



PENRITH

RESILIENT PENRITH ACTION PLAN 2021-2030

PENRITH
CITY COUNCIL

STATEMENT OF ABORIGINAL AND TORRES STRAIT ISLANDER RECOGNITION

Council values the unique status of Aboriginal people as the original custodians of lands and waters, including the lands and waters of Penrith City. Council values the unique status of Torres Strait Islander people as the original custodians of the Torres Strait Islands and surrounding waters. We work together for a united Australia and City that respects this land of ours, that values the diversity of Aboriginal and Torres Strait Islander cultural heritage and provides justice and equity for all.

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1 THE PLAN

1.1 INTRODUCTION

This localised Resilient Penrith Action Plan (the RPAP) aims to build awareness and preparedness and enhance the capability of Council and the community to adapt and improve resilience to risks, shocks and stresses. It aims to enhance our capacity to work together in becoming a more resilient city and community.

The RPAP has been developed in consultation with stakeholders and the community to build a resilient Penrith through:

- Identification and understanding of the shocks and stresses for the Penrith Local Government Area (LGA)
- Identification of risks and vulnerabilities for Council and the community
- Building knowledge and capacity for resilience
- Ensuring that we are addressing present and future challenges, identifying opportunities and undertaking action to enhance the resilience of Penrith.

1.2 CONTEXT

The RPAP builds on previous and existing Council plans and strategies, including the Cooling the City Strategy 2015 and the Local Strategic Planning Statement, as well as the programs and initiatives of Council, the community and other organisations and services operating within the Penrith area that have been completed or are currently ongoing.

Key policies, strategies and plans from a global to regional context have also guided the RPAP including the Western Sydney District Plan. Whilst the RPAP is localised to Penrith, it recognises that shocks, stresses and challenges faced do not start and end at the Penrith local government area boundary and that resilience is essential at all levels – global to local.

Local, State and Federal Government agencies all have a role to play in ensuring resilience across functions, infrastructure and services. Partnerships, collaboration and coordination is required across all levels of government.

1.3 STRATEGIC ALIGNMENT

RESILIENT CITIES NETWORK AND RESILIENT SYDNEY

The global Resilient Cities Network, formally the 100 Resilient Cities initiative pioneered by the Rockefeller Foundation assists cities worldwide in improving their resilience to social, economic and environmental challenges.

In 2015, Sydney became a member of the global network and the Resilient Sydney Program was formed to build the capacity of Greater Sydney to respond and adapt to shocks and stresses.

The Resilient Sydney Strategy: A Strategy for City Resilience, using the 100 Resilient Cities City Resilience Framework, was developed in 2018 in collaboration with State Government, local councils, businesses and the community within the Greater Sydney area. It 'sets the direction we must take to strengthen our ability to survive, adapt and thrive in the face of global uncertainty and local shocks and stresses' ¹.

Council, as a Resilient Sydney Ambassador, is committed to working collaboratively with Resilient Sydney to assist in building the resilience of Greater Sydney through involvement in the implementation of the Resilient Sydney Strategy. Council is also committed to achieving the outcomes of this Strategy at a local level through the development of the RPAP, which aligns with the five directions of the Strategy to build the resilience of Penrith and its community.

RESILIENCE COMMITTEE

Council established the Resilience Committee in 2017 to contribute to environmental, social and economic outcomes of Council and the community. The Committee advises on opportunities to enhance the resilience of the Penrith community and integrate resilience within the activities and decision-making of Council. The directions, outcomes and actions within the RPAP reflect and align with the priority areas as identified by the Resilience Committee.

INTEGRATED PLANNING AND REPORTING FRAMEWORK

Council is required to plan and report in line with the Integrated Planning and Reporting Framework. This framework recognises that Council's various plans and policies inter-relate and outcomes should be aligned to maximise efforts and add value.

The RPAP reflects Council's values and aligns with the outcomes within the Community Plan to improve Penrith as a place to live work and play and to build community resilience now and over the longer-term.

Actions in the RPAP will be embedded within Council's Delivery Program and Operational Plan, and a Resource Plan will be developed and aligned with the Resourcing Strategy to determine how Council will deliver on these actions and our commitment to build a resilient Penrith.

UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

The seventeen United Nations (UN) Sustainable Development Goals (SDGs) and the 169 associated targets included in the UN's 2030 Agenda were adopted in 2015 to address global challenges and provide a blueprint for a sustainable and resilient future ². Building community and system resilience to shocks and stresses and increasing adaptive capacity will promote a supportive environment for health and wellbeing that will assist in achieving the SDGs ³. The RPAP aligns with the SDGs. Applicable SDGs are provided under each of the five directions in the RPAP.

1.4 VISION AND GOALS FOR RESILIENT PENRITH

OUR VISION

A Penrith community that is strong, connected and inclusive.

OUR GOAL

Penrith will build its capacity to understand and manage vulnerabilities and risks and be prepared to respond, adapt and thrive together in the face of shocks and stresses.

THE PLAN WILL

- Ensure that Penrith develops as a sustainable, efficient, liveable and resilient city, through the application of strategic directions, practices and actions.
- Demonstrate leadership, innovation and collaboration in building the resilience of Council and the community.
- Identify and implement actions to build and strengthen the resilience of infrastructure, assets and ecosystems within the Penrith LGA.
- Adopt a resilience approach to proactively respond to the challenges of a changing climate and other existing and emerging shocks and stresses.
- Build awareness and capability of Council and the community to prepare, adapt, respond and recover from shocks and stresses

2 RESILIENCE

2.1 WHAT IS RESILIENCE?

Resilience is our ability to cope through tough times and emergencies including natural disasters. It can be defined as the capacity of individuals, communities, institutions, businesses and systems within a city to survive, adapt and thrive in the face of chronic stresses and acute shocks they experience ¹.

A positive model of resilience that promotes health and well-being involves resilience at three levels ³:

- Individual – building resilience in our personal and professional practices, adopting a positive attitude and supporting ourselves, our family, friends and neighbours to adapt to challenges and cope in the face of adversity.
- Community – building resilience through our workplace, volunteer work, social groups and our social networks, and accessing local support, resources and services within the community to withstand, cope and recover from shocks and stresses.
- System – building the capacity of systems to anticipate, withstand and recover from shocks and stresses by proactively adapting and transforming through planning, policy, place-making and the introduction of sustainable and resilient financial and social mechanisms.

2.2 SHOCKS AND STRESSES

Shocks are sudden events, major emergencies or short-term disruptions that threaten or disrupt our day to day life and includes:

- extreme weather (heatwaves, bushfire, storms, flood)
- water crisis (drought, water restrictions)
- disease outbreaks
- infrastructure and network failure; and
- cyber-attacks

Stresses are ongoing pressures that grow over time and impact us on a day-to-day or regular basis, potentially having negative impacts on our health and way of life. Examples of stresses include but are not limited to:

- increasing demand for health services
- inadequate public transport options
- inequity
- insufficient employment opportunities
- financial stress; and
- a lack of social cohesion

Shocks and stresses are not experienced in isolation and when they interact, they often amplify the impacts on a city and its communities ⁴.

2.3 PENRITH SHOCKS AND STRESSES

The Penrith community has experienced a number of these shocks and stresses including natural disasters and extreme weather events, as well as social shocks and stresses. Rapid growth and increasing diversity of the Penrith area has contributed to social stresses such as reduced social cohesion, housing affordability, availability of social housing and appropriate housing stock, and the equitable division of community infrastructure, services and employment opportunities across the Penrith area to meet the changing needs of a growing community. The one shock that has impacted on the community as a whole has been the COVID-19 disease pandemic, which has changed the way in which we live, work and socially interact and has enhanced stresses including loss of employment and social connectedness, financial stress, and demand on health services. In the face of COVID-19, Council has shown its leadership and commitment to collaboration through the proactive establishment of the Social and Economic Taskforce to develop the Penrith Rising Strong Recovery Plan, incorporating a Social and Economic Recovery Plan to support and strengthen the community.

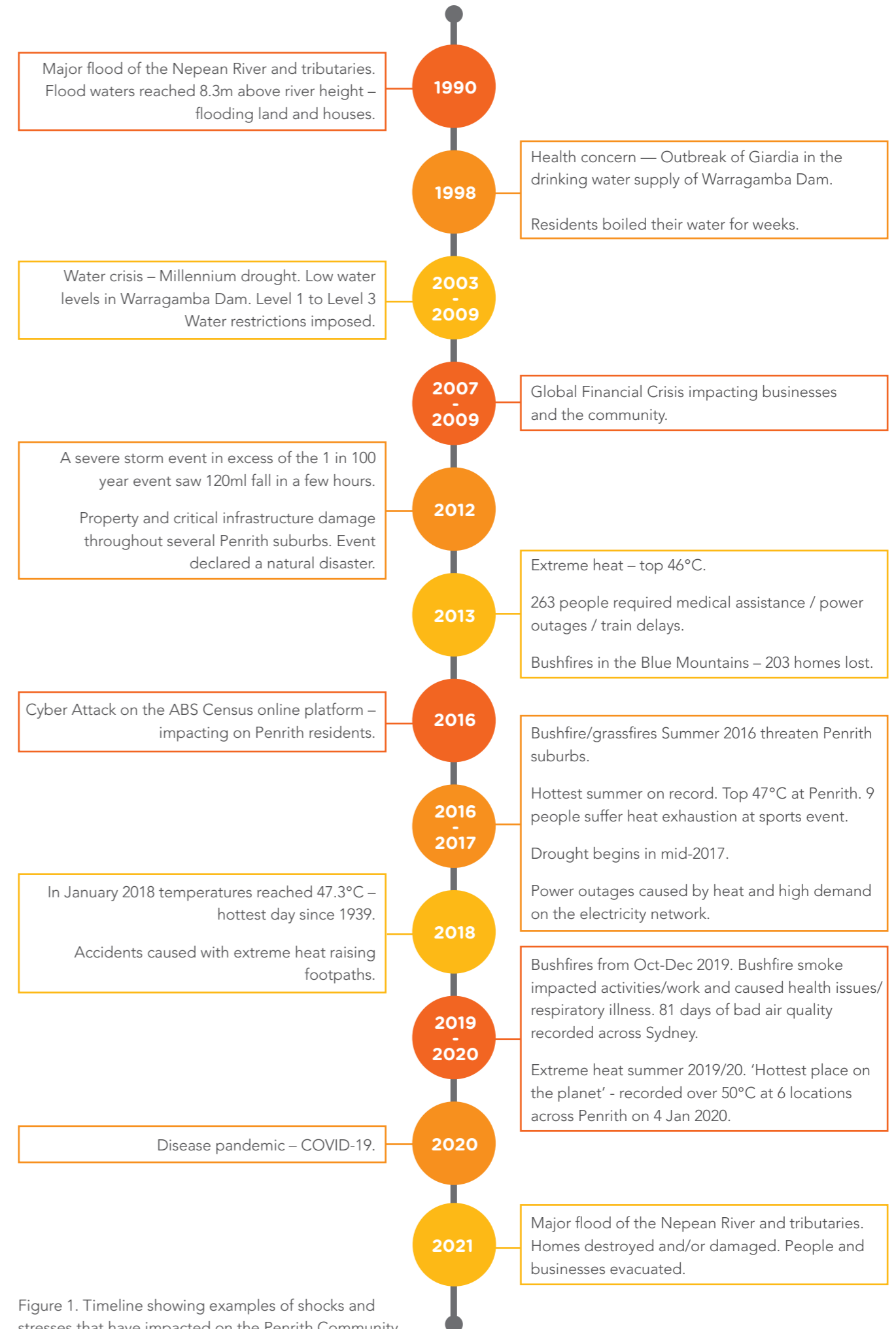


Figure 1. Timeline showing examples of shocks and stresses that have impacted on the Penrith Community.

2.4 PENRITH VULNERABILITY TO A CHANGING CLIMATE

The Penrith community is vulnerable now and in the future to shocks and stresses of a changing climate. 2019-2020 displayed unprecedented and accumulative natural disasters with severe storms and flooding preceding drought, heatwaves and bushfires.

A Climate Risk Assessment undertaken by Council in 2020 identified 48 climate risks that are impacting on Council now or may do so in the future based on the NSW and ACT Regional Climate Modelling (NARCLIM) projections. These risks were identified as resulting from extreme heat, bushfires and poor air quality, drought and flooding, or a combination of extreme weather events ⁵.

HEAT VULNERABILITY

Extreme heat and heatwaves are an extreme risk to Council and the Penrith community, as identified through Council's climate risk assessment. A heatwave is defined by the Bureau of Meteorology as three or more days of high maximum and minimum temperatures for a given location ⁶.

In a heatwave, night time temperatures do not drop sufficiently to provide relief, impacting on our sleep, comfort and affecting our health and wellbeing. Heat-related illnesses include dehydration, heat stress and heat stroke. Those with a chronic illness or medical condition may be at risk during a heatwave. Those playing sport during extreme heat and heatwave may also be at greater risk of heat-related illness.

Heatwaves have caused more deaths in Australia over the past 100 years than any other natural event. Across Australia from July 2000 to June 2018, 473 heat related deaths were reported to the Coroner, with 403 deaths occurring during a heatwave ⁷.

The figure below shows the number of temperature/heat-related presentations to hospital emergency departments in NSW between 2010-2019. Higher spikes in the number of presentations can be seen in 2013 and in 2017 through to 2019, with a total of 455, 310, 402 presentations over the summer months of 2016-2017, 2017-18 and 2018-2019 respectively ⁸.

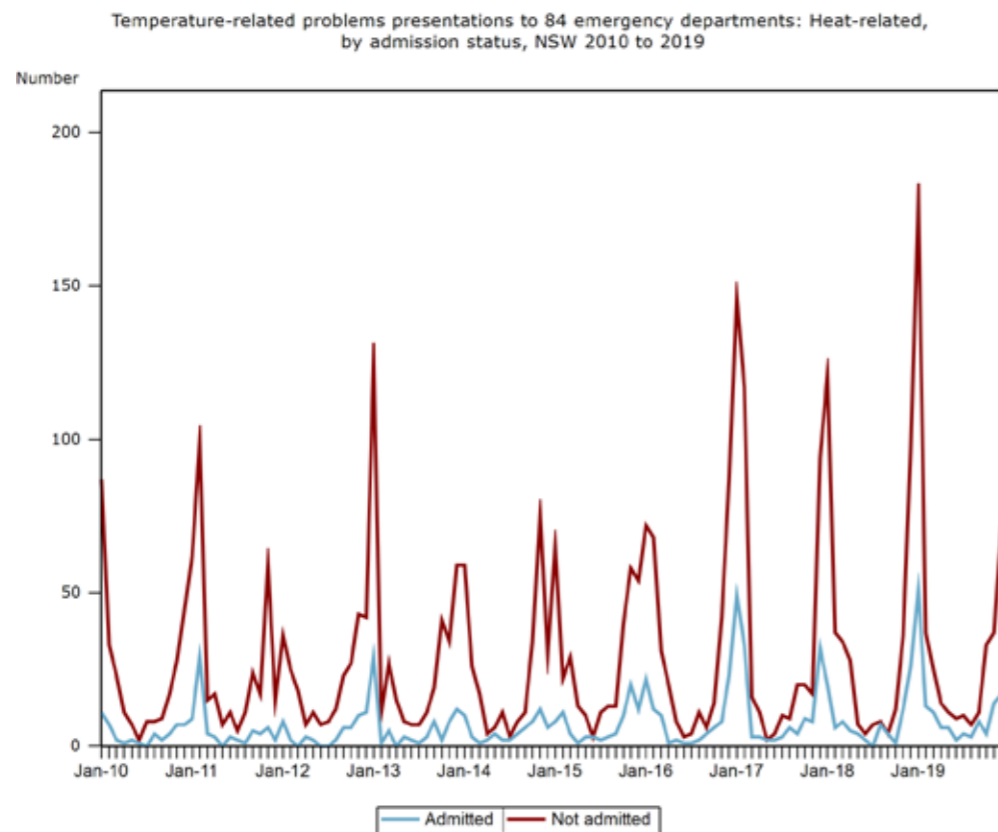


Figure 2. HealthStats NSW Temperature-related problems presenting to emergency departments ⁸.

The Metropolitan Sydney climate change snapshot by AdaptNSW below highlights the projected weather changes in temperature, rainfall and bushfire risk in the near future (2030) and the far future (2070) ⁹.

Projected temperature changes	
Maximum temperatures are projected to increase in the near future by 0.3-1.0°C	Maximum temperatures are projected to increase in the far future by 1.6-2.5°C
Minimum temperatures are projected to increase in the near future by 0.4-0.8°C	Minimum temperatures are projected to increase in the far future by 1.4-2.5°C
The number of hot days will increase	The number of cold nights will decrease
Projected rainfall changes	
Rainfall is projected to decrease in spring and winter	Rainfall is projected to increase in summer and autumn
Projected Forest Fire Danger Index (FFDI) changes	
Average fire weather is projected to increase in spring by 2070	Severe fire weather days are projected to increase in summer and spring by 2070

Figure 3. Metropolitan Sydney Climate Change Snapshot by Adapt NSW ⁹.

Nationally, 2020 was the fourth warmest year on record since 1910 but has been recognised globally in the Global Climate Report 2020 as the second warmest year on record, with every consecutive year since 2013 being included in the top ten warmest years on record since 1880 based on global combined land and ocean average temperature ¹⁰. Penrith has been touted in the media as the 'hottest place on earth' in 2018 and 2020: it is therefore acknowledged that Penrith is likely to continue to see an increase in temperature with heatwaves to become more frequent.

Projections by CSIRO and Bureau of Meteorology highlight that Western Sydney will experience more extreme heat days in the future with 22 days above 35°C by 2030. These projections are provided in the figure below ¹¹.

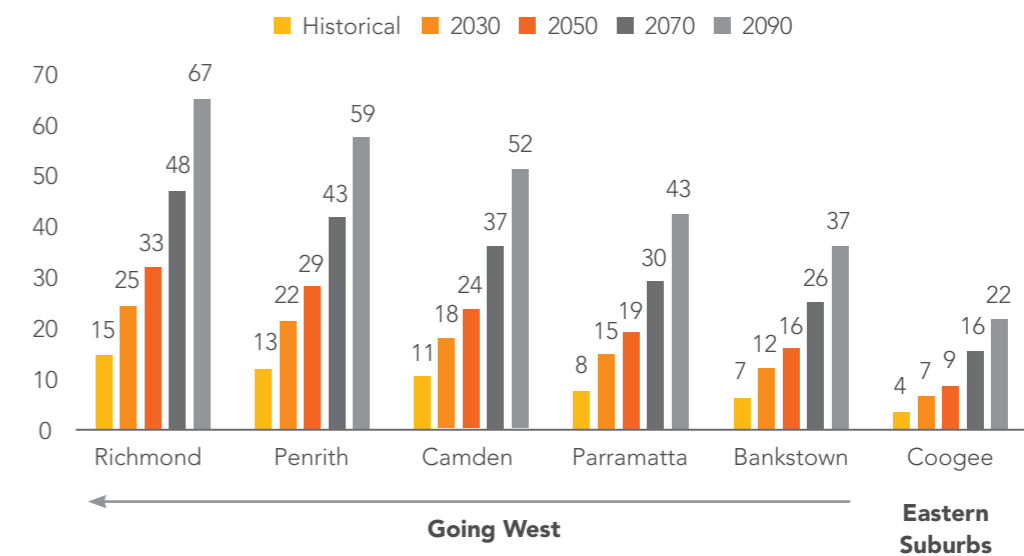


Figure 4. HeatWatch, Extreme Heat in Western Sydney 2018. Source: The Australian Institute (based on projections from CSIRO and BOM) ¹¹.

However, according to the recent Benchmarking Summer Heat Across Penrith Report ¹², based on the heat sensor study undertaken as a partnership between Council and Western Sydney University over the summer months of 2019-20, the number of days over 35°C, recorded in Penrith during the summer was 39 days. Temperatures over 50°C were recorded at six locations on 4 January 2020.

Mapping from the Benchmarking Summer Heat Across Penrith Report, as shown in figures 5 and 6, highlights the mean summer air temperature as well as the absolute maximum air temperature recorded over the summer of 2019-2020 ¹².

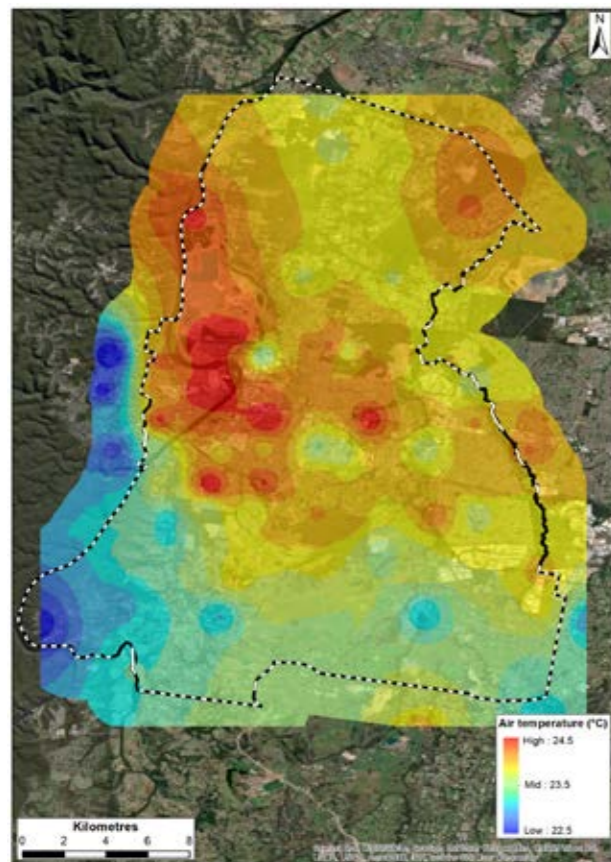


Figure 5. Mean summer air temperature across the Penrith area during the summer of 2019-20.

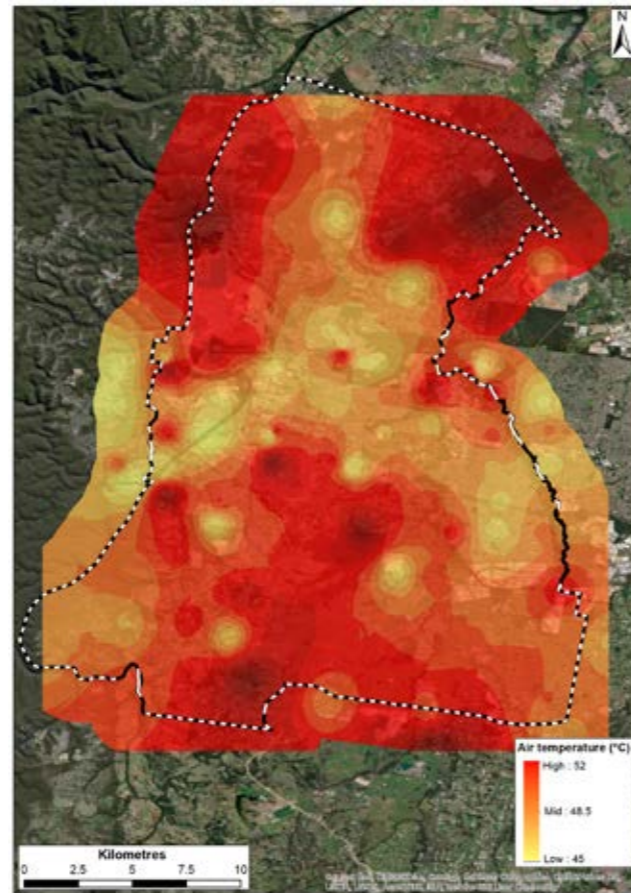


Figure 6. Absolute maximum air temperature across the Penrith area during the summer of 2019-20.

The map below in figure 7 shows the mean night time temperatures during a heatwave event where at least one location recorded a night time air temperature of greater than 30°C for seven nights during January and February 2020 ¹².

Night time temperatures were also found to be warmer in the suburbs with a higher cover of hard surfaces as well as the commercial centres, indicating an urban heat island effect in these areas.

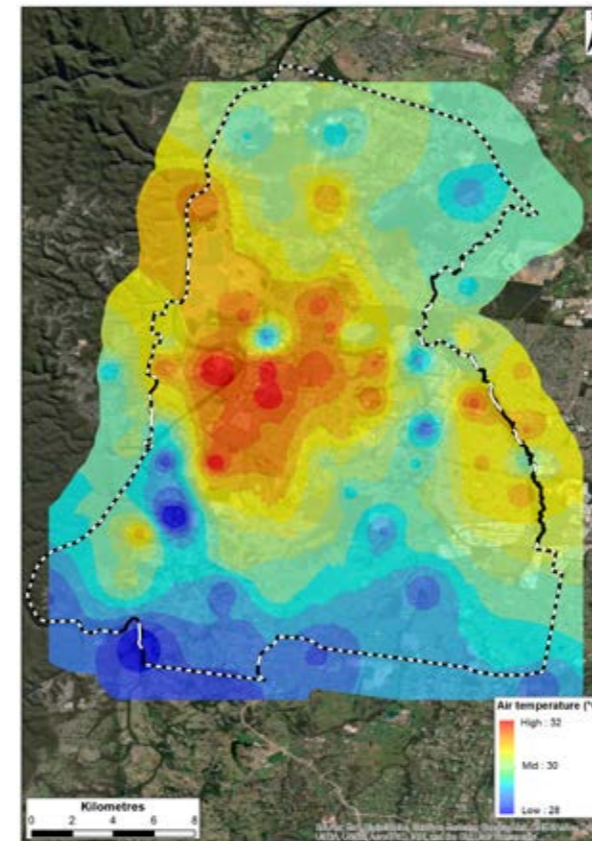


Figure 7. Mean night time air temperatures across the Penrith area during heatwave nights in summer 2019-20.

The vulnerability of the Penrith community to heatwave can be compounded by various socio-economic contributors and stresses. Households in the community feeling financial stress, people that are renting or in social housing without access to air conditioning or a private vehicle to transport themselves to cooler places, people with chronic conditions and disability, and people with English as a second language may have reduced capacity to prepare, respond and cope with extreme heat events.

Recent vulnerability mapping undertaken by Council has identified:

- **194,322** residents within the Penrith area as being vulnerable to heat
- **24,206** residents as having the highest heat vulnerability including:
 - » **3,595** people over 65 years,
 - » **1,148** Aboriginal or Torres Strait Islander people,
 - » **2,054** people with disability; and
 - » **754** people with English as a second language

Heat can also increase stresses on the community. For example, extreme heat and heatwaves may limit movement and impact on their ability to participate in and enjoy outdoor social gatherings, events and activities including sport and other recreational pursuits. Social isolation is becoming more common particularly for those of mature age as they are more likely to stay at home on extreme heat days or during a heatwave if it is too hot to leave home and they are reliant on public transport to move around Penrith. People may also be reluctant to leave home on hot days if they care for someone else that is not as mobile or if they have animals and pets that they do not want to leave unattended.

During heat events, the pressure on the electricity network increases as more people use air conditioning. Peak load on the network during heat can result in infrastructure failure and power outages which can lead to thermal discomfort, lack of refrigeration for medications and an increased risk of food poisoning from eating spoiled food, impacting on our health and well-being.

DROUGHT CONDITIONS AND BUSHFIRE RISK

The Penrith community has faced the challenge of drought and water shortage, including restrictions on water consumption, throughout the Millennium Drought (2001-2010) and again with the drought that commenced mid-2017, with water restrictions put in place in 2019 in response to low dam levels. Drought has impacted on our rural lands, flora and fauna, and our local businesses that are reliant on water, and has resulted in a loss of trees, an amenity of parks, gardens and open space and increased maintenance of infrastructure. For example, greater maintenance is required for sporting field surfaces, as drought and subsequent water restrictions can cause surfaces to harden and increase the risk of sporting injuries and disruptions to the playing season.

During the summer of 2019-20, Australia and NSW faced some of the worst bushfires in our history that coincided with the severe drought period. 2019 was recorded as the hottest and driest year with rainfall at 40% below the national average ¹³.

The 2019-20 summer bushfires, described as unprecedented with over 24 million hectares burnt across Australia, caused loss of life, destroyed thousands of homes, killed or displaced an estimated 3 billion native animals, and devastated whole communities, leaving them isolated, without communications, electricity, services and impacting on local businesses and economies ¹⁴.

Bushfires in the areas surrounding Penrith caused emotional and physical stress for those in the community, with many community members and Council staff assisting to combat the bushfires and the recovery process in a volunteering capacity. Bushfire smoke also increased the level of air pollution over an extended period, minimising some outdoor activities, limiting visibility, and forcing vulnerable members of the community to remain indoors due to the heightened risk of respiratory illness.

Penrith vulnerability mapping has identified that:

- **2,619** households are within a high/medium bushfire risk area including:
 - » **748** people over 65 years
 - » **292** people with disability,
 - » **381** Aboriginal or Torres Strait Islander people,
 - » **174** people with English as a second language; and
 - » **42** households without access to a car

RAINFALL, STORMS AND FLOOD

In early 2020, the Penrith community were hit with the worst storm since 2016 with heavy rainfall, hail and damaging winds causing power outages, transport network delays, school and sporting field closures and cancellation of sporting and outdoor events. Penrith suburbs, including the Penrith CBD, experienced localised and flash flooding of roadways, causeways and parkland.

Historically, Penrith faced its last major flood of the Nepean River and its tributaries in the early 1990s; however, in mid-March 2021, an extreme weather event, which subsequently led to the spilling of Warragamba Dam, resulted in flooding of the Nepean and Hawkesbury Rivers and their tributaries of a magnitude not experienced since 1961. The Nepean River peaked at approximately 10m at the Penrith gauge. Flood evacuation orders were put in place for multiple suburbs within the Penrith Local Government Area with over 350 people evacuated. Three homes were destroyed and multiple homes damaged by floodwaters, with flooding also causing road, schools and business closures, impacting on residents and local businesses. Council has undertaken flood studies and developed floodplain management plans to address flooding issues and identify measures to reduce flood damage and ensure community safety across the Penrith area. The Hawkesbury-Nepean Valley Regional Flood Study 2019, developed by the NSW Government, identifies the flood affected areas in the Valley and provides the best available information to assist Council with planning and decision-making ¹⁵.

The SES has developed a flood risk tool for the Hawkesbury-Nepean Valley to assist the community in increasing their knowledge of flood prone areas and preparing for flood ¹⁶.



Flooding at Jamison Park, 2020 (Source: Megan Dunn)

2.5 WHAT DOES A RESILIENT COMMUNITY LOOK LIKE?

According to the National Strategy for Disaster Resilience, a disaster resilient community is one where the community ¹⁷:

- Understand the risks that may affect them and others in their community
- Anticipate shocks and stresses and take the necessary actions to prepare for and respond appropriately with available knowledge and resources
- Work together with local leaders, community services and existing community and social networks to increase our capacity to prepare for shocks and stresses and provide support
- Work in partnership with emergency services, local authorities and other relevant organisations, and build a strong volunteer network to assist before, during and after emergencies
- Develop resilience-based emergency management and strategic plans, building resilience principles and outcomes into policies, planning, core services and product.
- Ensure land use planning systems and planning and development controls reduce community exposure to risks from known hazards, and new development and infrastructure is designed to specifications that enhance resilience
- Have mechanisms and systems in place to quickly restore functions and services and assist in recovery, with an initial focus on the most vulnerable community members ¹⁷.



Bushfire at Mulgoa, 2017 (Source: Eliza James, abc.net.au)

A Resilient Community is one that is equitable and inclusive, that provides accessible services, infrastructure and spaces; a community that comes together to support each other in times of need, and works collaboratively with a shared goal and responsibility to understand and manage risks, shocks and stresses to build community capacity to withstand, cope, adapt and recover from tough times, disasters and emergencies.

2.6 WHY IS A RESILIENT PENRITH ACTION PLAN IMPORTANT?

Penrith has and will continue to face shocks and stresses impacting on our city and our community.

Western Sydney is currently impacted on by a changing climate, with the community facing the accumulated impacts of multiple shocks and stresses. The science and data clearly predict climate variability, leading to extreme weather events, including heatwaves to continue, which will impact on our community into the future.

The Penrith LGA, and Western Sydney as a whole, is a growth area of the future, including the Western Sydney Airport and Aerotropolis as well as economic investment in industry, business and development. Growth will bring benefits to the Penrith community; however, growth will also increase pressures for housing, transport, infrastructure and services to cater for a growing population, and will provide challenges in addressing urban heat.

Whilst these pressures add to the stresses that frequently impact on our capacity to adapt and cope, the RPAP provides Council and the community with an opportunity to plan for and create sustainable, liveable urban spaces to build the resilience of our community and City.

Communities with a higher level of resilience have a greater capacity to withstand shocks and stresses and can recover more quickly.

Council and the community must be prepared to face these challenges together, to adapt together and to respond and recover together to form a stronger more resilient community.

As a community we need to be able to:

Adapt

reduce our exposure to shocks and stresses

Survive

withstand disruptions/emergency events through increased capacity to cope

Thrive

increase our capacity and ability to improve our quality of life and a liveable community

A RPAP is needed to ensure we are addressing present and future shocks and stresses and taking proactive action; including identifying our vulnerable communities, enhancing access to community spaces and services, advocating for sustainable urban planning, and implementing greening and cooling our city initiatives to enhance the resilience of Penrith now and over the longer term.



Tree planting at Chameleon Reserve, Erskine Park, 2021 (Source: Penrith City Council)

3 OUR COMMUNITY

3.1 PENRITH COMMUNITY PROFILE

The Penrith LGA has a population of approximately 213,000 people spanning 36 suburbs over 404km². Penrith's population is forecast to continue to grow and is expected to reach over 258,000 by 2036, with the Penrith CBD to be the largest growth area¹⁸.

PROFILE SNAPSHOT^{18, 19}

- 42% of residents are between 25-54 years of age
- 4% of residents identify as Aboriginal and/or Torres Strait Islander
- 21.6% of residents were born overseas and 18% speak a language other than English
- 30% of households are two-person households, with 19% being one-person households
- Of those residents living with disability, 5.2% need assistance with core activities
- The median household income for Penrith City is approximately \$1,655 per week
- 36% of people 15 years and over have completed secondary education to year 10 or above, 19.7% have attained a Certificate (I-IV) qualification, 8.5% have attained a diploma level qualification, and 12.3% have attained a bachelor's degree or higher
- There are approximately 14,676 local businesses within the Penrith area
- There are 85,873 local jobs within the Penrith area, with construction, retail and healthcare/social assistance being the largest employment industries
- There are 113,205 employed residents, the majority in full time work
- The average commuting distance for workers is 20.81kms
- 66.5% of Penrith residents commute to work by driving a car
- 12.2% of households are in housing stress, 4.4% of households are living in social housing, and over 800 people are homeless
- Mortgage stress is being experienced by 9.3% of purchasing households and rental stress is being experienced by 29.6% of renting households.
- Approximately 24% of households are not connected to the internet

3.2 COMMUNITY SOCIO-ECONOMICS AND RESILIENCE CAPACITY

Based on ABS census data and the Socio-Economic Indexes for Areas (SEIFA) incorporating indicators of advantage and disadvantage, for example, education, employment and income; the suburbs of higher disadvantage in the Penrith area were identified as North St Marys, St Marys, Werrington, Penrith, Oxley Park, Colyton and Kingswood²⁰. Areas of disadvantage are more likely to have less capacity to respond, adapt and cope with challenges, shocks and stresses.

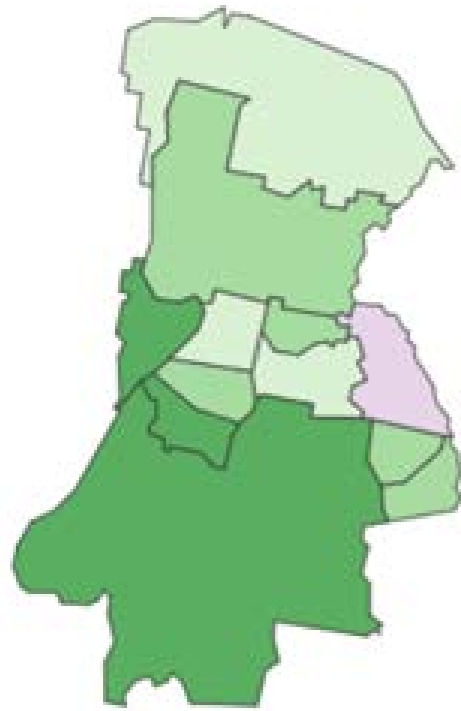
The Bushfire and Natural Hazards CRC have developed the Australian Disaster Resilience Index (ADRI) which provides a rating of low, moderate and high disaster resilience, with communities in each of these categories varying in their capacity to cope with and adapt to hazard events based on factors such as education, being able to adjust through learning and adaptation, ability to access and use available resources, accessibility of services and level of community cohesion²¹.

According to the ADRI, the combination of adaptive capacity and coping capacity determines the disaster resilience of a community with respect to preparedness, response and recovery to shocks such as natural hazards²¹.

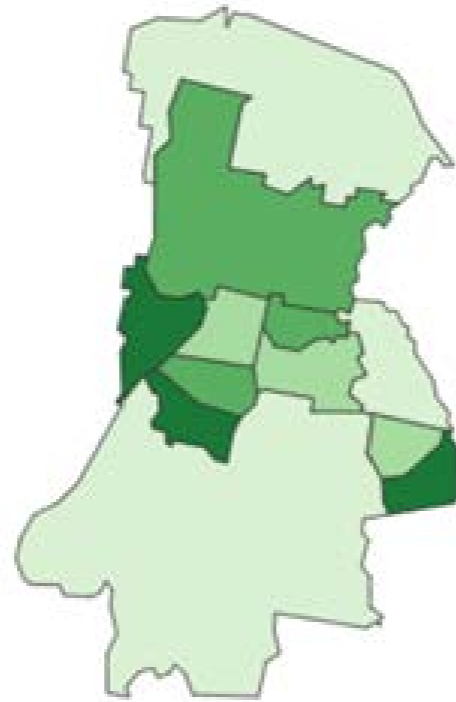
Penrith's adaptive capacity, its capability to adapt and adjust has been rated through the Australian Disaster Resilience Index as moderate to high. The highest rating being a 0.7506 for Leonay/Emu Plains and the lowest rating being St Marys/Colyton at 0.4962. The Penrith community was shown to have a slightly higher coping capacity comparative to adaptive capacity, although still rated as moderate to high. Leonay/Emu Plains was rated 0.8485 followed by Erskine Park at 0.8479 and Glenmore Park/Regentville at 0.8516, whilst Londonderry, Mulgoa/Luddenham/Orchard Hills and St Marys/Colyton were rated as 0.5593, 0.5668, and 0.5903 respectively²¹.

Overall, Penrith suburbs are rated as moderate to high for disaster resilience, with suburbs including Leonay, Emu Plains, Glenmore Park and Regentville given the highest disaster resilience rating (over 0.82), whilst suburbs including St Marys and Colyton were given the lowest ranked moderate rating of 0.5524²¹.

ADAPTIVE CAPACITY



COPING CAPACITY



DISASTER RESILIENCE

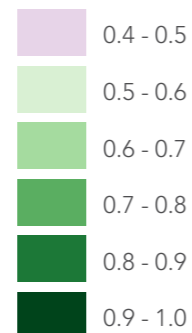
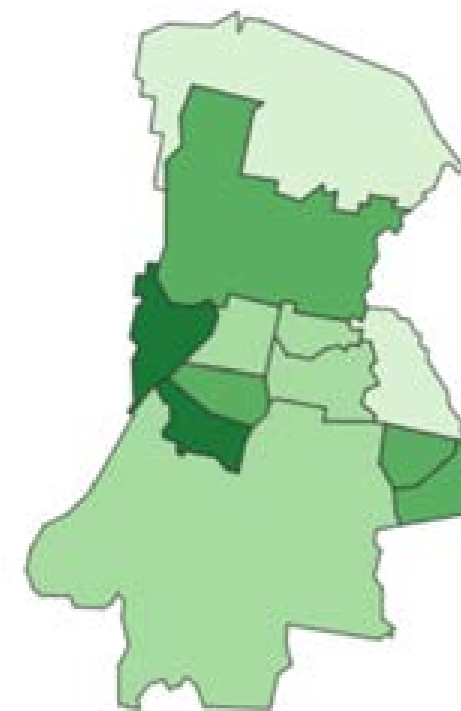


Figure 8, 9 and 10. Adaptive Capacity, Coping Capacity, and Disaster Resilience of the Penrith Local Government Area (SA2 level) to natural hazards based on the Australian Disaster Resilience Index ²¹.

3.3 COMMUNITY ENGAGEMENT ON RESILIENCE

In 2020, over 300 people in the Penrith community engaged with Council on resilience through an online survey, community and stakeholder workshops, focus groups and interviews. A summary of what we heard from the community is provided below ⁴.

The Penrith community has had to face multiple shocks compounded by stresses, with 2019-2020 seeing bushfires, poor air quality, flooding, water restrictions, extreme heat and a disease pandemic impacting on the health of our community, shutting down our local businesses, loss of jobs and financial stress, and social distancing from our work places, family, friends and neighbours.

The top shocks identified by the community were:

- Extreme heat
- Water crisis (drought, water restrictions)
- Bushfire
- Financial crisis
- Disease outbreak
- Digital network and infrastructure failure

When asked how prepared their household was for shocks including extreme weather events, the community response was a low score of 2.3 out of 5, where a score of 1 was not prepared at all and 5 was extremely prepared. This highlights that a large portion of households are not prepared in the event of a major shock, having no plan in place or items that they can pack quickly to evacuate if needed, which may limit the capacity to respond, adapt and recover quickly.

The top stresses identified by the community reflect the additional challenges of 2020 in dealing with a disease pandemic on top of the usual stresses including housing affordability, job security, and access to health and transport services.

The top stresses identified by the community were:

- Uncertainty about the future – feeling that life is on hold
- Social distancing – lack of social connections
- Job uncertainty and work life balance
- Financial stress and security
- Mental health concerns

People of all ages expressed anxiety over uncertainty about the future. In times of COVID-19, where job losses and job security has been felt by the community, there was a strong concern about financial security and the ability to pay bills, particularly in one-person households.

Anxiety, uncertainty and loneliness from social distancing during the pandemic can impact on mental health and well-being, with the community rating their wellbeing through the community survey as a 5.4 out of 10 ('I'm okay').

We have heard that our community copes through shocks and stresses by:

- Staying up to date with information
- Talking to and/or staying with friends and family
- Staying positive and improving health and well-being through exercise, time spent in a greenspace or local park, and/or gardening.

A strong connection to family and friends was identified as a strength of the community. There is a high dependency on family and friends as a key source of information, assistance and support, particularly for youth and people from CALD backgrounds, rather than seeking out and approaching professional or expert services. This recognises that people in the community without family or a close support system may be disadvantaged and more vulnerable in responding and coping with shocks and stresses.

43% of survey participants stated that they did not know their neighbours well or at all. It was widely acknowledged that opportunities exist to strengthen neighbourhood connections to build a more connected and resilient community that can support each other.

Our community would be better able to cope if they had:

- Clear information through multiple channels on how to prepare and respond to shocks
- Easy to understand expert advice
- Easy to find accessible services
- Good connections with their neighbourhood and community
- More/better designed infrastructure
- More open/green space near their home



3.4 COMMUNITY PRIORITIES FOR BUILDING RESILIENCE

To be more resilient we need:

- Greater connection between residents
- Reliable and equal access to services and information
- A reliable, diverse economy
- Sustainable environmental practices
- Capacity to deal with unexpected emergencies

Through engaging with community members, service providers and key stakeholders, we heard the following ideas, wants and needs 4:



Creating greater visibility for our support services



Building public spaces that help build more resilient communities



Make it easy for people to find the professional services and information they need



Help people to be able to combat heat waves in their own home



Facilitate better collaboration between our essential and community services organisations



Make sure everyone has information on how to respond to major emergencies in their home



Create more events and initiatives that bring our community together and help us know our neighbours



Create spaces that young people feel safe, and want to hang out



Promote free or low-cost educational opportunities in Penrith

Overall, our community wants a connected community with accessible services for all, safe public green spaces and cooler places to work, visit, play and live that will work towards building a resilient Penrith.

Figure 11. Community priorities in each Penrith Local Government Ward for support needed to build resilience 4.

4 DIRECTIONS, OUTCOMES, ACTIONS

4.1 MAKING IT HAPPEN

The RPAP has been shaped through engagement with the community, service providers and stakeholders on resilience and what building resilience means for Penrith.

The RPAP aligns with the five directions in the Resilient Sydney Strategy 2018¹. Outcomes, action areas and actions are identified in the Plan under each of the five directions.



Actions are included in the RPAP to build both Council and community resilience. The implementation timeframe for each of the actions is determined as short-term (immediate - 2 years), medium term (2-4 years) and long-term (5+ years). Implementation of actions may either be the direct responsibility of Council, and/or the responsibility of other organisations including State Government Agencies, Research and Education Institutions, Community Organisations, and Service Providers.

Council will implement actions within the RPAP that it has direct control over and will work collaboratively with others, and/or advocate on issues and challenges outside of Council's direct control to raise awareness of community concerns and highlight what needs to be addressed and actioned to strengthen our community resilience.

The action tables under each of the five directions include symbols that denotes responsibility for the actions, as follows:

- Direct control
- Collaboration
- Influence



DIRECTION 1. PEOPLE-CENTRED CITY

RESILIENT SYDNEY OUTCOME:

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

PENRITH CITY OUTCOME:

A city with well-connected infrastructure and accessible services that understand the lived experience and meet community needs.

SUSTAINABLE DEVELOPMENT GOALS:

United Nations Sustainable Development Goals aligned with Direction 1 and its actions.



ACTION AREA

BUILDING RESILIENCE THROUGH ACCESSIBLE SERVICES AND SPACES:

Adopting an integrated planning approach for resilience and inclusivity of the community in decision-making will assist in better understanding community needs and ensure that infrastructure, services and community spaces address those needs and assist in building resilience to shocks and stresses.

Planning and design for new infrastructure and public spaces must consider the need for safe, well-connected and purpose-driven spaces to ensure equity and accessibility for all within the community.

The Penrith Sport and Recreation Strategy is a key strategy in supporting a network of open space and green infrastructure, creating fit for purpose play spaces, and providing recreational facilities and open space for sport and recreation that are accessible and inclusive.

There is an identified lack of visibility and awareness of support services available to assist the community to cope with daily stresses, whilst also to some extent a stigma attached to seeking assistance. Collaboration with service providers and building community service networks to connect the community to what they need will assist in building community resilience.

Housing:

The Penrith Community is faced with stresses such as financial and housing stress. With Penrith's housing supply increasing over the next few years in alignment with the Local Housing Strategy, it is important that housing is sustainable, affordable and the housing type appropriate for the Penrith area and its demographics now and in the future.

Advocating for and collaborating with housing providers for increased and improved social housing with access to air-conditioning and energy/water efficient features will assist in addressing community needs.

Working in collaboration with community groups and services and continuing to facilitate the Homelessness Interagency provides support and essential services to those people in the community who are homeless.

Council's Homelessness Protocol, for example, must also enable a proactive and fair approach to managing homelessness, particularly in public spaces to ensure the continued safety, accessibility, and equitable use of public spaces by all people within the community.

Transport:

The Penrith Community Profile 2018, highlights a reliance on private vehicles for work and travel purposes, with 66.5% of residents driving to work as opposed to 5.6% who travelled by train and 0.8% that travelled to work by bus. Other modes of sustainable transport, including walking and cycling to work, were low within the Penrith area at 0.2% and 1.4% respectively ¹⁸.

This reliance on vehicles contributes to traffic congestion, parking problems, and greenhouse gas emissions. Public and sustainable transport options are a means of alleviating congestion in the main city centres, whilst also encouraging easier movement and a healthier lifestyle. However, encouraging a greater take up of sustainable transport relies on the accessibility of the network, frequency of services, end of trip facilities and safety.

Equity in the ability to access transport services and the frequency and reliability of services across different suburbs of Penrith, particularly in the more rural areas, has been identified as a concern and must be addressed. Improving infrastructure to support sustainable modes of transport, including walking and cycling, is also essential in planning for a more sustainable and resilient community.

Education and Employment Opportunities:

At present, there are more employed people than there are local jobs within the Penrith area, with over 57,000 people leaving the area to work ¹⁸. The Western City District Plan includes the concept of a 30-minute city with workers living within 30 minutes of their job location, education, and health and service facilities as a means of improving commuting times, creating a better quality of life and a sense of place ²². Planning for a 30-minute city will need to incorporate appropriate infrastructure, attracting investment, job creation and growth commensurate with the skills and qualifications of local residents, and building a smart city with smart networks and services.

Penrith is a growth area, and the number of jobs within Penrith City have been increasing over time. Given Penrith's proximity to the Western Sydney Airport and Aerotropolis, this may create new jobs and attract industries/businesses to the area providing future local employment opportunities. Penrith also includes two campuses for Western Sydney University providing an opportunity for residents to attend university locally. Learning can also be undertaken through TAFE, the Nepean Community College, as well as through non-government organisations such as LEEP, that support community members to build digital literacy, and Council itself offering various classes to build community capacity.

Community resilience will increase with equitable accessibility to education and employment opportunities and provision of information and resources on the applicable pathways for these opportunities.

GOAL	ACTION	TIMEFRAME	ACTION TYPE	RESPONSIBILITY (Council Departments / External Organisations)
Building resilience through accessible services and spaces				
Greater visibility of support services	• Better leverage existing community and social networks to promote professional health and social services within Penrith	Medium	●	Lead: City Activation, Community and Place Support: External organisations
	• Identify options for an online resource hub to connect community to information and services	Medium	●	Lead: City Activation, Community and Place
Building resilient individuals	• Create a promotional campaign to highlight Penrith localised stresses and building resilience	Short	●	Lead: Sustainability and Resilience Support: Communications
	• Work with service providers, private sector and education providers to raise youth awareness of education and employment pathways	Short - Medium	○	Lead: City Economy and Marketing Support: City Activation, Community and Place, External organisations
	• Investigate the challenges and opportunities for increasing women's access to education and employment opportunities in the LGA	Medium - Long	●	Lead: City Economy and Marketing Support: City Activation, Community and Place, People and Culture
	• Investigate opportunities to pilot a community 'Learn in the Park' program	Medium - Long	●	Lead: City Activation, Community and Place
	• Scope opportunities to work with CALD and migrant communities to identify barriers to employment.	Medium	○	Lead: City Activation, Community and Place
	• Investigate opportunities to continue to build digital literacy in the community and increase access to digital services	Short	●	Lead: Library Services Support: City Activation, Community and Place, Information and Communications Technology
	• Promotion of existing health and education services, and appropriate resources for Aboriginal and Torres Strait Islander people living in the LGA.	Short	●	Lead: City Activation, Community and Place
Building purpose driven accessible public spaces	• Inclusion of the youth voice in the design of new public spaces	Short - Long	●	Lead: City Activation, Community and Place Support: Community Facilities and Recreation
	• Refer to the NSW Public Spaces Charter to guide the creation of public spaces within Penrith	Short - Medium	●	Lead: Community Facilities and Recreation Support: Design and Projects, Other departments
	• Build on existing mapping of accessible public spaces and green space within the Penrith area and promote these spaces to the community	Medium	●	Lead: City Activation, Community and Place Support: Information and Communications Technology

● Direct control ○ Collaboration ● Influence
Short = Immediate -2 years **Medium** = 2-4 years **Long** = 5+ years

GOAL	ACTION	TIMEFRAME	ACTION TYPE	RESPONSIBILITY (Council Departments / External Organisations)
Accessibility to Public and Active Transport	• Advocate for improved transport connections and frequency of services in rural areas	Short - Medium	●	Lead: City Strategy Support: Sustainability and Resilience
	• Advocate for increased safety features at transport interchange hubs	Medium - Long	●	Lead: City Strategy
	• Enhance active transport routes to improve the walkability and rideability of Penrith	Medium	●	Lead: City Strategy Support: Sustainability and Resilience
Access to affordable and appropriate housing	• Advocate for more affordable housing options in Penrith	Short - Long	●	Lead: City Strategy, City Activation, Community and Place Support: City Planning
	• Advocate for new developments to include features enabling accessibility and aging in place	Short - Long	●	Lead: City Activation, Community and Place Support: City Strategy, City Planning
	• Better alignment of future housing type to Penrith demographics	Medium - Long	●	Lead: City Strategy Support: City Planning, City Economy and Marketing
	• Support service providers in proactively building the resilience and capacity of the homeless community	Short - Medium	●	Lead: City Activation, Community and Place

● Direct control ○ Collaboration ● Influence
Short = Immediate -2 years **Medium** = 2-4 years **Long** = 5+ years

DIRECTION 2. LIVE WITH OUR CLIMATE

RESILIENT SYDNEY OUTCOME:

People have access to clean air and water, natural environments and adaptive technology throughout the City for climate comfort and safety, health and City connection.

PENRITH CITY OUTCOME:

A healthier and more liveable Penrith which recognises and proactively addresses the challenges of a changing climate through cooling the city, resource and energy efficiency and valuing our natural environment.

SUSTAINABLE DEVELOPMENT GOALS:

United Nations Sustainable Development Goals aligning with Direction 2 and its actions.



ACTION AREAS

COOLING THE CITY

With heat being an extreme risk for the community, particularly those more vulnerable, and the continued growth planned for our City and Western Sydney as a region in the future, cooling the city and building the capacity of the Penrith community to cope and adapt to heat is essential.

A cooler, more liveable city can be created through innovation, collaboration and advocating for best practice sustainable urban design incorporating green infrastructure, water sensitive urban design and sustainable, reflective, cool materials.

WATER AND NATURAL SYSTEMS MANAGEMENT

With a warmer climate, and predicted decrease in rainfall in the near future, Penrith may be vulnerable to drought conditions and restrictions on water use which impact on our ability to keep open space, sporting fields, lawns, gardens, and trees watered and maintained, and is a challenge in providing cool outdoor infrastructure for the community to keep cool in summer. Council has implemented infrastructure such as water play spaces including splash pads and drinking fountains in public spaces for the community. There are existing locations within the Penrith area where recycled water is currently being used for irrigation purposes to reduce potable water use.

Water efficiency, using alternative non-potable water sources and water sensitive urban design is key to achieving integrated water management.

A changing climate will impact on our natural systems and tolerance range of our native flora and fauna. We will need to understand and increase the resilience of our bushland and biodiversity through restoration, linking corridors and maintaining the values of our natural systems.

RESOURCE AND ENERGY EFFICIENCY

The generation of energy through fossil fuels emits greenhouse gases which contribute to global warming and a changing climate. The cost of rising energy bills, particularly during summer months when electricity use is higher, can be a contributor to the financial stress already felt by community members in vulnerable areas of Penrith.

The total greenhouse gas emissions contributed by the Penrith community, based on 2018/19 data, is 2.15 million tonnes CO₂e. Electricity is the highest greenhouse emitter followed by transport, waste, and gas. A total of 53.8% of total greenhouse gases are emitted by the residential sector within the community, 34.5% by the commercial, retail and industrial sector, and 11.8% by the education and health sector ²³.

According to the Climate of the Nation Report 2020, 68% believe Australia should have a national net-zero emissions target and 59% would prefer investment in renewables, with solar being the preferred option¹³. Reducing emissions at a national, state and local level through energy efficiency, uptake of renewable energy and identifying a pathway to net zero emissions is a critically important component in addressing climate challenges.

Efficient and sustainable use of resources will assist in reducing waste, energy and green-house gases. The concept of a circular economy employs the approach of continual reuse and recycling of products to minimise waste to landfill and shifts towards the use of renewable energy promoting a healthier environment with better outcomes for the community.



Jordan Springs Community Hub, source: Penrith City Council.

GOAL	ACTION	TIMEFRAME	ACTION TYPE	RESPONSIBILITY (Council Departments / External Organisations)
Cooling the City				
Increase greening and cooling elements across the Penrith LGA	<ul style="list-style-type: none"> Finalise the Penrith Green Grid Strategy and deliver the actions in the Strategy. 	Short - Long	●	Lead: City Strategy Support: City Presentation, Other departments
	<ul style="list-style-type: none"> Develop and apply canopy cover targets for the Penrith Local Government Area 	Short - Medium	●	Lead: City Strategy Support: Sustainability and Resilience, City Presentation, Asset Management
	<ul style="list-style-type: none"> Develop and undertake tree planting projects across Penrith, including suburbs with a high heat vulnerability index 	Short - Long	●	Lead: Sustainability and Resilience Support: Asset Management, City Presentation, Design and Projects, Customer Experience
	<ul style="list-style-type: none"> Design and develop cool playgrounds and parks incorporating shade and cool materials 	Short - Long	●	Lead: Community Facilities and Recreation Support: Sustainability and Resilience, Design and Projects, Other departments
	<ul style="list-style-type: none"> Identify appropriate locations and install water play, water features and water bubbler infrastructure 	Short - Medium	●	Lead: Community Facilities and Recreation Support: Sustainability and Resilience, City Presentation, Asset Management, Other departments
	<ul style="list-style-type: none"> Implement the Cooling the City Carpark pilot project 	Short - Medium	●	Lead: Sustainability and Resilience Support: City Presentation, Asset Management
	<ul style="list-style-type: none"> Design and implement greening the city projects (new urban green space, green walls, pop up parks, gardens, light reflective surfaces). 	Short - Long	●	Lead: City Economy and Marketing Support: Sustainability and Resilience, Property Development and Management, Other departments

● Direct control ○ Collaboration ● Influence
Short = Immediate -2 years **Medium** = 2-4 years **Long** = 5+ years

GOAL	ACTION	TIMEFRAME	ACTION TYPE	RESPONSIBILITY (Council Departments / External Organisations)
Raise community capacity to address urban heat through the delivery of the Cooling the City community engagement program	• Implement the annual summer communications 'Beat the Heat' community campaign	Short	●	Lead: Sustainability and Resilience Support: Communications
	• Provide materials/resources for residents to increase capacity to cool their homes	Short	●	Lead: Sustainability and Resilience Support: Communications
	• Investigate the feasibility of subsidised heat mitigation solutions for residents	Short - Medium	●	Lead: Sustainability and Resilience
	• Provide materials/ resources on tree planting in suburban yards.	Short	●	Lead: Sustainability and Resilience Support: Environmental Health, Communications, Asset Management
	• Develop an 'adopt a tree program' with trees provided through Council's Nursery	Medium	●	Lead: Sustainability and Resilience Support: City Presentation, Customer Experience
	• Work with schools/childcare centres on planting programs	Short - Medium	○	Lead: Sustainability and Resilience Support: Children's Services, Environmental Health, External organisations
Sustainable urban planning and greening prioritised for development to cool the city	• Advocate to the State Government and developers for climate adapted buildings, increased percentage of pervious surfaces and greening within new developments/proposals	Short - Medium	●	Lead: Sustainability and Resilience Support: City Planning, Development Services
	• Advocate to the State Government to strengthen planning controls including Exempt and Complying, Standards and BASIX to incorporate cooling the city principles	Short - Medium	●	Lead: Sustainability and Resilience Support: City Planning
	• Inclusion of urban heat and cooling the city principles within the Penrith LEP/DCP	Short - Medium	●	Lead: City Planning Support: Sustainability and Resilience
	• Develop a Cooling the City package for developers	Medium	●	Lead: Sustainability and Resilience Support: City Planning, Development Services

GOAL	ACTION	TIMEFRAME	ACTION TYPE	RESPONSIBILITY (Council Departments / External Organisations)
Monitor and address urban heat challenges	• Develop and implement strategies to mitigate the heat island effect in urban centres	Medium - Long	●	Lead: Sustainability and Resilience Support: Environmental Health, City Planning, Other departments
	• Apply the Smart Cities Strategy to advance information and technology outcomes, including installing monitoring stations to measure real-time air temperature at nominated locations	Short - Medium	●	Lead: Sustainability and Resilience Support: Information and Communications Technology
	• Define, identify, establish and promote a cool refuge network for the community to utilise during extreme heat/heatwaves	Short - Medium	○	Lead: Sustainability and Resilience Support: City Activation, Community and Place, Other departments, External organisations
	• Investigate and if feasible apply tools/sensors that identify and monitor cool suburbs/spaces/air quality	Medium	●	Lead: Sustainability and Resilience Support: Information and Communications Technology, Property Development and Management
	• Investigate the feasibility of installing and retrofitting climate adapted bus shelters.	Medium	●	Lead: Sustainability and Resilience Support: Asset Management
	Natural Systems Management			
Being a water sensitive city	• Application of water sensitive urban design and naturalisation projects	Short - Long	○	Lead: Environmental Health and Compliance Support: Engineering Services, Asset Management, External organisations
	• Investigate water reuse opportunities and implement recycled water projects for irrigation, flushing and cleaning purposes	Short - Long	○	Lead: Sustainability and Resilience Support: Environmental Health and Compliance, Presentation, Other departments
	• Develop and implement a Council/ community water efficiency program	Medium	○	Lead: Sustainability and Resilience Support: Environmental Health and Compliance, City Presentation, Other departments
	• Advocate for an increase in the Basix water saving targets	Short - Medium	●	Lead: Sustainability and Resilience

● Direct control ○ Collaboration ● Influence
Short = Immediate -2 years **Medium** = 2-4 years **Long** = 5+ years

GOAL	ACTION	TIMEFRAME	ACTION TYPE	RESPONSIBILITY (Council Departments / External Organisations)
Managing natural systems in a changing climate	• Prepare an urban forest strategy to enhance corridors and biodiversity	Medium	●	Lead: Environmental Health and Compliance Support: Asset Management, Other departments
	• Manage and maintain biodiversity values in a changing climate	Medium - Long	●	Lead: Environmental Health and Compliance Support: Sustainability and Resilience, City Presentation
	• Programs to improve the health of waterways and ecosystems and protect their value and services	Medium - Long	○	Lead: Environmental Health and Compliance Support: Sustainability and Resilience, External organisations
Resource and Energy Efficiency				
Leading by Example in Resource and Energy Efficiency	• Set a net zero emissions target and develop a pathway to achieve emissions reduction	Short - Medium	●	Lead: Sustainability and Resilience Support: Waste and Resource Recovery, Financial Services
	• Conduct research and prepare a plan/pathway for a Circular Economy applicable to Council functions/ operations	Short - Medium	●	Lead: Sustainability and Resilience Support: Waste and Resource Recovery, Financial Services
	• Investigate and facilitate opportunities for use of recycled content and materials in projects (e.g. road/pavement/carpark/ sporting fields)	Medium	●	Lead: Sustainability and Resilience Support: Design and Projects, Asset Management, City Presentation, Community Facilities and Recreation
	• Building sustainability, resource efficiency and resilience into Council managed property/facilities	Short - Medium	●	Lead: Sustainability and Resilience Support: Property Development and Management, Asset Management, Other departments
Empower the community to increase energy efficiency and reduce peak demand on the grid	• Implement community programs to increase energy literacy and efficiency outcomes	Short	○	Lead: Sustainability and Resilience, External organisations
Increase the uptake of renewable energy	• Undertake research and feasibility studies on installation of solar at Council/community facilities	Short - Medium	●	Lead: Sustainability and Resilience Support: Design and Projects, Other departments
	• Undertake research on emerging and innovative technologies and investigate opportunities for renewable energy uptake.	Medium - Long	●	Lead: Sustainability and Resilience Support: Financial Services, Other departments
	• Identify opportunities for increasing Electric Vehicles in Council's fleet.	Medium - Long	●	Lead: Sustainability and Resilience Support: Financial Services, Other departments

DIRECTION 3. CONNECT FOR STRENGTH

RESILIENT SYDNEY OUTCOME:

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

PENRITH CITY OUTCOME:

A strong connected community with equal access for all.

SUSTAINABLE DEVELOPMENT GOALS:

United Nations Sustainable Development Goals aligned with Direction 3 and its actions.



ACTION AREAS

ACCESSIBILITY OF SERVICES

Accessibility to services is a key component of building community resilience, providing a service delivery approach that recognises the varying needs of people within the community, and ensuring equal and inclusive accessibility to places and services within the Penrith area.

CONNECTED COMMUNITY

Strong social cohesion reflects our community's connectedness to place and each other, a sense of belonging and our overall well-being.

Within Penrith, the support circle of friends and family is strong; however, with a community score of 3/10 for 'knowing your neighbour', the opportunity exists to build a more connected community by strengthening local neighbourhood connections through localised programs, services and events, to provide enhanced social interaction within local neighbourhoods and offer greater support and assistance in coping with shocks and stresses⁴.



Village Cafe Kingswood (Source: Penrith City Council)

GOAL	ACTION	TIMEFRAME	ACTION TYPE	RESPONSIBILITY (Council Departments / External Organisations)
Accessibility of services				
Equal accessibility to information, data and services	<ul style="list-style-type: none"> Map the user experience for community services across the Penrith area 	Medium - Long	●	Lead: City Activation, Community and Place
	<ul style="list-style-type: none"> Investigate options for a communications platform to share information in different languages 	Medium	●	Lead: Communications Support: Sustainability and Resilience
	<ul style="list-style-type: none"> Investigate the feasibility of establishing an English language learning community café in Penrith 	Long	●	Lead: City Activation, Community and Place Support: Sustainability and Resilience, City Economy and Marketing
	<ul style="list-style-type: none"> Pilot a place-based model in an area of high vulnerability to test how to best develop resilience at the community level 	Short - Medium	●	Lead: City Activation, Community and Place

GOAL	ACTION	TIMEFRAME	ACTION TYPE	RESPONSIBILITY (Council Departments / External Organisations)
Connected community				
Building a more connected community	<ul style="list-style-type: none"> Expand the Village Café program across the Penrith area with a focus on vulnerable communities. 	Short - Medium	●	Lead: City Activation, Community and Place
	<ul style="list-style-type: none"> Continue to work with the Access Committee and apply Disability Inclusion Action Planning to engage with people with disability. 	Short	●	Lead: City Activation, Community and Place
	<ul style="list-style-type: none"> Celebrate and promote diversity, resilience and sustainability through a series of inspirational community talks/events 	Short - Medium	●	Lead: Sustainability and Resilience Support: City Activation, Community and Place, Library Services, Joan Sutherland Performing Arts Centre, People and Culture
	<ul style="list-style-type: none"> Build and promote resilience in the community through implementation of programs including 'Penrith Proud' and 'St Marys Strong' 	Short - Medium	●	Lead: City Economy and Marketing Support: City Activation, Community and Place
	<ul style="list-style-type: none"> Continue to deliver the Good Neighbour Program, encouraging people to meet and interact with neighbours 	Short	●	Lead: City Activation, Community and Place Support: Communications
	<ul style="list-style-type: none"> Expand the community gardens network in partnership with community groups/organisations 	Short - Medium	○	Lead: Sustainability and Resilience Support: City Activation, Community and Place, Legal Services, External organisations
	<ul style="list-style-type: none"> Develop and deliver an urban food community engagement program 	Short - Medium	●	Lead: Sustainability and Resilience Support: City Activation, Community and Place, City Economy and Marketing, Waste and Resource Recovery
	<ul style="list-style-type: none"> Investigate opportunities for localised community events to connect local communities 	Medium	●	Lead: Sustainability and Resilience Support: City Activation, Community and Place, City Economy and Marketing
	<ul style="list-style-type: none"> Investigate the feasibility of establishing a community resilience network to build household and community resilience 	Medium - Long	●	Lead: Sustainability and Resilience Support: City Activation, Community and Place, External organisations

● Direct control ○ Collaboration ● Influence
Short = Immediate -2 years **Medium** = 2-4 years **Long** = 5+ years

● Direct control ○ Collaboration ● Influence
Short = Immediate -2 years **Medium** = 2-4 years **Long** = 5+ years

DIRECTION 4. GET READY

RESILIENT SYDNEY OUTCOME:

Understand the risks we face and how to work together to respond, recover and build our capacity to cope, now and in the future.

PENRITH CITY OUTCOME:

A community that is aware, prepared and has the capacity to adapt during emergencies, natural disasters and tough times.

SUSTAINABLE DEVELOPMENT GOALS:

United Nations Sustainable Development Goals aligned with Direction 4 and its actions.



ACTION AREAS

COMMUNITY AWARENESS AND PREPAREDNESS

The Penrith community has lived through multiple shocks and stresses over time and acknowledged the likelihood of being impacted in the future. Being aware of the risks and being prepared to act and knowing what to do and where to go in an emergency or for support, when and as needed, is essential in building community capacity to respond and recover.

Engaging with the community has highlighted varying levels of awareness but also a false sense of preparedness, with few having in place an actual plan to respond quickly to emergencies and events. Engaging with the community around better information, consistent messaging, and preparedness will increase community capacity and the ability to put in place actions and a response mechanism to enhance their resilience.

UNDERSTANDING VULNERABILITY AND RISK

Capturing and understanding Penrith's vulnerabilities and risks will enable enhanced planning to better support the community in adapting to shocks. Data sharing, development of response plans and scenario planning for adaptive management in collaboration with key combat agencies and the Local Emergency Management Committee will increase our capability to support each other in response and recovery, and to also increase the community's ability to prepare and respond.

PREPARING FOR SHOCKS (EXTREME WEATHER EVENTS)

Climate variability and extreme weather events are becoming more frequent with the potential for multiple weather-related hazards to occur together or within a short time of each, which may compound the impacts of these shocks and related stresses felt by the community. A collaborative coordinated approach is required to proactively design and manage our infrastructure and assets to increase their resilience in withstanding extreme weather events.

GOAL	ACTION	TIMEFRAME	ACTION TYPE	RESPONSIBILITY (Council Departments / External Organisations)
Community awareness and preparedness				
Increasing community awareness, preparedness and capacity to adapt to heat and emergencies including bushfire and flood	Promote the 'Get Prepared App' to the community	Short	●	Lead: Sustainability and Resilience Support: Communications
	Promote the Get Ready Small Business Toolkit to local Businesses	Short	●	Lead: Sustainability and Resilience Support: Communications
	Distribute multi-lingual emergency preparedness information and resources through multiple channels	Short - Medium	○	Lead: Sustainability and Resilience
	Engage with community on emergency preparedness through the Village Café	Short - Medium	●	Lead: City Activation, Community and Place Support: Sustainability and Resilience, Asset Management
	Provide a 'Get Ready' checklist for households	Short	○	Lead: Sustainability and Resilience Support: Asset Management, External organisations
	Deliver a Get Ready community expo	Short - Medium	○	Lead: Sustainability and Resilience Support: Asset Management, Local Emergency Management Committee, Emergency Services
	Develop a community emergency dashboard inclusive of the heatwave warning system	Short - Medium		Lead: Sustainability and Resilience Support: Asset Management, Information and Communications Technology, External organisations
	Investigate establishing partnership outreach program for vulnerable residents and homeless during heatwave and adverse weather events.	Medium - Long	○	Lead: Sustainability and Resilience Support: City Activation, Community and Place, External organisations

● Direct control ○ Collaboration ● Influence
Short = Immediate -2 years **Medium** = 2-4 years **Long** = 5+ years

Understanding vulnerability and risk				
Increase preparedness and response through understanding vulnerability and risk	<ul style="list-style-type: none"> Develop a localised Heat consequence management guide and response plan (inclusive of aged care facilities and social housing) 	Short - Medium	●	Lead: Local Emergency Management Committee, Asset Management Support: Sustainability and Resilience, External organisations
	<ul style="list-style-type: none"> Utilise the Data Strategy and framework to capture, analyse and share vulnerability data 	Short - Medium	●	Lead: Information and Communications Technology Support: Sustainability and Resilience, Business Transformation, City Economy and Marketing
	<ul style="list-style-type: none"> Reduce community exposure/vulnerability to natural hazards through planning controls 	Short - Long	●	Lead: City Planning Support: Development Services
	<ul style="list-style-type: none"> Enhance scenario planning for adaptive management and preparedness 	Medium	○	Lead: Local Emergency Management Committee, Asset Management
	<ul style="list-style-type: none"> Review procurement and supply chain processes and procedures to imbed Ecological Sustainable Development principles and resilience 	Medium	●	Lead: Financial Services Support: Sustainability and Resilience
	<ul style="list-style-type: none"> Map and promote to the community the key evacuation routes and centres for Penrith suburbs 	Short - Medium	○	Lead: Asset Management Support: Sustainability and Resilience, Information and Communications Technology
	<ul style="list-style-type: none"> Establish a Vulnerable Community Evacuation Plan in partnership with Emergency and Support Services to create targeted emergency response for vulnerable community members 	Medium	○	Lead: Local Emergency Management Committee, Asset Management Support: Sustainability and Resilience, City Activation, Community and Place, External organisations
Preparing for shocks				
Increase resilience to climate variability and extreme weather events	<ul style="list-style-type: none"> Implement floodplain management and stormwater asset management works to reduce flood risk 	Medium - Long	●	Lead: Engineering Services Support: Asset Management, Environmental Health and Compliance, Other departments
	<ul style="list-style-type: none"> Develop and include resilience criteria in the design and construction of new infrastructure and maintenance of existing assets 	Medium - Long	●	Lead: Sustainability and Resilience Support: Asset Management, Engineering Services, Community Facilities and Recreation, Other departments
	<ul style="list-style-type: none"> Advocate for essential upgrades to social housing to mitigate the impacts of urban heat on tenants 	Short	●	Lead: Sustainability and Resilience, Housing providers
	<ul style="list-style-type: none"> Advocate for the undergrounding of powerlines in areas across the LGA vulnerable to risk/shocks 	Long	●	Lead: City Strategy Support: Sustainability and Resilience, City Planning

● Direct control ○ Collaboration ● Influence
Short = Immediate -2 years **Medium** = 2-4 years **Long** = 5+ years

DIRECTION 5. ONE CITY

RESILIENT SYDNEY OUTCOME:

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

PENRITH CITY OUTCOME:

Penrith is leading by example and working collaboratively with key partners to build resilience.

SUSTAINABLE DEVELOPMENT GOALS:

United Nations Sustainable Development Goals aligned with Direction 5 and its actions.



ACTION AREAS

KNOWLEDGE BUILDING

Knowledge is key in building a reliable and informed picture of vulnerabilities, risks and resilience within the community. There is a need for further research, monitoring and data gathering from consistent, reliable sources that will better enable and inform targeted action and decision-making.

COLLABORATION

The time for collaboration is now. A resilient Penrith is reliant upon building a culture of sharing, coordination, collaboration and partnerships between Council, community groups, services and providers, businesses, research organisations and government agencies, as well as understanding and supporting each other's roles and responsibilities in preparing for and responding to shocks and stresses. Facilitating greater collaboration can create opportunities for efficiencies and the ability to deliver services and respond to community needs and priorities in building resilience.

LEADERSHIP

Commitment to building a resilient city and community requires leadership and good governance. Leading by example to embed resilience principles and outcomes into Council frameworks and core business, as well as being participatory, inclusive and willing to engage with the community and work collaboratively with key stakeholders will facilitate increased capacity to cope and adapt to shocks and stresses as 'one city'.

GOAL	ACTION	TIMEFRAME	ACTION TYPE	RESPONSIBILITY (Council Departments / External Organisations)
Knowledge building				
Build knowledge and capacity and make evidence-based decisions	<ul style="list-style-type: none"> Undertake monitoring and research-based projects in partnership with research institutions 	Short - Long		Lead: Sustainability and Resilience, Research Institutes
	<ul style="list-style-type: none"> Comprehensive mapping of key risks and vulnerabilities across Penrith 	Short		Lead: City Economy and Marketing Support: Sustainability and Resilience, Information and Communications Technology, City Activation, Community and Place
	<ul style="list-style-type: none"> Apply, where appropriate, guidelines and resources from the Climate Health and Wellbeing Western Parkland City Project 	Medium		Lead: City Strategy Support: Sustainability and Resilience, City Activation, Community and Place, External organisations
Collaboration				
Building a culture of collaboration and partnership	<ul style="list-style-type: none"> Establish ongoing opportunities for connection and collaboration with and between service providers 	Short -Medium		Lead: City Activation, Community and Place Support: Sustainability and Resilience
	<ul style="list-style-type: none"> Participate in and support the Resilient Sydney Program 	Short - Medium		Lead: Sustainability and Resilience Support: Executive
	<ul style="list-style-type: none"> Work collaboratively with the emergency services, health and other organisations to build resilience 	Short - Medium		Lead: Sustainability and Resilience Support: Asset Management, City Activation, Community and Place, External organisations
	<ul style="list-style-type: none"> Work collaboratively with sister city Lachlan Shire Council on a resilience partnership project 	Medium		Lead: Sustainability and Resilience Support: City Planning
	<ul style="list-style-type: none"> Participate in and work in partnership with the Sydney Science Park to deliver outcomes for our community 	Short - Medium		Lead: Sustainability and Resilience Support: City Economy and Marketing, Other departments
	<ul style="list-style-type: none"> Sponsorship of the WSU Solar Car and development of a community engagement and promotion program 	Short - Medium		Lead: Sustainability and Resilience Support: City Economy and Marketing
Leadership				
Promoting local leadership and good governance	<ul style="list-style-type: none"> Embed resilience and Sustainable Development Goals in planning and strategic frameworks and as part of core business 	Medium - Long		Lead: Sustainability and Resilience, Business Transformation Support: Other departments, Executive
	<ul style="list-style-type: none"> Ensure Council's Communications Strategy and engagement approach is inclusive and accessible 	Short - Medium		Lead: Business Transformation Support: Communications
	<ul style="list-style-type: none"> Investigate the opportunity to establish community 'pop-in sessions' to hear community concerns and ideas in building a resilient Penrith 	Medium		Lead: Business Transformation Support: Communications, Customer Experience

5 MONITORING, REVIEWING AND RESOURCING

The RPAP 2021-2030 incorporates actions prioritised over the short, medium and longer term and will be embedded into the Integrated Planning and Reporting Framework including the Community Plan, Delivery Program and Operational Plan.

The RPAP directly aligns with Council's Cooling the City Strategy 2015. Extreme heat is a major shock facing the Penrith community and increasing the capacity of the community and City to adapt to extreme heat is a key priority in building resilience. Cooling the City actions have therefore been identified and incorporated into the RPAP for the purpose of monitoring and reporting.

Action implementation will be reported on through the Council Annual Report, and bi-annual and quarterly performance reporting system.

Actions included within the RPAP have been developed based on identified shocks, stresses and challenges and the need to address these as a priority. Actions have also been directly translated from feedback, needs and priorities identified during the community, stakeholder and staff engagement process.

It is acknowledged that the RPAP has been developed amid a major disease pandemic and the stresses have accumulated from this shock, and that as a result a COVID-19 lens may have influenced community perceptions, needs and priorities identified through engagement with the community during this time. In recognition, the RPAP has been carefully developed to align with the five directions of the Resilient Sydney Strategy and the UN Sustainable Development Goals which ensure that the actions in the RPAP have addressed the priority challenges faced by Council now and in the future, and that these actions will work towards building a resilient Penrith.

A Monitoring and Evaluation Plan will be developed to monitor and evaluate outcomes and achievements of the RPAP, and an internal Resilience Working Group will be established to assist in monitoring and leading the implementation of the RPAP.

The actions in the RPAP will be monitored annually for the community operational plan and will be evaluated through a four-year review process which will align to the community strategic planning cycle. During this review Council will undertake community engagement and stakeholder consultation to determine any emerging challenges and changes in priority shocks and stresses that should be applied to the RPAP.

During the monitoring and review process, the RPAP will also identify new and emerging strategic alignments, partnerships and collaborations, and Council sustainability and resilience targets developed and/or reviewed will be incorporated to ensure the RPAP continues to achieve positive sustainable and resilient outcomes over the life of the RPAP.

A Resource Plan will be developed to identify potential resourcing and funding sources to assist in the implementation of the RPAP.

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