adrc 24 Australian Disaster Resilience Conference

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State Disaster Mitigation Plan - Driving systemic disaster risk reduction in NSW

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NSW Reconstruction Authority

NSW GOVERNMENT

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3 – 6 SEPTEMBER 2024
ICC Sydney

Acknowledgement of Country

I acknowledge the Gadigal people of the Eora Nation - the Traditional Custodians of the lands that we are meeting on today

I pay my respects to Elders past and present and celebrate the diversity of Aboriginal peoples and their ongoing cultures and connections to the lands and waters of NSW

I also acknowledge and pay my respects to any Aboriginal and Torres Strait Islander people joining us today

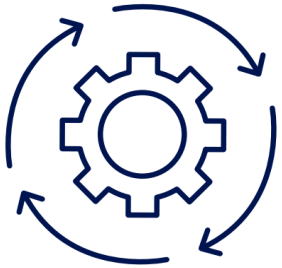
Danielle Mate is a descendant of the Murrawari and Euahlayi people. This artwork was commissioned for the State Disaster Mitigation Plan.

Role of the NSW Reconstruction Authority

Five key functions of the NSW Reconstruction Authority (the RA)

Reducing the risk (mitigation and adaptation)

Local preparedness



Community-centred recovery

Reconstruction

Disaster funding

NSW Reconstruction Authority

State Disaster Mitigation Plan

Costs of disasters

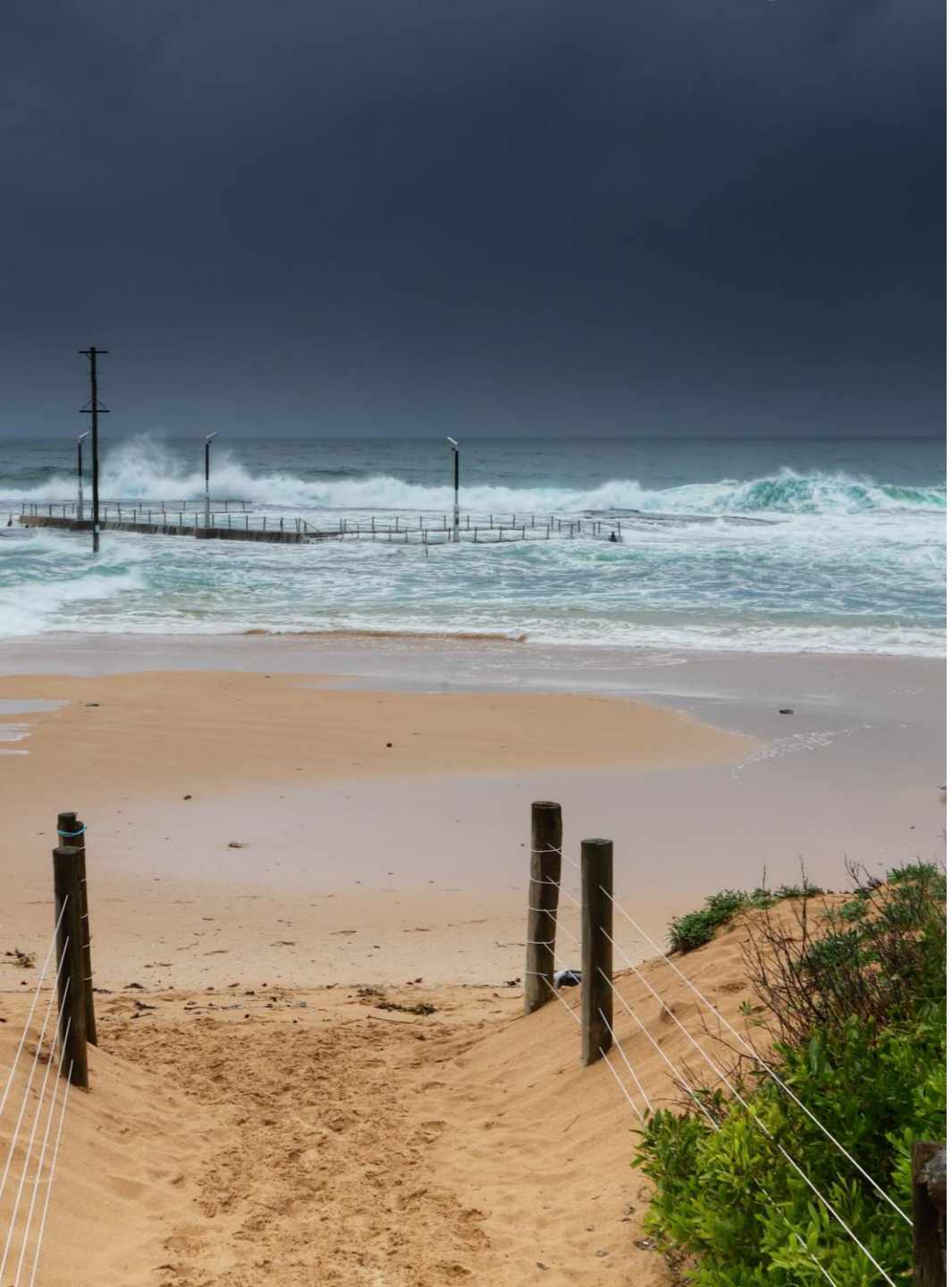
- Since 2019 in NSW – 73 disasters, costing government more than $9 billion
- 20,000 homes damaged in 2022
- Cost of disasters projected to hit $9.1 billion per year by 2060 if no action taken
- In Australia, 97% of disaster funding spent on response and recovery, 3% on reducing risk

Bush fire on the South Coast, NSW

State Disaster Mitigation Plan (SDMP)

- Launched February 2024
- Strategic view of disaster risk reduction
- Multi-hazard assessment
- Identifies areas at high risk of natural hazards
- 37 actions to adapt to and mitigate against natural hazards

Cover – State Disaster Mitigation Plan



Scope of the SDMP

- Complements existing State, regional and local Emergency Management Plans
- Supports NSW Climate Change Adaptation Strategy
- Covers eight natural hazards: bushfire, flood, coastal erosion and inundation, heatwave, landslides, earthquakes, storms and cyclones and tsunami

Mona Vale Beach Sydney

Risk assessment methodology

- Statewide, long-term risk of eight natural hazards across the social, economic, built and natural domains
- Built environment risk calculated using average annual loss
- Considers population growth and climate change by 2060 under a high emissions climate change scenario
- Drew on best available quantitative and qualitative data and expert advice across government

Land use planning in multi-modal transport environment

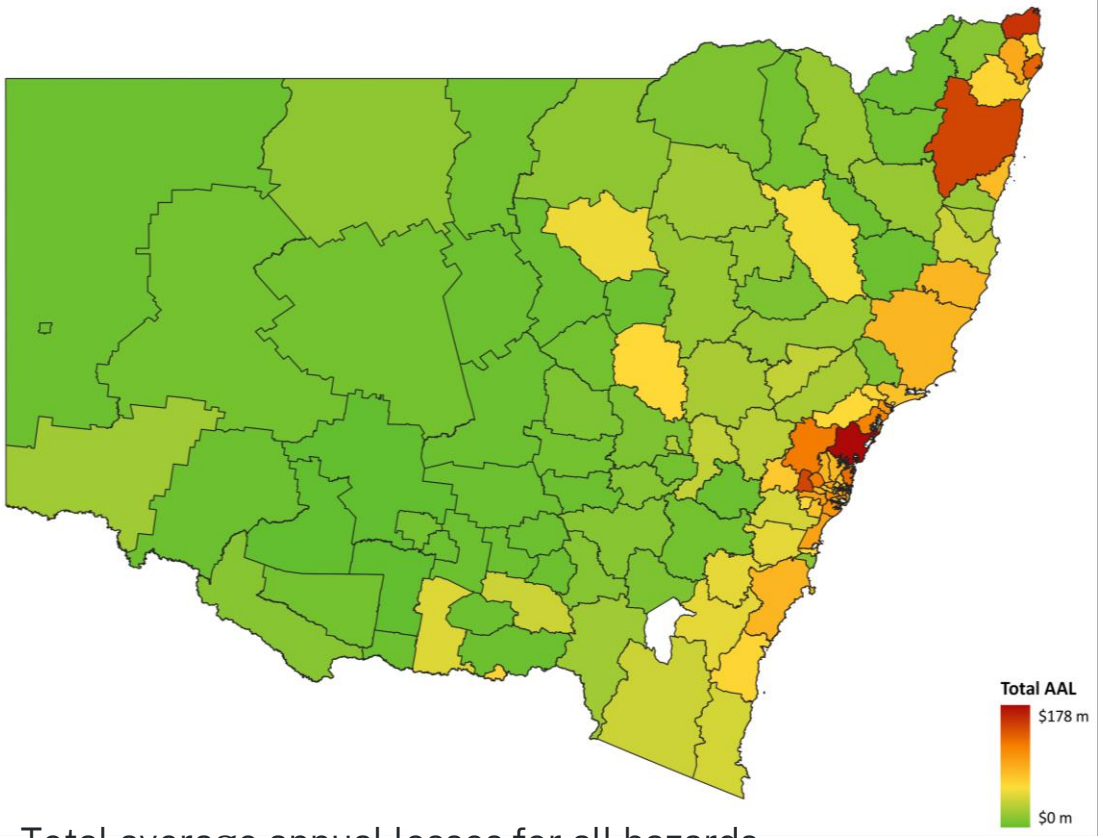
Top natural hazard risks

Multi-hazard risk assessment results: **Storm** and **flood** highest current risks to the built environment, **coastal hazard** in future.

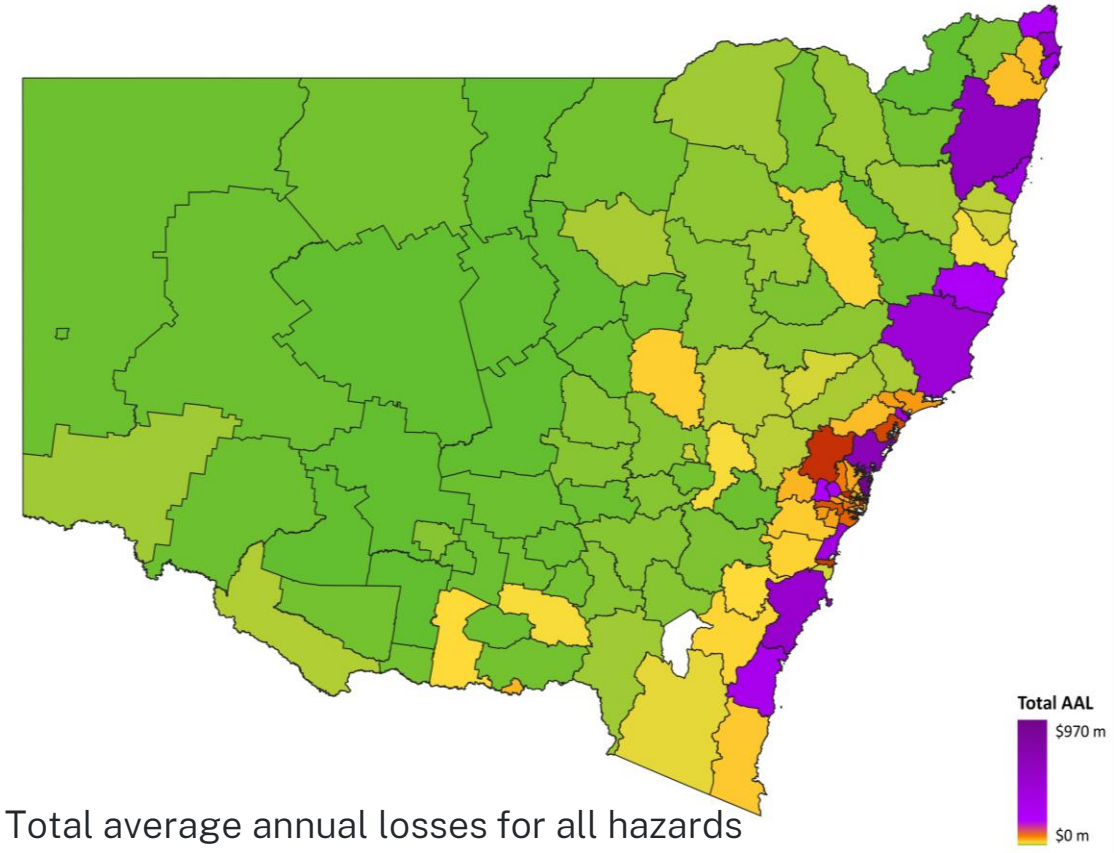
Historical loss of life impacts: **Storm** and **flood**, and **bush fire** and **heatwaves**, have presented the greatest risk to life and injury.

These five hazards are a focus of the Plan.

Existing and future multi-hazard risk maps



Total average annual losses for all hazards in the built environment **2023**



Total average annual losses for all hazards in the built environment **2060** (climate change)

Top 20 LGAs identified

Total AALs ($million) for the top 20 LGAs in the built environment (2023)[90]

LGA	Total	Storm	Flood	Bush fire	Earthquake	Cyclone	Coastal Inundation	Coastal Erosion
Central Coast	178	83	30	39	11	-	8	6
Tweed	146	24	100	3	1	9	9	0
Clarence Valley	133	12	112	2	1	4	1	1
Ballina	109	11	89	2	0	5	0	1
Northern Beaches	103	64	9	13	8	-	1	10
Penrith	97	28	61	2	6	-	-	-
Hawkesbury	94	8	82	2	2	-	-	-
Sydney	90	68	8	0	13	-	2	-
Lake Macquarie	87	52	3	23	6	-	2	0
Blacktown	85	50	23	1	11	-	-	-
Canterbury-Bankstown	81	57	14	1	9	-	0	-
Sutherland Shire	73	46	12	8	6	-	1	0
Newcastle	71	42	15	6	5	-	2	1
Bayside	68	43	17	0	8	-	0	0
Liverpool	65	30	27	2	6	-	0	0
Wollongong	64	45	2	9	6	-	0	1
Parramatta	63	40	13	1	9	-	0	-
Lismore	57	11	44	1	1	1	0	-
Shoalhaven	49	28	2	13	4	-	1	2
Inner West	49	41	3	0	6	-	0	-

Total AALs ($million) for the top 20 LGAs in the built environment (2060)[91]

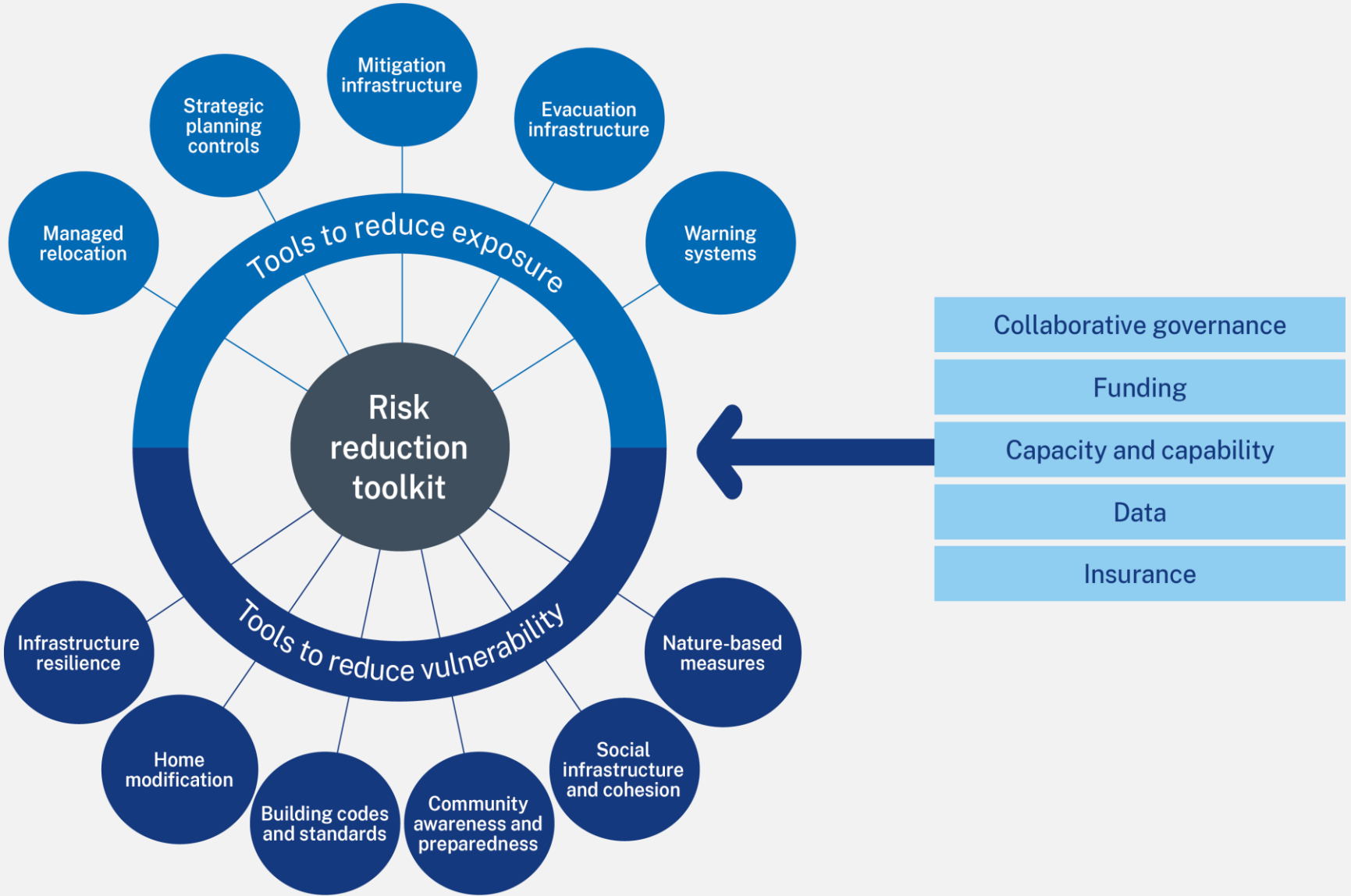
LGA	Total	Coastal	Storm	Flood	Bush fire	Earthquake	Cyclone
Northern Beaches	969	867	62	10	22	8	-
Central Coast	663	426	96	49	78	14	-
Clarence Valley	594	419	12	149	3	1	10
Byron	501	465	12	8	6	0	10
Shoalhaven	500	422	40	3	29	7	-
Mid-Coast	445	380	29	17	14	2	3
Coffs Harbour	378	317	24	21	5	1	10
Wollongong	363	270	61	3	19	10	-
Newcastle	334	231	51	33	12	7	-
Ballina	316	174	13	113	4	1	11
Eurobodalla	290	259	14	2	13	2	-
Blacktown	253	-	96	133	5	19	-
Tweed	235	40	26	139	7	1	22
Port Macquarie-Hastings	228	159	25	23	14	2	5
Penrith	216	-	40	160	6	10	-
Parramatta	153	1	80	46	4	22	-
Sydney	151	0	109	15	0	26	-
Hawkesbury	149	-	11	131	4	2	-
Shellharbour	139	109	23	1	3	3	-
Lake Macquarie	131	5	60	11	47	8	-

Challenges in mitigating risk

- Upfront costs – such as investment in mitigation infrastructure e.g. flood levees
- Quantifying benefits
- Enacting changes to strategic land use planning
- Managing competing priorities like housing supply and environmental or social impacts

Landslip on Armidale Road, Devil's Nook. Source: Kempsey Shire Council

Risk reduction toolkit



Key actions for delivery by 2026 or earlier

Managed relocation

State plan for large-scale multi-hazard managed relocation – understand where we could move people away from high-risk areas before a disaster occurs

Strategic land use planning

Determine tolerable risk for different development and land uses and embed in land use policy and legislation

Building codes and standards

Assess building codes to consider how to improve design and construction standards to build natural hazard resilience

Mitigation infrastructure

Assess cost and efficacy of large-scale offshore sand management

Insurance

Work with the insurance industry to reflect risk reduction in the cost of insurance and advocate for greater affordability

Community awareness and preparedness

Deliver multi-hazard, statewide 'Get Ready' program to improve awareness and community preparedness including public campaigns and funding for council initiatives

Delivery of the actions

Implementation is underway:

- 11 themed workstreams established responsible for delivery of related actions
- Governance process established
- Engaging agencies across NSW government
- Monitoring and reporting framework will track progress

Next SDMP to be released in 2026

Hawkesbury-Nepean Valley

Disaster adaptation planning

Relationship between SDMP and disaster adaptation planning

State Disaster Mitigation Plan (SDMP)

- Sets state approach for risk reduction
- Actions to fill policy and program gaps to support

Disaster Adaptation Plans (DAPs)

- Place-based
- Localised risk reduction options developed

Legislation overview:

- Part 4 *Reconstruction Authority Act 2022*
- Part 3, *Environmental Planning and Assessment Act 1979*
- Section 38, *Reconstruction Authority Act 2022*

What is a DAP?

DAPs bring together all the available hazard information for a defined area to understand the risk without action, including in the future

DAPs consider and analyse a range of risk reduction options

DAPs set out an action plan to implement preferred risk reduction options

DAPs can be developed by the RA, or another entity if directed by the RA

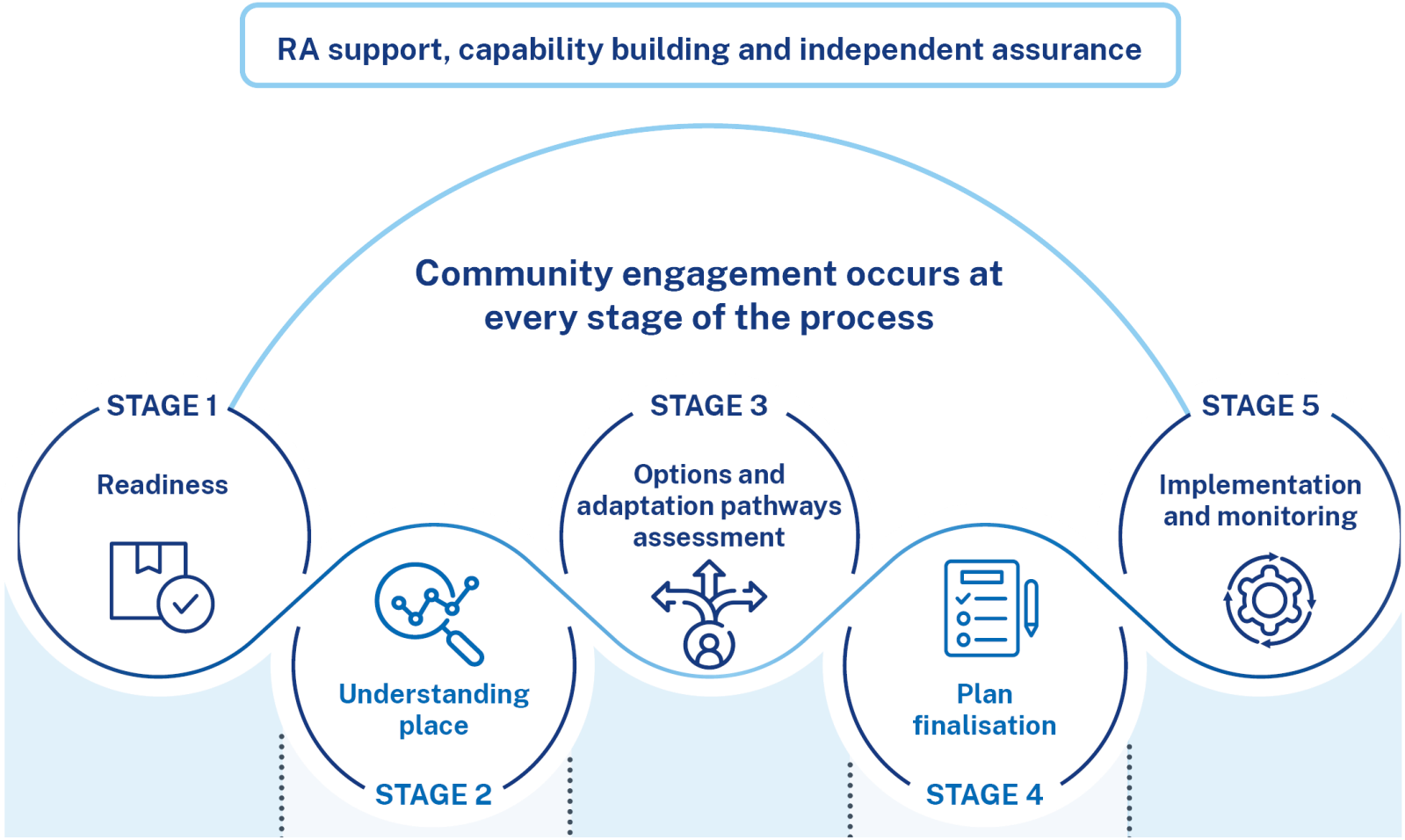
Regional disaster adaptation planning

The RA will facilitate the development of DAPs. Draft guidelines propose:

- a multi-hazard, regional and collaborative approach
- a range of stakeholders to be partners in the process, in close engagement with the community
- implementation of options will include, at a local scale, by councils or other organisations like critical infrastructure providers

Participants in breakout group at Mid North Coast DAP workshop

Process for developing a DAP

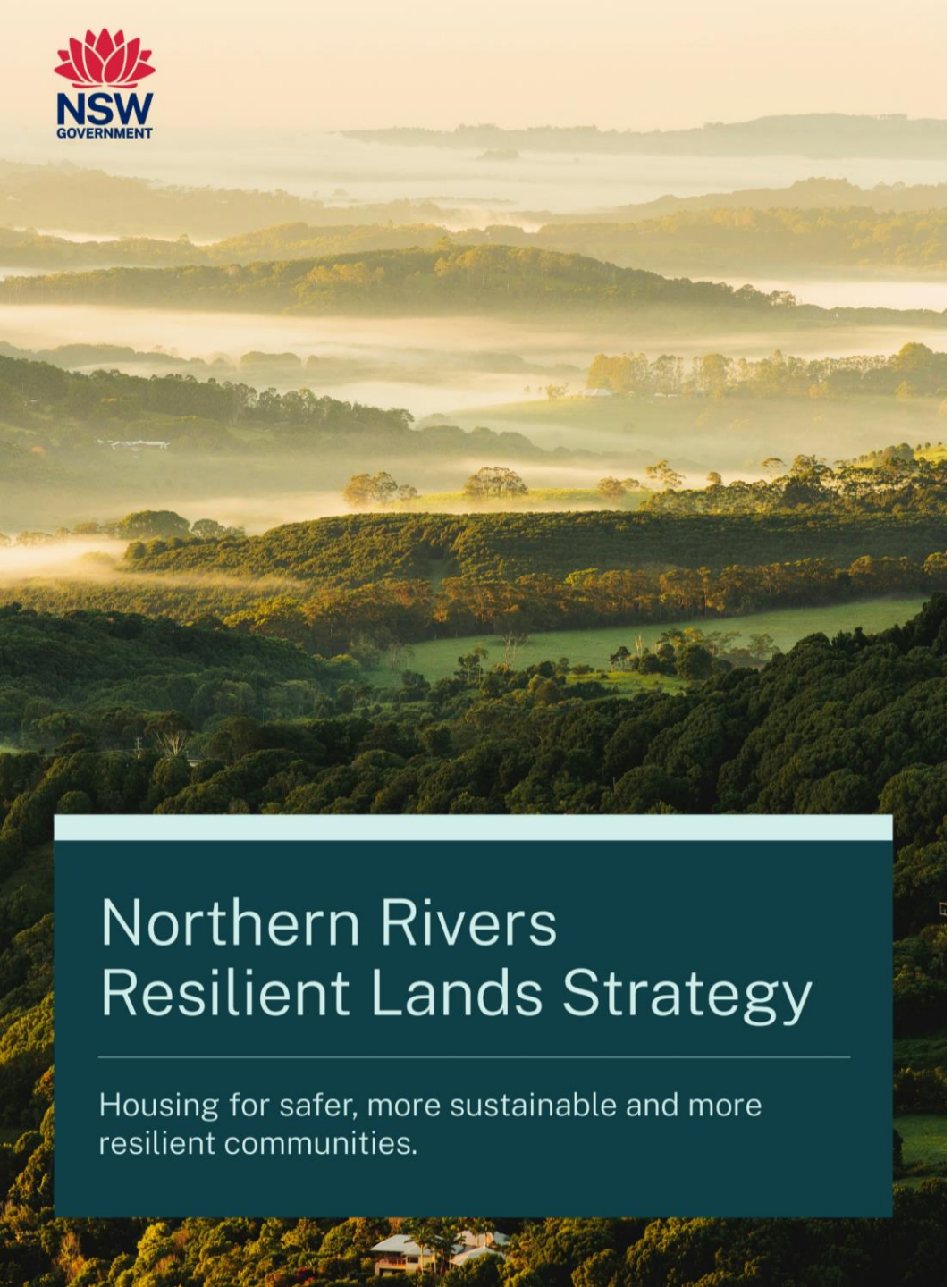


Northern Rivers: disaster risk reduction and adaptation in place

Managed relocation and home modification in action

- In the Northern Rivers, the largest assisted relocation program in Australia, delivered in response to a disaster, is underway
- To date, 814 buyback offers have been approved and 671 offers accepted: 82% take-up rate
- Complemented by retrofit and home raising – with approximately 370 homeowners identified as eligible.

Home purchased in the Resilient Homes project Northern Rivers



Resilient Lands Program

- The Resilient Lands Program is part of a package of measures to provide more housing choices by accelerating the supply of land and housing for flood impacted residents in the Northern Rivers
- The Northern Rivers Resilient Lands Strategy outlines the direction for the NSW Reconstruction Authority's $100 million Resilient Lands Program
- The Resilient Lands Program is being delivered in conjunction with the Resilient Homes Program. The programs work together to provide safer choices for people to live and improve resilience.

Northern Rivers Resilient Lands Strategy

Northern Rivers Disaster Adaptation Plan (DAP)

The first multi-hazard DAP in development is for the Northern Rivers region. It will cover:

- Hazards including flood, bushfire, heatwave and coastal hazard
- Seven local government areas
- Four water catchments

Northern Rivers DAP: Readiness phase

- Establishing a Regional Steering Committee and a Community Advisory Panel
- Collating existing hazard information
- Collating flood and property information in one place for evacuation planning
- Surveying floor levels in seven LGAs
- Establishing a council technical flood forum
- Social research to underpin targeted flood risk awareness campaign.

Northern NSW near Murwillumbah

Contact

sdmp@reconstruction.nsw.gov.au

https://nsw.gov.au/reducingrisk/sdmp

Blackwattle Bay, Sydney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