



Final Report

**INDEPENDENT
REVIEW OF
COMMONWEALTH
DISASTER FUNDING**

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Deloitte.

Letter from the Independent Reviewer

Senator the Hon Murray Watt
Minister for Agriculture, Fisheries and Forestry
Minister for Emergency Management
PO Box 6022
Parliament House
Canberra ACT 2600

30 April 2024

Dear Minister,

I am pleased to deliver my Final Report of the *Independent Review of Commonwealth Disaster Funding* (the Review). This report represents the culmination of 14 months of listening to the views, frustrations and aspirations of stakeholders across the disaster management sector, coupled with extensive fiscal and policy analysis, and modelling.

The report makes 47 recommendations which I believe, taken in totality, will improve the Commonwealth's disaster funding arrangements. The report also contains an executive summary of the findings as well as considerations for implementation. Attached to the report is a series of appendices that should be viewed as a companion to the report. The appendices describe the methodologies and data used to support the insights and recommendations presented in the report.

The Commonwealth's current disaster funding arrangements have served the nation well in support of state and territory government and local communities.

However, there is little doubt, that these arrangements are under increased stress. In my view, and in the view of many stakeholders, the arrangements are not optimised to support a system that is fit-for-purpose. While these recommendations will present an implementation challenge, encouragingly there is overwhelming support for change. An increasing focus on disaster risk reduction is seen by many as critical to the reforms that are needed.

I have appreciated the opportunity to perform this Review, and the support received from your office and from the National Emergency Management Agency. This has been crucial to the success of the Review.

Regards,



Andrew Colvin AO APM

Partner, Deloitte Touche Tohmatsu
Independent Reviewer, Independent Review of Commonwealth Disaster Funding

CC: *Brendan Moon, Coordinator General, NEMA*

Front cover: Flooded Darling River on a property in far western New South Wales.
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This page: A wallaby searching for food after bushfires. Credit: [iStock.com/Wirestock](https://www.iStock.com/Wirestock)

Acknowledgements

To our stakeholders

I wish to acknowledge the many stakeholders across multiple sectors who have given freely of their time to participate in this Review. Many, especially at the community level, expressed their fatigue from what has been a challenging past five years of natural disaster response and management. The Review team was very conscious that we were only one of many reviews in this space over recent years that have called upon the time, thoughts and expertise of others.

We were grateful that stakeholders were so open and forthcoming. We are also encouraged by the energy and support that is so obviously present across the disaster management arrangements ecosystem. There is a genuine desire for change, and we trust that we have captured their thoughts and aspirations throughout this Review.

To the Review team

I want to thank the tireless efforts of my colleagues, Deloitte Partners Tayanah O'Donnell and Sarah Millen, as well as the entire Deloitte Review team. None of us fully expected the complexity and interdependencies that are inherent in Australia's disaster management arrangements, nor the paths that our enquiries would take us down. This final report is just a small window into the mountain of evidence and thinking that has taken place.

The Deloitte team has also been well supported by the NEMA Taskforce, led by Michael Merriman, Senior Director National Governance and Reviews, and Alison Sommerville, formerly Assistant Coordinator General Review Taskforce. They have supported us throughout this Review and have become integral to its findings and recommendations. We are grateful for their guidance, support, and patience throughout this Review.

To Australia's First Nations people

This project has been a learning experience for everyone involved – and we must continue to learn if we are going to face into the challenges of the natural hazard risks that face us. As the First Nations leader, Professor Deen Sanders OAM, reminds us, a project like this is not really about financial models and intergovernmental arrangements alone, it is about Country and how we all need to come together to protect it, and therefore protect ourselves.

Acknowledging Country is not a mere act of rote script. It is a genuine recognition of the power of this country and the peoples that have cared for it for thousands of generations. The Independent Reviewer, and the Review Team acknowledge the traditional custodians of country throughout Australia. We recognise their ancient culture and their continuing connection to the land and sea. We also acknowledge their deep connection to, and unique understanding of, community.

We pay our respect to their elders, past and present, and to the strong voices that are following in their footsteps. We have been privileged to learn from them through this Review and hear their experiences firsthand. We have been reminded that Australia's First Nations people have responded to changes in our climate, and the impacts that follow, for tens of thousands of years.

First Nations communities are often most at risk from the rapid onset of a hazardous weather event, but it is through them we learn that vulnerability is a product of our reaction to disasters; a consequence of the systems, structures and policies that we have created. It is not a community state in, and of, itself, and it is possible to change the course of those things to better align to community outcomes.

There is much we can learn from being open to the voices of this country and the communities that care for it.

Andrew Colvin AO APM



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*Forest regrowth after Australian bushfires
Credit: iStock.com/PhilipThurston*



Contents

Glossary	8	Chapter 3: Adopting an evidence-informed, risk-based approach	75
Acronyms	10	Understanding the intersection of climate- and disaster-related risks	77
Executive summary	12	The need for change	77
Recommendations	24	Understanding shared risks	83
Theme 1: Commonwealth role and coordination	24	Developing a risk-based approach	86
Theme 2: National Natural Disaster Outcomes Policy	26	Describing elements of a Nation-wide Natural Disaster Risk Profile	87
Theme 3: An evidence-informed, risk-based approach	28	Developing data-informed risk analysis	89
Theme 4: Program reforms	31	Integrating First Nations' Perspectives into the Nation-wide Natural Disaster Risk Profile	92
Theme 5: Non-government and community sector	35	Chapter 4: Program Reform	94
Implementation and design	36	Disaster Recovery Funding Arrangements	97
Chapter 1: Role of the Commonwealth	45	Disaster Ready Fund	107
Clarifying the Commonwealth's role and establishing a whole of Commonwealth narrative	49	Australian Government Disaster Recovery Payment	112
Demonstrating national leadership on risk reduction and resilience	53	Chapter 5: Engaging beyond government	118
Enhancing coordination across the Commonwealth	55	Enhancing involvement of the non-government sector	120
Establishing the Disaster Management Advisory Council	56	Conducting a stocktake of existing partnerships in natural disaster management	121
Uplifting the capability of the disaster management system	57	References	125
Increasing data usability	59		
Standardising support for Australia's external territories	61		
NEMA capability and capacity	61		
Chapter 2: National Natural Disaster Outcomes Policy	62		
Articulating the Commonwealth's disaster funding objectives	64		
Increasing the visibility and transparency of Commonwealth decision making	66		
Introducing measures of success	71		
Integrating First Nations' perspectives into the Outcomes Policy	73		

*People marching in Lismore Lantern Parade, Lismore, New South Wales.
Credit: iStock.com/PDerrett*

Glossary

Term	Definition
All hazards approach	Dealing with all types of emergencies or disasters and civil defence using the same set of management arrangements.
Administered funding	Spending that is managed by government agencies and departments but that they do not directly control. Administered funding typically includes specific funding and grant programs. This funding is distinct from departmental funding which is directly managed and controlled by government agencies and departments for the purposes of day-to-day operations and program support.
Black Summer bushfires	The bushfires that affected a number of Australian state and territory jurisdictions in 2019-20, colloquially referred to as the Black Summer bushfires.
Build back better (betterment)	The use of the recovery, rehabilitation and reconstruction phases after a disaster to increase the resilience of nations and communities through integrating disaster risk reduction measures into the restoration of physical infrastructure and societal systems, and into the revitalisation of livelihoods, economies and the environment.
Building code	A set of ordinances or regulations and associated standards intended to regulate aspects of the design, construction, materials, alteration and occupancy of structures which are necessary to ensure human safety and welfare, including resistance to collapse and damage. Building codes can include both technical and functional standards. In Australia, the National Construction Code provides the technical design and construction provisions for buildings.
Bushfire Attack Level	A means of measuring the severity of a building's potential exposure to ember attack, radiant heat and direct flame contact. It is measured in increments of radiant heat (expressed in kilowatts/m ²).
Climate scenario	Representative estimates of future emissions of greenhouse gases, aerosols, and other pollutants. There are different publicly available scenarios that can be used to inform climate risk and opportunity assessments that are developed as part of several initiatives that underpin the Intergovernmental Panel on Climate Change. Emissions scenarios are used in combination with climate models to produce future climate projections. Examples of climate scenarios used by the Review include Shared Socioeconomic Pathway (SSP) and Representative Concentration Pathway (RCP). For consistency and simplicity, scenarios are distinguished in this report according to the emissions trajectories the underpin each scenario. For example, 'low,' 'moderate' and 'high' emissions scenarios.
Critical infrastructure	The physical structures, facilities, networks and other assets which provide services that are essential to the social and economic functioning of a community or society.
Disaster continuum	The cycle of preparing for, responding to, and recovering from disasters. The continuum contains various phases depending on the definition, however, most commonly these include prevention, preparedness, response, recovery, risk reduction and resilience.
Domains	A way to categorise and understand the complex impacts that disasters have on society. A domain represents a related set of assets or systems that may be impacted by disasters. The four domains are natural (e.g., ecosystems, landscapes, flora and fauna), social (e.g., social cohesion, community wellbeing), economic (e.g. tourism, industry, farming services), and built (e.g. critical infrastructure or assets).
Funding	The provision of financial resources, whether through a supply of money or commercial resources, for a specific purpose.
Funding Dataset	The NEMA Disaster Resilience Funding Dataset. This dataset aims to identify and quantify total Commonwealth expenditure on administered programs relevant to the disaster management landscape.
Grey literature	Material and research produced by organisations outside of traditional academic distribution channels. Can be produced by all levels of government, academia, business and industry.

Hazard	A process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation.
Nation-wide Natural Disaster Risk Profile (Risk Profile)	Nation-wide Natural Disaster Risk Profile is the approach suggested by the Review to embed a risk-based approach into Commonwealth disaster arrangements decision making. The Risk Profile would identify disaster risks and consider the capacity and capability that exist to mitigate these risks.
National Natural Disaster Outcomes Policy (Outcomes Policy)	National Natural Disaster Outcomes Policy is the policy suggested by the Review to tie clear outcomes for funding to enable clarity of funding decisions, guide appropriate investment and ensure Commonwealth investment is coordinated, monitored and evaluated.
Natural Disaster	For the purposes of the Review, a Natural Disaster has been defined as a rapid onset naturally occurring event that causes serious disruption to the functioning of a community or a society, due to its hazardous nature.
P95	P95, or the 95th percentile, is the amount at which there is a 95% chance, or level of confidence, that the actual cost will not exceed this amount.
P99	P99, or the 99th percentile, is the amount at which there is a 99% chance, or level of confidence, that the actual cost will not exceed this amount.
Preparedness	The knowledge and capacities developed by governments, response and recovery organisations, communities and individuals to effectively anticipate, respond to and recover from the impacts of likely, imminent or current disasters.
Prevention	Activities and measures to avoid existing and new disaster risks. The concept and intention to completely avoid potential adverse impacts of hazardous events.
Productivity Commission	The Australian Government's independent research and advisory body on a range of economic, social and environmental issues affecting the welfare of Australians.
Reconstruction	The medium- and long-term rebuilding and sustainable restoration of resilient critical infrastructure, services, housing, facilities and livelihoods required for the full functioning of a community, or a society affected by a disaster.
Recovery	The restoring or improving of livelihoods and health, as well as economic, physical, social, cultural and environmental assets, systems and activities, of a disaster-affected community or society.
Resilience	Action/s which seek to foster one or more of the following outcomes: Reducing exposure of the natural, social, economic and/or built domains to a hazard or hazards. For example, relocating flood damaged assets from hazard zones. Reducing sensitivity of the natural, social, economic and/or built domains in the event they are exposed to a hazard or hazards. For example, designing a building to a higher Bushfire Attack Level. Increasing adaptive capacity , by enabling communities and systems to modify or change their characteristics and behaviours to cope with actual or anticipated stresses. For example, improving a community's understanding of flood risk by providing access to current flood risk information. Increasing coping capacity , by enabling communities and systems to use their available resources and abilities to face adverse consequences. For example, through community support programs that foster support networks and social inclusion.
Response	Actions taken directly before, during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected.
Risk reduction	The lessening or minimising of the adverse impacts of a hazardous event. A selective application of appropriate techniques and management principles to reduce either the likelihood of an occurrence or its consequences, or both.
Sendai Framework for Disaster Risk Reduction	A global agreement that aims to reduce disaster risk and increase resilience by focusing on three dimensions of disaster risk; exposure to hazards, vulnerability and capacity, and hazards' characteristics. Adopted by the United Nations member states in 2015 at a conference in Sendai, Japan.
Vulnerability	The conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards.

Acronyms

Acronym	Definition
ACT	Australian Capital Territory
ADF	Australian Defence Force
AGCMF	Australian Government Crisis Management Framework
AGDRP	Australian Government Disaster Recovery Payment
AIDR	Australian Institute for Disaster Resilience
ANZEMC	Australia-New Zealand Emergency Management Committee
BoM	Bureau of Meteorology
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DITRDCA	Department of Infrastructure, Transport, Regional Development, Communications and the Arts
DMAC	Disaster Management Advisory Council
DRF	Disaster Ready Fund
DRFA	Disaster Recovery Funding Arrangements
DRR	Disaster Risk Reduction
EMA	Emergency Management Australia
ERF	Emergency Response Fund
FEMA	Federal Emergency Management Agency (United States of America)
Finance	Department of Finance
Home Affairs	Department of Home Affairs
ICA	Insurance Council of Australia
IDC	Inter-Departmental Committee
LGA	Local Government Area
NCRA	National Climate Risk Assessment
NDRRF	National Disaster Risk Reduction Framework
NEMA	National Emergency Management Agency
NNHDRP	National Natural Hazard Disaster Risk Profile
NSW	New South Wales
NT	Northern Territory
PM&C	Department of the Prime Minister and Cabinet
QLD	Queensland
SA	South Australia
SEMA	Social Emergency Management Alliance (Japan)
THIRA	Threat and Hazard Identification and Risk Assessment
TAS	Tasmania
USA	United States of America
VIC	Victoria
WA	Western Australia

Lightning over boardwalk at a Queensland beach.
Credit: iStock.com/Danhayward



Executive summary

To describe Australia's disaster arrangements as complex is an understatement. Australia's disaster arrangements are truly interdependent, and they rely on good practice and the goodwill of all actors, both government and non-government. Added to this is the recognition that the Commonwealth's role in these arrangements is changing in direct response to an overall disaster management system that is under significant and rapidly growing pressure.

The Review has examined the Commonwealth's disaster funding arrangements to identify the reforms required to produce a system that is scalable, sustainable, effective, equitable, transparent and accessible. To do this, we have also considered the wider disaster management arrangements, given how closely funding structures follow these arrangements. The Review has been thoughtful and considered in how to better embed risk reduction and resilience principles into response and recovery; and in exploring a range of ways to incentivise the state and territory governments to do the same. The Review has used various methods of investigation, including stakeholder engagement, surveys, policy and program analysis, international comparison, climate scenario analysis and financial and economic modelling to provide an evidence base on which to explore these questions.

The foundations of Australia's natural disaster arrangements are strong. There are well entrenched and understood principles that have served Australia well – principally that emergency management remains the core responsibility of state and territory governments. This has not changed. There has however been an evolution in two primary ways: firstly, that the Commonwealth has been more visible and active in the emergency management phases of natural disasters; secondly, that the community expects a far greater emphasis on risk reduction and resilience from all leaders within the disaster management community.

For the Commonwealth to deliver on these new expectations it has two significant levers; the contingent nature of the funding it provides and the national leadership it displays. The expectations of both continue to increase under the current weight of demand. However,

the ability of the Commonwealth to measure success, or to clearly define what it leads versus what it supports, is lacking.

Why reform is required

Disaster management costs are continuing to rise, resources are stretched, and an uncertain future is proving increasingly difficult to plan and prepare for. On any measure, the impact and scale of natural disasters is increasing. For the purposes of the Review, and by agreement, we have focused our attention on the incidence of rapid onset naturally occurring events – floods, cyclones, bushfires, storms and the like. But the perspectives heard, and recommendations made, have application in a multi-hazard environment.

The Review is also conscious of the growing body of thought, led by the UN Office for Disaster Risk Reduction, that disasters are not simply a natural event, but rather a reaction to human factors such as policy design, planning, vulnerability. While this Review has referenced natural disaster throughout, it is with the distinction between natural hazard, and the subsequent disaster impact, that the recommendations are grounded. Extreme weather events will always be a factor in a country like Australia. It is how we plan for, mitigate and respond to them that can truly have an impact on the potential for disaster, and subsequently the burden placed on government.

As the world's climate continues to change, it is expected that trends observed in recent years will continue. Analysis undertaken by the Review team showed that the severity and/or frequency of multiple climate hazards that are associated with Australia's most damaging disasters are projected to increase. Additionally, the Review found that much of Australia is highly sensitive to a changing climate – though the precise impacts are dependent on the levels of vulnerability, and its interplay with hazard and exposure. Increasing attention is rightly being directed to compounding and cascading disaster events and the additional strain that these place on a system that is already under pressure.

The Review undertook a range of financial and economic modelling to understand how hazard

exposure and vulnerability combine to impact the future cost of disasters. Based on average estimates in 2023-24 real dollars, the forecast total economic cost of natural disasters across Australia in 2023-24, excluding the impact of climate, is \$11.8 billion and is predicted to increase to \$40.3 billion in 2049-50. The 2049-50 cost of \$40.3 billion considers the anticipated underlying growth in the impact of natural disasters due to factors including increased population, and number and average size of dwellings at risk. These cost estimates do not consider underlying impacts of climate change.

There are multiple ways the future can evolve that may lead to different outcomes that are intimately linked with population changes, land use planning changes, economic activity and technological innovation. Scenarios are commonly used to investigate the impacts of plausible changes to these factors. The Review has undertaken climate scenario analysis to illustrate the exposure of many Australians arising under a changing climate, in particular a moderate emissions scenario and a high emissions scenario. It has then modelled the total economic costs under these emission scenarios based on projected changes in a range of hazards, population and housing, and has presented the costs by jurisdiction and hazard, at the 95th and 99th percentile to demonstrate the extreme outcomes.

In isolation these figures present a stark view of future natural disaster funding requirements. Modelling undertaken by the Review also clearly shows there is financial and economic benefit to be realised by focusing more investment on risk reduction and resilience. The Review's analysis has shown that upfront investments in risk reduction and resilience can result in downward pressure on the trajectory of response and recovery costs. Such investments also bring additional benefits, such as increased community wellbeing.

With a deliberate, focused and evidence-informed approach, the Commonwealth can do more to build resilience to the types of extreme events Australia is projected to experience in the coming decades. The Commonwealth's role cannot however begin and end simply with funding and supporting state and territory efforts. As the level of government with a national remit, it is incumbent on the Commonwealth to set the tone and intent of Australia's disaster management arrangements, and therefore the frameworks and programs that support disaster funding contributions.

The recommendations in the Review have been structured along thematic lines and are presented in the most logical order in alignment with their implementation priority. Taken individually, each recommendation will serve to improve existing funding arrangements and to also assist the Commonwealth with its overall national natural disaster management objectives. However, the true impact of the recommendations will not be realised unless the recommendations are considered as a holistic suite of reforms. These reforms will not only support the Commonwealth's role in disaster management now and into the future but provide a unique opportunity to bring about much needed change to existing national funding arrangements.

The role of the Commonwealth

The first step is to address opportunities for improvement across disaster management policy at the Commonwealth level. As the Review has found, existing Commonwealth efforts are not confined to the National Emergency Management Agency (NEMA). While NEMA carries a lot of the responsibility, roles relevant to disaster funding arrangements extend across the Commonwealth, touching upon many portfolios, departments and agencies. The totality of this Commonwealth effort is not well understood. Existing structures are not keeping pace with rapidly evolving expectations and responsibilities. While recent structural changes (in particular, the creation of NEMA) go a long way to support an enhanced Commonwealth role, they are currently insufficient to address the identified issues. Further changes are required for the Commonwealth to be able to effectively coordinate its activities in a way that is agile and can keep pace with a rapidly evolving hazard risk profile.

It is essential the Commonwealth establishes a clear understanding of its strategic objectives and intent. This clarity should extend beyond government, to encompass all stakeholders involved in disaster management. A key finding of the Review is the need for the Commonwealth to clearly prioritise disaster risk reduction and resilience measures as core components of its strategic disaster funding objectives. This will not only establish the Commonwealth's priorities for funding objectives, but prioritising risk reduction and resilience measures will enable the Commonwealth to place downward pressure on the anticipated increases in natural disasters expenditure.

A series of changes are also required at the Commonwealth level to better coordinate and understand government’s overall objectives and to ensure that it has sufficient access to views and opinions to help refine its approach.

Disasters in Australia have become such an important issue to the community, and to the Commonwealth, that an annual Statement to Parliament is warranted. This Statement would be an opportunity for the Commonwealth to clearly outline its vision, investment approach and risk reduction priorities. To support this Statement, the Commonwealth will need to coordinate efforts across departments and agencies to generate a common picture of disaster funding expenditure, particularly with regard to disaster risk reduction and resilience initiatives. The Department of the Prime Minister and Cabinet (PM&C) should establish a coordinating and convening role across the Commonwealth, in support of NEMA to deliver the annual Statement.

Working in partnership with NEMA, PM&C should coordinate a whole-of-Commonwealth approach to natural disaster management, particularly funding, and use its convening authority to ensure alignment across departments and agencies. Such an approach is critical if the Commonwealth is to be successful at targeting its collective efforts towards risk reduction and resilience building objectives.

The Commonwealth should also convene a Disaster Management Advisory Council (DMAC), reporting to the Minister for Emergency Management. The objective of the DMAC is to give voice to stakeholders across both government and non-government sectors, and provide new and varied inputs to Commonwealth perspectives.

The criticality of data

Throughout the Review, an ongoing limitation has been the access to effective and reliable fiscal and expenditure data upon which to develop insights and recommendations. While a wealth of evidence informed the Review, it has not been able to rely upon a consistent or well understood dataset. Indeed, the complexity of the system has required the Review to draw on a range of quantitative and qualitative information to ensure that the lived experiences of actors that interface with the disaster management system are adequately captured.



Community emergency workers marching during a street parade. Credit: iStock.com/MicheleJackson

The Review made use of the NEMA Disaster Resilience Funding Dataset (Funding Dataset) to undertake a comprehensive analysis of the Commonwealth’s disaster funding arrangements. Through the Funding Dataset, NEMA aimed to identify and quantify total Commonwealth expenditure on administered programs relevant to the disaster management landscape. The Funding Dataset is one of the first attempts by the Commonwealth to track disaster-relevant administered expenditure. While comprehensive, the exercise was challenging for NEMA for several reasons, including the lack of a shared understanding for what constitutes administered natural disaster expenditure, and limited coordination across the Commonwealth with respect to natural disaster related programs. Consequently, while the process of developing the dataset has helped to build a better awareness of Commonwealth disaster-relevant administered programs, the overall picture of how much the Commonwealth spends on natural disaster support, directly or indirectly, may still be incomplete.

Many of the data limitations experienced in the Review were symptomatic of a system that is not working optimally. Not all data is equal, and the Review has been careful to distinguish between data such as fiscal and expenditure data, and hazard and impact data. This would assist all participants across the disaster management continuum to be better informed and therefore be better able to make decisions. Accepted, reliable, and accessible data are essential to support consistent decision making across all aspects of the disaster continuum. There remains a view, particularly held by state and territory governments and by industry, that publicly available natural disaster hazard and impact information should be provided by the Commonwealth. There is a role for the Commonwealth in facilitating better access to the types of data required to provide a level of consistency in decision making across the disaster continuum.

System-wide uplift

While it is understood that state and territory governments have primary responsibility for

preparing for and responding to disaster, it is also a common view that locally led recovery is the best form of recovery. The Review has found that Australia is increasingly reliant on a local level of government, and community, which has the least capacity and often limited capability. While response and recovery from disaster events should be locally informed, it cannot be truly locally led under the current arrangements. Local governments reported a wide range of capabilities and capacities to the Review, as well as diverse assessments of their role and mandate. Given the critical role played by local governments in disaster management and as a recipient of Commonwealth funding, this apparent lack of capacity and capability, as well as expectation of role, should be cause for concern.

To support a comprehensive reform of current disaster funding arrangements, and to provide assurance that Commonwealth investment is targeted and has the best chance of success, uplifting local government capacity and capability, as part of system wide uplift is required. Nationally, the Commonwealth

should lead these efforts, however the responsibility to support the capability and capacity of local government still remains primarily a function of state and territory governments. Collaboration with state and territory governments is therefore essential, and regular assessments of local capacity and capability should be undertaken, combined with an enhanced national training and exercises regime.

National Natural Disaster Outcomes Policy

In exploring the question of how to improve funding outcomes for the Commonwealth, the Review found that significant gains could be achieved through rationalising existing national arrangements and implementing a repeatable and transparent national process. To achieve this, the Commonwealth should develop a National Natural Disaster Outcomes Policy (Outcomes Policy) to describe the outcomes the Commonwealth is seeking to achieve through its funding measures. This framework should ensure that appropriate weight is given across the disaster continuum, along with accountability measures, so that communities and groups who are most disproportionately impacted by disaster are able to access critical support.

Analysis by the Review has also established that the total economic cost of disasters is distributed diversely, with significant social costs observed over the longer term. However, funding is heavily favoured towards infrastructure and economic outcomes, due in part to a heavy reliance on precedent to determine funding decisions. While it should not be expected that funding is evenly distributed across all four recognised disaster domains (natural, social, economic and built), there needs to be a more deliberate assessment of need and priority that considers the wide-ranging impacts of disasters.

The Review heard on multiple occasions about the complexity of current funding arrangements. This complexity often prevents individuals, organisations and local government from accessing the arrangements. Stakeholders repeatedly raised concerns with navigating the numerous funding streams and initiatives offered by the Commonwealth and how there was often limited alignment with other available programs. As well as duplication and inefficiency, this results in potentially uneven distribution of support, where those entities who understand the frameworks are supported, while others who are less familiar with the

arrangements are not. As far as possible, the Outcomes Policy should be used to rationalise existing frameworks and processes to reduce complexity and the confusion that currently stems from the multiple, but not always aligned, existing arrangements.

Nationally, the capacity and capability of both government and non-government actors to operate within existing arrangements is reliant on experience and practice, not a readily identifiable and repeatable framework. For as long as the existing arrangements for tracking and measuring outcomes are reliant on individual experience, there will be limited opportunity for the Commonwealth, or its partners, to learn from the success or otherwise of funding initiatives and to continually improve performance and outcomes. The frustration stemming from a lack of ability to learn from each other, or from previous events, has been a common theme throughout the Review.

An Outcomes Policy will not only provide more confidence to the Commonwealth about its funding investment and certainty to the community, it will also provide a platform for streamlined monitoring and evaluation, and clear expectations of the conditions that attach to any Commonwealth investment. The inherent strengths of the current arrangements are in their flexibility. But flexibility requires discretion, and discretion over time leads to inconsistency. The Review has seen, and heard, of the inconsistent and duplicative assurance processes that currently exist between jurisdictions and the limited ability the Commonwealth has to monitor and evaluate the programs it supports or initiates. Line of sight visibility from funding concept to impact is often limited to the ability of individual program managers to track progress and is frequently reliant on data that are gathered either inconsistently, or not at all. As outlined in this report, this extends across the Commonwealth, where we found the level of data to support a detailed assessment and analysis of spending to be lacking and heard the frustration from departments and agencies at the inability to move beyond expenditure to track outcomes and impact.

Evidence-informed and risk-based approach

To support an optimised and consistent approach to Commonwealth disaster funding, the Review identified a need to introduce an evidence-based approach to decision making.

Road cut by flood waters of the Wollondilly River, New South Wales.
 Credit: iStock.com/lovleah



At present, disaster funding decisions are mostly reactive and are not understood in terms of consistency, certainty, nor transparency. The Review heard from many stakeholders about how difficult it was to understand how decisions were made, or how to approach making an application for funding. Equally, without a clear basis on which to prioritise decisions, the Commonwealth is unable to effectively weigh efforts to reduce risk and build resilience, nor hold other actors across the disaster management system to account. The Review heard from multiple participants, both government and non-government, about the need to introduce more structure and consistency into the current arrangements if there is to be a collective effort to prioritise investments that reduce the risk and subsequently the impact of events.

The Review recommends that a Nation-wide Natural Disaster Risk Profile (Risk Profile) be developed to aid in the decision-making process and to support the prioritisation of investment efforts. To be truly effective, the Risk Profile should be more than simply an assessment of risk from hazards. The Risk Profile should consider community vulnerability, local capacity, capability and adaptability, and should give equal consideration to risk arising across all types of natural disasters. Recognising that disaster management is a collective government effort, this Risk Profile will need to be informed by comprehensive risk assessments developed

by state and territory governments for their jurisdictions. In turn, local government should be required to develop complementary Disaster Management Plans to aid in the creation of the holistic Risk Profile. However, the Risk Profile should not be solely dependent on local and state/territory-based assessments. The Commonwealth will need to invest in understanding natural disaster related risks to also inform this Risk Profile.

Establishing such a profile is not a small undertaking. The Commonwealth will need to invest in the development of a methodology to support state, territory and local governments in a manner that provides a harmonised assessment process that is relevant to natural disaster risks, but that also recognises individual jurisdictional circumstances.

The Risk Profile should also inform Commonwealth funding decisions across the disaster continuum, not just funding related to the Disaster Recovery Funding Arrangements (DRFA) or Disaster Ready Fund (DRF). Requests for funding that are supported by the Risk Profile, or state and territory risk assessments, should be prioritised if the Commonwealth is to incentivise the deliberate and targeted investment in risk reduction and resilience objectives. To assist all participants in the disaster continuum to be better informed of relevant risks, and government priorities, a public version of the Risk Profile should be made available.

Program reform

While the most gains can be made by focusing on reforms relevant to the national architecture that supports Commonwealth disaster funding arrangements, there are also significant opportunities for improvements in existing programs and initiatives. The DRFA, DRF and the Australian Government Disaster Recovery Payment (AGDRP) are the three largest disaster funding programs, and in combination, account for more than 80% of Commonwealth disaster investment. The DRF is the smallest of these three programs, and the only one not principally focused on response and recovery measures.

Program reform: DRFA

The DRFA has long been the Commonwealth's primary disaster funding instrument, but the Review heard of a range of issues relating to accessibility, equity, effectiveness and its ability to deliver risk reduction outcomes. In the absence of wider national frameworks, the DRFA has become the default mechanism to deliver a range of outcomes. This has distorted its original intent and purpose.

Structurally, the DRFA has accessibility issues whereby program configuration and administrative design hinders some jurisdictions and non-government organisations from accessing support, thereby creating inequities. Further, being an event

based and location defined program, the DRFA will always be limited in its ability to deliver risk reduction and resilience outcomes nationally. Efforts to use the DRFA for broader risk reduction objectives as a product of response and recovery efforts are welcome but run the risk of distorting its primary role as a recovery funding instrument.

Reforms suggested to simplify application of the DRFA, as well as streamline its use within the Review, are designed to create uniformity, ease and consistency in its use. For example, government officials who administer the DRFA describe its application as confusing and difficult to work within. The existing Category A, B, C and D are not well understood and should be replaced with a more intuitive framing that recognises the phases of disaster recovery (short-, medium- and long-term) and also aligns with the recognised disaster domains.

Moreover, the rapid onset of some natural disasters, coupled with increased expectation for government support, means that DRFA decisions are often time pressured. Variances have been experienced amongst jurisdictions, and across disasters, leading to perceptions of inconsistency particularly regarding its more discretionary aspects. The DRFA will benefit from the introduction of a more robust decision-making framework (the Outcomes Policy) and the tightening of expectations.

Australian bush fire destruction, Blue Mountains, New South Wales. Credit: iStock.com/mikulas1





People marching after the floods, Lismore, New South Wales. Credit: iStock.com/PDerrett

Program reform: DRF

The DRF is a program that is welcomed by all stakeholders as the Commonwealth’s primary program that invests in risk reduction and resilience. It has a relatively small funding envelope, as compared to the DRFA or AGDRP, and consideration should be given to its increase if it is to be a truly effective risk reduction measure.

The DRF has the potential to deliver many positive outcomes but is also hampered by accessibility and administrative limitations. Co-funding arrangements, and the misalignment between funding cycle timelines and state and territory government budget processes, has led to mixed responses to how measures are identified. This leads to an emphasis on meeting the requirements of the process, rather than targeting the most strategic and impactful initiatives. The Review has heard how outcomes anticipated under the DRF are not always clearly articulated, and not always informed by strong evidence, limiting the DRF’s strategic potential.

Program reform: AGDRP

The AGDRP is the Commonwealth’s largest single disaster related funding program, having delivered more than \$4 billion over the five year period to 2022-23. Like other programs, the AGDRP has created inequities in its application and is potentially duplicative

of other funding streams designed to support individuals and families in the immediate aftermath of a disaster such as the DRFA hardship payments. The Review has identified opportunities to clarify the intent of the AGDRP and to better target its use to those most in need. The Review has also identified further opportunities to use any saved AGDRP expenditure towards measures that build risk reduction and resilience, including through the DRF.

Engaging beyond government

There is more that can and should be done to engage the non-government sector. Non-government actors across many sectors can play a crucial role in all stages of disaster management. To reform the disaster management system and better represent the voices of disproportionately affected communities, the Commonwealth should enhance its relationships with key non-government sector partners. In addition to the creation of the DMAC, enhancement should begin with a national-level assessment to identify and map existing and potential partners.

Building a more effective disaster management system

There are few policy constructs in Australia that are as complicated and interdependent as Australia’s disaster management arrangements. So much of the relative success that Australia

has had in managing a multitude of natural disaster events has come from the goodwill and cooperation of all participants. These actions include highly structured government interventions through to the incredible community level involvement that is so often volunteer-dependent. While the Review has focused its attention on Commonwealth disaster funding, it has been impossible to consider funding outcomes without an examination of the wider disaster management arrangements that funding exists within. Many aspects of our current arrangements have developed from necessary evolution, not by design.

Unsurprisingly, this evolution has tended to focus disaster management attention on the action of governments, at all levels, and the shared responsibility aspects have not developed at the same pace. In a crisis it is natural to want to simplify arrangements, and this most often results in government intervention to build confidence and deliver a swift and decisive response. However, for a truly efficient funding system, our natural disaster arrangements must draw upon the skill and expertise that exists beyond government. In order to do this consistently, and efficiently, new funding structures and arrangements are required that give proper consideration to risk, capability, and the appropriate decision-making frameworks right across the natural disaster management arrangements. The Commonwealth is uniquely placed to lead this reform as a catalyst for systemic change both

in the way the Commonwealth is organised and structured, but also in the national leadership that naturally accrues to the Commonwealth from all participants in the natural disaster management space.

The Review is acutely aware that the recommendations made in this report will not be easy to implement. They range in scale from those that are systemic in nature down to those that are specific to particular programs. In isolation each recommendation will improve Australia’s disaster management system. However, their true impact will only be realised if they are implemented in a strategic and coordinated fashion.

This of course will rely on involvement from all members of Australia’s disaster management arrangements. Disaster management in Australia is heavily reliant on all levels of government working seamlessly with each other and with communities and the non-government sector. Australia’s disaster management system has no single owner and the success of the reforms will necessarily rely on genuine collaboration.

The task is daunting. Yet a recurring message that the Review has heard throughout the process is that the costs of inaction are considerable and for some, unthinkable. On the other hand, the benefits of a disaster management system that is coordinated, effective and serves the needs of its communities will be extraordinary.



Road closed over a flooded roadway, Renmark (Paringa), South Australia. Credit: iStock.com/BeyondImages

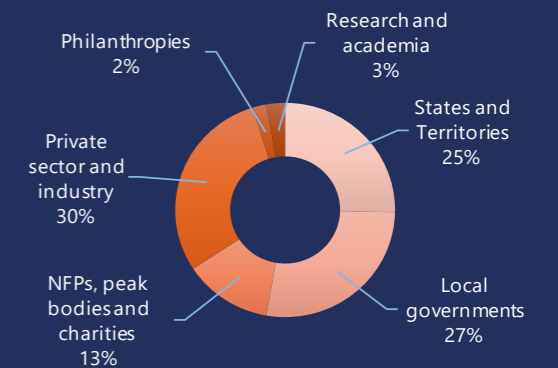
The Review at a glance

This page provides a high-level snapshot of the inputs that inform the Final Report. The methodology, detailed in the appendices, outlines our use of a mixed methods approach.

Stakeholders engaged

- Stakeholder focus groups **146 organisations**
232 individuals
- Local government survey **156 survey responses from**
103 local government areas
- Public submissions **224 submissions¹**
- First Nations focus groups **Five virtual workshops**

Focus group participants



Data analysed

- Calculated **87%** of Commonwealth disaster spend is on recovery programs
- Calculated that **88%** of Commonwealth disaster funding has gone to Built and Economic since 2018-19, with only 12% for Social and Natural domains
- Forecast average total economic costs of **\$40.3 billion** by FY2050 in real 2023-24 terms²
- 569** disaster events examined (2010-11 to 2022-23)
- \$15.9 billion** in Commonwealth disaster funding analysed (2018-19 to 2022-23)

Research conducted

- 197** academic articles, policies, frameworks, guides and legislative instruments reviewed
- Comparative analysis of disaster funding in **four countries** – Canada, USA, Japan and New Zealand
- 58** Commonwealth programs categorised and mapped
- 16** core funding programs explored in detailed analysis
- A review of disaster management and funding literature written by, or in respect to, **Aboriginal and Torres Strait Islander Peoples**

¹ This includes submissions received through the public submission process run by NEMA and submissions sent directly to the Independent Reviewer.

² Note this excludes climate hazard risk.

Recommendations

Theme 1: Commonwealth role and coordination

1. The Commonwealth should **prioritise nation-wide investment in disaster risk reduction and resilience** initiatives.
2. The Minister for Emergency Management should deliver an annual Statement to Parliament that:
 - Defines the Commonwealth's role in prioritising risk reduction, prevention, resilience, and mitigation against natural disasters.
 - Outlines the national natural disaster risk reduction investment priorities.
 - Reports against nationally agreed natural disaster risk reduction and resilience investment outcomes.
 - Updates Parliament on the progress of disaster impacted communities where Commonwealth programs and investment are involved.
3. The Commonwealth should **require all Commonwealth government departments and agencies to incorporate natural disaster risk reduction and resilience** into department or agency strategic considerations.
4. The Department of the Prime Minister and Cabinet (PM&C), jointly with the Coordinator-General of National Emergency Management Agency (NEMA), should **co-chair a coordination mechanism between Commonwealth departments and agencies to promote natural disaster risk reduction and resilience**.
 - This mechanism should ensure Commonwealth decision makers understand the role of relevant programs, with a view to avoiding duplication and ensuring better program information sharing and alignment.
 - In establishing this mechanism, PM&C and NEMA should consider all current Commonwealth emergency and disaster management forums to ensure alignment. This includes reviewing respective terms of reference, frequency at which they meet and the appropriate balance between emergency response coordination and a wider Commonwealth focus on disaster risk reduction and resilience coordination.
5. The Commonwealth, via NEMA, should work with state and territory governments to **adopt a leadership and oversight role in ensuring adequate capability, capacity and/or investment exists** across Australia for local government and communities to adequately respond to natural disaster events, and to engage with appropriate support and funding structures.
6. The Commonwealth should **implement an enhanced national training and exercise regime** that tests local capabilities, but also encourages better information sharing, continual improvement, cross-Local Government Area (LGA) and jurisdiction collaboration, and the identification of gaps or weaknesses in local disaster management capability and capacity.
 - Capability and capacity should be aligned with the requirements of the Nation-wide Natural Disaster Risk Profile (Risk Profile) and the National Natural Disaster Outcomes Policy (Outcomes Policy).

Theme 1: Commonwealth role and coordination (continued)

7. The Commonwealth should **develop a capability, with agreed accountability measures, to capture and track all Commonwealth expenditure** relating to natural disasters.
 - This capability should be digitally enabled and provide the supporting architecture for the Commonwealth to collate all disaster-relevant program information and report progress against the Outcomes Policy.
 - The capability should be informed by existing Department of Finance data collection arrangements.
8. The Commonwealth should **convene a Disaster Management Advisory Council** to provide a constructive view of the Commonwealth's current disaster arrangements, outcomes, and funding options. This Council should report directly to the Minister for Emergency Management and meet regularly (minimum twice per annum) but not be considered part of the decision making or administrative process.
 - A primary purpose of the Disaster Management Advisory Council should include advising on priority projects identified through the Risk Profile, and on how national outcomes could be better achieved.
 - The Advisory Council should be chaired by the Coordinator-General, NEMA and be supported by a secretariat within NEMA.
 - The Advisory Council should be comprised of a representative mix of government and non-government members.
 - Non-government members should be representative of a broad range of knowledge holders: industry, the not-for-profit sector, academia and representation of those groups who are disproportionately impacted by disaster.
 - First Nations should also be represented, with that representation drawn from existing First Nations' governance structures, or as otherwise nominated by First Nations communities.
9. The Commonwealth should **prioritise its data coordination efforts, including the provision of timely decision relevant information** to assist decision makers to manage their risks and satisfy their disaster management objectives.
 - Relevant data includes disaster risk information, climate hazard impact, capability and capacity information and vulnerability data.
 - The data provided should be in a format that is usable by decision makers across all levels of government.
10. The Commonwealth should **ensure that all non-self-governing Australian territories are clearly eligible for financial support** during and after a natural disaster. Specific reference to external Commonwealth territories should be included in the DRFA, and appropriate triggers for support should be included in all other natural disaster funding related programs.
11. The capability and capacity of **NEMA should be aligned with the reforms proposed by the Review**.
 - This includes, but is not limited to, capabilities related to policy and program design, data collection and reporting, program assurance, monitoring and evaluation and program administration.

Theme 2: National Natural Disaster Outcomes Policy

12. The Commonwealth should **develop a National Natural Disaster Outcomes Policy** (Outcomes Policy) that describes the outcomes the Commonwealth is seeking to achieve through its disaster funding.
13. The **Outcomes Policy should:**
 - Outline natural disaster related investment priorities of the Commonwealth and apply to all Commonwealth departments and agencies investment initiatives.
 - Ensure appropriate consideration of investment that is scalable, sustainable, effective, equitable, transparent and accessible.
 - Give deliberate consideration to funding initiatives across the disaster continuum, and particularly across the four domains: natural, social, economic and built.
 - Ensure that all Commonwealth disaster investment is coordinated, monitored and evaluated.
14. To the extent possible, all **current guidelines and frameworks in operation across Commonwealth disaster management funding arrangements should be superseded** by the Outcomes Policy.
15. The Commonwealth should **align all existing and new Commonwealth disaster-relevant programs** to the Outcomes Policy and require them to demonstrate how they are helping to deliver these outcomes.
16. The Commonwealth should **engage with state and territory governments on the design and implementation** of the Outcomes Policy.
17. The Commonwealth should ensure that the Outcomes Policy **includes outcomes that directly reference disadvantaged or disproportionately impacted groups** to ensure their needs are appropriately considered by disaster funding programs.



Theme 2: National Natural Disaster Outcomes Policy (continued)

18. When designing disaster management outcomes for First Nations communities, the Commonwealth should **consider flexible funding arrangements to support community self-determination** towards disaster preparedness, risk reduction and resilience as part of the Outcomes Policy.
 - Existing relevant programs, such as the National Indigenous Australians Agency administered Indigenous Rangers Program, could be expanded to include specific support for disaster risk reduction, resilience and recovery efforts.
19. The Commonwealth should **develop a common vocabulary** for disaster management that can be used at national, regional and local levels in both government and non-government sectors to support the Outcomes Policy.
 - This should include the creation of a consistent set of definitions, roles and responsibilities.
20. The Commonwealth should **introduce a systematic and consistent approach to measuring and evaluating the impact of disaster programs** against the nationally determined outcomes specified in the Outcomes Policy.
21. The Commonwealth should **embed regular sharing of lessons learnt** from program outcomes between state and territory governments, and the Commonwealth, to develop a continuous improvement culture.
22. The Commonwealth should **use reporting established by the Outcomes Policy to inform requirements associated with international obligations** (e.g., the Sendai Framework for Disaster Risk Reduction).
23. The Outcomes Policy should be subject to **periodic review by the Productivity Commission** (or a similar entity with an evaluation focus) to provide advice to government on the degree to which the outcomes are being realised and provide suggestions for improvement.



Opposite page: Aerial view of flooded Bulleen Road, Melbourne.
Credit: iStock.com/PaulFeikema

This page: Burnt and charred bush land after bushfires in Australia.
Credit: iStock.com/lovleah

Theme 3: An evidence-informed, risk-based approach

24. The Commonwealth should **adopt an evidence-informed, risk-based approach** to Commonwealth disaster funding.

25. The Commonwealth should lead the development of a **Nation-wide Natural Disaster Risk Profile** (Risk Profile) to enable the Commonwealth to identify risk reduction and resilience priorities and allow the Commonwealth, states, and territories to address agreed risk. The Risk Profile should:

- Be reviewed (including methodology) every five years but updated annually.
- Be led by NEMA and supported by PM&C.
- Encompass all components of natural disaster risk (hazard, exposure, vulnerability and response) with consideration of risk across all domains (natural, social, economic and built).
- Include consideration of the capacity and capabilities that exist to mitigate risks along with consideration of the capability to embed resilience.

26. The Commonwealth should **develop an agreed methodology to underpin the Risk Profile** that would identify at-risk communities, capabilities, and assets.

27. The Commonwealth should require state and territory governments to **complete complementary disaster risk assessments** to inform the Risk Profile and guide priority areas for Commonwealth investment and support.

Where they exist, climate risk or adaptation profiles developed at local, state and Commonwealth levels should be used to inform the Risk Profile.

28. To support a comprehensive risk-based approach, the Commonwealth should require state and territory governments to **develop local or regional Disaster Management Plans**. These Disaster Management Plans should:

- Identify the readiness of a region to handle a disaster event (including considerations of prevention, preparedness, response and recovery).
- Include risks and strengths that are specific to that area in the natural, social, economic and built domains.
- Contain information that can be used to inform state and territory risk assessments, inform response activities in advance of disaster events, or help inform resource and funding requirements for recovery, disaster risk reduction, and resilience.
- Recognise and accommodate the lived experience, increased cost, risk and complexity of delivering disaster management services to remote communities, and to First Nations communities.

*Opposite page: Emergency team assessing damage after an earthquake, Melbourne, Victoria.
Credit: iStock.com/ShengshengZhao*





Storm near an Australian highway.
Credit: iStock.com/stawroncs

Theme 3: An evidence-informed, risk-based approach (continued)

29. The Commonwealth should **mandate regular capability assessments of local governments** by state and territory governments.

- Where possible, these assessments should form part of the local or regional Disaster Management Plans.
- Priority should be placed on assessing capability, capacity and investment requirements, as well as assessing any barriers to enabling locally led action, including disadvantaged, or disproportionately impacted communities.
- These assessments should help inform broader capability needs considered as part of Recommendation 6.
- Consideration should be given to complementing these local government capability assessments with data held by Regional Development Australia, managed by the Department of Infrastructure, Transport, Regional Development, Communications and the Arts (DITRDCA).

30. The Commonwealth should ensure consistency with state and territory governments by also **mandating regular capability assessments** of all non-self-governing Australian territories that are administered by the Commonwealth to inform the Risk Profile.

- This should ensure that all non-self-governing Australian territories administered by the Commonwealth are considered in and eligible for disaster management support in the form of the DRFA, DRF and other related funding programs.

31. In compiling the Risk Profile, the Commonwealth should **draw upon existing activities** including, but not limited to, the National Climate Risk Assessment and the High-Risk Weather Season Outlook.

- The Risk Profile should incorporate national perspectives on risks and opportunities across the natural, social, economic and built domains, in the context of current and anticipated natural disasters.

Above: Storm over an Australian highway.
Credit: iStock.com/stawroncs

Theme 3: An evidence-informed, risk-based approach (continued)

32. The Commonwealth should use the results of the Risk Profile to work with state and territory governments to **identify and prioritise disaster funding**.

- The outcome of the Risk Profile should inform decision making elements in response to requests for Commonwealth funding, either directly or via co-contribution. Specifically, the results of the Risk Profile should also form a core consideration for future DRFA, and DRF decision making, as well as any other future programs.
- The Risk Profile should inform other Commonwealth programs, such as infrastructure investment, National Construction Code enhancements, climate change initiatives and the like.
- Understanding the Risk Profile will also allow the Commonwealth to place conditions or requirements on funding approvals that are consistent with a more strategically aligned approach to risk reduction and resilience.
- The Risk Profile should be used in concert with the Outcomes Policy to direct funding towards projects that advance risk reduction priorities, and which contribute to the outcomes the Commonwealth is seeking to achieve with its disaster funding.

33. To the extent possible, where programs are requested to be funded by the Commonwealth that have previously been agreed as part of the Risk Profile, **thresholds and administrative arrangements should be streamlined** to encourage pre-planning and a risk-based approach.

34. The Commonwealth should **publicly release a version of the Risk Profile and associated methodology** to inform the efforts of communities, industry, local and state and territory governments, and the not-for-profit sectors, to prepare for future natural disasters.

Theme 4: Program reforms

35. The Commonwealth should **institute a range of program reforms** required to support a disaster management system that is scalable, sustainable, effective, equitable, transparent and accessible.

- All Commonwealth disaster investment programs should be informed by, and consistent with, the proposed Outcomes Policy, and the Risk Profile.



Sydney skyline obscured by smoke from bushfires, Sydney, New South Wales.
Credit: iStock.com/DoraDalton

Theme 4: Program reforms (continued)

Disaster Recovery Funding Arrangements

36. The Commonwealth should **clarify the role of the DRFA** in the current Commonwealth disaster arrangements. This should be achieved through:
 - Reinforcing that the DRFA is a recovery focused funding agreement designed to support state and territory governments to respond to, and for communities to recover from, natural disaster events.
 - Acknowledging that the DRFA is not the primary funding mechanism to achieve disaster risk reduction, resilience, and prevention objectives.
 - Acknowledging that, wherever possible, recovery measures progressed under the DRFA should still seek to reduce future risk (including betterment provisions) and build future resilience.
37. The Commonwealth should **remove existing current DRFA Category A, B, C, and D** and negotiate their replacement with a criteria framework that categorises measures into short- (or immediate), medium-, and long-term recovery initiatives and groups initiatives according to their domain (natural, social, economic and built).
38. The Commonwealth should **clarify and more narrowly define an exceptional circumstances consideration** (currently Category D). This should include:
 - More narrowly and explicitly defining when the exceptional circumstances consideration can be utilised for recovery objectives consistent with a categorisation that acknowledges short-, medium- and long-term recovery.
 - Requiring the completion of a comprehensive impact assessment, or noting if a project was identified as a priority through the Risk Profile.
 - Aligning longer term recovery initiatives considered as part of the (current) Category D in conjunction with the Risk Profile.
39. The Commonwealth should **review the existing DRFA cost sharing arrangements** with state and territory governments, taking into consideration simplicity, equity and the capacity of the individual state and territory governments. Consideration should be given to the appropriate thresholds, reimbursement rates and whether insurance costs should be taken into consideration when determining thresholds.
40. The Commonwealth should **streamline nationally consistent standardised measures**, focused on response and short-term recovery that can be delivered quickly following a disaster event. The standardised measures should:
 - Ensure a nationally consistent activation process/decision making framework that is based on impact, consequence and need.
 - Create certainty and speed for pre-determined funding.
 - Clearly state the eligible activities, their relevant domain/s and the conditions under which the measure can be activated.
 - Adopt streamlined audit and assurance, as well as monitoring and evaluation requirements consistent with the Outcomes Policy.



*Bushfire smoke around Parliament House, Canberra, ACT.
Credit: iStock.com/Daniilc*

Theme 4: Program reforms (continued)

Disaster Ready Fund

41. The DRF should be **underpinned by an investment strategy that is informed by the Risk Profile**. This should be done through:
 - Prioritising state and territory projects that address needs identified through the Risk Profile.
 - Introducing an expanded ‘national projects’ stream that the Commonwealth could use to pursue national risk reduction priorities, as identified by the Risk Profile.
 - Linking the desired outcomes of the DRF to the Outcomes Policy.
 - Aligning the timing and process of decision-making with state and territory governments to ensure proper prioritisation of agreed risk reduction measures.
42. The Commonwealth should **reconsider, with a view to increasing, the current amount of funding allocated to the DRF**, or other similar future programs, to address the disaster risk reduction and resilience priorities identified by the Risk Profile.

Australian Government Disaster Recovery Payment

43. The intent of the **AGDRP should be refined to clarify its role** in the disaster management funding system. This should be achieved through:
 - Prioritising a clear intent statement that clarifies the purpose of the AGDRP.
 - De-conflicting the AGDRP and existing DRFA hardship payments.
 - Considering the AGDRP as part of a holistic package of support to individuals and families, not in addition to existing DRFA provisions. This should include consideration of the Disaster Recovery Allowance (DRA).
 - Aligning eligibility with the clarified role and intent of the AGDRP.
 - Strengthening eligibility based on criteria including geographic location, impact zones and reducing the eligibility timeframes.
44. The Commonwealth should **prioritise the redirection of AGDRP funding**, which occurs because of a refined role, towards natural disaster resilience and risk reduction program/s.
 - The DRF could be a vehicle through which any funding redirected from the AGDRP could be used to progress national disaster risk reduction and resilience priorities.

Theme 5: Non-government and community sector

45. The Commonwealth should **seek to establish enhanced relationships with key non-government and private sector partners** as part of reforms to the disaster management system.
46. The Commonwealth should **conduct a stocktake to map existing partnerships** in natural disaster management across various sectors including but not limited to, construction, healthcare, infrastructure, logistics, technology, philanthropy and the charitable sector.
 - This mapping should inform membership of the Disaster Management Advisory Council (Recommendation 8).
47. Disaster funding investments should **elevate the role of local First Nations leadership** in emergency management through formal recognition and resourcing for their actions and decision-making during disasters.



*Native Australian Banksia seed pods open after bushfire, Kangaroo Island, South Australia.
Credit: iStock.com/SerenaFindlay*



Implementation and design

After the floods, Lismore, New South Wales. Credit: iStock.com/PDerrett

The Review acknowledges that implementation of these recommendations will be complex. The Review heard on many occasions about the strong need for reform but has also seen the reluctance that sometimes follows due to the inherent interdependent nature of the system, the federated model in which it operates, and the risk of unintended consequences. The common denominator across the entire system is the Commonwealth, and for this reason it is incumbent on the Commonwealth to lead these reforms if it is to truly create a more efficient and effective set of disaster management funding arrangements.

This chapter provides overarching principles and guidance to support successful implementation, should the recommendations be accepted. It also explores the design, sequence, and interdependencies among recommendations, offering practical advice for implementation of future reforms. The purpose of this chapter is not to provide the Commonwealth with a blueprint for how it

could implement the Review’s suggested reforms. This chapter does not discuss a detailed timeline for implementation of the recommendations nor provide a step-by-step guide for their adoption.

The Review also remains conscious that the current national disaster arrangements continue to evolve. Many stakeholders commented on the constantly changing nature of the frameworks that comprise Australia’s disaster management system and spoke of how this reduced their capacity to engage with a continually evolving system. This presents significant implementation risk when considered in the context of other reviews being undertaken concurrently to the Review.

These include:

- The review of the Australian Government Crisis Management Framework by the Department of the Prime Minister and Cabinet (recently concluded)

- Independent Review of National Natural Disaster Governance Arrangements (recently concluded).
- The Senate Select Committee on Australia’s Disaster Resilience.
- The House of Representatives Standing Committee on Economics inquiry into insurers’ responses to 2022 major floods claims.
- The Council of Australian Governments (COAG) initiated review of the Disaster Recovery Funding Arrangements.

- Independent Review of the Australian Climate Service.

These are a sample of the numerous reviews currently underway, or recently completed. Their findings will intersect with the recommendations of the Review and should be considered during its implementation.

Below are eight principles that should frame future decision-making for Commonwealth funding and be used as a guide when implementing the reforms recommended by the Review.

Principles for Commonwealth disaster funding

Principle 1: Disaster management is a shared responsibility between governments, the non-government sector and the community.

Successful disaster funding arrangements reflect the shared responsibility of disaster management and align with agreed division of roles, including with the non-government sector. Funding program design should emphasise the obligations that all participants, government, non-government, community and individuals have to ensure that disaster risk is reduced through mitigation, prevention and preparedness.

Principle 2: The Commonwealth should prioritise investment in measures that reduce risk and build resilience.

Investment across the disaster continuum should seek to reduce risk and build resilience as part of program design. Commonwealth disaster funding programs should embed preparedness, prevention and mitigation as standard aspects of building resilience and reducing risk.

Principle 3: National natural disaster management arrangements must be clear on their intent, while retaining adaptability to ensure they are scalable, effective, and enduring.

As the severity, impact and vulnerabilities to natural disaster events continue to evolve, it is important that the national natural disaster management arrangements retain a level of flexibility, but within clear guidelines. This will help ensure that they can adapt to this evolution and to the circumstances of individual events. Importantly, they must also enforce a clarity of role, responsibility, and intent.

Principle 4: Commonwealth disaster funding arrangements must be based on robust, evidence-informed, decision making.

To avoid reactive, inconsistent and potentially maladaptive responses, the Commonwealth should prioritise evidence-informed approaches to program design. Evidence may include, but is not limited to, financial data, program evaluation outcomes, lessons learned, emerging theory and practice and feedback from relevant stakeholders.

Principles for Commonwealth disaster funding (continued)

Principle 5: The natural disaster management arrangements, and the funding programs that support them, must be accessible and equitable by design.

The disaster management system and its constituent programs should be accessible and equitable for their intended recipients. This should be consistent with the Commonwealth's commitment to provide a sufficient safety net for Australians in need. This applies to all aspects of the disaster continuum.

Principle 6: All Commonwealth disaster expenditure should be able to demonstrate its return on investment and how it represents value for money.

Commonwealth programs, particularly those that aim to deliver disaster risk and resilience outcomes across the natural, social, economic and built domains, must demonstrate their return on investment. This should inform an assessment of their value for money to ensure that the Commonwealth is directing expenditure in the most effective ways.

Principle 7: Commonwealth disaster expenditure must be traceable, and the outcomes of expenditure must be monitored and evaluated.

The Commonwealth must lead by example, with disaster funding programs that are accountable, coordinated, transparent and consistent in their application. Agreed monitoring and evaluation requirements should be included in all programs, regardless of their delivery mechanism.

Principle 8: Commonwealth funding initiatives should build upon, and align with, the development of capacity and capability in the system.

Commonwealth programs should be considered in the context of the capacity and capability of existing arrangements to absorb and deliver on the intent of those programs. The Commonwealth should be assured that sufficient capacity and capability exists and where gaps are observed, the Commonwealth should seek to address these deficiencies in partnership with state and territory governments. Commonwealth funding should consider the existence, or otherwise, of sufficient planning, assessment and governance arrangements before investments are approved.

Designing the National Natural Disaster Outcomes Policy

The National Natural Disaster Outcomes Policy (Outcomes Policy) is among the most important reforms suggested by the Review, but its implementation will be complicated and challenging. The final design and implementation of the Outcomes Policy will be dependent upon the Commonwealth articulating its priorities, as well as appropriate consultations with Commonwealth departments, agencies and state and territory governments. Implemented well, the Outcomes Policy will clearly outline the Commonwealth's aspirations and expectations.

It is important that the Outcomes Policy applies to all Commonwealth related programs across the natural disaster continuum, not just those administered by NEMA. While every effort should be made to align existing funding programs with the Outcomes Policy, the focus should be on ensuring that all future programs, initiatives and funding decisions are considered in the context of the Outcomes Policy. There may need to be grandfathering of certain funding program guidelines that currently exist.

How the Outcomes Policy operates in practice will be crucial. The Outcomes Policy should allow the Commonwealth to set clear and consistent expectations and provide increased transparency of decision-making. To that end, it should focus on the following:

- Aligning Commonwealth effort to Commonwealth priority objectives. The Commonwealth has several tools with which to shape and influence natural

disaster management arrangements. Policy development, regulation, and funding form one aspect, but so too does the national leadership and convening authority of the Commonwealth. The Outcomes Policy provides a lens through which all efforts by the Commonwealth, not just NEMA, should be considered.

- Require risk reduction and resilience as a core consideration of any proposal, although other objectives should also be considered. While the Review recommends that the Commonwealth should clearly prioritise disaster risk reduction and resilience, this will not always be possible. The below list is not exhaustive, and it is important that the Commonwealth takes the time to consider its priorities. However, it could include these considerations:
 - Preferring those funding measures that align with the Risk Profile.
 - Building capacity and capability across the disaster management system.
 - Building individual or business support post natural disaster.
 - Supporting state and territory governments on an assessed needs basis.

*Bushfire in Australia.
Credit: iStock.com/ascione*



A burnt tree flourishing with new growth.
Credit: iStock.com/lovleah



Critically, the Outcomes Policy provides the opportunity for a clear decision-making framework for funding programs and their measures to be designed and implemented. Consistent, transparent, and repeatable decisions will go a long way to alleviating concerns of the natural disaster community. The Outcomes Policy will need to state openly what those decision-making considerations are, and they could include:

- *Have appropriate cost sharing arrangements been considered?*
- *Has the funding considered impact across the four recognised domains (natural, social, economic and built)?*
- *What part(s) of the established natural disaster continuum is the funding targeted towards?*
- *Are the goals and objectives of the funding request clear? How does it address specific needs?*
- *Does the funding align with priorities identified through the Risk Profile and Disaster Management Plans? How does it intersect with other existing or planned programs?*
- *Has the funding request built in achievable monitoring and evaluation criteria that enables continuous, and shared, learning?*
- *Is there robust, but proportionate, impact or consequence planning as part of the funding?*
- *Has a wide stakeholder or delivery group been factored in – government and non-government?*
- *What are the expectations for reporting and assurance – are they scalable and proportionate to the initiative?*
- *Is the timeframe of the funding clear and appropriate for the intended aim and scale of outcomes?*

The Outcomes Policy should include articulation of these decision-making considerations in addition to the eight principles described earlier.

As the Review has said throughout, the Commonwealth has two significant levers at its disposal to bring about change in

the way natural disasters are managed: its national leadership, and its policy/funding considerations. The Outcomes Policy is core to both of those.

Sequencing and prioritisation of reforms

The recommendations have been sequenced deliberately so that that the earlier recommendations provide the foundations for the latter recommendations. The earlier recommendations are critical structural and role reforms, while the latter recommendations are program specific. Consequently, the sequence of the recommendations provides an order in which they should ideally be implemented.

The recommendations are highly interrelated and have been drafted and sequenced in a way that is intended to magnify their individual impact. While the program reforms may appear to be most tractable to implement, their overall impact is strongly dependent on the structural reforms, namely, clarifying the Commonwealth's role; development of an Outcomes Policy; and development of an evidence-informed Risk Profile.

Consequently, the reforms to programs are critical, but not in isolation of the broader structural and role reforms. Without these larger reforms, the impact of reforms to individual programs will be less effective and lead to similar issues of consistency, transparency and duplication that has been observed by the Review. Reforms to the DRFA, for instance, should commence quickly, but not to the exclusion of commencing reforms to overarching architecture arrangements such as the Outcomes Policy and Risk Profile.

From the perspective of the Review, the two most urgent and important recommendations relate to the Commonwealth clarifying its role in a reformed disaster management system and the development of the Outcomes Policy. The Commonwealth must approach disaster policy from a whole-of-Commonwealth perspective and create a range of mechanisms to better coordinate its activities and reduce key person/team dependency for critical functions. In parallel, the Commonwealth must also clarify, both in commitment and action, the role that it will adopt in the disaster management system. This includes adopting a leadership role for disaster risk reduction and resilience and continuing to support state and territory governments as they lead the response and recovery from a disaster event.

Relatedly, the Outcomes Policy provides the architecture to which all recommended reforms are oriented. This makes the Outcomes Policy a critically important reform that should set the foundation and tone for the numerous other reforms. It is also important that the Outcomes Policy is not simply added to the existing suite of guidance documents, frameworks, guidelines and the like. Efforts to consolidate and simplify current arrangements will be well received and likely result in greater participation in the reform process.

There are some recommendations which the Commonwealth could implement quickly that would deliver immediate and significant benefits. For the DRFA, this includes clarifying its role in the disaster management system as an instrument for recovery, and clearly defining use of the existing exceptional circumstances consideration under Category D. This could initially be achieved through revised guidance to state and territory jurisdictions on the expectations of the Commonwealth while broader reforms are implemented.

Reforms at the Commonwealth level around clarity of role, coordination of effort and the creation of a Disaster Management Advisory Council can also be achieved quickly. The Review is also conscious of the complementary work begun by NEMA as part of the development of a National Natural Hazards Disaster Risk Profile (NNHDRP).

Implementation will take time

The Review has developed a set of recommendations that are envisioned to be implemented immediately but recognises that it will take time for the reforms to reach full maturity and for their impact to be felt. These recommendations will be challenging to implement, but the benefits of a disaster management system that operates effectively and that builds the resilience of communities to growing disaster risks will have significant impact. Striving for immediate perfection of these reforms should not impede their progress. The reforms will take time, but it is critical that they commence.

Revising the Commonwealth’s disaster arrangements will require commitment to changes that range across structural and operational levels and over the short-, medium-, and long-term. Structural change requires ongoing commitment to collaboration with other governments, the private sector, not-for-profits and communities themselves.

This is largely due to the practicalities, and reality, that Australia’s national disaster management arrangements are a shared responsibility between all levels of government and the Australian community, with significant interdependencies. Effective collaboration requires the establishment of robust structures, systems, and ways of working which support consistency and dependability rather than being ad-hoc and reliant on the efforts of teams or individuals in isolation. By pursuing these long-term reforms through a collaborative approach which seeks to acknowledge these interdependencies, there is a much greater likelihood of success.

The Review has identified that there are inconsistencies in the understanding of, and use of data – fiscal expenditure data, and hazard and impact data in particular. This has led to gaps in efforts to build an evidence base which can effectively inform decisions. While critically important, data and evidence limitations should not limit taking well-considered steps towards reforming the existing arrangements, consistent with the recommendations of the Review. Adopting a risk-based approach, for instance, will take time to properly mature and to generate the level of data and evidence that will ultimately see it as the foundation of Australia’s disaster management arrangements. Notwithstanding this, the Commonwealth should take steps towards achieving this foundational capability, while data and evidence capability mature, and become more widely available and understood.

A national resilience agenda

The Review is aware of the work currently being led by the Department of the Prime Minister and Cabinet and the Department of Home Affairs on the implementation of an all-hazards national resilience framework. While this work was outside of the Review’s Terms of Reference, there is a significant opportunity for the Commonwealth to take a holistic view of hazard risk reduction to build national resilience. The recommendations of the Review should be considered as a complement to that work and will support a whole-of-Commonwealth approach to resilience.

The Review has considered risk reduction and resilience through a lens of natural hazards, and specifically rapid onset extreme weather events. In doing so the Review has also adopted an expansive definition (over the page) that has application beyond the disaster management system.

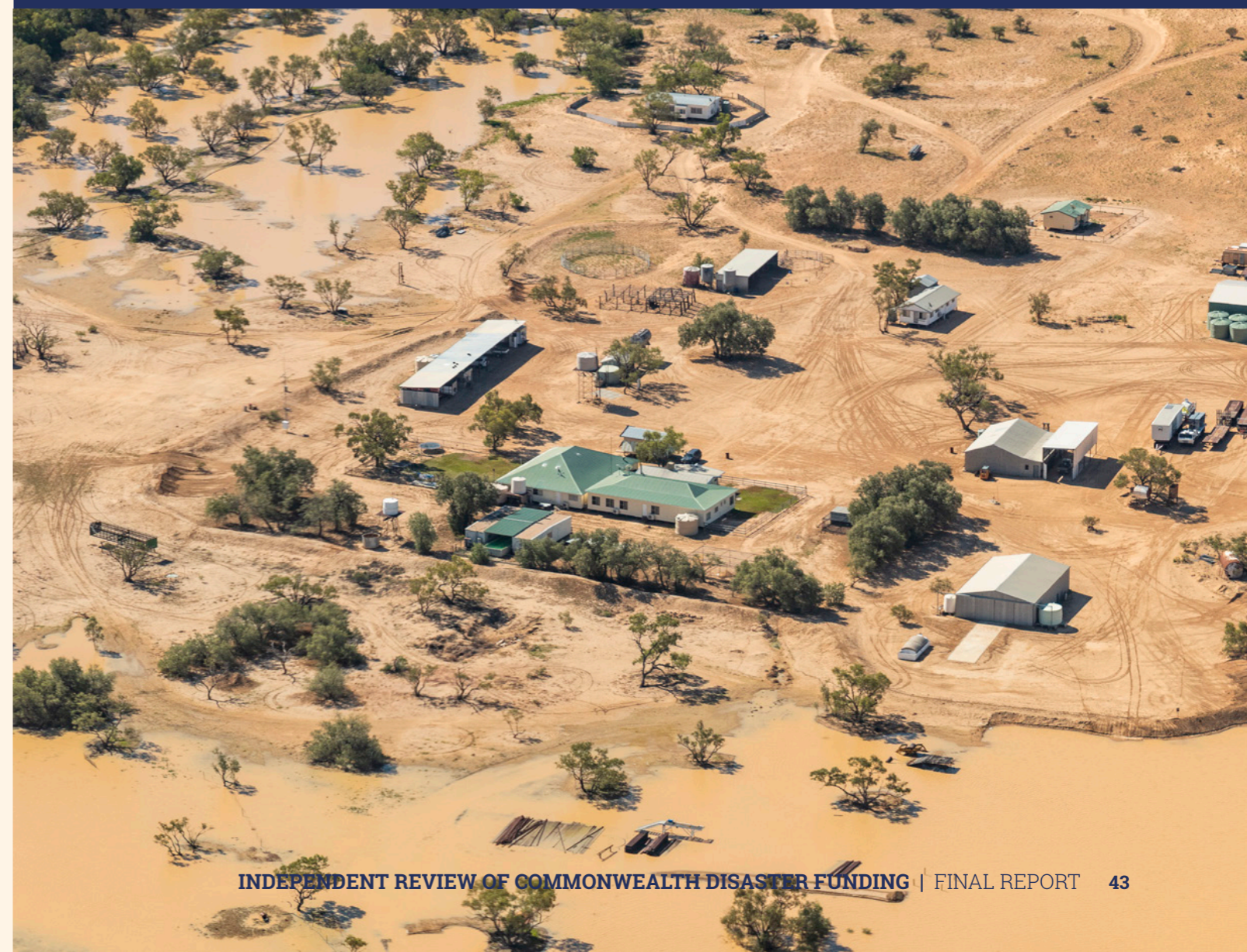
For the Review, resilience is defined as action/s which seek to foster one or more of the following outcomes:

- **Reducing exposure** of assets and other things we value in the natural, social, economic and/or built domains to a hazard or hazards. For example, relocating flood damaged assets from hazard zones.
- **Reducing sensitivity** of assets and other things we value in the natural, social, economic and/or built domains in the event they are exposed to a hazard or hazards. For example, designing a building to a higher Bushfire Attack Level.
- **Increasing adaptive capacity**, by enabling communities and systems to modify or change their characteristics and behaviours to cope with actual or anticipated stresses. For example, improving a community’s understanding of flood risk by providing access to current flood risk information.

- **Increasing coping capacity**, by enabling communities and systems to use their available resources and abilities to face adverse consequences. For example, through community support programs that foster support networks and social inclusion.

To support a national resilience agenda, the Commonwealth could consider adopting or adapting this definition. This definition was used throughout the Review and has been adapted from international best practice. Using such a definition does not assume it should be policed tightly, which would stifle actors from using the term flexibly to describe relevant issues in their context. Instead, it should serve as a base set of common terminology. It was well received by stakeholders who found it captured the complexity of the concept, while also being accessible.

*The flooded town of Birdsville, Queensland.
Credit: iStock.com/Ingrid_Hendriksen*





CHAPTER ONE

Role of the Commonwealth

*Kangaroo in burnt forest after bushfires.
Credit: iStock.com/PhilipThurston*



An emergency team responding to a Melbourne earthquake. Credit: iStock.com/ShengshengZhao

Chapter summary

The Commonwealth has a unique opportunity to enhance its governance and coordination with respect to disaster management, specifically disaster funding, and in doing so create the environment for national success across all participants in the disaster management sphere.

A clearer articulation of Commonwealth intent, specifically as it relates to disaster risk reduction and resilience, will help deliver the national leadership required to strengthen national arrangements and in turn will give greater assurance to the Commonwealth regarding its disaster-related initiatives.

The Commonwealth's role is not confined to providing funding support to state and territory governments on a reactive basis. Expectations, as well as actions, have shifted over recent years and events. This shift in expectation and effort has not been matched with an equivalent development of structures and governance arrangements.

The Review has found that a lack of cohesion and significant variance exists across the Commonwealth in regard to roles and responsibilities, capabilities and general understanding of the disaster management continuum. While many disaster management initiatives exist, there is no overarching and guiding intent. This limits the Commonwealth's ability to take a holistic

approach and impedes effective decision making.

The recent creation of NEMA has significantly shifted Commonwealth capability and established an enduring Commonwealth presence across the disaster continuum. However, the arrangements within the Commonwealth have not yet sufficiently matured to support a broader realisation of Commonwealth objectives.

The Commonwealth must specify its role in the disaster management system and implement a range of reforms. The Commonwealth should prioritise nation-wide investments in risk reduction and resilience (informed by the Nation-wide Natural Disaster Risk Profile (Risk Profile)) and support state and territory governments to make similar investments. Disaster arrangements must be considered a whole-of-Commonwealth issue and the Commonwealth should coordinate its activities accordingly. For this, NEMA should remain the disaster policy owner of the Commonwealth but should be supported by the Department of the Prime Minister and Cabinet in this role, particularly in this transition period, as Commonwealth arrangements mature. Together, these agencies should maintain a single view of Commonwealth disaster expenditure and, most importantly, the impact of this investment.

Chapter one

“There is a lack of clarity around the roles of all levels of government in the disaster continuum.”

- Commonwealth department/agency focus group participant

“Small businesses are confused about the roles of different levels of government in disaster response and funding.”

- Small business sector focus group participant

changed how disaster funding arrangements have been used. This has resulted in increased expectations for the role of governments, including the Commonwealth. Changes in precedent and expectations have been identified by a range of Commonwealth and state and territory government stakeholders.

“The disaster affected communities in [state] expect that with each disaster, the government will become more prepared and have a better plan for the next disaster, especially since the projected intensity and frequency of disasters is increasing.”

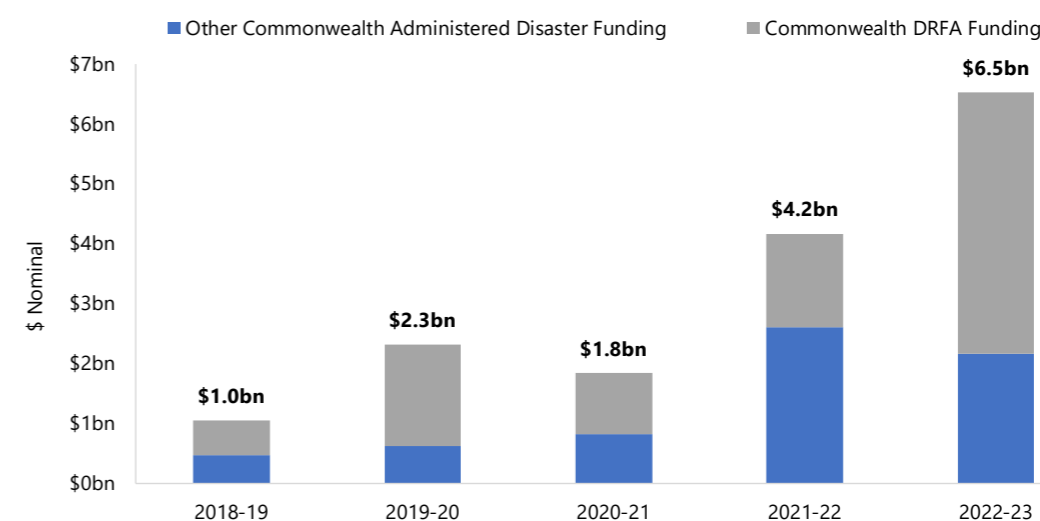
- State/territory government focus group participant

It is an enduring principle that state and territory governments retain primary responsibility for emergency management. The Commonwealth's primary role in the disaster management system has been to provide financial support to the states and territories when they have exceeded their capacity, or if the Commonwealth has specific capabilities beyond the remit of jurisdictions. While this enduring principle remains, recent disaster events have brought into focus this division of responsibility, with the Commonwealth assuming a more prominent role including soon after a disaster occurs.

While the role of the Commonwealth has historically been one of support in exceptional times, the frequency and severity of disasters – particularly those which cross jurisdictions – has

Financial support provided by the Commonwealth has grown considerably since 2018-19. Analysis of a compilation of Commonwealth administered programs relevant to disaster management since 2018-19 (the NEMA Disaster Resilience Funding Dataset, herein referred to as the Funding Dataset) demonstrates a significant increase in expenditure (see Figure 1). In 2022-23 alone, the Commonwealth provided over \$6.5 billion of disaster funding, with the majority of that funding directed towards responding to significant disaster events which occurred during this period, such as the NSW floods of July 2022 and the Southeast Queensland floods of February 2022. This resulted in a \$2.4 billion, or 57%, increase on the previous year's outlay.

Figure 1 Annual total Commonwealth administered disaster funding | 2018-19 to 2022-23



Source (Figure 1): NEMA 2023d and NEMA 2023e. Notes: (1) Chart presents Other Administered Funding (Category 1 and Category 2a of Disaster Resilience Funding Dataset), and DRFA Funding. (2) Category 1 refers to Commonwealth spend where the primary purpose of the activity is to address disaster resilience, while Category 2a spending is associated with an activity that was not initially established in response to a specific natural disaster risk, however, it has since been extended towards disaster resilience and the funding amount attributable to disasters can be quantified. (3) DRFA funding is based on the time of expenditure.

In total, Commonwealth administered expenditure over the period 2018-19 to 2022-23 was \$15.9 billion. The two largest programs that account for the Commonwealth's disaster recovery expenditure are the Disaster Recovery Funding Arrangements (DRFA) and the Australian Government Disaster Recovery Payment (AGDRP). As shown in Figure 2, the range of measures funded by the DRFA equate to \$9.2 billion, just over half of the Commonwealth's total spend on disasters. In contrast, the AGDRP is by far the most expensive single program, costing the Commonwealth \$4.1 billion in the period 2018-19 to 2022-23.

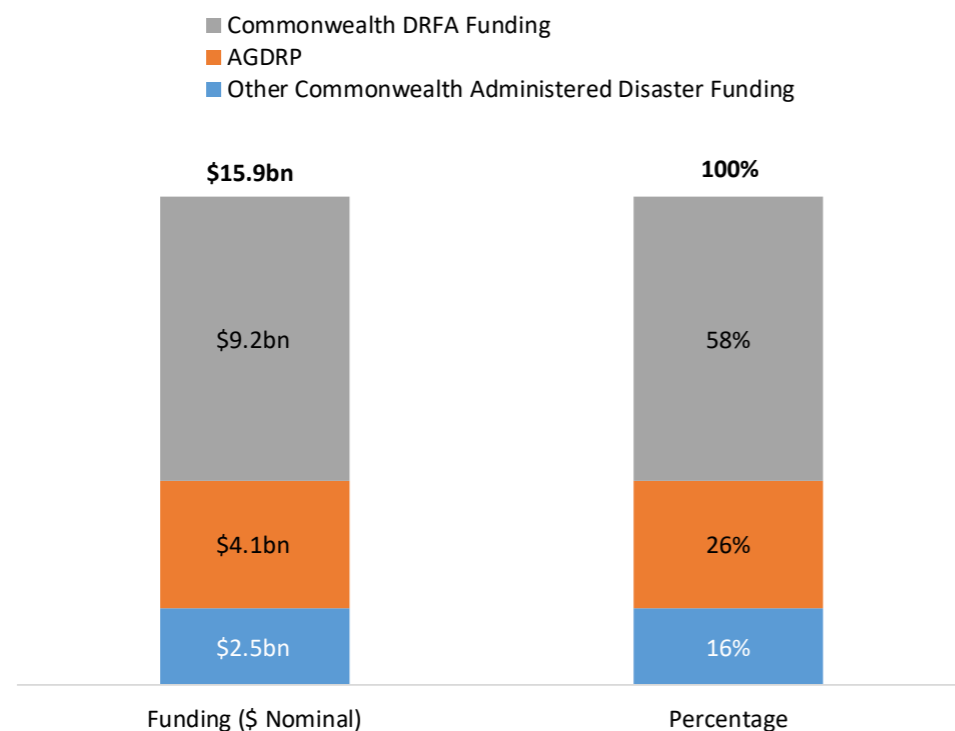
The full Commonwealth funding landscape for natural disasters is extensive, with numerous grants, capability programs, funding streams and in-kind support injected into the disaster management system. The marked increase in Commonwealth expenditure is the result of several drivers. These include a shifting

disaster profile, changes in how funding arrangements are being used by state and territory governments and the Commonwealth, and growing expectations on the part of the Australian public for a more prominent Commonwealth role.

As part of the Review, consideration was given to the forecasted total economic cost of natural disasters and the associated Commonwealth funding requirement in 2049-50 (see Figure 3). The outputs of the financial and economic modelling are presented by jurisdiction based on the average estimate which excludes the impact of climate change.

The 2049-50 results estimate that the anticipated underlying growth in the impact of natural disasters is due to an increased population, increased number and average size of dwellings at risk, and changes in building materials. The cost and associated

Figure 2 Overview of largest Commonwealth disaster programs | 2018-19 to 2022-23

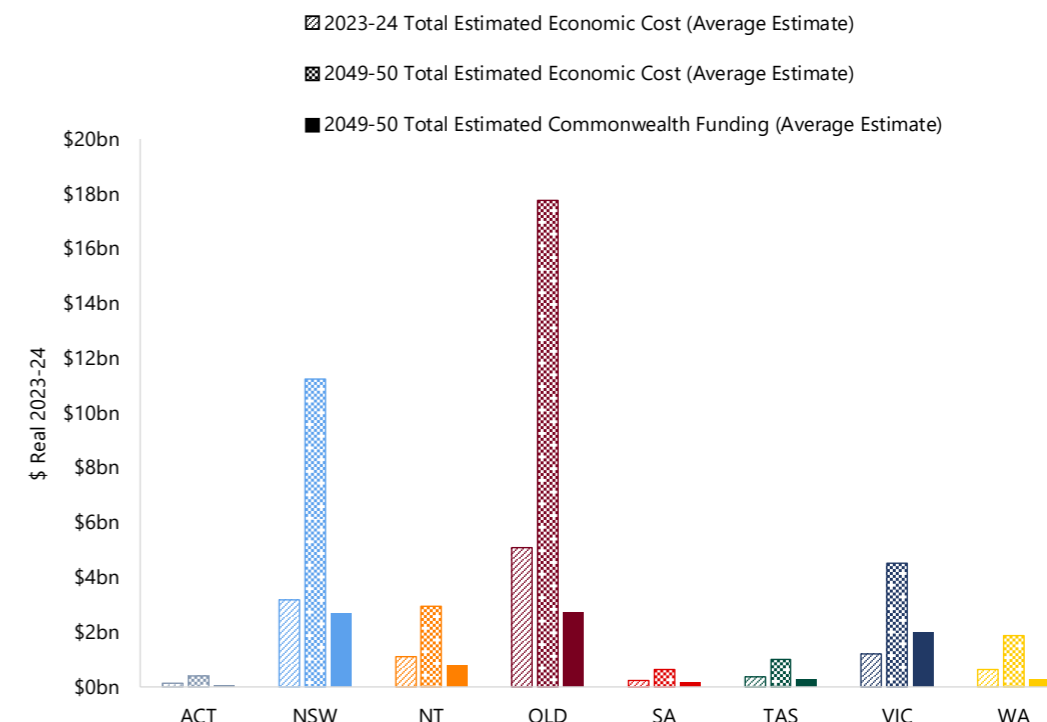


Source: NEMA 2023d and NEMA 2023e. Notes: (1) Chart presents Other Administered Funding (Category 1 and Category 2a Disaster Resilience Funding Programs), and DRFA Funding. (2) Category 1 refers to Commonwealth spend where the primary purpose of the activity is to address disaster resilience, while Category 2a spending is associated with an activity that was not initially established in response to a specific natural disaster risk, however, it has since been extended towards disaster resilience and the funding amount attributable to disasters can be quantified. (3) DRFA funding is based on the time of expenditure.

Commonwealth funding are forecast to continue to increase, assuming the current approach to disaster funding continues.

not necessarily new and was identified as early as the 2015 Inquiry into Natural Disaster Funding Arrangements (Productivity Commission 2015). That inquiry observed that the level of support

Figure 3 Total economic cost and associated Commonwealth funding of natural disasters by jurisdiction | 2023-24 and 2049-50



Source: Deloitte 2024

From a national perspective, based on the average estimate in real 2023-24 dollars, the estimated total economic cost of natural disasters is forecast to increase from \$11.8 billion in 2023-24 to \$40.3 billion in 2049-50. Based on the forecast total economic cost of natural disasters in 2049-50, it is estimated the Commonwealth will have an associated disaster funding requirement in of \$8.8 billion in 2049-50.

provided by the Commonwealth extended beyond being a safety-net. In the view of the Productivity Commission, this meant that "instead of being an 'insurer of last resort', the Commonwealth was in some respects becoming the 'insurer of first resort'". Observations and feedback from Commonwealth stakeholders in particular support this view, though it was also discussed by several state and territory governments, non-government and private sector stakeholders.

Clarifying the Commonwealth's role and establishing a whole-of-Commonwealth narrative

Changes in expectations of the Commonwealth's role across the disaster continuum has both resulted from, and been exacerbated by, confusion about funding responsibilities. This is

"What we've seen in the last few years is that the role of the Commonwealth is shifting, almost by stealth, as people scramble to respond to the many events which have been occurring."

- Commonwealth department/agency focus group participant

Consequently, and due to a lack of clarity in roles and responsibilities, the Commonwealth's existing disaster management arrangements

are under increasing stress. Feedback from stakeholders, from all levels of government and non-government actors, highlights a recurring theme in regard to the existing funding arrangements: the imperative for consistency, clarity, and coordination of effort. Indeed, stakeholders consistently identified these attributes as lacking from the current arrangements.

“Federal Government released small business grants in April 2022. A few months later, the state government released grant funding. Small businesses who not only had applied to state government previously but also for a few months were going through the application process for federal government. It wasn’t easy for these small businesses to be able to lift and shift the information.”

- Banking and financial sector focus group participant

An expanding remit for Commonwealth funding has come into sharp focus following successive, national-scale disasters in the past five years. Funding decisions made, for instance, during the Black Summer bushfires set new precedents for the kinds of support that the Commonwealth will provide during disasters. This includes direct delivery of services that are typically provided by other levels of government.

There are key policies and legislation which aim to define the Commonwealth’s responsibility. For example, the Australian Government Crisis Management Framework (AGCMF) describes the Commonwealth’s role in disaster management as:

- Coordination of national response to emergencies,
- Financial assistance to states and territories in disaster events,
- Supporting states and territories in disaster events that exceed the capacity of the states and territories to manage, and
- Providing leadership on national management strategies, building national resilience for the states, territories, industry and public.

The Review understands the AGCMF is also currently being reviewed, and while existing frameworks are largely still appropriate, they do not capture the reality of how support and funding is delivered in the evolving disaster management system.

More prominent involvement of the Commonwealth in very early response and recovery phases has set a precedent and fostered an expectation of a more extensive Commonwealth role. This has led to a shift in the use of existing arrangements and support mechanisms as traditional structures attempt to keep pace with changing expectations, and a shifting disaster risk profile.

“I genuinely don’t know how we would have coped without ADF support. We don’t have standing capacity in remote regions so we are reliant on the Commonwealth and the ADF and their ability to mobilise rapidly and move into those regions that we can’t in the same way.”

- State/territory government focus group participant

One prominent example of this is the sizeable measures funded under Category D of the DRFA in response to recent large storm and flood events. Analysis of recent expenditure by the Review demonstrated that significant investments in infrastructure betterment, voluntary property buy-back schemes and household raising programs occurred largely in NSW, Queensland, and Victoria (see *Chapter 4* for a detailed discussion of this). These are measures that historically have not been funded at this scale before under the DRFA.

Analysis of public submissions demonstrated a misalignment between the stated role and responsibilities of the Commonwealth and the expectations of stakeholders. Many cited a need for greater consistency in the goals and objectives of the Commonwealth across the disaster management continuum, to allow for better planning and greater certainty. Commonwealth, local government, and industry stakeholders noted that inconsistency can create both gaps, which are filled in ad-hoc or discretionary ways, and duplications which result in confusion and inefficiency. As raised by state and territory governments, Commonwealth entities and several not-for-profit stakeholders,

Bushfire destruction with a burnt property, Bell, New South Wales. Credit: iStock.com/mikulast

“The Constitution is now inconsistent with wider expectations. We need to make these two things consistent so that there is a shared understanding of the Commonwealth’s role.”

- Commonwealth department/agency focus group participant

duplication and gaps were evident in funding programs, with policy grey areas emerging particularly on issues such as disaster mitigation, preparedness, and risk reduction.

“Most interactions between the Commonwealth and states are not set up to deliver most effective outcomes and the response can be clunky.”

- State/territory government focus group participant

Greater clarity is also required within the Commonwealth. The Review has observed that the Commonwealth’s strategic objectives, as well as the distribution of responsibilities across departments and agencies, lacks a clear and cohesive narrative. Several Commonwealth government departments noted that with shifting expectations and the absence of a whole-of-Commonwealth narrative, there was a distinct lack of clarity about how each department was expected to contribute, when to engage, and how. Others emphasised the value of a holistic narrative to link and de-conflict efforts across the Commonwealth.

“We get questions about wildlife care and questions about what the Commonwealth is doing in this area – but there is ambiguity if that is the Commonwealth or states’ responsibility, and if our agency is even the correct point of contact for this. There needs to be a better public understanding of where to go for help.”

-Commonwealth department/agency focus group participant

A clear narrative from the Commonwealth that articulates its objectives in disaster management would provide a strong foundation for the Commonwealth to then make funding decisions and provide a consistent baseline from which new policies, frameworks or legislation could be developed. This clarity also extends to other levels of government and non-government organisations, who would more easily be able to articulate their role within a clearer national structure.

The incidence, impact and frequency of natural disasters means that these issues are front of mind for the Australian community. Media interest in government responses coupled with growing expectations of Commonwealth leadership underscores the prominence of disaster management as a nationally significant issue. It is for this reason that the Review recommends the Minister for Emergency Management deliver an annual Statement to Parliament. The Statement is an opportunity for the Commonwealth to clearly articulate its role and demonstrate how it is fulfilling that role.

“There’s so much work being done in agencies around resilience, risk reduction and preparedness, the overall narrative of what the government is trying to achieve at the moment is what’s missing – there isn’t an overlaying piece.”

- Commonwealth department/agency focus group participant

The Statement to Parliament should acknowledge that the Commonwealth is prioritising investment in disaster risk reduction and resilience and outline its national risk reduction priorities. To demonstrate how the Commonwealth is better coordinating and tracking the impact of its disaster funding, the Statement should also outline progress towards the outcomes articulated in the proposed National Natural Disaster Outcomes Policy (Outcomes Policy) and the impact such investment is achieving. Additionally, the Minister should also use the Statement to discuss how Commonwealth programs and investments have benefited disaster impacted communities.

The Statement should encompass all relevant Commonwealth activity across the continuum. It will be important for the Commonwealth to acknowledge its efforts in supporting state and territory governments, particularly during the response and recovery phases. However, the Statement should focus on the Commonwealth’s efforts across the entire disaster continuum, and particularly those that address risk reduction and the building of community resilience. The Statement is a clear opportunity for the Commonwealth to create the narrative of its investment priorities, its leadership on risk reduction and resilience as well as set the tone for Australia’s disaster management efforts.

Demonstrating national leadership on risk reduction and resilience

“It is the responsibility of the Commonwealth to embed disaster resilience and preparedness into national policies and frameworks.”

- Commonwealth department/agency focus group participant

The projected increase in frequency and severity of disasters, expanding community expectations for effective support and Australia’s existing commitments to the Sendai Framework for Disaster Risk Reduction (Sendai Framework) have contributed to a greater focus on the role of resilience and risk reduction in disaster funding approaches. The Review finds that there is significant opportunity for the Commonwealth to play a leading, constructive, and visible role in encouraging resilience and risk reduction nationally.

The benefits of investing in resilience and risk reduction are well documented in grey and academic literature. There is consensus within the literature that prior investment in disaster risk reduction provides greater return than investing in response and recovery focused measures alone. This is reflected in the Sendai Framework, which advocates a shift from managing disasters to managing risk. This shift points to an emerging body of literature around the co-benefits delivered from disaster risk reduction measures, particularly in respect to the social and natural domains. Indeed, Commonwealth stakeholders reflected that funding reforms in other portfolios, such as the Future Drought Fund administered by the Department of Agriculture, Fisheries and Forestry, have already shifted focus to increasing resilience to any kind of shock, rather than being activated by events.

This corroborates community and industry perspectives gathered throughout the Review. Disaster risk reduction and resilience, and the associated return on investment, are amplified in the context of the projected increase in frequency and severity of disasters. As disaster impacts have grown, so has the community’s

need for support.

Disaster risk reduction and resilience investments, whether structural or non-structural, work to intercept and lessen the potential impacts of disasters before they occur, providing a more cost-effective approach to disaster management. Developing a solid baseline for understanding and measuring the return on investment for these measures is not straightforward, with Commonwealth stakeholders noting how this acts as a barrier to implementing resilience measures. These barriers are weakening, however, as non-government stakeholders and the academic sector continue to advocate for mitigation methods and improved national resilience.

The Review heard from Commonwealth stakeholders charged with the responsibility of increasing disaster risk reduction and resilience capability that maturity is uneven and that uplifting the Commonwealth’s capability and capacity to invest more in disaster risk reduction and resilience will be critical. Improving the resilience of communities, notably those which are isolated and particularly disaster prone, would reduce the strain on the Australian Defence Force and emergency service workers. Greater community level resilience would preserve resources for when they are most needed, and ultimately uplift the broader disaster management system.

The Commonwealth has recently sought to invest more in risk reduction and resilience, such as with the Disaster Ready Fund. However, much greater and more evidence-informed investment is required if the Commonwealth is to have a positive impact on reducing the significant increase in disaster related costs. The financial returns associated with increased investment in risk reduction and resilience initiatives are discussed in *Chapter 4* and demonstrate that these investments will help stabilise and reduce the Commonwealth’s overall spend on disasters. In this capacity, the Commonwealth can show national leadership through what it prioritises, and supports, to demonstrate the most effective risk reduction and resilience initiatives.

In response to major disasters, particularly the Black Summer bushfires and East Coast floods of 2021-22, the Review heard continual calls for the Commonwealth to play a more substantial role in supporting communities before, during and after a disaster, rather than the traditional emphasis on response and recovery activities alone. Local government and private sector stakeholders, in particular, referred to the

importance of preparedness and the role of maintenance in mitigating disaster risk.

“Plans and strategies such as the National Action Plan should be owned by the Commonwealth Cabinet, and they should be trying to create a more resilient nation through setting national goals and establishing programs rather than small ones.”

- Research and academia focus group participant

Steps towards this have already begun. The Review has observed a clear shift in the Commonwealth’s policy position which demonstrates that the Commonwealth is assuming a much more active role in risk reduction and resilience. NEMA’s Statement of Strategic Intent (NEMA 2023a) identifies ‘Better investment in resilience and risk reduction’ as a key component of their five year future roadmap that is currently under development. The Second National Action Plan, developed to drive activities aligned to the National Disaster Risk Reduction Framework (NDRRF) also contributes to the implementation of Australia’s commitment to the Sendai Framework. The Second National Action Plan is an encouraging development towards providing the structure and pathway to a cohesive government and non-government approach.

Consistent with an increased risk reduction focus, changes have been made to Commonwealth programs such as introducing an Efficiencies Framework into the DRFA to enable jurisdictions to use residual funds on risk reduction and converting the former Emergency Response Fund (ERF) into the Disaster Ready Fund (DRF).

Outside of disaster-specific funding, the Commonwealth has also increased its engagement with disaster and climate risk through social, economic, and environmental policy. For example, the Department of Health and Aged Care has developed a capability to support mental health in disaster contexts. The Department of Climate Change, Energy, the Environment and Water (DCCEEW) has commenced the National Climate Risk Assessment (NCRA) and in March 2024, published the results of Stage 1 of the NCRA. DCCEEW are also pursuing a range of reforms to species and ecosystem protection which

improve resilience of nature to a range of shocks including disasters.

Notwithstanding these investments, most Commonwealth administered expenditure continues to be directed towards disaster recovery, given the response and recovery focused design of major funding arrangements. Stakeholders across sectors emphasise the need for resilience and risk reduction to be more systematically integrated into the fabric of Commonwealth disaster funding arrangements, particularly on an ongoing basis. They often discussed this systemic resilience approach in reference to better acknowledgement and funding of social and natural recovery domains, maintaining a system of capable disaster staffing, and ensuring resilience and betterment is embedded into recovery programs to the fullest extent possible. Commonwealth, non-government, and private sector stakeholders are frustrated by the limitations of current arrangements which inhibit learning, mitigation of risk, and maintenance of disaster capability in staffing and other assets.

Delivering sustained and effective nation-wide investments in disaster risk reduction will require an evidence base to inform these initiatives. The Review heard from state and territory governments and stakeholders across private and non-government sectors that an evidence-informed risk-based approach is required, including improved data sharing, planning, and collaboration. The Review has assessed that there is currently no transparent and strategic way for the Commonwealth to make these investments on a consistent basis. The Outcomes Policy (Chapter 2) and Risk Profile (Chapter 3) will help deliver an evidence base and ensure the Commonwealth invests in the right places and at the level that it needs to.

“To effectively increase the amount of money in disaster mitigation or risk reduction, and to utilise it in the most beneficial manner, factors that influence resilience must be identified, and the scope of these reforms must be defined. It should also be considered how risks will change over time.”

- Research and academia sector focus group participant

The Commonwealth assuming a more prominent and leading national role on risk reduction and resilience should not be implemented through government funding programs alone. The Commonwealth will need to create the environment for success and ensure the national disaster architecture, capability and capacity of all participants are aligned to support greater uptake of risk reduction and resilience initiatives.

Enhancing coordination across the Commonwealth

“All agencies and jurisdictions seem to overlap with one another when dealing with individuals which makes the process clunky and difficult for people to navigate.”

- Commonwealth department/agency focus group participant

The Review has found that Commonwealth administered programs cost a total of \$15.9 billion between 2018-19 and 2022-23. While some coordination of these investments across the Commonwealth is underway, it appears relatively ad-hoc and inadequate for providing a comprehensive overview, or for delivering the Commonwealth’s desired outcomes. There is benefit in treating disasters as a whole-of-Commonwealth concern that is not confined to the disaster policy and operations conducted by agencies such as NEMA, but as relevant to the work undertaken by many Commonwealth departments and agencies.

“There is an ambiguity of roles and responsibilities, there are many strategies in the mix across the Commonwealth and states, and there is a need to bring that together and set out principles of how we want to prioritise moving forward and to provide support.”

- Commonwealth department/agency focus group participant

In their submission to the Review, NEMA reported at least 19 different Commonwealth departments and agencies are currently managing over 164 separate sources of Commonwealth funding with a relationship to the emergency (disaster) management continuum. This is consistent with the observation of the Review, that the Commonwealth effort is substantial but not well understood or coordinated. A number of Commonwealth departments and agencies consulted by the Review raised concerns including that there is confusion in respect to division of responsibility, inconsistent communication, lack of a whole-of-Commonwealth overarching narrative, and inadequate interdepartmental planning across the disaster continuum. The Review has found that there is a significant shortfall in the reporting of whole-of-government program outcomes and this constrains an understanding of the effectiveness of the programs that the Commonwealth funds.

The first step to achieving better coordination and alignment of efforts is for the Commonwealth to establish a mechanism to track all expenditure, or initiatives, relating to natural disasters. During consultations with Commonwealth stakeholders, the Review was made aware of a number of existing forums, or Inter-Departmental Committees (IDC), that come together at various intervals to deal with crisis and emergency management aspects of the disaster cycle. While the understanding of these forums varied across the Commonwealth, it was clear that there is no existing mechanism to manage cross portfolio efforts in disaster funding generally, nor specifically how the Commonwealth coordinates its efforts around disaster resilience or disaster risk reduction.

While NEMA is the obvious agency to improve coordination, it is unclear if it has the mandate and convening authority to achieve this. For this reason, while arrangements within the Commonwealth continue to mature, the Department of the Prime Minister and Cabinet (PM&C) should provide additional support to NEMA in conducting its convening and coordinating role. PM&C should work with the Coordinator-General of NEMA to establish a mechanism to:

- Assist the Commonwealth to better understand its disaster funding landscape.
- Consider existing Commonwealth disaster and emergency management forums to ensure appropriate weight and focus is given

towards disaster risk reduction coordination, as well as emergency management.

- Promote learning and capability uplift across Commonwealth departments and agencies.

Determining the total picture of the Commonwealth funding landscape has been a challenge throughout the Review, and NEMA's Funding Dataset is one of the first attempts to track administered expenditure for disasters across the Commonwealth Government. The exercise was a challenge for NEMA for several reasons, including a lack of shared understanding of what constitutes natural disaster expenditure, the manual process required, limited coordination across the Commonwealth with respect to natural disaster related programs and a varied understanding of the disaster continuum. Although our analysis is comprehensive, the dataset may be incomplete.

What the Funding Dataset has highlighted is that, despite providing significant funding through various pathways, the Commonwealth has limited coordination and oversight of the actual amount of funding provided, where this funding is directed and the effectiveness of the funding in achieving outcomes across the disaster continuum. This limits the effectiveness of all Commonwealth disaster investment by reducing accountability, monitoring, evaluation, and learning.

The Review understands that the Department of Finance has tracked government expenditure on other whole-of-Commonwealth policy issues and it should consider replicating existing methodologies to track disaster-relevant expenditure. The Department of Finance should work closely with NEMA and PM&C to build on NEMA's efforts in developing the Funding Dataset. This dataset, in tandem with a role for PM&C to support a whole-of-Commonwealth approach to disaster policy, will help enable and empower NEMA to fulfill its role as the disaster policy lead for the Commonwealth.

Establishing the Disaster Management Advisory Council

“If you want to improve the outcomes for people at risk, then you need to have conversations with us and be involved in the preparing and planning. We could stop a lot of wastage and further traumatising by the recovery process that wasn't built for them and improve community resilience and improve universal design of recovery and resilience.”

- Community health service focus group participant

A consistent theme across stakeholder engagement, particularly with the non-government and community sector, was a perceived inability to influence or shape the strategic direction, effectiveness, and accessibility of Australia's disaster management arrangements. To support better informed decision making, the Commonwealth should convene a Disaster Management Advisory Council (DMAC). The DMAC would be an advisory body and hold no formal decision-making powers. Its purpose would be to provide a source of advice to the Minister for Emergency Management, the Coordinator-General of NEMA, and other decision makers.

It is apparent to the Review that the Commonwealth is heavily reliant on the advice of state and territory governments when making disaster related investments. While it is acknowledged that state and territory governments will often be well placed to provide this advice, the Commonwealth should consider diverse views as part of its strategic priorities and decision-making frameworks. This would include advice on the Commonwealth's current disaster arrangements, outcomes, and strategic funding options.

The DMAC would provide advice on how the disaster arrangements could be leveraged to best achieve the Commonwealth's stated funding outcomes, as well as providing insights and advice on how to engage the non-government sector. The membership of the DMAC should be broad and encompass representatives from the non-government sector, industry, academia, the not-for-profit and charitable sector, along with First Nations perspectives.

The DMAC should be chaired by the Coordinator-General of NEMA, on behalf of the Minister for Emergency Management, with a

secretariat function to be provided by NEMA. Among its core roles and responsibilities, the DMAC should be tasked to:

- Identify emerging issues impacting the natural disaster risk reduction priorities, and resilience of Australian communities.
- Identify barriers to the effective and efficient delivery of core Commonwealth services, specifically disaster funding initiatives.
- Report on the effectiveness and efficiency of existing disaster management arrangements.
- Report specifically on emerging trends or barriers impacting disadvantaged cohorts within communities affected by disaster.
- Respond to direct taskings by the Minister, or the Coordinator-General of NEMA, relevant to the efficient operation of Commonwealth disaster funding arrangements.

Uplifting the capability of the disaster management system

“Disaster preparedness and response is now just considered business as usual, but this isn't reflected in the funding given to local governments.”

- State/territory government focus group participant

The effectiveness of Australia's disaster management system, as well as the confidence the Commonwealth has in its disaster related investments, is often dependent upon the capability and capacity of other actors within the system. For the Commonwealth to develop and implement a revised set of arrangements that can serve the nation's current and future disaster needs, it should adopt a role that is additive to the capability and capacity of actors within the system. Uplifting the capability and capacity of actors across sectors, and across the disaster continuum, will require targeted changes that recognise the role of incentives

and behaviour in shaping system activity. This is particularly important for state, territory and local governments.

This strengthening of local governments is essential, as they are one of the key drivers of disaster management initiatives. Their proximity to communities and their local leadership role provides them with the necessary insights and authority to administer disaster-related programs. While local governments have particular experiences based on the state or territory they are in, a key gap highlighted through stakeholder consultation was that local governments do not feel supported to carry out the role expected of them by the community, state, territory and Commonwealth governments.

While most (though not all) have a strong desire to lead disaster management, they often do not have adequate capacity and capability to comprehensively meet the needs of their communities in a disaster context. In the local government survey conducted by the Review, 84% of respondents expressed a negative sentiment associated with disaster policy implementation with the most significant issues being associated with capability, capacity, time, and funding governance. This is particularly relevant in rural and regional communities which are often more exposed to disasters and have local governments with large areas, dispersed populations and less resources to meet the challenges created by disasters.

“Whether local governments see themselves as the primary bearers of the responsibility of recovery is inconsequential. The community expects and responds to disasters through the local government, despite consistent challenges with resourcing, financial liability and operating outside of their remit.”

- Local government focus group participant

“There is a gap around the role of local councils. We have no connection with local councils, but we have heard that there is a desire for more coordination and contact.”

- Commonwealth department/agency focus group participant

“Local government is a key player and takes the lead across the spectrum of emergency management, although responsibility is built on the state level. This puts a huge burden on local government for activities for which they are not well resourced.”

- State/territory government focus group participant

An aftermath of a bushfire, New South Wales.
Credit: iStock.com/stephallen75

While it must be acknowledged that state and territory government have primary responsibility for local government, the Commonwealth has historically played a role in supporting the capability and capacity of these actors in the system. To successfully improve existing disaster funding arrangements and give confidence about the investments being made, the Commonwealth will need to focus and prioritise these efforts. To achieve this, the Commonwealth, via NEMA, should work with state and territory governments to ensure adequate capability and capacity exists across Australia for local government and communities to adequately respond to natural disaster events. The ability to do this effectively has been impacted by the fragmentation and confusion of roles and a lack of current understanding of capabilities. The Risk Profile (see *Chapter 3*) should provide an important source of information for this and will help the Commonwealth fulfill this role.

“I think it’s about recognising the local governments have very varied capacity and capability, and then looking at how the other levels of government that are more resourced are able to support them.”

- Local government focus group participant

An enhanced national training and exercise regime should also be introduced. While under the AGCMF, the Commonwealth – via NEMA – has committed to developing and delivering an annual national exercise program, there is a clear need to enhance this offering based on stakeholder feedback. The Commonwealth should implement an enhanced national training regime that tests local capabilities as a means of improving the capabilities of the broader population and local governments.

It should also encourage better information sharing, continual improvement, cross-Local Government Area (LGA) and jurisdiction collaboration, and the identification of gaps or weaknesses in local disaster management capability and capacity, targeting the vulnerability of individuals and bolstering disaster-related industries which are currently too small to meet the increasing need. This should be done as part of the Outcomes Policy, to ensure consistency and equity in the approach. Plans should also be informed by the

Risk Profile and employ a risk-based approach to ensure that the specific needs of regions are met, and that funding is used most effectively.

“Higher levels of ongoing funding, reflective of risk assessments and community expectations would dramatically enhance the service delivery offering and ensure local community needs are met before, during and after emergencies.”

- Local government focus group participant

“Emergency management is a function that has always been an add on to someone’s else’s normal role. When disasters happen, they have to drop what they are doing and focus on managing the disaster. This is not just those involved directly, but also other functions.”

- Local government focus group participant

Increasing data usability

Throughout the Review, a consistent and almost dominant theme has been the collection, aggregation, access to and reliability of data – in all of its forms.

“Data is a nightmare; from a finance aspect we should be informed by data but that is tricky in emergency response. We are guided by historical data but access to information is poor, inconsistent. The Commonwealth is reliant on information from the states which isn’t standardised and is for a state purpose.”

- Commonwealth department/agency focus group participant

There are significant data holdings already available at the Commonwealth level held by multiple entities which can be better

coordinated. For example, the Review heard about the significant place-based risk data being aggregated by the Australian Reinsurance Pool Corporation, or the knowledge held by DITRDCA on regional and local capabilities across Australia.

“There isn’t a lack of data, it’s accessibility to the data. The challenge of data is that everyone has different systems and reporting styles. There are privacy constraints and systems constraints that no one thinks about until a disaster hits and then it is too late to utilise it.”

- Local government focus group participant

Reliable, useable and well understood data are essential to support consistent decision making across all aspects of the disaster continuum. Throughout this report there is reference to a clear need for expenditure data to be traceable across the Commonwealth, and how this can be significantly improved by the implementation of the proposed Outcomes Policy.

However, inconsistency in expenditure data must not be confused with the need for a range of data that underpin, or otherwise inform, day-to-day disaster management. Data that supports effective decision making includes geospatial information that maps critical infrastructure and population density; mobility data to understand population movement and evacuation patterns; communication infrastructure and essential services data to assess potential disruptions. At a more granular level, consideration should also be given to the Commonwealth providing data on disaster events such as capturing disaster impact, including financial and economic losses at an LGA level.

We heard from a range of stakeholders, including across the Commonwealth, that improvements in predictive modelling and decision support are critical assets required for all decision makers across the system, before, during, and after natural disaster events.

Of course, responsibility for data does not rest only with the Commonwealth. However, for there to be confidence in the allocation of resources and funding commitments, there must be confidence in the decisions that inform that investment. This is a point made by many

individuals during the Review’s consultations. Commonwealth, local government, private sector, and not-for-profit stakeholders recognised that data should play a role in boosting community profiling of risk. This would create an easier way for local government to achieve its role through evidence-based decision making and the subsequent development of better-informed initiatives.

“Local councils often don’t have access to valuable data, and the data they do have is often not up to date, which makes mapping and planning difficult, and at times inaccurate.”

- Local government focus group participant

“We need a single source of truth to identify where the need is, but also at a more granular level, because some of the local councils up here I think are close to as big by area as some of the states or territories, so you need that granular information to inform sensible decisions.”

- Social services focus group participant

The need for reforms to the way data is managed is not new. The Inquiry into Natural Disaster Funding Arrangements (Productivity Commission 2015) also found the importance of the intersection between the Commonwealth and data when it said, *‘the availability of information on natural hazards and exposure has improved significantly in recent years... however, there is scope for greater coordination and prioritisation of natural hazard research activities across governments and research institutions.’*

There remains a role for the Commonwealth in facilitating better access to the types of data required, to provide a level of consistency in decision making in the context of natural disasters, both in terms of response, but also support and funding.

“The Commonwealth has a role to play in coordinating and creating consistency in the data.”

- Commonwealth department/agency focus group participant

Standardising support for Australia’s external territories

In keeping with the treatment of disaster policy as a whole-of-government issue, and encouraging greater alignment across the Commonwealth, is the need to offer consistent support to all non-self-governing territories. The Review has observed that these territories are often overlooked when considering disaster management in Australia, as many of the existing programs, such as the DRFA, are triggered by state and territory governments.

The Review has found that these territories face specific difficulties in accessing the disaster management arrangements and their support and access is varied. The Review has observed that this variance could limit access to Commonwealth disaster funding. The Review learnt about challenges faced by the Jervis Bay Territory in accessing funding following the Black Summer bushfires, and the resourcing and response challenges that were considered, but thankfully never eventuated, when Norfolk Island was threatened by a cyclone in early 2023.

While change is occurring, with the Minister for Regional Development, Local Government and Territories announcing that round two of the DRF has been extended to include Indian Ocean Territories for example, the Commonwealth should ensure that all Australian external territories are eligible for financial support during and after a natural disaster. This includes consideration of their needs, risks and access when designing disaster funding programs and including reference to them specifically within existing programs like the DRFA and DRF.

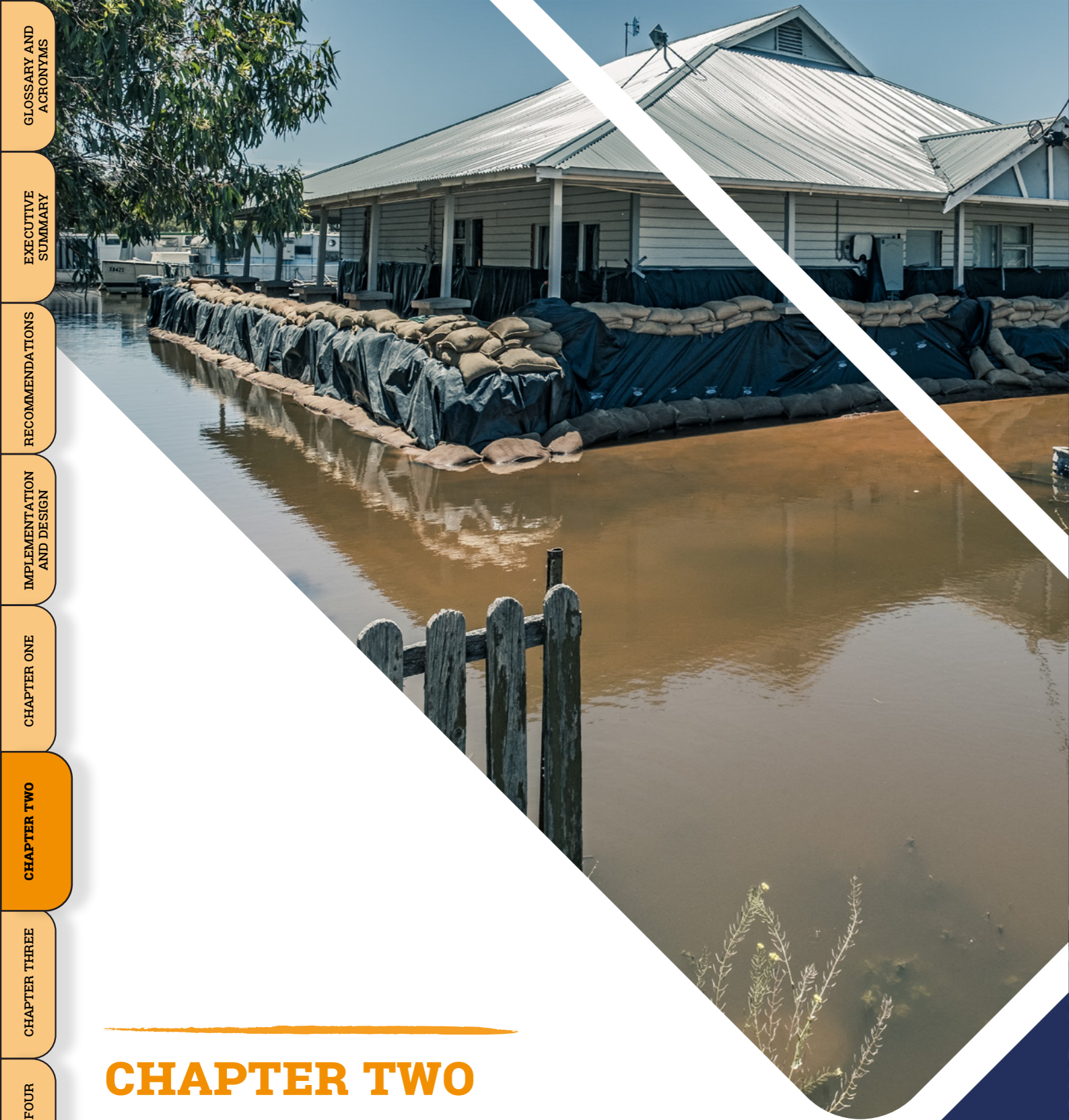
Intentionally referencing external territories in policy and program design would assist in mitigating inconsistent outcomes. It would also help to provide clarity for these territories and

their governing jurisdictions in how they can best be supported through natural disasters.

NEMA capability and capacity

While the capability and capacity of the Commonwealth to make the reforms suggested by this Review sits outside the direct scope of this report, the process of the Review has provided greater access and visibility of NEMA in particular. It is clear that the changing role of the Commonwealth is stretching NEMA’s existing capabilities and capacities, particularly as they are a relatively new but quickly maturing agency. This context, coupled with the projected increase in natural hazard impacts over the coming decades underscores that the successful implementation of reforms proposed by the Review requires careful and considered commitment of resources across the Commonwealth.

As the organisation with an extensive background in natural disasters, and a clear mandate, NEMA will play a crucial role in implementing these reforms. Regardless of the arrangements overseeing these changes, the Review notes the importance of considering NEMA’s capability and capacity to ensure the agency can successfully address the recommendations. To implement the proposed reforms to their maximum effectiveness, the Commonwealth, and NEMA, will need to ensure it has the appropriate expertise around critical functions such as natural disaster policy design, risk-based evidence, monitoring, evaluation and assurance outcomes, as well as data use capacity. These are all key themes of the Review that should feature prominently in reformed Commonwealth disaster funding arrangements.



CHAPTER TWO

National Natural Disaster Outcomes Policy

River Murray property with protections from rising floodwaters, Mannum, South Australia. Credit: iStock.com/BeyondImages

Chapter summary

The Commonwealth funding landscape features a range of disaster funding programs, each with their own discrete outcomes and objectives. While the Commonwealth has made significant and sustained investments in disaster support, the overall outcomes and strategic alignment of these investments remains unclear.

A lack of certainty over outcomes reflects the absence of a compelling whole-of-Commonwealth and whole of continuum narrative and framework in which these funding programs are delivered. In the absence of a guiding policy, outcome reporting, evaluation and learning is ineffective, and the Commonwealth cannot always be confident that funding is being delivered to the right places, at the right time, to achieve the right outcome. This impedes a detailed assessment of return on investment, policy effectiveness and

how investments can be best made to target national priorities. It also places the Commonwealth at a disadvantage when determining the merits of funding proposals and makes creating a system that is scalable, sustainable, effective, equitable, transparent and accessible far more difficult.

To meet this need, the adoption of a National Natural Disaster Outcomes Policy (Outcomes Policy) that specifies a clear set of priorities and objectives that the Commonwealth is seeking to achieve through its disaster funding would deliver a more joined-up and consistent disaster system. Central to the adoption of the Outcomes Policy is ensuring the Commonwealth has a clear and transparent mechanism to effectively direct Commonwealth investments across domains, the disaster continuum, and to communities most at risk.

Volunteer serves food during the Lismore flood aftermath. Credit: iStock.com/PDerrett



Chapter two

The Commonwealth has, over the past several years, reacted quickly to the impacts of significant natural disaster events. This reactive posture, while understandable in the circumstances, has diluted clarity on the role and responsibilities of the Commonwealth (as discussed in *Chapter 1*). It also makes it difficult for the Commonwealth to apply a strategic frame over what it spends on natural disasters and how it can measure the success of this expenditure.

The focus on disaster recovery and response is understandable when reflecting on the past five years of natural disaster events. Australia has experienced numerous events over large geographic areas. These events have been extreme, of longer-than-usual duration, and have occurred in shorter-than-usual succession. This has meant that a focus on recovery objectives has taken priority. While in some states this has resulted in funding for programs that embed risk reduction, such as the Resilient Homes Fund in Queensland and the Resilient Homes Program in NSW, the overwhelming majority of Commonwealth disaster expenditure has been spent on disaster recovery in a way that provides little or no ability to achieve standardised or national outcomes.

Development and implementation of an Outcomes Policy could help specify clear and consistent objectives associated with Commonwealth funding and provide a much firmer base on which to ground decisions. The development of an Outcomes Policy could draw from existing initiatives such as:

- The Australian Disaster Recovery Framework (NEMA 2022) which describes recovery outcomes across domains.
- The NDRRF (Department of Home Affairs 2018) which describes five year outcomes, including outcomes for disaster resilience and risk reduction.
- The Second National Action Plan (NEMA 2023b) which provides outcomes and national actions tied to the NDRRF.
- Australian Institute for Disaster Resilience’s (AIDR) Monitoring and Evaluation Framework for Disaster Recovery Programs

(AIDR 2018) describes disaster recovery outcomes associated with all domains.

Although there are good elements across these examples, they are typically constrained to a particular component of the disaster continuum such as recovery or risk reduction. Critically, they are also not widely known, understood, or adopted across the Commonwealth. Without an overall guiding policy for Commonwealth natural disaster funding, and a clearly understood and agreed method to track and monitor Commonwealth investment nationally, the Commonwealth risks continuing to be drawn into funding disaster management activities that are misaligned with the Commonwealth’s role and objectives.

“There should be the opportunity to see if Commonwealth funding is being sent to an area that is already receiving other state and territory, or Commonwealth departmental funding. This visibility would improve efficiency.”

- Commonwealth department/agency focus group participant

“In some instances, significant amounts of Commonwealth funding were allocated to projects that didn’t align with state strategies or were duplicating or competing with existing programs and projects. In some other instances, the funding program may have been designed to deliver an outcome that was quite narrow and probably couldn’t realise benefits to the potential broader community.”

- State/territory government focus group participant

Articulating the Commonwealth’s disaster funding objectives

An Outcomes Policy would assist the

Commonwealth to move from a reactive disaster continuum posture, to one that is more proactive and considered. The Review heard from a variety of stakeholders, including state and territory governments, that stronger governance and more clarity on decision making would assist all actors working across the disaster continuum. It would serve as an important reference point to which other decisions are made and against which decisions could be measured. Specifically, they noted there is no guiding piece of national policy and common practice to firstly link Commonwealth disaster efforts, and secondly, to describe how the Commonwealth coordinates with states, territories, and non-government actors.

“Without coherence, everything seems to be a bit haphazard, it’s a lot of reactive rather than proactive.”

- Commonwealth department/agency focus group participant

As noted in the recommendations, fundamental elements are required for the Outcomes Policy to serve its purpose. These include:

- Describing the priorities and outcomes the Commonwealth is seeking to achieve through its disaster funding.
- Ensuring appropriate consideration of investment that is scalable, sustainable, effective, equitable, transparent and accessible.
- Ensuring that all Commonwealth disaster investment is coordinated, monitored, and evaluated.

This can be achieved by ensuring the Outcomes Policy incentivises state and territory governments to align efforts in ways that engender appropriate levels of flexibility to drive effective outcomes at local, regional, and jurisdictional scales.

Presently, the Commonwealth lacks a consistent method to incorporate specific outcome requirements across its funding initiatives. This limits the Commonwealth’s ability to influence anticipated results, mandate fundamental risk reduction and resilience building, or to incentivise the non-government sector, particularly business and the private sector, to address the growing natural disaster risks.

“There isn’t the governance and accountability to ensure that all jurisdictions and the Commonwealth are working towards a single National Plan. Local governments and communities should have pieces to deliver into that.”

- Commonwealth department/agency focus group participant

It is unreasonable to expect this level of leadership and funding from the Commonwealth, with no framework through which to require certain preconditions, or to guide expectations. The demand for federal leadership is stated by not-for-profit and private sector stakeholders, several state and territory governments and Commonwealth stakeholders. The Outcomes Policy is intended to provide the architecture through which disaster programs can deliver agreed national outcomes. During our not-for-profit consultations, it was observed that they:

“We don’t see any other option apart from federal leadership, it needs to dissolve down into local government resilience and empowerment accompanied by federal government leadership”

- Environmental advocacy sector focus group participant

Through recommending an Outcomes Policy, the Review seeks to achieve deliberate articulation of what the Commonwealth wants to achieve with its disaster funding and increased focus on outcomes across the disaster continuum and domains. It will ensure greater transparency around Commonwealth disaster funding decisions by operationalising the Risk Profile (discussed in *Chapter 3*). It will support improved coordination across levels of government, support prioritisation of outcomes for those who have been left out of the disaster management system, and importantly it will provide the Commonwealth with a stronger basis on which to agree, or disagree, with funding requests.

Increasing the visibility and transparency of Commonwealth decision making

Several public submissions to the Review were concerned with the lack of transparency over the Commonwealth’s disaster related spending, including concern over the reasons for decisions not being well communicated, that in turn creates levels of distrust among broader stakeholder cohorts. Among not-for-profit organisations and several local governments, there was concern that a lack of understanding about how decisions were made led to greater uncertainty about how to approach funding requests, or how to target perceived gaps.

Analysis of the DRFA and the Funding Dataset reveals that between 2018-19 and 2022-23, a significant majority (87%) of Commonwealth disaster expenditure targeted the recovery phase of the continuum (see Figure 4). After recovery spending, the remaining parts of the

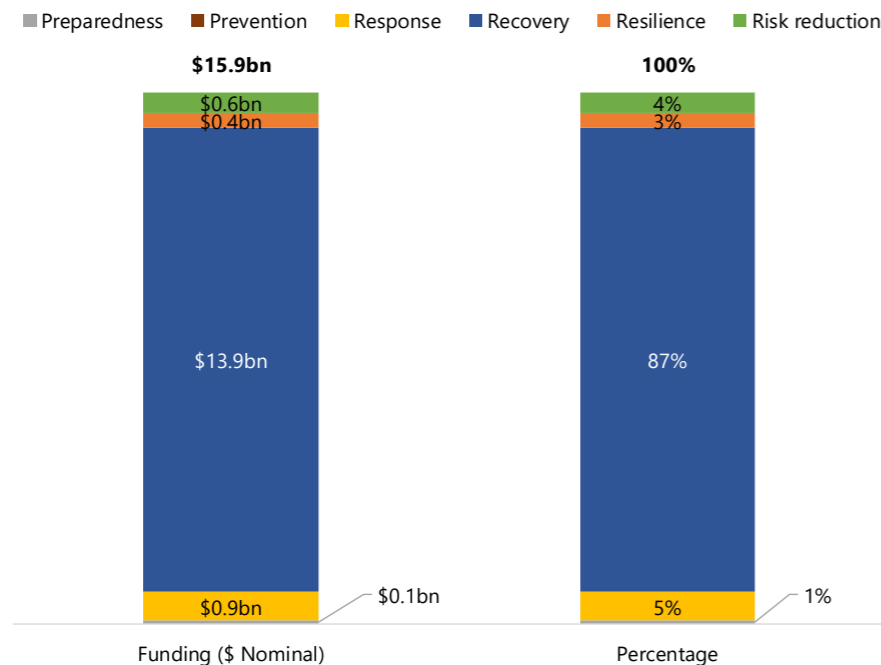
disaster continuum received comparatively little funding.

“We want mechanisms and measurements for appreciating the value of national social infrastructure and evidence for why certain projects have been selected. There is no transparency on how these programs are decided to get funded in grants.”

- Social enterprise participant in philanthropy sector focus group

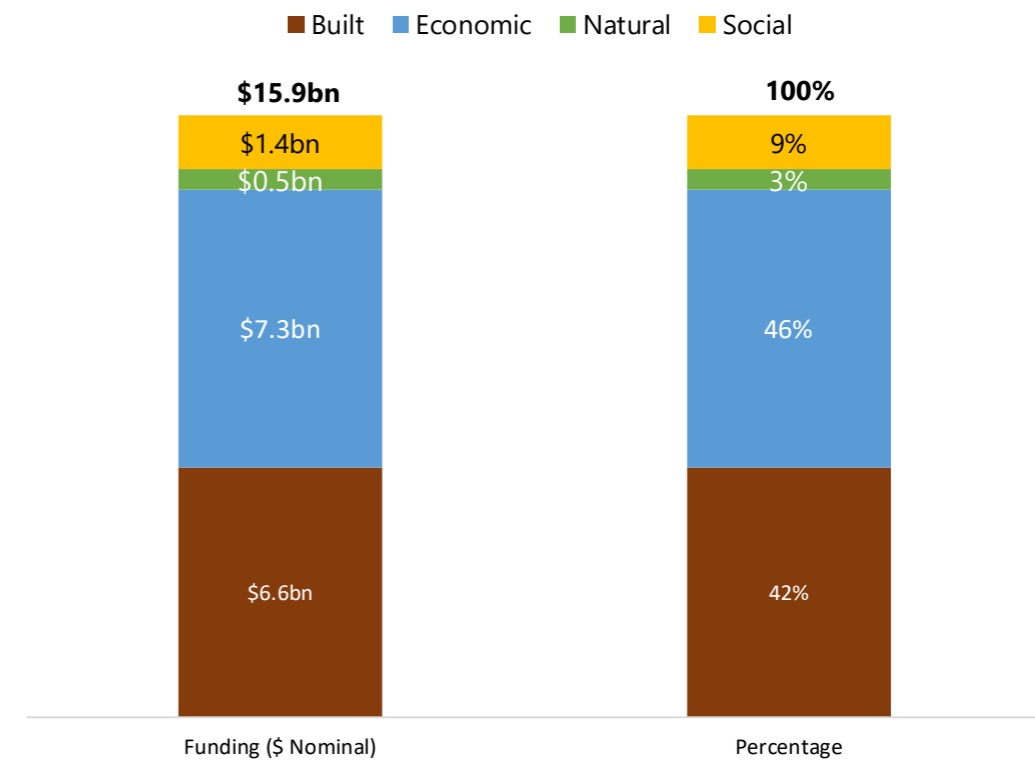
While recovery funding is essential and the dominance of recovery spend is understandable, a more balanced approach that includes other aspects of the disaster management continuum can yield long-term benefits. By investing in measures that reduce the risk of disasters or lessen their impact, a more balanced funding profile can reduce property damage, and minimise the financial burden on individuals and government, thereby creating a more comprehensive and sustainable approach to managing disasters.

Figure 4 Total Commonwealth administered disaster funding across the disaster continuum | 2018-19 to 2022-23



Source: NEMA 2023d and NEMA 2023e. Notes: (1) Chart presents Other Administered Funding (Category 1 and Category 2a Disaster Resilience Funding Programs), and DRFA Funding. (2) Category 1 refers to Commonwealth spend where the primary purpose of the activity is to address disaster resilience, while Category 2a spending is associated with an activity that was not initially established in response to a specific natural disaster risk, however, it has since been extended towards disaster resilience and the funding amount attributable to disasters can be quantified. (3) DRFA funding is based on the time of expenditure.

Figure 5 Total Commonwealth administered disaster funding by domain | 2018-19 to 2022-23



Source: NEMA 2023d, NEMA 2023e and Deloitte 2024. Notes: (1) Chart presents Other Administered Funding (Category 1 and Category 2a Disaster Resilience Funding Programs), and DRFA Funding. (2) Category 1 refers to Commonwealth spend where the primary purpose of the activity is to address disaster resilience, while Category 2a spending is associated with an activity that was not initially established in response to a specific natural disaster risk, however, it has since been extended towards disaster resilience and the funding amount attributable to disasters can be quantified. (3) DRFA funding is based on the time of expenditure.

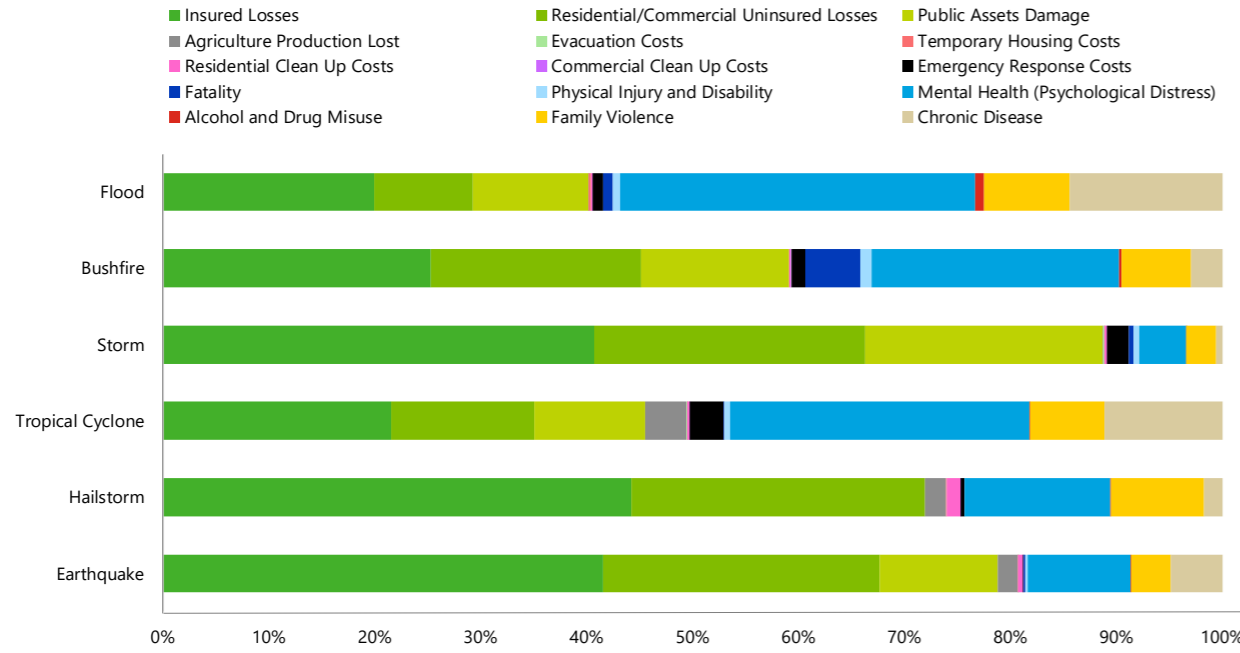
From a domain perspective, a large proportion of current funding is weighted toward the built and economic domains, with relatively little allocated to the natural and social domains (see Figure 5). The Review is not critiquing this, and there is a compelling school of thought that no recovery can be possible, including across social outcomes, if sufficient attention is not given to supporting economic recovery and reestablishing critical infrastructure needs. But a more deliberate, and transparent, approach to funding decisions across the domains is required.

The split in funding across domains was also raised by state and territory governments, non-government, private sector and local government stakeholders who emphasised the urgent need to acknowledge the social ramifications of disasters. Better accounting for the mental health impacts of disasters was emphasised by social service providers and advocates for higher-risk cohorts, farming and

primary producers, local governments and Commonwealth departments and agencies. There is a need to agree on consistent and common definitions for each domain, so that expenditure directed to each of the domains can be easily tracked and compared across different jurisdictions and organisations. Importantly, investment in one domain often has flow-on benefits, costs and impacts for others. For example, infrastructure expenditure can have a range of positive social and economic outcomes. This highlights the importance of making deliberate and evidence-informed decisions that account for these interdependencies.

Analysis undertaken by the Review has modelled the total economic cost of natural disasters by disaster type. Different event types have different cost profiles, which have been taken into consideration through the use of case studies or ‘reference events’. The cost profile for different event types is presented in Figure 6.

Figure 6 Cost profile by disaster type

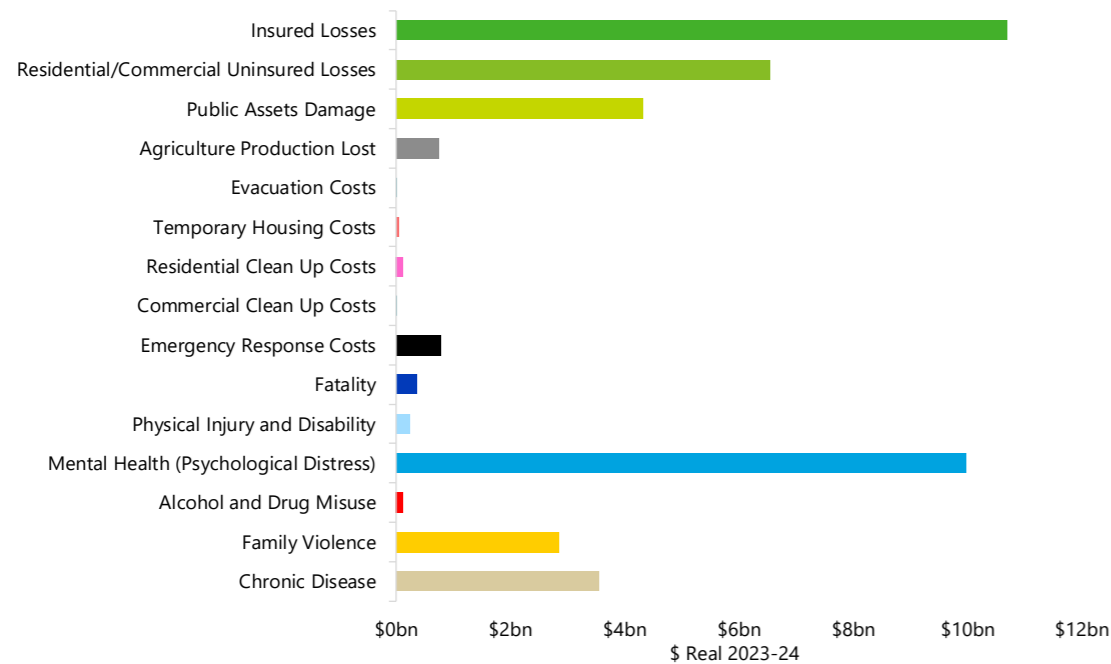


Source: Deloitte 2024.

Applying the disaster cost profiles to the forecast insured losses provides an indication of the makeup of the total economic cost in 2049-50. This analysis shows that social costs of disasters are a significant contributor to the overall impact of the most common disaster events experienced in Australia (42% of the total estimated economic cost). In particular, impacts to mental health were found to be one of the single greatest costs associated with natural

disasters. Due to data limitations, the costs associated with agricultural production losses are not fully accounted for and the costs to the environment were not able to be modelled, and as such, the costs shown in Figure 7 likely underestimate the total costs of disasters. However, they do provide a useful reference point on which to consider and contrast existing funding profiles.

Figure 7 Breakdown of 2049-50 total economic cost of natural disasters (\$bn | Real 2023-24) | Average estimate



Source: Deloitte 2024.

“Building community resilience in a social capacity is important. Communities with better social bonds and connection recover much more effectively after a disaster as do the individuals. It’s important to consider when providing individualised services.”

- Social services sector focus group participant

“Funding for the environment has largely been un-strategic and has been very knee-jerk.”

- Crisis response sector focus group participant

In addition to giving greater consideration to funding across the domains, as well as the entire continuum, a more considered balance will also help ensure groups who are disproportionately impacted by disaster are appropriately considered by disaster funding programs. The Review heard from a range of stakeholders during the consultation period and via public submissions, on the importance of providing appropriate support to vulnerable communities before, during and particularly in the immediate aftermath of a disaster event. A range of stakeholders observed that this remains an area that requires better coordination and clarity of purpose, when considering reforms to disaster management arrangements.

“There needs to be a national framework or strategy which acknowledges that every community is vulnerable. Each community can prepare using a national plan their way.”

- Philanthropy sector focus group participant

The benefits of an Outcomes Policy that explicitly accounts for vulnerable communities in the context of natural disaster events would include improving the resilience of all Australians and contribute towards funding that is more scalable, sustainable, effective, equitable, transparent and accessible.

There are also advantages in taking a proactive, deliberate approach to vulnerability identification, to ensure the Commonwealth

supports individuals in their time of need, during disaster events:

“If the top 100 most vulnerable communities could be identified before they’ve been hit by a disaster, and then have their social and economic capacity built it would vastly improve their recovery outcomes.”

- Social services sector focus group participant

Without a purposeful Outcomes Policy, the Review has observed a system that includes duplicate funding programs and a lack of baseline knowledge across all stakeholder cohorts as to what is available to whom, when and for what purpose. In addition, there exists a commonly held view among Commonwealth stakeholders in particular, that it will be difficult to create a unified approach to disaster funding arrangements without the Commonwealth articulating what it wants to achieve through its funding and how that funding is to be managed. As noted by one philanthropic sector participant during the Review’s consultation:

“Outside of an immediate crisis there is no coordination about response and assistance mechanisms between governments, NGOs, NFPs, etc., which results in fragmentation and duplication. This is particularly noticeable during the later phases of recovery when communities often need the most support.”

- Philanthropy sector focus group participant

Some stakeholders observed that vulnerabilities and disadvantage were unintentionally exacerbated through response and recovery phases. While it was noted that some programs provide specific assistance for disadvantaged cohorts, stakeholders felt that there is, on the whole, limited consideration of vulnerabilities across Commonwealth policies as a whole.

Among farming and primary producers, social services and some Commonwealth departments, there was a view that an urban understanding

Bushfire smoke at Fingal, Tasmania.
Credit: iStock.com/Wirestock

“It is equally important to focus on economic and social recovery of an impacted community. Funding flow-on effects need to be recognised.”

- Banking and finance sector focus group participant

of community can result in disaster policy and funding not meeting the needs of rural, regional, and remote communities. For example, by focusing funding on community recovery rather than on businesses which drive the regional economy, disaster funding can be misaligned to how recovery and resilience with a regional population is achieved. Social service providers discussed that funding for providers of mental health supports, for example, are most effective when the provider has experience of rural and regional life and cultures. For remote communities, funding is often inadequate or impractical due to their isolation. The Review’s consultations with the energy sector were revealing on this point:

“There’s an ethical dilemma that comes from the principle of trying to do the best for everyone, versus protecting those who are vulnerable. We’re not good at looking after those highly vulnerable communities that don’t have much and that has been our experience post disaster.”

- Energy sector focus group participant

Government’s role here is not one that is for the Commonwealth alone: the sharing of risk among state and territory governments, as well as local governments through to individuals is a key feature that can be better addressed through an Outcomes Policy. As noted during a government consultation:

“There is importance in having a national narrative around shared responsibility and that using all the important work and information we’ve been gathering around those that are most vulnerable and at risk from emergencies and ensuring that those that can support themselves are given the tools and the mechanisms.”

- State/territory government focus group participant

The complexity of funding applications and the strict requirements around them – which stakeholders expressed often changed without clear reason – made them inaccessible to many groups, including culturally and linguistically

diverse communities, First Nations people, low-income households or people with a disability.

The intent of the Outcomes Policy is to enable clarity of purpose and coordination across all aspects of the disaster management funding system and to create an overarching strategy to ensure that disaster funding is transparent, prioritised, outcome focused, balanced and drives accountability across the funding arrangements.

Introducing measures of success

In the absence of an Outcomes Policy, there has been a deficiency of reporting, evaluation and learning. This in turn has limited assessment of return on investment, value for money, policy effectiveness and how investments can be best made to target national outcomes. The effectiveness of disaster funding programs has been difficult for the Review to determine, as no consistent approach to monitoring and evaluation of natural disaster funding arrangements has been adopted across the Commonwealth. Evaluations have been carried out across some programs; however, their results are not widely available. This limits the Commonwealth’s ability to adequately assess program effectiveness and creates transparency issues for the public. This also makes the evaluation of funding requests from state and territory governments difficult to assess. As one Commonwealth department noted:

“When we look at requests for assistance from the states, they’re rarely proposals that we’ve never seen, but we can’t access nationally aggregated monitoring or evaluative information to see how similar programs have or haven’t worked. Despite the fact that a percentage of every DRFA request goes towards monitoring and evaluation work, it is rarely implemented.”

- Commonwealth department/agency focus group participant

This creates challenges in assessing the performance of programs. It also undermines the Commonwealth's ability to accurately assess if it is achieving system-wide outcomes. These sentiments were echoed by stakeholders and were identified as a problem that has impeded evidence-based decision making by multiple Commonwealth agencies. Consultation with the research and academia sector revealed that:

“There is a need for proper program closures which assess program effectiveness and what would’ve done differently as currently agencies are not learning from their programs and thus repeating mistakes.”

- Research and academia sector focus group participant

Greater transparency is also needed so that the Commonwealth can trace its expenditure and measure the outcomes of that expenditure. The research sector and state government sector consultations had a lot to offer on this point, including:

“The funding process is not well integrated, coordinated, and doesn’t promote effective collaboration. Reporting, auditing, accounting, and monitoring processes and requirements are difficult, onerous, and complicated for people to complete.”

- Research and academia sector focus group participant

For an Outcomes Policy to have the desired impact, it is essential that it is accompanied by a monitoring, evaluation and learning capability that allows the Commonwealth to track how its programs are delivering against agreed outcomes. This was raised by several Commonwealth departments. This capability could build upon existing work and planned initiatives such as the Measurement, Evaluation and Learning Framework for the NDRRF, the National Monitoring and Evaluation Framework for Disaster Recovery Programs (AIDR 2018) and DCCEEW’s monitoring, evaluation, reporting and improvement tool (MERIT) (DCCEEW 2022).

A common theme in stakeholder feedback

from state, territory, and local governments in particular, was a perception of onerous, confusing and duplicative auditing and assurance requirements. Many stakeholders felt frustrated that they had contributed this perspective in several reviews. The Review heard that stakeholders felt that more detailed auditing requirements were difficult to comply with and were not always tailored to the outcome being delivered or to the value of the program. Separate auditing requirements by state and territory governments, in addition to those required by the Commonwealth, on the same programs were believed to slow the process and complicate reimbursement decisions. This has led to funding participants feeling that monitoring, audit, and evaluation requirements are arbitrary, not contributing to tangible outcomes and present a barrier to participation in funding programs.

The Review heard that audit and assurance requirements were also problematic from the perspective of Commonwealth program administrators. Funding recipients reported significant administrative burden associated with fulfilling audit and assurance requirements. In contrast, program administrators reported that they had little visibility of program delivery. This indicates that current audit and assurance requirements – a necessary aspect of any government funded program – are currently not serving either party optimally and require urgent reform.

While monitoring, evaluation and learning is clearly a different requirement to audit and assurance, the two can be better aligned for more consistent and transparent effect. Simpler, consistent and standardised audit, monitoring and evaluation requirements that are clearly linked to the Outcomes Policy would increase the transparency and integrity of disaster funding programs. It would also enable the Commonwealth to ensure that all funding recipients had a clear understanding of these requirements.

To support this, regular review of the effectiveness of the Outcomes Policy by an independent body such as the Productivity Commission is required. This would ensure that the objectives and principles of the Outcomes Policy align with up-to-date information, leading practice and community needs and that the Framework is serving its whole-of-Commonwealth and national purpose.

Finally, differing understandings and inconsistent definitions of key terms or concepts

has meant that a clear picture of the entirety of the Commonwealth disaster funding landscape has been difficult to produce. Obtaining the financial data to support the modelling for the Review proved challenging, as different departments had different definitions for the disaster continuum (in particular, resilience). Several Commonwealth departments observed this challenge, noting that a common understanding with consistent definitions would enable a more coordinated approach to policy design:

“A shared understanding of what is meant by disaster would be beneficial, as currently it is defined differently within each disaster review, despite multiple occurring simultaneously. It would enable the recommendations of the review to be implemented in a coordinated manner. It would also be beneficial if this could be extended into policy as it would clarify what sort of assistance we should be providing.”

- Commonwealth department/agency focus group participant

Commonwealth stakeholders raised the importance of having whole-of-Commonwealth

definitions for key terms to support overall coordination, including in the response and recovery phases. Suggested scenarios when agreed definitions would be useful included when deploying personnel to a disaster event or beginning a new policy proposal.

An Outcomes Policy would provide the Commonwealth with an opportunity to articulate clear terminology. Steps towards an agreed set of terminology have been made through the Second National Action Plan and the AGCMF and provide a solid foundation upon which to build this common understanding. Efforts to do this at the Commonwealth level will have clear benefits nationally where inconsistency in terminology has tangible impact.

Overall, an effective Outcomes Policy would clearly articulate an established set of goals, roles and responsibilities. This would help to define what the Commonwealth should and should not fund, avoiding the Commonwealth overstepping their role in the disaster sector and in turn support the capability of state and territory governments. This will enable all levels of government to better coordinate disaster funding according to their roles and responsibilities in the system and will provide stakeholders clarity on what assistance they should expect from the Commonwealth.

steps to achieve this – both in the design and implementation of the policy.

Integrating First Nations’ perspectives into the National Natural Disaster Outcomes Policy

When developing the Outcomes Policy, due consideration and integration of First Nations insights and perspectives is crucial to ensure the policy delivers improved outcomes for all communities. Insights from engagements with First Nations people as part of the Review provide us with key principles and actionable

To accurately describe and in turn, improve disaster funding outcomes for First Nations communities, requires acknowledgement that emergency response systems have been designed with Western frameworks at their centre. First Nations peoples believe that existing frameworks have overridden the deeply place-based and socio-cultural-environmental adaptive capacities that Indigenous peoples traditionally used for risk management and response. Local knowledge, which is grounded in reciprocal relationships with Country, ecological insights and kinship bonds, has been found to enhance the resilience of communities to natural disasters.

“I think it’s important to remember, Aboriginal people aren’t afraid of nature. Fighting against adversity in nature has been one of the biggest shaping influences on our people forever. So, when our people see these floods come through, they are looking for the cultural significance of it, its cause, its function.”

- First Nations Engagement

Kinship and community systems are at the core of First Nations’ community and knowledge holding practices. Genuine understanding of this is key to ensuring the Outcomes Policy’s articulation of disaster management outcomes supports First Nations’ community autonomy towards disaster preparedness, risk reduction and resilience.

“Indigenous communities hold a unique position in disaster risk reduction discourse, in that they are often more vulnerable than non-Indigenous groups and yet also hold traditional knowledges that enable a greater understanding of hazards and disasters. In addition to systemic marginalisation by mainstream disaster management institution. Dependency on short-term, foreign-sourced humanitarian aid following disasters has led to the abandonment of traditional coping practices.”

- First Nations Engagement

It is critical that the Outcomes Policy embeds culturally inclusive descriptions of what ‘good’ or ‘effective’ outcomes of funding look like. For First Nations communities, resilience is a product

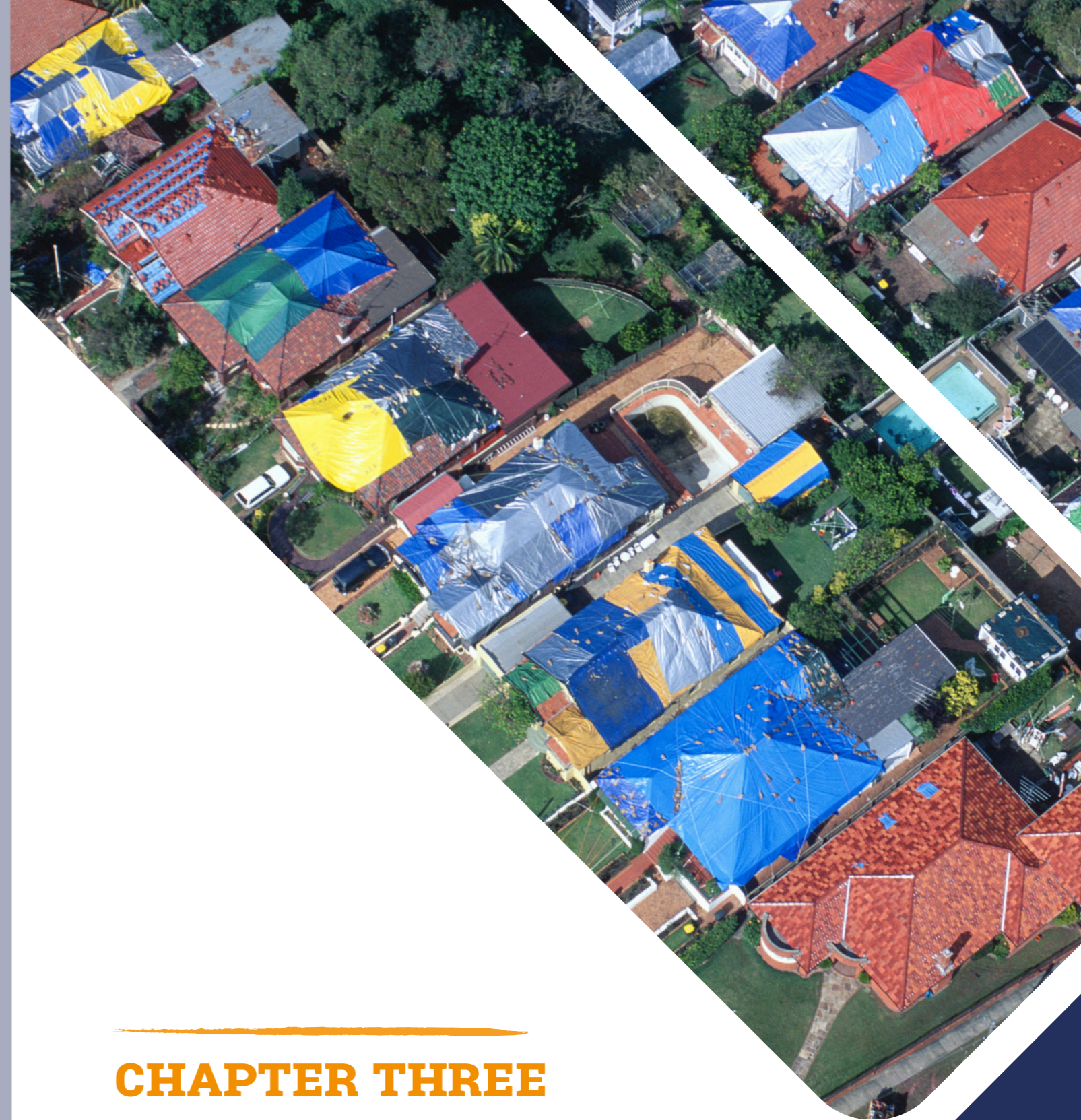
of place; expressed in song, story and cultural practice adapted to the land’s patterns and cycles. It is essential that the Commonwealth considers how this impacts what success looks like for First Nations communities. Specifically, it is vital the Outcomes Policy supports and uplifts a First Nations framing of resilience.

“What we need to do is ensure the conversation, and the planning that happens for us about us, how do we get a seat at the table for this to happen? If we’re there at least we know we’ve got our voices heard and putting these concepts into place. We need to make sure the mechanisms are reflective of what we need. It means we are stronger on how we can be included, otherwise it will happen for and about us.”

- First Nations Engagement

To meet this need, respecting First Nations leadership, empowering self-determination, and encouraging collaborative research are vital for embedding First Nations’ knowledge and perspectives into disaster management frameworks. At a practical level, sharing relational-based examples of successful approaches, their mechanisms, beneficiaries and reasons, could contribute to an intersectional knowledge base that informs the design and implementation of the Outcome Policy. First Nations funding considerations embedded in the Outcomes Policy should account for the capacity, needs, and risk of communities. Most importantly it should reflect that caring for Country and investing in prevention and response infrastructure as well as recovery, needs to occur before a disaster occurs.

*West Macdonnell Ranges, Northern Territory.
 Credit: iStock.com/TonyFeder*



CHAPTER THREE

Adopting an evidence-informed, risk-based approach

Hail damage to roofs in Sydney, New South Wales. Credit: iStock.com/JohnCarnemolla



Chapter summary

Conservationists collecting data after bushfires, Rockingham Lakes Regional Park, Western Australia. Credit: iStock.com/SolStock

There is an urgent need to reduce disaster risk across Australia. However, the Commonwealth currently has no holistic and effective mechanism with which to determine where it should make investments to help reduce disaster risk and build resilience to future events. Such investments are critically important given Australia's rapidly changing disaster risk profile and the increasing disaster recovery costs that will result from these changes.

To embed a risk-based approach into its decision making, the Commonwealth should develop a Nation-wide Natural Disaster Risk Profile (Risk Profile). The Risk Profile would identify disaster risks and consider the capacity and capability that exist to mitigate these risks. Its scope should be broad and encompass all four domains (natural, social, economic and built).

The development of the Risk Profile must be a collaborative exercise as it will require inputs from all levels of government. This

would include risk assessments carried out by the Commonwealth and state and territory governments, along with the creation of Disaster Management Plans for local or regional areas. In doing so, the Risk Profile would provide a transparent, defensible and structured process to identify where risk reduction investment should be targeted.

Analysis undertaken by the Review has demonstrated the costs and benefits of adopting a risk-based approach within existing cornerstone programs such as the DRFA, DRF and AGDRP. This analysis has shown there is considerable economic benefit from doing so.

Adopting a risk-based approach must be done in tandem with the other recommendations proposed by the Review. In particular, the National Natural Disaster Outcomes Policy (Outcomes Policy) should be used in concert with the results of the Risk Profile to prioritise investments.

The Review has found that the Commonwealth disaster funding system lacks a structured and systematic approach to prioritising funding decisions. This creates issues in consistency across states and territories, limits transparency and accountability and renders the Commonwealth reactive rather than proactive in how it manages the impacts of disaster events.

The Commonwealth's reactive posture in administering support has had a range of impacts. For example, it has led to setting unsustainable precedents around the level and type of support offered by the Commonwealth, and has influenced how the Commonwealth prioritises its disaster management funding contributions:

"If you cannot agree on the pipeline and the decision, you end up with a bit of scattergun action."

- Research and academia sector focus group participant

This reactivity is driven by the Commonwealth's lack of a mechanism to prioritise investment and forward plan for disasters with a whole of disaster continuum lens. The rapid succession of more impactful disaster events in recent years has compounded this reactivity – time between events has been minimal – and has meant that the Commonwealth has approached its role and therefore its expenditure in an unstructured way. The Review has found that the Commonwealth requires a range of mechanisms to embed an evidence-based, risk-informed approach to disaster management. Adopting such an approach would help to drive recovery costs down and shift spend across the entirety of the disaster continuum.

"We need to balance the difference between response and resilience. Resilience has lower overall costs and we are shifting to fund this more than response, but this shift is very slow."

- Commonwealth department/agency focus group participant

Within Australia, there is clear recognition of the imperative and benefits of planning for disasters, as well as the need for inputs to

enable the adoption of risk-based approaches. Numerous frameworks, inquiries and reviews have stressed this imperative. These include (but are not limited to): The NDRRF, the Second National Action Plan, The Australian Disaster Resilience Handbook on Emergency Planning, the Australian Disaster Recovery Framework and The National Strategy for Disaster Resilience.

The Productivity Commission's Inquiry into Natural Disaster Funding Arrangements (Productivity Commission 2015) identified that *"the Australian, state and territory governments should commit to develop a more refined risk-based model for the allocation of mitigation funding among jurisdictions over time,"* and, more recently, the Royal Commission into National Natural Disaster Arrangements (2020) made several recommendations relating to improved planning processes across the disaster continuum.

The Review undertook a range of financial and economic modelling to examine the benefits of integrating a greater consideration of risk data into some of the Australia's largest disaster funding programs (e.g., DRFA, DRF and AGDRP). This modelling aimed to understand the economic benefits of a more coordinated and strategic approach to investments in risk reduction and resilience.

This analysis is discussed in detail in *Chapter 4* and the findings are clear: an increased investment in risk reduction delivers significant economic benefits. This imperative was also recognised by the Insurance Council of Australia (ICA) in their submission to the Review, which commented on the potential benefit of risk reduction and resilience investment under the DRF. More broadly, the need for greater investment in risk reduction is reflected in Australia's obligations under the Sendai Framework, which articulates a shift from managing *disasters* to managing *risk*.

Understanding the intersection of climate and disaster related risks

In adopting an evidence-informed, risk-based approach to decision making in the disaster



management system, understanding the intersection of climate and disaster related risks is critical.

Climate risk involves the interaction between hazards with the exposure and vulnerability of human and environmental systems (see Figure 8). Hazards include possible sources of harm and from a disaster perspective, may include various severe weather or climate-related events. Exposure considers the presence of things we value in places and settings that could be affected by a hazard. Vulnerability considers the predisposition to be adversely affected by a hazard. Vulnerability is contingent on the sensitivity of an individual or community, along with their resilience and capacity to adapt to the impacts associated with a hazard. Risk is further influenced by the range of response measures taken by an individual, community, or other entity to reduce their vulnerability and/or exposure.

Figure 8 The determinants of climate risk: hazard, exposure, vulnerability and response



Source: A framework for complex climate change risk assessment, Simpson, et al., 2021

A changing climate is affecting the severity of natural hazards and exacerbating disaster risk, particularly in areas where exposure is already considerable. Severe weather events have affected various regions worldwide, including Australia, and have contributed to impacts affecting society, economic activity, as well as the built and natural environments in multiple ways. One narrative that has emerged from the Review is the changing complexity, frequency and intensity of disasters. The interval between events is becoming shorter, at times one type of hazard followed by another (e.g., the floods

that followed the Black Summer bushfires), or in other instances, multiple hazards occur at the same time. This can lead to a compounding or cascading of impacts associated with multiple risks. These events have significant consequences for society and the economy. They have also challenged post-disaster recovery efforts, and limited capacity to respond and recover as disasters affect community wellbeing and resilience.

Australia's first National Climate Risk Assessment (NCRA), currently underway, intends to provide a consistent understanding of climate risks across Australia for eight systems of national importance. It will also examine complex risk. The NCRA is intended to be completed in December 2024 and will be an important input into an evidence-informed, risk-based approach to decision making. The results of Stage 1 of the NCRA were released in March 2024, with Stage 2 now underway.

While analysis of future climate scenarios indicates that temperatures will continue to rise, the changes projected for each hazard varies. Indeed, the magnitude, rate of change and direction of change (increase vs decrease) all vary per hazard. The long-term outcomes from these trends are strongly dependent on both adaptation and mitigation efforts.

Natural disaster risk is not only dependent on hazards, but also intimately linked to changes in multiple factors such as population change, urbanisation, technological innovation, agricultural intensification, economic activity and the connectivity/interdependencies of global supply chain networks. Changes in these characteristics affect exposure. For example, modification of the environment to accommodate growing populations can alter natural systems in ways that can increase exposure to certain hazards.

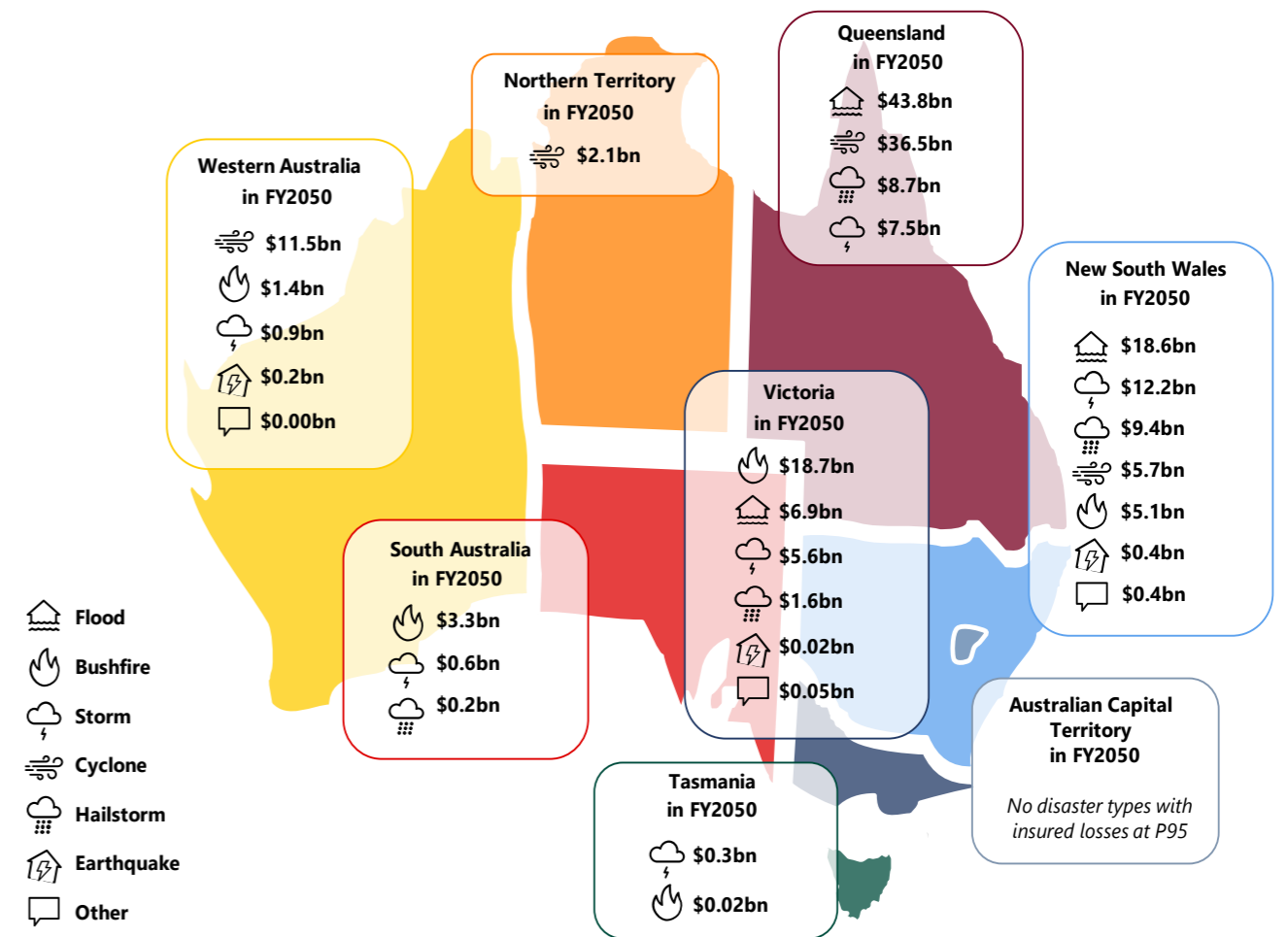
Similarly, the impacts of climate change may push societies towards a state of instability leading to major social transformations, including displacement or forced migration (Birkmann, et al. 2022). Examples in Australia have included the impacts of the Millennium drought which contributed to higher rates of male suicide, especially among farmers (Nicholls, et al. 2005; Hanigan, et al. 2012). The impact of crossing tipping points can further challenge community resilience, particularly when livelihoods are directly affected. Understanding how tipping points may impact the effectiveness of initiatives that aim to build disaster resilience is critical.

The need for change

The Review applied a climate overlay to the financial and economic modelling to consider how a changing climate may contribute to higher disaster costs. While the financial and economic modelling considered six physical hazards, the climate overlay considered how the frequency and intensity may vary across each

state and territory for flood, bushfire, storm surge and tropical cyclones across a moderate emissions scenario and a high emissions scenario to 2049-50. From a financial and economic modelling perspective, storm events could not be modelled separately from storm surges and east coast lows and therefore climate change impact adjustments exclude storm surge events. Figure 9 provides a summary of how climate change may influence the estimate of total economic cost by hazard across the different states and territories.

Figure 9 Total economic cost by hazard by jurisdiction (\$ billion | Real 2023-24) | P95 estimate including the impact of climate change under a moderate emissions scenario | 2049-50



Source: Deloitte 2024. Notes: (1) P95 outputs represent a value where there is a 5% chance of exceedance (2) The numbers presented are modelled using the ICA Historical Catastrophe dataset (August 2023) (3) The Australian Capital Territory has only two events with associated insured losses recorded in the ICA dataset over a 57-year period (4) Other disaster type rounds to zero for Western Australia.

Most states and territories cover large land areas that span different climate zones. Therefore, to complement the financial and economic modelling, climate scenario analysis was carried out at the LGA to understand a range of plausible changes across each LGA, relative to those four physical hazards.

It is important to note that climate change impacts will not evolve equally across the states and territories. Some regions are highly exposed to particular hazards, more so than others. Furthermore, how hazards are impacted by climate change is also complex. For example, rainfall declines are projected for much of southern and eastern Australia, while at the same time heavy, short bursts of rainfall are projected to increase in some areas (including for those areas where overall rainfall is projected to decrease).

To understand the complexity of projected changes, a subsequent climate scenario analysis focused on examining projected changes for each state and territory. This intended to examine in how the occurrence of important climate hazards may change in the future, for each state and territory. This complements the financial and economic analysis and demonstrates the complexity of the projected changes. The other objective of the climate scenario analysis was to highlight how different parts of the country will be impacted by climate change differently and how critical this information will be to informing government investment decisions.

This climate scenario analysis examined a low emissions scenario and a high emissions scenario. To understand how multiple hazards may change over time, two future time horizons that represent near-term (2030: average over 2020 to 2039) and mid-century (2050: average over 2040 to 2059) conditions were considered. The analysis for Queensland, New South Wales and Western Australia is discussed in the following paragraphs and figures.

Queensland – Flood associated with projected changes in extreme rain conditions

This analysis revealed that the regions with the highest exposure to a given hazard are often concentrated to a smaller region within a state. Across the state of Queensland, the change in both extreme rain days and maximum daily rainfall (measures of extreme rainfall), is projected to be highly variable, over both

climate scenarios and time horizons. *Figure 10* shows that the projected increases in the frequency of extreme rainfall are greatest over southern Queensland, whereas the greatest projected increase in the intensity of extreme rainfall events are located across LGAs in northern Queensland. In particular, this case study illustrates that different conclusions may arise depending upon whether the frequency or intensity attributes of extreme rainfall events are considered.

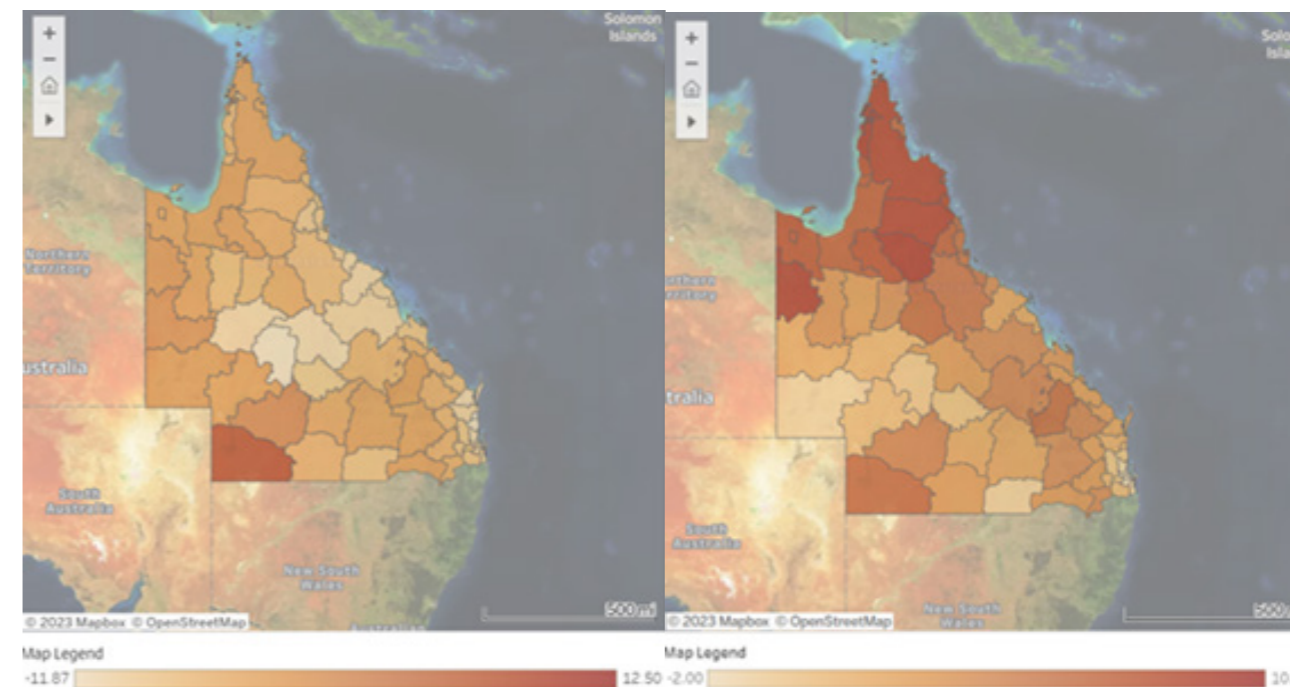
New South Wales – Extreme rainfall changes against a backdrop of long-term declines in rainfall

For New South Wales (*Figure 11*), projected changes in extreme rainfall vary across the state, with the largest increases forecasted for central and southwest regions of NSW across multiple scenarios. Although rainfall extremes may increase, changes in annual rainfall totals are also projected to decrease over regions west of the Great Dividing Range (Fei, et al. 2022). Therefore, dry spells may become longer. This could contribute to flash flooding during extreme rainfall events due to poor infiltration of rainfall into a dry and compacted surface. This case study shows that many New South Wales LGAs are exposed to increases in extreme rainfall but may also be exposed to long-term rainfall declines. This may present diverse challenges for effectively managing both flood and drought risks, due to the high rainfall variability that is possible for the region.

Western Australia – changes in extreme rainfall associated with different weather influences

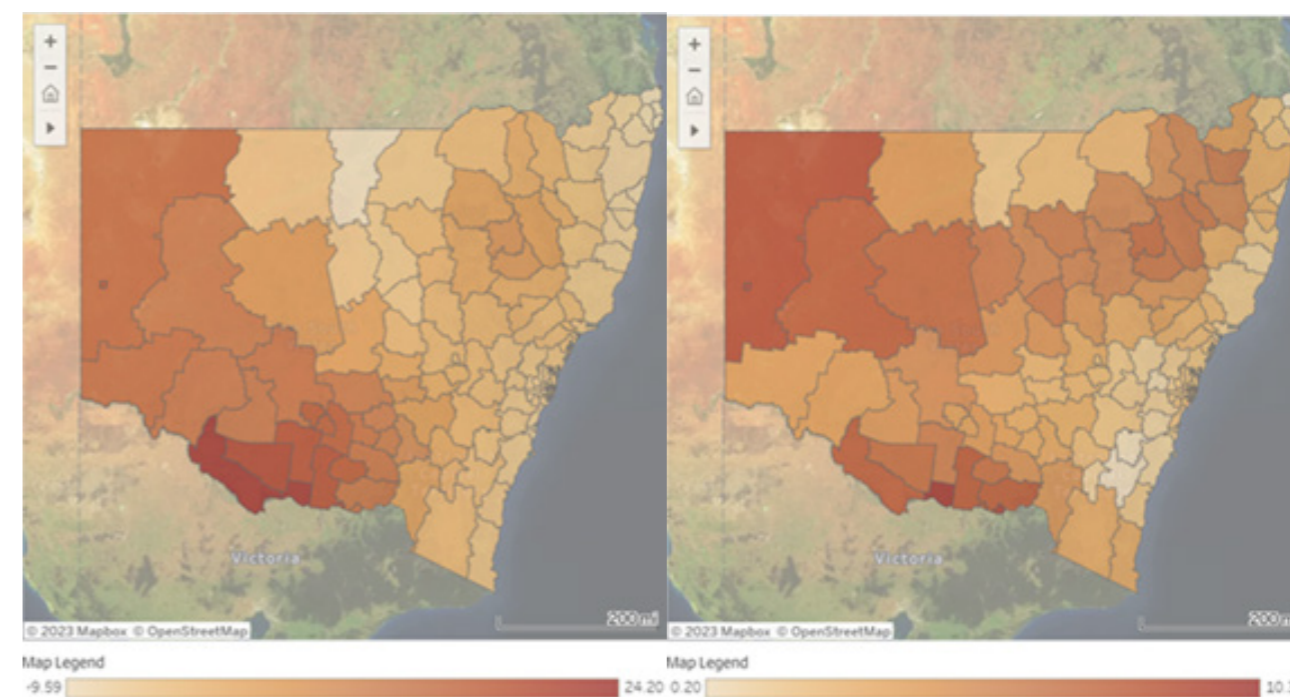
For Western Australia (*Figure 12*), the largest projected increases in extreme rainfall frequency and intensity, across multiple scenarios, correspond to the southern LGAs of the state. Rainfall over these regions can be influenced by frontal systems and, on occasion, northwest cloudbanks spanning northwest to southeast Australia. Projected increases in extreme rainfall intensity across northern WA are also considered high for the state, particularly for the north-west regions. These regions are affected by the northern Australian monsoon season and tropical cyclone activity. This case study shows that different weather systems can contribute to extreme rainfall events.

Figure 10 Projected change in extreme rainfall relative to the 1995-2014 average over Queensland.
Left: Future percent change in extreme rain days (with at least 20 mm per day) by 2050 under a high-emissions scenario compared to the 1995-2014 historical baseline. Units are %. **Right:** Future percent change in maximum daily rainfall by 2050 under a high-emissions scenario compared to the 1995-2014 historical baseline. Units are %.



Source: Deloitte 2024.

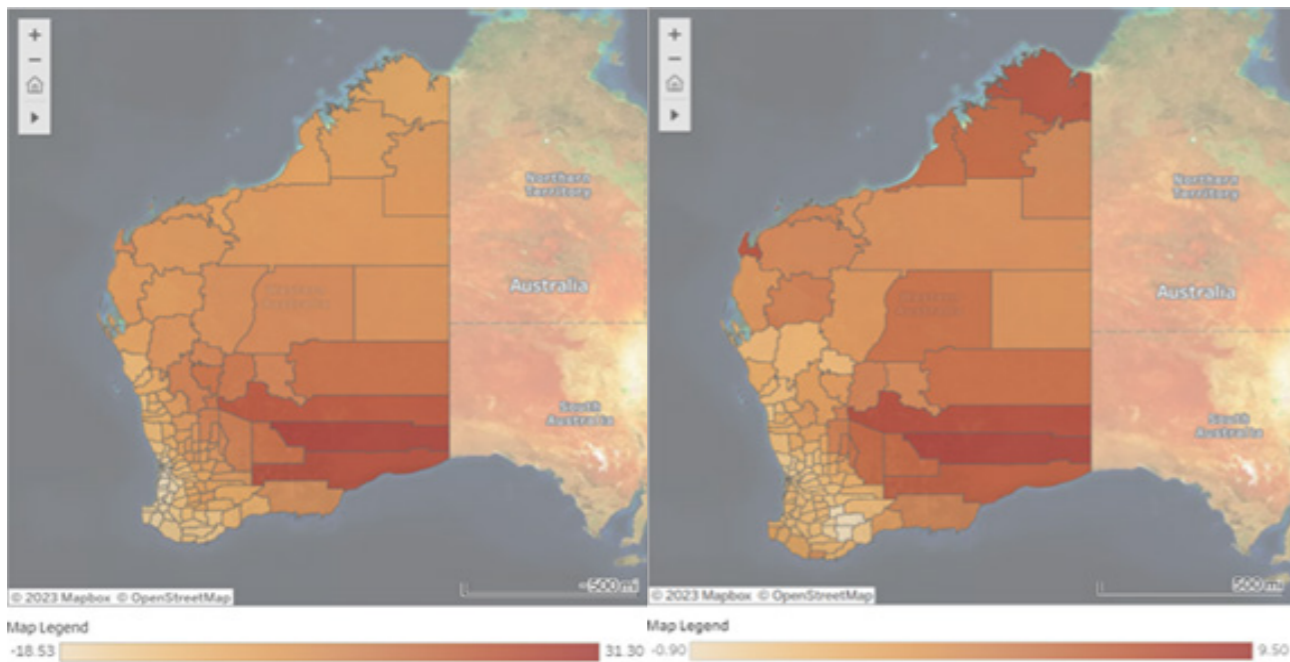
Figure 11 Projected change in extreme rainfall relative to the 1995-2014 average over New South Wales.
Left: Future percent change in extreme rain days (with at least 20 mm per day) by 2050 under a high-emissions scenario compared to the 1995-2014 historical baseline. Units are %. **Right:** Future percent change in maximum daily rainfall by 2050 under a high-emissions scenario compared to the 1995-2014 historical baseline. Units are %.



Source: Deloitte 2024.

Figure 12 Projected change in extreme rainfall relative to the 1995-2014 average over Western Australia.

Left: Future percent change in extreme rain days (with at least 20 mm per day) by 2050 under a high-emissions scenario compared to the 1995-2014 historical baseline. Units are %. **Right:** Future percent change in maximum daily rainfall by 2050 under a high-emissions scenario compared to the 1995-2014 historical baseline. Units are %.



Source: Deloitte 2024.

These case studies highlight that exposure to extreme rainfall is not uniform across large regions of Australia. The findings of the climate scenario analysis help to demonstrate that different parts of the country are exposed to hazards in different ways and thus will require different interventions to reduce their future risk.

These examples focused on extreme rainfall hazards, but another important consideration is how other hazards may contribute to conditions that can lead to more severe impacts. These are known as compound events. Compound events are combinations of multiple weather and climate hazards that interact with the built domain and socioeconomic circumstances. Types of compound events include those that occur sequentially at the same location or co-occur over multiple regions simultaneously. Recent examples affecting NSW include the 2017-2019 drought which preconditioned the environment leading to the Black Summer bushfires, and the consecutive La Niña events that led to the 2021-22 floods in Queensland and New South Wales. Analysis of the projected changes in compound events with climate change, suggest that hot and dry, and wet and windy, events are likely to become more frequent (Ridder, et al. 2022).

Enabling risk-based decision making on how to manage natural hazards, now and in the

future, requires consideration of multiple sources of information and data. Where possible, this analysis should consider the multiple components of risk as well as the variable impact across regions. There is a considerable amount of information and data available that characterises exposure to various hazards, both from trusted national (e.g., the Bureau of Meteorology, CSIRO, Geoscience Australia) and international (e.g., Intergovernmental Panel on Climate Change, Copernicus Climate Data Service) sources. However, data that characterise vulnerability and existing risk management activities are often limited, and data that describe the hazards and their impacts, vis-a-vis climate-related risks, are still evolving.

In the interim, there is a reliance on external reports such as those from the insurance sector, which often analyse the financial impacts associated with a disaster. These typically focus more on the insured losses and not necessarily the broader socioeconomic impacts (e.g., income losses, poor mental health, community wellbeing, scale of productivity losses or supply chain disruption) which are of interest to governments and communities. As one Commonwealth agency stated in response to quantitative analysis completed by the Review, financial and economic modelling is not able to capture the cultural loss of significant sites for First Nations people and a holistic perspective

on what Australian communities value must be considered in disaster funding. Another Commonwealth department and a research and academia sector stakeholder, noted that there are critical information gaps relating to people who have been impacted by disasters, including demographics and wellbeing over time. Without information on the true impacts of disasters, governments will have a limited ability to take these impacts into account in their decision making.

Without information on the true risks and impacts of natural hazards, governments will have a limited ability to give full consideration to them in their decision-making process. In a submission to the Review, the ICA called for a robust national hazard database of current and future hazard risks that streamlines existing national, state and territory datasets and that is accessible to all levels of government, industry and the public. They believe the provision of such information would play an important role in helping stakeholders understand disaster risk. The Review supports such an approach as it would improve disaster risk knowledge and be used to inform investment decisions that aim to reduce those risks.

Understanding shared risks

It is clear from the analysis and stakeholder engagement undertaken to inform the Review, that shared risk and what to do about it, is not explicitly accounted for in the existing arrangements. NEMA acknowledges that its role is in bringing governments, private sectors and communities together to reduce natural disaster impacts and support a more resilient Australia. In doing so, it implicitly recognises that disaster management is a shared responsibility where the Commonwealth must provide national leadership, targeted funding, and enable collaboration. NEMA also understands that this responsibility is often not equally shared. Indeed, throughout the Review's stakeholder consultation, it was acknowledged by many sectors that the role of government had changed, particularly for the Commonwealth.

Although leadership from the Commonwealth remains vital, there is an increased likelihood that risks which should be borne by other

sectors and individuals, have been taken on by the Commonwealth. Acknowledging, as NEMA does, that while individuals and communities have their role to play, they do not control many of the mechanisms needed to reduce structural disaster risks. Therefore, clarity of the ownership of shared risks is needed. This will help the Commonwealth determine where it should intervene and where it should not.

Indeed, it was apparent to the Review that the Commonwealth has repeatedly provided support that extends beyond its stated role as a fiscal safety net for state and territory governments. This was observed as early as the Productivity Commission's Natural Disaster Funding Arrangements Inquiry, which noted that the "current extent of Australian Government support goes well beyond what is needed to redress relative fiscal capacity and deliver the 'safety-net' policy objective. Instead of being an insurer of last resort, for some government assets the Australian Government has become the 'insurer of first resort'" (Productivity Commission 2015).

The observation that the Commonwealth potentially remains both the insurer of first and last resort – particularly regarding the spend on infrastructure – was shared by Commonwealth, state and territory stakeholders as well as several non-government and private sector stakeholders engaged throughout the Review.

"Government is becoming an insurer of last resort. Communities of limited means who've gone to live in cheap areas now can't get insurance because it's too high and they're often in increasingly vulnerable flood zones."

- State/territory government focus group participant

The Review also heard of the challenges associated with land use planning and infrastructure development when delineating roles. Many land use planning and development decisions lie within the responsibility of state and territory governments. Over time, decisions have been, or are continuing to be made, that now place communities in increased states of vulnerability and exposure to natural disasters. This is not new. The Productivity Commission's Natural Disaster Funding Arrangements Inquiry found that "land use planning is arguably the most potent policy for managing disaster risk". (Productivity Commission 2015).

The criticality of land use planning rules, regulations, and policies for effective disaster risk reduction and resilience remains well documented. The complexity of effecting change across the states and territories each of whom have their own bespoke set of laws and regulations governing land use planning and zoning is known across the system. Equally acknowledged is the need to address the challenges of inconsistent, at times ad-hoc and not fit-for-purpose land use decisions where these do not appropriately consider disaster risk reduction and resilience.

Evidence of more considered land use planning policies are beginning to be seen. For example, the NSW Government has recently released flood mitigation modelling for the Hawkesbury-Nepean valley, an area of Western Sydney known for its high flood risk. In October 2023, proposed rezoning of some residential land was curtailed due to the flood risks identified. Such measures, along with the NSW State Disaster Mitigation Plan limit development in vulnerable areas. While positive initiatives are being seen, more work in this area is needed, across all state and territory jurisdictions.

In addition to the risks associated with land use planning decisions where these are not appropriately factoring in disaster risk reduction, is the growing challenge of under-insurance amid a volatile global re-insurance pool. Insurance itself is facing escalating costs due to climate change and other enhanced risks. The insurance sector recognises its key role in providing community resilience through its products:

“We have done some work on the role insurance plays as a safety net in rural communities and providing economic safety that isn’t directly funding resilience but where insurance exists, community rebounds quicker.”

- Insurance sector focus group participant

There is growing understanding of the role of underinsurance (often called ‘the insurance gap’), alongside recognition that where underinsurance exists, governments are increasingly exposed to cover the financial shortfall. This was particularly noted by state and territory government stakeholders throughout the Review. The growing challenge of shared risk and the insurance gap is also well recognised

by international literature. Past land use decisions, including land use planning legacy issues, exacerbate this. Insurers are already optimising their risk exposure in response to dynamic market conditions. Some stakeholders recognised the critical role of state and territory governments to make difficult decisions in prohibiting development in high-risk locations to ensure that properties can be affordably insured. This is complex terrain. New ways of transferring risk, optimising public-private partnerships and creating new government support programs are all required, with the end goal being affordable insurance. Over time, the transferring of risk to ensure an equitable split across all actors in the system is required.

“We don’t believe any area in Australia is uninsurable, but we agree some areas of high risk might not be affordable. We need to be smarter on where we build, how we build, and why we build.”

- Insurance sector focus group participant

There are additional levers available to the Commonwealth. As well as the implementation of the recommendations of the Review, there are existing mechanisms such as the National Building Code and the work underway to develop Australia’s National Adaptation Plan, that can be leveraged. Land use planning and the systems that support it within state and territory jurisdictions also require thorough review. It is apparent to the Review that the Commonwealth and likely all levels of government, carry added risk with respect to land use decisions that may later result in the need for disaster mitigation, response, or recovery efforts. Importantly, any reforms to land use planning will be ineffective in isolation of a broader understanding of the Risk Profile (discussed in detail later in this chapter). For these reasons, the Commonwealth should require the consideration of land use planning as part of the Risk Profile.

These factors all point to the need to develop a shared understanding of the nation’s disaster risks (i.e., the Risk Profile) that is underpinned by a publicly available, baseline hazard data portal. The purpose of which would be to help all sectors, including individuals and communities, to be aware of their own risks and to be working from the same foundational information when taking action to mitigate those risks. How to address this need, and by whom, requires

Firefighters working at Buxton, New South Wales.
Credit: iStock.com/petarbelobrajdic

“Land use planning has a strong bearing on when and how people are exposed in emergencies, which includes fleshing out sharing responsibility and thinking about those most at risk.”

- State/territory government focus group participant

deep and thoughtful consideration across the Commonwealth, but begins with a dedicated effort to understand and document the risks.

It is not the intent of the Review that the Commonwealth own those risks. Rather, the role of the Commonwealth should be to provide information to ensure that ownership of risks can be appropriately distributed. The first step is to understand and acknowledge what those risks are. This is a key rationale for the development of a Risk Profile. Without it, the alternative is that the equitable distribution of shared risks will continue to weigh against the Commonwealth.

Developing a risk-based approach

Despite good initiatives and goodwill across the disaster funding system, the Review has found that strategic alignment of intent and priority, is lacking. Limited coordination or ability to be proactive in funding program design leads to a lack of clarity on their intent and ultimately their execution. The Commonwealth requires a way to prioritise funding in an evidence-informed, risk-based way. Without this, Australia's disaster funding system risks remaining reactive and uncoordinated. The need for this was noted by several stakeholder groups:

“We are missing a true risk-based funding model. There’s a real lack of risk-based approach, that I don’t think is driven by a lack of risk data, because that data certainly does exist in different forms. But, I think that is something that needs to be a big priority if we are going to be spending our money effectively into the future.”

- Research and academia sector focus group participant

“Everything seems to be a bit haphazard, it’s a lot of reactive rather than proactive. So, develop a plan, work out what you can proactively do, while also generating the capacity to provide response options.”

- Commonwealth department/agency focus group participant

There is appetite across all stakeholder groups for change. Over the last five years, the increasing impact of disaster events, coupled with a growing population, expanding land use, evolving climatic conditions and rising community expectations of government support, has collectively heightened the challenges faced by the Commonwealth. While the total economic cost of natural disasters drives the administered Commonwealth funding estimate, taking a risk-based approach to Commonwealth funding has the potential to put downward pressure on the economic cost from natural disasters.

Strategic investments in disaster mitigation (risk reduction) and resilience, as well as embedding risk reduction and resilience principles into all natural disaster funding, has also been called for by the private sector:

“Preparation and resilience start in the relief and recovery phases and have some incentives and product features making sure that people build back better.”

- Insurance sector focus group participant

Developing a Risk Profile and incorporating it into decision making will enable the Commonwealth to identify and prioritise at-risk communities, infrastructure, assets and other risks requiring consideration by either the Commonwealth, or state and territory governments. Further, taking a risk-based approach would help delineate funding roles and responsibilities between governments and other actors.

There are areas across state and territory governments in Australia where risk-based approaches to disaster risk reduction and resilience are already established. These include the Queensland Reconstruction Authority's Strategy for Disaster Resilience and the

NSW State Disaster Mitigation Plan. Some jurisdictions have begun to introduce climate adaptation strategies, all of which highlight a consistent theme of using climate hazard data, alongside broader knowledge sharing, to inform an overarching risk-based approach to disaster impacts.

While Australia currently incorporates climate data and risk information into policymaking and strategic planning, there is room for improvement by adopting a more proactive and coordinated stance. The Commonwealth should actively leverage climate scenarios and natural disaster data to anticipate potential disaster events and their impacts. Due to uncertainty in weather event forecasting, there are limitations in how hazard impacts may be anticipated and effectively managed. For example, the impacts associated with a severe tropical cyclone may be greater after the system evolves into a lower intensity system, particularly if it brings intense rainfall over already saturated catchments.

Implementing risk-based approaches in disaster management decisions can optimise funding allocations, prevent unnecessary overspending or duplication in lower-priority areas and ensure adequate investment in regions that demand significant attention.

Jurisdictions internationally have sought to adopt a risk-based approach to disaster management. One example of this is New Zealand's Natural Hazards Research Platform. This mechanism provides evidence-based research and scientific advice to government. It is focused across five themes, including geological hazards, weather and flood and coastal hazards. It further assists in developing regional and national risk evaluation models and resilience. This approach is also similarly embedded in New Zealand's National Disaster Resilience Strategy.

The United States Federal Emergency Management Agency's (FEMA's) Threat and Hazard Identification and Risk Assessment (THIRA) is another good example. The THIRA involves a three-step risk assessment process to help communities understand their disaster risks and what they need to do to address those risks. To streamline planning processes, FEMA's guidance outlines how the outputs of the THIRA can be leveraged in mitigation planning efforts. Jurisdictions across the US are using THIRA and mitigation planning processes to better understand the likely impacts of potential threats and hazards. Overall, both processes inform a comprehensive approach to

disaster planning – forming a key part of FEMA's Planning Frameworks.

The FEMA Planning Frameworks delineate clear foundational and organisational arrangements for disaster management while noting the importance of community-centred design throughout. For example, the National Mitigation Framework stresses two-way data collaboration (nationally generated and locally derived) to threats and hazards identification. Through this top-down, bottom-up approach, existing national data can be reinforced and verified at the local level so that outputs of planning best address the needs of the given community.

Further, FEMA's approach to planning provides a streamlined process for all stakeholders and levels of government to effectively plan for prevention, protection, response, recovery and mitigation. This is exemplified by each Framework's coordinating structures and the opportunities to integrate across stakeholders, with examples at the neighbourhood, local, regional, state or tribal and national level.

If implemented as recommended, the Risk Profile would follow a similar structure to the THIRA. This includes where local Disaster Management Plans can help inform a broader state disaster risk assessment, which can then inform the Risk Profile. This is discussed further in the next section.

Describing elements of a Nation-wide Natural Disaster Risk Profile

The Risk Profile should encompass all components of natural disaster risk, with consideration of risk across all domains (natural, social, economic and built). It should also include a consideration of the capacity and capabilities that exist to mitigate risk, as well as consideration of the capability to embed resilience.

Given the Commonwealth will lead the development of the Risk Profile, the Commonwealth should also lead design of an agreed methodology in close collaboration with state and territory partners, ensuring that

jurisdictional nuances and unique circumstances are taken into account. To coordinate and streamline the disaster funding system, the Risk Profile should draw on risk assessments completed by state and territory governments (see *Figure 13*).

Beyond leveraging state and territory inputs, the Commonwealth should conduct risk assessments for assets and infrastructure within its own remit. For example, consideration of disaster risk with regard to the Security of Critical Infrastructure (SOCl) regime and the National Electricity Market (NEM). This will be crucial to ensuring the Commonwealth has a mechanism to identify and address national level priorities from a Commonwealth standpoint, not just as a combination of state and territory identified priorities.

Importantly, the risk assessments undertaken by the Commonwealth, state and territory governments should also consider the capacity and capabilities that exist to mitigate risk. This would give the Commonwealth and state and territory governments a clearer picture of their respective strengths and gaps in capability.

Alongside this, to support a comprehensive risk-based approach, the Commonwealth should require state and territory governments to develop local or regional Disaster Management Plans. These Disaster Management Plans should identify the readiness of an area to respond to a disaster event and include considerations of prevention, preparedness, response

and recovery. As part of this, the Disaster Management Plans should consider risks that are specific to the natural, social, economic and built domains. In doing so, funding can be targeted to address disproportionately impacted groups, critical infrastructure and assets, key industries such as tourism and farming and incorporate adequate consideration of ecosystems, landscapes, flora and fauna. The information from Disaster Management Plans could then inform state and territory risk assessments, response activities in advance of disaster events and help inform applications to the Commonwealth for natural disaster related funding.

The Risk Profile would also enable the Commonwealth to place contingent conditions on funding approvals, consistent with a more strategically aligned and evidence-informed approach to risk reduction and resilience. To the extent possible, when programs are requested to be funded by the Commonwealth which have previously been identified as part of the agreed Risk Profile process, thresholds and administrative arrangements should be streamlined to encourage pre-planning. Equally, where investment proposals do not align with the Risk Profile, the Commonwealth should consider carefully its decision to invest. Alongside this, the Commonwealth should publicly release a version of the Risk Profile and associated methodology to inform the mitigation efforts of communities, industry, local, state and territory governments and the not-for-profit sector. It is critical that

the risk-based approach is not seen as a Commonwealth-only initiative. It should be led by the Commonwealth at a nation-wide level, but is reliant on state and territory governments, and the non-government sector, to recognise their own roles and obligations to reduce risk and build resilience.

Importantly, the Commonwealth will need to use the Outcomes Policy to prioritise the investments it makes based on the results of the Risk Profile. The Risk Profile is likely to identify a range of projects whose cost may stretch beyond Commonwealth, state and territory government resources. Consequently, an Outcomes Policy, in concert with the Risk Profile, will be a critical tool to support the Commonwealth in selecting investments that are aligned with the nation-wide outcomes it is seeking to achieve.

Orienting Commonwealth disaster support towards a risk-based approach will be a significant undertaking, requiring additional effort and activities that are not currently being undertaken consistently by state and territory governments. To deliver a coherent nation-wide system and a complementary approach to disaster funding, the Commonwealth must facilitate the nation-wide capability uplift required to deliver on this new approach, including ensuring the capacity and capability of NEMA is appropriately adjusted.

However, it is not only the capability of NEMA that will be important in the development of the Risk Profile. As discussed in this report, the success of a reformed disaster management system is reliant on all actors cooperating effectively and having the adequate resources to do so. Consequently, the Commonwealth should work with state and territory governments to undertake capability assessments of local governments. The emphasis of these assessments should be on the capability, capacity and investment requirements to enable locally led action. This would include identifying any barriers preventing these actions, along with an assessment of the communities that are likely to be disproportionately impacted by disasters.

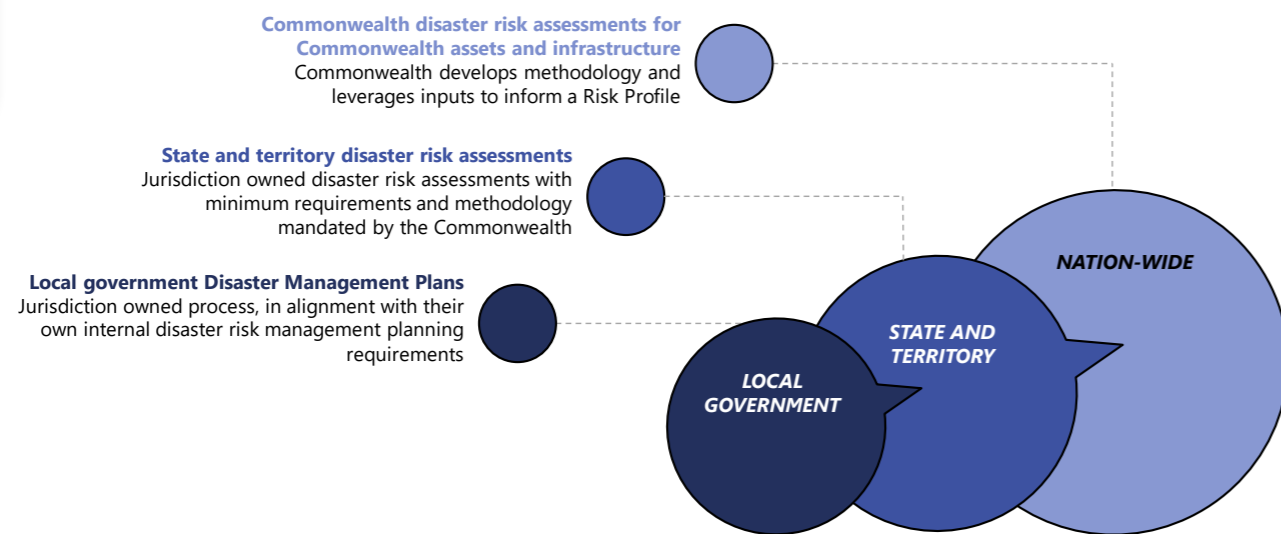
The results of this assessment should form part of the local or regional Disaster Management Plans, which would then form part of the Risk Profile. In turn, any capability shortfalls or barriers that are highlighted could be addressed through funding provided by the Commonwealth. A similar capability assessment should be carried out for all non-self-governing territories that are administered by the

Commonwealth. The coordination of these capability assessments would be in keeping with the enhanced role for the Commonwealth described in *Chapter 1*. This is to ensure that appropriate capability, capacity and investment exists across Australia to adequately respond to natural disaster events.

To address this need, the Commonwealth can leverage existing initiatives to streamline the process. The Commonwealth should draw upon existing assessments such as the NCRA and the High-Risk Weather Season Outlook, as well as national perspectives on risks and opportunities across the natural, social, economic and built domains. Where they currently exist, climate risk or adaptation profiles developed at local, state and territory and Commonwealth levels should inform the Risk Profile.

While the Risk Profile may appear duplicative of the NCRA, the two should be viewed as highly complementary activities. The NCRA has focused its analysis on identifying climate risks that are nationally significant over the medium- (2050) and long-term (2090). It also focuses analysis on the risks to eight systems of national importance. In contrast, the Risk Profile is envisaged to be far more granular and focused on practicable measures over the short- to medium-term. By drawing on insights from local and state and territory governments, and by also considering the capability and capacity of communities to respond to natural disasters, the Risk Profile is designed to provide highly actionable information for all levels of government. From this perspective, the NCRA will provide an important input into developing the Risk Profile, but a range of other inputs will be required (particularly the views of local and state and territory governments). As discussed in the following section, the methodology for developing the Risk Profile could draw learnings from the NCRA methodology.

Figure 13 The range of inputs which would be drawn on to develop the Risk Profile



Source: Deloitte 2024.

Developing data-informed risk analysis

Accurate and reliable data will be critical to the development of the Risk Profile. At the same time, the imperative to develop and implement the Risk Profile provides the preconditions for better data and information management.

Flooded houses on the River Murray, South Australia.
Credit: iStock.com/BeyondImages

“Establishing data sharing methods would be beneficial for understanding the scope of recovery activities needed before the next disaster strikes and the different needs of different demographics when doing this planning.”

- Local government focus group participant

This will include data collected as an input for the Risk Profile, and data generated from the Risk Profile as an output to inform the funding landscape. As found in the Review’s analysis of academic and grey literature, comprehensive risk-based approaches are contingent upon high-quality data and information as well as effective sharing and accessibility arrangements (Eckhardt, et al. 2019; Smith 2011). Through these inputs, risk information can be appropriately embedded into strategic planning to achieve better outcomes.

The Review observed that inputs to enable disaster risk-based approaches, as part of planning, currently exist but are poorly coordinated and under-utilised. This finding is supported by the views of Commonwealth departments and agencies, private sector stakeholders, and state and territory and local governments. These include datasets held by the insurance sector and various geospatial datasets. Industry is particularly vocal in calling for better access to data for all decision makers. If the Commonwealth seizes this opportunity, it could not only help put downward pressure on their expenditure but also streamline the development of the Risk Profile, whereby the Commonwealth can ensure traceability and consistency of outcomes and a better return on investment.

Potential inputs also include data and information from state climate risk assessments. Several jurisdictions have committed to complete state-wide climate change risk assessments. These assessments are being aligned with related national work programs, including the NCRA.

While the aim of climate risk assessments is not to comprehensively understand and characterise natural disaster risk, their outputs could help support disaster planning. If the aim of disaster planning as a process is to turn data into information, information into knowledge and knowledge into better-informed decision making, then the Commonwealth could better align with leading practice by leveraging the methodologies and utilising datasets and outcomes from climate risk assessments to inform how disaster risk is planned for.

At a practical level, this is demonstrated by FEMA guidance, which supports stakeholders in using THIRA outputs in mitigation planning efforts. For the THIRA, all types of threats and hazards are considered (natural, technological and human-caused), while mitigation plans only require natural hazards to be addressed.

Despite these differences, states and territories in the United States can use a single coordinated process to consider all their potential threats and hazards and then use that risk data to inform both the THIRA process and mitigation plans.

The Review has heard that stakeholders believe improving data sharing and harmonisation will help to smooth administration and reporting for funding programs, increase disaster response coordination and efficiency and support resilience through the identification of risk. This is relevant at all stages of the disaster continuum. For example, from sharing information on risk mapping in the prevention stage, leveraging data to identify those with unique evacuation needs in response, to coordinating data requirements for grant applications in the recovery stage.

Despite this well recognised need for better data, there are a host of data and information limitations in the disaster management landscape. These are considered key deficiencies that contribute to the difficulty in enacting pre-emptive planning, decision making, risk reduction and to measuring the effectiveness and outcomes. Consideration of mitigating strategies for these limitations is key to ensuring the Risk Profile is informed by high-quality and accessible data:

“One of the challenges for that [data sharing around the Black Summer bushfires] with us is that we’ve basically had to go and do eight separate data sharing array agreements with the states and territories to be able to share that data nationally [for the Commonwealth] to actually be the coordinating point of some of this data and to support industry to provide that data to a common platform would be useful.”

- Telecommunications sector focus group participant

“Local councils often don’t have access to valuable data, and the data they do have is often not up to date, which makes mapping and planning difficult, and at times inaccurate.”

- Local government focus group participant

Integrating First Nations' perspectives into the Nation-wide Natural Disaster Risk Profile

An evidence-informed, risk-based approach to disaster management requires clear understanding of how First Nations communities possess inherent strengths and resilience that contribute to their capacity for self-determination. In the face of a natural disaster, First Nations people are often responded to as 'vulnerable' and 'helpless', rather than resilient and providing solutions for others (Ali, et al. 2021). Government policies for First Nations people are often framed in these deficit terms. Insights from engagement conducted as part of the Review, highlight how First Nations people aspire to contribute their expertise to disaster preparedness, planning and response, but face exclusion from mainstream systems and opportunities.

“Aboriginal people are often cast as ‘vulnerable passive recipients of assistance’. They frequently cite vulnerabilities and conceal the strengths Aboriginal peoples possess. These include their laws and customs with respect to kin and Country, their cultural knowledge, their knowledge practices, their social networks, as well as their own organisations and land base.”

- First Nations Engagement

First Nations people speak about having endured a 'continuous state of emergency'. This is particularly true for communities who continue to live on Country, where they carry a deep responsibility for place, but are often on the economic and social margins of that same Country (Productivity Commission 2015). The result is seen in the disproportionate impacts from natural disasters in terms of health, housing and opportunity, as well as the compounding of intergenerational trauma. First Nations culture understands intergenerational trauma and memory in direct and cumulative ways – because of a widely held multi-

generational cultural responsibility – and directly in some cited instances, because trauma is layered into the social and cultural determinants of health and opportunity.

“We had three or four cases of rheumatic heart disease [prior to the floods]. It was almost non-existent. Since the flooding, we’ve had a significant increase to almost endemic levels. You know having overcrowding in houses, it’s a disease of poverty, of inequality. There has been a significant increase in rheumatic heart disease. That’s an outcome of poor planning by Federal and state and territory governments, shoving everyone into cramped, poor housing for over 12 months, and a lot of people are still in those housing conditions. Rheumatic heart disease will stay with these people for a long time unfortunately. It doesn’t just go away.”

- First Nations Engagement

First Nations collectively hold a deeply informed, localised body of knowledge that has formed throughout time. Therein lies a body of science that provides profound ecological insights, enabling effective prevention, prediction, preparation and resilience to natural hazards. Incorporating local knowledge into Disaster Management Plans is crucial for the successful outcomes of all communities – Indigenous and non-Indigenous.

Case studies gathered from engagement as part of the Review demonstrate the strengths and contributions of First Nations led solutions. From food, shelter and rapid response recovery in Lismore, to whole of recovery strategies across the Fitzroy Valley, it was often First Nations community members who provided the leadership and knowledge necessary for the situation. These solutions were usually generated outside of the formal systems of emergency response governance. Recognising, resourcing and supporting these governance structures is fundamental for fostering resilience in First Nations communities and all community.

“When you are in a relationship with community, and once the [Fitzroy Valley] community realised that they were serious about community engagement, then the skillsets that came out and were discovered in community were crazy. It highlighted how skilled the Aboriginal community is. Go get an Aboriginal grader if you want a better job done. People will behave in the manner you expect them to behave.”

- First Nations Engagement

“The Lockhart Valley Aboriginal Shire Council has entered a partnership with the Local Disaster Management Group (LDMG) to deliver disaster management outcomes which leverage Indigenous knowledge whilst respecting their expertise and ownership over it through consistent collaboration.”

- First Nations Engagement

To facilitate the adoption of an evidence-informed, risk-based approach, there is a critical need for comprehensive First Nations perspectives to be entrenched in local assessments and plans. This is intrinsically tied

to issues of trust, government capacities and the rights of First Nations peoples to have control and ownership over their communities, peoples, lands and resources.

Effectively integrating the needs, perspectives and solutions of First Nations communities is crucial for the Commonwealth to systematically identify the risk profile, active capacity and capability of communities; to then resource them appropriately to play a role in effective disaster management services. This, in turn, helps the Commonwealth move from reactive measures, to a proactive approach that involves continuous learning, understanding and building relationships with the natural world and community members.

“This knowledge of caring for Country is not restricted to ‘bush fire and flood management’ and extends into biodiversity and an inter-generational landscape, governance, leadership and whole system management. While welcome, even the belated, recent acceptance of ‘cultural burning’ and ‘ranger’ capability is a minimisation of the vast science that makes up the bodies of Country, water and fire lore.”

- First Nations Engagement



Young students studying together, Western Australia. Credit: iStock.com/SolStock



CHAPTER FOUR

Program reform

*Volunteers help rebuild fences after fires, Braidwood, New South Wales.
 Credit: iStock.com/Daniielc*

Chapter summary

*House after flooding in the community of Yuendumu, Tanami desert.
 Credit: iStock.com/JulienDiVincenzo*

Several existing Commonwealth disaster funding programs require reform to ensure the Commonwealth's financial investments are more effectively and equitably aiding communities.

The DRFA and AGDRP are the two largest administered measures which require clearer and more prescriptive intent and governance. These two programs, along with the DRF, require clearer alignment with a revised set of Commonwealth objectives.

The DRFA should be restructured according to recovery domains and time horizons, to enable more equitable and consistent application. This will also assist in clarifying its intent as a recovery funding program. While betterment should be a fundamental consideration of all DRFA funding initiatives, the DRFA should not be seen as the primary mechanism to achieve national disaster risk reduction and resilience building objectives.

The AGDRP should be activated on a more refined basis than by local government areas, be de-conflicted with existing DRFA Hardship Payments and claiming timeframes should be tightened to reduce the risk of fraud.

While significantly smaller by quantum of funding, the DRF should be aligned to the investments prioritised through the Risk Profile. The DRF's funding allocation should also be reconsidered in line with the scale of investment required to meet community expectations for risk reduction and resilience building. To give full effect to the DRF and to the Commonwealth's focus on risk reduction and resilience, consideration should be given to increasing the size of the DRF as well as refining its timelines and process, to allow a more complete assessment of initiatives by state and territory governments.

Finally, in addition to structural program reforms, better attention to functionality and governance is required to ensure the programs are fit for purpose. This involves streamlining administration requirements across Commonwealth programs (including audit and assurance), simplifying the purpose and relationship between programs to make them easier to navigate and improving guidelines and communication to reduce confusion.



Chapter four

Reforming individual funding programs in isolation of wider structural reforms will not fully meet the Commonwealth’s objectives. To ensure disaster funding achieves its objectives of supporting arrangements that are scalable, sustainable, effective, equitable, transparent and accessible, it is crucial to integrate funding reforms into a wider national approach. This involves clarifying the role of the Commonwealth and it assuming a national leadership role for risk reduction and resilience (Chapter 1), developing an Outcomes Policy (Chapter 2) and a Risk Profile (Chapter 3).

This integrated approach will foster a consistent, evidence-informed and risk-based understanding of Australia’s vulnerability to disasters, allowing the Commonwealth to target risk reduction and resilience, while also being able to support disaster recovery more effectively. By creating a pathway for all levels of government to invest in risk reduction and resilience, the Commonwealth can ensure a transparent, consistent and effective pathway towards increased resilience and preparedness.

“Overall complexity and inconsistency between various mechanisms in place is creating huge stoppages in the overall process.”

- State/territory government focus group participant

As detailed earlier in this report, the Commonwealth disaster funding contribution is rising and based on modelling of future scenarios, it is expected to continue to increase, particularly if existing arrangements do not change. In addition to growing costs, current funding arrangements present significant challenges in respect to equitable access. The complexity and lack of alignment across existing programs disadvantages those lacking system knowledge. Navigating competitive grants and challenging administrative requirements undermines the coping capacity of individuals and communities. Program design often inadequately accounts for factors like gender, disability, isolation and cultural-linguistic diversity. Arrangements are also ill-

equipped to address the secondary and tertiary impacts of disasters, such as mental health issues, family violence and prolonged housing insecurity. This can often result in inequitable funding outcomes for disadvantaged groups and communities who are disproportionately impacted.

While all future programs will be enhanced by the development of an Outcomes Policy and through the better use of an evidence-informed and risk-based approach, reforms to existing programs are also required.

“By virtue of the grant systems in the country, the competitive grant process, the communities that can apply for the money and the ones who arguably need it most don’t, as they don’t have the capability, as they don’t have the evidence base, resources or time.”

- Philanthropy sector focus group participant

“The current system of Commonwealth disaster funding is largely available post disaster, is reactive rather than proactive. The grant process is usually competitive and directly fosters competition between regional stakeholders rather than building the alignment and a collaborative approach that is needed to successfully support communities recover from, and plan resilience to, natural disasters of increasing frequency and intensity.”

- Local government focus group participant

The DRFA, the AGDRP and the DRF represent the core programs for Commonwealth disaster-related support. This is due to the quantum of funding provided by these programs and their strategic importance within the system. Existing Commonwealth response and recovery funding is dominated by the DRFA as the largest funding source. The experience of the Review is that there is a tendency for the DRFA to not just dominate discussion of Commonwealth spend, but also act as the de-facto policy for the Commonwealth (and to an extent, for state and territory governments as well) in the disaster

management system, in the absence of a broader overarching policy approach.

While the Review has been tasked with recommending improvements to the current Commonwealth disaster funding arrangements, it is important to emphasise that despite stakeholder concerns and limitations, Commonwealth supports are considered fundamental, irreplaceable and are appreciated. Any changes made to Commonwealth disaster funding programs should be made with care, with regard for possible consequences for the availability of assistance and with regard to usability for staff who often hold responsibility administering and managing many areas of work, of which disaster is only one.

Understandably, stakeholders gravitate to discussing the DRFA in respect to disaster funding. The DRFA has provided \$9.2 billion in funding in the period from 2018-19 to 2022-23 through a variety of different funding initiatives. By comparison, the AGDRP represents the Commonwealth’s largest single expenditure, costing the Commonwealth over \$4 billion in the period 2018-19 to 2022-23. The DRF is the Commonwealth’s primary dedicated funding program for disaster risk reduction and resilience, outside the betterment achievable through the DRFA. The DRF is relatively new, having conducted two of the five committed rounds of funding. In total, the DRF has an announced value of \$1.0 billion, with \$200 million in grants available to fund successful projects each year between 2023-24 and 2027-28. Unlike the DRFA and AGDRP, the DRF’s focus is on increasing resilience and risk reduction activities.

The Review has identified key reform opportunities within these three main disaster funding programs. These reforms will enhance overall effectiveness and are crucial to ensuring the sustainability of Australia’s Commonwealth funding arrangement for natural disasters.

Disaster Recovery Funding Arrangements

The DRFA is the primary vehicle for the Commonwealth to support communities impacted by a natural disaster through fully

funding or co-funding measures with state and territory governments.

The DRFA has been discussed by several previous reviews and reports in recent years and is currently the subject of ongoing review under the guidance of the Australia-New Zealand Emergency Management Committee (ANZEMC). As such, the Review has focused on providing recommendations that improve the DRFA within a broader set of strategic reforms. The Review also understands that a further study is to commence shortly, with respect to co-funding arrangements of the DRFA. As such the Review does not seek to re-tread ground of previous and ongoing reviews that have recommendations still to be considered.

The DRFA operates as a shared-cost mechanism to assist states and territories in managing the financial implications of natural disasters. DRFA assistance is designed to support communities and individuals in need and is not intended to provide compensation for losses, or restore lifestyles to their pre-disaster standard. It comes into effect following an eligible disaster, in circumstances where a coordinated, multi-agency response is required and the state or territory expenditure exceeds the small disaster criterion of \$240,000. A core principle of the DRFA is that states, territories and local governments should draw on their own resources to provide disaster assistance before seeking support from the Commonwealth through the DRFA.

The inherent strength of the DRFA lies in its design as an event- and location-based instrument. As an emergency management tool and recovery focused program, this clarity of how and when the DRFA is activated is crucial. The same activation according to event and location is also the limiting factor for the DRFA when it is considered as a funding tool to achieve national outcomes, particularly in risk reduction and resilience.

The DRFA is structured according to four categories: A, B, C and D with each of the categories providing different types of assistance (Table 1 describes the intended use of each category). The amount that the Commonwealth reimburses also varies from 50% to 75% depending on the category, though the Commonwealth under Category D can agree a different cost sharing ratio. The calculation of the reimbursement rate is complex, and from the perspective of state and territory governments, is a barrier to using the DRFA. This is discussed in detail in the following section.

Table 1 Categories of the DRFA and their intended use

Category	Intended use
Category A	To provide assistance to individuals to alleviate personal hardship or distress as a direct result of a disaster. These measures are provided by state and territory governments without requiring prior approval from the Commonwealth. States have 24 months from the end of the financial year in which the relevant eligible disaster occurred to incur state expenditure for Category A measures.
Category B	To aid the restoration of essential public assets and specific counter-disaster operations. Most measures can be claimed within 24 months, except for essential public asset reconstruction (12 months) and emergency works (up to three months).
Category C	To provide clean-up and recovery grants to small businesses, non-profits and primary producers for severe impact events, requiring approval from the Prime Minister. Similar to Category B, state and territory governments have 24 months to submit a claim, with a 50:50 cost-sharing ratio.
Category D	To alleviate distress or damage in exceptional circumstances, requiring approval from the Prime Minister. States and territories have 24 months to incur expenditure for Category D measures post-disaster once specific recovery gaps are identified.

Importantly, over the period from 2018-19 to 2022-23, the Commonwealth, on average, funded 58% of eligible DRFA expenditure.

Despite yielding positive outcomes, the DRFA faces challenges related to accessibility and transparency, with inconsistent application across jurisdictions. Its flexibility, while a notable strength, also introduces complexities due to the inherently discretionary nature of its decision making. Specifically, the inefficiencies relating to the inconsistent nature of assurance processes and difficulty in aligning the timing of DRFA reporting requirements across jurisdictions. The current categorisation framework (A, B, C, and D) is inadequately understood and is used to differing degrees by different state and territory governments, leading to a need for simplification and more transparent application.

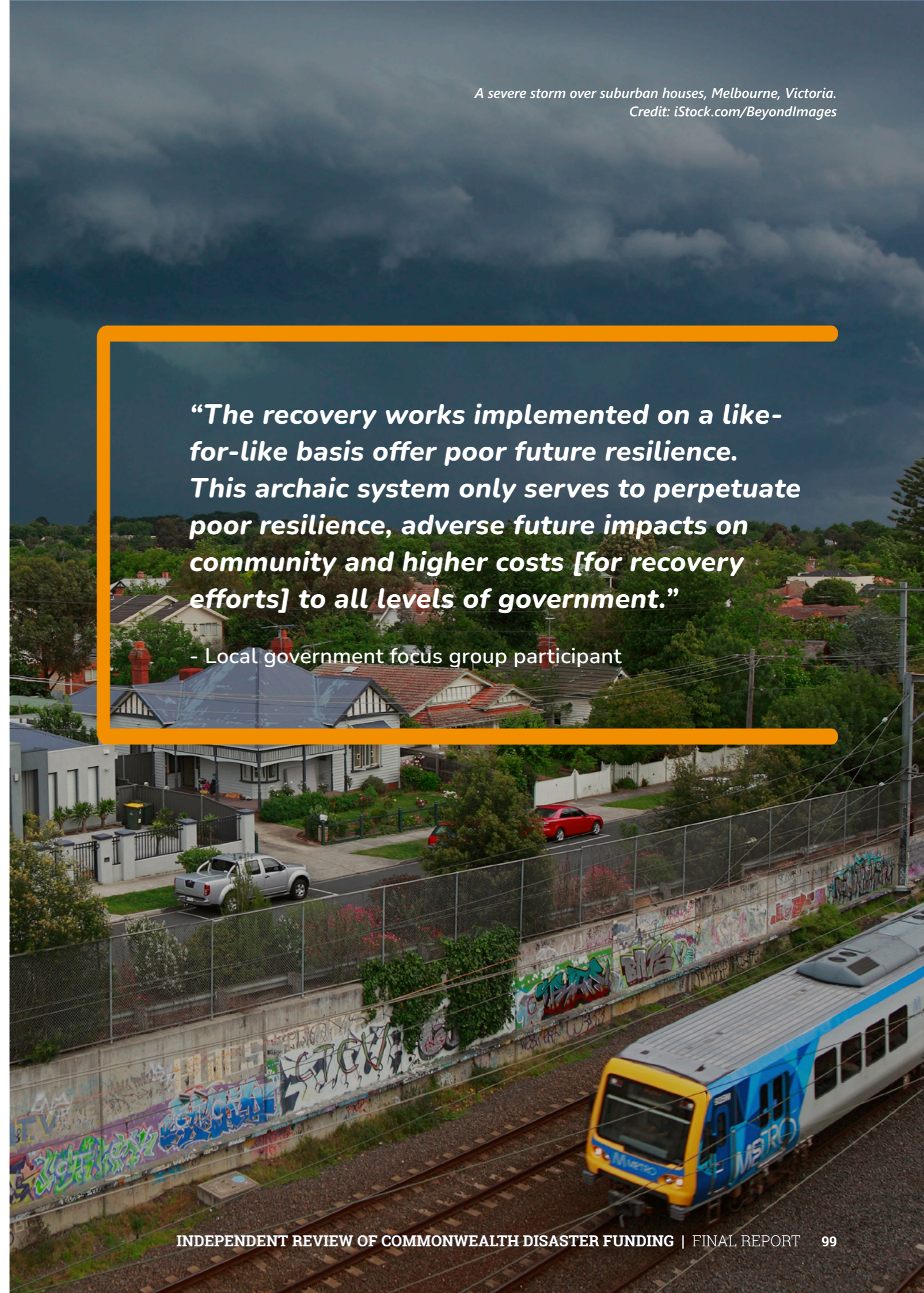
“Interpretation of DRFA and guidelines needs to be rediscussed with Commonwealth, as the interpretation is changing over time, the guidelines will be approved but then they’re different again at audit time.”

- State/territory government focus group participant

Engagement with local governments and state and territory governments, supported by non-government stakeholders, has found that institutional capability, expertise in using the DRFA and access to NEMA staff are key factors influencing the way the DRFA is used. For those local, state and territory governments with limited capacity or experience with the DRFA guidelines, the combination of complexity, non-prescriptiveness and the perceived complicated reimbursement and cost sharing procedures, result in a high risk of ineligibility and hesitation to access Commonwealth assistance.

To claim reimbursement from the Commonwealth under the DRFA, an audit report must be submitted within nine months from the conclusion of the financial year that costs were incurred, after which the Commonwealth has three months to complete its assurance activities. This results in a delay between incurring the commencement of expenditure and confirmation of reimbursement. The potential delays that flow from this reimbursement process are a significant barrier to many smaller jurisdictions or LGAs. For those local governments affected by consecutive disasters, carrying even a small percentage of the claim while awaiting decision and reimbursement by the Commonwealth can

A severe storm over suburban houses, Melbourne, Victoria.
Credit: iStock.com/BeyondImages



“The recovery works implemented on a like-for-like basis offer poor future resilience. This archaic system only serves to perpetuate poor resilience, adverse future impacts on community and higher costs [for recovery efforts] to all levels of government.”
- Local government focus group participant

constitute significant, if not existential, financial risk due to the scale of works required.

“The process of reimbursement is a disaster of its own. At one point our Shire had amounts that were not reimbursed [in a timely fashion] amounting to approximately 45% of our rate base. This has become such a problem that we cannot risk letting a tender for future disaster recovery works as the Shire may effectively run out of cash and become technically insolvent. It is an unacceptable state of affairs.”

- Local government focus group participant

A review of existing literature on the effectiveness of the DRFA echoed concerns raised during stakeholder engagement. Notably, the DRFA's time limits for program expenditure were identified as hampering the pursuit of longer-term resilience and recovery efforts. NEMA acknowledged the frequent need for extensions to be granted to applicants. The expansive nature of categories, especially Category C and Category D, posed challenges, with past events establishing unsustainable precedent and significant uncertainty for these categories. DRFA programs funded under Category D to provide support in exceptional circumstances, such as the Black Summer bushfires, have now set both a precedent and heightened expectations.

Additionally, in the absence of a nationally agreed-upon set of disaster risk reduction objectives, the DRFA is frequently employed opportunistically to build outcomes beyond the recovery phases. As a location- and event-based funding mechanism, the DRFA inherently possesses limitations in contributing to national resilience and risk reduction. Existing literature and stakeholder experiences also emphasise that the recovery phase is not ideal for implementing transformational changes aimed at reducing risk. It is an understandable evolution, but using the DRFA as one of the primary programs to build risk reduction and resilience significantly distorts its original intent. This is not to say that programs under the DRFA should not seek to build resilience or enhance risk reduction (often through the concept of betterment), but this should not be the primary tool with which to achieve it.

“To receive funding for it [betterment] requires a separate application which our agencies often don't have the time or infrastructure to complete as they need to rebuild quickly, resulting in resilient infrastructure not being built.”

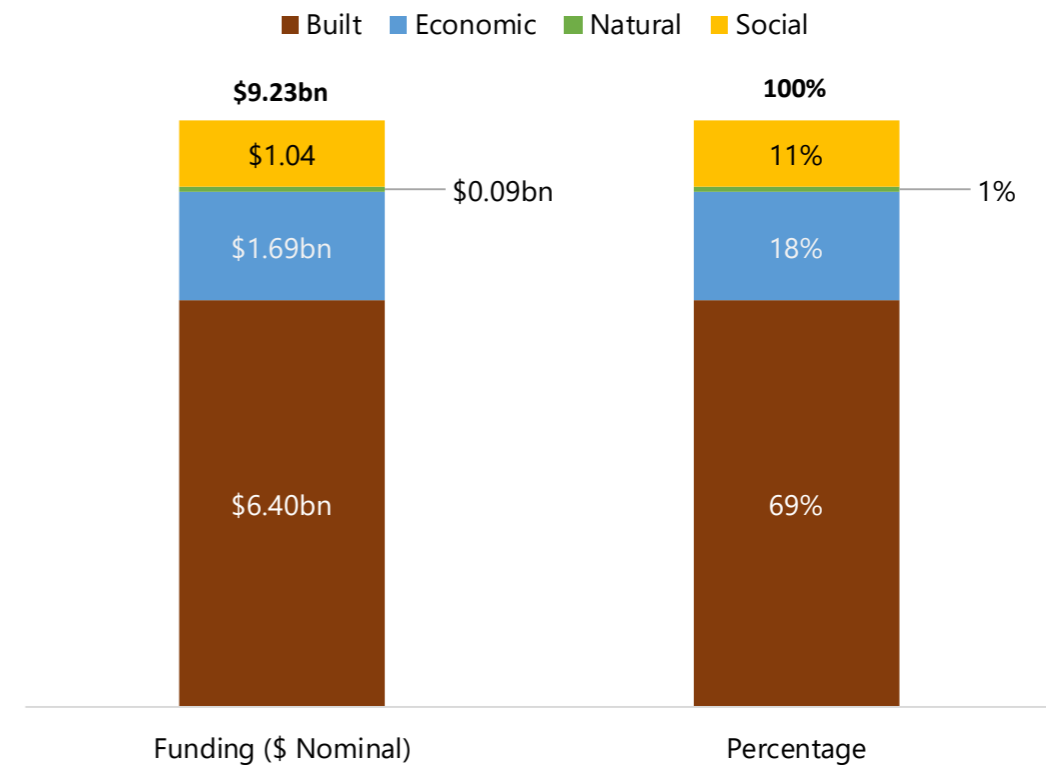
- State/territory government focus group participant

DRFA expenditure is also not evenly distributed across the four domains, potentially undermining effectiveness and systemic resilience. This is to be expected. While it is acknowledged that economic and built domains will often dominate recovery considerations, more deliberate consideration across the domains should be a focus of an effective DRFA. This has been considered in earlier chapters and underscores the need for a holistic Outcomes Policy, and an evidence-informed risk-based approach to investment.

While this applies to investments across the disaster continuum, it is particularly evident in the DRFA. Based on analysis of the primary domain of the expenditure, the social domain constitutes 11% of the DRFA funding between 2018-19 and 2022-23 (see Figure 14). However, as discussed earlier in the report, of the estimated average total economic costs of natural disasters predicted for 2049-50, 42% represent social costs while 58% represent financial costs (under a moderate emissions scenario). Noting this, the Commonwealth should build a more deliberate consideration of funding across the domains, noting the diverse impacts of disasters.

While the DRFA's inclusivity in funding various activities is commendable, its complex nature poses challenges for certain jurisdictions. Contributing factors include thresholds, the small disaster criterion, cost-sharing arrangements, reimbursement and activation processes. Under the DRFA, the first and second thresholds for reimbursement are based on a percent of the state or territory government's total general government sector revenue and grants. The rules around the application of thresholds are complex. This can lead to confusion and irregularities in interpretation of the rules, resulting in a less efficient and effective use of the arrangements. The portion of funding provided by the Commonwealth varies between 50% and 75%, however under Category D the Commonwealth has the flexibility to agree to an alternate cost sharing

Figure 14 Commonwealth DRFA disaster reimbursement by domain | 2018-19 to 2022-23



Source: NEMA 2023e and Deloitte 2024. Notes: (1) DRFA funding is based on the time of expenditure.

ratio, including fully funding the extraordinary assistance measures

“There is an inconsistency across jurisdictions in recovering disaster related costs. For example, in New South Wales and Tasmania, they allow for internal cost recovery such as labour expenses and materials, but in South Australia, they are not eligible expenditure under local government disaster recovery assistance arrangements.”

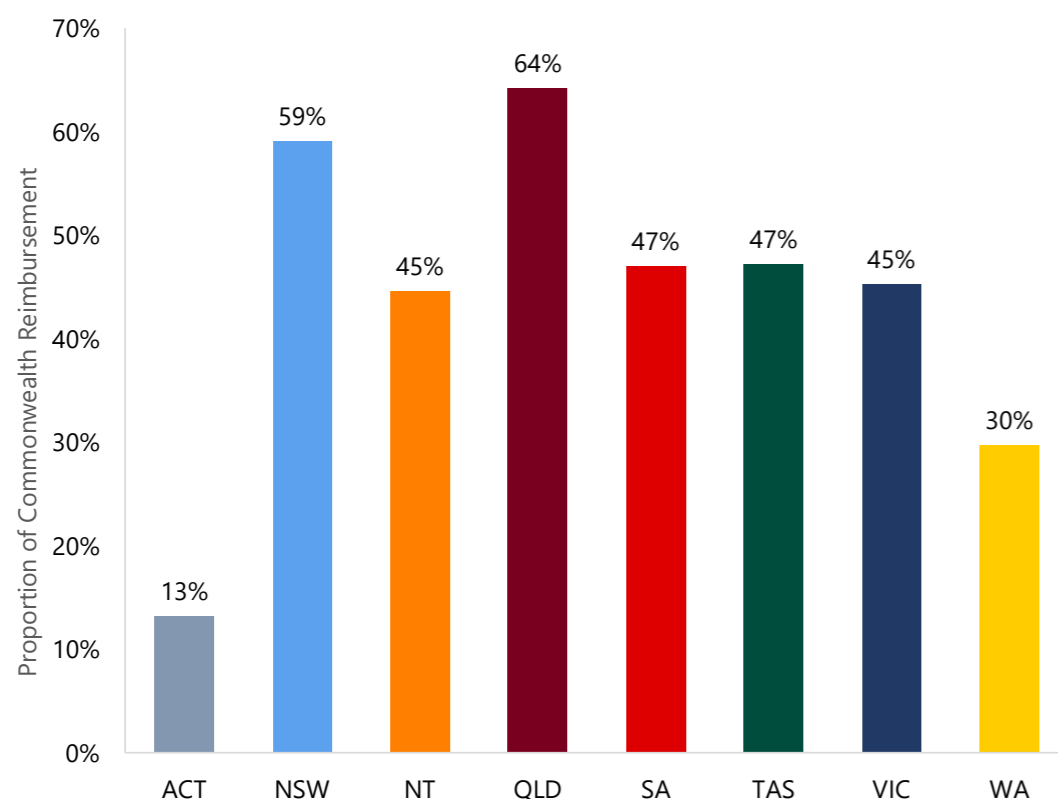
- Local government focus group participant

From a state and territory government perspective, the Commonwealth has overall funded 58% of eligible DRFA expenditure. For New South Wales and Queensland, the Commonwealth has funded 59% and 64% respectively. In comparison, the Australian Capital Territory and Western Australia have

received the lowest level of reimbursement, 13% and 30% respectively. The reimbursement across the states and territories is summarised in Figure 15.

Table 2 and Table 3 present the net state and territory DRFA expenditure and the Commonwealth DRFA reimbursement respectively, across the analysis period on a per capita basis. Consistent with the analysis, Queensland and New South Wales received the highest level of funding on a per capita basis between 2018-19 and 2022-23. Western Australia and Northern Territory have a higher average net state of DRFA expenditure than Victoria. The Australian Capital Territory received, on average, the lowest Commonwealth DRFA reimbursement. This is a reflection of the fact that the Australian Capital Territory only had two declared disaster events over the analysis period. In addition, the Australian Capital Territory, like Victoria, holds insurance which potentially reduces the amount which they claim under the DRFA.

Figure 15 Commonwealth share of DRFA expenditure by jurisdiction | 2018-19 – 2022-23



Source: NEMA 2023e. Notes: (1) DRFA funding is based on the time of expenditure. (2) Includes 100% Commonwealth funded measures.

Table 2 Net state DRFA expenditure per capita by jurisdiction | 2018-19 to 2022-23

Jurisdiction	Average Net State DRFA Expenditure	Minimum Net State DRFA Expenditure	Maximum Net State DRFA Expenditure
ACT	\$6.37	\$0.00	\$31.73
NSW	\$61.21	\$0.26	\$143.17
NT	\$31.15	\$0.00	\$82.47
QLD	\$93.46	\$67.24	\$165.54
SA	\$18.44	\$0.00	\$37.68
TAS	\$30.42	\$3.31	\$62.55
VIC	\$26.07	\$11.49	\$60.95
WA	\$33.03	\$26.88	\$50.54

Source: NEMA 2023e and ABS 2023. Notes: (1) Net state expenditure is calculated as the amount of the state's/territory's eligible DRFA expenditure less the Commonwealth's reimbursement (excluding any Commonwealth 100% funded measures). (2) DRFA funding is based on the time of expenditure. (3) 2022-23 population data is from the March quarter.

Table 3 Commonwealth DRFA reimbursement per capita by jurisdiction | 2018-19 to 2022-23

Jurisdiction	Average Commonwealth DRFA Reimbursement	Minimum Commonwealth DRFA Reimbursement	Maximum Commonwealth DRFA Reimbursement
ACT	\$0.97	\$0.00	\$4.66
NSW	\$88.39	\$0.26	\$216.34
NT	\$25.17	\$0.00	\$70.58
QLD	\$167.31	\$97.84	\$351.69
SA	\$16.42	\$0.00	\$31.50
TAS	\$27.33	\$3.32	\$73.18
VIC	\$21.49	\$0.69	\$66.80
WA	\$13.77	\$2.90	\$43.53

Source: NEMA 2023c and ABS 2023. Notes: (1) DRFA funding is based on the time of expenditure. (2) 2022-23 population data is from the March quarter. (3) Commonwealth Reimbursement includes 100% Commonwealth Funded Measures.

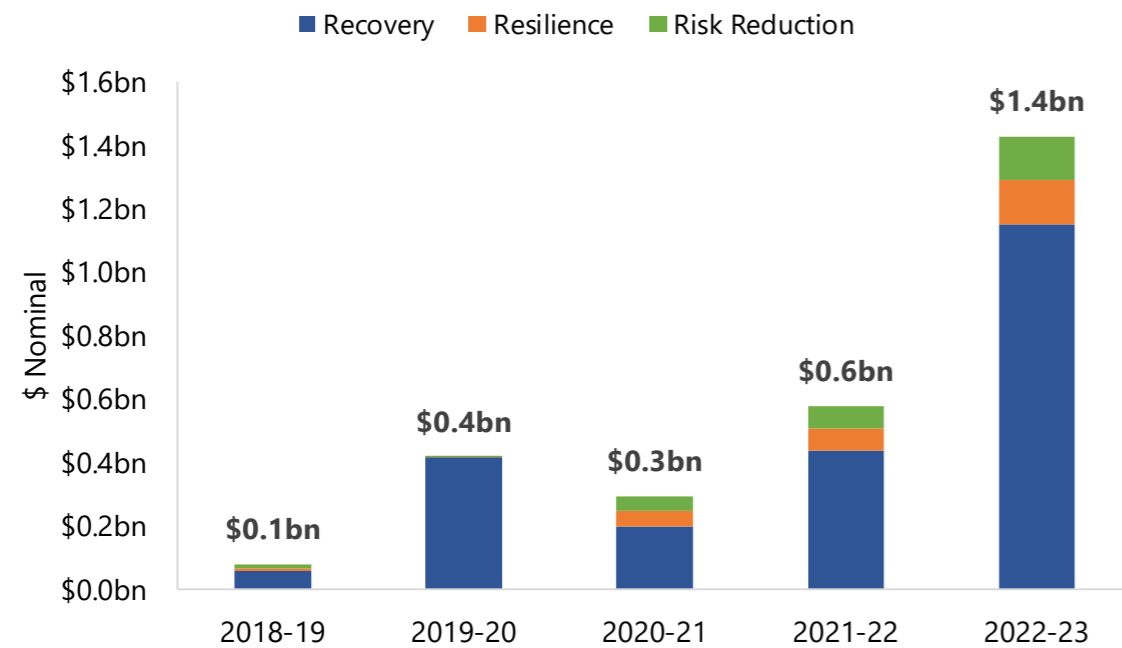
Financial analysis, using data provided by NEMA, for the period between 2018-19 and 2022-23 shows that:

- **Category A:** The average Commonwealth reimbursement is \$62.5 million per annum. New South Wales received the largest reimbursement, followed by Queensland and Victoria. Notably, Category A expenditure on response is lower compared to recovery measures.
- **Category B:** The average Commonwealth reimbursement is over \$1.2 billion per annum. Queensland being the largest recipient, receiving 2.2 times that of what New South Wales received. The other jurisdictions each received less than \$0.3 billion in total during this period.
- **Category C:** The average Commonwealth reimbursement is \$61.9 million per annum. Victoria received the largest Category C reimbursement where the other jurisdictions, excluding Queensland and New South Wales, received less than 10% of Victoria's estimated Category C reimbursement. Notably, the Australian Capital Territory and Northern Territory had no Category C activations during this period.

- **Category D:** The average Commonwealth reimbursement is \$560.3 million per annum. New South Wales received the most, 3.5 times of what Queensland received. The highest reimbursement is observed in New South Wales, Queensland, and Victoria, aligning with the frequency of natural disasters in these jurisdictions compared to the rest of the country.

Figure 16 illustrates that Category D funding has been increasing over the analysis period with additional focus on resilience and risk reduction, potentially influenced by the Royal Commission into National Natural Disaster Arrangements' (2020) recommendation to broaden Category D funding for resilience-focused recovery measures, even in non-exceptional circumstances.

Figure 16 Estimated DRFA Category D Commonwealth reimbursement across the disaster continuum | 2018-19 to 2022-23



Source: NEMA 2023e and Deloitte 2024. Notes: (1) DRFA funding is based on the time of expenditure. (2) Includes 100% Commonwealth funded measures.

To address these issues, the Review recommends a range of reforms to the DRFA.

Replacing the current DRFA Categories

The current DRFA category system has created confusion among stakeholders and is not well understood. The Review has heard that users are often unsure how to navigate or use the categories to achieve successful outcomes.

As stated throughout the Review, adjustments to the DRFA in isolation of broader reform will only have limited impact and potentially create similar inconsistencies and discrepancies over time. But it is important that stakeholders see progress towards a more transparent, consistent and fairer application of the DRFA. To create greater certainty, and stronger governance, the DRFA should align its funding consideration across the well-defined and understood disaster domains. This new category structure should be accompanied by consideration of time frame horizons that clearly distinguish initiatives into short-, medium- or long-term measures.

Providing a structure that is better understood, with clearer articulation of objectives, will not only provide more assurance and consistency,

but also transparency as end users will have a framework in which they can clearly see where initiatives fit, and how they can align with existing standard DRFA measures. Coupled with an Outcomes Policy, these reforms should streamline approval processes as measures will be supported by impact, assessment and consequence plans.

The Review's suggested reform is similar to a design concept for new national disaster funding arrangements proposed by NEMA in their submission to the Review.

Introduce standardised measures

To accompany a simplified category framework, the Commonwealth should reform the DRFA to include the standardisation of measures that are most consistency and uniformly triggered. Existing standardised measures, such as hardship payments, could be expanded to include those measures which are routinely deployed in response to a disaster, including for example evacuation centres, debris removal and small business and primary producer grants. In considering the standardisation of measures, efforts should be made to also align these measures across jurisdictions – for example,

hardship payments currently vary across each jurisdiction creating the perception, if not real risk, of inequality. The Review understands that consideration of standardising measures has been a feature of the COAG DRFA review, which is nearing completion.

As well as providing certainty to local communities and responding organisations, standardising those measures that are most consistently relied upon will help to streamline approval, reconciliation and reimbursement practices. This will bring much needed clarity and consistency to available funding, as well as address concerns from end users who hesitate to use the DRFA due to uncertainty about Commonwealth reimbursement.

Embed betterment and risk reduction objectives

While acknowledging that the DRFA is not the primary funding mechanism to achieve disaster risk reduction, resilience, and prevention objectives, the DRFA's recovery measures

should seek to reduce future risk and build future resilience at every opportunity. The Review's quantitative policy analysis considered the potential benefits of further incorporating betterment into the DRFA. Embedding risk reduction objectives, including betterment, in the DRFA could, under the mid case (see Table 4), yield:

- Net societal benefits, including avoided damages when a disaster occurs and co-benefits that occur even in the absence of a disaster, in as little as two years.
- A net reduction in the estimated total economic cost of natural disasters in twelve years, depending on the location and severity of subsequent disaster events.

The analysis considered the cost of betterment as a portion of the Restoration of Essential Public Assets (REPA), the portion of economic benefits resulting in avoided damages and the benefit cost ratio under three scenarios. See Table 4 for the key assumptions.

Table 4 Embedding betterment within the DRFA | Key assumptions

Key assumptions	Unit	Low Case	Mid Case	High Case
Betterment cost as a portion of REPA cost ¹	%	65%	60%	55%
Portion of economic benefits resulting in avoided damages ²	%	20%	20%	20%
Benefit Cost Ratio ³	x	3:1	6:1	8:1
Number of periods for benefits realisation ³	#	23	23	23
Real discount rate ⁴	% p.a.	7%	7%	7%
2023-24 National REPA cost ⁵	\$ M Real 2023-24	4,314	4,314	4,314
2023-24 National total economic cost ⁵	\$ M Real 2023-24	11,837	11,837	11,837
2049-50 National total economic cost ⁵	\$ M Real 2023-24	40,275	40,275	40,275

Sources: (1) Based on analysis of Queensland Reconstruction Authority case studies (Queensland Reconstruction Authority 2023) (2) Based on analysis of Summary of Recovery of Assistance Table (SORAT) data (NEMA 2023c) (3) Based on analysis of National Institute of Building Sciences 2019 (4) Department of the Prime Minister and Cabinet – The Office of Impact Analysis 2023 (5) Outputs from Deloitte forecast modelling. Numbers represent the average estimate excluding the impact of climate change.

Table 5 Net present value of costs and benefits of embedding betterment in the DRFA | 2023-24 to 2049-50

Key outputs	Unit	Low Case	Mid Case	High Case
Estimated total economic cost of natural disasters excluding betterment ¹	\$bn	(239.5)	(239.5)	(239.5)
Commonwealth betterment funding	\$bn	(51.4)	(43.9)	(38.8)
Estimated total economic cost of natural disasters including betterment ¹	\$bn	(268.5)	(244.5)	(232.1)
Net saving/(cost) from avoided damages	\$bn	(29.0)	(5.0)	7.4
Potential total economic benefits ²	\$bn	112.2	194.5	230.7
Potential net economic benefits ³	\$bn	60.8	150.6	191.9

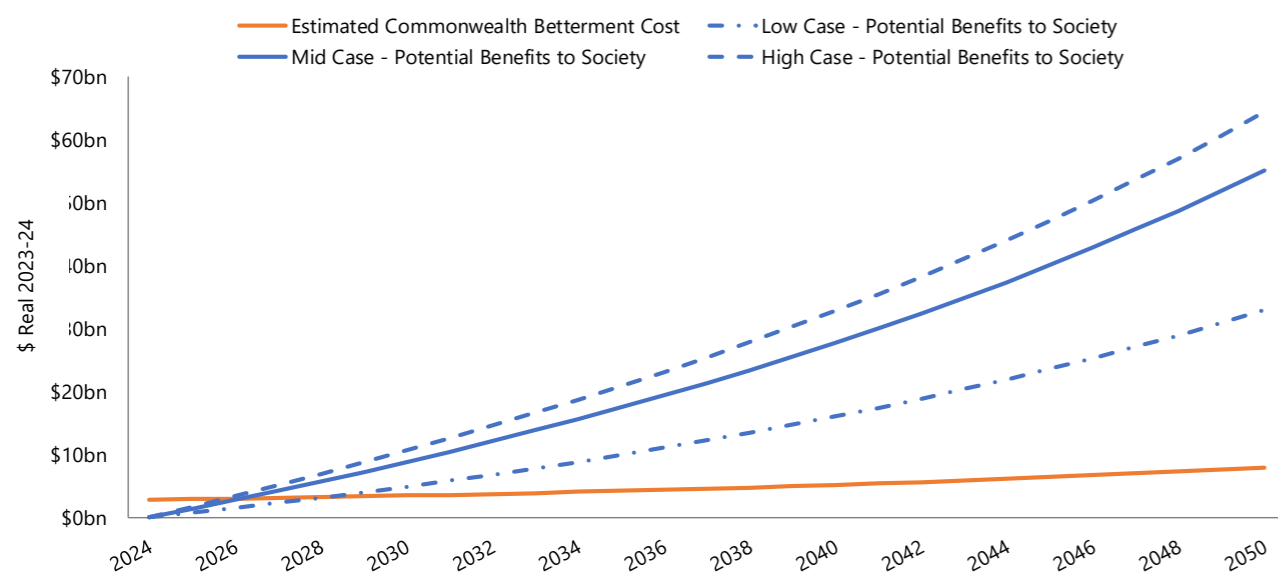
Source: Deloitte 2024. Notes: (1) Analysis is based on the average estimate of the total economic cost of natural disasters excluding the impact of climate change. (2) Total economic benefits includes avoided damages when a disaster occurs and co-benefits that occur even in the absence of a disaster. (3) Numbers may not add due to rounding.

The analysis found that over a 27-year period under the mid case, the estimated betterment cost of \$43.9 billion in net present value terms is projected to generate total economic benefits of \$194.5 billion in net present value terms. It should be noted that these benefits may include a reduction in the total economic costs associated with future natural disasters and/or wider benefits to society through improving economic growth and wellbeing. Table 5 provides a summary of the impact on the total forecast economic cost of natural disasters of embedding further betterment into the

DRFA. The analysis indicates that betterment, coupled with risk-based analysis to identify those projects that will yield the greatest benefit cost ratio, has the potential to put downward pressure on the total economic costs associated with natural disasters.

Consistent investment in betterment leads to accumulated annual economic benefits reaching \$64.4 billion, \$55.1 billion, and \$32.9 billion in 2049-50 under high, mid, and low cases, respectively in real 2023-24 dollar terms (see Figure 17).

Figure 17 Additional costs and economic benefits associated with embedding betterment in the DRFA | 2023-24 to 2049-50



Source: Deloitte 2024. Notes: analysis does not consider the impact of climate change.

Review cost-sharing arrangements

The complexity of the DRFA poses a significant obstacle for effective utilisation by state, territory, and local governments. The Review found that familiarity with the DRFA benefited certain states, territories and local governments, while others consciously opted out of using it, or using it to its full potential. Simplifying cost-sharing arrangements, along with reimbursement criteria, based on individual states' and territories' capacities would enhance accessibility, especially for smaller jurisdictions with fewer financial resources. Further, there is a growing concern about the inconsistent financial support and capabilities for local-level disaster management leadership. Confidence in the capacity and capability of states, territories, and local governments is crucial for the effective operation of the funding parameters.

Adding to this complexity, the small disaster criterion was originally set in 2007 and has not been reviewed or adjusted since. While the small disaster criterion is considered in the context of an eligible disaster, it does not take into consideration the financial capacity of the relevant state or territory in determining the expenditure to be reimbursed by the Commonwealth. The Review supports the expected deeper examination of how the current cost sharing arrangements are working in practice and how their complexity is creating barriers to entry into the scheme. Any review of the current arrangements should consider the thresholds, reimbursement rates and whether insurance costs should be taken into consideration when determining thresholds.

Narrow and standardise the use of Category D

While the DRFA's flexibility has been acknowledged as a strength by various stakeholders throughout the Review, a more prescriptive approach, especially for Category D, is necessary. Category D is increasingly relied upon for various activities, including risk reduction which, while valuable, is carried out on an ad-hoc basis. Using Category D in this manner deviates from the DRFA's original intended purpose as recovery assistance. Category D's uncapped expenditure also poses a risk to the overall Commonwealth natural disaster spend without improved governance and discipline. The Royal Commission into National Natural Disaster Arrangements (2020) recommended the broadening of Category D to enable resilience and risk reduction funding through recovery, and indeed, all recovery

spending should facilitate resilience building by design. However, standalone investments in national resilience and risk reduction should preferably be made principally through the DRF, or other dedicated risk reduction programs. The Review recommends the intent of Category D – specifically the exceptional circumstance aspects – be more tightly defined.

The increasing use of the exceptional circumstance clause of Category D, and the over-reliance on it to achieve broader recovery outcomes, highlights the need for a critical rethink of how these outcomes are delivered and the role played by the DRFA. Existing guidelines for the use of the DRFA highlight the need for impact assessments and gaps to be identified before being activated. This needs to be applied more consistently and rigorously as Category D is now being triggered earlier in the post disaster period, often well before impact and consequence assessments can be realistically made. Ideally, consistent completion of impact and comprehensive impact assessments would provide the Commonwealth with clear evidence that allocated funding delivers on intended objectives. This should be a key decision point before Category D funds are released to ensure efficient and appropriate support is delivered to communities.

Furthermore, consistent with the need to introduce more evidence-informed decision making and a clearer understanding of relative risk, the Commonwealth should seek to align recovery objectives along a short-, medium-, and long-term timeline. To incentivise a more evidence-informed approach, funding requests that align with the Risk Profile should be prioritised.

Disaster Ready Fund

In 2023, the Emergency Response Fund (ERF) was converted into the Disaster Ready Fund (DRF), with \$200 million per annum of funding allocated to fund natural disaster resilience and risk reduction for 5 years, from 2023-24 onwards. The establishment of the DRF reflects a growing emphasis on resilience and risk reduction and directly contributes to Australia's obligations under the Sendai Framework.

State and territory governments submit

proposals for projects to NEMA for DRF funding through a self-nominated lead agency or department. Projects administered under the DRF require a 50% co-contribution from the applicant. As per the DRF Round Two Guidelines, anyone is eligible to develop a DRF proposal, however only Australian state and territory governments are eligible to submit projects to NEMA.

Under the standard application pathway, applicants submit project proposals to lead agencies, with processes for doing so varied across jurisdictions. Lead agencies consider and screen proposals to ensure submissions comply with the DRF’s objectives, eligibility criteria, and selection criteria as outlined in the guidelines and categorise each proposal as ‘Highly Suitable’, ‘Suitable’, or ‘Not Suitable’. Only projects categorised as ‘Highly Suitable’ and ‘Suitable’ can be submitted to NEMA for assessment.

No historical quantitative analysis of DRF was possible given that funding was only recently committed in 2023-24.

Despite the DRF being the primary funding pathway available to achieve investment in disaster risk reduction (outside a disaster event having occurred), the quantum of funding is relatively small, especially when compared with post-disaster specific programs like the DRFA and AGDRP. As highlighted by NEMA’s submission to the Review, between 2018-19 and 2021-22 the DRFA was used to fund up to \$3 billion in measures that could contribute to a risk reduction/resilience outcome. This is contrasted against the \$1 billion available to the DRF over a five year period.

This is a positive assessment of the impact of the DRFA but highlights the significant difference between the Commonwealth’s primary national risk reduction program (the DRF) and the DRFA, which is location- and event-based. As such, a significant increase to the DRF’s funding allocation is likely required if the Commonwealth is to play a leading role in disaster risk reduction and resilience on a nation-wide basis, rather than follow the reactive approach of the DRFA. NEMA, as well as other Commonwealth stakeholders, have argued that the DRF does not have the level of sustainable funding needed to address larger-scale transformative projects.

Within the current disaster funding arrangement, there is positive evidence of efforts to target disaster risk reduction through

the DRF. This is demonstrated by recent uplift to the DRF guidelines from Round 1 to Round 2, with Round 2 selection criteria now directly aligned to activities of the Second National Action Plan. Though this represents a positive shift in strategically investing in resilience and risk reduction, the scale and complexity of the challenge is at odds with the quantum of funding currently allocated to the fund.

“The scale of funding is a critical issue. While it’s wonderful to get funding through the DRF, it’s a drop in the water when dealing with issues like storm water and the major structural changes which are needed for resilience building.”

- Local government focus group participant

A key concern raised by stakeholders about the DRF was the heavy administrative burden associated with applying and using the funding. Stakeholders from a range of sectors emphasised that often the amount of work required to receive and then maintain funding hindered their ability to effectively utilise it. Applications were described as cumbersome and often different to other forms of financial support (such as the DRFA), despite aiming for similar outcomes. This creates a high burden for applicants as they often apply for multiple types of funding simultaneously and then must use similar information and evidence but in different processes. The Review has heard that this complexity can disincentivise its use by potential beneficiaries, and implicitly advantages more mature jurisdictions, or non-government actors, with significant experience.

“There is a lack of coordination for national programs across states. We have lots of communities we want to sponsor to get DRF funding...”

- Philanthropy sector focus group participant

These issues were further compounded by the DRF’s funding cycle timelines. Stakeholders noted that the Round 1 cycle of DRF funding did not align to budget cycles, which inhibited some jurisdictions from being able to meet co-funding

requirements, preventing them from accessing funding.

“The administrative burden of the DRF is too much as often people are managing disaster recovery simultaneously. Funding rounds often align with disaster periods in our jurisdiction, which results in applications falling behind.”

- Philanthropy sector focus group participant

This leads to an emphasis on meeting the requirements of the application process, rather than targeting the most strategic and impactful initiatives. Issues of timing have ongoing ramifications for DRF projects. The funding cycle does not provide sufficient time for major program adjustments to be made. There is insufficient time for necessary changes to be signalled and to allow for applicants to plan appropriately, to obtain co-funding and to identify eligible projects. While DRF Round 2 funding cycles are currently underway, there is already feedback describing misaligned processes between the Commonwealth and state and territory government requirements.

“There’s often a requirement for a 50% co-contribution, which sometimes local governments can’t meet, and grant funding cycles generally don’t align with government budgeting cycles, so it’s hard to align all of that up and often local governments compete not just against each other, but also state government.”

- Local government focus group participant

“The Commonwealth is like a big corporate bank, and the Commonwealth is the big central entity, and the state is all the branches based on their own strategic alignments. The DRF eligibility was very loose and then the states just administered however they wanted.”

- Philanthropy sector focus group participant

Stakeholder feedback highlighted a perception that projects were chosen based on who had existing capability to write persuasive proposals, rather than seeking out excellent ideas from communities and groups who may not have grant writing expertise, exacerbating issues of inequity across regions. The Review also heard that too often projects were funded as one-off initiatives rather than ongoing projects, limiting their long-term success.

Stakeholders also discussed the damage of a competitive process, whereby potential collaborators were required to compete for funding in the same at-risk, or impacted communities and regions. This was seen to actively undermine local adaptive and coping capacity. Similarly, as state and territory governments are both the conduit for applying for Commonwealth funds and themselves submitting proposals, some local and non-government stakeholders demonstrated suspicion and confusion about the fairness of the assessment process, whereby the local benefits of a project were compared with state-wide proposals. Frustration about a lack of transparency around decision rationales led these stakeholders to believe that the program imposes a significant resource burden to assemble a proposal without providing feedback on how proposals are chosen.

“DRF is skewed to state and territory success and not local.”

- Local government focus group participant

“The DRF timelines were tight and there was not a lot of clarity regarding the emergency management process and how these were progressed up to the Commonwealth. There was also a lack of clarity around feedback.”

- Local government focus group participant

Better harnessing the benefits of the DRF

Despite these shortcomings, stakeholders expressed support for the DRF. It was noted that the DRF’s intent to fund resilience and risk reduction was essential for long term community resilience and safety. Stakeholders

“Not enough is being provided to support future needs. The announcement of the DRF in this space by the new government is a step in the right direction. I think there’s definitely more that can be done in that area though.”

- Farming and primary producers sector focus group participant

Regrowth after bushfires, Mallaacoota, Victoria
Credit: Andrew Colvin

also emphasised that it was a crucial resource for infrastructure development and disaster mitigation programs, which were not necessarily eligible for support under other programs.

The DRF remains an effective program for supporting this strategic uplift, due to stakeholder support and the cost-effectiveness of risk reduction initiatives. By implementing a risk-based approach to decision making, the Commonwealth can direct funding towards activities with the greatest potential to reduce

risks and the associated cost of natural disasters. Financial and economic modelling of the DRF shows that it could provide a net reduction to the total economic cost of natural disasters by 2028-29, due to the positive impacts of resilience and risk reduction investments (see Table 6).

This analysis also shows that the Commonwealth can reduce the total economic costs of natural disasters through investments in risk reduction and resilience.

Table 6 Key assumptions underpinning the analysis of the DRF’s future economic benefits

Key assumptions	Unit	Low Case	Mid Case	High Case
Portion of economic benefits resulting in avoided damages ¹	%	20%	20%	20%
Benefit cost ratio ²	x	3:1	6:1	8:1
Number of annuity periods ²	#	23	23	23
Real discount rate ³	%	7%	7%	7%
2023-24 National total economic cost ⁴	\$ M Real 2023-24	11,837	11,837	11,837
2049-50 National total economic cost ⁴	\$ M Real 2023-24	40,275	40,275	40,275

Sources: (1) Based on analysis of SORAT data (NEMA 2023c) (2) Based on analysis of National Institute of Building Sciences 2019 (3) Department of the Prime Minister and Cabinet – The Office of Impact Analysis 2023 (4) Outputs from Deloitte forecast modelling. Notes: Numbers represent the average estimate excluding the impact of climate change.

Table 7 Net present value of costs and benefits of DRF funding | 2023-24 to 2049-50

Key outputs	Unit	Low Case	Mid Case	High Case
Estimated total economic cost of natural disasters excluding DRF ¹	\$bn	(239.5)	(239.5)	(239.5)
Commonwealth DRF Funding	\$bn	(0.8)	(0.8)	(0.8)
Estimated total economic cost of natural disasters including DRF ¹	\$bn	(239.8)	(239.8)	(239.8)
Net saving/(cost) from avoided damages	\$bn	(0.3)	0.2	0.5
Potential total economic benefits ²	\$bn	2.5	5.0	6.6
Potential net economic benefits ³	\$bn	1.7	4.1	5.8

Source: Deloitte 2024. Notes: (1) Analysis is based on the average estimate of the total economic cost of natural disasters excluding the impact of climate change. (2) Total economic benefits includes avoided damages when a disaster occurs and co-benefits that occur even in the absence of a disaster. (3) Numbers may not add due to rounding.

The analysis found that over the evaluation period, the Commonwealth can expect to see a net cost saving, in terms of the total cost of natural disasters, under the mid case and the high case (see *Table 7*). While the low case does not result in a net cost saving in the total economic cost of natural disasters, from a societal perspective the funding is expected to generate net positive benefits when the co-benefits are taken into consideration.

Appropriately using the DRF and targeting programs to derive the maximum benefit would enable a holistic uplift of capability and capacity across the disaster management system. This is not possible however, without a revision of the program to reflect a strategic, whole-of-Commonwealth approach to disaster management and without the development of the Risk Profile.

The collaboratively developed Risk Profile would enable the Commonwealth, in conjunction with states and territories, to identify risk reduction and resilience priorities nationally. This, coupled with local Disaster Management Plans and assessments, will strengthen the ability of communities to embed resilience and identify associated resources requirements. Subsequently, this will identify at-risk communities which may require additional assistance and inform Commonwealth priority areas, including through the DRF.

Using this approach to inform the use of the DRF, as opposed to singularly using an entity's funding application, would facilitate a better approach to building resilience and provide a more rounded, robust and transparent decision-making framework. Applications would remain beneficial, but it would allow the Commonwealth to test the merit of proposed projects without placing an additional administrative burden on the applicant, as well as to target programs based on community needs and stakeholder feedback.

“Funding is a zero-sum game in the DRF. If you prioritise funding in one area another is missing out and there is a matching requirement in there, but there are things that can be done to improve that. An evidence-based approach would remove some of this discrepancy.”

- Philanthropy sector focus group participant

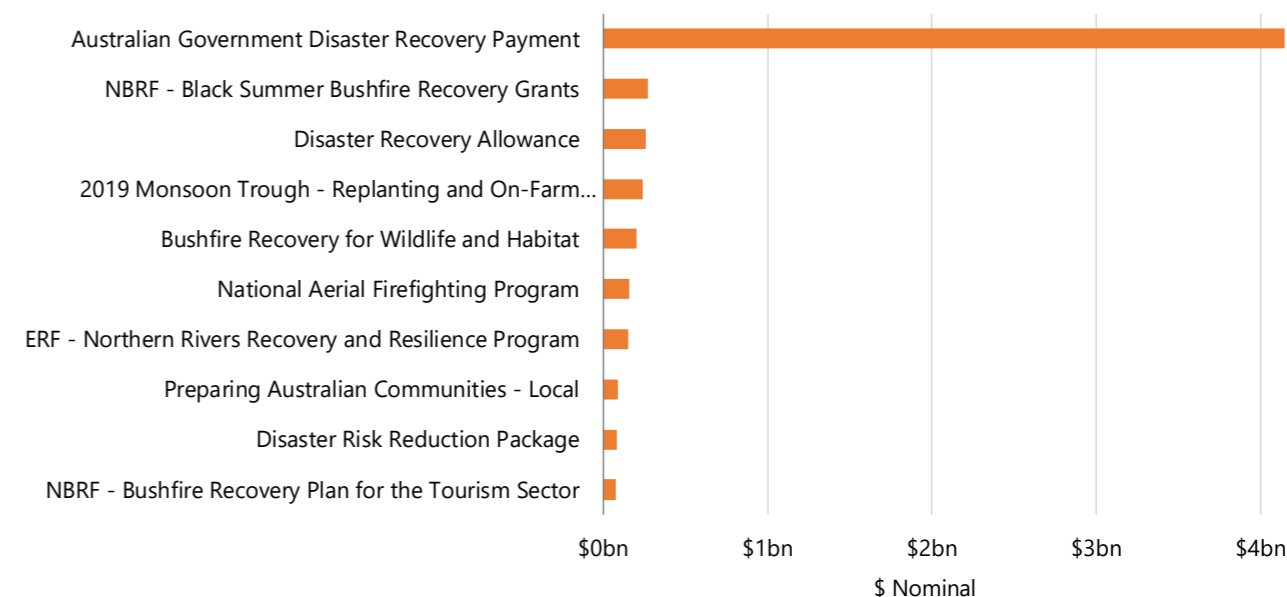
To guide these investments further and to ensure they align with the strategic goals of the Commonwealth, the Outcomes Policy is essential to optimising the DRF. The combination of an Outcomes Policy to guide DRF objectives, and a risk-based approach to identify areas in need, can inform the DRF's existing 'national projects' stream to include initiatives that the Commonwealth identifies as in the national interest. Consequently, the Risk Profile will be a critical component to inform an expanded 'national projects' stream. The Risk Profile, which would be developed as part of a risk-based approach, would help determine both what are national priorities, and which projects align to them. It would also ensure that community driven initiatives could be supported along with large-scale infrastructure projects.

Finally, re-aligning the release of DRF funding to the budget cycles of state and territory governments would assist state and territory governments to tailor projects according to their risk-assessed needs, and streamline application processes for other potential beneficiaries. A collaborative approach will allow for sustainable cost-sharing between the Commonwealth and state and territory governments to meet common goals. In building the resilience of states and territories, the Commonwealth is also allowing parties to move away from a reliance on the DRFA for disaster support and shifting spending to earlier stages of the disaster continuum.

Australian Government Disaster Recovery Payment

The Australian Government Disaster Recovery Payment (AGDRP) is a one-off payment provided to eligible Australian residents who are adversely affected by a major disaster. It is a non-means tested payment of \$1,000 per adult and \$400 per child that is activated when a major disaster occurs. The AGDRP was introduced in 2006 as a Commonwealth payment under the *Social Security Act 1991*. The AGDRP is administered by Services Australia and is the Commonwealth's largest disaster-related expenditure outside of the DRFA. It is important to note that the AGDRP, like many disaster funding programs, is not confined to

Figure 18 Top ten non-DRFA disaster funding related programs by value | 2018-19 to 2022-23



Source: NEMA 2023d.

natural disasters and can be triggered for major disasters that are either natural or man-made.

Over the past five years, Commonwealth expenditure for the AGDRP has equated to over \$4 billion dollars as shown in *Figure 18*.

The AGDRP's intent is unclear

The AGDRP has become a payment that is synonymous with natural disasters, with community expectations often meaning that the payment is activated quickly in response to significant natural disasters.

An issue raised during consultations with Commonwealth stakeholders, and observed by the Review, was that the AGDRP lacks a clear statement of intent. Across different stakeholder groups there were varied views on the specific intent of the payment. For example, some stakeholders view it as a hardship payment, while others view it as an extraordinary payment made in 'unique' circumstances to individuals who have been 'adversely' impacted. What was clear, is that the AGDRP is very quickly activated after most natural disaster events and is used widely across a disaster affected region.

A lack of certainty around the purpose and scope of the AGDRP, coupled with its inherently subjective activation determination, creates opportunity for the AGDRP to be activated where it may be more appropriate to activate other support payments (e.g. cost-shared hardship payments under the DRFA).

A statement of intent should clearly describe the purpose of the AGDRP and what it aims to address, as distinct from existing cost shared hardship payments, and other supports, provided under the DRFA. A clear understanding of the intent of the AGDRP, and subsequent consideration of its impact (as per the Outcomes Policy), will help guide policy makers, decision makers and Ministerial determinations to ensure that the AGDRP is used in the most effective possible manner.

The AGDRP activation areas are broad and not well informed by hazard extent data

The AGDRP's general application across LGAs is an area for improvement, with Commonwealth and social service sector stakeholders raising concerns about the AGDRP's activation criteria. The AGDRP has traditionally been activated within an affected LGA, meaning that all people who lived within that LGA are eligible to make an application. In practice, this has created inequitable outcomes where certain communities and individuals are potentially disadvantaged by not receiving the payments due to LGA boundary delineations. It also opens the payment to a wide group of individuals, not all of whom have been impacted equally.

For example, the decision following the 2022 Lismore floods to make additional AGDRP payments to certain LGAs potentially distorted the intent of the payment and demonstrated difficulties with the LGA activation process.

As announced in March 2022, the decision was:

“An additional two weekly disaster payments for the catastrophe zones in the Lismore, Richmond Valley and Clarence Valley LGAs paid for those who had already claimed and received the Australian Government Disaster Recovery Payment”

- Prime Minister’s Office 2022

This decision raised concerns about equitable access to assistance. While the nominated LGAs covered a large portion of those impacted, it did not cover them all. While the speed of this payment is one of the AGDRP’s greatest strengths, concerns have been highlighted with using LGAs - a sometimes large and imprecise area - as the determining eligibility factor for a disaster payment such as the AGDRP.

Similar issues were heard with respect to victims of natural disaster who did not have access to government support because the disaster declarations were not triggered due to the size or impact of a particular event. The impact on an individual or a family was the same, but the support differed. Unintentionally, the AGDRP has developed a reputation of sometimes being divisive in communities between those who are eligible and receive the payment, and those who do not.

The potential to use geospatial information or hazard impact data, for example, could enable NEMA and Services Australia to better target potential beneficiaries in need, avoid legitimate beneficiaries being excluded and reduce the risk of fraudulent claims. The Review understands that after the 2023 storm events in Southeast Queensland, efforts were made to map impact zones and target AGDRP eligibility using data available from non-government sources. This is a positive development and should be explored further.

Similarly, in preparation for a predicted or pending event, likely hazard impact mapping would assist in the planning for AGDRP activation in a targeted manner by being able to draw clearer boundaries around disaster areas. As well as being more targeted to the needs of individuals, the Commonwealth should ensure that AGDRP expenditure is more effective, especially since it is the largest non-DRFA program the Commonwealth administers.

The AGDRP is duplicative of the Category A hardship payments of the DRFA

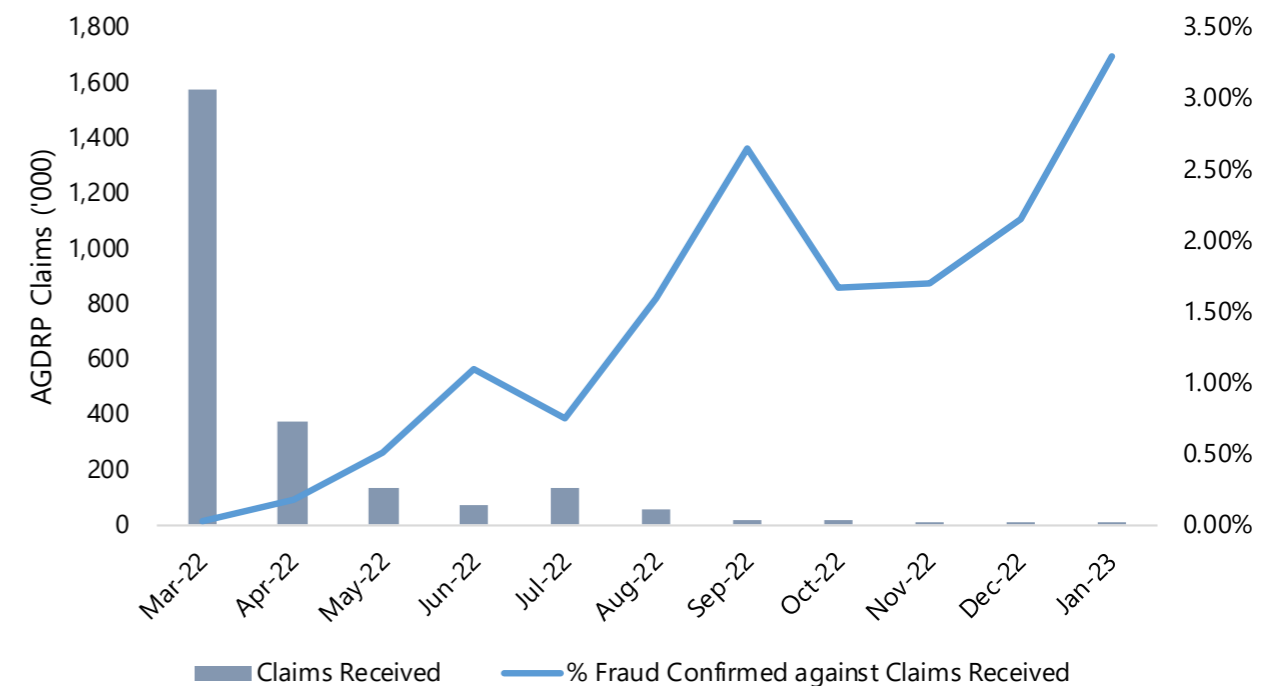
Through stakeholder engagement it became clear to the Review the AGDRP is often believed to be an additional payment, but similar to, the hardship measures provided under Category A of the DRFA. Category A hardship payments vary between jurisdictions but provide financial assistance to affected individuals and families following disasters. The AGDRP should not be considered as an additional payment to the DRFA, but instead as part of a holistic package of support that is provided to individuals and families based on assessed need. Hardship payments under Category A are cost-shared payments with states and territory governments, meaning that they are more likely to target the most impacted communities and individuals. Some aspects of these payments may be subject to means and/or asset testing, providing further assurance that the payments are being appropriately targeted.

The Review proposes that the DRFA Category A hardship payments should be regarded as the primary mechanism through which the Commonwealth supports individuals and families in the immediate aftermath of disasters. Other recommended reforms to DRFA categories outlined in the Review will also improve the clarity around the purpose and intent of immediate, individual and family post disaster payments.

The eligibility timeframes of the AGDRP obscure its intent and creates risk for fraud

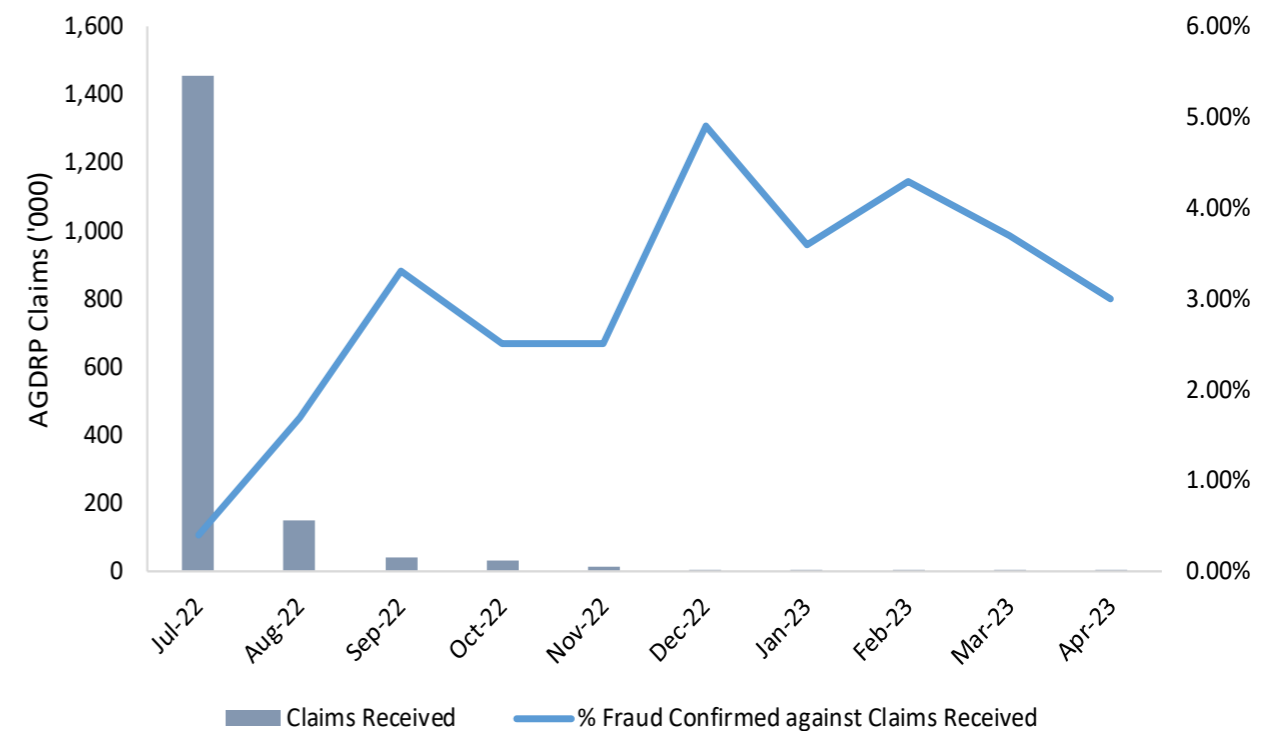
The AGDRP can be claimed for six months from the date of its activation. As noted in *Figure 19* and *Figure 20*, while the claims do drop over time, the risk for potential fraud increases towards the end of the six-month timeframe. The activation of the AGDRP for both the NSW floods of February 2022 and July 2022 highlights the fraud risk over extended periods. Due to multiple extensions for this event, the timeframe for claims was ten months. *Figure 19* shows the number of AGDRP applications for the NSW floods in March 2022, and the percentage of cases rejected due to fraud in these applications over time. *Figure 20* highlights the same for the July 2022 floods. This shows that the longer the AGDRP is available for, the greater the chance that fraudulent claims will be made. Consideration should be given to reducing the eligibility timeframes of the AGDRP to align the AGDRP more closely as a response payment and to reduce the risk of fraudulent claims.

Figure 19 Number of AGDRP claims against proportion of fraudulent claims | NSW Floods March 2022



Source: Services Australia 2024.

Figure 20 Number of AGDRP claims against proportion of fraudulent claims | NSW Floods July 2022



Source: Services Australia 2024.

Increasing the AGDRP's impact

A revised statement of intent would deconflict the AGDRP and Category A DRFA hardship payment by defining the AGDRP's boundaries as a separate and different payment to the DRFA hardship payment. A more disciplined and purposeful use of the AGDRP would allow the Commonwealth to target it to those who need it most. This may deliver reductions in the overall cost of the AGDRP, which could be redirected to risk reduction and resilience activities.

The Review undertook financial and economic modelling to examine the impact of redirecting any reductions in the overall cost of the AGDRP to risk reduction and resilience activities. This analysis assumed that due to the tightening of the scope of the AGDRP, some savings may be realised.

The analysis considered a high, mid and low case, where it was assumed the policy change

generated a 3%, 5% and 7% saving in AGDRP expenditure (see Table 8).

The analysis found that over the evaluation period the Commonwealth can expect to see a net cost saving in terms of the total cost of natural disasters (see Table 9). Under the mid case, in net present value terms, the \$0.8 billion in redirected AGDRP funding is estimated to produce an economic benefit of \$3.1 billion. Table 9 provides a summary of the impact on the total forecast economic cost of natural disasters and the potential net economic benefits of redirecting any savings from tightening the scope of AGDRP.

Redirecting any savings from tightening the scope of AGDRP towards resilience and risk reduction activities, results in estimate d accumulated annual economic benefits reaching \$2.0 billion, \$1.0 billion, and \$0.3 billion in 2049-50 under high, mid, and low cases, respectively in real 2023-24 dollar terms (see Figure 21).

Table 8 Redirecting AGDRP savings to resilience and risk reduction activities | Key assumptions

Assumption	Unit	Low Case	Mid Case	High Case
Proportion of AGDRP redirect to resilience and risk reduction measures	%	3%	5%	7%
Implementation year of AGDRP redirect	Year	2025-26	2025-26	2025-26
Portion of economic benefits resulting in avoided damages ¹	%	20%	20%	20%
Benefit cost ratio ²	x	3:1	6:1	8:1
Number of periods for benefits realisation ²	#	23	23	23
Real discount rate ³	% p.a.	7%	7%	7%
Historical average annual AGDRP funding ⁴	\$ M Real 2023-24	828	828	828
2023-24 National total economic cost ⁵	\$ M Real 2023-24	11,837	11,837	11,837
2049-50 National total economic cost ⁵	\$ M Real 2023-24	40,275	40,275	40,275

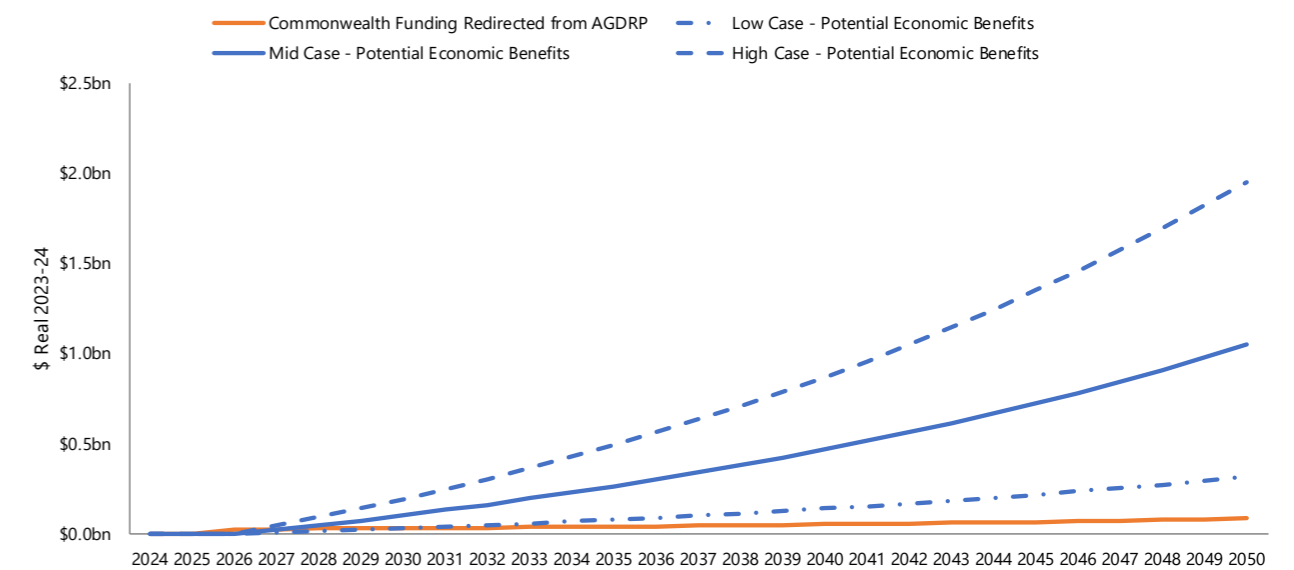
Sources: (1) Based on analysis of SORAT data (NEMA 2023c) (2) Based on analysis of National Institute of Building Sciences 2019 (3) Department of the Prime Minister and Cabinet – The Office of Impact Analysis 2023 (4) Based on analysis of Summary of Disaster Resilience Funding Dataset (NEMA 2023d) (5) Outputs from Deloitte forecast modelling. Numbers represent the average estimate excluding the impact of climate change.

Table 9 Net present value associated with redirecting AGDRP savings to resilience and risk reduction activities | 2023-24 to 2049-50

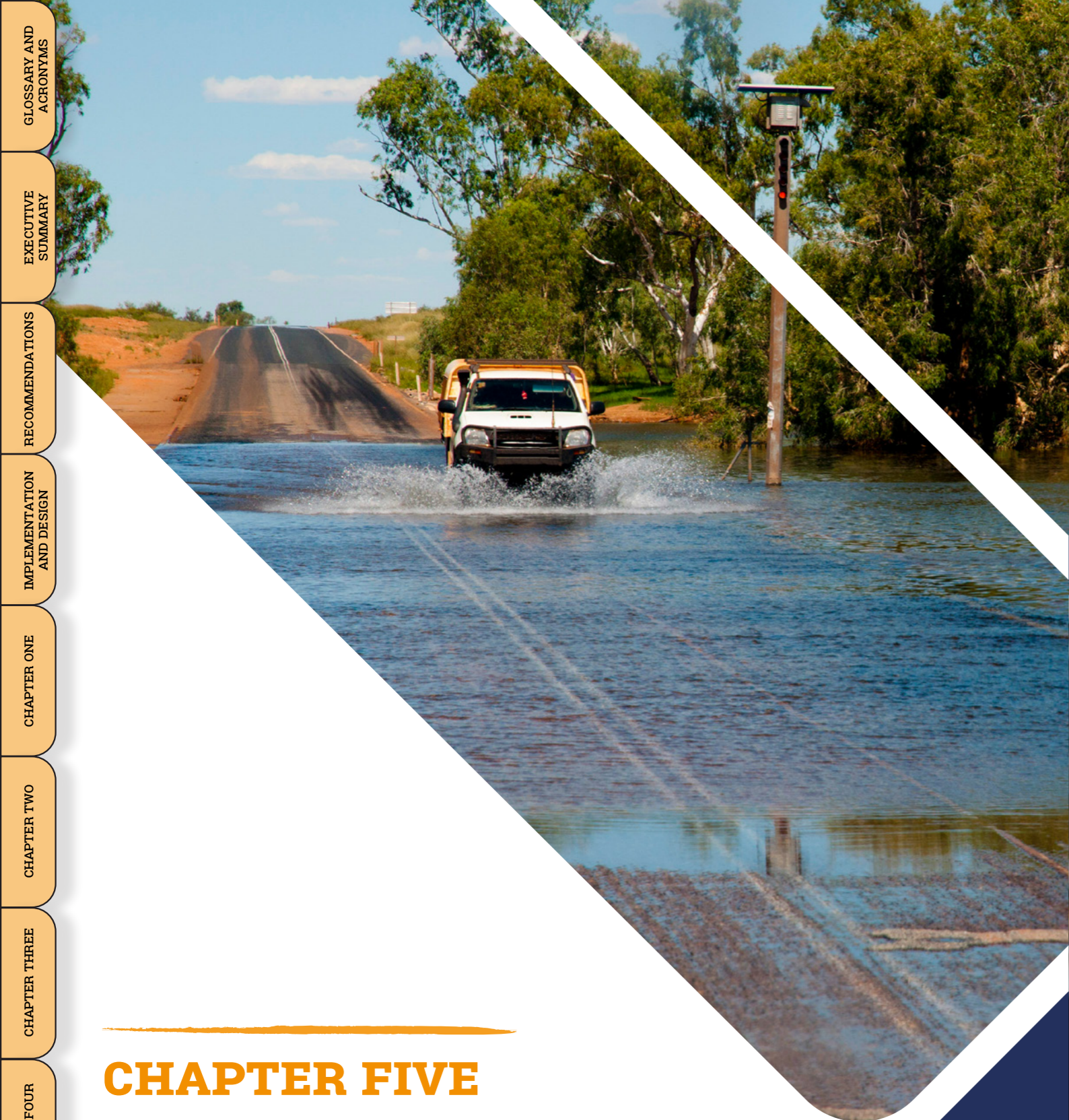
	Unit	Low Case	Mid Case	High Case
Estimated total economic cost of natural disasters excluding redirected AGDRP funding ¹	\$bn	(239.5)	(239.5)	(239.5)
Commonwealth funding redirected from AGDRP to resilience and risk reduction activities	\$bn	(0.5)	(0.8)	(1.1)
Estimated total economic cost of natural disasters including redirected AGDRP funding ²	\$bn	(239.3)	(238.9)	(238.4)
Net saving/(cost) from avoided damages	\$bn	0.2	0.6	1.1
Potential total economic benefits ^{3,4}	\$bn	0.9	3.1	5.7

Source: Deloitte 2024. Notes: (1) Analysis is based on the average estimate of the total economic cost of natural disasters excluding the impact of climate change. (2) Includes the cost of the redirected AGDRP funding albeit this is not an additional cost to the Commonwealth (3) Total economic benefits includes avoided damages when a disaster occurs and co-benefits that occur even in the absence of a disaster. (4) Numbers may not add due to rounding.

Figure 21 Analysis of benefits associated with redirecting AGDRP savings to resilience and risk reduction activities | 2023-24 to 2049-50



Source: Deloitte, 2024.



CHAPTER FIVE

Engaging beyond government

Road flooding in the Outback.
 Credit: iStock.com/Photon-Photos

Chapter summary

SES volunteers during the Floods,
 Lismore, New South Wales.
 Credit: iStock.com/PDerrett

Non-government actors across multiple sectors can play a crucial role in disaster management, according to academic literature and stakeholder engagement. To reform the disaster funding system and better represent the voices of vulnerable communities and industries, the Commonwealth should enhance its relationships with key non-government sector partners. This enhancement could start with a national-level assessment to identify and map existing and potential partners.

Many communities already have strong networks with valuable disaster knowledge and experience. Recognising and supporting these networks will lead to more effective outcomes for both communities and the broader system. Notably, First Nations communities in Australia possess a deep understanding of the environment and have well-established community networks that can deliver significant social outcomes. By amplifying local, community and First Nations' voices and incorporating them into national disaster goals and planning, outcomes can be improved for both Indigenous and non-Indigenous Australians.



The Commonwealth plays a pivotal leadership role in establishing a national approach and fostering collaboration among all stakeholders in the disaster funding landscape. The Review has heard from multiple stakeholder groups of the crucial contribution the non-governmental sector (industry, private sector, not-for-profits and community groups) makes to disaster management, particularly in the immediate response and recovery phases.

Additionally, locally led response and recovery plays an important role for disaster management – local people know their communities best. For this reason, they should also have a voice in how natural hazard risk is reduced, and resilience built.

Enhancing involvement of the non-government sector

The deliberate inclusion of the non-government sector into both the Outcomes Policy and the Risk Profile will significantly enhance Commonwealth funding arrangements. It will support greater recognition of the shared responsibility across the full disaster continuum and will give confidence to individuals and organisations that their contribution is valued, and that they have certainty about their role.

Strengthening these partnerships and understanding the dynamics at play is crucial, but action is paramount. Embedding consideration for the non-government sector, including public-private partnerships, into decision making is critical. The Review has underscored the absence of a cohesive national narrative guiding Commonwealth disaster efforts and their coordination with states, territories and non-governmental actors to inform investment strategies. This lack of certainty, and uniformity, can hinder the efficient coordination of non-government resource allocation in particular, ultimately impacting the effectiveness of the overall response.

It is widely acknowledged that communities equipped with robust resources and capabilities are more likely to emerge resilient from disasters. How strong a community is

before a disaster directly influences how they emerge after a disaster. Investing in people and capabilities well before disasters occur is essential for coherent and efficient disaster frameworks.

However, non-governmental organisations often face capacity challenges, with financial support for recovery arriving too slowly, leaving the burden on not-for-profit and other community organisations. Enhancing community knowledge about disaster funding and improving access to longer-term systemic funding are crucial steps forward. This must be done, however, in step with reforming Commonwealth support programs to improve their accessibility (see *Chapter 4*). Having awareness of the funds is inadequate if communities are rendered unable to apply for them.

Fostering stronger relationships with local stakeholders and organisations has the capacity to shift focus away from transactional, grant-based relationships towards transformative partnerships that bridge government and communities. The dominance of competitive grant programs is widely perceived to impede or undermine community resilience. This finding resonates with research from the AIDR, which indicates that competitive grant processes favour applicants with proficient grant writers.

Reducing the administrative burden associated with disaster funding will also improve the accessibility of funding to First Nations communities. Non-indigenous and non-local organisations often struggle to effectively engage with First Nations communities in disaster response and recovery efforts. Recognising First Nations' invaluable knowledge and skills in disaster management, as demonstrated in international policies, is essential for enhancing community resilience. Mainstream emergency management strategies often neglect biodiversity, Country, and sacred sites in favour of prioritising human life and infrastructure. However, these decisions profoundly impact community recovery, local economies, future climate resilience, and cultural heritage. Prioritising community-led actions, informed by local leaders, ensures an effective and culturally sensitive disaster response.

For First Nations specific funding, consideration could be given to the role of the Commonwealth Office of the Registrar of Indigenous Corporations, to assist and support the National Indigenous Australians Agency in enabling stronger risk-based outcomes for First Nations communities.

“I think if federal government were proactively working with communities, to do an assessment of what is needed and then what is needed for funding to be put in place. If they go out there and see what the community needs, speak to the Elders, speak to the boards out there.”

- First Nations Organisation

Conducting a stocktake of existing partnerships in natural disaster management

Australia currently lacks a comprehensive overview of formal partnerships in natural disaster management, resulting in gaps in understanding the role, potential and capabilities of non-government entities in Australia's disaster management system. To address this, the Commonwealth should conduct a thorough stocktake of existing formal partnerships across various sectors and phases of the disaster continuum, encompassing areas such as construction, healthcare, infrastructure, logistics, technology, philanthropy, and the charitable sector.

Stakeholders across sectors and across the country expressed a belief that non-government, not-for-profit and community-based organisations should assume a leading role, not only in initial response efforts but also in prevention, risk reduction, and resilience-building initiatives. They suggest that these organisations possess an intimate understanding of their local area, including how to develop effective risk-reduction and resilience initiatives. This grassroots understanding is indispensable both immediately after an event and for long-term recovery and resilience efforts. Establishing structured engagement with these sectors, along with noting the priorities, needs, capabilities, and strengths of communities in documents such as Disaster Management Plans, holds the potential for substantial efficiency gains and reduction of duplication. Ultimately, this information is critical for informing Commonwealth investment.

Industry and the private sector play a crucial role in shaping markets and related economic drivers that in turn influence how the nation responds to disaster risks. They also play a critical role in responding to disasters, for example, through operation of telecommunication infrastructure, supply chains, transport logistics and the provision of insurance.

Like the state and territory government stakeholders discussed in *Chapter 3*, non-government stakeholders have also highlighted the escalating cost of insurance as a significant issue. They are concerned about the growing unavailability of insurance and the resulting increased reliance on government assistance. However, the insurance sector maintains that while they believe no area in Australia is uninsurable, certain high-risk areas may face affordability challenges. This high cost is attributed to the growing impact of natural disasters, as well as the ongoing trend of establishing new developments in disaster-prone zones.

The insurance sector emphasised that reducing insurance costs is dependent on enhancing resilience and implementing effective risk reduction strategies. To achieve this on a national scale, strategic intervention that respects the autonomy and expertise of communities, while acknowledging their capability constraints, is needed. Reforming Commonwealth disaster funding programs to be more accessible and targeted to the needs of communities is an effective way to do this and will help to address capability constraints. This will enable communities to build resilience in a way that is most appropriate for their individual circumstances, and generate improved community buy-in.

The demand for evidence-based decision making, grounded in comprehensive, consistent, and precise data resonates across government, private and not-for-profit sectors involved in disaster management. Despite strides made by the Commonwealth, there is still a consensus that data remain underutilised and inadequately accessible across the spectrum of disaster management. Insurance representatives pointed out that they possess extensive risk and hazard information for various areas. With appropriate agreements in place, guided by clear goals, this information could be leveraged to improve land use planning, which has been considered essential for risk reduction and reducing the cost of insurance.

A lack of formal arrangements has also been found to impact supply chains and slow the non-government sector’s ability to rapidly respond and provide support to government during natural disasters. For example, the establishment of ongoing evacuation and relief centres, which are frequently managed by non-government partners, are often done without the resources to provide holistic supports, such as social and mental health services.

Australia also stands to gain invaluable insights by examining international best practices. Japan, for example, relies heavily on partnerships to furnish funding for natural disaster support, often through voluntary investment schemes. Noteworthy among these collaborations is the Japanese Social Emergency Management Alliance (SEMA), which encompasses both public sector entities and civil society organisations. SEMA serves as a conduit for post-disaster information sharing, facilitates supply chain support and mobilises resources for disaster-affected regions. These alliances leverage the robust connections between local government bodies and private enterprises to offer assistance in the aftermath of natural disasters, presenting an alternative to conventional national government aid.

New Zealand’s disaster framework is also underpinned by multi-sectoral perspectives and engagement, encompassing contributions from the private sector, not-for-profit organisations and various community representatives. This inclusive approach fosters a holistic understanding of risk and resilience, thereby enhancing the effectiveness of disaster management strategies.

Through the Review, both essential services and the construction sector voiced frustration over the absence of existing market agreements with the Commonwealth. This has led to delays in response times and increased costs, as industries struggle to meet the surge in resources demanded during disasters. They suggest that establishing agreements in the preparedness phases of natural disasters would allow for better outcomes. Additionally, food and grocery providers highlighted the pressure placed on the sector when the Commonwealth and state and territory governments request materials during a disaster event at low or no cost to meet community needs. As disasters become more frequent and severe, there is a growing need for agreements that enable adequate preparation.

The private sector could play a vital role in

shaping disaster management policy and garnering community support. The Review heard that a key challenge in interacting with the Commonwealth is the lack of clarity regarding who to contact in a disaster event. Identifying the appropriate contacts and coordinating efforts has long been a major hurdle for those outside of government in providing an effective response to disasters. The duplication of communication across various government departments not only adds to the administrative burden but also complicates response and recovery efforts.

Communities often rely on the non-government sector for service delivery during and post-disaster, especially in recovery efforts. Stakeholder feedback indicates a potential gap in recognising the capacity of non-government entities to enhance the system in more consistent, coordinated, and defined ways. For example, while the contributions of community organisations and not-for-profits is appreciated by local governments, there is concern that unintended outcomes can result without proper consideration for how competitive funding incentivises or dissuades collaboration and coordination among actors.

Several local governments reported that it is common for state, territory, and Commonwealth governments to fund community organisations to initiate services and assets which later become the responsibility for local governments in an ongoing, and often unfunded way. The Review also heard of instances of community groups being funded to undertake initiatives on local government land without the knowledge of the local government.

Improvement of collaborative efforts between the Commonwealth and the non-government sector could foster innovative incentives for disaster management decisions. For example, non-government stakeholders highlighted how the government relies on community organisations to provide expertise and services in disaster response, filling gaps beyond governmental capacity.

“Graded role delineation between tiers of government would be helpful for us in understanding what our role and what the role of government is and how that then translates to community.”

- Social services sector focus group participant

“That’s been our community’s experience post recovery is maintaining connectedness and nurturing and harvesting volunteers. We’re doing the work that can be done, still on a volunteer capacity. There is a great need to support direct bodies and committees in Aboriginal communities at risk of disaster and equipping them to respond instantaneously.”

- First Nations Organisation

A fire burning on the South Coast, New South Wales.
 Credit: iStock.com/Blinikins

The Review noted ongoing uncertainty regarding the perceived Commonwealth funding shortfall that charities and other non-government organisations address with their programs. This extends to disagreements over the role of non-government organisations. Furthermore, there are organisations playing critical roles in disaster management that are ineligible for government funding, underscoring the need for transparency regarding organisations operating in this ecosystem, their partnerships, and the needs they aim to address across the disaster continuum. Through the Review, the telecommunications sector highlighted the need to enhance the resilience of networks, especially as more resources move online. However, they pointed out that they are not classified as an essential service under legislation, limiting the support they can access.

Small businesses were identified as pivotal players in disaster events, particularly in regional and rural communities. They typically employ local residents, demonstrating a significant investment in the community's success and recovery. Despite acting as evacuation, recovery, and donation centres during disasters, small businesses are often not compensated for these efforts and consequently operate at a prolonged loss. Representatives from small businesses have highlighted, for example, that the relocation and evacuation of communities for extended periods can harm businesses by depleting their available workforce, particularly in small and regional communities.

Relatedly, stakeholders highlighted an escalating labour shortage as a major obstacle to engaging in work during the disaster recovery phase. They noted the challenge of persuading workers to relocate to disaster-affected areas for extended periods due to the harsh conditions and pervasive social issues. Similarly, there has been a sharp decline in volunteering rates, attributed to rising living costs and sociocultural shifts.

This decline has significant implications for the emergency response and recovery sector, which has traditionally relied heavily on volunteers. This trend is particularly prevalent in areas with ageing populations, where the number of young and healthy volunteers is dwindling. As a result, there will likely be an increased financial burden on emergency services and the Commonwealth to employ individuals to fill these roles. Additionally, there will be added pressure on the not-for-profit sector, as they will need to provide services that were previously carried out by volunteers.

There is significant opportunity to improve the relationship between the Commonwealth and the non-government sector across the disaster management arrangements. The non-government actors working within the disaster management system, each with varying capabilities and capacities, require a level of national understanding and coordination to ensure they are working towards similar goals. A stocktake of these actors, including mapping existing partnerships and considering how best to leverage their support and draw on their expertise, will enable a more considered and repeatable approach to disaster management funding.

Combined with the Disaster Management Advisory Council (see *Chapter 1*), an appropriate stocktake will invariably provide opportunity to take the pressure off already stretched Commonwealth support, and further reinforce that natural disaster management in Australia is a shared responsibility.



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Businesses affected by flood waters, Windsor, New South Wales.
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*Driving on back roads through burnt bush land after bushfires.
Credit: iStock.com/lovleah*

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