

# OWNING THE FUTURE: RISK OWNERSHIP AND STRATEGIC DECISION MAKING FOR NATURAL HAZARDS

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#### THE TEAM

### Mapping and Understanding Bushfire and Natural Hazard Vulnerability and Risk at the Institutional Scale

#### Researchers

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#### **End Users**

- 1) Liam Fogarty DEPLWP, Vic
- 2) Pauline Cole DCSI, SA
- 3) Ed Pikusa SAFECOM, SA
- 4) Patrick Schell, RFS, NSW
- 5) Chris Irvine, SES, Tas
- 6) Greg Christopher, EMV Vic

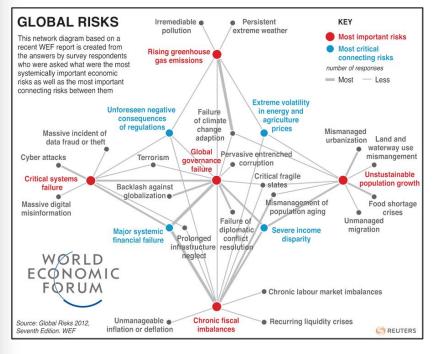
#### **OUR PROJECT**

## Mapping and Understanding Bushfire and Natural Hazard Vulnerability and Risk at the Institutional Scale

- Economics to support strategic decision making.
- Understanding and application of risk ownership.

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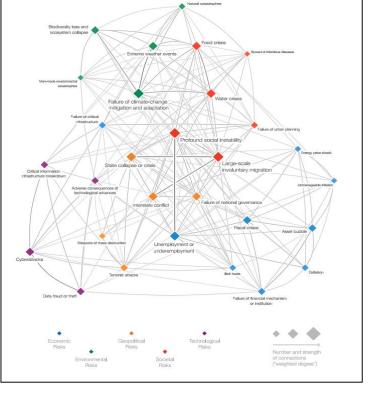
#### THE CHANGING LANDSCAPE OF RISK



Data fraud/theft Critical information Infrastructure breakdown Liquidity crises Cyber attacks Failure of financial Manmade environmental Terrorist attack catastrophes Decline of Importance Organized crime Biodiversity loss and of US dollar Fallure of critical Infrastructure Olimate change Global governance Political and Unemployment and fallure social instability underemploymen Oil price shock Income Food crises disparity Economic and Interstate conflict resource nationalization Mismanaged urbanization State collapse Chronic diseases Weapons of Antibiotic-resistant Pandemic Economic Geopolitical Technological Number and strength Environmental Societal of connections "weighted degree"

2012

2014



2016

The Risks-Trends Interconnections Map (DAVOS 2012 - 2016)

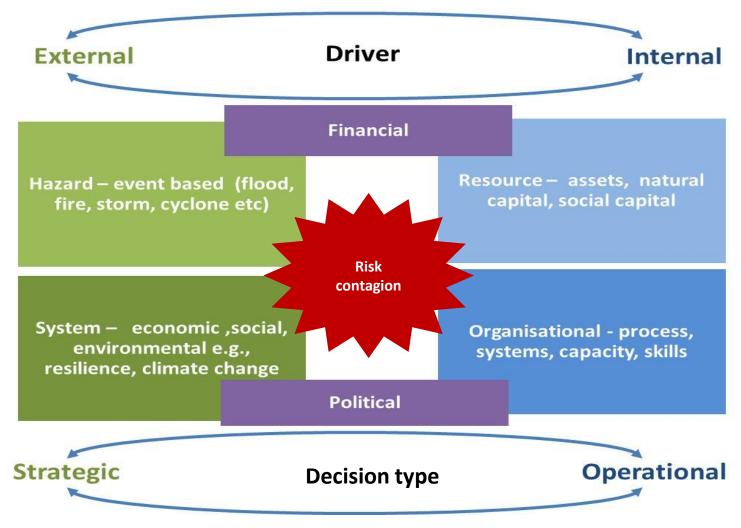
#### **WORKING WITH SYSTEMIC RISK**



'Unfortunately, in many companies, the CFO is handling financial risk, the CEO is handling strategic risk, and the COO is handling operational risk, but no-one is looking at all those risks as one.'

Jim Loucks, Chief Commercial Officer, Aon Risk Solutions

#### UNDERSTANDING THE SYSTEM OF RISK



Risk System With Internal And External Components, (Young et al 2016)

#### **UNDERSTANDING THE SYSTEM OF RISK**



The 2011 floods in Thailand cost an estimated

US\$ 40bn



Roughly a quarter of the world's hard drives are made in Thailand



Impact of floods saw global hard drive prices jump

28%



Widespread disruption also affected the automotive industry



Honda's factory in Swindon was forced to cut production as a result of the shortage of Thai-manufactured components



Toyota lost production of

260,000 vehicles

### STRATEGIC DECISION MAKING



"Planning is the pathway, but strategy provides the destination."

Liam Fogarty, DELWP, Victorian Government

#### WHY RISK OWNERSHIP?



Risk ownership is the one constant in a highly changeable risk landscape.

If a risk is not owned then it very likely it is not being managed.

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#### **DETERMINING RISK OWNERSHIP**

Our definition combined two definitions:

- Whoever owns the assets owns the risk (Productivity Commission 2014)
- Person or entity with the accountability and authority to manage a risk (ISO 31000)

This was assessed across: Short (2-12 months), (medium) 1-2 years, (long) 2+ years timeframes, using the RAP criteria:

- Who is responsible?
- Who is accountable?
- Who pays?

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## RESEARCH SCOPE

#### Values (tangible and intangible)

Built infrastructure, social, environmental and Economic.

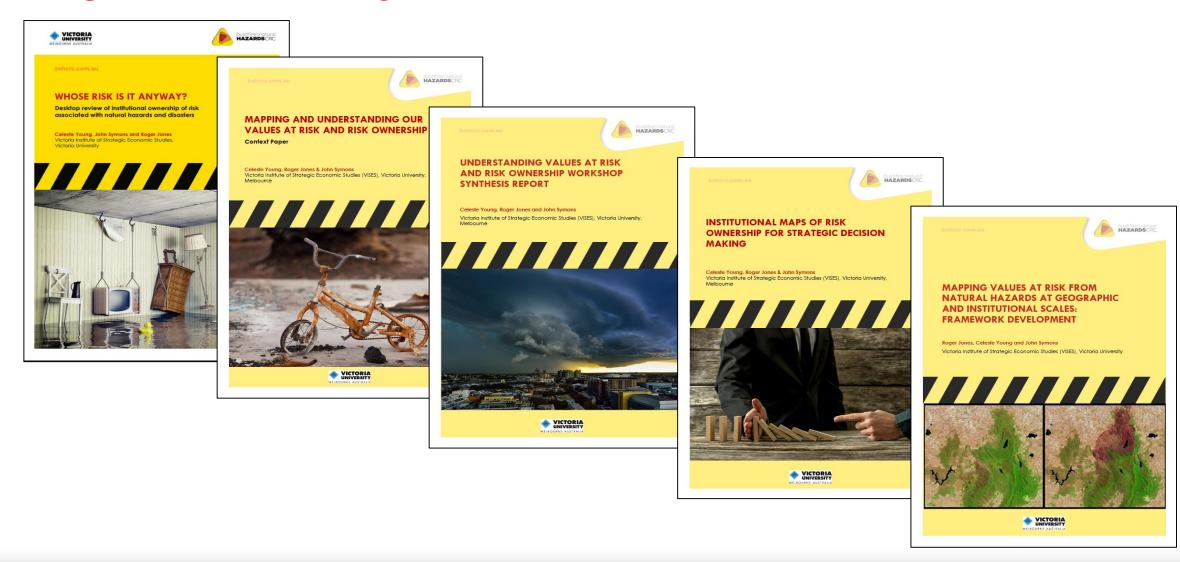
#### Institutions:

Federal, state/territory and local government, business and industry and community.

#### **Hazards**:

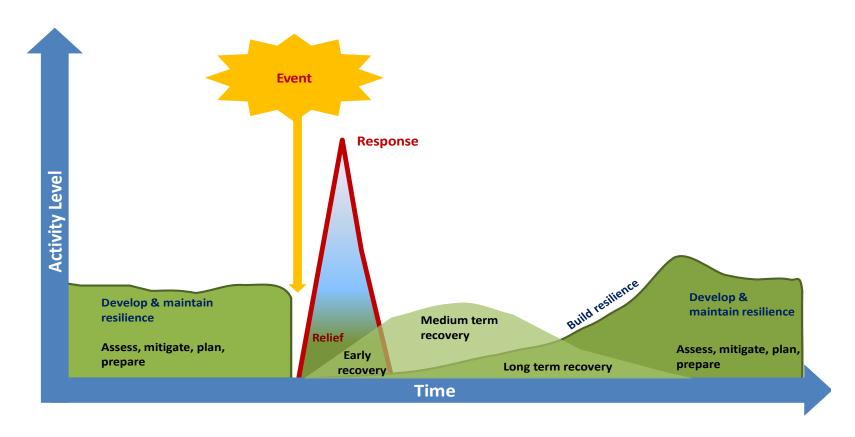
Fire, Flood, Severe storm (includes wind and hail), Heatwave.

#### **HOW WE DID THIS**



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#### WHAT WE FOUND

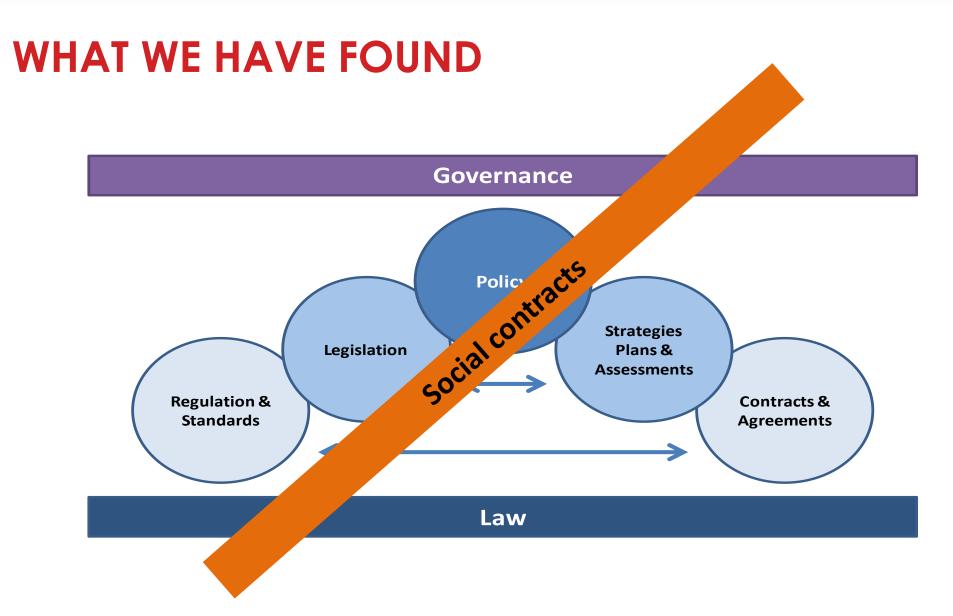


Activity based allocations natural hazard management, Young et al (2015)

#### WHAT WE HAVE FOUND

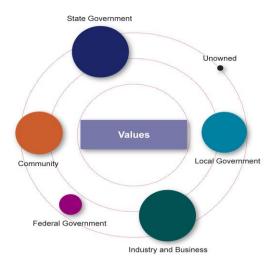


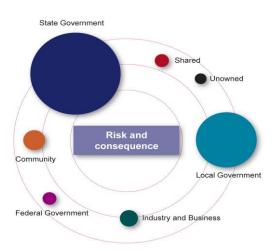
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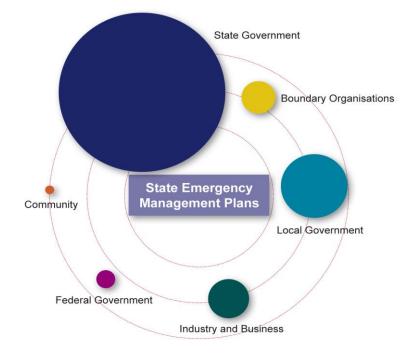
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#### WHAT WE HAVE FOUND







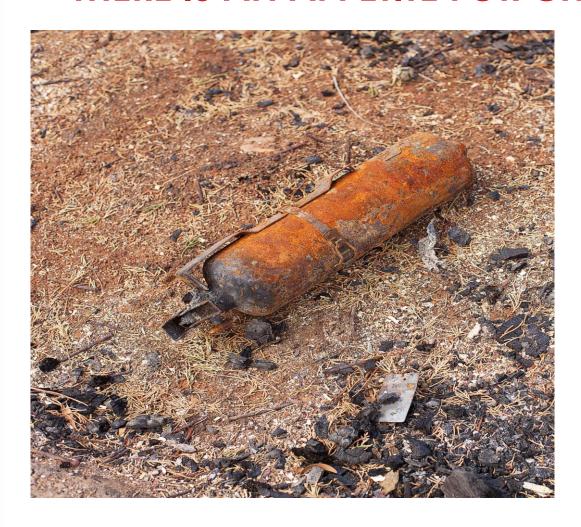


#### WHAT WE HAVE FOUND

- Effective risk ownership, requires understanding of who the owner is, what the allocation is for, how it is allocated, and if the associated responsibilities can be fulfilled.
- Risk ownership is a negotiated process so how you undertake that process is crucial.
- **Skills, capacity and tools development** are needed to support better strategic planning and evaluation of values (particularly intangibles) and allocation and uptake of risk ownership.

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#### THERE IS AN APPETITE FOR CHANGE



"We can't do this without our communities and we know we can't keep telling them what to do because that just doesn't work.....We have to think about this in the longer term otherwise we are just setting ourselves up to fail."

Tasmanian workshop participant

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### WHERE TO NEXT?



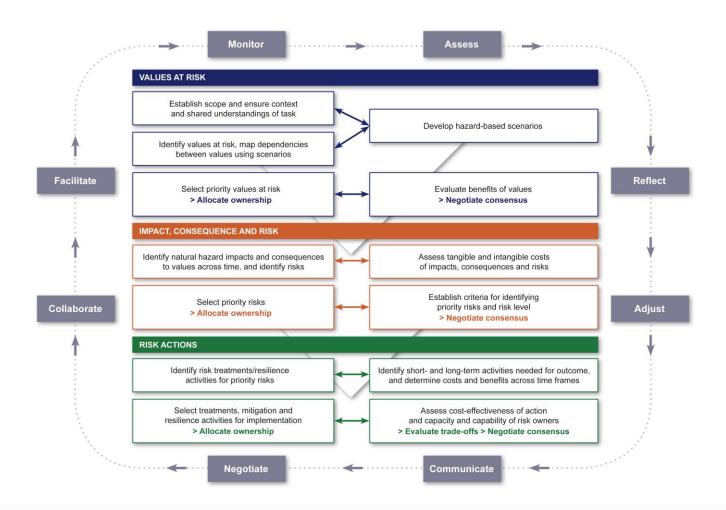
#### STEP 1: CREATE UNDERSTANDING

**Key concepts and knowledge areas** needed to support risk ownership and strategic decision making.



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#### **STEP 2: IMPLEMENT**



A values based decision making process that links ownership of values to ownership of risk.

#### THE CHALLENGE



"People don't value what they don't understand, and I think some values and risks get dismissed because they are seen as too much hard work."

**Victorian Workshop Participant** 

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#### **QUESTIONS**

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