

Understanding the National Climate Risk Assessment



A Snapshot for the ACT Community Sector

Australia's first [National Climate Risk Assessment](#) (Assessment) provides a consistent, nationwide assessment of current and future climate risks, and how these will affect people and systems across the country.

This ACTCOSS Snapshot summarises key risks and adaptation opportunities for the **community sector** and people experiencing disadvantage in the ACT outlined in the Assessment. The Snapshot is a resource for the community sector and our partners. ACTCOSS has produced this Snapshot in recognition that the complexity of adapting to climate change is already straining governance capacity in governments and the community sector.

The Assessment recognises the critical role of community organisations, particularly in supporting people experiencing disadvantage, and in building more effective climate and disaster resilience.

The impacts of climate change on vulnerable communities and systems across Australia include:

- **Communities:** Existing disadvantage and socioeconomic vulnerabilities are shown to exacerbate climate risk. Addressing these underlying issues is essential to reducing risk across many communities.
- **Health and Social Support:** Health and social support services may struggle to keep pace with more frequent, severe, and prolonged climate events. The Assessment also notes the toll on emergency personnel and volunteers, including impacts on their physical and mental health.
- **Aboriginal and Torres Strait Islander Peoples:** Climate change is identified as a significant threat to self-determination. It places at risk the ability to connect with Country, which is vital to the physical, mental, cultural, and community wellbeing of Aboriginal and Torres Strait Islander Peoples.
- **National Security:** The increasing frequency and severity of climate events is placing strain on emergency response systems, particularly due to a declining and aging volunteer workforce. This is affecting the physical and psychological health of personnel and volunteers.
- **Governance:** The Assessment warns of emerging conditions that could undermine effective adaptation and governance, including rising inequality driven by the intersection of social disadvantage and disaster vulnerability. Under-resourced community service organisations are bearing the brunt.

This Snapshot also highlights adaptation options from the Assessment that can be undertaken by governments and the community sector to reduce risks and impacts. Below is a summary of key adaptation opportunities:

Key adaptation opportunities

Address the underlying sources of disadvantage and contextual vulnerabilities to reduce climate risk in many communities.¹

Implement coordinated efforts across public, private, and civil society actors, at multiple levels for effective adaptation.²

Address individual-level vulnerabilities, including *“access to health services, social connectedness within local communities, and household mobility”*.³

Empower and promote Aboriginal and Torres Strait Islander peoples' self-determination and governance.⁴

Integrate and value traditional knowledges to support climate adaptation.⁵

Strengthen coordination and collaboration across federal, state, territory and local levels, and with NGOs, to increase capacity for effective and equitable relief.⁶

Expand and enhance existing adaptation efforts by states and NGOs.⁷

Allocate resources effectively to address sources of disadvantage and reduce vulnerability to climate risks, generating far-reaching co-benefits across multiple systems.⁸

Engage communities in sustained and comprehensive ways for effective governance of climate risk.⁹

What is the Assessment?











Developed over a period of two years by the Australian Climate Service and the Department of Climate Change, Energy, the Environment and Water (DCCEEW), it brings together data and knowledge about climate risks to help governments, organisations, and communities plan for and respond to climate change. The Assessment informed the development of the [National Adaptation Plan](#), which outlines strategies and pathways for adapting to climate risks across sectors and regions.

Out of the ten climate hazards identified in the Assessment, the six highlighted below are directly relevant to the ACT. Others (like tropical cyclones or coastal erosion) can still affect us indirectly, for example by disrupting supply chains, transport, or communications.

The Assessment also considers how climate risks affect interconnected systems, and how risks in one system can cascade and compound risks in others. Thinking in terms of systems can support more effective and coordinated adaptation strategies. This Snapshot summarises the four systems most relevant to the ACT community sector (highlighted below), along with broader risks related to governance and system interdependence.

Priority hazards

10 priority hazards were considered in the National Assessment to determine key impacts and climate risks for Australia over the next century.

	Changes in temperatures, including extremes
	Drought and changes in aridity
	Bushfires, grassfires and air pollution
	Extratropical storms
	Convective storms, including hail
	Tropical cyclones
	Riverine and flash flooding
	Coastal and estuarine flooding
	Coastal erosion and shoreline change
	Ocean warming and acidification

Key functional systems

The National Assessment considers risks across 8 key systems:

	Aboriginal and Torres Strait Islander Peoples
	Communities – urban, regional and remote
	Defence and national security
	Economy, trade and finance
	Health and social support
	Infrastructure and the built environment
	Natural environment
	Primary industries and food

Australia's National Climate Risk Assessment: An Overview, 2025, Australian Climate Service.

Communities



Figure 1: Risk rating for the Communities system (retrieved from p. iv)

Climate change will disproportionately impact those already facing disadvantage and socioeconomic vulnerabilities.¹⁰

The Assessment highlights that existing disadvantage exacerbates risk from a changing climate.¹¹ People who live in vulnerable circumstances can face greater exposure to climate risks and have fewer ways to adapt. Climate change will drive escalating economic costs and compounding impacts can erode community resilience and social cohesion.¹²

Climate change poses immediate risks to critical and essential services.¹³

Rising temperatures and extreme weather events threaten the reliability and accessibility of critical and essential services for communities, including health, aged care, water supply, energy and transportation.¹⁴ Increased frequency of service disruptions and infrastructure damage can lead to decreased quality of life and increased health risks, particularly for people already facing disadvantage.¹⁵

Adaptation opportunities

Address the underlying sources of disadvantage and contextual vulnerabilities to reduce climate risk in many communities.¹⁶

Consider providing targeted financial solutions for disadvantaged households to increase resilience and encourage adaptive upgrades to homes.¹⁷

Consider prioritising infrastructure investment in developments in hazard-prone areas, alongside climate-informed urban planning and building codes, to ensure continuity of critical and essential services and reduce long-term risks.¹⁸

Health and social support



Figure 2: Risk rating for the Health and social support system (retrieved from p. iv)

Climate change is already having noticeable impacts on communities living with disadvantage.¹⁹

Australia is already experiencing adverse health impacts resulting from climate change.²⁰ The projected increase in frequency and severity of climate hazards is expected to worsen existing health vulnerabilities and disadvantage, and to affect a larger proportion of the population.²¹

Climate risks to health and wellbeing vary considerably depending on individual circumstances, including health status, socioeconomic vulnerabilities and access to support²². These risks also differ across types of climate hazards. For example, older people are particularly vulnerable to extreme heat due to reduced thermoregulation, while in flooding events, mobility challenges may prevent timely evacuation²³. Cultural and linguistic differences can also affect vulnerability to severe hazards.²⁴

Post-disaster mental health impacts include increased rate of post-traumatic stress disorder, depression and generalised anxiety.

“This system is already experiencing significant pressures due to climate change”²⁵ and “health and social support services may not keep up with more frequent, severe and longer duration events”.²⁶

The Assessment highlights that support services may struggle to keep pace with climate events, particularly when critical infrastructure is compromised.²⁷ Additional strain can result from supply chain disruptions, which may interrupt the supply of medications and health supplies across Australia.²⁸ Impacts on primary industries and food systems can also reduce access to nutrition, decreased availability and affordability of healthy food choices.²⁹

“The Health and social support system is experienced in and geared towards implementation, which is a key asset for future adaptation, if given adequate support”.³⁰

Adaptation opportunities

Consider expanding existing plans and policies focus beyond the health sector to include more directed to social support and wellbeing.³¹

Consider social and cultural adaptations, which have shown strong potential to protect human health from some climate hazards, such as extreme heat.³²

Implement coordinated efforts across public, private, and civil society actors, at multiple levels for effective adaptation.³³

Address individual-level vulnerabilities, including “access to health services, social connectedness within local communities, and household mobility”.³⁴

Aboriginal and Torres Strait Islander Peoples

Aboriginal and Torres Strait Islander peoples have identified climate change as a significant risk to self-determination.³⁵

The *Climate Risks to Aboriginal and Torres Strait Islander Peoples technical report* highlights that existing challenges to cultural governance and practices, economic adaptation and social disruption are expected to worsen as climate impacts intensify. These impacts undermine the ability to maintain cultural practices and remain on Country, directly affecting autonomy and self-determination³⁶.

The lack of inclusion of Aboriginal and Torres Strait Islander peoples in decision-making process, particularly in relation to caring for Country and climate adaptation strategies, further compounds these risks.³⁷ Moreover, as demand for Indigenous knowledge to support climate adaptation increases, there is a growing risk of cultural knowledge and intellectual property theft (biopiracy). Without adequate recognition and remuneration, Aboriginal and Torres Strait Islander peoples may lose tangible benefits from sharing biodiversity-related expertise.³⁸

Environmental changes pose threats to cultural knowledge, practices, values, and sites.³⁹

Risks to land, sea, and Country from climate change are highlighted, including damage to natural environments, biodiversity, and ecosystem functions.⁴⁰ They also affect the roles and responsibilities of individuals and communities, limiting their ability to meet cultural protocols and customs. Aboriginal and Torres Strait Islander peoples emphasised the importance of intergenerational knowledge transfer, noting that climate impacts may disrupt the ability of Elders to share Lore and cultural practices with younger generations.⁴¹

Aboriginal and Torres Strait Islander peoples' physical, mental, community and cultural health and wellbeing is and will continue to be directly impacted by the decline in the health of Country.⁴²

Aboriginal and Torres Strait Islander peoples also highlight that "Aboriginal health" encompasses not only the physical wellbeing of an individual but also the social, emotional and cultural wellbeing of the whole community. The decline in the health of Country and increasing frequency of extreme weather events, such as those that lead to social and cultural displacement from traditional Country, pose significant risks health, wellbeing and identity.⁴³

Adaptation opportunities

Empower and promote Aboriginal and Torres Strait Islander peoples' self-determination and governance:

"Aboriginal and Torres Strait Islander communities and organisations across Australia have created numerous Caring for Country plans. This work needs to be amplified to benefit from millennia of knowledge of living sustainably on Country and to continue the vital work of communities and organisations effectively responding to climate change".⁴⁴

Integrate and value traditional knowledges to support climate adaptation:

"There is a critical need to recognise the value of different forms of knowledge and develop ways to integrate Aboriginal and Torres Strait Islander peoples knowledges data alongside quantitative data to address this".⁴⁵

National security



Figure 3: Risk rating for the Defence and national security system (retrieved from p. iv)

The capacity to respond to extreme climate events is likely to be challenged by declining and aging volunteer workforce.⁴⁶

Australia's emergency service capability, including in the ACT, relies heavily on volunteers to respond effectively to natural hazards. However, this capacity is increasingly constrained by a declining volunteer participation, exacerbated by disruptions to volunteering during the COVID-19 pandemic⁴⁷.

A key concern for ACT organisations that rely on volunteers to respond to emergencies and deliver services is the ageing volunteer workforce. An average of 42% of volunteers are aged 55 years or older in Australia.⁴⁸ Volunteer recruitment and training challenges are likely to lead to service gaps as climate-related emergencies demand grow more intense.⁴⁹

The increasing frequency and severity of climate events is negatively impacting emergency response personnel and volunteers, physical, psychological and mental health.⁵⁰

The Assessment highlights significant risks to emergency management personnel, warning that escalating workloads and more frequent extreme events may overwhelm response systems. These pressures can negatively affect the physical and mental wellbeing of responders, leading to distress, grief, social strain, and mental fatigue, particularly when managing multiple concurrent crises. Such impacts may reduce their ability to respond effectively in the long term.⁵¹

Adaptation opportunities

Strengthen coordination and collaboration across federal, state, territory and local levels, and with NGOs, to increase capacity for effective and equitable relief.⁵²

Expand and enhance existing adaptation efforts by states and NGOs.⁵³

Consider recruiting new volunteers, particularly from diverse communities, as an essential action in maintaining a resilient emergency workforce capable of meeting the increasing demands of climate-related events.⁵⁴

Empower people with disabilities to participate in disaster risk management and decision-making to strengthen the effectiveness of disaster risk reduction and build resilient communities.⁵⁵

Governance (cross-system)

There are growing calls for a governance system that invests in social welfare and protective measures to reduce vulnerability to climate change.⁵⁶

Climate risks and impacts are unevenly distributed, reflecting and exacerbating existing inequalities created by past and present governance decisions. While addressing these underlying vulnerabilities is essential to reducing climate risks, local governments and communities remain underresourced for the level of risk they are expected to address.⁵⁷

Another key challenge is the limited capacity of governance systems to capture and reflect the experiences of diverse social groups. Intersectional factors, such as gender, culture, and socio-economic status, can significantly influence both the impact of climate change on individuals and their ability to participate in decision-making processes.⁵⁸

Governance structures and processes are being outpaced by climate risks and by their cascading, compounding and systemic effects.⁵⁹

These pressures are affecting governments, NGOs and other entities, reducing their ability to deliver essential services. Direct impacts include harm to staff and volunteers, damaged infrastructure, increased financial burdens, legal liabilities, and operational disruptions, and other complex flow-on effects.⁶⁰

Adaptation opportunities

Allocate resources effectively to address sources of disadvantage and reduce vulnerability to climate risks, generating far-reaching co-benefits across multiple systems.⁶¹

Engage communities in sustained and comprehensive ways for effective governance of climate risk.⁶²

Consider effective planning to support adaptation efforts by both government and non-government actors, with policies and plans serving as indicators of progress and reflections of commitment to future preparedness.⁶³

Interconnected systems

Impacts on one sector can rapidly spread to others through a complex web of interdependencies.⁶⁴ A range of interconnected systems are expected to cascade and exacerbate the risks described above, including:

- **Insurance and financial stress:** Rising insurance premiums and reduced affordability and availability of coverage for at-risk communities are expected to worsen, increasing household costs and financial vulnerability.⁶⁵
- **Energy infrastructure:** Most energy systems were not designed to withstand future climate extremes. Events like extreme heat can reduce generation capacity and disrupt supply, particularly when energy is most needed to keep people safe.⁶⁶
- **Telecommunications:** Loss of connectivity has serious consequences for health and economic systems. It can prevent financial transactions and hinder access to emergency services.⁶⁷
- **Food security:** Increasing climate impacts on primary industries will cascade into other systems, affecting food security and public health. Disruptions to supply chains and infrastructure will affect jobs, market access, and the availability of essential goods.⁶⁸

End Notes

¹ Australian Climate Service 2025. *Australia's National Climate Risk Assessment Report*.

(NCRA) 280pp, p.68, p.69

² NCRA, p.141

³ NCRA, p.143

⁴ Australian Climate Service 2025. *Climate Risks to Aboriginal and Torres Strait Islander Peoples*. (Technical report), p.19

⁵ Technical report, p.20

⁶ NCRA, p.91

⁷ NCRA, p.91

⁸ NCRA, p.232

⁹ NCRA, p.232

¹⁰ NCRA, p.43

¹¹ NCRA, p.68

¹² NCRA, p.43

¹³ NCRA, p.64

¹⁴ NCRA, p.64

¹⁵ NCRA, p.64

¹⁶ NCRA, p.68, p.69

¹⁷ NCRA, p.68

¹⁸ NCRA, p.45

¹⁹ NCRA, p.126

²⁰ NCRA, p. 131

²¹ NCRA, p. 126

²² NCRA, p.127, p.138-139

²³ NCRA, p.138

²⁴ NCRA, p.138

²⁵ NCRA, p.126

²⁶ NCRA, p.130

²⁷ NCRA, p.130

²⁸ NCRA, p.128

²⁹ NCRA, p.139

³⁰ NCRA, p.142

³¹ NCRA, p.142

³² NCRA, p.140

³³ NCRA, p.141

³⁴ NCRA, p.143

³⁵ NCRA, p.39

³⁶ Technical report, p.12

³⁷ Technical report, p.12, p.18

³⁸ Technical report, p.14

³⁹ Technical report, p.14

⁴⁰ Technical report, p.12

⁴¹ Technical report, p.14

⁴² Technical report, p.14

⁴³ Technical report, p.14

⁴⁴ Technical report, p.19

⁴⁵ Technical report, p.20

⁴⁶ NCRA, p.74, p.89

⁴⁷ NCRA, p.88

⁴⁸ NCRA, p.88

⁴⁹ NCRA, p.89

⁵⁰ NCRA, p.89

⁵¹ NCRA, p.89

⁵² NCRA, p.91

⁵³ NCRA, p.91

⁵⁴ NCRA, p.91

⁵⁵ NCRA, p.91

⁵⁶ NCRA, p.235

⁵⁷ NCRA, p.235

⁵⁸ NCRA, p.235

⁵⁹ NCRA, p.243

⁶⁰ NCRA, p.243

⁶¹ NCRA, p.232

⁶² NCRA, p.232

⁶³ NCRA, p.237

⁶⁴ NCRA, p.117

⁶⁵ NCRA, p.108

⁶⁶ NCRA, p.158

⁶⁷ NCRA, p.164

⁶⁸ NCRA, p.207