DDOCDAM C

THE ECONOMICS OF BUSHFIRES AND BUSHFIRE MANAGEMENT

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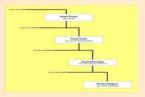
Asset at Bushfire risk and Consequences from Cosses*

Identify, classify, quantify and evaluate the consequences of bushfire on assets throughout Victoria

Consequences of losses from bushfires



(impact from the loss of an asset - based on the loss of a function and/or service provided by the asset)



(loss of asset value)



Assigned a value for

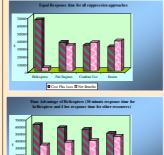
- (i) damage from the loss of every assets
- (ii) likely disruption resulting from the destruction or non-functioning of assets.

Where possible dollar value were used and scales were developed in other places. This approach is currently being evaluated

Economics of Bushfire Suppression

Different suppression outcome and operational cost





Cost plus loss and net benefit

estimates for alternative fire

suppression approaches (for hypothetical fire suppression scenario

and operational cost)

Economic Analysis of Aerial

Fire Suppression (with Program A)

Many Suppression Methods

Work completed

- -suppression strategies are examined for their economic utility
- -cost of operation and physical productivity of suppression approach are important factors that affect the economic efficiency of suppression
- -results support the use of aircraft to reduce response time

Community actions in bushfire management

Benefits of community programs in bushfire management

Volunteerism

- Evaluation of different approach to value volunteerism
- Value of volunteers

Project C 5 - Output to date

Papers, Book Chapters and Reports

- •Bushfire Management: Why, Where and How Economics Matter? (Proceeding of Royal Society of Queensland)
- •The Social Value of the Bushfire CRC: An Ex-ante Economic Evaluation (CRC Report)
- •Framework for measuring the value of Australian Bureau of Meteorology fire weather services (Bureau of Meteorology Report)
- Managing Wildfire Hazards in Fire-prone Landscape:
 Australian Experiences (Munasinghe Institute for Development, Colombo)

Conference papers and presentations

- •Economic Efficiency of Bushfire Suppression Methods Use in Australia (Australian Agricultural ad Resource Economics Society 2007)
- •Socio-economic Approach for Managing Wildfire: Australian Experiences (International Society of Ecological Economics 2006)
- •An Economic Analysis of Bushfire Management Programs (International Association of Agricultural Economics 2006)
- Economics of Bushfires and Bushfire Management (AFAC/Bushfire CRC 2005)
- •The economics of interface wildfires (II International symposium on fire economics, policy and planning 2004)
- •The real costs of bushfire (AFAC/Bushfire CRC 2004)

Future direction

Work towards an economic model for strategic decision support based on the following three approaches to fire risk management*

- Protect people and property focus on loss reduction, health and safety, arson
- · Fire suppression focus on the fire
- · Prevention focus on fuel

The model is being developed within a set of constraints, for example:

- need to allocate funds between 3 different approaches to maximise efficiency
- · minimise wasted effort
- * Fire suppression consumes most of funds in USA



