

# Attachment 1 to Item 10.3.2.

Draft Strategy 'Thriving Hawkesbury: Beyond Resilience'

Date of meeting: 29 July 2025 Location: Council Chambers Time: 6:30pm

## HAWKESBURY CITY COUNCIL

THRIVING HAWKESBURY: BEYOND RESILIENCE



www.hawkesbury.nsw.gov.au

## STATEMENT OF COMMITMENT TO FIRST NATIONS PEOPLES

The City of Hawkesbury is predominantly situated on Dharug Country and includes Darkinjung Country in the Colo Heights and St Albans areas.

Hawkesbury City Council recognises and acknowledges the Dharug and Darkinjung Peoples as the Traditional Custodians of this land.

Hawkesbury City Council pays respect to all Dharug and Darkinjung Elders past and present and acknowledges their continuing contribution to the life of this city and the region.

Aboriginal and Torres Strait Islander Peoples should be aware that this document may contain images or quotes of deceased persons.

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## GLOSSARY

#### Adapt:

Cambridge University Press defines "adapt" as:

- To change, or to change something, to suit different conditions.
- To change your ideas or behaviour to make them suitable for a new situation.

(Definition of adapt from the Cambridge Advanced Learner's Dictionary & Thesaurus © Cambridge University Press)

#### Local Government Area:

Local Government Area is a neighbourhood or region managed by a local council. The council takes care of local services in the area to make the community a better place to live.

#### **Resilient communities:**

Resilient communities have the ability to resist, absorb, accommodate, recover, transform and thrive in response to the effects of shocks and stresses. Resilient communities do this in a timely, efficient manner to enable positive sustainable economic, social, environmental and governance outcomes.

#### Shocks:

Shocks are disaster events with an immediate damaging impact, such as cyber-attacks, extreme storms or flooding.

#### **Stresses:**

Stresses are chronic long-term or cyclical trends that undermine systems over time, such as rising, inequity, ageing infrastructure, inadequate access to transport, or rising sea levels.

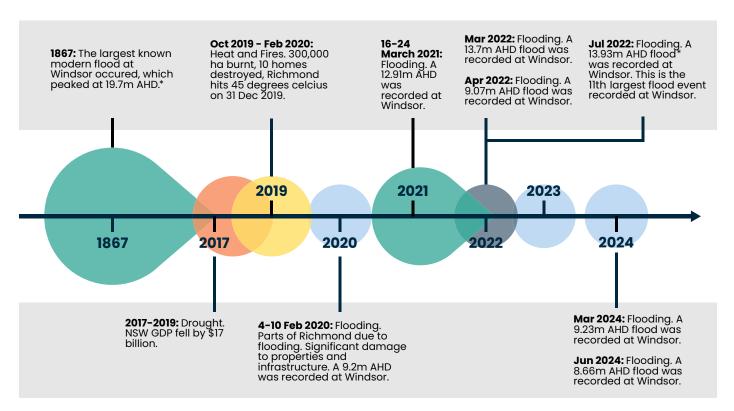
#### **Acronyms:**

- ABS Australian Bureau of Statistics
- CALD culturally and linguistically diverse
- CMP Coastal Management Plan
- COVID-19 Coronavirus disease
- CWA Country Women's Association
- DCCEEW Department of Climate Change, Energy, Environment and Water
- DPI Department of Primary Industries
- NSW EPA Environment Protection Authority
- EV Electric vehicle
- FOGO Food Organics, Garden Organics
- HCC Hawkesbury City Council
- HRCC Hawkesbury River County Council
- IT Information Technology
- LEMC Local Emergency Management Committee
- LEP Local Environmental Plan
- LGA Local Government Area
- NAIDOC National Aboriginal and Islander Day Observance Committee
- NARCLIM NSW and Australian Regional Climate Modelling
- P-CEP Person centered emergency preparedness
- RA Reconstruction Authority
- RFS Rural Fire Service
- SES State Emergency Service
- WMF Waste Management Facility
- WSIG Western Sydney Infrastructure Grants Program
- WSPP Western Sydney Planning Partnerships
- WSROC Western Sydney Regional Organisation of Councils

## **EXECUTIVE SUMMARY**

The Thriving Hawkesbury: Beyond Resilience provides a strategic framework and road map for strengthening our resilience together, building on the strengths and efforts of our community. It is aligned with local, regional and state policies and strategies.

Resilience is a concept that the Hawkesbury community is intimately familiar with. Throughout the 2019 drought and catastrophic bushfires, COVID-19, and the subsequent years' major flood events the importance of resilience has been reinforced and strengthened. The reality is that events such as these that test resilience will become more frequent, more intense and have the potential to overlap and cascade due to the impacts of Climate Change, population growth and economic conditions. The below figure highlights a brief summary of some of the natural disasters Hawkesbury has faced.



#### Figure 1: High-level summary of Natural Disaster Events in the Hawkesbury

\*Hawkesbury Floodplain Risk Management Study and Plan 2025<sup>1</sup>

In addition, the Hawkesbury community is spatially, geographically, culturally and economically diverse. Areas such as St Albans, Colo Heights and Mountain Lagoon, to name a few, experience increased risk due to their proximity to fire and flood affected land combined with their potential isolation in emergency events. This impacts their ability to evacuate or receive emergency assistance. The Hawkesbury River (Dyarubbin) and our stunning bushland are well appreciated by residents and visitors and are close to the hearts of our community. To live near these incredible natural assets does require acknowledgment and management of the inherent risks. It is known that approximately 22,000 properties are flood prone, 393 properties are landslip prone, over 17500 are bushfire prone, over 8300 properties are not connected to a water utility and over 11,000 are not connected to a sewer utility. The Hawkesbury community also experiences daily pressures such as ageing infrastructure, inequitable access to transport and health services across our urban and rural areas, and social isolation that make it harder to cope when disaster strikes.

Furthermore, the Hawkesbury community expressed high levels of concern about infrastructure failures, communication, climate change, domestic violence and mental health, and inequality of access to services and public transport.

These challenges are complex and interconnected. Resilience requires a holistic and collaborative approach that informs what we do as individuals, local neighbourhoods and as a broader community.

The Hawkesbury is already resilient. Our community has weathered and survived multiple catastrophic shocks and stresses in the past few years, however to goal is to thrive. This takes conscious practice and deliberate effort to be aware of threats and vulnerabilities, find ways to prepare for different scenarios, and manage and recover from impacts from shocks and stresses.

This Strategy is informed through Hawkesbury City Council's collaboration with various partners and agencies, scientific evidence spanning regional, state and local plans and importantly, the lived experiences and voices of the Hawkesbury community who have contributed their time, efforts and energy to make the Hawkesbury more resilient.

The Strategic Directions identify key priorities and actions and create a platform for collaboration and partnerships between the community, businesses, government agencies and non-government organisations.

The Strategy's Action Plan (pages 72 to 110) will articulate the full range of resilience actions including their timeframes for delivery and key partners.



## STRATEGIC DIRECTION

The Strategy establishes five Strategic Directions to support and contribute towards Council's vision of a more resilient Hawkesbury.

The Strategy aims to communicate clearly where issues are within Council's control, within Council's sphere of influence or, are outside of Council's control yet are of concern to the community. This plan aims to provide actions that addresses this reality.

The Strategic Directions identify key priorities and actions and create a platform for collaboration and partnerships between the community, businesses, government agencies and non-government organisations.

The Strategy's Action Plan (pages 72 to 110) will articulate the full range of resilience actions including their timeframes for delivery and key partners.

The Strategy and its recommendations focus on 5 Strategic Directions:





#### VISION

A strong, connected and prepared Hawkesbury that is empowered to endure, adapt and thrive.

#### PURPOSE

A strategic framework and road map for strengthening our resilience together, building on the strengths and efforts of our community.



#### **RESILIENCE CHALLENGES**

#### **STRESSES**

Poor access to public transport

Poor access to affordable & sustainable housing

Ageing & damaged infrastructure

Poor telecommunications

Inequitable access to services

Community connections for new residents

Disadvantaged groups

#### SHOCKS

Storms

Flooding

**Bushfires** 

Heatwaves

Droughts

Infrastructure & utility failure

Potential future shocks

## **PART A: INTRODUCTION**

"Together we can create a connected, healthy, and adaptable Hawkesbury that is prepared for whatever the future holds."

Hawkesbury resident

### Background

The Hawkesbury community has shown great resilience and community spirit amid a long history of natural disasters including floods, bushfires and drought.

In the face of climate change, we have experienced consecutive and devastating natural disasters, compounded by the global pandemic. Moreover, on a daily basis our community encounters stresses such as ageing infrastructure, limited health services, transport challenges and social isolation that make it harder to cope when disaster strikes.

77,000 people are expected to call the Hawkesbury home by 2041. This represents a growth of over 9,000 people (+14%) from 2021 (DPE Population Projections 2022)<sup>2</sup>. This growth, coupled with the interconnected nature of our shocks and stresses, highlights the importance of continuing to build resilience and connectivity within our community.

The Thriving Hawkesbury: Beyond Resilience recognises the work Council, community and partners have been doing over the years to build resilience, foster social cohesion and promote sustainability.

This Strategy builds on the outcomes and actions set out in our Community Strategic Plan, which includes a strong focus on strengthening our shared responsibility for community resilience.

### Purpose

The purpose of this Strategy is to provide a long-term framework and road map for strengthening resilience in the Hawkesbury, outlining our community's priorities and defining our shared future focus areas.

Importantly, the Strategy builds on and consolidates the work that is already being delivered across our region, not just by Council but by volunteers, local community organisations, businesses, service providers and other agencies.

By consolidating existing knowledge, actions, and directions, this Plan aims to provide strategic guidance for action towards progressing resilience in the Hawkesbury.



### Who is this Strategy for?

This Strategy calls upon diverse stakeholders such as Council, community organisations, service providers, emergency responders, residents and visitors to work together to realise the vision of a strong, connected and prepared Hawkesbury that is empowered to endure, adapt and thrive. The Action Plan outlines Council's contributions towards realising this vision through actions such as investment, leadership, support and implementation. Resilience is the responsibility of the entire Hawkesbury community. We must all work together and do our part.

### **Strategic Directions**

The Strategy identifies five strategic directions to strengthen resilience in the Hawkesbury LGA:



#### **Great Place to Live**

Hawkesbury has the social assets it needs to thrive. The community should be able to live, work and play comfortably and have equitable access to social services, transport, housing, education and employment opportunities.



#### **Caring for Country**

Caring for nature and living sustainably. Understanding that we are all a part of an ecosystem and must behave accordingly. Take care of Country and Country will take care of you.



#### **Connected for strength**

Our communities are connected. Hawkesbury residents from all walks of life are empowered to work together to prepare, adapt and recover in times of crisis.



#### **Prepared and Informed**

Every community member is supported to be informed about the risks they face and is empowered to work together to prepare for and recover from shocks events.



#### **Our Hawkesbury**

We will strengthen partnerships across between governments, service providers, community organisations, local businesses and residents form the foundation for capacity building, knowledge sharing and cooperation.



### Whole of Community Approach

Everyone in our community has a shared and collective responsibility, requiring a whole of community approach involving individuals, households, communities, service providers, businesses as well as infrastructure providers and governments.

#### **Communities within Communities**

The Hawkesbury is made up of many layers and small communities influenced by their social and geographical settings, each with their own unique strengths, vulnerabilities and resilience.

#### **Engagement & Inclusion**

Everyone should have equitable opportunities to genuinely participate in decisions which affect their lives. Equal rights should be established and promoted, with opportunities for all people.

#### **Evidenced Based**

There will be a focus on using the most current evidence to respond effectively to the priorities of this Strategy. Best practice models, where available, will be identified for implementation. Where these are not available, innovation will be implemented in combination with rigorous evaluation to strengthen the evidence base.

### **Build Capacity**

The strategy implementation will aim to ensure the best conditions are created for success in achieving effective resilience outcomes for the community. Capacity building activities will be led and supported by collaboration between the community, stakeholders and Council. Collaboration will ensure any initiatives build on existing community strengths and reflect the local context.

## HOW THIS STRATEGY WAS DEVELOPED

This Strategy is the result of a collaborative effort between Council, community, local service providers and other key stakeholders.

Community and stakeholder engagement to inform this Strategy commenced in 2022 but was put on hold to prioritise flood recovery efforts. The engagement period resumed and was completed in 2023.

Specifically for this Strategy, more than 250 Hawkesbury community members and service providers generously shared their stories of resilience and their ideas to strengthen our resilience together.

Council engaged the Hawkesbury community using a variety of inclusive methods (see page 15) to make sure we heard from people from different walks of life, including outreach activities to reach residents of our rural and remote areas.

We used community engagement activities as an opportunity to raise awareness in our community about the importance of emergency preparedness and about the work Council is already doing to strengthen resilience.

In addition to the engagement activities specifically supporting this plan, we reviewed findings from other events including the Recovery Action Planning Day 2022, Hawkesbury Preparedness Network Day 2022, the Disability Inclusive Emergency Planning Workshop 2023 and a series of four Volunteer Engagements in 2023. These activities engaged with a further 250 residents and stakeholders.

Council has also conducted many related community engagement activities for strategic development in the past two years and have used what was shared to further inform this Strategy.

### **Risk Assessment**

A detailed risk assessment was undertaken to identify what Hawkesbury's unique shocks and stresses were and the level of impact that they were likely to have.

It is important to note that the community's perception of shocks and stressors were also evaluated and were often different to each other and to the objective outcomes. This highlights the critical nature of clear and effective communication and education.

### **Review and research**

Council undertook a comprehensive review of international, national, regional and local resilience strategies, plans, projects and research. This has helped to shape a Strategy that is rooted in strategic planning frameworks and builds on the existing efforts of Council and other agencies, stakeholders and our community.

Appendix 2 provides an overview of how the Strategy's five directions relate to existing Council plans.

### Strategic collaboration

Internal engagement was conducted with senior Council managers and staff across teams to understand how their service delivery can be more resilient into the future, and how the Strategy can support this. Similarly, Council also collaborated with its regional and state partnerships and networks to further strengthen and inform best practice and to help understand the interconnectedness between Hawkesbury's resilience and the resilience of Western Sydney and more broadly NSW. This Strategy is inspired by and closely aligned to the Resilient Sydney Strategy 2025-2030 as a localised strategy embedded within Regional Greater Sydney collaborative action.

## Snapshot of resilience targeted engagement activities in 2022-2023

Hawkesbury City Council has undertaken a range of stakeholder engagement activities for multiple overlapping strategic documents in recent years which have guided the development of this Strategy. In addition, over 500 community members were directly engaged and provided feedback through the following methods:



#### **ONLINE SURVEY**

Helped us understand our community's preparedness, knowledge of resilience and their priorities for The Strategy.



#### SERVICE PROVIDERS MEETINGS

Local service providers told us about their experiences working within the Hawkesbury, with a focus on strengths, challenges and ideas for resilience.



#### POP-UP STALLS IN WINDSOR, RICHMOND, BILPIN & ST ALBANS

We were out in our community to give people a chance to meet the project team, provide feedback and ask questions.



#### INTERVIEWS WITH COMMUNITY LEADERS

Conversations with local community leaders helped us gain deeper insights into the shocks and stresses impacting our communities and priorities for The Strategy.

#### **COMMUNITY FOCUS GROUPS**



We hosted a face-to-face workshop where community members shared their stories and challenges of resilience. We also ran an independently recruited focus group online.



TARGETED ABORIGINAL AND TORRES STRAIT ISLANDERS ENGAGEMENT We spoke to local Aboriginal and Torres Strait Islander community members to hear their stories of resilience and ideas for the future.





During the development of the Hawkesbury Environmental Sustainability Strategy, Youth were engaged for a Youth Forum and Survey. Feedback from this engagement has been considered for this Strategy.

## WHAT OUR COMMUNITY TOLD US

Our community shared their stories of resilience across the engagement period. Many comments shared general themes which are described below.

> The Hawkesbury is a unique place which should be protected and preserved

Hawkesbury needs connections, in particular improved physical connections such as roads

Climate Change is starting to affect us in real and tangible ways

Community needs purpose and support to achieve that purpose

Hawkesbury's natural assets are highly valued and appreciated by all

Strength, connection and resilience already exists in the Hawkesbury but we can all do more

There is inequal access to services across the Hawkesbury particularly West and North of the Hawkesbury River

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## STRATEGIC CONTEXT

### The vision for this Strategy is

"A strong, connected and prepared Hawkesbury that is empowered to endure, adapt and thrive".

The Strategy is strongly linked to and overlaps with all of Council's strategic documents. This convergence of ideas highlights the necessity of embedding resilience as a core principle of Council across all strategic and operational activities.

The Strategy therefore is by nature complementary to and complemented by existing Council strategic and action which is reflected in this documents action items.

In addition to this, The Strategy identifies actions that are not yet encapsulated within other strategic documents of Council or expands upon the purpose and benefits of taking already identified actions which may alter prioritisation factors such as timing and importance.

The Strategy will be implemented and monitored through the Integrated Planning and Reporting Framework as shown in Figure 2 below.



#### Figure 2: Embedding the Strategy using the IP&R Framework

The General Manager will oversee the Strategy, and it will be reviewed in line with Council's four-year delivery program cycle. Public updates on progress of actions will be provided as part of Council's annual reporting.

This Strategy establishes ten priority Desired Outcomes which work collectively towards realisation of Council's vision by nurturing the improved coping and adaptive capacity of all levels of community to endure, adapt and thrive including individuals, villages, groups, business and the broader community.

The priority investments into **Desired Outcomes** are:

- Embed first Nations knowledge and practices in land management
- Increase tree canopy and habitat
- · Support electrification and energy transition
- Collaborate and advocate for solutions to Greater Sydney's waste crisis
- Improve heat resilience of communities in Hawkesbury
- Better connect communities with Active and Public transport
- · Facilitate inclusive access to social infrastructure
- Identify and engage community leaders in resilience and emergency planning and improve community leadership redundancy
- Provide up to date local data and information on website
- Strengthen the resilience of Council Assets

These desired outcomes fall within the 5 Strategic Directions of 'Great Place to Live', 'Caring for Country', 'Connect for Strength', 'Prepared and Informed' and 'Our Hawkesbury'.

#### Each Strategic Direction identifies:

- Measurable outcomes
- Current Investment and opportunities for investment
- · Description of challenges and opportunities
- Relevant contributing strategies
- Key actions

The Strategy includes an action plan to guide the implementation of actions from each strategic direction. Council cannot control every outcome, as such it is identified what level of influence Council has over the outcome of an action so Council activities are assigned appropriately to address this reality.

Council acknowledges that some challenges that are of concern to Council and the Hawkesbury community are too complex and/or too large with global or national influences which are not going to be able to be solved in isolation.



### From Global to Local

This Strategy supports and complements priorities and actions within a range of global, national, state, regional and local frameworks, however, it is tailored to reflect the unique needs of our local community. Below is not a comprehensive list, it highlights some of the strategic context directly relevant to this Strategy. A full list of local strategies can be found at Appendix I.

#### Global

- United Nations (UN) Sustainable Development Goals
- UN Paris Climate Accords
- 100 Resilient Cities
- UN Framework Convention on Climate Change
- UN-Sendai Framework for Disaster Reduction

#### National

- National Strategy for Disaster Resilience
- National Climate Resilience & Adaptation Strategy

- Australian Infrastructure Plan
- Critical Infrastructure Resilience Strategy

#### State

NSW Climate Change Policy Framework

- North-West Growth Area
- NSW State Emergency Management Plan
- State Disaster Mitigation Plan

#### Regional

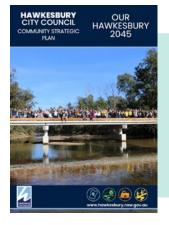
- Resilient Sydney Strategy 2025-2030
- Greater Cities Commission, Western District Plan
- Greater Sydney Region Plan, Greater Cities Commission

#### Local

 Hawkesbury City Council Community Strategic Plan 2022- 2042

- Hawkesbury Local Strategic Planning Statement 2040
- Hawkesbury Environmental Sustainability Strategy 2023-2033
- Urban Greening Strategy
- Climate Risk Assessment and Adaptation Action Plan Asset Management Strategy
- Social Infrastructure Strategy
- Net Zero Emissions and Water Efficiency Strategy
- Active Transport Plan
- Draft Cultural Plan
- Disability Inclusion Action Plan
- Events Strategy
- Communication Strategy
- Local Emergency Management Plan (EMPLAN)

### **Key Local Strategic Alignments**

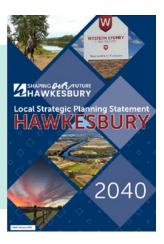


#### **Community Strategic Plan: Our Hawkesbury 2025**

The CSP is the highest-level plan for the next twenty years, created on behalf of the community to reflect its key priorities and aspirations. It outlines strategies to achieve these goals and guides all other Council strategies and plans, including the Delivery Program and Operational Plan.

#### Local Strategic Planning Statement 2040

Council recognises that our community is growing and changing, with significant development and growth areas designated by the NSW Government. Understanding the dynamics of our growth areas is crucial to ensuring the resilience of our community and infrastructure as we move into the future. This is most specifically highlighted in Planning Priority 10 – Sustainable and Aware.



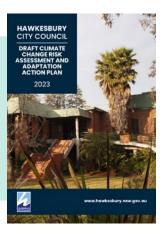


#### **Environmental Sustainability Strategy 2023-2033**

This Strategy is strongly aligned with our Environmental Sustainability Strategy 2023-2033 which provides a framework for collaborative action towards living more sustainably and in harmony with our rich history and environment. Resilience and Sustainability are viewed by Council as the same object viewed from different perspectives.

### Climate Change Risk Assessment and Adaptation Action Plan 2023

Focused on adapting Council service delivery to changing climatic conditions and contains a comprehensive risk assessment of shocks and stresses in our given context that is used to develop the Strategy, as well as actions to improve the resilience of Council assets and operations which is critical to the success of The Strategy.



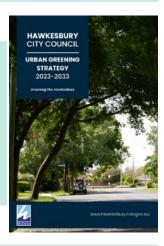


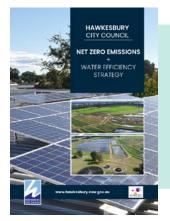
#### Asset Management Strategy 2025-2035

Comprehensive asset management planning document that incorporates long-term financial plans to ensure that assets are maintained and renewed in line with financial sustainability targets and are servicing the needs of the community. The Asset Management Strategy takes a Total Cost of Ownership approach to Asset Management.

#### Urban Greening Strategy 2023-2033

This strategy discusses the impacts of urban heat and the correlated relationship between heat islands and grey/green infrastructure. This strategy is a key component of Council's plan for Resilience in delivering nature-based solutions. Urban Greening encourages healthier and more productive living, improves quality of life, enhances our environment, connects communities and supports minimising Climate Change's impacts on Council's assets.





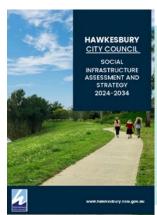
#### Net Zero Emissions and Water Efficiency Strategy

A transition away from fossil fuels and onto renewable energy and preservation of drinking water is critical for building resilience. The actions contained in the strategy commit Council to electrification, reducing our impact on Climate Change and protecting potable water.

#### Hawkesbury Disability Inclusion Action Plan 2023-2026

The Hawkesbury Disability Inclusion Action Plan (DIAP) 2023-2026 aims to improve inclusion for people with disabilities in the Hawkesbury area. It focuses on enhancing community attitudes, systems, and processes to be more accessible and inclusive. The plan is guided by the local community and aligns with the NSW Disability Inclusion Act 2014.





### Hawkesbury Social Infrastructure Assessment and Strategy 2024-2034

The Hawkesbury Social Infrastructure Assessment and Strategy is designed to guide the future planning, delivery, funding, and management of social infrastructure within the Hawkesbury LGA. This strategy aims to ensure the community has access to essential services and facilities that support its well-being and resilience by providing an integrated approach to social infrastructure, considering various aspects like community needs, service delivery, and resource allocation.

## PART B: OUR COMMUNITY AND RESILIENCE

"The capacity of individuals, communities, businesses and systems within a city to survive, adapt and thrive no matter what kinds of chronic stresses and acute shocks the experience."

Definition of resilience, Resilient Cities Network<sup>3</sup>



### **Our Hawkesbury**

The Hawkesbury is located on the north western fringe of the Sydney metropolitan area. The largest local government area in metropolitan NSW, our LGA is made up of 65 urban and rural suburbs with the main centres in Windsor and Richmond.

Central to the identity of the Hawkesbury is its natural environment, which is highly valued by our community, including significant waterways (Hawkesbury River, Colo River, South Creek) and extensive natural bushland and national parks including the Greater Blue Mountains World Heritage Area.

Bushfires, floods, heatwaves, drought and severe storms in the Hawkesbury are a regular occurrence that have shaped the nature of our region. The Hawkesbury community have shown great resilience and community spirit in the face of increasing impacts of climate change and natural disasters.

As climate change continues to worsen, the frequency of these disasters coupled with rising temperatures, underscore the need to bolster our resilience further. By fostering a culture of preparedness and adaptability, we are striving to ensure that future generations inherit a Hawkesbury that is connected, prepared and resilient.

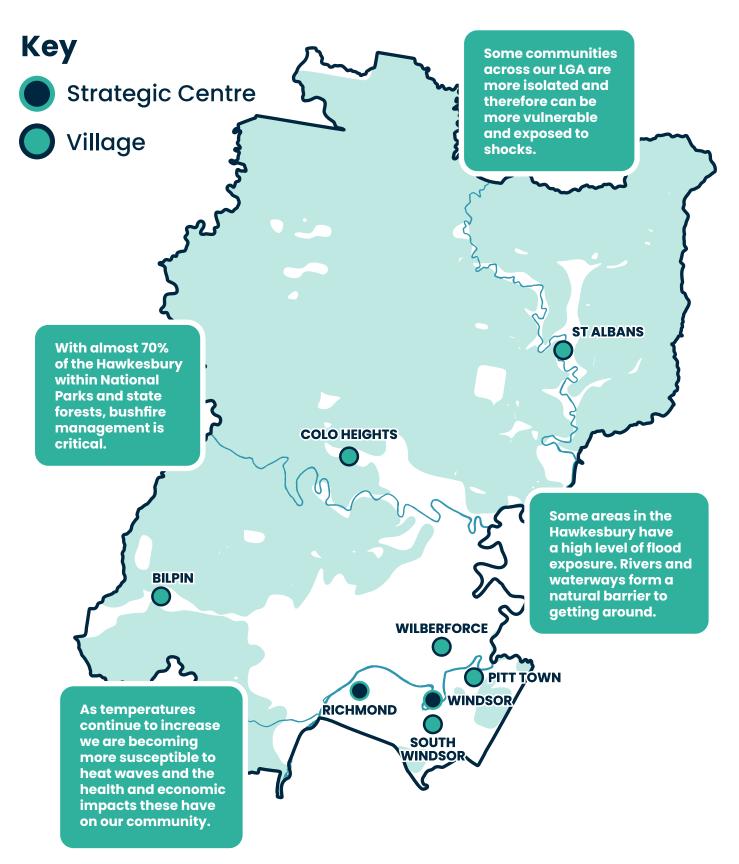
At the time of the 2021 ABS Census<sup>4</sup>, the Hawkesbury was home to over 67,200 residents with projections forecasting a population increase to over 77,000 people by 2041. This growth will occur primarily in the south-western areas of our LGA, including within the Northwest Growth Area.

Settlements in the Hawkesbury are scatted throughout the LGA and are home to distinct and unique communities. The dispersed nature of our population, as well as natural barriers such as waterways, can pose a challenge to accessing centres, services and public transport.



### **Our Places**

As shown in Figure 3 below, our LGA is shaped by valleys, mountains, waterways and natural bushland areas that are highly valued by our community. These also form natural barriers to getting around and put us at risk of flooding and bush fires. Future growth will be concentrated in the south-west of our LGA, including in the North-West Growth area.



### **Our Community**

The figure below gives insights into the Hawkesbury's unique community characteristics in comparison to Greater Sydney.

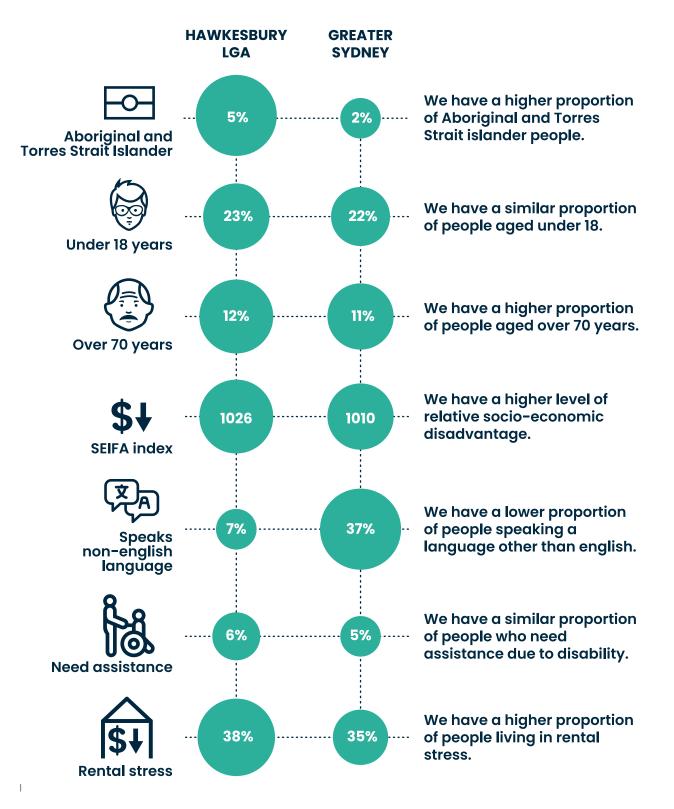


Figure 4: Community characteristics of Hawkesbury in comparison to Greater Sydney. All data is from the ABS 2021 Census, sourced from profile.id.<sup>5</sup>



Over 1500 hectares of native bushland



495 regionally significant wetlands in the Hawkesbury-Nepean River catchment



214 parks and reserves



848 thousand tonnes of CO2 generated by community (2020/21)



The Upper Hawkesbury River flows through the LGA, a total length of around 76km



1,333 ha Council managed public open space



<10% Tree Canopy in Town Centres

On average Hawkesbury

households use 8,456 kWh

compared to the Greater Sydney household average of 5,576 kWh (2020/21)



71% of land in Hawkesbury LGA is National Parks



5 –10 additional hot days by 2030



13.1% medium or highdensity dwellings



28.7% of households have solar systems (Sept 2022)



5.27M kl/year of water use (2020/21)



40% of household red garbage bins are made up of food and garden waste

### **DISASTER PRONE HOMES**



**393** Known landslip affected properties



Approx. 22,000 flood prone properties

### **COMMUNITY VULNERABILITIES**



Over 8300 not connected to water utility



Over 11,000 not connected to sewer utility



7823 registered businesses worth \$4.52 billion to economy

### **BUSHFIRES**



Category 3 10287



Category 2



Category 1 7469

## WHAT IS RESILIENCE?

Resilience is a deeply relevant concept for the Hawkesbury. Our community has been impacted by a long history of fires, floods, droughts and heatwaves.

Into the future, climate change will continue to exacerbate these shocks, with recent events, including unprecedented bushfires, devastating floods and the COVID-19 pandemic, turning many lives upside down and impacting everyone in our community.

The Hawkesbury's history of experiencing and responding to these shocks means the community have been practicing resilience for a long time. The Hawkesbury community's capacity to survive, adapt and thrive no matter what kinds of challenges are experienced is one of their great strengths. However, there will always be need for the Hawkesbury to improve its resilience in the face of changing conditions. Resilience is not only about the ability to withstand and recover from acute shocks, but also about dealing with ongoing chronic stresses that affect us day-to-day, such as limited access to transport, services and jobs. In this way Council seeks to work together with community and key stakeholders to nurture a Hawkesbury that thrives.

The community has lived experience of resilience and has shared their experiences with Council throughout consultation to inform the development of this Strategy. Their stories of resilience and voices are embedded throughout this document.

Aboriginal communities have and continue to demonstrate significant resilience. The Traditional Custodians of the Hawkesbury are the Dharug and Darkinjung people, who occupied the land within our boundaries for many thousands of years before European settlement. The Dharug and Darkinjung people have been Caring for Country for thousands of years and continue to do so.

To Aboriginal people the natural environment is integral to culture, community and individual wellbeing and cannot be separated from human life. Our community told us that there is a lot to learn from the Traditional Custodians resilience, such as thinking about human health, environmental health and prosperity as holistically interconnected.

"Country is the water, the land, the air we breath, the people, the stories and history... We are Country and Country is a part of all of us. This is something that all people share and need to recognise."



### What does a resilient community look like?

The Resilient Cities Framework identifies seven characteristics that foster a resilient community. The diagram below has been adapted from the Resilient Cities Framework, as shown in Figure 5 below.



Figure 5: A resilient community, adapted from the Resilient Cities Framework.

and infrastructure.

Understanding human behaviours in how we respond to the shocks and stresses that we face, helps us implement any planned actions and build resilience effectively. The following table outlines the influence that human behaviour can have on resilience and how the Strategy proposes to address this.

Behaviour	Influence	Response
Attachment and Connection	Refers to a respondent's attachment to the community. A person, group or entity must feel substantially invested in an area to respond effectively to threats to that community's wellbeing	Provide opportunities for connection with our area, environments and community to encourage the development of personal investment.
Framing	Resilience can be 'framed' differently between individuals, groups and communities which influences their response to given circumstances	Listen to and understand the community and speak to their values and experiences. Use clear and simple language.
Salience	<ul> <li>Refers to the property of standing out. For example immediately after a flood event, community are more focused on flood risk rather than drought.</li> <li>This is also the case of stresses vs shocks. Stresses are typically more front of mind given they are day to day.</li> </ul>	Focus should be given to maintaining ongoing awareness of shocks, keeping their potential and impact front of mind and driving continual action to respond. E.g. Awareness campaigns for floods even during drought. Don't let preparedness slip.
Acceptance	Acknowledgment of the challenge's inevitable existence. Without acceptance efforts will be made to mitigate or avoid the issue rather than to Prepare and adapt	Clear communication of evidence-based information relating to the risks and the preparation and adaptation options. Continued and ongoing communication to allow time for community to process and accept.
Anchoring	The tendency of people to rely on specific pieces of information or memories even when long outdated. Examples can be past experiences, social norms, prices or emergencies	Regular and ongoing communications relating to shocks

Behaviour		Influence	Response
Human Bias	Availability Bias	The tendency of people to base the probability of an event based on how easily or recently they can recall the event E.g. "I've lived here for 30 years and nothing bad has ever happened"	Clear communication of evidence-based information relating to the risks and the preparation and adaptation options.
	Optimism Bias	The tendency to underestimate the outcome of an adverse event E.g. "It wont be as bad as they say"	Regular and ongoing communications relating to shocks including locally lived experiences
	Overconfidence Bias	The tendency of people to overestimate their ability to deal with an adverse outcome E.g. "I can stay as I need to protect my home from the fire" or "I'm a good swimmer, I can swim through the flood water	Encourage community to undertake scenario planning including response actions to specific hypothetical scenarios
	Status Quo Bias	The tendency of people to avoid changes and believe in the status quo being unchangeable E.g. "Nothing more can be done"	Empower community with simple steps to mitigate the effects of stresses. Communicate that the impact of a shock/stress is not as inevitable as the shock/stress itself.

#### Table 1: Understanding human behaviors

(this table was adapted from the Northern Beaches Resilience Strategy)

### **Our Places**

As shown in Figure 6 below, our LGA is shaped by valleys, mountains, waterways and natural bushland areas that are highly valued by our community. These also form natural barriers to getting around and put us at risk of flooding and bush fires. Future growth will be concentrated in the south-west of our LGA, including in the North-West Growth area.

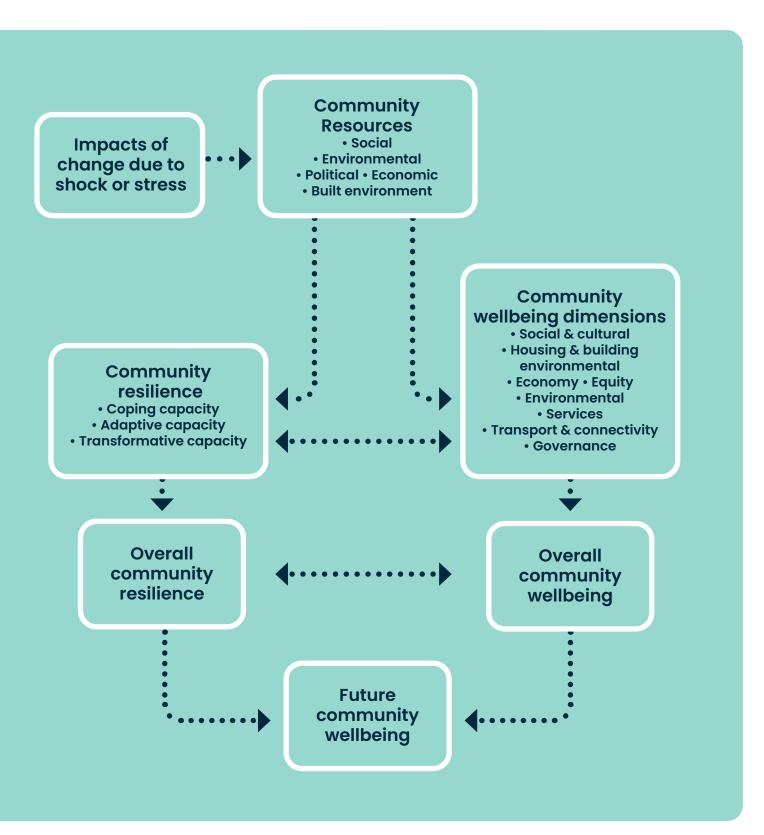


Figure 6 - A conceptual model for community wellbeing and resilience for the Hawkesbury (adapted from McCrae, Walton and Leonard, 2014, p. 278)<sup>6</sup>

## PART C: KEY FINDINGS OUR VALUES, STRENGTHS AND CHALLENGES

"Together we can create a connected, healthy, and adaptable Hawkesbury that is prepared for whatever the future holds."

Hawkesbury community member



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### Values, Strengths and Challenges

The resilience of the Hawkesbury at a fundamental level is defined by the unique strengths of the community which determine community's ability and capacity to weather, adapt to and overcome challenges that arise due to global and national factors or local issues.

The Hawkesbury River (Dyarubbin) is the heartbeat of the community and indeed the landscape. The Hawkesbury is blessed with large amounts of National Parks, natural bushland and rural/ agricultural land. The Hawkesbury is also peripheral to the urban Greater Sydney and the gatekeeper between the city, the mountains and western NSW. These aspects unite the identities of our distinct and varied local communities into a cohesive whole.

The same assets that unite the Hawkesbury do however also present our community with some challenges. Recent experiences such as drought, catastrophic bushfires, pandemic and multiple floods have occurred in concurrent and cascading fashion. The Hawkesbury has been forged into a resilient community by responding time and again to these challenges, however inevitably the scale and frequency of recent disasters takes a toll. This Strategy takes the next step towards a thriving Hawkesbury community well adapted to our unique challenges.

### Values of the Hawkesbury

Council asked the community what they value about the Hawkesbury. The themes of the feedback is summarised below:

- Healthy and Sustainable Hawkesbury River and Waterways
- The rural character of the Hawkesbury
- Protecting Bushland, Open space and natural habitats
- Community Connection: Social and physical connection is incredibly important including services, infrastructure and relationship.
- Focus on thriving local economy, business and tourism.

# STRENGTHS OF THE HAWKESBURY

The Hawkesbury community is known for its tight knit social networks that support each other during times of crisis. Our community share their stories of neighbours coming together to help, whether to mow the lawn of an elderly neighbour, pick up items during a trip into the city or evacuate animals to safe ground during floods or fires.

Our community has many strengths that help us to be resilient in the face of crises. The following quotes in green are what the community has told Council.

### We are connected and take care of each other

The Hawkesbury covers a large area and is considered metropolitan in NSW government plans. Despite this the communities of the Hawkesbury operate largely like smaller, more regional communities that display characteristics of support and togetherness. This has been reinforced by the lived experiences and displayed resilience to multiple natural disasters.

#### "Whatever our differences are, we are a small community, and everyone works together." - Hawkesbury community member

# We are self-reliant and have a lot of knowledge to share

Communities across the Hawkesbury have experienced significant disruptions including floods, bushfires and power outages. As a result, many community members have plans in place for when shocks happen. We also have generational knowledge from people who have been living in the community for a long time which can help us respond to and prepare for shocks.

"We have a lot of knowledge of past experiences and ways of planning in relation to those experiences." - Hawkesbury community member

# We have a volunteering spirit and strong community-led organisations

The Hawkesbury is home to many community organisations. People told us the willingness of locals to volunteer their time to keep them running that is inspiring and a strength.

"Most people in my street are involved as volunteers in the SES, CWA or RFS. The work they do in times of crisis is inspiring to see." - Hawkesbury community member

# **Beautiful natural environment**

The Hawkesbury is home to vast bushland areas, iconic waterways, farmlands, and numerous rural and hinterland villages. The natural environment is cherished by our community. This includes 1,500 hectares of native bushland and 495 significant wetlands.

"Proximity to nature. Beautiful and fun place to live. Talking about nature is really important for resilience" - Hawkesbury community member

# **Community spaces**

The Hawkesbury community has a number of community spaces that act as social connectors both outside and during times of crisis. Community members describe these as hubs for information, but also a space to connect with each other. Some people also told us Recovery Centres, Community Hubs and Outreach are integral to helping the community bounce back during times of shock.

"I found the centres really good. Being able to talk to people in person to help you and understand what needs to be done is so important. If I was trying to do all this online, I think it would be really hard, and it would increase my stress levels." - Hawkesbury community member

## **Passionate service providers**

The Hawkesbury is home to many passionate service providers that have developed strong relationships with the Hawkesbury community. Our service providers also have strong relationships with each other and can collaborate to best meet the needs of the Hawkesbury.

"Well-connected community services have strong relationships with the community and each other." - Hawkesbury community member



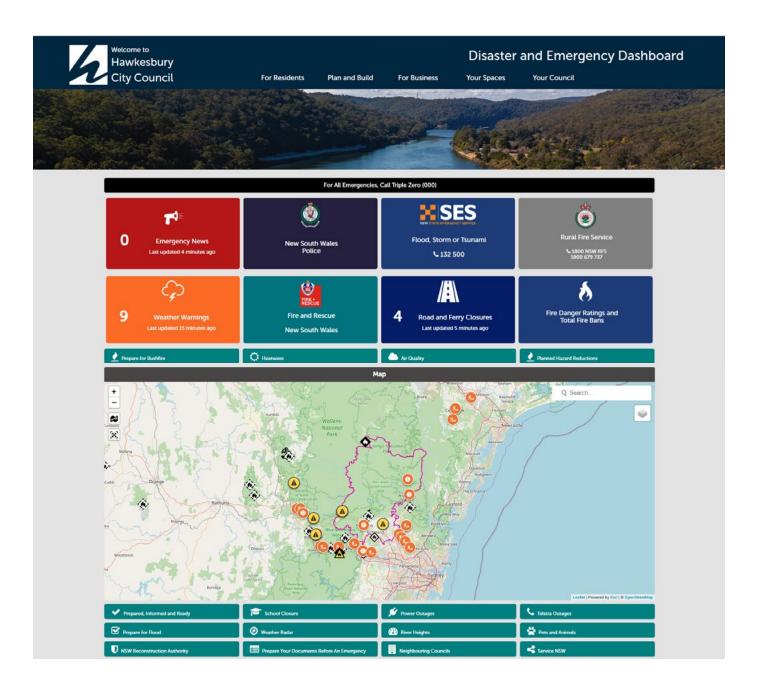
### **Disaster and Emergency Dashboard**

Council has created the Disaster and Emergency Dashboard to provide our community with a real-time single point of information during emergencies, including floods and bushfires.

The dashboard includes a map indicating current incidents in the Hawkesbury, weather alerts, evacuation information, shelter locations and more.

Our dashboard is an innovative way to enhance communication, coordination and situational awareness during emergencies.

#### disaster.hawkesbury.nsw.gov.au



# **Building momentum across the Hawkesbury**

Community groups, non-profit organisations, and industry leaders are doing work to better understand the Hawkesbury's resilience and take action to strengthen it. This is just some of the leading resilience work going on across the region.

#### **Connected and Prepared project** McDonald Valley Association

In February 2022 the McDonald Valley Association received \$280, 000 in federal funding under the Black Summer Bushfire Grant Program. The Association created a local radio network to enable valley-wide communication during disasters, with every resident given a radio. The Association also provided the community with emergency kit bags and unique Community Emergency Response Plans.

"The connected and prepared community resilience project helped us get radios to the whole community so we can talk to each other during disasters. We think this is a great outcome that was all done through neighbourhood networks." -Hawkesbury community member

#### Community transport services Peppercorn

Peppercorn provides services directly to people in the Hawkesbury, including a community transport service. This service helps people without access to a car or who are unable to drive access shops, services and spaces they need to live a fulfilling life.

#### Supporting at risk cohorts Hawkesbury's network of support services

In the Hawkesbury region, there's a range of important services that work together to support our community. They're here for us in different ways - including helping out during emergencies, providing housing, supporting people with drug and alcohol addictions, organising community events, taking care of our health, and offering assistance for families and children. These services are the backbone of our community, helping us through both tough times and our everyday life.

#### Bright Ideas project Hawkesbury City Council

The Bright Ideas to Build Resilience Project aims to build a more resilient community that is self-supporting in the wake of the accumulated stress of recent multiple disasters. Our community is encouraged to bring their bright ideas for resilience to the project worker who can provide support, guidance and training to initiate their idea.

The Bright Ideas project was funded 2022-2024 by Wentworth Healthcare provider of the Nepean Blue Mountains Primary Health Network

#### Hawkesbury Resilience Project Western Sydney University

In partnership with Western Sydney University and other stakeholders, the Hawkesbury Resilience Project was developed. This initiative includes a digital map of local groups and organisations working to build resilience in the community, workshops to strengthen our communities understanding of resilience and a number of Western Masters Research internships.

#### Person Centred Emergency Preparedness (P-CEP) Peppercorn

Through P-CEP, Peppercorn empowers our community to better prepare for emergencies. With trained facilitators, Peppercorn assists our older community and those living with disability to better plan and prepare for emergencies. The facilitators help guide people to identify their strengths and disaster risk and help them plan how they will manage support needs during emergencies.

#### **Engagement with caravan parks** Infrastructure NSW and NSW SES

Infrastructure NSW in partnership with NSW SES have been delivering targeted flood preparedness engagement with caravan park residents and operators in the Hawkesbury-Nepean valley. Many caravan parks in the valley are in low lying, floodprone areas next to rivers and can quickly become inundated and/or have access routes cut in a flood. They also often have issues with telecommunications. The aim of the project was to engage caravan park owners in the Hawkesbury-Nepean Valley around their pre-flood event planning and deliver a tailored flood emergency plan template.

#### **Digital Literacy Foundation** Outreach Digital Literacy Foundation

The Digital Literacy Foundation works with people experiencing disadvantage to build their online skills. You can join face-to-face, telephone or video chats with a Tech Mate that can help you learn a range of different things including online shopping, staying safe online, accessing services online and keeping in touch with families and friends. Hawkesbury residents can access this service at the Community Hubs.

#### Supporting mental health Hawkesbury's network of mental health support services

Mental health support services across the Hawkesbury have collaborated together to support our community in recovery. A diverse range of organisations provide wrap around support in a variety of ways to residents.

# **OUR RESILIENCE CHALLENGES**

In developing this Strategy, Council spoke at length with our community about their experiences of acute shocks as well as chronic stresses in the Hawkesbury. Council heard stories that demonstrate how shocks and stresses are intrinsically related, with stresses such as ageing infrastructure and roads making it harder to cope when a shock event, such as a flood or bushfire occurs.

Council also heard that shock events can have long-lasting, cascading impacts on our communities and sometimes affect people long after the event itself has ended. For example, a person may develop poor mental health following a natural disaster, however the barriers they face after the event in terms of accessing support due to services being at capacity or long travel times due to damaged infrastructure, exacerbates these health issues and prevents recovery.

The Hawkesbury community were asked to identify their:

- Level of concern for each stress and shock
- Perceived level of preparedness as a household/local community/overall Hawkesbury LGA
- Ideas for addressing these challenges

There were some interesting findings, displayed in the text box on the right.

# Community survey insights

#### Shocks of most concern (Top 4)

- . Storms and flooding
- 2. Bushfires
- 3. Infrastructure failure (e.g. roads, bridge or building collapse)
- 4. Utilities failure (e.g. power or communications outages).

#### Stresses of most concern (Top 4)

- I. Access to transport
- 2. Access to affordable and suitable housing
- 3. Inequality divides in the community
- 4. Poor physical and mental health.

# What would help to better withstand emergencies (Top 3)

- 1. Better quality infrastructure and buildings
- 2. Better access to places and facilities to go in times of emergency
- 3. Support and resources for the community to prepare for emergencies.



# STRENGTHS OF THE HAWKESBURY

Shock	Likelihood	Consequence	Overall Risk	Areas with Highest Risk
Disease Pandemic	Probable	Major	High	Whole of community
Bush Fire	Likely	Major	Extreme	Refer to fire prone land map
Flooding	Likely	Major	Extreme	Whole of community
Storms	Likely	Moderate	High	Whole of community
Digital Network Failure	Possible	Moderate	Moderate	Whole of community
Infrastructure Failure	Likely	Moderate	High	Whole of community
Cyber Attack	Possible	Major	High	Whole of community
Financial Institution Failure	Not Rated	Variable	Not Rated*	Whole of community
Heatwave	Likely	Major	Extreme	Whole of community
Water Crisis	Possible	Moderate	Moderate	Whole of community
Terror Attack	Probable (current Terror Alert)	Not Rated	Not Rated*	Whole of community
Landslip/ Rockfall	Likely	Moderate	High	Communities within existing or old landslide areas, at the or on the top or base of slopes, within or at the base of drainage hollows, any sloping ground in an area known to have a landslide problem
Earthquake	Possible	Moderate	Moderate	Whole of community
Biosecurity	Possible	Moderate	Moderate	Whole of community

#### Table 2: Risk rating of shocks in the Hawkesbury

\*Not Rated = Additional work required to determine risk likelihood and consequence for Hawkesbury

# COMMUNITY PERCEPTION OF SHOCKS, STRESSES & PREPAREDNESS

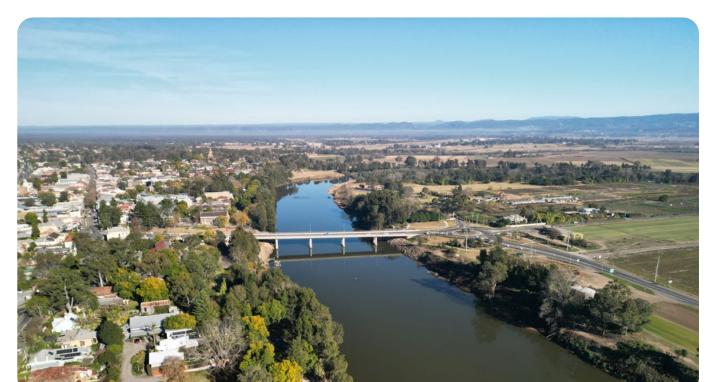
# **Community perception of shocks**

The table below highlights the Hawkesbury community's perception of shocks. Community members were asked to rank their concern of shocks from 1 (highest concern) to 9 (least concern).

Rank	Theme	Average Score
1	Storms and flooding	2.63
2	Bushfires	3.41
3	Infrastructure failure (e.g. roads, bridge or building collapse)	3.46
4	Utilities failure (e.g. power or communications outages)	3.56
5	Heatwaves	5
6	Disease pandemic	6.05
7	Financial crisis	6.22

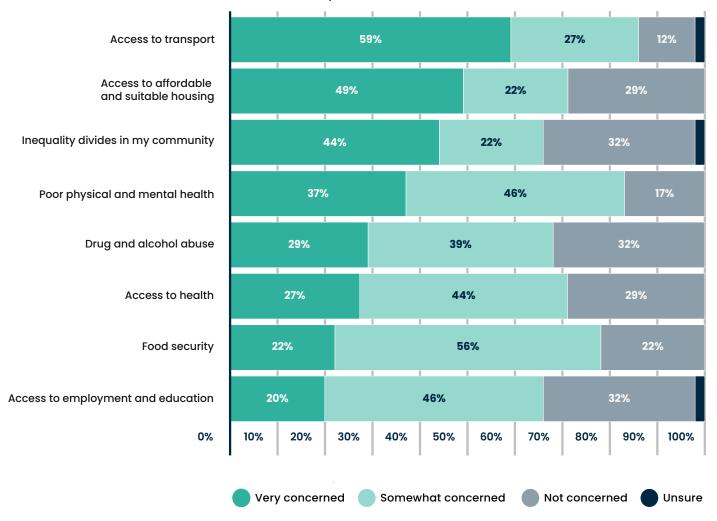
#### Table 3: Hawkesbury community's perception of shocks

Storms and Flooding, Bushfires, Infrastructure failure and Utilities failure scored much higher concern than remaining shocks which is likely unsurprising given recent shock events. It is interesting to note that heatwaves were not a top concern despite being a greater cause of fatality than all other disasters combined (see Appendix VI). This likely highlights a need to better educate the community on heatwaves.



# **Community perception of stresses**

The figure below highlights the Hawkesbury community's perception of stresses. Community members were asked to rank their concern of stresses across 8 categories with response options being 'unsure', 'not concerned', 'somewhat concerned' and 'very concerned'.



#### Figure 7: Hawkesbury community's perception of stresses

Inequality division whilst receiving the 3rd highest "concerned" score also received the highest "not concerned" score. This ironically highlights the divide of perspectives.

When considering the addition of very concerned and somewhat concerned the top stresses are:

- 1. Access to Transport
- 2. Poor physical and mental health
- 3. Food security

This would indicate underlying stresses that may not be as critical now but could become more critical in the future.

Common to both shocks and stresses were the communities concerns for infrastructure and Council assets.

# **Global Influences**

It is important to note that the risk profile of the Hawkesbury is influenced by global factors. The World Economic Forums' The Global Risks Report 2025 (20th Edition) describes the current state of risk perception globally.

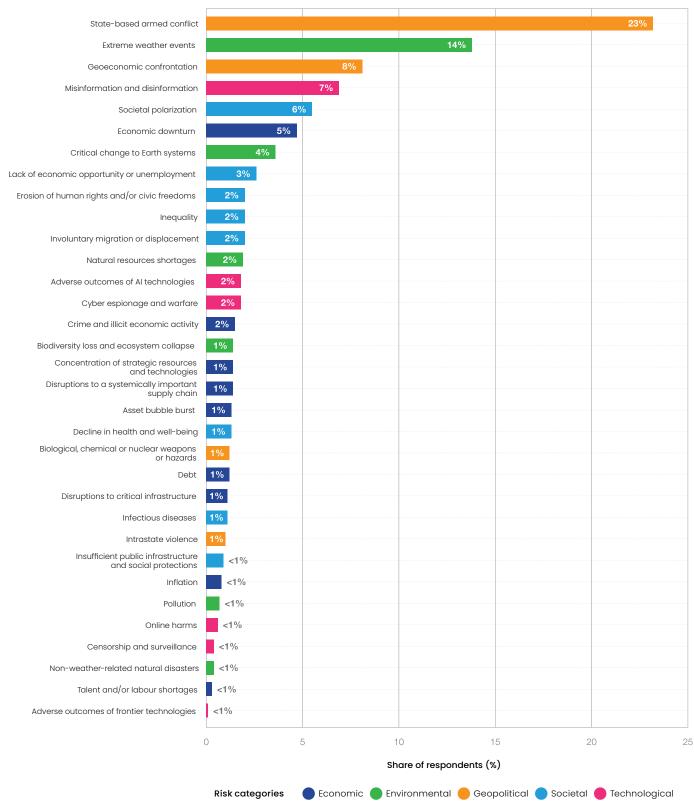


Figure 8: Risks likely to produce a material impact globally as of 2025. The Global Risks Report 2025 (20th Edition), World Economic Forum.

Interestingly extreme weather has previously dominated both likelihood and impact categories but has now been overtaken by the risk of misinformation and disinformation due to the growing understanding of the importance of social cohesion and the rise of widespread misinformation.

(1 <sup>st</sup> )	Misinformation and disinformation	(6 <sup>th</sup> )	Pollution
2nd	Extreme weather events	(7th)	Inequality
3rd	State-based armed conflict	(8th)	Involuntary migration or displacement
(4 <sup>th</sup> )	Societal polarisation	(9th	Geoeconomic confrontation
<b>5</b> <sup>th</sup>	Cyber espionage and warfare		Erosion of human rights and/or civic freedoms
Risk categories 🛛 🗧 Economic 🕘 Environmental 🛑 Geopolitical		olitical 🔵 Societal 🛑 Technological	

# Figure 9: Global risks ranked by severity over the short term (2 years), The Global Risks Report 2025 (20th Edition), World Economic Forum.

World Economic Forums' The Global Risks Report 2025 (20th Edition) describes how respondents generally have a rather negative view of the coming two years focusing on destabilisation of the worlds systems primarily due to climate and conflict. As such, the view continues to darken over the 10-year time-frame.

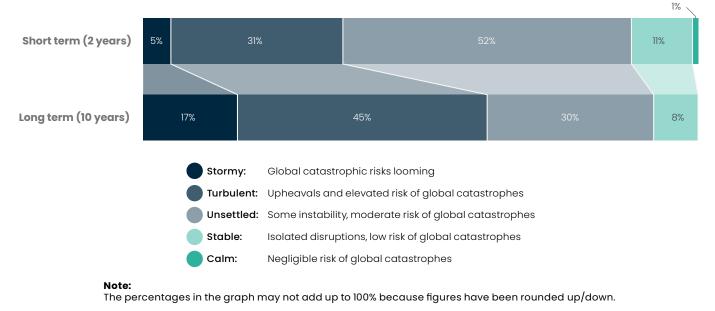


Figure 10: Short and long-term global outlook, The Global Risks Report 2025 (20th Edition),

#### World Economic Forum.

Whilst the risk perceptions individually impact upon those at a more local level it is also important to note that having a negative perception of world trajectory can also correlate to increasing impacts on mental health and decreased resilience. In this regard, there requires a conscious leadership role in creating hope and vision of positive outcomes to improve resilience. It is helpful in this way to apply the Circles of Influence (Stephen R. Covey, The seven habitats of highly effective people) concept which has been adapted into many contexts. It is critical to move attention and focus away from factors that are not within an individuals/groups/organisations control or influence, to those that are so that energy is not expended becoming more negative and less resilient but is directed towards positive and responsible action. This also helps foster an understanding that risk cannot be address in isolation or alone. Collaboration is required to prepare for the challenges that the Hawkesbury is facing and thrive.

#### Core business, statutory responsibilities, service provision, Council facilities and services, building and other assets

#### CONTROL

Direct decision-making and action is possible (and necessary). Appropriate investment will be effective. Areas of partial or shared responsibility or influence

#### INFLUENCE

Council has the ability to Collaborate with, Educate, Support, Empower, Lead etc. but does not control outcomes. Appropriate investment very likely to be effective. Issues that concern Council but which we have no substantial ability to influence the outcome

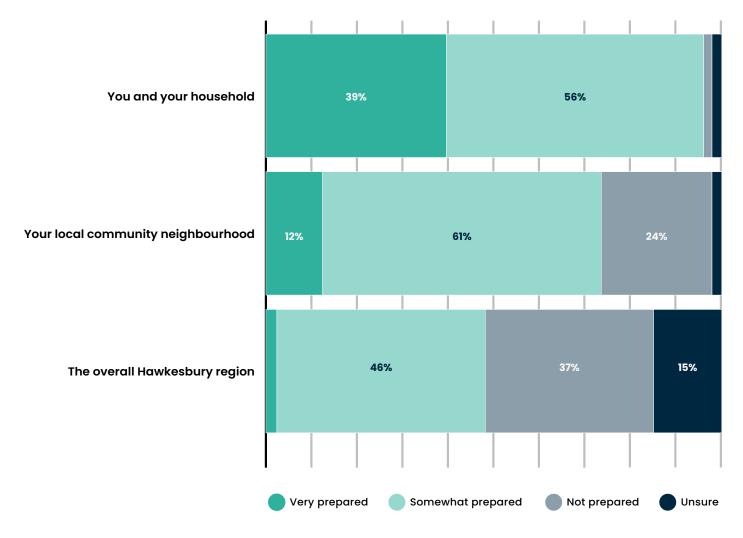
# CONCERN

Awareness/understanding and incorporation into strategic vision is important. Council can aspire to influence by educating, advocating and lobbying. Investment not likely to be effective.

Figure 11: Hawkesbury Resilience Spheres of Influence

## **Community perception of preparedness**

The table below highlights the Hawkesbury community's perception of preparedness. Community members were asked to rank their perception of preparedness for them and their household, for their local community and for the overall Hawkesbury community.



#### Figure 12: Community perception of preparedness

The community perceives preparedness more poorly and are less sure as the context broadens. This is largely in line with the previously discussed human behaviours matrix, which impact perceptions, and reinforces the need to engage with the community better regarding the varying levels of preparedness and to combat misconceptions and lack of information.

A positive takeaway is that in general the perceptions of preparedness are quite high, whilst an obvious area of improvement is in ensuring the overall Hawkesbury region is prepared and the community recognises it as such.

# OUR SHOCKS

# Storms and flooding

In March and July 2022 our community experienced the largest flood in 44 years. With bad flooding already hitting the region in 2020 and 2021, this flood compounded issues of infrastructure, environment and maintenance and caused further isolation of outlying communities. These floods were also the first floods experienced by many people living in downstream communities, spanning areas where many of our socially vulnerable community are located. This includes social housing tenants and those living permanently in caravan parks.

During flooding events our community experiences many challenges including road closures, lack of telecommunications coverage and power outages. This has flow-on impacts on their ability to access emergency information or evacuate to safer spaces. This can leave members of our community isolated for days or weeks after flooding subsides, which can also impact local businesses.

"When the floods come we get cut off. Even though we aren't directly impacted by the floods we often end up isolated which means our business has to close down because we can't access things we need to keep it running." - Hawkesbury community member

The impacts of floods can last for many weeks and even months after the waters subside. Not only do people have to rebuild all of, or parts, of their property, they have to spend time and energy navigating insurance and government websites and processes. This can have lasting impacts on mental, physical and financial well being.

"I lie in bed and hear heavy rain. It's stressful because I think how long before the water comes in. It wakes me up at night because I am scared." - Hawkesbury community member

The Hawkesbury region is uniquely exposed to flooding. The watercourse begins in the Mountains before being held by Warragamba Dam. In moderate rain events the dam prevents flooding of the basin downstream, however during major and severe rainfall events where Warragamba dam in unable to hold any more water the immediate release combined with additional catchment rainfall results in large flow of water. Due to the Hawkesbury's unique topography, beyond the basin the river has cut its way into rock escarpments meaning flood waters have no-where to go and begin to rise, known as the 'bath-tub effect'. This is the reason why floods are so prevalent in the Hawkesbury and so damaging. For an in-depth technical analysis of flooding please refer to Appendix VII.

# **Bushfires**

On 26 October 2019, a lightning bolt struck Gospers Mountain in Wollemi National Park and began a fire that would burn for 79 days. It would grow to become the biggest forest fire Australia has ever known and among the world's 10 largest bushfires on record. The fire was eventually extinguished on 10 February due to intense rainfall. This in turn created another extreme weather event in the form of a localised flood.

Our community told us that similar to flooding events, access to information before and during bushfires could be improved. This means residents often find themselves unprepared for the full impact of the fires. This includes a lack of communication around road closures, leaving people isolated.

"We didn't have access to phones or the internet for six weeks. I had to come to the fire shed twice a day to check if I was in danger." - Hawkesbury community member

The impacts of bushfires on our community are long-lasting and devastating on the mental, physical, social and financial wellbeing of our residents.

"We experienced the 2019 fire. Everything was burnt except the house. They shut the road off for 10 days while they cleaned up. We usually aim to be self sufficient for a week but when the roads are closed for so long it becomes harder." - Hawkesbury community member

Hawkesbury residents value their natural spaces and proximity to National Parks however this increases the likelihood of becoming affected by bushfire and for severe impacts. More than 17,500 properties are bushfire prone. For an in-depth bushfire risk analysis please see Appendix V.

### Heatwaves

In summer, the hot air and the absence of a coastal sea breeze intensify the extreme temperatures in the Hawkesbury. In recent years, Western Sydney has experienced temperature spikes of six to ten degrees during extreme weather events (WSROC 2018)<sup>7</sup>. As climate change worsens it is likely our community will see more 50-degree heatwaves, with particular concern for Windsor and Richmond (Sweltering Cities 2022)<sup>8</sup>.

A 2018 study by WSROC found there is a 13% increase in mortality rates during heatwaves, killing more Australians each year than any other natural disaster combined.

The impact of heatwaves hits disadvantaged community members hardest - our elders, infants and children, low-income households, First Nations and CALD communities, people with health conditions and those who are socially or geographically isolated. Local flora and fauna, along with livestock and family pets are also susceptible to heatwaves.

Along with the loss of human life, heatwaves have a number of flow on effects including soaring demand for energy, water and health services. During the 2011 heatwaves there was almost a 100% increase in demand for electricity placing pressure on city assets and infrastructure (WSROC 2018)<sup>7</sup>.

To better protect our community from urban heat, we are committed to creating cool, connected and well-maintained urban green spaces across our LGA.

By investing in urban-greening we can reduce both heat and minor flooding and make the Hawkesbury more liveable. For additional information on heat please see Appendix VI.

## Cold

While cold wasn't identified as a shock during the community consultation, the Australian Institute of Health and Welfare states that deaths from the cold between 2011 to 2021 was the second highest of extreme weather related deaths in Australia.

More information and evidence is required to address the risks of extreme cold effectively, however it can be assumed that many of the mitigation actions that apply to heat would similarly apply to cold.

# Droughts

Heatwaves combined with long periods of low rainfall can cause widespread droughts. With large areas of agricultural land, our community often face severe and devastating consequences during droughts. As with other shocks, climate change is increasing the frequency and impact of droughts. In June 2018, more than 99% of NSW was declared to be affected by drought (AdaptNSW 2023).

During periods of drought farmers struggle to maintain healthy livestock and viable harvests which negatively impacts their livelihood. This has flow on effects on health and wellbeing. Research highlights that as droughts worsen, the risk of suicide increases by 15% in rural men aged 30-49 (AdaptNSW 2023).

Drought not only impact our community, but can disrupt our ecosystem and biodiversity. According to WSROC (2020) more than one third of Sydney's urban tree species are vulnerable to drought, with climate change predicted to push some species over their survival thresholds. Limited water availability can also increase the risk of other shocks such as bushfires or dust storms.

Drought, heatwaves, bushfire and floods are predicted to increase in occurrence and severity due to the impacts of Climate Change. For an in depth analysis of the impacts of Climate Change on the Hawkesbury please refer to NARCliM 2.0 Metropolitan Sydney Climate Change Snapshot - Department of Climate Change, Energy, the Environment and Water available here www.climatechange.environment.nsw.gov.au/ projections-map

# Infrastructure and utility failure

Community relies upon physical connections to move from place to place and access services, food and social nourishment. Infrastructure is also critical to the economy and for day-to-day activities such as getting to school, attending medical appointments and accessing homes.

When Infrastructure fails, the impacts can not only disrupt lives but also severely exacerbate existing issues. It can also disrupt typical services such as waste collection or social service home visits.

These same impacts are also true for utilities such as electricity, mobile/internet service, water or sewer. The Hawkesbury is particularly exposed to these issues given our geographical location and unique position in Greater Sydney.

For a Metropolitan Council we have many residents not connected to basic utilities and reliant on single pieces of infrastructure.

Hawkesbury Climate Change Risk Assessment and Adaptation Action Plan, Asset Management Strategy and Communications Master Plan describe Council's plans to tackle the issues related to these impacts that are within our control or influence.

## **Emerging shocks**

Resilient Sydney has identified other acute shocks that are high risk to Sydney, including cyberattacks, financial crisis, water crisis and disease pandemics. The Hawkesbury is also vulnerable to these, and we need to be prepared should they occur in the future.



# **OUR STRESSES**

Stresses are the issues which are systemic, interconnected and complex in nature that weaken the fabric of our community on a daily or cyclical basis.

# Poor access to public transport

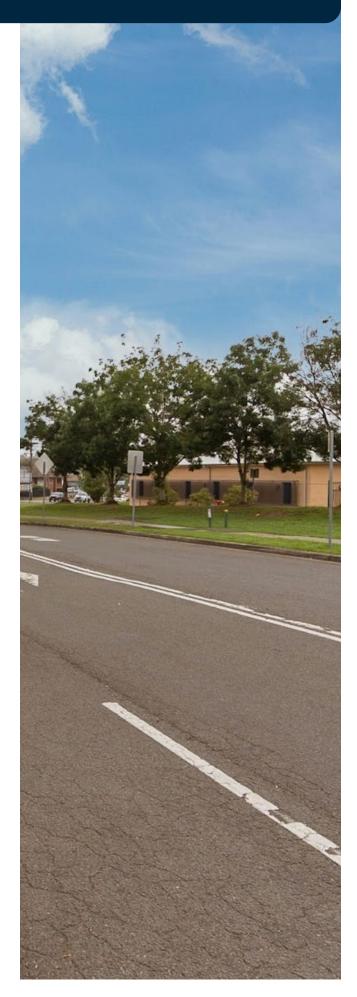
Our community told us access to public transport in the more regional and remote areas of the Hawkesbury LGA is poor. 59% of survey respondents told us they are very concerned about access to transport.

Where our community is unable to drive, they have to rely on public transport or car-sharing to travel. This travel could be to access services, employment, education, or even for leisure.

This is particularly concerning to the community as there is an ageing population that may have health problems impacting their driving ability.

On top of this, many evacuation plans in the Hawkesbury rely on people being able to drive, which poses problems for those who can't drive during times of crisis.

"A couple of years ago I had medical emergency and afterwards I was unable to drive for a while. My only access to a shopping centre to buy food was via the school bus. I could take the school bus to Richmond but had to wait to the end of day to come home. It might not affect a huge number of people because a lot of people drive but when you get older this does become an issue." - Hawkesbury community member



# Access to affordable and suitable housing

Our community told us they think there is a lack of affordable and suitable housing across the Hawkesbury. 49% of survey respondents told us they are very concerned about access to affordable housing.

We heard stories of our community being unable to find affordable housing in the area, particularly if they have to move off their property due to flood or fire damage. There are also concerns about attracting people to the area if there is no affordable housing. Our community want to see more social and affordable housing available across the LGA, along with better support services for people experiencing homelessness.

Our community also shared concerns about a lack of housing suitable for our ageing population. It is important to have housing suitable for older people so they can continue living in the community they have spent a long period of their life in.

Improved building standards and affordable renewable energy can assist to mitigate heat and cold related shocks.

"We moved off the land after the floods and wanted something quickly. We looked at rentals in town and there were only four properties available. We applied for all of them and only got one. It felt great to be safe and it was only then I realised how badly we were impacted mentally by the floods. It's hard because we have to pay more than 40% of our income on housing. It would be good if we could plan for more medium density." – Hawkesbury community member



### Existing initiative: Western Sydney Heat and Social Housing Initiative

Link Wentworth, Hume and Evolve along with Penrith and Hawkesbury councils produced a range of educational resources to support vulnerable members of the community in heat. This includes videos and fact sheets with tips and tricks on staying cool in summer and information for front line staff working with vulnerable community members in Western Sydney.

The resources can be found here: www.linkwentworth.org.au/ our-programs/western-sydney-heat and-social-housing-project

# Ageing and damaged infrastructure

Our roads are often impacted by natural disasters particularly during floods where parts of the roads fall away. This can create dangerous driving conditions that last for weeks, months and sometimes years after these disasters are over. Our community also told us that there are not enough roads in the Hawkesbury, which creates traffic and unsafe driving conditions with many heavy trucks on the road.

"Connected communities do better. Infrastructure can do this in a physical way." - Hawkesbury community member

"Road infrastructure is a major issue with no plan in place for road collapse. My community in lower Macdonald doesn't have a safe road at all at the moment." - Hawkesbury community member

### Poor telecommunications

Mobile phone and internet coverage in the Hawkesbury can be of low quality, or in some areas non-existent. While our community has found ways around this with wi-fi calling, satellites, these are not always effective or may not be financially viable for everyone. Local business owners told us this impacts their livelihood as they can struggle to find people to visit their business without mobile reception or internet. Our community told us this can often be exacerbated during times of crisis and can impede their ability to access critical information on floods and fires in the region.

"Communication is key because the internet is patchy and mobile reception goes down during floods. This means we never get updated data on river." - Hawkesbury community member



## Inequitable access to services

Services are not equitably distributed across our community. The western side of the river, home to 47% of our population and expected to hold much of our future growth, does not have a hospital and access to essential services is significantly impacted in disasters.

In particular, our community told us that access to physical and mental health services is an issue, with 83% of survey respondents being very or somewhat concerned about physical and mental health. Challenges identified by the community include not enough bulk-billing doctors, long waiting lists for doctors and elective surgeries, not enough in-home care and not enough support for mental health. Access to mental health services is particularly necessary given the impact cumulative disasters can have on our community's mental health.

There are also some more isolated communities that do not have access to a local community centre or hub that can act as a safe space both in normal times and during disasters.

"My neighbors' husband had a stroke and is in hospital. They want to release him, but she does not feel she can look after him alone. They originally said they will send a nurse everyday but when they checked her address, they said it would only be once a week. Because of this he will have to stay in hospital." - Hawkesbury community member

"We aren't really that remote but we still don't have any local services nearby. It's over an hour's drive to the hospital or supermarkets." - Hawkesbury community member

"A lot of areas in the region have no access to basic infrastructure, such as digital networks, telecommunications, transport, and health. These are crucial to get in times of emergencies as well." - Hawkesbury community member



#### Community connections for new residents

Our community told us sometimes important information on natural disasters is not reaching the whole community. Some of this is because of the telecommunications issues and some because new residents are moving in and are not connecting to relevant information.

Our community also told us that if they rent they do not always feel as connected to the community and may not experience the same level of community connection as those who have been living and owning homes in the Hawkesbury for a long time.

Our community told us that a key challenge we face in preparing for flooding events is that new residents, including people who rent, are not prepared or aware of the risks highlighting a need to connect people to information.

"When people rent, there's no process where they're told that they're in a flood zone. The real estate agent is certainly not going to tell them." - Hawkesbury community member

"There seems to be a barrier between long-term residents and newer residents, between older people and younger people. We need facilities to help build a strong community." - Hawkesbury community member Richmond. Most of us are renters, I feel there is no sense of community. People live here simply for cheaper housing and they commute longer distances to other parts of Sydney. This sees many people naive to resilience or what to do in times of crisis." - Hawkesbury community member

### Addressing Disadvantage

Our community told us that some people or groups are currently disadvantaged when it comes to established systems for resilience

**Mobility challenges** making it more likely to have difficulties coping during shocks.

**People with care support needs** may be at higher risk during disasters.

**Language barriers** may present higher risks to persons if there is limited access to culturally relevant information.

**Lack of access to technology** either due to infrastructure or a skills deficit may mean persons struggle to access information on disasters.

**Rental and/or income stress** can mean households have fewer resources to adapt in the face of shocks and stresses.

**Sourcing information** can be challenging for a range of reasons, and this should be considered when developing and promoting information regarding preparation for emergencies.

**Loneliness / isolation** can exacerbate the level of a disaster and heighten the decline of wellbeing and mental health in an individual.

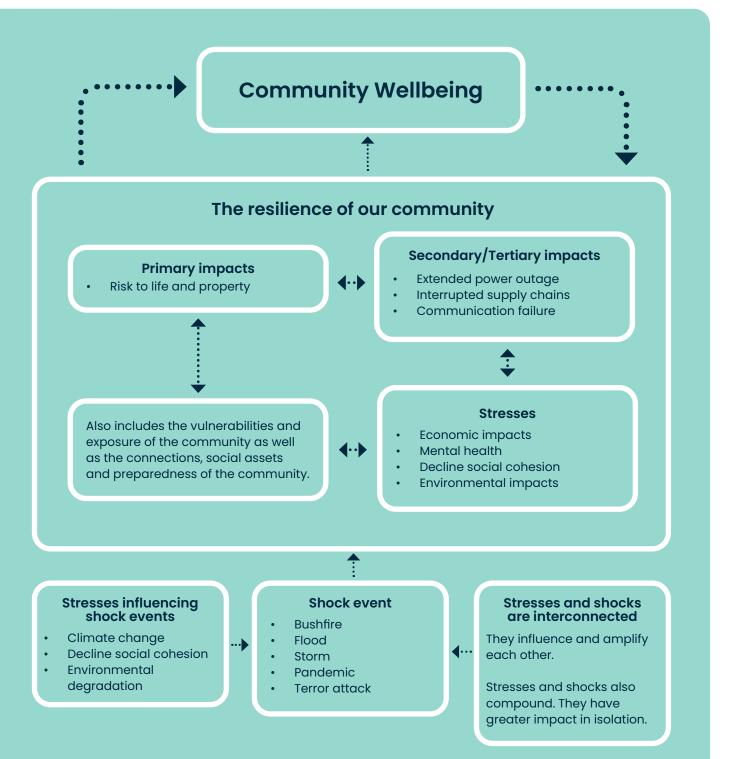
Community spoke about the importance of building connections with people who may be less connected into the community and therefore are at higher risk during disasters.

# INTER-RELATIONSHIP AND CASCADING EFFECTS OF SHOCK EVENTS AND STRESSES

Shocks and stresses do not occur in isolation. A stress may influence a shock occurrence or exacerbate the severity of a shock occurrence and vice versa. This interconnected relationship is complex and results in long lasting effects on community beyond any one event.

In some cases, the long term secondary and tertiary impacts effect the community more than the event itself. This inter-relationship must be considered in planning for resilience to develop a community that thrives.

#### Figure 13: Inter-relationship and cascading effects of shock events and stresses



# EMERGING RISKS AND RESILIENCE CHALLENGES

# **Regional Perspective**

Hawkesbury City Council is a member of Resilient Sydney and recognises their contributions and support in collaborating on this document and also on resilience across Greater Sydney.

The Resilient Sydney Strategy 2025-2030 provides overarching regional risk assessment and strategic direction for the Sydney region which this strategy is specifically aligned to, taking into account the Hawkesbury local placebased context including risks, challenges and community profile.

Resilient Sydney has identified the following 8 priority actions:

- Embed First Nations knowledge and practices in land management
- Support electrification and energy transition
- Collaborate and advocate for solutions to Greater Sydney's waste crisis
- Improve the heat resilience of communities in Greater Sydney
- Facilitate community-led action
- Research community preparedness and support coordinated campaigns
- Promote and participate in collaborative governance and engagement for Greater Sydney
- Adopt region-wide data and tools

The Resilient Sydney Strategy 2025-2030 also has identified the regional shocks and stresses for Greater Sydney as shown in Figures 14 and 15<sup>9</sup>.

#### **Shocks for Greater Sydney**

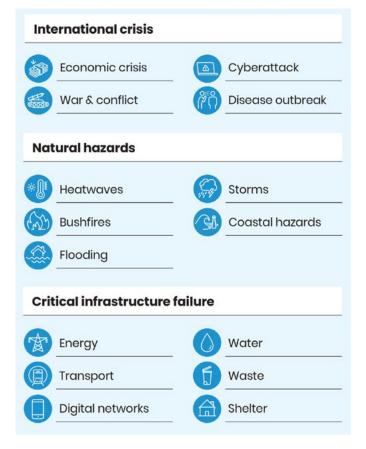


Figure 14: Shocks for Greater Sydney, Resilient Sydney Strategy 2025-2030

#### **Stresses for Greater Sydney**



Figure 15: Stresses for Greater Sydney, Resilient Sydney Strategy 2025-2030 Shocks and stresses do not occur in isolation. A stress may influence a shock occurrence or exacerbate the severity of a shock occurrence and vice versa. This interconnected relationship is complex and results in long lasting effects on community beyond any one event.

In some cases, the long term secondary and tertiary impacts effect the community more than the event itself. This inter-relationship must be considered in planning for resilience to develop a community that thrives.



# CRITICAL ASSETS, INFRASTRUCTURE & SUPPLY CHAINS

Critical assets, infrastructure and supply chains support our everyday lives such as energy, water, transport, food, communications, health, insurance, banking and finance.

Secure and resilient infrastructure and supply chains are necessary for a community to be resilient to shocks and stresses and thrive.

A disruption to these systems could have serious implications for business, governments and the community.

Infrastructure systems and services vulnerability is influenced by:

- Level of dependency and system interconnectedness
- Just-in-time supply, level of storage and centralisation
- Variety of sources or lines of supply
- Dependence on imports to meet demand (e.g. food, fuel)
- Expectation of continuous ongoing supply
- Tolerance for loss and disruption
- Complexity of supply chain e.g. involving multiple entities at local, regional, national and international scales (Resilient Sydney Strategy 2025-2030)<sup>9</sup>

Critical infrastructure of the Hawkesbury:

- Roads (Local and Regional including bridges)
- Wastewater and stormwater infrastructure
- Telecommunications infrastructure
- Educational facilities
- Energy network
- Water supply
- Waste Management Facility
- Ferries
- Fuel and EV charging
- Supermarkets

There are a number of Council and community assets that whilst not being critical infrastructure are also important for community wellbeing including:

- Footpaths and walkways
- Sporting and recreational facilities
- Community and cultural facilities
- Parks, reserves and natural areas
- Playgrounds

Supply chains are the network of all the individuals, organisations and activities involved in creating a product including resource extraction, manufacturing, transportation and distribution. A basic supply chain is food production. People (consumer) typically get their food from a supermarket (distributor). The supermarket acquires (transport) the food products from farmers (manufacturer). The farmer requires supplies (seed, fertiliser, fuel etc.) to grow the food and the supply chain continues on for each of those supplies.



Supply chains are exposed to a range of shocks and stresses that eventually effect the Hawkesbury community in a variety of ways, including:

- Geopolitical shocks (trade disputes, wars, drought etc.) resulting in shortages e.g. fuel, food, fertiliser
- Environmental shocks Gospers Mountain bushfire affected transport and communication amongst other impacts
- Economic shocks E.g. Cost of living and affordable housing crisis
- Societal shocks E.g. labour strikes or pandemic affecting local economies, transport, tourism etc.
- Infrastructure shocks Road damages disrupting transport logistics
- Cyberattacks

Recently there has been heightened awareness of the fragility of Hawkesbury's and indeed Australia supply chains due to global conflict, the COVID-19 pandemic and successive environmental disasters. The Hawkesbury has experienced impacts on logistics and transport, infrastructure, import/export restrictions and panic buying behaviours.

Specifically, the Hawkesbury economy is highly dependent on:

- Groceries and Supermarkets
- Transport
- Dining and Entertainment
- Specialised & luxury goods
- Professional Services

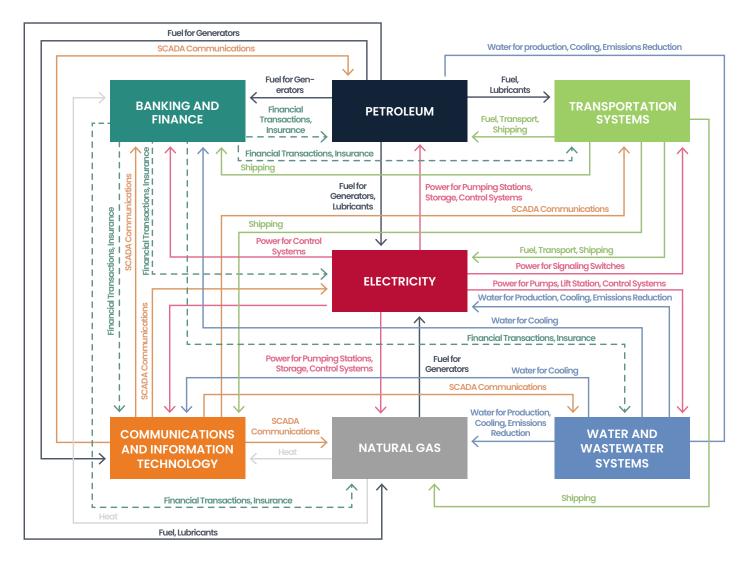
Whilst supply chain impacts are often largely outside of Council or community control the Hawkesbury businesses should be aware of and understand supply chain issues and develop strategies to improve resilience and reduce risk.

## Interdependency and interconnectedness of infrastructure systems and supply chains

Critical infrastructure and supply chains exist as an interconnected web of assets and systems that are dependent upon each other for continuation.

It is an inherent nature of any system that an impact on one part will trigger effects on all other connected parts in a ripple effect that can have large consequences comparative to the shock event. The more integrated and centralised a system is, the less resilient the system becomes to certain shocks.

A shock that effects the interconnected system of infrastructure and supply chains can expose vulnerabilities and inequities through society – particularly if disrupted for extended periods (national Resilience Taskforce, 2018)<sup>10</sup>. An example of just one electricity supply chain is displayed below.



#### Figure 16: Sample electricity supply interdependency model (Infrastructure Australia, 2021)

(this table was adapted from the Northern Beaches Resilience Strategy)

Infrastructure and supply chain resilience can be developed to ensure that service levels are adequate during shocks and disruptions through four principles:

- Resistance: Ability to withstand a shock (e.g. the ability of a road to survive a flood)
- · Reliability: Capability to perform and maintain operations in a variety of conditions
- Redundancy: The ability of a system to cope with the failure of one single component (e.g. back up water supplies, battery or generator systems in blackouts etc.)
- Response and Recovery: System design to enhance recovery from disruption (e.g. modularity for part replacement rather than complete re-installation)

For an in-depth analysis of Council's plan to ensure the Hawkesbury's infrastructure is resilient please refer to The Hawkesbury Asset Management Strategy and the Hawkesbury Climate Change Risk Assessment and Adaptation Action Plan.

# **Principles for determining Resilience investments**

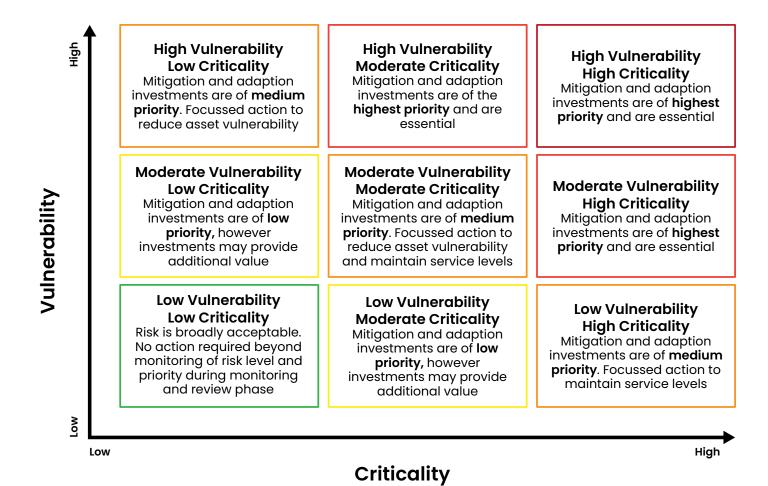
**Increased investment in risk reduction activities is a fiscally responsible approach to infrastructure** management leading to reductions in avoidable damages and recovery costs for the asset owner and for the community. This highlights that there is a financial benefit to focusing on anticipatory, mitigative and adaptive action.

Failure to appropriately invest in infrastructure will result in:

- Increase in insurance costs and liabilities
- · Increasing asset vulnerability to shocks and stresses
- Disruption to services typically the disruption will occur when most needed, during a time of crisis
- Underperforming assets unable to achieve a required or desired level of service
- Repair/replacement costs exceeding mitigation/adaptation costs
- Reduction in mitigation/adaptation opportunities as they are no longer available feasible.

For the purposes of community resilience generally, prioritisation of investment must consider, the vulnerability of the asset, the criticality of the asset to the resilience and wellbeing of the community and the likelihood of infrastructure disruption/failure. These principles apply equally to infrastructure resilience and broader resilience actions.





#### Figure 17: Resilience investment priority matrix

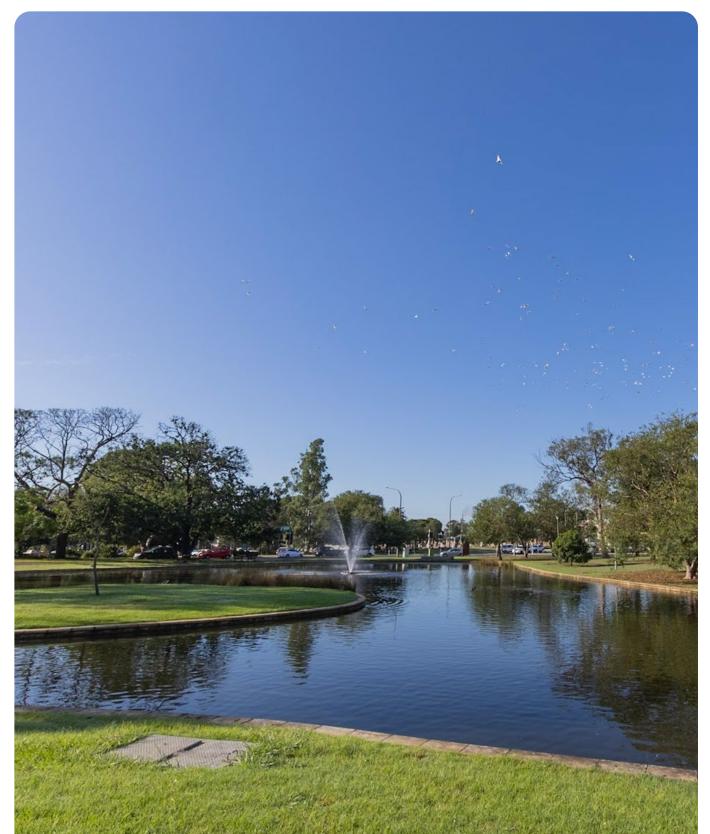
(this table was adapted from the Northern Beaches Resilience Strategy)



# **PART D: STRATEGIC DIRECTIONS**

## Vision:

"A strong, connected and prepared Hawkesbury that is empowered to endure, adapt and thrive"



# **VISION TO ACTION**

Hawkesbury City Council's Vision for this Strategy is:

#### "A strong, connected and prepared Hawkesbury that is empowered to endure, adapt and thrive"

The vision will require collaborative effort as its scope and scale is beyond the direct control of Council. Resilience requires collective action guided by effective strategy. This Strategy addresses risks and vulnerabilities not only that are immediate in nature but also aims to prepare for and respond to longterm future risks.

Council's strategy for collaborating towards the realisation of this vision is to focus on five core principled Strategic Directions that provide the foundation for positive change and advancement towards resilience.

The Strategic Directions establish broad principled guidance as to what is needed for the Hawkesbury to become more resilient and to improve community wellbeing. Actions are what Council controls or can influence, that will contribute towards their respective Strategic Directions and achievement of Council's vision.

These principles are viewed as collective efforts undertaken by a range of stakeholders from Federal and State Government agencies, Local governments, Community groups and private organisations, and individuals. Council can collaborate on these works and influence the direction they go in to contribute towards a more resilient Hawkesbury.

It must be recognised that Council is already working towards building resilience in the Hawkesbury. The existing strategic suite adopted by Council is complemented by The Strategy and The Strategy is in turn complemented by Council's existing strategies. The Strategy aims to become a connector, highlighting the importance that all of Council's strategy, operations and actions have towards resilience and community wellbeing.

The Strategy provides a Resilience Action Plan to articulate whole of Council action towards resilience. It is envisioned that this Strategy will align within and influence Council's Integrated Planning and Reporting framework and Delivery Program.

Actions will be given prioritisation based on resilience impact (Figure 17), type of action (direct, support, advocate) and will establish estimate time of completion. Given Council's delivery program is contained within a 4-year cycle actions will either specify a month and year over the coming 4 years or that actions are outside the scope of this delivery program.

# **FIVE STRATEGIC DIRECTIONS**

The Strategy identifies five strategic directions to strengthen resilience in the Hawkesbury LGA:

- Direction 1: Great Place to live
- Direction 2: Caring for Country
- Direction 3: Connected for strength
- Direction 4: Prepared and Informed
- Direction 5: Our Hawkesbury

These directions align with and build on those outlined in the Resilient Sydney Strategy 2025-2030, recognising that many of the challenges faced by the Hawkesbury are experienced across metropolitan Sydney.

The Strategy outlines how each direction is important within the unique local context of the Hawkesbury, bringing together the many actions and initiatives that Council is already undertaking to strengthen community resilience.

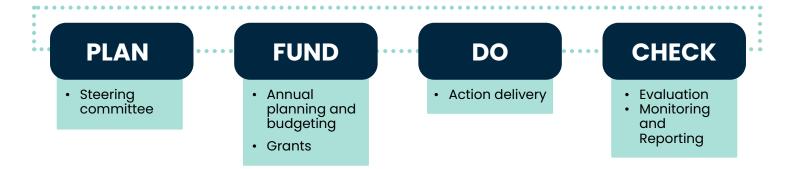
Under each direction we have identified the local resilience challenges and needs and have provide an action plan towards improving resilience.



# GOVERNANCE

Effective governance is critical to strategy or plan. This Strategy calls for the establishment of a **steering committee** tasked with overseeing the effective implementation of actions.

It must be clear that only those entities that provide significant contribution towards strategic actions should be invited to represent on the committee. Below details the stages of how governance influences the implementation.





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The Hawkesbury should have the social assets it needs to thrive. The community should be able to live, work and play comfortably and have equitable access to social services, transport, housing, education and employment opportunities.



As our Hawkesbury communities continue to grow and change it is important to plan for people-centred places that are equitable and liveable for all. This means ensuring that everyone has access to the housing, social services, jobs, facilities and networks that make it easier to thrive day to-day and to cope and recover in times of crisis.

The Hawkesbury LGA spans a large and diverse geographic area. While our towns and villages provide access to a range of services, some communities, including our outlying villages, are less well served by health services, public transport, jobs and public spaces for social connection.

Taking a place-based approach to planning will help to support the resilience of our communities across the region.

"A lot of people have moved to the Hawkesbury recently and they don't realise the extent to which flood events can impact people and that you can get cut off." - Hawkesbury community member

At the same time, the cumulative impacts of shocks and stresses as well as growth and change across our LGA are placing increased pressure on essential infrastructure and services, from parks and schools through to hospitals and roads.

Our community is also concerned that development is changing the character of our places and increasing the number of people at risk to natural hazards such as flooding.

In particular, our community told us that resilient infrastructure, access to transport and affordable, safe, diverse and appropriate housing choice is essential to the resilience of our community.

"A lot of areas in the region have no access to basic infrastructure, such as digital networks, telecommunications, transport, and health. These are crucial in times of emergencies." - Hawkesbury community member

### Data insights

All data is from the ABS 2021 Census<sup>4</sup> unless otherwise stated.

#### **Getting around**

- The Hawkesbury community is highly **dependent on cars** to get around. More than 95% of households own a car compared to 89% across Greater Sydney.
- Fixing and improving the resilience of our road network is our community's top priority for Council (Micromex Research survey, 2021)<sup>11</sup>.

#### Housing

- Our community is increasingly concerned about housing affordability, including for younger generations and key workers.
- We have a higher proportion of households experiencing rental stress (38%) compared to Greater Sydney (35%), and this is as high as 47% in South Windsor.

#### **Income and jobs**

• We have a relatively **low median household income**. The median household income is \$1,933 across the LGA and as low as \$1,369 in some suburbs, compared to \$2,099 in Greater Sydney.

#### Health

- Our community is ageing and has a high proportion of residents with a disability and/ or a longterm health condition.
- During disasters such as floods and bushfires some communities are cut off from essential services.

# Our 'Great Place to live' desired outcomes

Our Desired outcomes	Description
Plan and design places to withstand increased natural hazards	<ul> <li>The Hawkesbury needs to ensure its assets, spaces and places including homes, community centres, towns and facilities are resilient to natural hazards and can continue to support thriving communities before, during and after shock and stress events.</li> <li>Examples include: <ul> <li>Natural disaster planning</li> <li>Sustainable design standards</li> <li>Town Planning</li> <li>Social Infrastructure planning</li> <li>Infrastructure and connectivity</li> </ul> </li> </ul>
Improve the heat resilience of communities in Hawkesbury	<ul> <li>The Hawkesbury already experiences high exposure to heat relative to Metropolitan Sydney and will continue to experience increasingly severe and more frequent heatwaves. The Hawkesbury must respond to ensure our people, nature and economic continues to thrive.</li> <li>Examples include: <ul> <li>Heat consideration in development</li> <li>Sustainable design standards</li> <li>Urban Greening</li> <li>Rethinking energy reliance and planning</li> <li>Access to cool spaces and places</li> </ul> </li> </ul>
Increase and improve affordable rental Housing	<ul> <li>The Hawkesbury along with NSW and Australia is experiencing a cost-of-living crisis that requires an increase in the availability of affordable rental housing that is of a quality that allows people to thrive regardless of their economic situation.</li> <li>Examples include: <ul> <li>Affordable housing design standards</li> <li>Affordable Housing schemes</li> <li>Renting of spare rooms/guest houses/granny flats</li> <li>Review of development controls</li> </ul> </li> </ul>
Better connect communities with active and public transport	Community connections are critical to a thriving Hawkesbury. Connections can be social, physical or emotional but regardless to more connected we are to each other, our communities and our environment the more resilient the Hawkesbury becomes. Examples include: • Telecommunications • Physical infrastructure (roads etc.) • Community spaces • Access to community services • Quality bike paths and footpaths that are shaded, safe and appealing • Improved public transport options

Our Desired outcomes	Description
Create inclusive and welcoming public places	Public places are only as good as the value they bring to the community. By being welcoming and inclusive the whole community will realise and enjoy to full benefits of each public space. Community also benefits by becoming more connected, more socially cohesive and more socially equitable. Examples include:
	<ul><li>Maintaining and upgrading public assets</li><li>Installing disability appropriate equipment</li></ul>

- Traditional owner interpretation and art
- Art, stories and installations
- Sustainable design heat reduction, connection to nature etc.



# SDI: 'Great Place to live' Action Plan

											d design o withstand ad natural	Desired Outcome
											Moderate	Investment Priority
											Control	Sphere of influence
	Redbank Flood Study	Risk Management Plan	Hawkesbury Flood Study and	strategy	Infrastructure	Social	Control Plan	Urban Greening Strategy Development	Sustainability Strategy	Climate Change Risk Assessment and Adaptation Action Plan	Asset Management Strategy	Relevant adopted strategy/plans
Develop Social Infrastructure Strategic Action Plan	Trial of manhole level sensors in the sewer scheme to have greater visibility of incidental stormwater infiltration during rain events	Installation of back-up generators/plug-in generator provisions on pump stations	Sewage pump station upgrade program to raise height above 1% flood level	Introduce Industrial chapter into DCP	Introduce Urban Heat chapter into DCP	Review bushfire chapter in DCP	Introduce Flood chapter into DCP	Build and maintain regional and state level collaborations	Develop McDonald River Flood Study	Develop Redbank Flood Risk Management Plan	Develop Infrastructure Resilience Study	Action/s
Unfunded Opportunity	Operational Plan	Operational Plan	Operational Plan	Operational Plan	Operational Plan	Operational Plan	Operational Plan	Memberships: Sustainability Advantage, Resilient Sydney, WSROC - Operational Plan	Operational Plan	Operational Plan	Grant	Committed Resourcing -
Asset Systems & Planning	Wastewater	Wastewater	Wastewater	Strategic Planning	Strategic Planning	Strategic Planning	Strategic Planning	Senior Leadership Team	Strategic Planning	Strategic Planning	Asset Systems & Planning	Responsibility

Desired Outcome	Investment Priority	Sphere of influence	Relevant adopted strategy/plans	Action/s	Committed Resourcing –	Responsibility
Improve the heat resilience of communities in Hawkesbury	High	Control	Urban Greening Strategy Climate Chanae	Continue Get Ready program	Unfunded Opportunity	Community Partnerships and Planning
			Risk Assessment and Adaptation Action Plan	Introduce Urban Heat DCP Chapter	Operational Plan	Strategic Planning
			Environmental Sustainability			
			Strategy Asset Management Strategy	Build and maintain regional and state level collaborations	Memberships: Sustainability Advantage, Resilient Sydney, WSROC - Operational Plan	Senior Leadership Team
			Develonment			
			Control Plans Communications	Continue extended hours on public buildings (Library, Aquatic centres etc.)	Operational Plan	Senior Leadership Team
			and Engagement Strategy	Identify tree planting opportunities	Unfunded Opportunity	City Services / Strategic Planning
Increase and improve affordable rental Housing	Moderate	Influence	Environmental Sustainability Strategy	WSPP Affordable Housing Scheme??	Operational Plan	Strategic Planning
			Development Control Plans			
Better connect communities with active and public transport	High	Control	Active Transport Plans	Advocacy to NSW State Government for public transport	Unfunded Opportunity	Council Officers
		Influence/ Concern	strategy	Implement the Western Sydney Infrastructure Grants Project – Rickaby's Creek and Kurrajong to Kurmond projects	Operational Plan	Western Sydney Infrastructure Grants Team
			Asset Management Strategy	Voluntary Planning Agreements consider active transport connectivity	Unfunded Opportunity	Strategic Planning
			Communications and Engagement Strategy	Continued role of Road Safety Officer	Operational Plan / Grant	Community Planning & Partnerships

							Create inclusive and welcoming public places	Desired Outcome
							Moderate	Investment Priority
							Control	Sphere of influence
	Dratt Cultural Plan	Strategy	Environmental Sustainability	Heritage Strategy	Aboriginal Cultural	Disability Inclusion Action Plan	Asset Management Strategy	Relevant adopted strategy/plans
Continue to invest in communications to welcome visitors at the Visitor Information Centre	Review of strategic implementation of Community Halls	Develop Social Infrastructure Strategic Action Plan		Develop a Hawkesbury Interpretation Strategy Unfunded Opportunity			Western Sydney Infrastructure Grants – Wayfinding	Action/s
Operational Plan	Unfunded Opportunity	Unfunded Opportunity		Unfunded Opportunity			Operational Plan	Committed Resourcing –
Economic Development / Corporate Communications	Asset Systems & Planning	Asset Systems & Planning	Planning & Partnerships	Strategic Planning/ Community			Western Sydney Infrastructure Grants Team	Responsibility



# **Direction 2: Caring for Country**



Caring for nature and living sustainably. Understanding that we are all a part of an ecosystem and must behave accordingly. Take care of Country and Country will take care of you.



Caring for Country is a philosophy embedded in First Nations culture and expressed from a First Nations perspective. It is analogous to the western use of the terms "living sustainably" and means that we are all connected and interrelated. Country can mean natural features, air, water, plants, animals, soil but can also mean people, wellbeing and prosperity all embodied in the one entity of Country.

Caring for this Country then requires understanding that interconnectedness between nature, people and prosperity and acting and behaving in ways that benefit all.

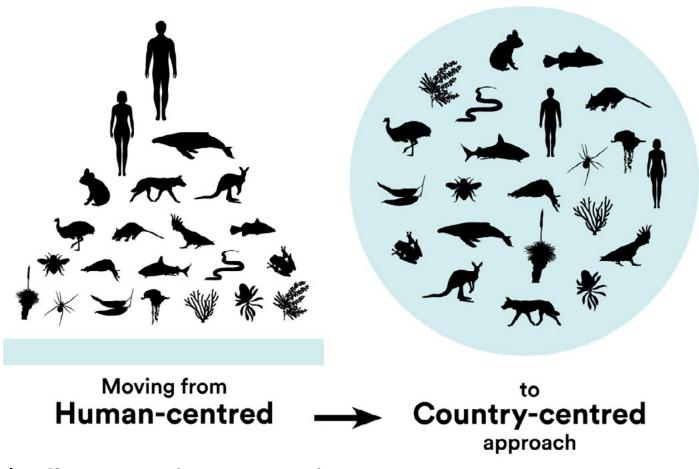
The impacts of not Caring for Country can be understood through western- sciences current understanding of Climate Change. People have prioritised industrialisation over sustainable growth and our economies have been built on a foundation of burning fossil fuels for energy. This has led to increased carbon in the atmosphere which has impacted the climate negatively for humans. We can confidently say we have not taken care of Country and are now feeling the impacts.

Another example closer to home is waterway pollution leading to decreased farm productivity, commercial and recreational fishing, impacted natural areas and decrease in biodiversity. By taking care of our waterways, we improve our resilience and have more capacity to thrive.

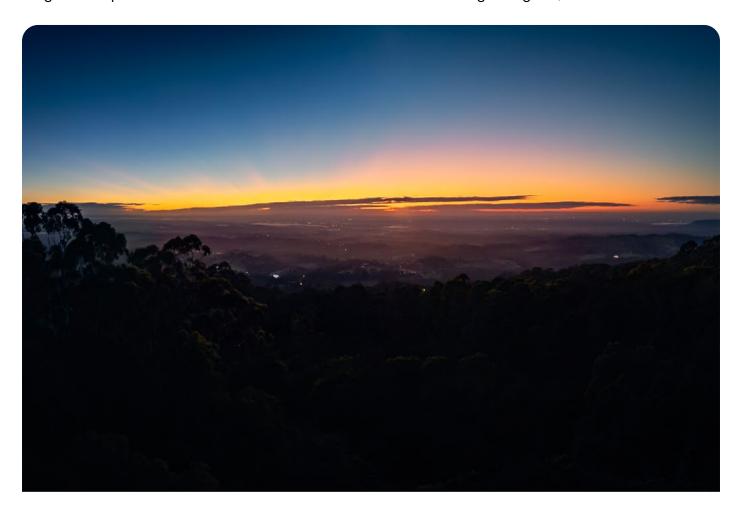
By harnessing this philosophy, we can focus efforts of resilience towards the repair and improvement of nature and our social connection to nature for the betterment of community, people and economic prosperity.

Having good biodiversity and healthy natural areas is only one factor that contributes towards thriving resilience. It is the connection between people and nature at a deep and meaningful level that is of critical importance to resilience and where the greatest benefits lie. Through connection with nature, it is well documented that peoples mental and physical wellbeing improves (Barragan-Jason et al., 2023)<sup>12</sup>, economic productivity increases (Dasgupta, 2010)<sup>13</sup> and communities begin to thrive.

Finally through adoption of a strategic direction that is directly influenced by First Nations philosophy and of critical concern to The Hawkesbury Traditional Owners and Aboriginal community, people of all groups and communities can better understand and communicate with each other and thrive.



**Figure 18: Human-centred or Country-centred.** Diagram adapted from German architect Steffen Lehmann's 'Eco v Ego' diagram, 2010



# Data insights

All data is from the ABS 2021 Census<sup>4</sup> unless otherwise stated.

#### **Bushfires**

 The 2019-20 bushfires saw 50% of our LGA burnt prompting a state of emergency. It is estimated that days with severe fire danger rating will increase from by 30% to 70% by 2030 (Hawkesbury Town and Village Place Plans)<sup>15</sup>.

#### Income and jobs

• We have a relatively **low median household income**. The median household income is \$1,933 across the LGA and as low as \$1,369 in some suburbs, compared to \$2,099 in Greater Sydney.

#### **Storms and flooding**

- The Hawkesbury-Nepean system has the highest flood risk in NSW. In 2022 our community experienced the largest flood in 44 years. With bad flooding already hitting the region in 2020 and 2021, this flood compounded impact on our community, environment and infrastructure.
- Expanding urban development means that flood exposure will increase in the future. Climate change may further increase flood risk as it has the potential to increase the severity and frequency of flooding.

#### Drought

 In June 2018, 99% of NSW was under drought conditions (AdaptNSW 2023). Long periods of drought and limited water availability can increase risks of other natural disasters such as bushfires.

# Our 'Caring for Country' desired outcomes

Our Desired outcomes	Description
Embed First Nations knowledge and practices in land management	Land Management requires deep understanding of ecosystems and the interconnected relationships between land, water, flora and fauna as well as the impacts from people and climate. First Nations have a deep understanding forged through 60,000+ years of ongoing connection and communion with Country. Cultural practice shaped Australia and its landscapes making it essential to incorporate cultural knowledge and practice into land management.
	Examples include:
	Development of Hawkesbury Reconciliation Action Plan
	<ul> <li>Engagement with Aboriginal community through focus groups and strategy workshops</li> </ul>
	Collaboration on Cumberland Plain Conservation Plan - Caring for Country Strategy implementation
	Collaboration on development of Hawkesbury Nepean River System     Coastal Management Program
	Collaboration on development of the Hawkesbury Cultural Restoration     Strategy (DPI – Fisheries)
Connect and protect green and blue places	Green and Blue spaces' value is not only in their abundance or quality but also in how connected they are. Biodiversity requires connection to flourish. Healthy Country is connected Country.
	Examples include:
	Implementation of our Urban Greening Strategy
	Continue to develop and implement the Hawkesbury Nepean River System     Coastal Management Program
	<ul> <li>Implementation of our Environmental Sustainability Strategy including updates to LEP/DCP</li> </ul>
Increase tree canopy and habitat	Tree Canopy and habitat are indicators of environmental health relating to mitigation of Urban Heat, participation in active transport, connection to nature and increased biodiversity. Increasing tree canopy and habitat is important for the Hawkesbury and is the everyone's responsibility.
	Examples include:
	Implementation of our Urban Greening Strategy
	Development of a Nature Positive Strategy
	Updating our Local Environmental Plan (LEP) and Development Control     Plan (DCP) with nature provisions as per actions in our adopted     Environmental Sustainability Strategy
	Implementation of our Environmental Sustainability Strategy.
	<ul> <li>Greater Sydney Landcare<sup>16</sup> has planted 20,000+ new trees in public and private spaces in the Hawkesbury in 2024 with plans for 30,000 more</li> </ul>
	Landholders are improving habitat corridors and shaded areas for their stock and native fauna.

Our Desired outcomes	Description
Increase biosecurity awareness	Biosecurity is an increasing risk within a globalised world. Poor biosecurity poses a risk to our health, our economy and our environment. Pests, diseases and ecosystem imbalance and are associated with biosecurity. Council recognises this risk and will work collaboratively to improve Hawkesbury biosecurity resilience.
	Examples include:
	<ul> <li>Collaborate with State agencies, neighbouring Local Governments, land owners and relevant community stakeholders to improve biosecurity</li> </ul>
	<ul> <li>Identify key biosecurity issues for the Hawkesbury and their associated impacts</li> </ul>
	Communicate the benefits of improving biosecurity
Secure the future of Greater Sydney's water supply	Australia is a dry continent. Increasing population growth, climate change, new technologies and decentralisation pose water supply challenges. Access to clean drinking Water is an essential for life and for people to thrive. Efforts to secure water supply for the future is a necessity
	Examples include:
	<ul> <li>Collaborate with Sydney Water and other relevant stakeholders to address regional water concerns</li> </ul>
	<ul> <li>Develop and Implement the Hawkesbury Nepean River System Coastal Management Program</li> </ul>
	Implement Hawkesbury's Net Zero Emissions and Water Efficiency Strategy
Support electrification and the energy transition	Electrification is a critical step towards reducing climate change driving carbon emissions. Electrification can also have a range of other benefits such as reducing cost of living, improving resilience and securing the energy needs for all communities. Efforts are being taken on a global, national, regional, local and individual scale to electrify and transition away from fossil fuels.
	Examples include
	<ul> <li>Implementation of Hawkesbury's Net Zero Emissions and Water Efficiency Strategy</li> </ul>
	NSW Net Zero Plan
	Installation of solar systems and batter storage
	Electric Vehicles
	Electric stove top and heat/cooling
Improve the sustainability of Hawkesbury's food and agricultural systems	Similar and connected to water security and biosecurity. Food and agricultural systems are straining to provide adequate and affordable food for a growing population in increasingly difficult conditions. Action must be taken to improve the sustainability of our food systems.
	Examples include:
	Develop Sustainable Food Systems Strategy
	Transitions towards sustainable farming practices
	Agritourism SEPP changes
	Circular economy opportunities
	Buying local – farm shops etc.

#### Our Desired outcomes Description

Collaborate and advocate for solutions to Greater Sydney's waste crisis Sydney is increasingly aware of the growing waste crisis. Sydney is predicted to run out of landfill space by 2030. Sydney must reduce its waste now and find alternative resource recovery solutions to ensure a sustainable future.

Examples include:

- · Implement Council's various waste and resource recovery strategies
- Strengthen Council's procurement to become more circular and influence our supply chain to reduce and eliminate waste
- Support local business to reduce waste and participate in a more circular economy
- Repair damaged items rather than throw away and buy new (clothes, appliances, IT etc.)
- Circular economy opportunities
- NSW EPA mandated Food Organics Garden Organics (FOGO) rollouts



SD2: 'Carir	SD2: 'Caring for Country' Action Plan	try' Action I	Plan			
Desired Outcome	Investment Priority	Sphere of influence	Relevant adopted strategy/plans	Action/s	Committed Resourcing -	Responsibility
Embed First Nations knowledge and practices in land	High	Control/ Influence	Environmental Sustainability Strategy	Develop Hawkesbury Reconciliation Action Plan	Operational Plan	Community Partnerships and Planning
management			Aboriginal Cultural Heritage Study	Establish Aboriginal Advisory Committee	Grant	Community Partnerships and Planning
				Cumberland Plains Conservation Plan – Caring for Country collaboration	Grant	Community Planning & Partnerships / Strategic Planning
				Development of Hawkesbury Nepean River System Coastal Management Program	Delivery Plan/ Operational Plan – collaboration with Hills Shire Council, Hornsby Shire Council, Ku-Ring-Gai Council, Central Coast Council and Northern Beaches Council	Strategic Planning / City Services
				Develop Hawkesbury Cultural Plan	Operational Plan	Arts and Culture

Desired Outcome	Investment Priority	Sphere of influence	Relevant adopted strategy/plans	Action/s	Committed Resourcing –	Responsibility
Connect and protect green and blue places	Moderate	Control/ Influence	Urban Greening Strategy	Undertake Street tree inventory	Operational Plan	Strategic Planning
			Environmental Sustainability Strateay	Develop Hawkesbury Green Grid	Unfunded Opportunity	Strategic Planning
			Development Control Plan Stormwater Asset Management Plan	Develop Hawkesbury Nepean River System Coastal Management Plan (CMP)	Delivery Plan/ Operational Plan - collaboration with Hills Shire Council, Hornsby Shire Council, Ku-Ring-Gai Council, Central Coast Council and Northern Beaches Council	strategic Planning / City Services
				Collaborate with NSW, regional and local partners on waterway coordination	Unfunded Opportunity	strategic Planning / City Services
				Rollout of CCTV stormwater inspection program	Operational Plan	Asset Systems and Planning
				Continue Water Quality Monitoring program	Operational Plan	City Services
Increase tree canopy and habitat	High	Control	Urban Greening Strategy	Develop Nature Positive Strategy	Unfunded Opportunity	Strategic Planning
			Development Control Plans	Collaborate with Greater Sydney Landcare	Delivery by Greater Sydney Landcare	strategic Planning / City Services
			Environmental Sustainability Strategy	Develop Koala Management Strategy	Operational Plan	Strategic Planning
				Develop Hawkesbury Nepean River System Coastal Management Program	Delivery Plan/ Operational Plan - collaboration with Hills Shire Council, Ku-Ring-Gai Council, Ku-Ring-Gai Council, central Coast Council and Northern Beaches Council	strategic Planning / City Services

				Secure the future of Greater Sydney's water supply					Increase biosecurity awareness	Desired Outcome
				Moderate					Low	Investment Priority
				Influence/Concern					Control/ Influence/ Concern	Sphere of influence
				Net Zero Emissions and Water Efficiency Strategy Environmental Sustainability Strategy						Relevant adopted strategy/plans
Review Net Zero Emissions and Water Efficiency Strategy	Encourage water smart choices	Improve water treatment capabilities	Increase Council usage of recycled water	Collaborate with NSW Government agencies (E.g. Sydney Water) and other relevant stakeholders	Continue facilitating Bushcare	Continue to Co-fund HRCC	Education program on invasive species and impacts	Collaboration with local landholders	Collaboration with Regional and State Agencies E.g Greater Sydney Local Land Services, Department of Primary Industries, Greater Blue Mountains World Heritage Alliance	Action/s
Unfunded Opportunity	Unfunded Opportunity	Operational Plan	Operational Plan	Unfunded Opportunity	Operational Plan	Operational Plan	Unfunded Opportunity	Unfunded Opportunity	Unfunded Opportunity	Committed Resourcing –
Strategic Planning	Strategic Planning	Wastewater	Wastewater	Wastewater / Strategic Planning	City Services	Council	Strategic Planning / City Services	Strategic Planning / Economic Development	Strategic Planning / City Services	Responsibility

Desired Outcome	Investment Priority	Sphere of influence	Relevant adopted strategy/plans	Action/s	Committed Resourcing –	Responsibility
Support electrification and the energy	High	Control/Influence/ Concern	Net Zero Emissions and Water Efficiency	Council fleet transition to Electric Vehicles	Operational Plan	Strategic Planning / Fleet
transition			Strategy Environmental	Electrification of Council assets	Operational Plan	Asset Systems & Planning / Strategic Planning
			sustainability strategy	Encourage electrification in community	Operational Plan	Strategic Planning
				Advocate to and consult with Federal and NSW government	Unfunded Opportunity / Grant	Strategic Planning
				Sustainability Dashboard Development	Operational Plan	Strategic Planning / Business Transformation & Customer Experience
				Floodlighting LED upgrades	Unfunded Opportunity	Facility Operations / Asset Systems & Planning / Strategic Planning
Improve the sustainability of Hawkesbury's food and agricultural systems	Low	Influence	Environmental Sustainability Strategy	Develop Sustainable Food Systems Strategy	Unfunded Opportunity	Strategic Planning

						Collaborate and advocate for solutions to Greater Sydney's waste crisis	Desired Outcome
						High	Investment Priority
						Influence	Sphere of influence
Litter Prevention Plan	Landfill Management Strategy	FOGO Transition Plan	Sustainable Materials Strategy	Western Sydney Regional Waste and	Sustainability Strategy	Waste and Resource Recovery Strategy	Relevant adopted strategy/plans
ARC-Ento trial at WMF	Open WMF to neighboring LGAs for recoverable items		Investigate Circular economy initiatives at WMF	circular economy	Collaborate on	Review procurement	Action/s
Operational Plan	Operational Plan		Grant	Advantage	Operational Plan	Unfunded Opportunity	Committed Resourcing -
Resource Recovery	Resource Recovery		Resource Recovery		Strategic Planning /	Senior Leadership team	Responsibility

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# Direction 3: Connected for strength



Our communities are connected. Hawkesbury residents from all walks of life are empowered to work together, prepare, adapt and thrive.



Research shows that social capital is critical to a community's wellbeing. (Gilbert et al, 2013)<sup>18</sup>. The COVID-19 pandemic has taught us how important our social connections are in dealing with crisis events and supporting our individual and collective resilience.

"We love living out here and people really pull together, we have good neighbours. It's a bit of heaven on earth." - Hawkesbury Community Member

The Hawkesbury community already has some strong community connections and many people volunteer their time and energy to support each other through crises and recovery from traumatic events. However, our community is fatigued from cumulative disasters, with some telling us they don't have much mental capacity to organise community connection activities and events. We also heard that some groups are less connected to the community, including people who rent or are new to the area. Some interview participants told us there is a need for more community centres in the LGA to provide residents with access to services, information and a safe space for community connection. At the same time, we have a range of services supporting our community – but they are not always easy to access.

Individuals who are disadvantaged and those facing complex situations have expressed challenges in effectively accessing available support services. The following cohorts face extra barriers in connecting with their community:

- Older people are more likely to face health issues, social isolation and technological barriers.
- People with disability are more likely to face physical barriers along with stigma and discrimination.
- Culturally and linguistically diverse community members are more likely to face language and cultural barriers and discrimination.
- People living with mental health conditions are more likely to face social isolation and stigma.

Our goal is to facilitate connections between individuals and tailored services that address their unique needs.

Existing and deepening inequalities in our society has placed the need to look after those groups who may be particularly vulnerable to effects of shocks and stresses front and centre of resilience planning.

## Data insights

All data is from the ABS 2021 Census<sup>4</sup> unless otherwise stated.

#### Volunteering

• The Hawkesbury has a **high proportion of volunteers** (18.4%), however, this is declining as our community ages and people are increasingly time-poor.

#### **Renters & new residents**

- Nearly one in four households are **renting** their home (23%).
- A growing number of people are moving to the Hawkesbury, including to the North West Growth Area on our southeast border near Windsor and Richmond.

#### **Diversity**

 Our community is home to a growing number of people **born overseas** (+4,900 since 2011) including an increasing proportion speaking a language other than English at home.

# Our 'Connected for strength' desired outcomes

Our Desired outcomes	Description
Embed dignity principles in leadership and engagement	Dignity principles are the idea that all people have inherent value and worth, and that actions and conditions should respect that value. This is critical for nurturing social connectedness.
	<ul> <li>Examples include:</li> <li>Understanding and acknowledging differences in background and needs</li> <li>Privacy and confidentiality</li> <li>Empowering informed decision making</li> <li>Accessible communication</li> <li>Cultural sensitivity</li> <li>Inclusivity and participation</li> </ul>
Replenish resilience through creative and cultural expression	<ul> <li>Cultural expression nurtures sharing, understanding, connectedness and creativity. These are all highly important in terms of resilience and creating a thriving community. Empowering cultural expression brings people closer together and helps us understand the world from different perspectives</li> <li>Examples include: <ul> <li>Development of the Cultural Plan</li> <li>Art exhibitions</li> <li>Cultural events (NAIDOC, Lunar New Year festivals, Agricultural shows etc.)</li> <li>Empowering Traditional Owner cultural practice on public land e.g. cultural burns, thinning, basket weaving, materials harvesting, food production etc.</li> </ul> </li> </ul>
Support First Nations self-determination	Town art installations and story telling     Article 1 of the International Covenant on Civil and Political Rights states "All     peoples have the right of self-determination. By virtue of that right they freely     determine their political status and freely pursue their economic, social and     cultural development" <sup>17</sup> . First Nations people globally have had this self-     determination impacted by colonisation. Governments including Australian     Federal, State and Local, must now actively work to ensure First Nations     Australian's are empowered with self-determination.     Examples include:
	<ul> <li>Participation in decision making</li> <li>Preservation of group identities and cultures</li> <li>Facilitation and support for Aboriginal governance structures</li> <li>Empowering informed decision making</li> </ul>

Our Desired outcomes	Description
Facilitate community- led action	Governments and Council are not responsible for providing every service and everything a community needs to thrive and be resilient. Community led action is incredibly powerful in creating community strength and connection whilst also servicing the needs of the community.
	Examples include:
	<ul> <li>Facilitating greater collaboration amongst service providers and non- government organisations through inter-agency networks and forums to better respond to the needs of our communities</li> </ul>
	• Promoting and sharing information about service providers, community organisations and volunteering opportunities through a range of channels
	Empowering and building capacity and leadership of our community, including through volunteer and community group support
	Funding community-led initiatives that strengthen social connection and resilience, including through the community sponsorship, events sponsorship and other community grant programs
	Volunteerism
	Neighbourhood events
	Not for profit service providers
	Community organisations
Engage children and young people in decision-making about the future and	Involving young people in decision-making can lead to better outcomes for young people and society. It can also help to build trust in government and strengthen accountability. It speaks to the legacy that decision made now can have on future generations.
their wellbeing	Examples include:
	Youth forums and advisory boards
	Youth co-design
	Leadership programs
	Youth empowerment
Measure and value social capital	Social Capital is the networks of relationships among people who live and work in a particular society, enabling that society to function effectively. Social Capital requires a surplus rather than the bare minimum in order for a community to thrive.
	Examples include:
	Social interaction
	Collective goals
	Neighbourhood cohesion
	Network diversity, size, density
	Civic participation
	• Trust
	Relationships

Our Desired outcomes	Description
Facilitate inclusive access to social infrastructure	Social infrastructure are the facilities and services that support a community's well-being and development. Inclusive access to social infrastructure is important to be a fair and equitable society.
	Examples include:
	Providing spaces and places that facilitate community connections and safe places to improve place-based access to services, mental health and wellbeing support
	Providing Hawkesbury Community Hubs in local villages to mitigate long transport times
	Delivering and facilitating community activities and events across the entire Hawkesbury LGA to support health, wellbeing and connection

- outcomes
  Working in partnership with government and community organisations to improve services and facilities for disadvantaged at-risk groups to build stronger, more cohesive communities
- Ensuring social infrastructure access does not disadvantage a particular person, group or community.



<b>Action Plan</b>	
for strength'	
SD3: 'Connected fo	

Desired Outcome	Investment Priority	Sphere of influence	Relevant adopted strateav/plans	Action/s	Committed Resourcing –	Responsibility
Embed dignity principles in	Moderate	Control/ Influence	Disability and Inclusion Action	Develop Hawkesbury Reconciliation Action Plan	Operational Plan	Community Partnerships & Planning
leadership and Engagement			Plan	Establish Aboriginal Advisory Committee	Grant	Community Partnerships & Planning
				Cumberland Plains Conservation Plan – Caring for Country collaboration	Grant	Community Partnerships & Planning / Strategic Planning
				Development of Hawkesbury Nepean River System Coastal Management Plan	Operational Plan	Strategic Planning
Replenish resilience	Low	Control/ Influence	Draft Cultural Plan	Review Plans of Management to allow Cultural practice	Unfunded Opportunity	Strategic Planning
through creative and cultural				Support cultural events and practices	Operational Plan	Arts and Culture
expression				Cultural programs aligned with building resilience - art exhibitions etc.	Operational Plan	Arts and Culture
				Implement Community Recovery Hubs during emergencies	Unfunded Opportunity	Community Partnerships & Planning
				Continue and expand the Community Hubs program	Grant	Community Partnerships & Planning
				Facilitate exhibitions that allow community members to share their stories and artworks, fostering a sense of ownership and connection	Operational Plan	Arts and Culture
				Organise workshops that use art and storytelling to help participants process experiences and build coping strategies.	Operational Plan	Arts and Culture
				Develop traveling cultural programs to reach undeserved areas, ensuring broader community engagement.	Unfunded Opportunity	Arts and Culture
Support First Nations self-	Moderate	Control/ Influence/	Aboriginal Cultural Heritage	Develop Hawkesbury Reconciliation Action Plan	Operational Plan	Community Partnerships & Planning
determination		Concern	Study	Establish Aboriginal Advisory Committee	Grant	Community Partnerships & Planning

												action	Facilitate community-led	Desired Outcome
													Moderate	Investment Priority
													Control/ Influence	Sphere of influence
								6.000	Communications and Engagement Strateav	Strategy	Infrastructure	Strategy	Asset Management	Relevant adopted strategy/plans
Support the community services sector	Hold annual YouthFest event	Hold annual Youth Forum event	Reviewing Service Level Agreements with community groups	Continue Bushcare and Community Nursery Program	Support the Club Grants program	Review community grants and events sponsorship programs	Develop a Volunteering Strategy	Provide quality community spaces	Implement Communications and Engagement Strategy	Hi Neighbour Program	Review current committees	Identify community leaders	Continue and expand Community Hubs Program	Action/s
Operational Plan	Operational Plan / Grant	Operational Plan	Operational Plan	Operational Plan	Operational Plan	Operational Plan	Operational Plan	Grant - WSIG	Operational Plan	Operational Plan / Grant	Operational Plan	Unfunded Opportunity	Grant	Committed Resourcing –
Community Partnerships & Planning	Community Partnerships & Planning	Community Partnerships & Planning	Community Partnerships & Planning	City Services	Community Partnerships & Planning	Community Partnerships & Planning	Community Partnerships & Planning	Western Sydney Infrastructure Grants team	Corporate Communications & Events	Community Partnerships & Planning	Governance & Risk	Community Partnerships & Planning	Community Partnerships & Planning	Responsibility

Desired Outcome Investment Priority	Investment Priority	Sphere of influence	Relevant adopted strategy/plans	Action/s	Committed Resourcing –	Responsibility
Engage children and young	Low	Control/ Influence	Communications and Engagement	Hold annual Youth Forum Event	Operational Plan	Community Partnerships & Planning
people in decision-making about the	_		Strategy	Hold annual YouthFest event	Operational Plan	Community Partnerships & Planning
future and their wellbeing	_		Waste and Resource Recoverv	Support youth services sector	Operational Plan	Community Partnerships & Planning
	_		Strategy	Implement Communications and Engagement Strategy	Operational Plan	Corporate Communications & Events
	_			Continue to hold School Leadership Program	Operational Plan	Corporate Communications & Events
				Continue Waste Education Incursion Program in Schools and Early Learning Centres	Operational Plan	Resource Recovery
Measure and value social capital	Moderate	Control	Community Strategic Plan Social	Establish baseline social capital	Unfunded Opportunity	Community Partnerships & Planning / Strategic Planning / Business Transformation & Customer Experience
			Strategy	Incorporate social capital alignment or outcomes across corporate processes (e.g. reports / grant considerations / business cases)	Unfunded Opportunity	Community Partnerships & Planning / Strategic Planning / Business Transformation & Customer Experience
				Gather evidence and report on changes in social capital over time	Unfunded Opportunity	Community Partnerships & Planning / Strategic Planning / Business Transformation & Customer Experience

			Facilitate inclusive access to social infrastructure	Desired Outcome
			High	Investment Priority
			Influence	Sphere of influence
Active Transport Action Plan	Draft Cultural Plan	Disability Inclusion Access Plan	Asset Management Strategy	Relevant adopted strategy/plans
	Upgrade public toilets in alignment with Changing Places Program		WSIG – Oasis and Richmond Swimming Centre	Action/s
	Unfunded Opportunity		Grant	Committed Resourcing –
	Unfunded Opportunity Community Partnerships & Planning		WSIG Team	Responsibility



# Direction 4: Prepared and Informed



# Every member of our community understands the risks they face and is empowered to work together to prepare for and recover from shocks events.

The importance of a community that is aware and prepared for shocks and stresses cannot be overstated. We know from recent experiences and particularly from the Black Summer bush fires, that the ability to protect lives and properties are contingent on the community's capacity for planning ahead and supporting each other to respond in times of crises.

The community told us they want to see more education programs and information available about resilience and shocks, including for residents who are new to the Hawkesbury area and people who are renting and less likely to be prepared for emergencies.

Moreover, the community expressed a strong call for Council to leverage local knowledge and experiences when planning for shocks. We can all reflect on the past to better understand and plan for the future. This can include intergenerational information exchanges from those who have lived their whole lives in the LGA, to implementing Indigenous knowledge through practices such as cultural burning.

"One of our strengths is the knowledge of past experiences and ways of planning in relation to those experiences" - Hawkesbury Community Member

"The Bilpin community was very well prepared for the Gospers Mountain fire. There was preparedness by individuals on their own properties, neighbours helping neighbours and 'pod' armies (utes with pods and firefighters). These were all essential. The Bilpin Hall upgrades also provide a safer place for the older folk to gather for support in emergency times." - Hawkesbury Community Member

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Prepared, Informed and Ready disaster.hawkesbury.nsw.gov.au

### **Data insights**

All data is from the ABS 2021 Census<sup>4</sup> unless otherwise stated.

#### **Community preparedness**

 Less than 40% of survey respondents feel their household is prepared for emergencies. Just 12% think their community and neighbourhood are prepared.

# Council's emergency response

 A 2021 community survey found that 75% of residents say that Council responded well to the 2019/2020 bushfires and 2021 floods. Communication was highlighted as the most important role for Council in any future emergencies, with residents relying on Council to be a trusted provider of up-to-date information and alerts.

# Our 'Prepared and Informed' desired outcomes

Our Desired outcomes	Description
Embed people-centred emergency planning	<ul> <li>Emergency planning needs to consider the specific needs and behaviours of the people that it is planning to protect and manage in an emergency event. This is important not only for responding to the event but also resilience planning and recovery.</li> <li>Examples Include: <ul> <li>Empowering and engaging with our community by providing easy-to-understand information about disasters and preparedness, including via our Disaster and Emergency Dashboard and Prepared Informed and Ready Pages and Program</li> <li>Multi-language and inclusive access to information</li> <li>Community co-design and engagement in resilience and emergency planning.</li> </ul> </li> <li>Advocating to the Federal and State Government and telecommunications companies on behalf of communities to improve telecommunications infrastructure and reduce blackspots, prioritising high risk areas and along evacuation routes</li> </ul>
Research community preparedness and support coordinated campaigns	<ul> <li>Understanding how prepared our community is, is necessary to analyse gaps that exist and plan for increased preparedness. It also helps to inform coordinated programs that seek to improved community preparedness creating improve community outcomes and better returns on investment.</li> <li>Examples Include: <ul> <li>Working with services to distribute information about disaster risks and preparedness to renters and social housing residents</li> <li>Conducting annual preparedness survey and tracking improvements over time</li> <li>Bringing community preparedness information to our community in the locations where they are such as shopping centres, chemists and medical facilities.</li> <li>Get Ready resources and education programs</li> </ul> </li> </ul>
Coordinate and encourage volunteering	<ul> <li>Hawkesbury has a strong cohort of volunteers in a range of areas which all contribute to strengthening community resilience. Hawkesbury should continue to build on this strength and ensure volunteering is vibrant, diverse and coordinated.</li> <li>Examples include: <ul> <li>Volunteer coordination and networks</li> <li>Increasing volunteer numbers and diversity</li> <li>Youth volunteering</li> <li>Preparing for spontaneous volunteering</li> <li>Incentivising volunteering</li> </ul> </li> </ul>

Our Desired outcomes	Description
Improve collaboration to be better prepared for emergencies	Collaboration is critical for resilience and a thriving community and starts with trust and relationships. Improvements in collaboration makes for improved emergency response and improved resilience and recovery
	Examples include:
	<ul> <li>Working with local businesses to support them to bounce back, prepare and adapt, including business continuity planning and the delivery of the Business Recovery Plan</li> </ul>
	Planning and advocating for longer term recovery funding acknowledging that our communities experience cumulative and compounding events
	<ul> <li>Linking community groups to Emergency Services to build trust and relationships</li> </ul>
	Creating community service networks
	Ensuring cohesive visions and actions between community, resilience and emergency service organisations.
Establish an emergency warning and information	Early warning systems that are reliable and trusted are invaluable in emergency situations. These systems need to be a source of truth, accurate, reliable and accessible to all community.
system that is	Examples include:
accessible, accurate and trusted	Hawkesbury Emergency Dashboard
	NSW Hazards Near Me
	Bureau of Meteorology
Identify and engage community leaders in resilience and emergency planning and improve community leadership	Community leadership can be a literal life saver in some communities particularly in the Hawkesbury. Community leaders are trusted, knowledgeable and connected. Often there is only 1 or 2 leaders that a community looks to in an emergency. If they are not available the community is at increased risk. Making sure there is increased community leadership mitigates this and strengthens existing leaders.
redundancy	Examples include:
	Connecting leaders across communities
	Connecting leaders to emergency planners and services
	Nurturing new community leaders
	Providing support to existing leaders

#### Future 'Get Ready' initiatives

- Improve equity of access to information for everyone including newcomers, people from culturally diverse backgrounds and people with disability
- Support or deliver tailored programs to work with volunteers, community, disability and aged services to be able to work directly with clients around preparedness and resilience building as trusted persons in the client's life
- Offer place-based opportunities for skills development in areas such as First Aid and Mental Health
- Engagement and training opportunities for volunteers, particularly working with vulnerable groups

SD4: 'Prepo	SD4: 'Prepared and Informed' Action Plan	formed' Ac	tion Plan			
Desired Outcome	Investment Priority	Sphere of influence	Relevant adopted strategy/plans	Action/s	Committed Resourcing -	Desired Outcome
Embed people- centred emergency planning	Moderate	Control/ Influence/ Concern	Local Emergency Management Plan Climate Change Risk Assessment and	Review emergency dashboard for inclusive access and easily accessible information	Unfunded Opportunity	Senior Leadership Team
			Adaptation Action Plan	Council chairing of and representation on LEMC	Operational Plan	Infrastructure Services
			Various Hawkesbury Telecommunication provider plans (not HCC)	Business Continuity Planning	Operational Plan	Senior Leadership Team / Community Partnerships & Planning
			NSW State Disaster Mitigation Plans (NSW Government)	Implement regular "resilience" messaging throughout the year	Operational Plan	Corporate Communications
			Local EMPLAN			
Research community preparedness and support coordinated campaigns	Moderate	Control	Communications and Engagement Strategy	Undertake baseline Community Preparedness assessment and track	Unfunded Opportunity	Community Partnerships & Planning
				Continue and Expand Community Hubs Program	Unfunded Opportunity	Community Partnerships & Planning
				Mobile/pop-up community outreach	Unfunded Opportunity	Community Partnerships & Planning

Desired Outcome	Investment Priority	Sphere of influence	Relevant adopted strategy/plans	Action/s	Committed Resourcing –	Desired Outcome
Coordinate and encourage volunteering	Low	Control/ Influence	Environmental Sustainability Strategy	Operationalise Community Resilience Coordinator role	Grant	Community Partnerships & Planning
			Waste and Resource Recovery Strategy	Hold an annual volunteer appreciation event	Operational Plan	Community Partnerships & Planning
			Litter Prevention Plan	Recognise volunteering excellence	Unfunded Opportunity	Community Partnerships & Planning
				Continuing Bushcare and Community Nursery Program	Operational Plan	City Services
				Continue to collaborate with RFS on bushfire hazard reduction planning	Operational Plan	City Services
				Continue to support Clean Up Australia Day volunteers	Operational Plan	Resource Recovery
Improve collaboration to be better prepared for emergencies	Moderate	Control/ Influence	Environmental Sustainability Strategy	Continue and expand Community Hubs Program	Operational Plan	Community Partnerships & Planning
				Operationalise Community Resilience Coordinator role	Grant	Community Partnerships & Planning
				Business Continuity Planning	Operational Plan	Organisation: Senior Leadership Team / Community: Community Partnerships & Planning
				Continue to collaborate with RFS on bushfire hazard reduction planning	Operational Plan	City Services

Establish an emergency warning and information system that is accessible, accurate and trusted	Desired Outcome
Moderate	Investment Priority
Control / Influence / Concern	Sphere of influence
Local Emergency Management Plan Climate Change Risk Assessment and Adaptation Action Plan Hawkesbury Flood Risk Management Study and Plan Draft Macdonald River, Colo River, Webbs Creek and Greens Creek Flood Study and Floodplain Risk Management Study and Plan	Relevant adopted strategy/plans
Continue to fund and improve Hawkesbury Emergency Dashboard Use partnership and networks to influence improvements in emergency warning regarding early warning systems and river height gauges	Action/s
Operational Plan Operational Plan Unfunded Opportunity	Committed Resourcing -
Operational Plan Operational Plan Coperational Plan / Community Partnerships & Planning / Infrastructure Operations Unfunded Opportunity Infrastructure Services	Desired Outcome

Desired Outcome	Investment Priority	Sphere of influence	Relevant adopted strategy/plans	Action/s	Committed Resourcing –	Desired Outcome
Identify and engage community leaders in resilience and emergency planning	High	Control/ Influence		Create a critical community leader register – internal and external	Unfunded Opportunity	Community Partnerships & Planning
and improve community leadership redundancy				Continue and expand Community Hubs Program	Operational Plan	Community Partnerships & Planning
				Operationalise Community Resilience Coordinator role	Grant	Community Partnerships & Planning
				Provide opportunities for critical community leaders to network with Council and Emergency Services E.g. Recovery on Wheels Hawkesbury Connect	Grant	Community Partnerships & Planning
				Nurture new community leaders	Operational Plan	Community Partnerships & Planning
				Collaborate with NSW RA	Operational Plan	Strategic Planning / Community Partnerships & Planning and Infrastructure Services
				Continue to collaborate with RFS on bushfire hazard reduction planning	Operational Plan	City Services

# **Direction 5: Our Hawkesbury**



#### Strong partnerships between governments, service providers, community organisations, local businesses and residents from the foundations for capacity building, knowledge, sharing and cooperation.

The challenges facing our Hawkesbury that by working together, we can achieve far more than by acting in isolation.

There are many different government entities, organisations, groups and individuals delivering research, planning and projects that are already strengthening the resilience of the Hawkesbury.

By sharing our knowledge, resources and expertise we can support greater collaboration and reduce duplication of efforts, maximising our community's ability to adapt, withstand, and recover from challenges that lie ahead.

In particular, service providers told us they would like to see Council continue to play a proactive role in providing opportunities for organisations and services to network and share information. They also see an important role for Council in advocating to funding agencies to simplify grants processes, and longer-term funding to support continuity.



### **Data insights**

### **Operating Hawkesbury**

 There are over 100 organisations with some level of control in operating and managing systems that sustain our lives and economy in the Hawkesbury. Sectors include government, regional bodies, water, electricity, transport, telecommunications, emergency services and food provision.

## 'Our Hawkesbury' desired outcomes

Our Desired outcomes	Description
Promote and participate in collaborative governance and engagement for Hawkesbury and the wider region	<ul> <li>Council sees itself as a key leader and connector between community and state emergency services and departments. Council will seek to foster collaborative governance to the benefit of all and for more effective use of resourcing</li> <li>Examples include: <ul> <li>Connecting and facilitating networking between services, including by facilitating interagency groups such as Recovery on Wheels, Hawkesbury Youth Interagency and Hawkesbury Connect</li> <li>Supporting community groups and services to apply for grant funding</li> <li>Collaborative Development of the Hawkesbury Nepean Valley Disaster Adaptation Plan and Greater Sydney Disaster Adaptation Plan</li> <li>Collaborative Development of the Heat Smart Cities Plan with WSROC and other stakeholders</li> </ul> </li> <li>Advocating for improved funding models for community resilience and for access to greater resources</li> </ul>
Provide up to date local data and information on Council website	<ul> <li>Connect isolated groups and services</li> <li>Council's website needs to be the single source of truth for our community meaning it is accurate, reliable, accessible and has integrity beyond reproach. This ensures that the community is appropriately informed and that they trust the information they are receiving from Council which can be critical in emergency events.</li> <li>Examples include:         <ul> <li>Hawkesbury Emergency Dashboard</li> <li>Up to date and easily accessible strategies/plans/data etc.</li> <li>Inclusive access to Councils website</li> <li>All information is relevant, current and accurate</li> </ul> </li> </ul>
Strengthen the resilience of council assets	<ul> <li>Our community has been loud and clear about the importance of assets and infrastructure. To build resilience and a thriving Hawkesbury, Council must strengthen the resilience of our assets to withstand increasingly frequent and severe disasters.</li> <li>Examples include: <ul> <li>Repair and maintenance of roads</li> <li>Disposal of non-priority assets</li> <li>Incorporating Total Cost of Life modelling</li> <li>Asset planning for the future</li> <li>Establishing best practice design standards for assets to be resilient, sustainable and cost effective</li> </ul> </li> </ul>
Galvanise resilience across the Hawkesbury	<ul> <li>The Hawkesbury community has proven itself to be incredibly resilient. There is an opportunity to strengthen what is already working and to address gaps that may exist to turn the dial from surviving to thriving</li> <li>Work with existing groups and leaders</li> <li>Improve efficiency and effect of resourcing</li> <li>Create cohesive collaboration and empower joint action</li> <li>Prioritise the most vulnerable, exposed and disadvantaged individuals/ groups/communities</li> </ul>

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Desired Outcome	Investment Priority	Sphere of influence	Relevant adopted strateav/plans	Action/s	Committed Resourcing -	Responsibility
Promote and participate in collaborative	Moderate	Control/ Influence	Community Strategic Plan	Council chair of and represented on Local Emergency	Operational Plan	Infrastructure Services and City Planning
governance and engagement for Hawkesbury and the wider region			Communication and Engagement Strategy	Management Commitment		
			Reconciliation Action Plan Local Emergency	Establish an Aboriginal Advisory Committee	Grant	Community Partnerships & Planning / Governance & Risk
			Management Plan	Establish a Culturally and Linguistically Disadvantaged Advisory Committee	Unfunded Opportunity	Community Partnerships & Planning / Governance & Risk
				Implement Communications and Engagement Strategy	Operational Plan	Corporate Communications
				Continue to collaborate with RFS on bushfire hazard reduction planning	Operational Plan	City Services
Provide up to date local data and information on Council website	High	Control	Environmental Sustainability Strategy Nat Zero Emissions	Review website content for inclusiveness and access	Operational Plan	Senior Leadership Team
			and Water Efficiency Strategy	Review website content for currency and accuracy	Operational Plan	Senior Leadership Team
			Climate Change Risk Assessment and Adaptation Action Plan	Ensure alternative data and information sharing mediums	Operational Plan	Corporate Communications
			Communications and Engagement Strategy	Continue to maintain and improve Hawkesbury	Operational Plan	Infrastructure Operations
			Waste and Resource Recovery Strategy	Dashboard		

Desired Outcome Strengthen the resilience of council	Investment Priority High	Sphere of influence Control	Relevant adopted strategy/plans Climate Risk Assessment and	Action/s Develop Sustainable Design Standards	Committed Resourcing – Unfunded Opportunity
			Plan Asset Management Strategy	Ensure c assets e contribu thriving and are efficient	Ensure all Council assets effectively contribute to a thriving community and are resource efficient
			Strategy	Reviev policy	Review procurement policy
				Estc star	Establish asset standards policy
				Dev Infr Stro	Develop Social Infrastructure Strategic Action Plan
				Re Re	Develop Infrastructure Grant Resilience Study
Galvanise resilience across the Hawkesbury	Moderate	Control/ Influence	Local Emergency Management Plan		Operationalise the Community Resilience Coordinator Role
				Pro	Continue and expand Community Hubs Program
			1	Con the Whe	Continue to facilitate the Recovery on Wheels group
				Con: the F Con	Continue to facilitate the Hawkesbury Connect group

# **IMPLEMENTATION**

Council will aim to deliver the Strategy within existing resources in line with the Long-Term Financial Plan. However, we will seek opportunities to leverage external sources of funds where possible. Evaluation on our progress against the outcomes, priorities and actions will be undertaken on an annual basis in accordance with the Integrated Planning and Reporting Framework (refer Figure 19).

Where Resilience outcomes are beyond Council's direct control, efforts and resources will be provided to influence partnerships, collaborators and external stakeholders to contribute towards desired outcomes. Where outcomes are beyond Council's control and influence, intensive resourcing should be avoided, reverting to a role of advocacy and providing information to those parties that do have control.

The Strategy should be reviewed following a 4 – year cycle that mirrors Council's Delivery Program as described in figure 19. Following Council's bi-annual community survey an interim review should be undertaken to include measurable progress updates such as survey results and related strategy implementation updates, as well as any action planning changes.

Following the election of a new Council, a new Community Strategic Plan and Delivery Program are development as well as a State of our City report. These documents should be utilised as the best opportunity to provide information on the Strategy's successes, failures and learnings and to conduct a major **Thriving Hawkesbury: Beyond Resilience** review.

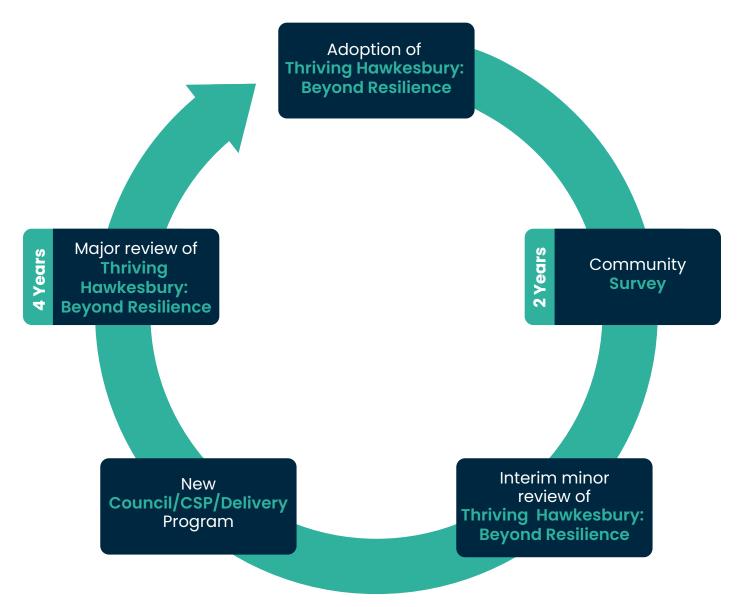


Figure 19: Strategy implemetation plan in alignment with Integrated Planning and Reporting Framework

# **APPENDICES**

### Appendix 1

The below is a list of identified key stakeholders in the Thriving Hawkesbury: Beyond Resilience

- Resilient Sydney
- The Parks
- Sustainability Advantage
- Local schools
- Local businesses
- NSW Police Local Area Commands
- Hawkesbury Residents and landholders
- Transport for NSW (TfNSW)
- Nepean Blue Mountains Local Health District (NBMLHD)
- Community groups, including community transport
- Chambers of Commerce
- Education and training institutions (for example TAFE NSW and Western Sydney University)
- Reconciliation Australia
- Infrastructure Australia
- NSW Reconstruction Authority
- Western Sydney City Deals Health Alliance
- Western Sydney Regional Organisation of Councils
- NSW State Emergency Services
- NSW Department of Climate Change, Energy, Environment and Water
- NSW Department of Planning, Housing and Industry
- Sydney Water
- Neighbouring local Council's Blue Mountains City Council, Penrith City Council, Hills Shire Council, Blacktown City Council, Central Coast Council
- NSW Environment Protection Authority
- Federal Government agencies
- Critical infrastructure providers Endeavour Energy, Telstra etc.
- Water NSW

The table below shows how existing Hawkesbury City Council Strategies align to our five resilience directions.

STRATEGY DIRECTIONS	Great Place to Live	Caring for Country	Connect for Strength	Prepared and Informed	Our Hawkesbury
Asset Management Strategy					
Hawkesbury Environmental Sustainability Strategy 2023-2033					
Hawkesbury Social Infrastructure Strategy					
Hawkesbury Climate Risk Assessment and Adaptation Action Plan					
Hawkesbury Net Zero Emissions and Water Efficiency Strategy					
Draft Cultural Plan					
Development Control Plan					
Aboriginal Cultural Heritage Study					
Enterprise Risk Management Framework					
Local Emergency Management Plan					
Urban Greening Strategy					
Active Transport Plans					
Flood Policy					
Local Approvals Policy - Caravan Parks					
Hawkesbury City Council Community Strategic Plan 2025-2045					
Hawkesbury Local Strategic Planning Statement 2040					
Draft Hawkesbury Local Housing Strategy					
Hawkesbury Regional Open Space Strategy					
Draft Hawkesbury Employment Lands Strategy					
Hawkesbury Rural Lands Strategy					

STRATEGY DIRECTIONS	Great Place to Live	Caring for Country	Connect for Strength	Prepared and Informed	Our Hawkesbury
Waste and Resource Recovery Strategy					
Hawkesbury Floodplain Risk Management Study and Plan					
Redbank Creek Flood Study					
MacDonald River, Colo River Flood Study					
Hawkesbury-Nepean Flood Emergency Plan 2020					
Bushfire Risk Management Plan					
Disability Inclusion Action Plan 2023-2027					
Hawkesbury Family and Domestic Violence Action Plan					
Reconciliation Action Plan at Reconciliation Australia					
Dementia friendly Hawkesbury Plan					
Food Organics Garden Organics (FOGO) Transition Plan					
Hawkesbury Landfill Management Strategy (Beyond 2026)					
Hawkesbury Litter Prevention Plan					

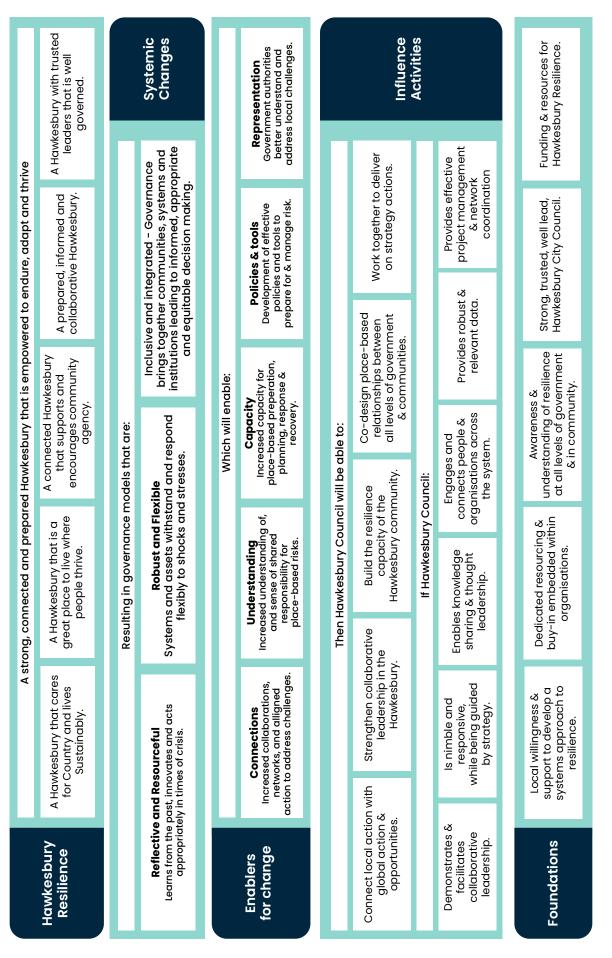


Figure 20: Theory of change

### Investment priorities

Ten investment priorities have been identified against 4 criteria: resilience value, system vulnerability, shock exposure and government priority.

Desired outcome	Resilience Value	System Vulnerability	Council Priority	Shock Exposure	Investment Priority Rating
Embed First Nations knowledge and practices in land management	x	X	x	X	High
Connect and protect green and blue places	x				
Increase tree canopy and habitat	x	x	x	X	High
Increase biosecurity awareness	x				Low
Secure the future of Greater Sydney's water supply	x			X	Moderate (Council cannot control)
Support electrification and the energy transition	X	X	x	X	High
Improve the sustainability of Hawkesbury's food and agricultural systems	x				
Collaborate and advocate for solutions to Greater Sydney's waste crisis	x	X	x	X	High
Plan and design places to withstand increased natural hazards	x		x	x	Moderate
Improve the heat resilience of communities in Hawkesbury	x	X	x	X	High
Increase and improve affordable rental Housing	x	x			
Better connect communities with active and public transport	x	X	x	X	High
Create inclusive and welcoming public places	x		x		Moderate

Desired outcome	Resilience Value	System Vulnerability	Council Priority	Shock Exposure	Investment Priority Rating
Embed dignity principles in leadership and Engagement	x		x		Moderate
Replenish resilience through creative and cultural expression	x				Low
Support First Nations self-determination	x	x	x		Moderate (Council cannot control)
Facilitate community- led action	x		x	x	
Engage children and young people in decision-making about the future and their wellbeing	x				Low
Measure and value social capital	x				Low
Facilitate inclusive access to social infrastructure	x	x	x	x	High
Embed people-centred emergency planning	x				Moderate
Research community preparedness and support coordinated campaigns	x				Moderate
Coordinate and encourage volunteering	x				Low
Improve collaboration to be better prepared for emergencies	x			x	Moderate
Establish an emergency warning and information system that is accessible, accurate and trusted	x		x	x	Moderate
Identify and engage community leaders in resilience and emergency planning and improve community leadership redundancy	x	x	X	x	High

Desired outcome	Resilience Value	System Vulnerability	Council Priority	Shock Exposure	Investment Priority Rating
Promote and participate in collaborative governance and engagement for Hawkesbury and the wider region	x		x		Moderate
Provide up to date local data and information on Council website	x	x	x	X	High
Strengthen the resilience of council assets	x	x	x	X	High
Galvanise resilience across the Hawkesbury	x		x		Moderate

#### Note:

Resilience value – where the action contributes to building resilience.

System vulnerability – where the system is at risk of imminent disruption and/or is unable to fulfill its current resilience function effectively.

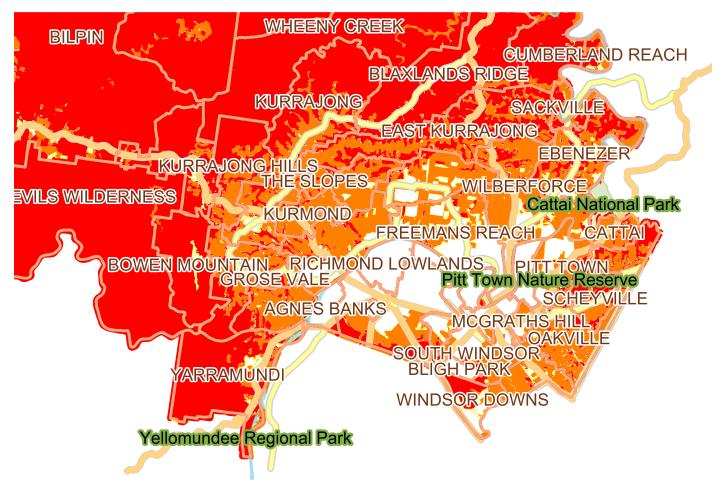
Shock exposure – where the risk to people, place and economies is large in scale and consequence. Government priority – where existing Council strategy is conducive for collaboration and implementing change that will increase resilience.

### Bushfire

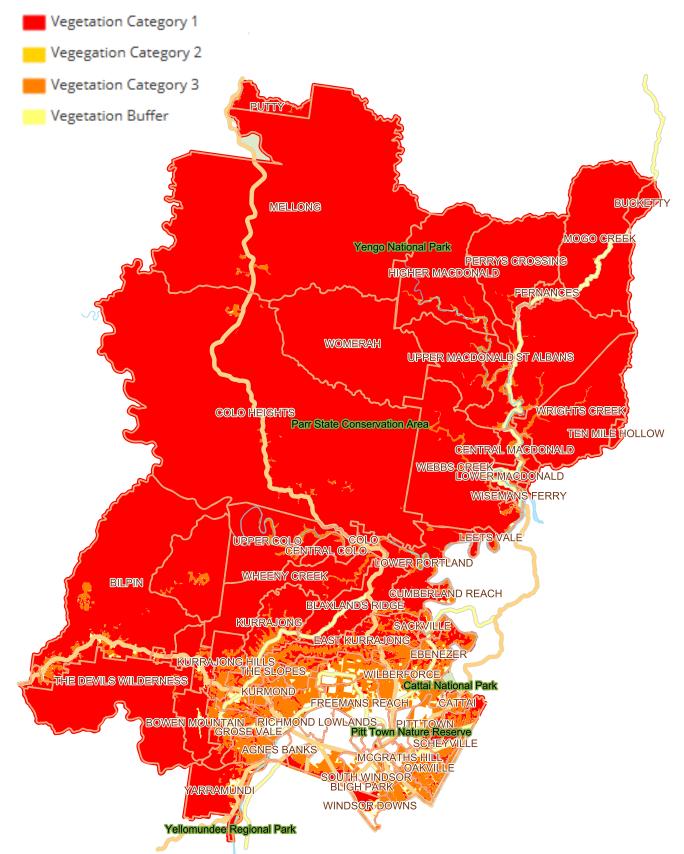
As shown in the map below, the land to the North and West of the Hawkesbury River is highly prone to bushfire. The vast majority of this land is National Parks or State Forest however there are important communities that reside is this region such as Colo and St Albans. These communities are at high risk of bushfire impacts both directly from bushfire contact and also from becoming isolated due to road inaccessibility.

This means that not only does the community, Council and NSW government need to consider how these communities survive and adapt to bushfire contact risks but also how to ensure the community is adapted and resilient to becoming isolated without the usual access to medical facilities, waste service, food or rescue assistance by road.

There is also significant potential for impacts on critical infrastructure such as electricity and water. To add to this mobile connectivity in this area is typically poor and can worsen or completely disappears during bushfire events.



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#### © State Government of NSW and NSW Rural Fire Service 2025

This map shows the bushfire risk for the rest of the LGA including the relatively more urban areas South and East of the Hawkesbury River and communities and the communities from Richmond to Berambing including North Richmond, Grose Valley, Redbank, Mt Bowen, Kurmond, Kurrajong, and Bilpin. There are significant amounts of both Vegetation Category 1 and 3 in these areas indeed some properties contain both categories on their land.

Other than the relatively wet lowland areas of Agnes Banks, Richmond Lowlands, Cornwallis and Pitt Town Bottoms are towns and villages are surrounded by and penetrated by bushfire prone areas highlighting the significant risk of all of the Hawkesbury community to bushfire.

#### Heat

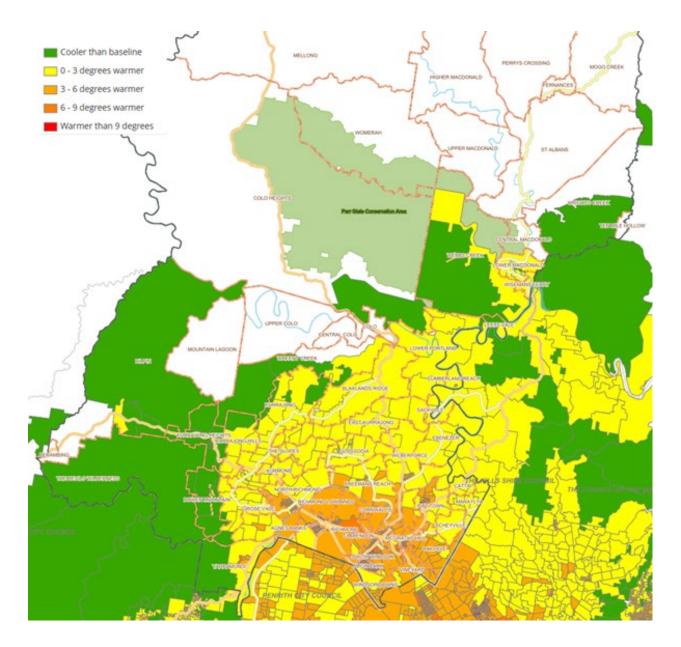
Historically, heat has killed more Australians than fire, flood and storms combined. Despite this fact heats impacts are typically underestimated because of not being systematically recorded.. The impact of heat extends beyond health concerns however, and can have complex and cascading implications for:

- Infrastructure: Reductions in energy transmission capacity, failures of signaling equipment, increased asset degradation.
- Economy: Lost productivity, business disruption (network connectivity, e-payment) and stock losses (agriculture, cold storage, transport, and logistics).
- Community: Increased energy and medical bills, lost work, social and mental health impacts, exacerbation of medical conditions.
- Environment: Tree canopy die-back, heat related deaths of native fauna, as well as water and air quality impacts.

Our changing climate is contributing to the risks of heat. There is expected to be more hot days and more extreme temperatures exposing the Hawkesbury to more heat risk as well as less cool nights that are critical to providing relief from heat stress.

During an extreme heatwave event there is a real risk that Greater Sydney's response capacity could be overwhelmed due to systemic breakdowns of enabling infrastructure e.g. electricity grid failure, loss of air-conditioning, water supply impacts, telecommunications etc.

Compounding climate change and extreme heat events, urbanisation is increasing the average temperature and creating heat islands. Grey infrastructure absorbs and radiates heat, much like a black shirt in the sun. Natural assets such as trees and grass are much better at reflecting heat and transpiring moisture thereby passively cooling their surroundings. The heat island effect is felt most particularly in Western Sydney in places such as Blacktown, Penrith, Richmond and Windsor. The LGA wide impacts of the Heat Island Effect are displayed in the map on the following page.



The heat island effect has only been calculated for areas that are in the metropolitan region of Greater Sydney therefore gaps exist for the majority of the north of the Hawkesbury LGA. The below map displays the areas in the Hawkesbury where the Heat Island Effect is most prominent.



It can be seen that in our most built up areas such as Richmond, Windsor, South Windsor, Bligh Park and parts of Pitt Town it is calculated that heat is 6-9°C (or possibly more) hotter than the ambient temperature. To be clear this isn't a future effect of Climate Change this is increased heat, now, due to urbanisation.

The Greater Sydney Heat Smart City Plan was developed to highlight these risks for Greater Sydney and to develop pathways to mitigate them in a coordinated and collaborative manner. Council was a key contributor to the co-design of the Greater Sydney Heat Smart City Plan and should consider aligning local action to this regional plan.

**Appendix 6 Maps:** NSW State Government 2016, 2016 Urban Heat Island Effect, Available from: https://datasets.seed.nsw.gov.au/dataset/nsw-urban-heat-island-to-modified-mesh-block-2016

### Flood

The Hawkesbury-Nepean Valley has one of the most significant flood risk exposures within Australia. Due to the combination of large upstream catchments and narrow downstream gorges creating natural blockages, floodwaters can rise rapidly causing significant flooding both in depth and area within the Hawkesbury Local Government Area.

A total of 4,766 residential and non-residential properties within the Hawkesbury River floodplain are flooded above floor level in a 1% AEP event and 19,080 properties are flooded above floor level in a Probable Maximum Flood event. The Average Annual Damages for this flooding is currently estimated to be \$90,868,080 (2025).

At present (2025), a 1% AEP (Annual Exceedance Probability) flood event is estimated to affect more than 13,000 people that reside or work in the Hawkesbury Local Government Area.

Flood risk is heightened by a number of factors, including:

- insufficient road capacity to safely evacuate the whole population in a timely fashion
- a fragmented approach to managing flood risk
- low community awareness about the flood risk.

Evacuation is constrained by the need for multiple communities to rely on common, constrained and congested road links as their means of evacuation.

The undulating topography of the Hawkesbury-Nepean Valley also results in many key evacuation routes becoming flooded at low points long before population centres are inundated, creating flood islands. Many of the significant urban centres such as McGraths Hill, Windsor, Richmond and Bligh Park are located on flood islands which can become fully submerged in large flood events.

Reliable and timely flood forecasts and warnings are critical for evacuation. Currently the Bureau of Meteorology has advised that it can provide up to 15-hour flood level predictions for large flood events. However, the NSW State Emergency Service requires more than 15 hours to evacuate some flood islands in the Hawkesbury-Nepean Valley during large flood events. This could force the NSW State Emergency Service to make evacuation orders based on uncertain flood prediction. If the flood exceeds the prediction, lives could be at risk. Alternatively, if the flood does not reach the predicted level, large numbers of people could be evacuated unnecessarily, which could mean people may be reluctant to follow future evacuation orders.

Within the Macdonald and Colo Valleys there are no flood warning systems, so the State Emergency Services relies on intelligence from contacts within these localities. Historically, with the type of flooding within these Valleys (faster rise and fall), many residents have 'sheltered in place' during flood events, giving rise to risks associated with isolation.

Future climate change has the potential to alter existing flood behaviour through both increased rainfall intensity and increased sea level rise and needs to be considered to understand future changes to flooding behaviour and the management of the impacts of these changes.

Council undertakes Flood Studies and Floodplain Risk Management Studies and plan to better understand the nature of flooding and investigate options to reduce or mitigate the impacts of flooding, taking into consideration the risks to life, and the social, economic and environmental impacts of flooding. Council's current Floodplain Risk Management Projects are:

#### Adopted:

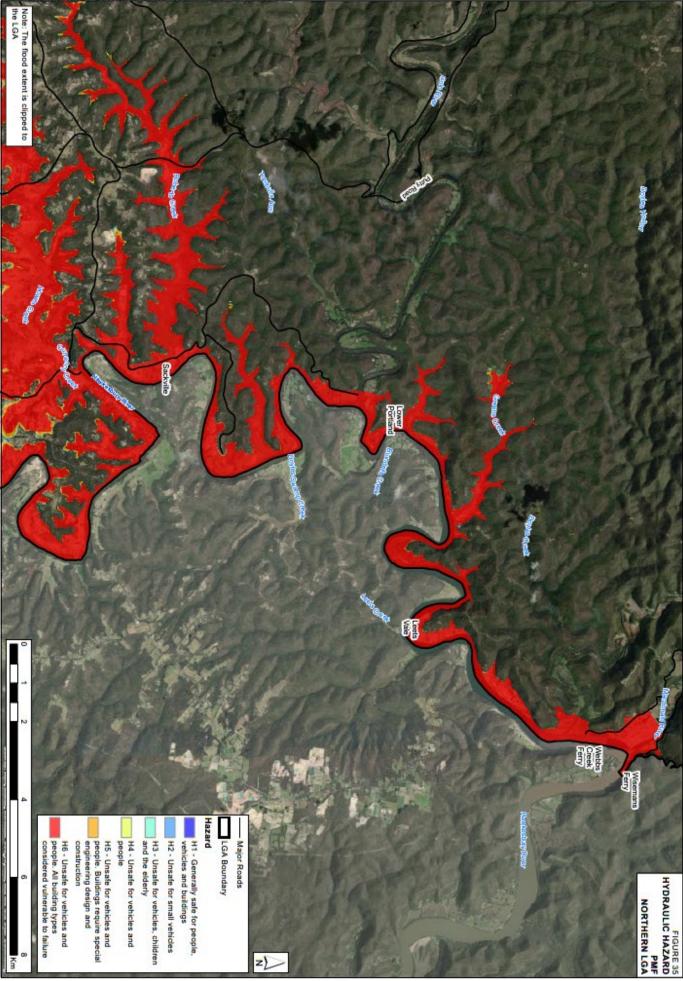
• Hawkesbury Floodplain Risk Management Study and Plan 2025 (Adopted 11 March 2025)

In Progress:

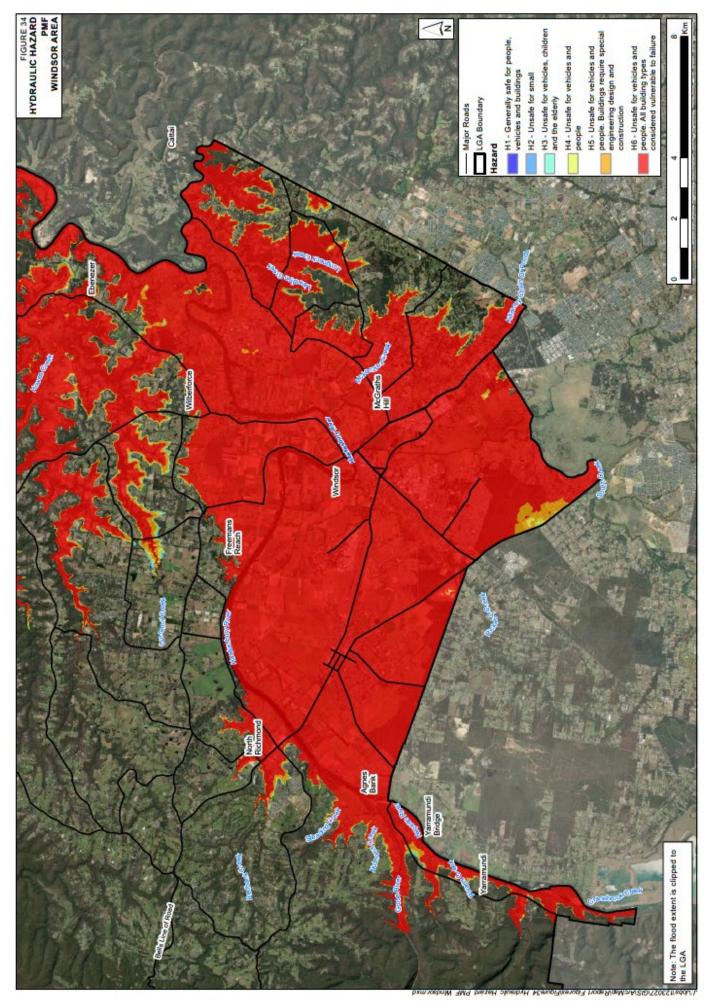
- Redbank Creek Flood Study
- Macdonald River, Colo Rover, Webbs Creek and Greens Creek Flood Study and Floodplain Risk Management Study and Plan

Images on pages 126 and 127 display the current and most up to date flood mapping available to Council. It should be noted that this flood mapping is not static. Climate change is driving an increase in flooding meaning the maps will likely need to be continually updated over regular intervals.





Map from the Hawkesbury City Councils 2025 Flood Study



Map from the Hawkesbury City Councils 2025 Flood Study Hawkesbury City Council | Thriving Hawkesbury: Beyond Resilience | 127

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