SOUTH AUSTRALIA'S DISASTER RESILIENCE STRATEGY 2019-2024







CONTENTS

1. Introduction	4
Definitions	4
Vision	4
Process	5
2. Why we need a disaster resilience strategy	6
Our changing world	6
Our State	7
Why resilience?	8
3. Who is this Strategy for?	9
Ways of contributing to disaster resilience	9
4. Understanding disaster resilience	10
Disaster resilience	10
Community resilience	10
Cross-cutting themes	11
Diversity and inclusion	11
Health and wellbeing	12
5. Guiding principles for building disaster resilience	13
6. Focus areas	14
Focus area 1: Neighbourhoods and communities	15
Goal	15
Context	15
Actions and recommendations	16
Focus area 2: Small Businesses	18
Goal	18
Context	18
Actions and recommendations	18
Focus area 3: Children and young people	20
Goal	
Context	
Actions and recommendations	21
Focus area 4: Strategic and connected networks	
Goal	22
Context	
Actions and recommendations	23
7. Public information campaign	25
8. Summary of projects and recommendations	26
9. References	27

We acknowledge South Australia's Aboriginal peoples and pay respect to Aboriginal Elders past and present. We recognise the intrinsic and enduring connection of Traditional Owners to Country and long history of contributing to culture and traditions in this State.

Through understanding the significant knowledge and practice of Caring for Country by Aboriginal South Australians, together we can build a more resilient and prosperous state.

South Australia's Disaster Resilience Strategy has been developed, on behalf of the State Emergency Management Committee by the South Australian Fire and Emergency Services Commission (SAFECOM).

We acknowledge the many individuals and organisations that contributed their thoughts and knowledge to inform this work.

Version 1.4, February 2019

Strategic alignment

South Australia's Disaster Resilience Strategy intends to support the work of, and align to the following:

- The National Strategy for Disaster Resilience (NSDR), Council of Australian Governments (COAG), 2011
- The Sendai Framework for Disaster Risk Reduction 2015-2030
- The National Disaster Risk Reduction Framework, Commonwealth of Australia, 2018
- The Fire and Emergency Services Act 2005
- The Emergency Management Act 2004
- The State Emergency Management Plan (SEMP)
- The State Emergency Management Committee (SEMC) Strategic Plan 2017-2022
- People at Risk in Emergencies Framework for South Australia, and the associated Implementation Plan and Communication Plan, Australian Red Cross, 2017
- The Local Government Act, 1999
- Towards a Resilient State, the South Australian Government's Climate Change Adaptation Plan
- The Planning, Development and Infrastructure Act 2016 and related reforms
- State Public Health Plan 2019-2024, Government of South Australia
- The National Partnership Agreement on Natural Disaster Resilience 2015-18







1. INTRODUCTION

DEFINITIONS

The following terms and definitions are used throughout this document:

Small Businesses	Small businesses, including farming and agriculture, are categorised as those employing 0-19 full time positions
Co-design/user centred design	Stakeholders and/or consumers are central to the design process
Community	A group that shares common characteristics
Community resilience	A community that works together to understand and manage the risk it confronts ¹
Disaster	A disaster is a serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, exceeding the ability of the affected community or society to cope using its own resources and therefore requiring urgent action
Disaster resilience	The ability to survive, adapt and grow, no matter what happens
Emergency	An event, actual or imminent, which endangers or threatens to endanger life, property or the environment, and which requires a significant and coordinated response ²
Emergency management sector	All people, agencies, organisations and groups that contribute to emergency management across resilience, prevention, preparedness, response, relief and recovery efforts
Neighbourhood	A population living in close proximity geographically

VISION

The first of its kind for our State, the Disaster Resilience Strategy (the Strategy) provides a foundation upon which state and local government, non-government organisations, businesses, and communities can work together to make a more resilient South Australia (SA).

The Strategy has been led by the Government of South Australia through the SA Fire and Emergency Services Commission (SAFECOM) but, most importantly, has been shaped by the thoughts and experiences of over 500 South Australians through co-design – a collaborative process undertaken with community members, businesses, state and local government, and organisations.

Developed with these stakeholders, the vision for the Strategy is:

Working together towards a safe and resilient South Australia.

In providing a roadmap toward achieving this vision, the Strategy aims to:

- enable a shared understanding of disaster resilience that can be adopted and applied across the emergency management sector
- identify priority areas of focus for disaster resilience effort and investment
- identify practical, evidence-based pilot projects and recommendations to guide action that will contribute to a safe and resilient SA.

In the context of this Strategy, disaster resilience is:

The ability to survive, adapt and grow, no matter what happens.

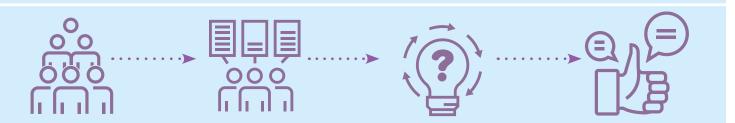
PROCESS

Improving disaster resilience is complex and can only be achieved through working effectively across organisational and sectoral boundaries.

Acknowledging this, representatives of government and non-government agencies, businesses, and community members were closely engaged in developing the Strategy. Participants were directly involved in establishing the context for the Strategy, identifying and exploring key issues, and determining the Strategy's vision and recommended actions.

A review of current research and best practice also informed the Strategy.

A Project Report is available from SAFECOM that outlines the co-design process, detailed research findings, and how action areas and recommendations were identified.



Over 500 people...*

- State & Commonwealth Government: **157**
- Community members: **151**
- Business / private sector: 93
- Local Government: 68Non-government: 37
- Other jurisdictions: 6

contributed through...

- In-depth interviews (32)
- Workshops (18)
- Online surveys (75)
- Guided conversations (20)

to develop, test and refine...

- **42** initial concepts and ideas
- 21 ideas for communication tools

to create South Australia's Disaster Resilience Strategy:

- 4 Focus areas
- **6** Projects
- **12** Recommendations
- **8** Guiding principles

*Contributions from an additional 300 people who participated in a related Red Cross project, focussing on non-government organisations and local government, were included in this research.



2. WHY WE NEED A DISASTER RESILIENCE STRATEGY

OUR CHANGING WORLD

Our world is changing, and with change comes the opportunity to reflect on the way we live and what is important to us.

In Australia, we are experienced at preparing for and responding to natural hazards such as bushfire and extreme weather. Now and into the future, such events will be experienced at a greater intensity and frequency, amplifying the impacts and placing increased pressure on our capacity to respond.

The types of threats we face are also changing, with our reliance on technology increasing our vulnerability to cyberattack, while the relative ease of global travel, and our expanding cities, can increase the spread of infectious disease and the risk of pandemics.

As a State, we need to better understand these risks, and how to live with an increased threat of disaster in a way that not only prepares us to protect what is most important, but also to forge a path forward, thrive, and grow.

Working together – as communities, businesses, and government and non-government organisations – we can build our own resilience and contribute to the resilience of the State as a whole.

Our changing climate

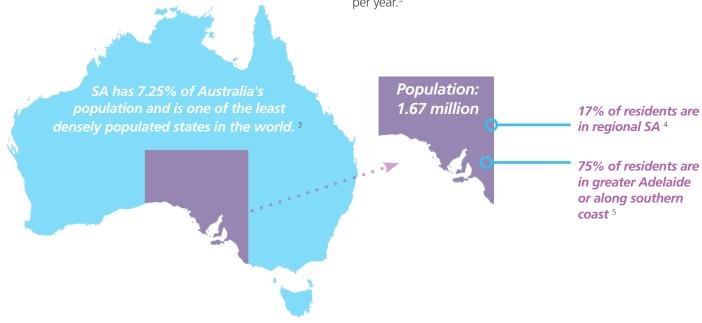
- Since 1900, more people in Australia have died as a result of extreme heat than from the effects of all other natural hazards combined.
- The number of hot days per year have doubled in Australia over the last 50 years."
- Hot weather in Adelaide, Melbourne and Canberra has already reached the levels previously predicted for 2030.^{III}
- Forest Fire Danger Index values demonstrate that over many parts of Australia there has been an increase in extreme fire weather and the length of the fire season since the 1970s. This increase is especially pronounced in southern and eastern Australia, driven by higher temperatures and reductions in cool-season rainfall.
- A global sea level rise of 0.2m has already increased the incidence of storm surge impacting along the coasts of South Australia.^{IV}



OUR STATE

While changes are happening globally, the nature of the threats that we face is also specific and unique to the community in which we live.

The State's population continues to change and grow. Between 2011 and 2016, the population increased at an average of 0.9% per year ² while over the same period, regional areas experienced growth at a slower rate of 0.4% per year.³



SA's economy is dominated by the services sector:6



The State's landscape varies from rugged outback wilderness and desert, including some of the most arid parts of the continent, to mountain ranges and a coastline stretching more than 3,700 kilometres.⁷

Compared to some other parts of the Australia, SA tends to have less sudden-impact disasters. It does, however, have the highest number of heat-related deaths per capita of any other state or territory.8

The table below shows the relationship between some of these characteristics and disaster risk and resilience.

Characteristic of SA Link to disaster risk and resilience Known for its hot, dry High temperatures and extended summers, particularly heatwaves can impact on day-toin the north, SA is day activity as well as lead to serious the driest state on health issues. Long dry summers also increase the risk of bushfires across the driest inhabited continent on earth. the State. A relatively small Regional, remote or isolated areas regional population may be more vulnerable to the is distributed across impacts of natural disasters due to less readily available resources to mitigate a large geographical area. risks, respond in an event, and recover in the aftermath. This gives individuals and communities an important role in contributing to disaster resilience. A very large A concentrated population may be concentration of more vulnerable to health-related population lives in events such as a pandemic. Acts of the Greater Adelaide terrorism are more likely to occur in densely populated and/or high-profile area. A large proportion of With expected rises in sea level, the population lives coastal areas will experience increased on the coast. risk of coastal inundation and extreme weather. Communities need to consider their populations, assets and infrastructure along the coastline. **Economic activity** These industries generally support occurs in agriculture, regional economies and are vulnerable mining, tourism, to climate impacts including extreme fisheries, aquaculture weather, fire, flood, heat waves and and forestry. natural disasters.

WHY RESILIENCE?

Directions in national policy, recent experience of extreme weather and state-wide blackout, and the impacts of climate change have led to a change in thinking about how we prevent, prepare for, respond to, and recover from emergencies.

A key element of the new approach is investment in disaster resilience - the ability of our State to survive, adapt and grow, no matter what happens.

Building disaster resilience requires:

 sharing responsibility for emergency management beyond traditional emergency response agencies, including supporting individuals to be more self-reliant

- involving all parts and levels of government and nongovernment agencies, businesses and the community
- taking decisions and action based on evidence
- communicating clearly and consistently about disasters, risk and response.

In supporting this direction, the Strategy complements and adds to the following bodies of work contributing to SA's disaster resilience:

- State Emergency Management Committee (SEMC) Strategic Plan 2017-2022
- SA's State and zone-level emergency risk management programs that have identified building disaster resilience at an organisational and community level as one of the top ten risk treatments
- The findings of the Burns Review into the arrangements surrounding the extreme weather event and associated statewide power blackout in September and October 2016⁹
- The National Strategy for Disaster Resilience 2011
- United Nations International Strategy for Disaster Reduction (UNISDR) Sendai Framework for Disaster Risk Reduction 2015-2030.

The cost of not building resilience

- The total economic cost of natural disasters in Australia over the 10 years to 2016 averaged \$18.2 billion per year.
- This cost is expected to more than double in real terms to average \$39 billion per year by 2050.
- The Australian Business Roundtable's report on the social and economic impact of disasters found that carefully targeted investment in effective resilience measures now can reduce estimated expenditure on natural disaster relief and recovery by more than 50% by 2050.^v

3. WHO IS THE STRATEGY FOR?

The Strategy is for everyone involved in emergency management. This includes all of the people, agencies, organisations and groups that contribute to emergency management across resilience, prevention, preparedness, response, relief and recovery efforts.

Put simply, everyone has a role to play in building disaster resilience.

It is clear there are different levels of responsibility and capacity across the emergency management sector. Development of the Strategy has identified an interest from community members and groups in taking on a greater role, as well as the need to broaden involvement and understanding of who is responsible for what, and how everyone can contribute.

An implementation plan, to be developed in 2019, will aim to assign lead agencies to the actions contained in the Strategy, while continuing to emphasise an inclusive partnership approach to their delivery. These actions, and others, will be tracked, monitored and reported on over time, to demonstrate SA's progress.

Summarised below are some of the ways partners in the emergency management sector can and do contribute to disaster resilience.

Ways of contributing to disaster resilience **Partner Commonwealth** - Set national strategic directions through the *National Strategy for Disaster Resilience (NSDR)* and *National* Disaster Risk Reduction Framework Government - Distribute funding to embed and build resilience nationally, through the National Partnership Agreement on Natural Disaster Resilience. - Facilitate collaboration between all services, communities and individuals across prevention, preparing, **State** Government responding and recovering - Lead activities to mitigate against potential disasters - Manage risks through asset management, land-use planning, development controls, building regulations and natural resources management - Facilitate public education, including reliable and accessible risk information and risk reduction options - Develop strategy and policy to build resilience across all sectors of the community - Support and apply research to make evidence-based decisions - Maintain policies, legislation and planning for potential emergencies (natural or caused by humans) - Coordinate State response and recovery efforts - Plan effective business continuity to maintain Government services during and after emergencies and disasters - Provide localised risk information to the public Local Government - Undertake measures to mitigate the impacts of emergencies on local communities - Plan effective business continuity to maintain Local Government services during and after significant events - Assist in planning and preparing for emergencies as part of SA emergency management arrangements - Represent community interests to different levels of government - Support communication and coordination between local organisations in disaster recovery - Facilitate public education and awareness before, during and after emergencies - Support individuals and community organisations to manage the risks they face - Manage risks through asset management, land-use planning, development controls and building regulations **Businesses** - Understand their exposure to risks - Consider prevention and reduction of risk as part of their core activities in preparing business continuity plans - Participate in the social and economic recovery of the local community - Consider the benefits and opportunities in partnering with government in disaster resilience initiatives - Plan for business continuity Nongovernment - Incorporate emergency preparedness messaging into existing service delivery for people at risk and not-- Contribute to prevention, preparedness, response and recovery activities for-profit - Connect people at risk with information and support services organisations - Understand what clients and customers expect of them **Communities** - Understand the risks in the local area and individuals - Plan and prepare for all hazards

- Understand what clients and customers expect of them in relation to emergencies and disasters

- Work with others to support the local community

- Encourage others to be prepared

4. UNDERSTANDING DISASTER RESILIENCE

DISASTER RESILIENCE

In this Strategy, disaster resilience is defined as **the ability to** survive, adapt and grow, no matter what happens.¹⁰

Like the Strategy itself, this definition was developed with reference to best-practice research, and with the participation of stakeholders.

COMMUNITY RESILIENCE

Development of the Strategy identified building the resilience of people and communities to be the highest priority at this point in time.

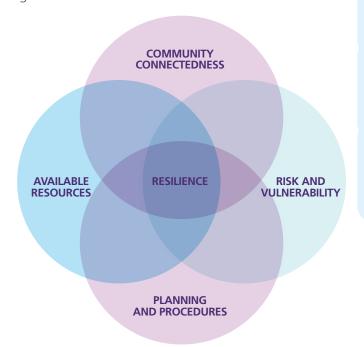
The National Strategy for Disaster Resilience defines a disaster resilient community as:

'One that works together to understand and manage the risk that it confronts. Disaster resilience is the collective responsibility of all sectors of society, including all levels of government, business, the nongovernment sector and individuals.' 11

Importantly, resilience looks different in each community, based on its unique experience and attributes, including the types of risks it faces, and the characteristics of the people, organisations and places it contains.

The Torrens Resilience Institute's model of community resilience (Figure 2) identifies domains similar to the focus areas that emerged through the consultations for the Strategy.

Figure 2 – Domains of disaster resilience



Other projects building SA's resilience

While building disaster resilience within communities is the focus of the Strategy, disaster resilience is influenced by other areas such as built infrastructure, the natural environment, health and wellbeing, and socio-economic factors. Important bodies of work in these areas are underway in SA; they complement the Strategy and also contribute to the resilience of the State. They include:

- reforms under the Planning, Development and Infrastructure Act 2016 that will make significant changes to planning regulations, policies, and processes for planning approvals
- Regional Climate Change Adaptation Plans developed by councils across SA that identify opportunities to mitigate the impact of climate change risks through adapting and building resilience
- the State's Health in All Policies initiative. Working across the policy development process of different agencies, the Government is able to better address the social determinants of health and health inequities in a systematic manner
- the Local Government Association of SA's Council Ready program that provides a coordinated approach to local government emergency management planning
- the SA Lifelines Capability Plan that identifies key lifelines such as cash, fuel and food, and describes arrangements for their provision
- The emergency management sector's planning and exercising for catastrophic events and building of internal capability to prepare for, respond to, and recover from emergencies
- The Emergency Management Workforce Capability Development Framework that identifies the workforce capabilities required to fulfil the state's emergency management

CROSS-CUTTING THEMES

Within the overarching priority of community resilience, development of the Strategy further identified two crosscutting themes that were important both within documented research and amongst stakeholders, namely:

- diversity and inclusion
- health and wellbeing

While building resilience has many elements, these themes emerged as essential considerations to guide the Strategy as a whole, including its implementation.

Diversity and inclusion

Diversity refers to all the ways people are different and unique, including age, ethnicity, culture, ability, religion, gender and gender identity, sexuality and more.

Diversity enriches groups, workplaces and communities through challenging assumptions and bringing new ideas and experiences. Diverse organisations are better connected to their communities, more innovative, productive, supportive and harmonious.¹²

Inclusion is about valuing and accepting the different qualities diversity can bring and celebrating and embracing these differences.

Inclusivity contributes to disaster resilience by deliberately empowering a greater number and greater diversity of those involved. As a result, disaster resilience messages are spread more broadly and effectively, including to those with potentially higher levels of vulnerability to the impacts of emergency events (e.g. older people, people from non-English speaking backgrounds) who might otherwise be excluded.

Recognising Aboriginal and Torres Strait Islander Peoples' knowledge

- Aboriginal and Torres Strait Islander peoples have lived in this country for tens of thousands of years, witnessing droughts, floods, fires and sea levels rising and falling.
- Aboriginal and Torres Strait Islander peoples have shown resilience to adversity and the importance of family and community, connectedness, sharing, role models and leadership.^{VI}
- Acceptance and understanding of the knowledge and practices of Aboriginal and Torres Strait
 Islander peoples will contribute to decreasing the impacts of emergencies and disasters. VII
- Remote Aboriginal communities are particularly vulnerable to the impacts of climate change because of their relative isolation and limited access to support facilities.
- Following consultations and desktop research IX
 concern for the landscape and risk of wildfires was
 identified as a key issue for Aboriginal peoples.



People at risk

- A review of 16 international case studies examining the impacts of natural disasters and conflicts found that regardless of the level of prosperity of a country, those most affected tended to be economically disadvantaged, had a disability or were frail, female, socially isolated, or caregivers of family members^x
- Despite people from minority groups being over-represented in mortality and injury rates for disasters, they are often on the peripheral of planning and responding.^{XI}
- Everyone experiences elements of vulnerability and resilience and has knowledge, experiences and capabilities to draw upon.XIII
- People most at risk are best supported to prepare for and respond to emergencies by the people closest to them.^{XII}
- The incidence of domestic and family violence significantly increases in the wake of natural disasters.XIII

Health and wellbeing

General resilience through good health and positive wellbeing make an important contribution to disaster resilience. Strong, healthy communities are more resilient to shocks and stressors. Conversely, physical, economic, social and environmental factors linked to lower levels of health and wellbeing can make people more vulnerable, and impact how they prepare for emergencies and disasters.¹³

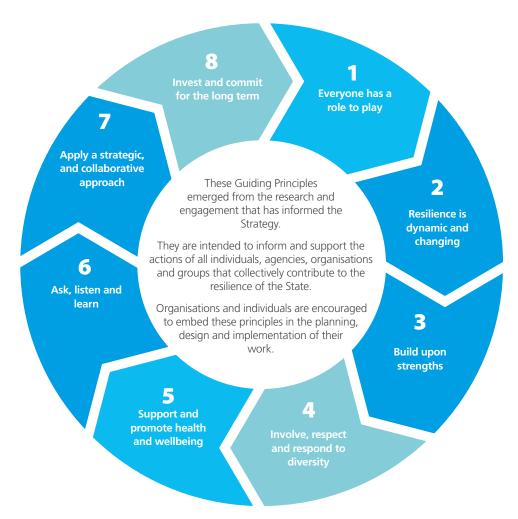
Good mental health is defined as a state of wellbeing in which individuals realise their potential, cope with the usual stresses of life, work productively and are able to contribute to their community, all of which strengthen their ability to cope with challenges and to support others to do the same.¹⁴

Many factors impact the general health and wellbeing of individuals and communities, including where they live, their environment, genetics, income, education level, and relationships with friends and family.

Workplace wellbeing

Workplaces can play a key role in contributing to the wellbeing of employees and a more resilient society, for example, through flexible leave days, adapting work arrangements on days of extreme weather, providing space at work for prayer or breastfeeding, welcoming children at work, and encouraging both fathers and mothers to take paid parental leave. These initiatives support resilience in employees as individuals both in and outside the workplace, and as members of the communities they belong to.

5. GUIDING PRINCIPLES FOR BUILDING DISASTER RESILIENCE



1: Everyone has a role to play

The increasing frequency and severity of disasters is placing pressure on services and exceeding the capacity for emergency services to act alone. Building disaster resilience can reduce this pressure, through an inclusive process that recognises the roles that can be played by all.

2: Resilience is dynamic and changing

Building disaster resilience is best viewed as an ongoing process, rather than an end-state or outcome. The ability of people, communities, and organisations to prepare for, cope with and recover can change over time based on their experiences, resources, wellbeing, and other factors. Because of this, tailored or iterative approaches may be most effective.

3: Build upon strengths

Resilience-building is most effective when it is opportunityfocused and strength-based, drawing on the knowledge, skills and abilities of those involved.

4: Involve, respect and respond to diversity

Diversity refers to the ways people are different and unique, including age, ethnicity, culture, ability, religion, gender and gender identity, sexuality and more. Applying an understanding of and respect for diversity leads to better outcomes and enriches groups, workplaces and communities through challenging assumptions and bringing new ideas and experiences.

5: Support and promote health and wellbeing

Strong, healthy communities are more resilient to shocks and stressors. On an individual level, good health and wellbeing build people's general resilience and their ability to be resilient when faced with disaster.

6: Ask, listen and learn

Sharing experiences, listening to others and being open to learning from a range of sources adds significant value to resilience-building activities. Activities that are evidence-based and which adapt existing successful solutions will be more effective and efficient than 'reinventing the wheel'. In addition, seeking local knowledge, experience and ideas will lead to better outcomes and levels of participation.

7: Apply a strategic and collaborative approach

Forming new partnerships with diverse stakeholders can generate new insights, solutions and ways of thinking. We need to consciously break down silos and work collaboratively towards common goals across agencies, sectors and communities.

8: Invest and commit for the long term

Understanding and building disaster resilience in communities and across society will take time and intergenerational cultural change. Communities, all levels of government, businesses, nongovernment organisations and emergency services can contribute to this change by applying and embedding the principles of disaster resilience in their day-to-day activities and operations.

6. FOCUS AREAS

The participatory co-design process described on page 4 (Process) engaged over 500 community members, businesses, representatives of state and local government, and non-government organisations to explore the strategic opportunities to build disaster resilience in SA.

Four focus areas emerged as fundamental to building resilience in SA:

- Informed and connected neighbourhoods and communities working together
- 2. Prepared and adaptable businesses that can continue to operate during and after an emergency or disaster, maintaining their livelihood while supporting their community

- **3.** Children and young people actively engaged in reducing their risks and increasing their self-reliance
- 4. Strategic and connected networks that broaden the emergency management sector, working towards common goals and shared outcomes

The following sections address each focus area, summarising the insights – from research and consultation – that informed the development of concepts and ideas. These concepts were further refined, in collaboration with stakeholders, to develop initial actions that will practically and effectively support disaster resilience across our State.



FOCUS AREA 1:

NEIGHBOURHOODS AND COMMUNITIES

GOAL

Informed and connected neighbourhoods and communities working together.

In the context of the Strategy, neighbourhoods refer to populations living in close proximity geographically, while communities can include groups that share common characteristics (e.g. religion or age group) or interests (e.g. playing a sport, or volunteering).

CONTEXT

Insights from research and consultation summarised below informed the development of actions to support neighbourhoods and communities to build disaster resilience.

Insights from research

- In the future, we will more frequently experience demand on services in an emergency exceeding the capacity to respond.
- When disasters strike, local residents and neighbours support each other until trained emergency personnel arrive.¹⁵
- Community sector organisations, businesses and community groups can lead positive change by building resilience for emergencies as part of regular services and supports, particularly for people at risk.¹⁶
- To contribute to resilience, it is important that relationships and networks are established prior to events.
- An effective recovery does not only depend on the overall amount of damage caused by an event, or the money invested in response and recovery. Social capital - the connections that people have with each other, are shown to have the most impact and influence on the recovery process.¹⁵
- Financially resilient households, those with the ability to draw on resources and financial products and services, including insurance, recover faster and more effectively after an emergency.¹⁷
- Volunteering improves community health and wellbeing and is essential in providing many community services.
 Formal volunteering rates across Australia are declining for the first time in 20 years and this is impacting many sectors, including emergency management.¹⁸ Barriers to volunteering include changing demographics and family and work demands.¹⁹



 Building disaster resilience requires long-term commitment and cultural change in organisations and communities, and a multi-faceted approach across multiple sectors.

Insights from consultation

- By building the resilience of communities, we can build a more resilient SA.
- A resilient community is a well-connected community. This includes people having connections to each other as well as with local and state government and non-government agencies, organisations and community groups.
- Shared responsibility is not about giving up areas of responsibility. It means emergency management agencies working more closely with non-traditional partners (whole of government, local government, non-government, community and businesses).
- Community members and professionals, such as vets and engineers, have an interest in taking on a greater role in emergency management. There are examples of community members self-organising and playing an active role in their emergency management planning and recovery, following a significant event. Approaches should be developed at the community level and tailored to unique local needs and wants.
- There is an expectation by the public that first responders can be there to help everyone during and after significant events.
- Behavioural, cultural and attitudinal barriers to community resilience include lack of time, money, and interest, with people believing 'it' will not happen to them and expecting that help will arrive when it is needed.
- Some services are perceived as potentially creating dependency rather than building resilience. For example, if people receive a targeted text message telling them that they need to evacuate, an expectation may be set. Rather than assessing their own risk, in future events, they may wait to receive a text message before they evacuate.

- In addition to plans, other elements of preparing and building resilience can be promoted and acknowledged, such as changes in behaviour, having conversations about preparing for events or hosting a street party to connect with neighbours.
- There must be strong motivators in place for households to actively engage in risk management and resilience at a household and neighborhood level. This requires creative thinking about how to engage individuals and communities.
- Information and resources that support communities to play a stronger role need to be tailored to the local context and be more accessible.
- There are many existing tools and programs in SA and other jurisdictions that can be built upon for communitybased emergency management initiatives. Neighbourhood Watch is one example that has an existing structure in place for working with communities, disseminating information and building social capital.

Community Disaster Resilience

A disaster resilient community is one where we:

- understand the risks we face based on our location and situation
- take action where we can to prepare for and manage these risks
- know our neighbours and those who might need more help in an emergency or disaster
- know how and where to get the information we need in a range of situations
- know how to link into services that are there to support us
- understand the importance of coming together as a community to help emergency and support services understand our needs after an emergency or disaster
- are as self-reliant as we can be because we know that in a significant event, emergency services can't be everywhere
- have the ability to withstand and recover from a disaster or emergency event.

All participants in the research were asked what disaster reslience meant to them. Their answers were grouped as illustrated here.

ACTIONS AND RECOMMENDATIONS

PROJECT 1:

Community-based emergency management

Develop and pilot a collaborative model for community-based emergency management.

This project will work towards SA having a strategic joined-up model for community-based emergency management. The model is to be piloted in three locations that face different risks, contexts and experiences, supporting communities to work together to identify their local priorities and develop tailored and appropriate solutions for each location.

The recommendation is for a co-design approach with broad participation from established community groups, state and local government, non-government organisations and businesses.

Further considerations for the pilot include:

- development of an online portal with an interactive map of SA for communities to share resources and information for their region with one another and the sector
- exploration of the use of Neighbourhood Watch groups as an existing structure that brings community members together. Building community resilience could reinvigorate the work of Neighbourhood Watch groups
- involvement of universities for rigour around collecting an evidence base and evaluating approaches
- ensuring people at risk are involved and that the outcomes address their needs.

Some organisations and community groups in SA have recognised the importance of community-based emergency management, with initiatives gaining momentum. However, these are taking place alongside one another without a collaborative and strategic approach.

PROJECT 2:

Develop innovative insurance initiatives for businesses and households

Develop initiatives to increase financial resilience and stability for businesses and community members and to reduce levels of financial hardship after an emergency or disaster. Learn from existing innovations including the related work of the *Resilient Melbourne strategy*.²⁰

RECOMMENDATION 1:

Innovate to strengthen a culture of volunteering

Build on existing initiatives that aim to increase volunteer participation, such as:

- Volunteering Strategy for SA 2014-2020 ²¹
- Fostering a Culture of Giving lesson plans developed by Volunteering Australia that promote volunteering to young children.²²

Other jurisdictions

- Emergency Management Victoria's approach that enables community volunteers and organisations to build relationships by working together to identify priorities and develop solutions with involvement from government, emergency services, businesses, industry and non- government organisations.XIV
- The Torrens Resilience Institute (TRI) Community
 Disaster Resilience Scorecard Toolkit.^{XV} This toolkit
 has been developed for communities interested in
 self-assessment of their potential resilience and to
 develop an action plan to strengthen community
 resilience.
- The New South Wales Government is funding a 'Get Ready' Pilot that uses a co-design, communityled, all-hazards approach to community-based emergency management. This is currently being piloted across three communities.
- The Wellington Region Emergency Management Office (WREMO) in New Zealand has dozens of pre-identified 'community emergency hubs' for the community to coordinate their efforts to help each other during and after a disaster.^{XVI} The hubs are located in primary schools, community centres or other public gathering locations. WREMO works with communities to identify community strengths, resources, vulnerabilities and potential solutions to the challenges a community will face during a disaster.

FOCUS AREA 2: SMALL BUSINESSES

GOAL

Prepared and adaptable businesses that can continue to operate during and after an emergency or disaster, maintaining their livelihood while supporting their community.

In the context of the Strategy, small businesses are categorised as those employing 0-19 full time equivalent positions.

OPEN

CONTEXT

Insights from research and consultation summarised below informed the development of actions to support small businesses to build disaster resilience.

Small businesses are the focus as SA is a small business state, with over 140,000 small businesses representing about 98% of all South Australian businesses.²³

Insights from research

- SA's small businesses employ about 34% of the workforce and contribute \$34 billion to the economy annually. They have the highest survival rate of businesses for mainland Australia.²³
- Thirty percent of small-to-medium businesses close and never re-open following a disaster.²⁴
- Most small businesses are underprepared for an emergency or disaster. A national survey found that 79% of small businesses in Australia did not have a business continuity plan.²⁵
- A survey of Business SA members conducted following the state-wide blackout in 2016 showed that:
 - 12% of businesses had a back-up generator
 - 83% of businesses had to cease operating temporarily as a result of the blackout
 - 37% of businesses had interruption insurance. Of these, more than half were not covered for any costs associated with the blackout and only 12% were fully covered for their costs associated with the blackout.²⁶

Insights from consultation

- Despite seeing emergency planning as important, business owners cite lack of time, money and expertise as barriers to being prepared.
- Regional businesses, including agriculture and industry, face unique challenges such as limited access to services and their livelihoods being more vulnerable to the impacts of severe weather.
- Providing incentives or communicating the cost benefits of planning for emergencies or disasters, may motivate businesses to prepare.
- Support for small businesses, such as business planning and financial literacy, must be accessible for regional businesses and farmers.
- Despite the availability of business continuity planning information and online templates, the uptake of these resources is limited.²⁷
- Businesses could play a stronger role in supporting the resilience of their communities.
- Businesses can play a key role in introducing innovation and new technology to the sector.

ACTIONS AND RECOMMENDATIONS

PROJECT 3:

Small business resilience

Develop and pilot programs or services that build small business resilience.

The majority of small businesses are underprepared for disasters, and many close when impacted. These closures have flow-on effects for business owners and employees as well as the local community.

Although there is some support available, such as online business continuity planning templates, a greater level of engagement with small business is required to support them to build resilience and contribute to the resilience of the neighbourhoods and communities in which they operate.

The first stage of this project will aim to:

- provide a better understanding of the drivers and barriers to small business preparedness and resilience
- develop usable and creative solutions so that taking steps to be disaster ready is considered part of normal business operations
- contribute to an environment that supports government and businesses to collaborate to reduce disaster risk and strengthen resilience.

This project will bring together relevant stakeholders including:

- South Australian small businesses
- Business SA
- Primary Industries and Regions SA
- the South Australian Small Business Commissioner
- the Department for Industry and Skills
- other jurisdictions working in this space, for example, Resilient Melbourne.

RECOMMENDATION 2:

Ensure grant funding is targeted

Expand the Natural Disaster Resilience Program (NDRP)²⁸ grant funding to enable businesses to apply, and encourage joint applications with other organisations, such as government or non-government agencies.

To encourage uptake, a business representative should be included on the NDRP assessment panel and the program promoted through the business sector.

RECOMMENDATION 3:

Strengthen business sector engagement

Identify opportunities to strengthen the emergency management sector's engagement with the business sector, involving business and relevant peak bodies and organisations in planning and decision making across resilience, prevention, preparedness, response and recovery.

FOCUS AREA 3:

CHILDREN AND YOUNG PEOPLE

GOAL

Children and young people actively engaged in reducing their risks and increasing their self-reliance.

CONTEXT

Insights from research and consultation summarised below informed the development of actions to support children and young people to actively engage in reducing their risks and increase their self-reliance.

Insights from research

- Article 12 of the UN Convention on the Rights of the Child (OHCHR 1989), states that children and young people have the right to express their views and be heard on matters that affect them.²⁹
- Children can be positive change agents in their households and communities. If given the opportunity to participate, they can make a very real and positive difference before, during and after an emergency.³⁰
- Mental health was the top issue of national concern for over 24,000 young people responding to Mission Australia's Youth Survey in 2017. Coping with stress was the top issue of concern identified by South Australian respondents, potentially reducing their ability to cope when things go wrong.³¹
- There are many existing tools and resources available to engage with young people.
- Disaster resilience education (DRE) (i.e. teaching disaster resilience in schools) is a proven way to engage with children and young people.³²

Young people are worried that if they don't get to contribute they won't learn the 'adult' skills they need. They are an experiential generation. They are hard wired for hands-on learning and doing it themselves. Young people will not learn by osmosis and they won't value things just because previous generations have.

Helen Connolly, Commissioner for Children and Young People SA



Insights from consultation

- Working with young people is key to sustainable and intergenerational cultural change. Children will take learnt behaviour and attitudes through to their adult years.
- Adults perceive children and young people as losing practical skills that support resilience and self-reliance and being over-protected, leaving them inexperienced and less able to deal with adversity and failure.
- The perspectives, and contributions, of young people are generally overlooked in emergency management.
- Disaster resilience messaging for children and young people must be engaging, constructive and targeted.
- DRE is an obvious starting point to effect behaviour change through embedding disaster resilience into the school curriculum.
- Schools currently implement many resilience and wellbeing initiatives through existing frameworks. There is a question about where to draw the line between the responsibility of schools and parents to 'teach' disaster resilience.
- The importance of professional development for teachers and educators and strengthening the links to disaster resilience in the curriculum is in the context of an overcrowded curriculum, with teachers being stretched to support children with higher-priority aspects of resilience building such as suicide prevention, self-harm and bullying.
- Some schools may have the appetite for further DRE, while others may not.

ACTIONS AND RECOMMENDATIONS

PROJECT 4:

Scoping exercise with children and young people

Engage with children and young people to better understand how they can play an active role in building their resilience.

Although a wide range of relevant stakeholders were consulted in developing the Strategy, only a small number of these were children and young people. Rather than leading to clear solutions, the user research raised questions, challenges and differing opinions of how to enable children and young people to build resilience.

Before further projects are developed, specific engagement with children and young people, including those who have experienced a disaster, is necessary to learn more about what resilience means to them, how resilient they consider themselves to be, what the barriers are and how they would like to contribute to building the resilience of their communities and neighbourhoods.

This exercise could be conducted in collaboration with the Commissioner for Children and Young People.

RECOMMENDATION 4:

A consistent approach to disaster resilience education

Work with the AIDR (Australian Institute for Disaster Resilience), DRANZSEN (Disaster Resilient Australia-New Zealand School Education Network) and sector leaders to promote a consistent approach to disaster resilience education.

Leverage existing international and national approaches and best practice, including:

- child-centred disaster risk reduction research produced through the BNHCRC (Bushfire Natural Hazards Cooperative Research Centre), including the Practice Framework for disaster resilience education
- the United Nations Office for Disaster Risk Reduction Comprehensive School Safety Framework as a basis for integrating disaster resilience education and building safer and more resilient school communities.

Frameworks, guidelines and resources

- The Australian Institute for Disaster Resilience (AIDR) Education for Young People Program^{XVII} promotes the development of DRE. Leadership and support is being provided for schools and communities through the DRESG^{XVIII} Strategy group and DRANZSEN^{XIX} national network. Major resources include a national DRE strategy for Australia (in development), DRE mapping of the curriculum and a national website providing links to all key international and national resources and activities.
- The BNHCRC research project Child-Centred
 Disaster Risk Reduction has developed a Practice
 Framework for DRE for Australian Emergency
 Management Agencies. **The project is conducting
 a nationwide evaluation of programs and
 strategies and will develop programs that increase
 resilience for children, schools, households and
 communities.
- Macquarie University has partnered with Incept Labs^{XXI} to develop a 'Business Innovation Challenge'. Secondary school students are presented with real world business problems to solve. The Challenge is designed to teach complex problem solving and creativity, self-directed learning and build the student's capacity for handling ambiguity.

FOCUS AREA 4:

STRATEGIC AND CONNECTED NETWORKS

GOAL

Strategic and connected networks that broaden the emergency management sector and work toward common goals and shared outcomes.

In the context of the Strategy, the emergency management sector is considered in the broadest sense, inclusive of all people, agencies, organisations and groups that contribute to emergency management across resilience, prevention, preparedness, response, relief and recovery efforts.

CONTEXT

Insights from research and consultation summarised below informed the development of actions to support strategic and connected networks.

Insights from research

- To manage the increasing frequency, complexity and uncertainty of emergencies, the emergency management sector needs to strengthen and build new partnerships, working with organisations and individuals that can contribute to and effect change.
- Disaster resilience is complex with many influencing factors sitting outside the traditional domain of emergency management. For example, strong employment levels and a strong economy, urban spaces that encourage community interaction, land-use planning and development control can all contribute to a resilient community. A single agency or sector in isolation will not achieve the levels of resilience that can be built by many in partnership.
- SEMC's Strategic Plan (2017-2022) calls for better synergy across government through collaboration and knowledge sharing that places public value at the centre of decisionmaking, and strengthens partnerships that promote innovation and knowledge integration.³⁴
- The emergency management sector has an obligation to inform the public of the risks that they face, but information alone does not lead to action. The public need to know how to reduce their risk and have the ability to do so.³⁵
- The emergency management sector can benefit from local knowledge and practice through establishing and building on relationships with local government, non-government organisations, community groups and traditional owners, prior to events.



Insights from consultation

- There are many existing champions of resilience and disaster resilience both within and outside of the emergency management sector in SA. Bodies of work with a resilience focus exist in the areas of climate change, mental health, public health and business. There is an opportunity to share learnings and work towards a common vision of resilience.
- Strong leadership is required in the emergency management sector. The future of training and development in SA's emergency management sector needs to introduce new non-operational modules to reflect a more holistic and contemporary view of emergency management.
- Command and control and hierarchical structures in emergency management agencies are important and necessary, particularly in the response stage of events.
 However, in building community resilience, such structures can create barriers to collaboration and problem-solving.
- There is a view that government can be risk averse and resistant to change.
- The public are looking for 'real' and honest communication from governments. For example:
 - Emergencies will happen.
 - Government cannot always be there for everyone.
 - There are things being done by governments to support you.
 - There are things that you can do to support yourself and here is some further guidance/information etc.

Quick tips for resilience

- Prepare your household to be self- sufficient for 72 hours.
- Involve children in planning by preparing a stay or go bag with toys, entertainment, appropriate clothing etc.
- Always have at least half a tank of petrol in your car and some cash in your wallet.
- Keep your freezer door closed in a blackout.
- Have the name and number of your neighbours handy. Identify those that may need help during an event.
- Use camping equipment as your starter kit eg.
 A small cooker/bbq, torch, water cannisters and wind up radio.

ACTIONS AND RECOMMENDATIONS

PROJECT 5:

Emergency management capability development

Develop additional training modules for the emergency management sector reflecting an all hazards resilience-based approach.

SEMC's five-year strategic plan signals a shift in approach for emergency management. Broadening out from a more traditional view of prevention, preparedness, response and recovery, the Plan sets out a comprehensive, all-hazards resilience-based approach. Shared responsibility, working across whole of government and a focus on consequence management, including considerations of the secondary effects of emergencies is encouraged, as is listening to views, experiences and ideas from the community.

Steps are being taken to support this transition and integrate this approach throughout the sector's plans, strategies, policies, organisational structures and discourse.

It is suggested that the existing *Introduction to Emergency Management* online training is broadened to include additional modules and concepts such as disaster risk reduction, climate change and consequence management, underpinned by a resilience-based approach, as outlined in the SEMC strategic plan.

This needs to be considered in the context of the Capability Development Advisory Group.³⁶

RECOMMENDATION 5:

Avenues to network and share

Convene resilience forums to share lessons and form new partnerships and connections

Convene regular forums open to all members of the sector to exchange information and create and reinforce relationships. The design of forums should consider:

- strong regional representation and inclusion of community members/groups
- incorporating workshop sessions to progress or contribute to bodies of work
- inviting people from across Australia who contribute to disaster resilience
- establishing an information flow for learnings and outcomes
- combining the forum with the *People at Risk* implementation plan action item, Action 11: 'Deliver a showcase event to share successes and learnings'.

RECOMMENDATION 6:

Increase collaboration between disaster resilience and recovery functions

The user research highlighted the opportunity to further support communities to move from recovery following an event, to building their resilience for future events.

To support this, the disaster resilience and recovery functions would benefit from a closer working relationship.

RECOMMENDATION 7:

Undertake a strategic review of the *Natural Disaster Resilience Program* (NDRP)

The next National Partnership Agreement (NPA) for the *Natural Disaster Resilience Program* is likely to undergo changes in strategic direction to reflect the priority activities of the *National Disaster Risk Reduction Framework*. Recommended changes in this area will be subject to the NPA change in direction.

It is recommended that SAFECOM, as the administrator of the NDRP Program in SA:

- develop a marketing and promotions strategy for NDRP in SA
- refine the monitoring and evaluation framework for NDRP in SA
- review the next NPA implementation plan to consider the review findings conducted on the NDRP program in SA in 2017, including consideration of revised strategic realignment with key State strategies and the development of a resilience and innovation stream
- ensure projects funded are inclusive of the needs at people at risk and represent the diversity of our community
- advocate for the South Australian Government's contribution to the NPA to be increased to match the Commonwealth contribution (50:50) to align with other jurisdictions' funding commitment and to demonstrate shared responsibility.

RECOMMENDATION 8:

Partner with local government and build on the everyday work of councils to strengthen disaster resilience

Local governments are key partners in strengthening disaster resilience within communities. Councils are the closest level of government to the community, and contribute strong local relationships, knowledge of hazard, risk, and locally available resources and experience in mitigating, responding to and recovering from emergencies.

The everyday work of councils in areas such as community development, infrastructure management, public health and community leadership can be leveraged to strengthen disaster resilience.

RECOMMENDATION 9:

Diversity and inclusion

Support greater diversity and inclusion in emergency management e.g. through a dedicated taskforce.

RECOMMENDATION 10:

Support strategies that better prepare people at risk for emergencies

Support the work of the Australian Red Cross projects aimed at embedding policy and practice in preparing and responding to emergencies in a way that is inclusive of the diverse make-up and needs of our community.

- People at Risk in Emergencies Framework for SA Implementation Plan
- Community Services Organisations: A Shared Responsibility.

RECOMMENDATION 11:

Recognise local knowledge

Recognise local knowledge, including partnering with Aboriginal and Torres Strait Islander peoples.

RECOMMENDATION 12:

Build resilience through health and wellbeing

Build on existing public health and wellbeing programs and policies across agencies that contribute to community resilience, such as the State's *Health in All Policies* and the *State Public Health Plan 2019-2014*.

7. PUBLIC INFORMATION CAMPAIGN

Within the scope of developing the Disaster Resilience Strategy was to explore the role of a public information campaign aimed at building a stronger culture of self-reliance and preparedness across SA.

Where people are motivated and supported to understand and manage the risks they face, and to take action to reduce these risks, they:

- experience better outcomes when emergencies and disasters occur
- reduce demand on response and recovery agencies, allowing support to be provided to those who need it most.

Research into a possible public information campaign generated the following insights:

- Progress toward a more disaster-resilient population requires the active participation of community members.
- Public information campaigns can play a key role in generating public awareness on an issue and shifting attitudes and behaviours.
- Long-term behaviour change generally requires more than just a public information campaign.³⁷ Public information should be part of a broader strategy and paired with programs, services, legislation and incentives that all support the desired outcome.
- Achieving long-term sustainable behaviour change will take many years of commitment and bi-partisan support.
- A 72-hour model, based on being prepared to take care of yourself and others for three days following an event, has been successfully adopted internationally, including in the United States, Canada, Spain, New Zealand and other parts of Australia.
- Before public materials are developed on disaster resilience, the emergency management sector should establish a shared and consistent understanding of disaster resilience.
- The viability of developing a new campaign would need to be considered in the context of existing hazard-specific campaigns, with care taken not to duplicate messaging or confuse the target audience.

- A broad public information campaign would be most effective complemented by tailored local-level activities and messaging.
- A public information campaign would require additional dedicated resources for its development and management, and significant ongoing investment to support widespread advertising and media communications.

PROJECT 6:

Disaster Resilience Public Information Campaign

Undertake research to determine the viability and need for an all-hazards disaster resilience public information campaign.

If it is determined a disaster resilience campaign should proceed, the following steps would be required:

- secure funding that covers an ongoing or defined period of time to cover strategic, production, advertising and evaluation costs
- draw on existing research and user experience from previous resilience-related campaigns and establish a brief for creative strategy development and media planning built around achieving community behavioural change
- engage a creative agency to develop the campaign concept and materials
- implement focus group concept testing for the campaign and materials
- identify campaign elements that can be delivered within agency resources through embedding messages and actions through existing channels, programs and services such as emergency service volunteers, local government, or nongovernment organisations
- explore partnerships with other states and territories to encourage a consistent campaign.



8. SUMMARY OF PROJECTS AND RECOMMENDATIONS

FOCUS AREA 1:

NEIGHBOURHOODS AND COMMUNITIES

PROJECT 1 - Community-based emergency management

Develop and pilot a collaborative model for community-based emergency management.

PROJECT 2 – Innovative insurance options

Develop initiatives to increase financial resilience and stability for businesses and community members and to reduce levels of financial hardship after an emergency or disaster.

RECOMMENDATION 1 – Innovate to strengthen a culture of volunteering

Build on existing initiatives that aim to increase volunteer participation.

FOCUS AREA 2:

SMALL BUSINESSES

PROJECT 3 – Small business resilience

Develop and pilot programs or services that build small business resilience.

RECOMMENDATION 2 – Targeted grant funding

Expand the Natural Disaster Resilience Program (NDRP) grant funding to enable businesses to apply.

RECOMMENDATION 3 – Strengthen business sector engagement

The emergency management sector to strengthen engagement with business across resilience, prevention, preparedness, response and recovery.

FOCUS AREA 3:

CHILDREN AND YOUNG PEOPLE

PROJECT 4 – Scoping exercise with children and young people

Engage with children and young people to better understand how they can play an active role in building their resilience.

RECOMMENDATION 4 – A consistent approach to disaster resilience education

Work with the AIDR (Australian Institute for Disaster Resilience), DRANZSEN (Disaster Resilient Australia-New Zealand School Education Network) and sector leaders to promote a consistent approach to disaster resilience education.

FOCUS AREA 4:

STRATEGIC AND CONNECTED NETWORKS

PROJECT 5 – Emergency management capability development

Develop additional training modules for the emergency management sector reflecting an all-hazards resilience based approach.

RECOMMENDATION 5 – Avenues to network and share

Convene regular forums open to all members of the sector to exchange information and create and reinforce relationships.

RECOMMENDATION 6 – Disaster resilience and recovery

Increase collaboration between disaster resilience and recovery functions.

RECOMMENDATION 7 – Natural disaster resilience program

Undertake a strategic review of the Natural Disaster Resilience Program (NDRP).

RECOMMENDATION 8 – Relationship with local government

Partner with local government and build on the everyday work of councils to strengthen disaster resilience.

RECOMMENDATION 9 – Diversity and inclusion

Support greater diversity and inclusion in emergency management e.g. through a dedicated taskforce.

RECOMMENDATION 10 – Support strategies that better prepare people at risk for emergencies

Support the work of the Australian Red Cross projects aimed at embedding policy and practice in preparing and responding to emergencies (specifically the People at Risk in Emergencies Framework and the Community Services Organisations project).

RECOMMENDATION 11 – Recognise local knowledge

Recognise local knowledge, including partnering with Aboriginal and Torres Strait Islander peoples.

RECOMMENDATION 12 – Build resilience through health and wellbeing

Build on existing public health and wellbeing programs and policies across agencies that contribute to community resilience, such as the State's Health in All Policies and the State Public Health Plan 2019-2014.

ADDITIONAL AREA OF CONSIDERATION: PUBLIC INFORMATION

PROJECT 6 – Public information campaign

Undertake research to determine the viability and need for an all-hazards disaster resilience public information campaign.

REFERENCES

- 1 Council of Australian Governments (COAG), National Strategy for Disaster Resilience, 2011, p iv
- 2 Australian Institute for Disaster Resilience: Australian Disaster Resilience Knowledge Hub, Australian Disaster Resilience Glossary (online), https://knowledge.aidr.org.au/glossary
- 3 SA Planning Portal, Population projections and demographics, http://www.saplanningportal.sa.gov.au/data and research/population-projections and demographics#population-change-2011-2016
- 4 Population Australia, Population of South Australia 2018, http://www.population.net.au/population-of-south-australia
- 5 Australian Bureau of Statistics (ABS), 2016 Census QuickStats, http://quickstat/4GADE?opendocument
- 6 .id the population experts, Australia: Industry sector of employment, https://profile.id.com.au/australia/industries
- 7 SA.GOV.AU, Living in South Australia, https://www.sa.gov.au/topics/about-sa
- 8 Coates, L., Haynes, K., O'Brien, J., et al, Exploring 167 years of vulnerability: An examination of extreme heat events in Australia 1844-2010, Environmental Science & Policy v 42 October 2014, pp 33-44
- 9 Burns, G., Adams, L., Buckley, G., Independent Review of the Extreme Weather Event South Australia, 28 September – 5 October 2016, 2017
 - Develop practical policy outcomes to support resilience (eg the 72 hour model) and promote this broadly to community through media, awareness campaigns, policies etc. Research should be undertaken to gain insight into the types of messaging and activities that have the most impact on sustained behaviour change within the community before committing to a particular model.
- 10 Adapted from the Rockefeller Foundation's 100 Resilient Cities program definition of disaster resilience 'the capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience.'
- 11 Council of Australian Governments (COAG), NSDR, 2011, p v
- 12 Emergency Management Victoria (EMV), The Emergency management diversity and inclusion framework: Respect and inclusion for all, 2016
- 13 United Nations Office for Disaster Risk Reduction (UNISDR), Vulnerability, https://www.preventionweb.net/risk/vulnerability
- 14 World Health Organization, Mental health: strengthening our response, http://www.who.int/en/news-room/fact-sheets/detail/mental-health-strengthening-our-response
- 15 Aldrich, D., Fixing recovery: Social capital in post-crisis resilience, Journal of homeland security and emergency management, May 2010
- 16 Australian Red Cross, People at risk in emergencies framework for South Australia, 2017, p 14
- 17 Victoria State Government, Health and Human Services, Promoting financial resilience to emergencies through home and content insurance, 2017
- 18 ABS, 4159.0 General social summary: Summary results, Australia 2014, http://www.abs.gov.au/AUSSTATS/abs@.nsf/mf/4159.0
- 19 Volunteering in Australia, State of volunteering in Australia: Help create happiness, 2016, p 12
- Resilient Melbourne Delivery Office, Annual report 2017-18, https://resilientmelbourne.com.au/strategy
- 21 Volunteering SA&NT, Volunteering strategy for South Australia, http://www.savolunteeringstrategy.org.au/the-strategy
- 22 Volunteering Australia, Volunteering and the Australian curriculum, https://www.volunteeringaustralia.org/resources/australian-curriculum
- 23 SA Small Business Centre, South Australia. Made by small business, 2016 Annual small business statement, 2016
- 24 City of Melbourne, Can you futureproof your business, http://commail.monkii.com/campaigns/reports/viewCampaign.aspx?d=r&c=340D8EC4173F6446&ID=990B8D4C497A90DD2540EF23F30FEDED
- 25 BNHCRC, Risk and warning communication that supports women during disasters, https://www.bnhcrc.com.au/news/blogpost/amisha-mehta/2018/riskand-warning-communication-supports-women-during-disasters
- 26 Business SA, Chamber of Commerce and Industry Blackout survey results: Understanding the effects of South Australia's state-wide blackout on Wednesday 28 September 2016, n.d.
- 27 Online business continuity plans provided by the SA Department for Industry and Skills have been downloaded 120 times. (As at August 2018).
- 28 Commonwealth and State funding provided for disaster resilience initiatives.
- 29 United Nations, Human Rights Office of the High Commissioner Convention on the Rights of the Child, 1989
- 30 Australian Red Cross, Pillowcase project, https://www.redcross.org.au/get-help/emergencies/resources-about-disasters/resources-for-parents-and-teachers/pillowcase-project

- 31 Mission Australia, Mission Australia's 2017 youth survey report, n.d.
- 32 The development of knowledge and skills which enable learners to assess danger in the environment and take protective action before, during and after a potential disaster or emergency event. Refer to AIDR, What is disaster resilience education?, https://schools.aidr.org.au/disaster-resilience-education/what-is-dre
- 33 BNHCRC, Disaster resilience education, A practice framework for Australian Emergency Management Agencies, 2017, https://www.bnhcrc.com.au/publications/biblio/bnh-2803
- 34 Government of South Australia, State Emergency Management Committee Strategic Plan 2017-2022, 2016
- 35 International Federation of Red Cross and Red Crescent Societies, Public awareness and public education for disaster risk reduction: a guide, 2011
- 36 Chaired by SA Health, this group has been established to finalise work from the State Emergency Service (SES) capability project.
- 37 Australian Public Service Commission, Changing behaviour: A public policy perspective, https://www.apsc.gov.au/changing-behaviour-public-policy-perspective

REFERENCES IN BOXES

- Van den Honert, R., Coates, L., Haynes, K., et al, A century of natural disasters
 what are the costs? Fire Australia Magazine, Summer 2014-2015, pp 30-33
- II Hot days are days with a maximum temperature > 35°C; Bureau of Meteorology, About the climate change extremes analyses, http://www.bom.gov.au/climate/change/about/extremes.shtml Australian Research Council, Are heatwaves 'worsening' and have 'hot days' in Australia doubled in the last 50 years?, https://www.climatescience.org.au/content/1146-are-heatwaves-worsening-and-have-hot-days-australia-doubled-last-50-years
- III Climate Council of Australia, Heatwaves: Hotter, longer, more often, 2014, p
- IV Climate Council of Australia, Relevant, immediate, local: Guide to communicating climate change in Australia, 2014, p 19
- V Australian Business Roundtable for Disaster Resilience & Safer Communities, The economic cost of the social impact of natural disasters, March 2016
- VI McLennan, V., Family and community resilience in an Australian Indigenous community. Australian Indigenous Health Bulletin v 15 no 3, 2015
- VII Sendai Framework. Refer to https://www.unisdr.org/we/coordinate/sendai-framework
- VIII ABS, 4613.0 Australia's Environment: Issues and Trends, Jan 2010, http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4613.0Feature+Article1Jan+2010
- IX Anangu Pitjantjatjara Yankunytjatjara (APY) Lands; emergency management counterparts other states and territories; land management; and Indigenous groups.
- X Powell, S., Plouffe, L., Gorr; P., When ageing & disasters collide: lessons from 16 international case studies, Radiation Protection Dosimetry, v 134 no 3-4, 1 June 2009, pp 202-206
- XI Diversity in Disaster Collaborative, Diversity in disaster conference issues paper, January 2018
- XII Australian Red Cross, People at risk in emergencies framework for South Australia, 2017
- XIII Gender & Disaster Pod, The National gender and emergency management guidelines. 2016
- XIV Emergency Management Victoria (EMV), Community based emergency management, May 2016
- XV TRI, Household Resilience Toolkit, http://www.flinders.edu.au/torrens-resilience-institute/projects/household-resilience-toolkit.cfm
- XVI Refer to https://getprepared.nz/my-community/community-emergency-hubs
- $\textbf{XVII} \quad \textbf{Refer to} \ \underline{\textbf{https://schools.aidr.org.au/disaster-resilience-education/strategy}$
- XVIII The National Disaster Resilience Education Strategy Group (DRESG) provides leadership in the development of strategies and opportunities for disaster resilience education (DRE).
- XX BNHCRC, Disaster resilience education, A practice framework for Australian Emergency Management Agencies, 2017, https://www.bnhcrc.com.au/publications/biblio/bnh-2803
- XXI Refer to http://www.inceptlabs.com.au