

Australian Institute for Disaster Resilience

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@AIDR_news







Disaster Resilience Education: Young Australians for a disaster resilient future

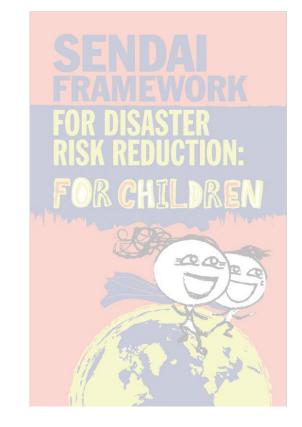
Australian Institute for Disaster Resilience

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f AIDR news AIDR news in aidr

Disaster resilience education equips young Australians with the skills and confidence to take protective action before, during and after an emergency or disaster.

DRE offers a vision of young Australians who are empowered to participate as active members in skilled and resilient communities, working to reduce the risk of disaster.





Disaster resilient young people

- use scientific data to measure, explain and predict hazard events
- research, map and investigate the impacts of hazard events on people and places
- learn from the experiences, knowledge, skills and cultural wisdom of others
- follow practical steps to prepare for an emergency
- practise strategies for mental health and personal resilience

- are connected and active in their local community
- respect the environment and make sustainable choices
- · design solutions to real world problems
- · have a voice, work together and feel valued
- reduce the risk of a disaster!













































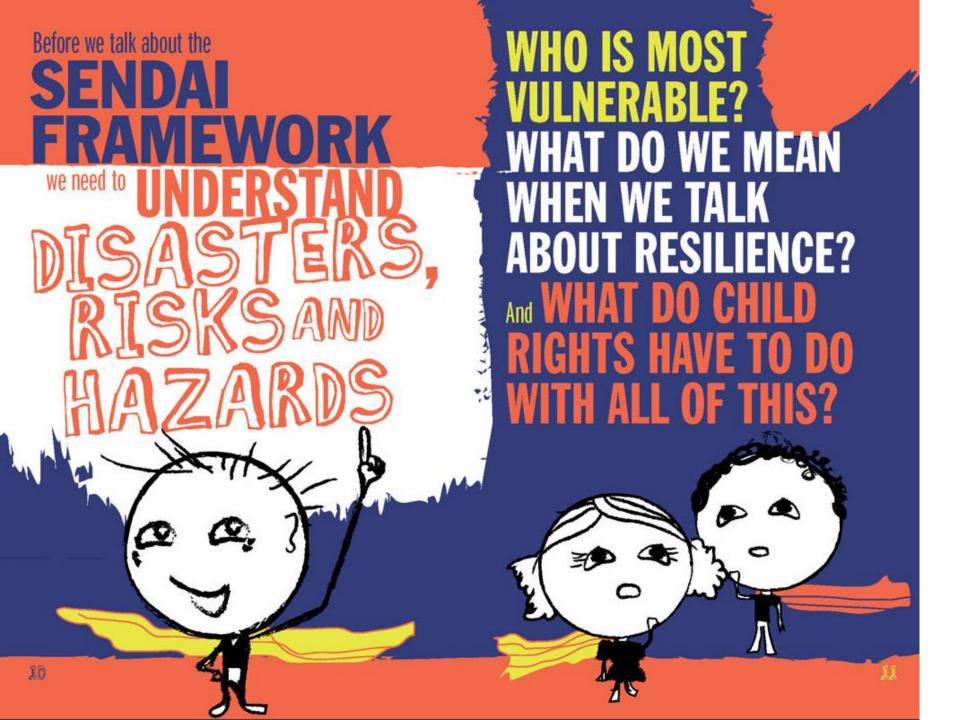




Sendai Framework

for Disaster Risk Reduction

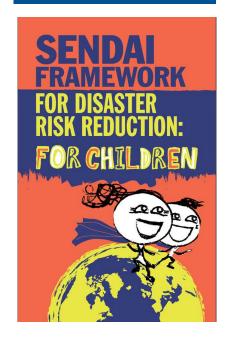
2015 - 2030





Sendai Framework for Disaster Risk Reduction 2015 - 2030













SUSTAINABLE GEALS





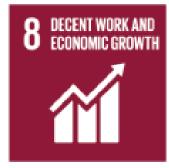


































The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth — all while tackling climate change and working to preserve our oceans and forests.





SUSTAINABLE DEVELOPMENT GOAL 13

Take urgent action to combat climate change and its impacts*



PROGRESS & INFO (2018)

PROGRESS & INFO (2017)

PROGRESS & INFO (2016)

TARGETS & INDICATORS

The global indicator framework was developed by the Inter-Agency and Expert Group on SDG Indicators (IAEG-SDGs) and agreed to, as a practical starting point at the 47th session of the UN Statistical Commission held in March 2016. The report of the Commission, which included the global indicator framework, was then taken note of by ECOSOC at its 70th session in June 2016. More information.

TARGETS INDICATORS

13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

13.1.3	Proportion of local governments that adopt and implement
	local disaster risk reduction strategies in line with national
	disaster risk reduction strategies

- **13.1.1** Number of deaths, missing persons and persons affected by disaster per 100,000 people
- **13.1.2** Number of countries with national and local disaster risk reduction strategies



SUSTAINABLE DEVELOPMENT GOAL 11

Make cities and human settlements inclusive, safe, resilient and sustainable



PROGRESS & INFO (2018)

PROGRESS & INFO (2017)

PROGRESS & INFO (2016)

TARGETS & INDICATORS

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TARGETS	INDICATORS

- By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums

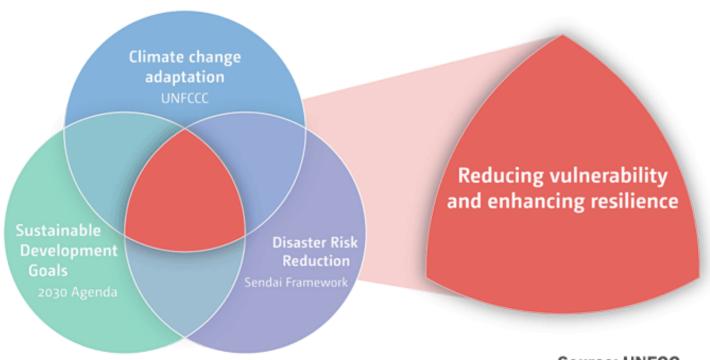
 11.1.1 Proportion of urban population living in slums, informal settlements or inadequate housing
 - By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and
- 11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations
 - **11.5.1** Number of deaths, missing persons and persons affected by disaster per 100,000 peoplea
 - 11.5.2 Direct disaster economic loss in relation to global GDP, including disaster damage to critical infrastructure and disruption of basic servicesa







Integrating adaptation with the Sustainable Development Goals and the Sendai Framework



Source: UNFCC

Greta Thunberg nominated for Nobel Peace Prize for climate activism

Australian Institute for Disaster Resilience

① 14 March 2019









Schools' climate change protests



Greta Thunberg, the Swedish schoolgirl who has inspired an international movement to fight climate change, has been nominated as a candidate to receive this year's Nobel Peace Prize.



GRETA THUNBERG

THE DISARMING CASE TO ACT RIGHT NOW ON CLIMATE CHANGE







State of the Climate 2018

Report at a glance

Australia's changing climate

Oceans

Greenhouse gases

Future climate

Further information

References

Videos

Previous State of the Climate reports

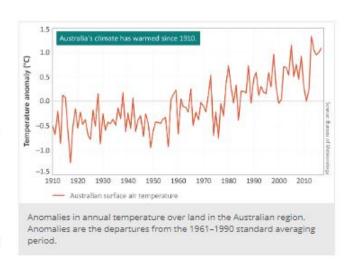
Australia's weather and climate continues to change in response to a warming global climate.

Temperature

 Australia's climate has warmed by just over 1 °C since 1910, leading to an increase in the frequency of extreme heat events.

Australia's weather and climate continues to change in response to a warming global climate. Australia has warmed by just over 1 °C since 1910, with most warming since 1950. This warming has seen an increase in the frequency of extreme heat events and increased the severity of drought conditions during periods of below-average rainfall. Eight of Australia's top ten warmest years on record have occurred since 2005.

The year-to-year changes in Australia's climate are mostly associated with natural climate variability such as El Niño and La Niña in the tropical Pacific Ocean and phases of the Indian Ocean Dipole in the Indian Ocean. This natural variability now occurs on top of the warming trend, which can modify the impact of these natural drivers on the Australian climate.



Last updated: 19 December 2018



CLIMATE CHANGE IN AUSTRALIA IMPACTS & ADAPTATION INFORMATION FOR AUSTRALIA'S NRM REGIONS



NRM Regions AdaptNRM

Central Slopes East Coast

Monsoonal North Murray Basin Rangelands Southern Slopes SSW Flatlands Wet Tropics

Home » Impacts and adaptation » NRM Regions

INTRODUCTION

Australia has 54 natural resource management (NRM) regions, which are defined by catchments and bioregions. Many activities of organisations and ecosystem services within the NRM regions are vulnerable to impacts of climate change.

For this report, these NRM regions are grouped into 'clusters' which largely correspond to the broad-scale climate and biophysical regions of Australia. The clusters are diverse in their history, population, resource base, geography and climate. Therefore, each cluster has a unique set of priorities for responding to climate change.

Find out more about the NRM regionalisation scheme

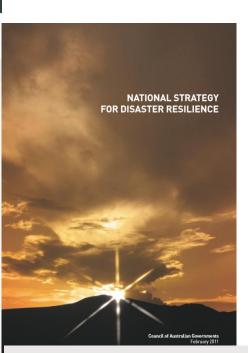


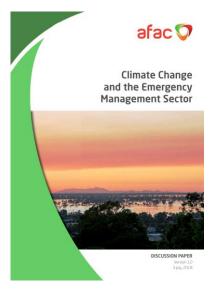
IMPACTS AND ADAPTATION INFORMATION FOR AUSTRALIA'S NRM REGIONS

Across Australia research has been conducted to develop a deeper understanding of how climate change will impact upon the country's unique and diverse natural resources and natural resource management (NRM) activities.

Click on the map below to explore what adaptation research has been conducted to support natural resource managers to plan for and consider the impact of climate change for Australia's regions. In these pages (arranged by clusters) you will access background information on the region, key messages about the impact of climate change, and reports and other relevant supporting material.







Introduction

Australia has recently experienced a number of large scale and devastating natural disasters, including catastrophic bushfires, far reaching floods, and damaging storms. Natural disasters are a feature of the Australian climate and landscape and this threat will continue, not least because climate change is making weather patterns less predictable and more extreme. Such events can have personal, social, economic and environmental impacts that take many years to dissipate.



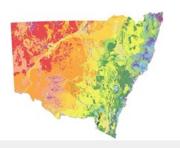
AdaptNSW



ADAPT NSW HOME ABOUT CLIMATE CHANGE IN NSW CLIMATE PROJECTIONS FOR NSW IMPACTS
OF CLIMATE CHANGE

ADAPTING TO CLIMATE CHANGE EDUCATION RESOURCES BACK TO OEH HOME

Understanding and adapting to climate change impacts in New South Wales



Discover everything you need to know about climate change in NSW.

Discover how. Explore where. Learn to adapt.

Need some help on where to start?

About climate change

What can we expect NSW Climate projections

Show me changes in temperature









in region ○ my local areastate view

2020-392060-79

See interactive climate change map



Access the raw data



Learn more about climate change in NSW page



Impacts of climate change

Find out about the impact of climate change



Adapt to climate change

Learn about how you can adapt to climate change



Educational resources

Information & resources on climate change

NSW Climate projections map for 2060-2079

Would you like to access all NARCliM data?

Grid view Region view Zoom to Q NSW suburb or postcode State view summary Situated in the mid-latitudes of eastern Australian NSW covers an area of 809,444km², with just over 2.000km of coastline. From the mountainous region of the Great Dividing Range the coastal rivers flow eastward to the sea. These rivers are short and subject to flooding during high rainfall periods. The western plains cover almost twothirds of the state. These vast plains covered by riverine sediment are almost entirely flat. For time range: 0 2020-39 @ 2060-79 Temperature Rainfall Severe Fire Weather is projected to increase across State. This is dominated in the far west Read more \approx Melbourne Cold nights Esri, HERE, Garmin, FAO, NOAA, USGS Read climate change snapshot Changes in number of days a /ear FEDI > 50

Access the raw data

Home

Marriage Law Postal Survey

Area profiles

About the profile areas

Population >
How old are we? >
Who are we? >
What do we do? >
How do we live? >

Communities of interest

Indigenous profile

Post-Census updates

Building approvals

Supporting information

About community profile >
Explanatory notes >
Site map
Sign in

Downloads

Reports >

Other resources

Latest updates
Help centre
Nat'l Demographic Indicators
Nat'l Economic Indicators
Related sites
Resource centre
Blog

Welcome to the Australia Regional Profile

The Australia Estimated Resident Population for 2017 is 24,597,528, with a population density of 0.03 persons per hectare.

The Australia Regional Profile provides demographic analysis for the Country and its suburbs based on results from the 2016, 2011, 2006, 2001, 1996 and 1991 Censuses of Population and Housing. The profile is updated with population estimates when the Australian Bureau of Statistics (ABS) releases new figures.

Population

24,597,528

ABS ERP 2017

Land area

770,213,508

ha (7,702,135 Km²)

Population density

"

0.03

persons per hectare



idcommunity demographic resources City of Sydney | social atlas community profile social atlas population forecast economic profile Analysis Supporting info Other resources Map selector Gender Year Data type Thematic Population density Usual residence Persons 2016 Persons per hectare City of Sydney, Population density, 2016, Usual residence, Persons, Persons per hectare Road Satellite Satellite Labels Reset map North Head Harris Rosehilt Crows ... + Park Putney Mosman Nest Rhodes Longueville Neutral Bay Gladesville Hunters ylands Newington Waverton Liberty Cremorne Woolwich Henley. Grove Point Sydney Watsons Bay Cabarita Harbour Auburn Nielson Abbotsford Balmain Balmain ildford Granville South Homebush Concord Russell Lea Vaucluse Canada Bay Homebush Rozelle ldford Point Everley Berala Five Dover Piper Lyne Strathfield Dock Heights Park Lilyfield Rookwood Burwood Bellevue Chester Hill-Regents Hill Haberfield North Burwood Bondi Heights Bondi Strathfield Greenacre Beach Petersham South Bass Hill Queens Ashbury Tamarama Park Belfield Hurlstone Yagoona Campsie ensington Clovelly Randwick Bankstown Canterbury ankstown rence erodrome Windsor Belmore Clemton Daceyville Punchbowl Earlwood Ruse South Park Mascot Park dgerys Creek (III) - Türrella Coogee Bardwell @ Roselands Picton Valley North Bowral Wollongong Arthur Eastgardens Banksia Botany Beverly Byrne Bexley Kyeemagh Reserve Sir Joseph Industrial



Live

Explore

Learn

Community

Business

Development

Vision

Council

Home > Vision > Sustainable Sydney 2030 > Resilient Sydney



Sydney 2030 resources

Resilient Sydney

Digital city

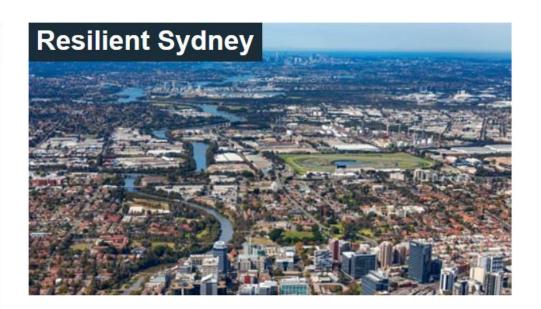
Business and economy

Communities and culture

Sustainability

Architecture and design

Transport and access



Sydney's resilience story

Resilient Sydney – A strategy for city resilience 2018 is the first of its kind for our city, marking a new spirit of

Resilient Sydney

A strategy for city resilience 2018

Our Vision

Metopolitan Sydney is connected, inclusive and resilient

Our Mission



People centred city

We include communities in decision making for growth and equity.

- Inclusion
- Resilient growth
- A more equitable city

Challenge

Inequitable growth

Outcomes

People are connected to where they live and able to access transport, affordable housing, education and employment opportunities





p72-81

Live with our climate

We adapt to sustain our quality of life and our environment.

- Local adaptation
- Global performance
- A diverse economy



Challenge

Pressure on our health, environment and economy

Outcomes

People have access to clean air and water, natural environments and adaptive technology throughout the city for climate

Connect for strength

Every Sydneysider will feel they belong in our community and city.

A welcoming city

DIRECTION

- Resilient cultures
- Strength in diversity

Challenge

Declining social cohesion

Outcomes

People have equal access to engage in society, the economy and all the city has to offer.



Get ready

We know how to prepare, respond and recover.

- Understanding risks
- Understanding interdependencies
- A prepared community



Challenge

Lack of understanding of risks and interdependencies

Outcomes

Sydneysiders and organisations understand the risks they face and how to work together to respond to them, now and in the future.

One city

We are one city.

- Collective leadership
- Collaboration
- Sharing knowledge



Challenge

Disjointed governance

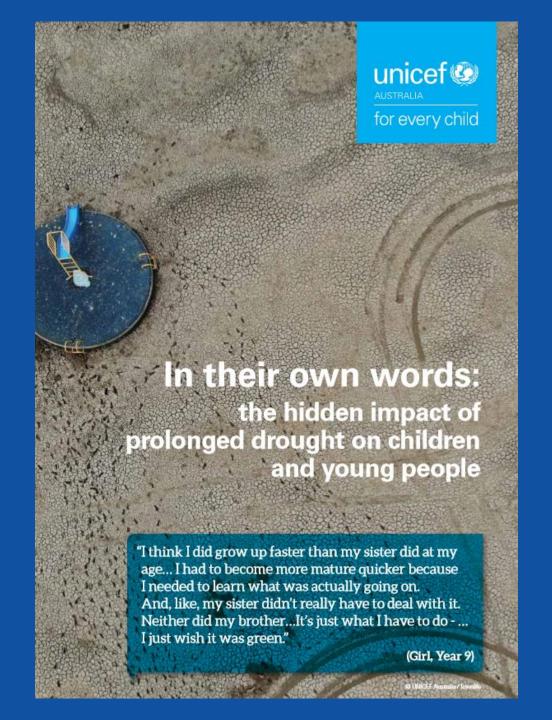
Outcomes

Key governing organisations across Sydney pledge to build their capacity and cooperate to understand and manage shock and stresses for everyone in a resilient metropolitan Sydney.

Sydney 2050 Engagement











PM&C @ @pmc_gov_au · Jan 30

The National Drought Map is now live. It's designed to help organisations around Australia support drought-affected communities.

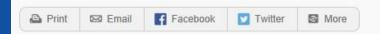
pmc.gov.au/news-centre/do...



WINEWS

Australian Institute for Disaster Resilience

Business Sport Science Health Arts Analysis Just In Politics World



Climate change eats away at Torres Strait islands, prompting calls for long-term solutions

ABC Far North By Anna Hartley

Posted 9 Feb 2019, 5:00am

Rising sea levels, coastal erosion, unpredictable winds and destructive king tides are increasing problems in the Torres Strait, with roads, buildings and even cemeteries being washed away in recent years.

A flood prevention method that withstood wild weather this week may be rolled out to other vulnerable Torres Strait communities, including Yam Island where families were left homeless after king tides last year.

Torres Strait Island Regional Council deputy mayor Getano Lui said geotextile sandbags were used for the first time in the Torres Strait this week when abnormally high tides impacted Poruma Island, a cultural hub home to just 200 people.

"It's getting worse every year," he said.

"Climate change is really having a detrimental effect on all the communities.



Summer 2018-19 was hottest on record, BOM says, with little relief expected for autumn

ABC Weather By Kate Doyle

Updated 28 Feb 2019, 2:01pm



March-May 2019

Climate and Water Outlo

outside

RELATED STORY: It's so hot in SA this couple baked biscuit

RELATED STORY: North Queensland's record-breaking rain event was officially 'exceptional'

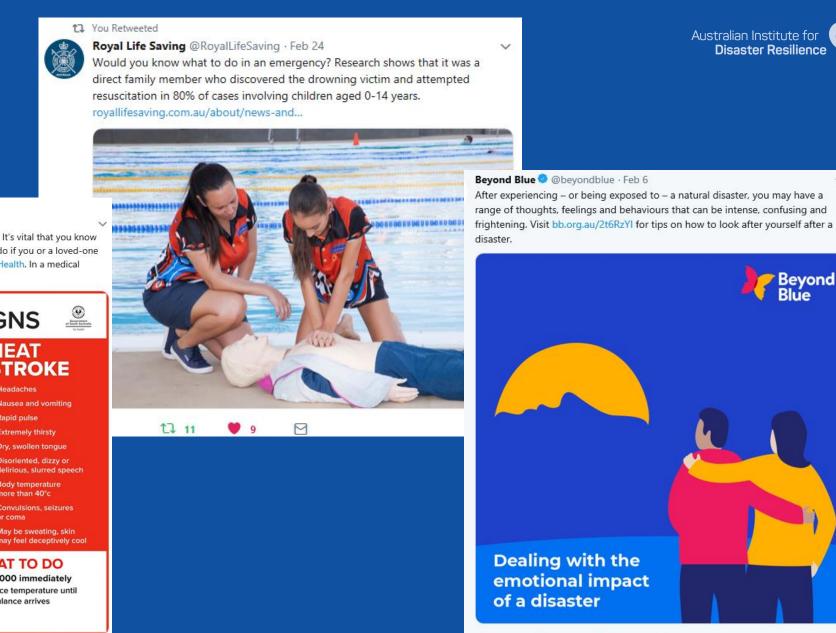
RELATED STORY: 'Our climate has already changed': The \$1.5b cost of Qld's 'summer of disasters'

RELATED STORY: Fire, floods, dust and snow: How is this a



Townsville homes may become 'uninsurable' due to flooding from cli...

Flood risk in the region likely to increase by 130% by end of century, modelling shows



17 14

9 13



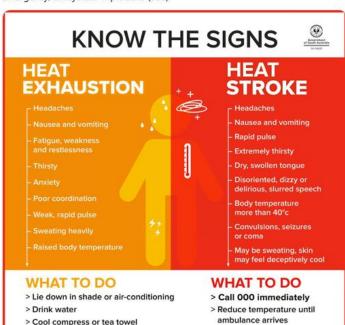
SA Ambulance Service @ @SA_Ambulance · Feb 27

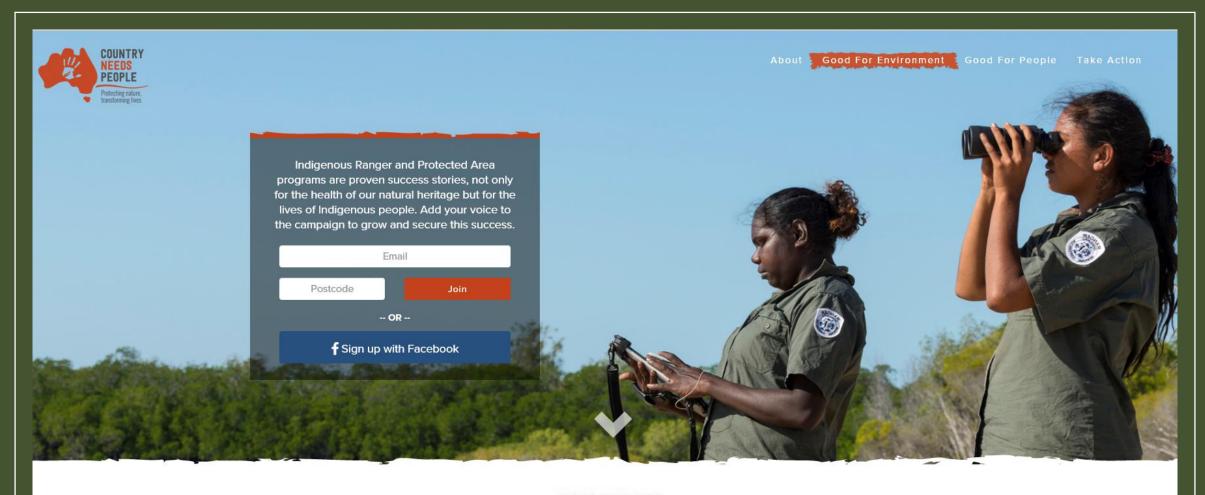
> Cool shower or bath

17 30

9 31

Day 5 of super #hotweather in much of #SouthAustralia. It's vital that you know the signs of #heatexhaustion & #heatstroke, & what to do if you or a loved-one are affected. For more #healthyintheheat tips, visit @SAHealth. In a medical emergency, always call Triple Zero (000).





MANAGING FIRE

Much of the Australian environment is shaped by fire. Aboriginal people harnessed the potential of fire by developing systems for managing fire which are now called patchwork, fire-stick and mosaic burning. They aimed to control the intensity of dangerous wildfires, improve hunting success by attracting animals to resprouting grasses and flushing out small game, and promoting the growth of valued plants.

These traditional fire management systems are now valued by modern science for encouraging environmental diversity, and reducing both the danger from and carbon output of more ferocious wildfires.

Indigenous fire methods protect land before and after the Tathra bushfire

ABC South East NSW By Vanessa Milton

Updated 18 Sep 2018, 2:09pm



VIDEO: Burning to heal: Indigenous burning before and after the Tathra bushfire (ABC News)

On a hot, dry day in March 2018, 20 separate wildfires ignited across the Bega Valley in New South Wales.

One fire that began at Reedy Swamp north of the town of Bega tore through close to 1,000 hectares before reaching the beachside township of Tathra.

REL Building links between WA landcare groups and cultural burning REL from programs

REL By Caroline Hughes | 1 October, 2018 | News | No Comments

fire s

WALN is keen to assist landcarers to learn more about cultural burning programs and would like feedback on what information, training or events would be useful

Fighting fire with fire: cultural burning at Bundanon brings life back to the land

By Andrew Taylor

1.25pm, first published Apri





INFRASTRUCTURE

projects in Sydney's Liberal marginal seats

1 hour ago

Chinese-Australians have had a gutful of all the tokenism

Sydney woman on Centrelink found with almost \$250,000 in

Berejiklian's new cabine











On a day topping 30 degrees in tinder-dry bush at Haunted Point, Indigenous elder Sonny Timbery is showing a group of teenage boys how to light fires.

Firefighters from the NSW Rural Fire Service watch as the teenagers use firesticks made from bark to ignite leaf litter that has accumulated on a ridge above the Shoalhaven River.

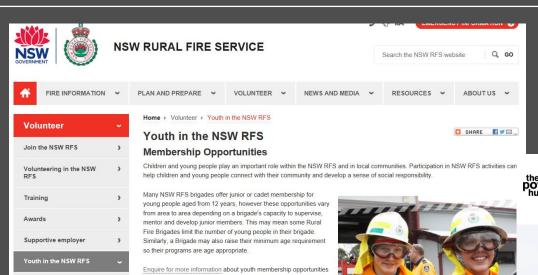




Talking Point: Indigenous fire rangers could save Tasmania's wilderness



The real time and interactive map with all the actions planned for 25 September shows the world the creativity, passion and commitment for the SDGs. The most inspiring and impactful actions will be featured in the SDG Live Studio in New York on the Opening Day of the UN General Assembly.



VOLUNTEERING REIMAGINED

Support your local brigade







Get help Get involved

Support us

Contact Q Search

VOLUNTEER

DONATE



Recovery begins after Cyclone Trevor

Remote communities are headed home after the largest evacuation in 45 years.



What is your **school** doing to make Australia more disaster resilient?

Submissions open now



/schools.aidr.org.au

Education for Young People Knowledge Hub AIDR



Education for Young People

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Disaster resilience education ~

News

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Disaster resilience education

What is DRE?



The aims and value of disaster resilience education for children and young people

Teaching resources



Resources mapped to the Australian Curriculum as a starting point for disaster resilience education

Connect and collaborate



Organisations and education networks around Australia and New Zealand

DRE in action



Disaster resilience education examples and case studies

















Stage 2 Stemshare Project - SES

"It's a really powerful thing to say to the kids "I really don't know! Let's go have a look' and problem solving it together". In this video (8:28 - 13:06), teacher Jennifer Faulconbridge explains how she integrated technology into a Personal Development, Health & Physical Education (PDHPE) unit: Technology can keep us safe. Students from St Thomas Public School in Wollongong investigated the role of the State Emergency Services in the community and designed vehicles that would assist the SES in performing different tasks. SES volunteers from the local unit provided expert feedback on the students' designs.

Firesticks Project at 2009 Bushfire Commemoration

An overview of the award-winning Firesticks project was streamed to an audience of thousands at the 2009 Bushfire State Commemoration in Melbourne this week. Stream available here (55:45 for Firesticks project).

A walk through our fire history

The Strathewen Arthurs Creek Bushfire Education
Partnership showcases another year of learning in this
animated video, exploring the local history of fire,
measuring risk and preparing for fire season. Produced by
students at Strathewen Primary School in Victoria.

Pillowcase Project

"When a recent fire in Darlington (WA) took hold and Elise and her family decided to evacuate, Elise knew exactly what she needed to grab before she left home. Thanks to a Red Cross Pillowcase Project lesson Elise had participated in at school the previous year, she had her own personal evacuation 'kit' ready to go in no time ..." Learn more.

First Aid skills for young people to make remote region more resilient

Tragedy at a remote waterhole in the Northern
Territory moved the local community to take action. St
John Ambulance NT responded, delivering the First Aid in
Schools program to over 100 students at Beswick and
Barunga. Further details.

St John Ambulance NT were state (territory) winners of the 2018 Resilient Australia Awards (community category) and highly commended nationally for the First Aid in Schools 'Remote Indigenous Access Project'. Learn more.





February 2019

View this email in your browser

2019: reset for action

Welcome back to all new and continuing subscribers! Our expanding readership recognises the important role of young people in keeping communities safe before, during and after an emergency or disaster. Record-breaking heatwaves and other extreme weather events have dominated the headlines over the summer and the return to school has been disrupted by fires in Tasmania and floods in North Queensland.

Ten years on from Black Saturday, education for disaster risk reduction remains as important as ever and the Education for Young People program is asking you:

- How can we support schools (and other learning environments) to implement relevant and engaging disaster resilience education initiatives?
- How do we enable young people to participate in skilled and resilient communities?

To help us to meet your needs, we want to hear from you!

- · Take part in our survey to evaluate the program website and supporting resources
- If you are a teacher, invite your students (8+) to complete our anonymous student survey on hazard alerts and warnings.

Or contact me directly with your feedback, questions, requests or news to share for our next edition. I look forward to hearing from you!

Brigid Little, AIDR Education for Young People Program





Education for young people

Disaster resilience education: inviting young people to participate

Bushfires, floods, droughts, cyclones and other hazard events have had devastating impacts on people and places throughout Australia. Young people have an important role to play in raising awareness of the ongoing risk of disaster and working to build safer, stronger communities. Disaster Resilience Education enables learners to develop their understanding of hezards and risk, and to take protective action, before, during and after an emergency or disaster.

The Australian Institute for Disaster Resilience (AIDR) Education for Young People Program is informed by the Sendal Framework for Disester Risk Reduction, the Comprehensive School Safety Framework and our National Strategy for Disaster Resilience.

AIDR supports disaster resilience education initiatives which invite young people to participate as active members of communities, working in partnership towards a resilient future.





Disaster Resilient Australia New Zealand School **Education Network (DRANZSEN)**

The Disaster Resilient Australia New Zealand School Education Network (DRANZSEN) is an initiative of the Australian Institute for Disaster Resilience (AIDR). DRANZSEN brings together educators, emergency services, community and youth organisations, researchers and others seeking to collaborate with young people in the development of knowledge, skills and solutions for disaster risk reduction.

State and territory DRANZSEN events take place each year. A national event provides a platform to share experiences, learning and practice from around the country, and to consult on national priorities for disaster resilience education.

Safety Framework



This was an excellent forum because it showcased relevant and practical programs being made available to schools.

Disaster resilient young people

- predict hazard events
- of hazard events on people and places
- learn from the experiences, knowledge, skills and cultural wisdom of others
- follow practical steps to prepare for an
- practise strategies for mental health and personal resilience
- use scientific data to measure, explain and are connected and active in their local community
- research, map and investigate the impacts respect the environment and make sustainable choices
 - design solutions to real world problems have a voice, work together and feel valued

 - · reduce the risk of a disaster



www.schools.aidr.org.au













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Australian Institute for Disaster Resilience

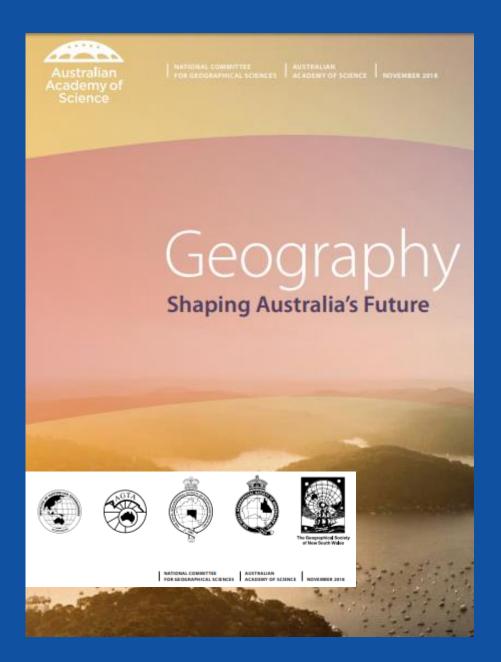
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The scientific character of geography is recognised in university degrees—of the Australian universities that offer a geography major, in the vast majority it can be taken in a Bachelor of Science degree. In Victorian schools, geography is recognised as partially a STEM subject that develops and applies distinctive STEM skills. An awareness that school geography extends beyond its humanities perspectives, and also has significant scientific content, would be greatly helped if it was nationally recognised as partially a STEM subject.

RECOMMENDATION

The National Committee for Geographical Sciences and AGTA develop a case for submission to Ministers of Education for geography to be recognised as partially a STEM subject.

Future directions

Opportunities for future geographical research that will contribute to Australia's capacity to manage natural hazards include:

- Strengthening the data on the magnitude and frequency of past geophysical, meteorological and hydrological events that have produced hazards, to validate models of future events under a changing climate.
- Investigating the likely effects of climate change on the frequency, intensity and spatial patterns of natural hazards.
- Improving the understanding of community adaptive capacity and disaster resilience—what determines it, how it can be measured, and how responsibilities are shared between communities and government agencies.
- **4.** Evaluating Aboriginal and Torres Strait Islander conceptions of human-environment relations and their application to methods of fire hazard reduction.
- 5. Investigating ways that social media could be used to share information within communities to provide real time data on unfolding disasters that can enhance warning and response actions—e.g. real-time updates on moving fire fronts.

