sector :** industry (e.g. insurance, developers, commercial forestry), utilities
 - **Community:** Community groups, charities, unions
 - **Individual:** Individuals, households, small business

2. A typology of decisions

Fire management and policy challenges

- Allocating public resources across competing:**
 - Public interest portfolios (e.g. fire, education, defence)
 - Activities within a fire management program (e.g. research, risk modification, response)
 - Technologies and strategies to meet management objectives (e.g. prescribed burning for protection of lives, built assets and biodiversity)
- Policy and institutional considerations within public allocation decisions:**
 - Fire budget and decision-support policy
 - Asset management and land use policy
 - Individual risk averting behaviour in relation to public policy

3. Areas of economic analysis

Delineation of four different modes of analysis, from economic theory and thematic review of the literature

- Benefit-cost analysis:** Evaluating net benefits from investments in fire programs, management response, technology, policy.
- Decision-support systems:** accounting for multiple objectives, priorities, and tradeoffs in fire management and policy decisions.
- Institutional/behavioural economics:** evaluation of institutional dimensions of human behaviour, and related policy implications.
- Political economy:** Evaluation of incentives within political and governmental systems that influence fire management and policy decisions.