

Mitigation is the key
Tracy Green




Mitigation is the key
Today's agenda

- The economic and social case for natural disaster mitigation
- Studies of mitigation from an insurance perspective
- Where and how we invest for the future

The Australian Business Roundtable (ABR)



The Roundtable was formed in 2012 following an unprecedented number of floods, storms and bushfires that had recently devastated life and property across Australia.

Roundtable members came together with a shared vision to ensure that communities across Australia were better able to prepare for, respond to and recover from natural disasters.

The Roundtable is a unique collaboration of companies with direct experience in dealing with the often devastating aftermath of natural disasters and extreme weather events across Australia.

ABR research builds strong economic case for reform



- 2013 - White Paper - *Building our Nation's Resilience to Natural Disasters*
- 2014 - *Building an open platform for natural disaster resilience decisions*
- 2016 - *The Economic Costs of the Social Impact of Natural Disasters*
- 2016 - *Building Resilient Infrastructure*

Social cost of natural disasters often greater than economic cost

- Natural disasters have wide ranging social impacts with both immediate and long-term impacts
- Increased mental health issues, alcohol misuse, domestic violence, chronic disease and short-term unemployment have resulted from extreme weather events across Australia
- More than 1 in 10 people exposed to natural disasters are reported to develop psychological distress
- Clear need to invest in and build resilience to ensure that communities and individuals are better able to cope and adapt after natural disasters

Total economic cost of natural disasters to exceed \$33 billion by 2050

- True cost of natural disasters, including cost of social impacts, at least 50% greater than previously estimated
- Targeted investment in resilience measures now will reduce Australian Government expenditure on natural disaster relief and recovery by more than 50% by 2050

Changing the equation for mitigation investment

Building our nation's resilience to natural disasters



Each year an estimated
\$560 million
is spent on post-disaster
relief and recovery



For every **\$10** spent on
post-disaster recovery,
only **\$1** is spent on prevention

Investing
\$250 million
a year in disaster resilience
to 2050 would generate
budget savings
of more than
\$12 billion

Resilience not an essential factor in building nation's critical infrastructure

- Only 3 of 12 Australian cost benefit analysis guidelines recognise resilience to natural disasters as formal assessment criteria
- More than \$450 million per year spent by Australian governments on restoring essential public assets following extreme weather events between 2002-03 and 2010-11 (ie, 1.6% of total public infrastructure spending)
- An estimated \$17 billion needed to cover direct replacement costs of critical infrastructure – such as roads, railways and hospitals – by 2050, as a result of natural disasters

Warragamba Dam – without flood risk mitigation

Average flood costs would triple by 2050

Costs would jump from \$102 million to \$317 million by 2050, without pre-disaster mitigation, according to 2013 ABR report

Repeat of historic large flood would result in

- 60,000 to 90,000 people evacuated
- 20,000 more stranded with evacuation routes cut-off
- Direct impact to 1,000 to 3,000 businesses



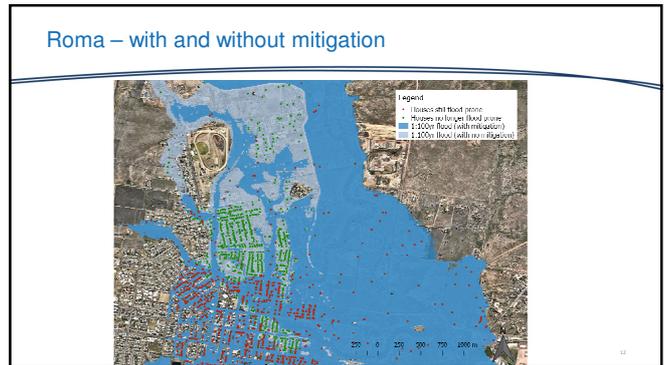
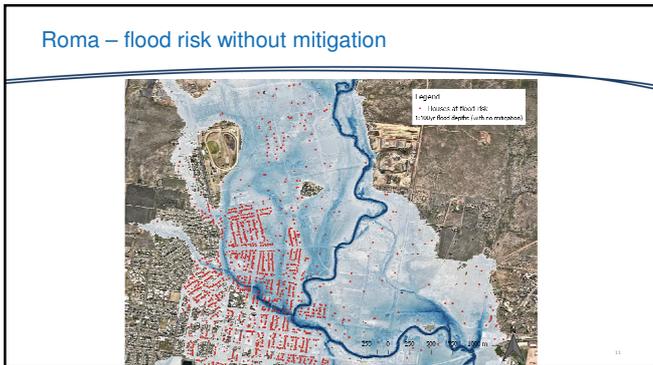
Warragamba Dam – with flood risk mitigation

Recent NSW Government funding to reduce dam's flood risk very encouraging

Action will significantly reduce community risk

Economic case for raising height of dam is clear

- Save more than \$3 billion by 2050
- Reduce average flood costs by around 73%

Roma – mitigation in action

- Local, state and federal governments funded flood levee as mitigation measure
- Action significantly reduced community risk – and provided access to more accurate flood mapping and risk information
- Positive impacts on insurance affordability

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Next steps – where and how we invest for the future

- Long-standing investment frameworks must be adapted to more effectively target where investment is needed
- How we invest in mitigation (it's more than levees) must be tailored to suit specific disaster risks and broader community vulnerability

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IAG submission – not all floods are created equal

- Submission explores relationship between flood risk and socio-economics
- Relative vulnerability between communities is determined using matrix of factors including:
 - Residential flood risk: Council flood studies, IAG modelling, third party modelling
 - Socio-economic index: SEIFA, IRSAD
 - Key infrastructure: Hospitals, airports, schools, police stations, government offices
- Communities with better financial capacity are better able to meet costs of flood event

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New ABR research to be launched in 2017

- Objective to shape conversation about where and how mitigation funding should be targeted
- Focus on successful resilience projects and mitigation activities across Australia
- Provide update on natural disaster costs by state and territory

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Mitigation is the key

Wrap up

- Economic case for mitigation funding and reform is strong and clear
- Mitigation strategies are reducing community risks, leading to improvements in insurance affordability
- Where and how we deliver effective mitigation a critical next step

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for Disaster Resilience
& Safer Communities

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