



Flood Risk and RAMMS

(Risk Assessment, Mitigation and Measurement Subcommittee)

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'Australia's vast and diverse regions, landscapes and climatic variations mean we will continue to be at risk from the damaging impacts of disasters.

Underpinning a disaster resilient community is knowledge and understanding of local disaster risks.

We all share responsibility to understand these risks, and how they might affect us.

By understanding the nature and extent of risks, we can seek to control their impacts, and inform the way we prepare for and recover from them.'

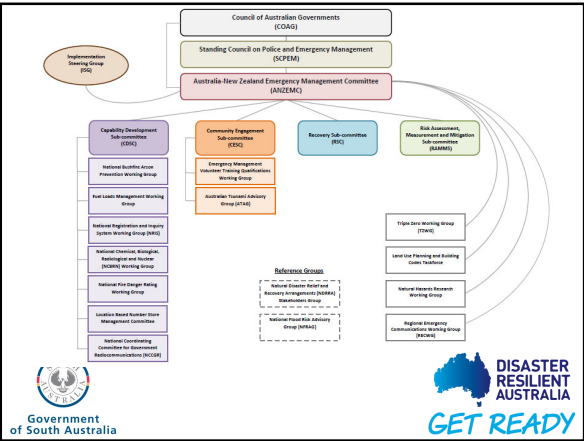
National Strategy for Disaster Resilience (COAG 2011) page 6.







Consistency





OUTLINE

- RAMMS, and emergency management
- The National Emergency Risk Assessment Guideline
- The National Work Program for Flood Mapping
- Future Directions
- Insights



Role

- Contribute to the management of disaster risk by developing national approaches to risk assessment, measurement and mitigation.

Functions

The primary functions of the Risk Assessment, Measurement and Mitigation Subcommittee (RAMMS) are to:

- Provide advice to the ANZEMC on disaster risk assessment, measurement and mitigation issues and priorities relating to disasters in Australia.
- Develop nationally consistent approaches to disaster risk assessment, measurement and mitigation aimed at enhancing the resilience of Australian communities to disasters.
- Progress relevant priorities and actions identified under the National Strategy for Disaster Resilience
- Facilitate the effective exchange of practice, research and information on national and international issues relating to risk assessment, measurement and mitigation.
- Where appropriate develop national policy on risk assessment, measurement and mitigation for ANZEMC consideration and/or endorsement.

The National Emergency Risk Assessment Guidelines

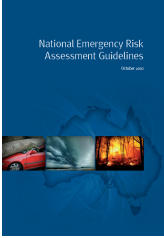


Released 2010

Based on AS/NZS ISO 31 000:2009

Tailored for emergency events

Intended to be a consistent guideline

Across hazards, across jurisdictions.

Understanding Risks across Hazards

Hazard 1



Likelihood Level	Consequence Level				
	Insignificant	Minor	Moderate	Major	Catastrophic
Likely	Green	Yellow	Orange	Red	Dark Red
Possible	Green	Yellow	Orange	Red	Dark Red
Unlikely	Green	Yellow	Orange	Red	Dark Red
Rare	Green	Yellow	Orange	Red	Dark Red
Very Rare	Green	Yellow	Orange	Red	Dark Red

Hazard 2

Likelihood Level	Consequence Level				
	Insignificant	Minor	Moderate	Major	Catastrophic
Likely	Green	Yellow	Orange	Red	Dark Red
Possible	Green	Yellow	Orange	Red	Dark Red
Unlikely	Green	Yellow	Orange	Red	Dark Red
Rare	Green	Yellow	Orange	Red	Dark Red
Very Rare	Green	Yellow	Orange	Red	Dark Red
Almost Incredibly	Green	Yellow	Orange	Red	Dark Red

Hazard 3

Likelihood Level	Consequence Level				
	Insignificant	Minor	Moderate	Major	Catastrophic
Almost Certain	RBC 1, RBC 14, RBC 15, RBC 16				
Likely			RBC 5, RBC 6, RBC 7, RBC 8, RBC 18, RBC 19, RBC 20, RBC 21		
Possible	RBC 2, RBC 3				
Unlikely	RBC 27, RBC 29		RBC 10, RBC 12, RBC 13, RBC 26, RBC 28	RBC 4, RBC 9, RBC 11, RBC 22, RBC 23, RBC 24, RBC 25	
Rare			RBC 17		
Very Rare					
Almost Incredibly					

Online training course – draft version

Module 1: Establish the Context

Headings & Terminology

RI Concepts

RI Framework & Process

Learning Outcomes

RI Framework & Process

Quiz - Framework

Quiz - Process

Summary & Progress Task

Checkpoint

NERAG Methodology

Learning Outcomes

NERAG Methodology

Progress Task

Checkpoint

Establish the Context

Establish the Project

Learning Outcomes

Outcomes & Outputs

Test your Knowledge & Check Answers

Re-do Quiz | Test Version

Scoring: For this quiz you receive two points for a correct answer, minus one point for an incorrect answer and no points if you do not indicate a correct answer. See how you go!



Multiple Choice

Which of the following are ERM Principles?

A) Creates value

B) Implementation of the framework

C) Integral part of organisational processes



NERAG Document – Consistent Criteria

NERAG Online Training Course

Build Capacity

NERAG Practice Guide 'How to' material

- Application
- Capacity
- Consistency

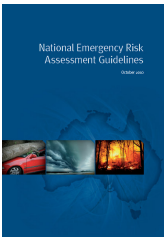





Revision of NERAG

After 3 years, being revised

NERAG working group



Later 2013, new version for approval

National Work Program for Flood Mapping

February 2011

"In consultation with Geoscience Australia, scope a potential work program to map areas of risk relating to riverine flooding, flash floods, storm surge and coastal inundation. That work should take into account existing knowledge and initiatives, currency of information and identified information gaps, and the need for consistent and robust methodologies"






8 Projects

Short-term x 4 (completed in 2012)



Long term x 4 (in progress)

Finalised by 2016



Short Term Projects

1. Strategic Overview
2. Principles
3. End User Needs Analysis
4. Stocktake of flood mapping

Long Term Projects

5. Technical Specifications of floodplain mapping
6. Datasets required to increase utility of flood mapping
7. National competency in applying floodplain management
8. Evaluate the Program



Future Directions

Measurement

- How do we present risk information to the public?
- How do we measure community resilience?
- How do we use this to demonstrate ROI?

Mitigation

- How do we change and understanding of risk into a mitigating action?

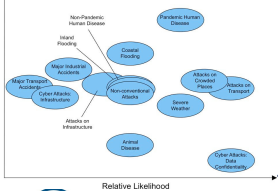



Communicating Risk Registers

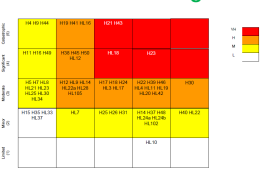

NERAG

Likelihood Level	Consequence Level			
	Insignificant (B100.1)	Minor (B100.2)	Major (B100.3)	Catastrophic (B100.4)
Likely	Green	Yellow	Orange	Red
Possible	Green	Yellow	Orange	Red
Unlikely	Green	Yellow	Orange	Red
Very Rare	Green	Yellow	Orange	Red




UK Risk Register

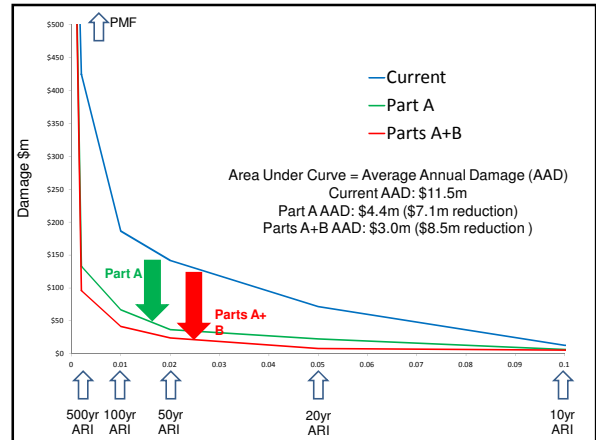
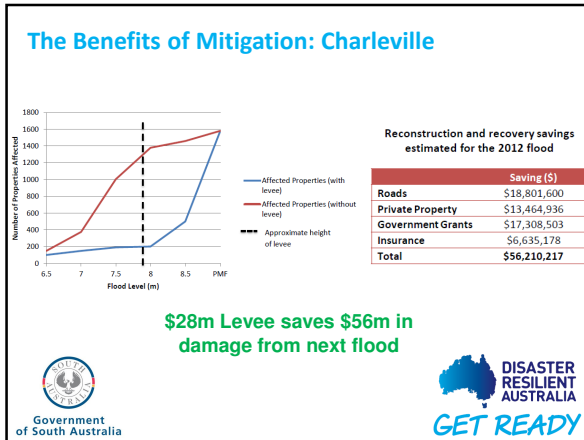


London Risk Register

Measuring Resilience



Insights

... but its hard to get

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Insights

Addressing flood risk in Australia is a long-term challenge

RAMMS will continue to drive agreed Ministerial Council resolutions

Tries to overcome the hurdles of federal system

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Conclusions

Not the most exciting part of the process

But ...

we all agree there needs to be a national consensus on many issues of risk and emergency management, and this is the best process that exists to get there.

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Likelihood Level	Consequence Level				
	Insignificant	Minor	Moderate	Major	Catastrophic
Almost Certain	Yellow	Yellow	Orange	Red	Red
Likely	Green	Yellow	Orange	Red	Red
Possible	Green	Yellow	Orange	Red	Red
Unlikely	Green	Yellow	Orange	Red	Red
Rare	Green	Yellow	Orange	Red	Red
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