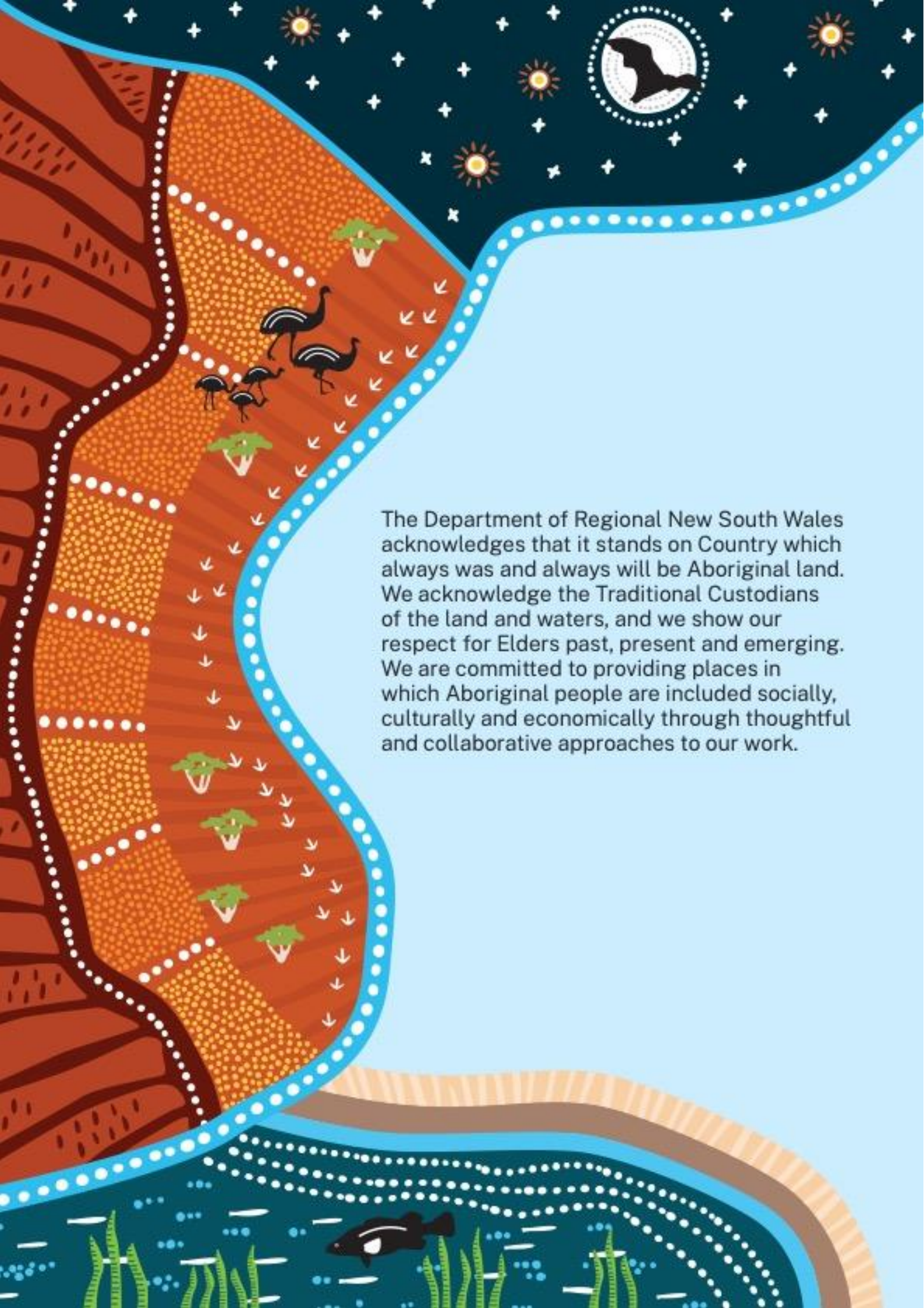


Hastings Macleay Regional Economic Development Strategy – 2023 Update





The Department of Regional New South Wales acknowledges that it stands on Country which always was and always will be Aboriginal land. We acknowledge the Traditional Custodians of the land and waters, and we show our respect for Elders past, present and emerging. We are committed to providing places in which Aboriginal people are included socially, culturally and economically through thoughtful and collaborative approaches to our work.

Published by the Department of Regional NSW

Title: Hastings Macleay Regional Economic Development Strategy - 2023 Update

First published: February 2023

Acknowledgements

The Department of Regional NSW would like to acknowledge the significant contribution of many stakeholders in the Hastings Macleay region to the development of the 2023 REDS Update, with particular thanks to staff from Kempsey Shire Council and Port Macquarie Hastings Council. The Department of Regional NSW also acknowledges the assistance provided by PricewaterhouseCoopers and ProjectsJSA to help deliver the 2023 REDS Update project.

On Country – Artwork by Mumbulla Creative

"On Country" captures the many different countries located within the Department of Regional NSW footprint. Only part of the image is shown on the Acknowledgement of Country page. The regions included in this partial image are detailed below.

The Far West region of NSW is represented by red earth plains, mallee scrubs and an abundant emu population. Freshwater countries are referenced by the expansive network of rivers stretching through the regions. The Riverina Murray region is represented by the roots of a river redgum on the banks of a river, and a large Murray Cod can be seen in the river. The night sky features as it plays an important navigational and story-telling role in traditional life.

Cover image: Boats moored on Hastings River and the coastal town of Port Macquarie. Photo credit: Destination NSW.

© State of New South Wales through the Department of Regional NSW 2023. You may copy, distribute, display, download and otherwise freely deal with this publication for any purpose, provided that you attribute the Department of Regional NSW as the owner. However, you must obtain permission if you wish to charge others for access to the publication (other than at cost); include the publication in advertising or a product for sale; modify the publication; or republish the publication on a website. You may freely link to the publication on a departmental website.

Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (February 2023) and may not be accurate, current or complete. The State of New South Wales (including the Department of Regional NSW), the author and the publisher take no responsibility, and will accept no liability, for the accuracy, currency, reliability or correctness of any information included in the document (including material provided by third parties). Readers should make their own enquiries and rely on their own advice when making decisions related to material contained in this publication.

Table of contents

Table of contents	4
1. Executive Summary	5
Changes in the Hastings Macleay region since 2018	5
Key themes from local consultation	6
Hastings Macleay REDS – 2023 Update strategies and enablers	7
2. About the 2023 REDS Update	8
3. About the Hastings Macleay region	9
4. The 2018 Hastings Macleay REDS and 2020 bushfire addendum	10
5. The big picture: Shocks and trends impacting the Hastings Macleay region since 2018	12
Significant events impacting major industries.....	12
Macroeconomic trends shaping the region’s future	13
6. Responding to change: Initiatives and investments since 2018	15
Significant investments since 2018	17
7. Hastings Macleay 2023 economic snapshot	20
Demographics	20
Housing	21
Employment	22
Hastings Macleay region 2023 engine and emerging industries	24
Hastings Macleay region 2023 endowments	26
8. Looking ahead: Strategic opportunities for growth, resilience and liveability	27
Opportunities and vulnerabilities in Hastings Macleay engine and emerging industries	27
Key themes in stakeholder consultation.....	31
Hastings Macleay REDS - 2023 Update strategies	31
Key enablers of economic growth	32
9. References	34

1. Executive Summary

Changes in the Hastings Macleay region since 2018

In 2018, the NSW Government developed Regional Economic Development Strategies (REDS) for 38 Functional Economic Regions (FERs) across regional NSW. Since publication, regional NSW has endured shocks including bushfires, floods, COVID-19, and the mouse plague, and significant new economic opportunities have emerged. The 2023 REDS Update provides an updated evidence base to guide governments in making policy and investment decisions to enhance resilience and drive sustainable, long-term economic growth in regional NSW.

The Hastings Macleay region has seen significant investment delivered since 2018, with additional projects in the planning or delivery stages



The **\$66 million Charles Sturt University** campus expansion.



The **\$5 million Cowarra State Forest Tourism Precinct**, which includes projects led by the local Aboriginal community.



Major upgrade projects for the **Pacific Highway, Maria River Road and Ocean Drive** totalling **\$342 million**.



Over **\$20 million** has been invested into **sports and recreation infrastructure**.

The region has seen significant population growth, decreasing unemployment and rising house prices since 2018



+ **4.1%** population growth since 2018.



Housing vacancy rates sit at just **1%**, with median house prices having risen by **51% to 60%** since 2018.



The proportion of the **population over 55 years** has remained relatively steady (**+0.5%**) since 2018.



Unemployment has **decreased significantly** in the region since its COVID-19 pandemic peak in 2020, with job vacancies reaching an all-time high of **4,595** in 2022.

The region's key engine industries are continuing to deliver strong economic growth outcomes



Tourism

+ 3.1% Year-on-Year (YoY) growth from 2011-2020

\$ 727 million visitor spend in 2021

9,667 jobs supported in 2021



Construction

+ 5.5% YoY growth from 2011-2020

\$ 647 million Gross Value Added (GVA) in 2020

4,601 jobs supported in 2021



Agriculture, forestry and fishing

+ 7.6% YoY growth from 2011-2020

\$ 234 million GVA in 2020

1,459 jobs supported in 2021



Healthcare and social assistance

+ 5.3% YoY growth from 2011-2020

\$ 676 million GVA in 2020

9,360 jobs supported in 2021

Key themes from local consultation

Stakeholders from the Hastings Macleay region highlighted the need to focus on building resilience for both infrastructure and the community, enhancing skills and improving land utilisation as key priorities that can help support future economic growth.

Social, environmental and economic resilience



Recent natural disasters have brought the need for enhanced resilience to the forefront of stakeholders' minds, including the need to plan and deliver infrastructure that is resilient to future events.

Skills development and attraction



Labour supply issues have since emerged, which requires a refocus on building the skills capacity of existing residents, and the targeted attraction and retention of skilled workers.

Leveraging opportunities for growth



Stakeholders highlighted the need to capitalise on the region's relatively high availability of residential and employment lands through effective coordination of land use planning and infrastructure delivery.

Hastings Macleay REDS – 2023 Update strategies and enablers

Strategies	Enablers
<p>Grow the region’s skilled labour supply.</p>	<ul style="list-style-type: none"> • Collaborate with local industry and training providers to develop the local skills base in line with industry needs, including through supporting targeted Aboriginal skills development initiatives. • Plan for and deliver greater housing diversity and affordability in areas that are at low risk from natural hazards and well connected to utilities and transport infrastructure.
<p>Foster industry development in engine and emerging industries, including through growth of industry clusters.</p>	<ul style="list-style-type: none"> • Facilitate the development of industrial and employment land throughout the region, including through enhancing and extending essential infrastructure connections such as roads, water and sewage. • Support initiatives to leverage key endowments such as the Port Macquarie Health, Education, and Innovation Precinct and the Airport Business and Technology Park to grow emerging sectors including knowledge-intensive sectors and circular economy opportunities. • Support research and feasibility studies to identify new industries and business in the region with the capacity to improve economic and supply chain resilience.
<p>Grow the region’s export-based sectors through better connections to markets and understanding of market opportunities.</p>	<ul style="list-style-type: none"> • Support collaboration between producers and value-add manufacturing businesses in the region to grow advanced manufacturing, diversify the regional product offering and attract investment. • Enhance resilience of transport infrastructure against potential climate-related events, including by improving the flood resilience of major roads and undertaking scenario planning for future events.

2. About the 2023 REDS Update

In 2018, the NSW Government and local councils developed a series of REDS for 38 Functional Economic Regions (FERs) across regional NSW. FERs are made up of one or more Local Government Areas (LGAs) that work together to create smaller economies with strong economic links.

Supporting the *20-Year Economic Vision for Regional NSW*, the REDS set out a place-based vision and framework for economic development for each FER. The REDS identify each FER's endowments, industry specialisations and key vulnerabilities and opportunities, and outline economic development strategies and actions to leverage these strengths.

Since 2018, regional NSW has endured many challenges including drought, bushfires, floods, COVID-19 and the mouse plague. At the same time, a range of broader state-wide trends and actions continue to change the economic landscape across regional NSW, including digital transformation, increased remote working and the shift towards net zero. These challenges and trends have altered the landscape of economic development in many regions and created new opportunities for growth.

The 2023 REDS Update provides an updated evidence base to guide governments in making policy and investment decisions to enhance resilience and drive sustainable, long-term economic growth in regional NSW. The objectives of the update are to:

1. **Highlight progress:** reflect on significant initiatives and investments that have supported progress against the strategies and actions in the 2018 REDS.
2. **Capture major changes:** identify and assess the impacts of major changes to regional economies since 2018, including the effect of recent 'shocks' such as bushfires, droughts, floods, the mouse plague, and the COVID-19 pandemic.
3. **Identify strategic opportunities:** identify key strategic opportunities and vulnerabilities for engine and emerging industries, as well as any changes to local endowments.
4. **Set the foundation for the future:** review, affirm, and/or adjust the 2018 strategies, including consideration of new strategies to meet emerging priorities, to ensure they remain relevant.
5. **Identify key enablers to guide future action:** develop a non-exhaustive list of priority enabling actions that will support the 2023 REDS Update strategies.



Figure 1: Little Bay Picnic Area, Arakoon. Photo credit: Destination NSW.



Figure 2: Diners enjoying a lunch at Cassegrain Wines, Port Macquarie. Photo credit: Destination NSW.

3. About the Hastings Macleay region

The Hastings Macleay FER is situated on the Mid North Coast of NSW, and is comprised of the Kempsey Shire and Port Macquarie-Hastings local government areas (LGAs). Home to more than 117,000 people, the 2 major population centres are Port Macquarie and Kempsey, while other significant towns in the region include Camden Haven, Crescent Head, Lake Cathie, South West Rocks, and Wauchope.

Total area covered (km ²)	7,239
Population (2021)	117,401
Kempsey	30,816
Port Macquarie-Hastings	86,585
Size of the economy (2020)	\$6.11 billion
Total employment (2021)	45,621

Source: ABS Estimated Resident Population (2021), REMPLAN (2020), ABS Census (2021)

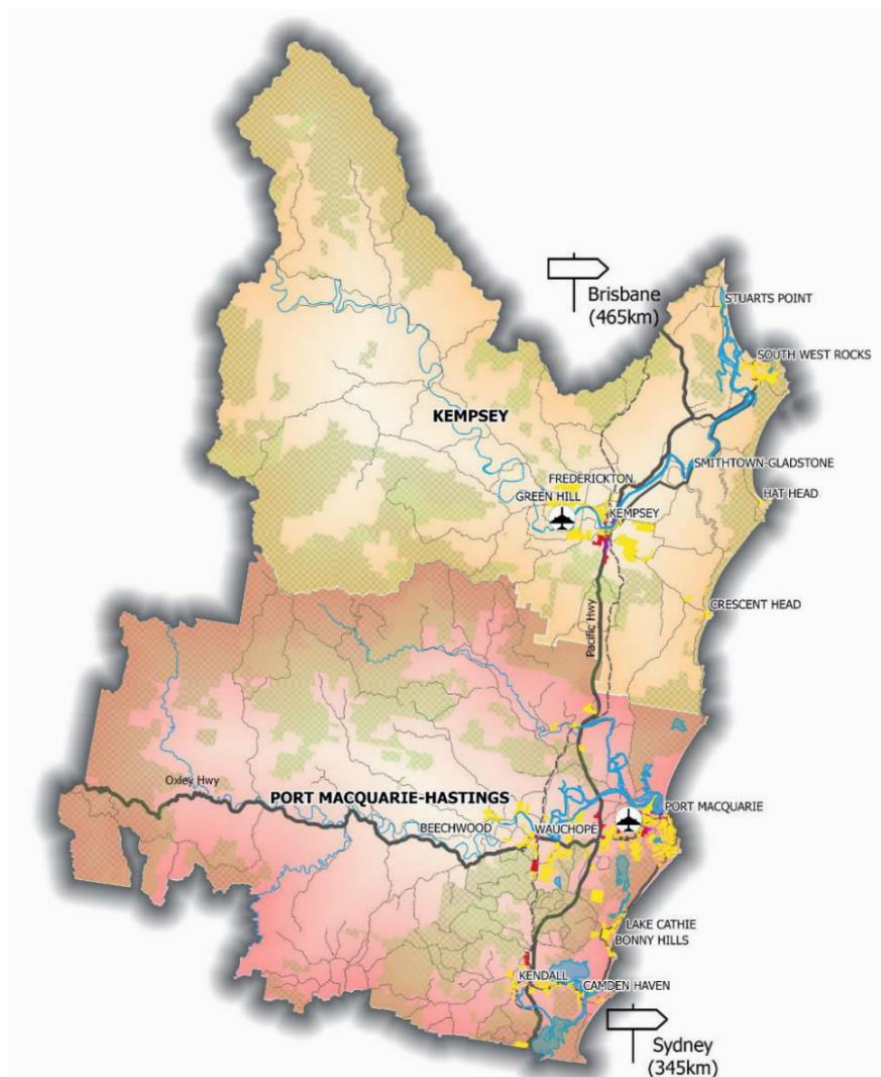






Figure 3: Map of the Hastings Macleay Functional Economic Region.

4. The 2018 Hastings Macleay REDS and 2020 bushfire addendum

In the 2018 Hastings Macleay REDS, the region was actively pursuing growth of its population and its key engine industries including tourism and agriculture. Endowments recognised in the document spanned natural, social and infrastructure assets, many of which were central to the outlined approach to enabling economic development in the region.





Following the 2019-2020 bushfires, the NSW Government developed the 2020 Hastings Macleay Bushfire Impact Addendum, which offered additional areas of strategic focus designed to aid recovery from the fires and promote enhanced resilience of both infrastructure and the community.

2018 Hastings Macleay strategies

	Grow the population and labour pool.
	Foster industry development.
	Grow the engines of growth through better connections to markets.
	<p>The 2020 Hastings Macleay Bushfire Impact Addendum also provided a number of additional areas of strategic focus related to:</p> <ul style="list-style-type: none"> • overcoming the direct and indirect damage sustained from the fires by the forestry and tourism sectors, and • enhancing infrastructure resilience, particularly for major transport infrastructure that connects the region to external markets.






































2018 Hastings Macleay specialisations

The primary industry specialisations below were identified as comparative advantages for the Hastings Macleay region in the 2018 REDS, based on employment concentrations in industry sectors.

	Tourism
	Healthcare and social assistance
	Agriculture, forestry and fishing
	Electricity, gas, water and waste services

2018 Hastings Macleay endowments

Hastings Macleay is home to a wealth of physical, institutional, built and human endowments. These endowments play a key role in enabling success and growth across its industry specialisations.

Endowment	Relevant 2018 specialisation
Port Macquarie and Kempsey Airports	
Pacific Highway	 
North Coast rail line	 
Accommodation capability and capacity	
Allied health services and hospitals in Wauchope, Kempsey, and Port Macquarie	
Shared Health Research and Education Campus (SHREC)	
Education network	   
Hastings and Macleay rivers and hinterlands	 
State forests and national parks	
Werrikimbe World Heritage area	
Beaches and coastline (Port Macquarie, South West Rocks, Crescent Head, Camden Haven)	
Road access to south-east Queensland and Sydney	 
Significant arable land	
High-quality of life and services	   
Local and state government advocacy and economic contributions	   
University campuses (Charles Sturt University) and partnerships (University of NSW and University of Newcastle SHREC partnerships)	   
Heritage and diversity	
Diverse specialised skillsets	   

5. The big picture: Shocks and trends impacting the Hastings Macleay region since 2018

Significant events impacting major industries

A sustained period of drought, followed by major bushfires and flooding, had severe environmental and economic implications for the Hastings Macleay region. The COVID-19 pandemic further challenged the region, with local businesses, particularly those in the visitor economy suffering from the impacts of movement and operating restrictions.

During the 2018 to 2022 period, the region had 9 disaster declarations^[1] and received \$49.07 million in disaster recovery grants funding. Recovering from these events and developing both industry and community resilience remains a key priority for the region.

Drought

Following a sustained period of low levels of rainfall, Kempsey Shire's main water source, the Stuart McIntyre Dam, reached a low point of 56% capacity in early January 2020.^[2] Meanwhile, combined water levels in dams serving Port Macquarie-Hastings Council area fell below 39.52%, resulting in level 4 water restrictions being implemented across the region.^[3]

The drought had substantial impacts across the agriculture sector, in particular the livestock sector, where dairy and meat output were significantly reduced, with decisions taken by many primary producers to substantially reduce herd sizes.^[4]

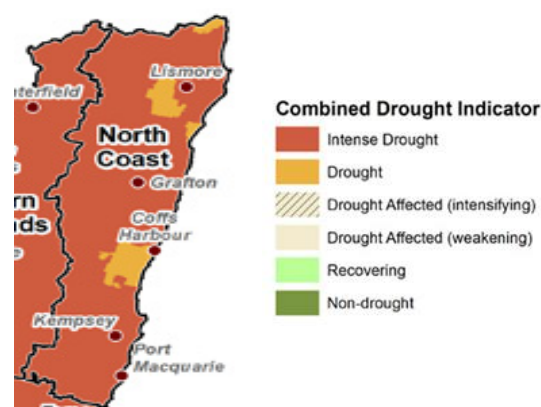


Figure 4: Combined Drought Indicator, 12 months to 31 December 2019 (Department of Primary Industries (DPI), 2022).

Bushfires

The region was severely impacted by the 2019-2020 bushfires, with total damage to the local economy in the region estimated at more than \$190 million dollars.^[5] Almost 50% of the region was burnt in the fires, including a significant proportion of primary production land and around two-thirds of bushlands and forests in the region.^[5]

As well as damaging or destroying over 450 properties, the bushfires had a significant impact on major engine industries, with an estimated 30 to 50% decrease in tourist visitation, and a 10% long-term loss of forestry supply.^[6] The agriculture sector was also badly impacted, with significant loss of pasture and feedstock, loss of stock, and road closures impacting access to markets.^[6]

Beyond direct impacts on the environment from the immediate fire damage, there were also subsequent negative environmental events that followed. Substantial native fish deaths occurred in the region's rivers in late 2019 and 2020, as rain washed large amounts of ash into the river systems, promoting bacteria growth and reducing oxygen supply.^[7]

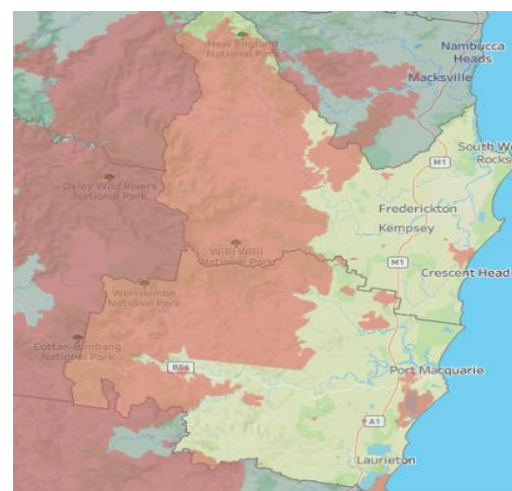


Figure 5: 2019-20 Bushfire impacted areas in the Hastings Macleay region.

COVID-19

The region was affected by the COVID-19 pandemic, with 37% of businesses reporting that it had a negative effect on their business.^[8] The region’s specialisation in tourism was particularly vulnerable to impacts from this shock, in particular extended lockdowns and travel restrictions. Revenues were down by 25% and employment levels by 15% in the accommodation and food services sectors during the initial phase of the pandemic.^[9] The COVID-19 pandemic also had a significant impact on the local community, with JobSeeker recipients rising by 54%, and healthcare card holders rising by 28%, between March and June 2020.^[10]

Floods

Both Port Macquarie-Hastings and Kempsey LGAs have been impacted by a number of significant flooding events since 2020. Substantial floods at 1 in 100 year levels hit the region in February and March 2021, causing significant damage to residential properties, roads and infrastructure across the region, isolating communities for extended periods, and requiring evacuations.^[11]




Further heavy rain and flooding events have also impacted the region in late 2021 and 2022 causing further disruption and damage across the region, with it estimated that over 30% of businesses have been directly impacted by major flooding events.^[12] Key industries in the region’s economy including agriculture, tourism and construction have been significantly impacted by the flood events, with livestock washed away, major damage to pastures and crops, lasting impacts on productivity in the construction sector, and sustained impacts on tourism visitation to the region.^{[13] [14]}

During consultation, stakeholders also noted the flood events have required some local livestock farmers to shift their operations to higher ground elsewhere, and it was noted that some operators have indicated they are unlikely to return to the region due to the risk of future natural disasters.

Macroeconomic trends shaping the region’s future

Macroeconomic trends related to climate and migration have played a significant role in the development of the Hastings Macleay region since 2018 and are likely to continue to have a strong influence on its future. With a growing population, the impacts of successive natural disasters and supply chain challenges, the region faces both opportunities and risks in building resilience and leveraging competitive advantage to take advantage of these trends.

Trend	Opportunities and risks
<div data-bbox="92 1375 159 1438" data-label="Image"> </div> <p data-bbox="92 1451 309 1518">Digital Transformation</p> <p data-bbox="365 1375 999 1653">Recent events such as the launch of Axiom Connected at Charles Sturt University in Port Macquarie have demonstrated opportunities associated with the emergence of digital transformation trends in the region. The need for robust telecommunications infrastructure has come to the fore as a regional priority in the wake of major natural disasters.</p> <p data-bbox="365 1668 999 1877">The presence of multiple university campuses and partnerships in the region, combined with a diverse economic base presents pathways to drive innovation, including in emerging sectors such as advanced manufacturing and growing knowledge intensive sectors.</p>	<p data-bbox="1058 1375 1493 1619">Enhancing the resilience of telecommunications infrastructure against natural disasters can aid the region in developing improved readiness and resilience in the case of future events.</p> <p data-bbox="1058 1635 1493 1877">Ongoing advocacy for better telecommunication connections in more remote parts of the region can help ensure affordable and reliable digital access to all members in the community.</p>

Trend	Opportunities and risks	
 <p>Changing Migration Patterns</p>	<p>The COVID-19 pandemic increased the number of remote workers taking advantage of the regional lifestyle offering while maintaining metro-based employment, with regional NSW gaining an additional 26,800 residents across 2020 to 2021 while Sydney declined by 5,200.^[15] The Hastings Macleay region was no exception, with sustained population growth since 2018.</p> <p>While growth brings economic benefits, there is a need to ensure people moving to the area can provide the skills needed to support community and economic wellbeing.</p>	<p>Targeted efforts to encourage skilled workers in key areas of need to migrate to the region will be required to enable sustainable and productive population growth.</p> <p>Increasing availability of land for housing developments can enhance housing supply in the region to help meet increased demand as more people move into the region.</p>
 <p>Towards Net Zero</p>	<p>The region's strengths in relatively high emission industries including agriculture, construction and transport will present challenges as NSW and Australia work toward achieving net zero targets. Ensuring businesses are well placed to pursue opportunities to decarbonise will be critical to building long-term resilience in the economy.</p> <p>Significant availability of land in the region, alongside an existing specialisation in electricity distribution places the region in a good position to explore opportunities associated with renewable energy.</p>	<p>Supporting adoption of processes and technology that reduce emissions can help ensure local industries remain competitive while shifting towards net zero.</p> <p>Investigating the feasibility of renewable energy generation and storage projects can grow the region's energy supply specialisation, and have flow-on benefits by increasing energy security in the region.</p>
 <p>Rising Uncertainty</p>	<p>Recent natural disaster events, including drought, bushfires and floods have highlighted the potential damage that these events can cause to communities, businesses and infrastructure.</p> <p>Enhancing community and infrastructure resilience to protect against similar future shocks represents a key priority for the region moving forward.</p> <p>Ongoing supply chain challenges are also creating issues for key industries in the region. Stakeholders noted detrimental impacts from supply chain challenges on local construction businesses and their ability to deliver on time and within budget.^[16]</p>	<p>Supporting development of increased local manufacturing capacity may aid the region in developing stronger local supply chains, while also providing significant economic growth opportunities.</p> <p>Enhancing the resilience of infrastructure will be critical to minimising the direct and indirect impacts of future natural disasters.</p>

6. Responding to change: Initiatives and investments since 2018



Figure 6: View from Tacking Point Lighthouse, Port Macquarie. Photo credit: Destination NSW.

Since 2018, local councils, the NSW Government and other key organisations have delivered new and updated strategic documents and plans that help guide economic and community development in the region. These documents support the development of local enabling actions that contribute towards progress against key REDS priorities and strategies.

Strategies and plans	Relevant 2018 strategies
The North Coast Regional Plan 2041 sets out a 20-year strategic land use planning vision to capitalise on the region’s spectacular environment and vibrant communities.	
The Kempsey Shire Council and Port Macquarie-Hastings Council Community Strategic Plans (CSPs) seek to guide economic and community development, with a strong focus on resilience. Each is supported by the councils’ Local Strategic Planning Statements , which guide land use to facilitate the goals of the CSPs, consistent with the North Coast Regional Plan 2041.	
The Mid North Coast Joint Organisation Statement of Strategic Priorities 2021-2024 outlines strategic goals associated with social, environmental, economic, infrastructure, governance and advocacy for the region.	

<p>The Kempsey Draft Local Housing Strategy 2022 and Port Macquarie-Hastings Draft Local Housing Strategy 2021-2041 look to address a current shortfall of housing availability given current and projected increased housing demand.</p>	
<p>Recognising the importance of the tourism industry to the region, the North Coast Destination Management Plan (DMP) 2018-2021, Horizon 2030 Macleay Valley Economic Development and Tourism Strategy, Macleay Valley DMP 2019-2029 and the Port Macquarie-Hastings DMP 2020-2024 look to guide growth and support diversification of the region’s visitor economy offering.</p>	
<p>While still being finalised, the Port Macquarie-Hastings Infrastructure Strategy and Transport Strategy under development by council will have focus on facilitating economic development through improving key enablers.</p>	
<p>The Port Macquarie Regional City Action Plan (RCAP) has been developed by the NSW Government, in collaboration with Port Macquarie-Hastings Council, to help Port Macquarie fulfill its potential as a thriving regional centre.</p>	
<p>The Port Macquarie Health and Education Precinct Master Plan outlines a vision for a major health and education precinct that can make Port Macquarie a competitive destination for university students and healthcare professionals.</p>	
<p>The Kempsey Shire Council Agribusiness Industry Plan 2021-2026 looks to support the development of the Macleay Valley as a smart and sustainable agribusinesses local, so to help drive industry diversification into new areas and build on the region's comparative advantage and competitive strengths.</p>	
<p>The North Coast Regional Water Strategy outlines a series of recommended actions to secure water supply over the next 2 decades along the NSW North Coast. It uses the latest climate evidence, along with a wide range of tools and solutions to chart a progressive journey for the region’s water needs.</p>	

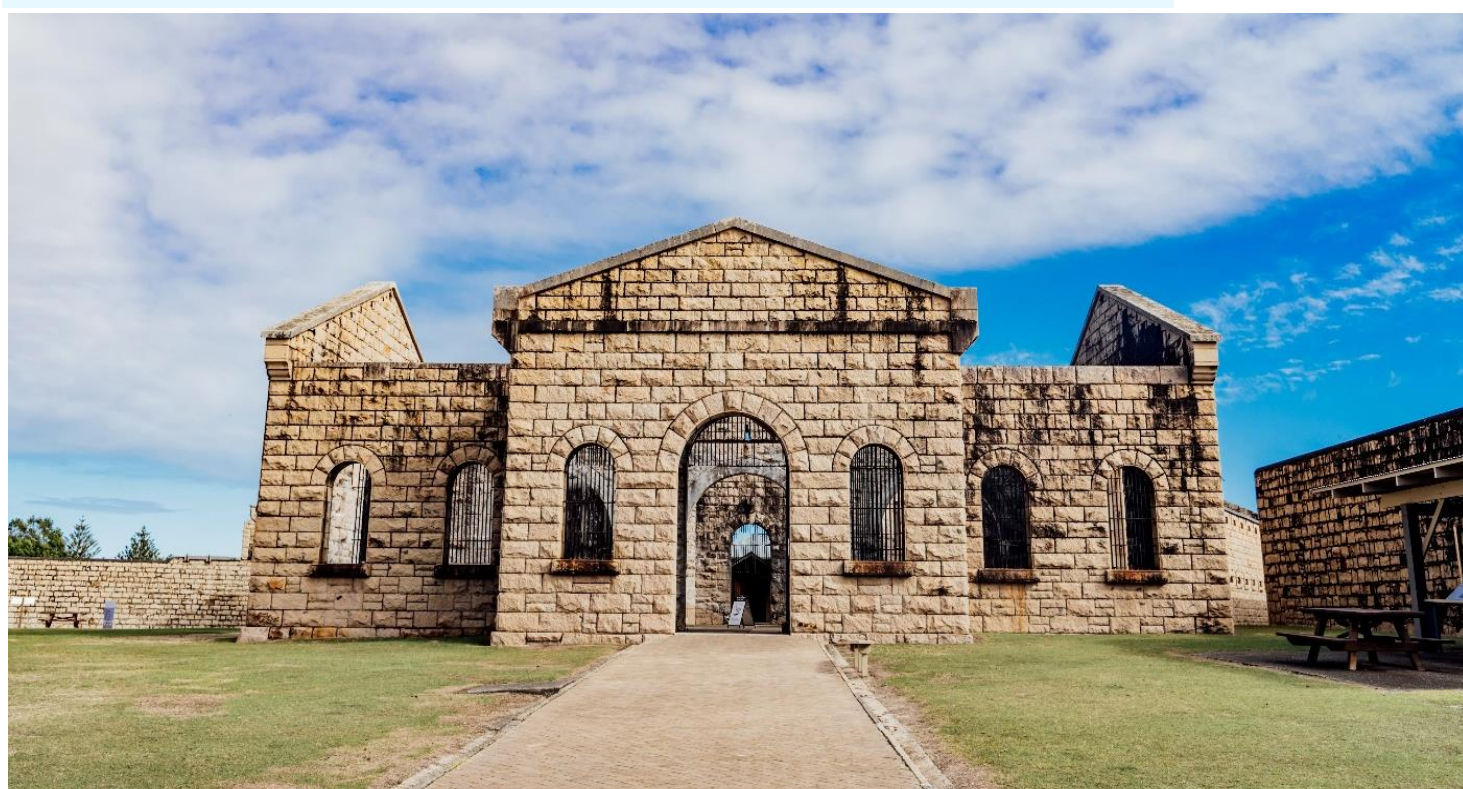


Figure 7: Trial Bay Gaol, South West Rocks. Photo credit: Destination NSW.

Significant investments since 2018

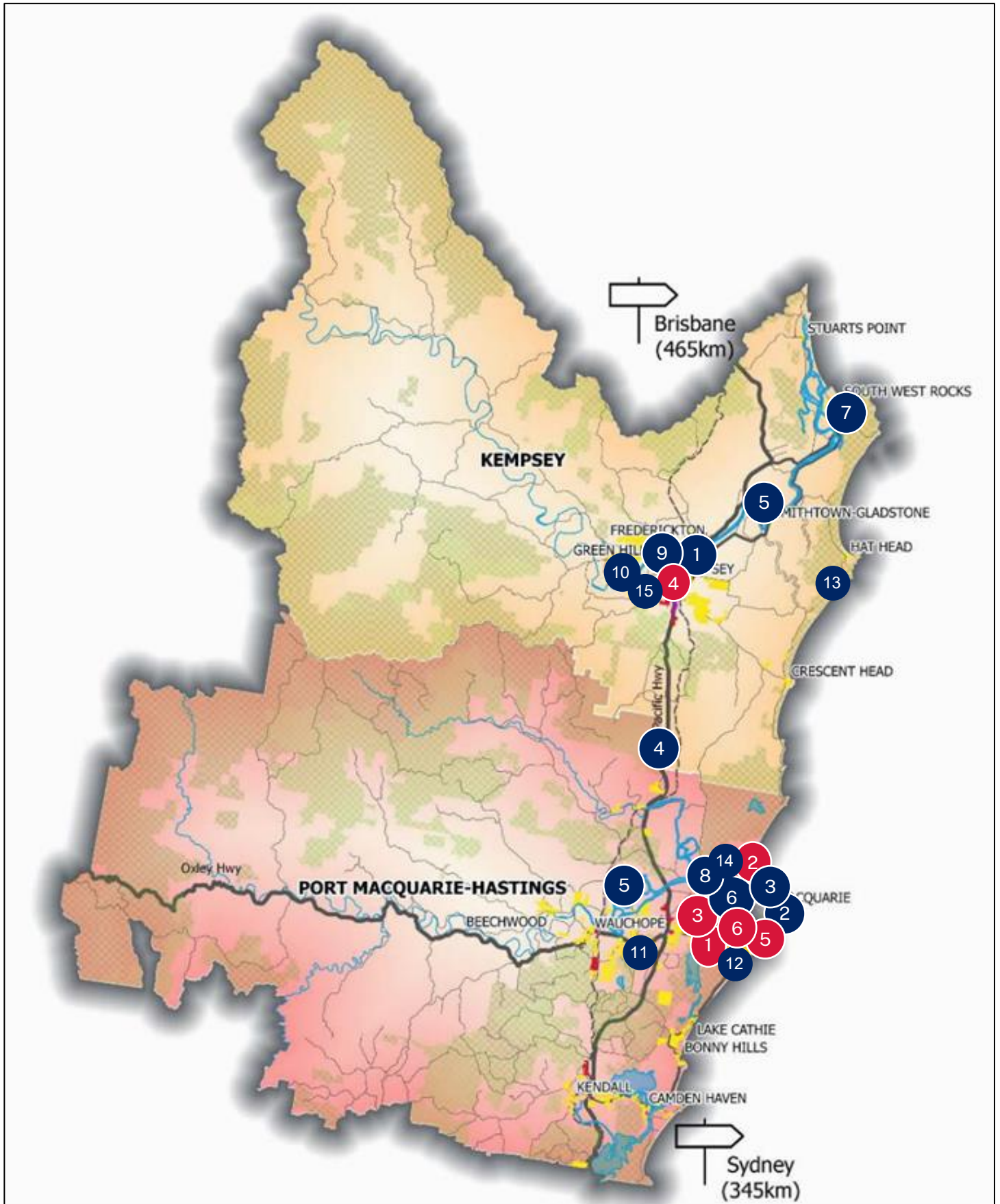


Figure 8: Significant investments in the Hastings Macleay FER since 2018, as set out on pages 18 and 19.

As shown in Figure 8 above, since 2018 the region has received significant local, state and federal funding, as well as a number of major private investments. These investments are at varying stages of progress, with some delivered, some underway, and some investments still in the planning stage. Public investments have largely focused upon developing infrastructure which supports amenity for the local community, particularly recreation facilities, as well as a range of major transport infrastructure upgrades. Grant funding has played a key role in the delivery of many of these projects.

Major private investment since 2018

Investment	Estimated total project value	Relevant 2018 strategies
1 Charles Sturt University Port Macquarie Stage 2 ¹	\$66 million	
2 Sails Port Macquarie Resort Refurbishment	\$15 million	
3 Sovereign Place Town Centre	\$20 million	
4 Kempsey Cinema ²	\$6.15 million	
5 Port Macquarie Private Hospital expansion	\$30 million	
6 Port Macquarie Koala Hospital redevelopment ³	\$6.25 million	
7 Birdon Holdings Aluminium fabrication facility ⁴	>\$8 million	

Major public investment since 2018







Investment	Estimated total project value	Relevant 2018 strategies
1 Kempsey Regional Saleyards infrastructure upgrade	\$6.33 million	
2 Port Macquarie Health and Education Precinct	Not available	
3 Port Macquarie Hospital helipad relocation and new car parking	\$21 million	

1 Supported by a grant through the NSW Government Growing Local Economies Fund.

2 Supported by grants from the Commonwealth Government and Kempsey Shire Council.

3 Support by a grant through the NSW Government Environment and Tourism Fund.

4 Supported by a grant through the NSW Government Regional Job Creation Fund.

4	Road upgrades (Pacific Highway, Maria River Road, Ocean Drive)	\$342.5 million	
5	Fixing Country Bridges – 73 timber bridge upgrades across the region	\$40.37 million	
6	Port Macquarie Airport Parallel Taxiway	\$18 million	
7	Mid North Coast High Performance Centre - South West Rocks	\$5.16 million	
8	Hastings Regional Sports Complex	\$4 million	
9	Verge and Eden Sporting Complex upgrades	\$10 million	
10	Macleay Valley Recreation Adventure Park	\$11.13 million	
11	Cowarra State Forest Tourism Precinct	\$5.1 million	
12	Port Macquarie Bicentennial Walkway upgrades	\$3.05 million	
13	Five Headlands Coastal Experience	\$4.8 million	
14	Port Macquarie Airport Business and Technology Park	\$50 million	
15	South Kempsey Employment Lands Hub sewerage upgrades	\$2.3 million	

Regional Grants Program Funding

The region has received \$120.59 million in grants since 2018. A key program in the region has been the Bushfire Local Economic Recovery Fund, with \$32.33 million committed to a range of projects including an adventure park, community projects and biodiversity conservation projects.

Grant category	Approved funding
Community	\$32.04 million
Economic	\$39.48 million
Disaster recovery	\$49.07 million

Note: Total grant funding outlined above only includes programs managed by the Department of Regional NSW, accurate as at January 2023.

7. Hastings Macleay 2023 economic snapshot

Hastings Macleay’s population continues to grow strongly, however a high proportion of the population in the over 55-year age group presents a challenge for the region in maintaining a sufficient workforce to support industry growth

Population growth

Hastings Macleay has experienced significant population growth in recent years, with a 4.1% increase recorded between 2018 and 2021 (see Figure 9). This represents an average annual growth rate of 1.4%, a step change compared to the 1% average between 2011 and 2018.

COVID-19 related internal migration is likely to have been a factor in this growth rate. Ensuring future growth translates to an increase in the skilled labour workforce needs to form a key priority.

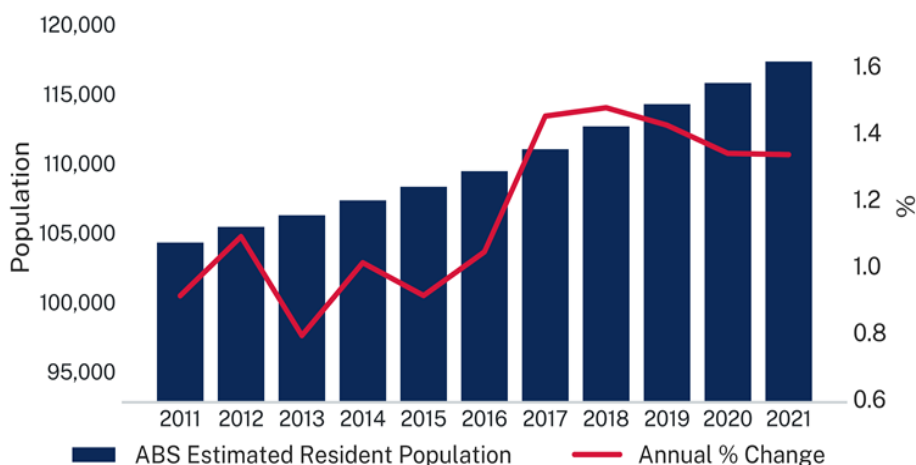


Figure 9: Hastings Macleay FER population growth, 2011-2021 (ABS ERP, July 2022).

Demographic profile

The Hastings Macleay region has a median age of 48 years, 10 years above the NSW average, with 41.8% of the region’s population aged over 55 years, compared to 28.3% statewide (see Figure 10). The proportion of the region’s population in the prime working between 20 and 54 years sits at 35.3%, significantly lower than the 47.5% proportion statewide.

Therefore, while the region has seen consistent population growth since 2018, there is a key need to focus on attracting and retaining people in their prime working age. This will require targeted enhancement of social infrastructure and services which support amenity for skilled workers and their families, as well as continuing to develop education and training offerings in the region, so to encourage local young people to stay in the region rather than move to study and work.

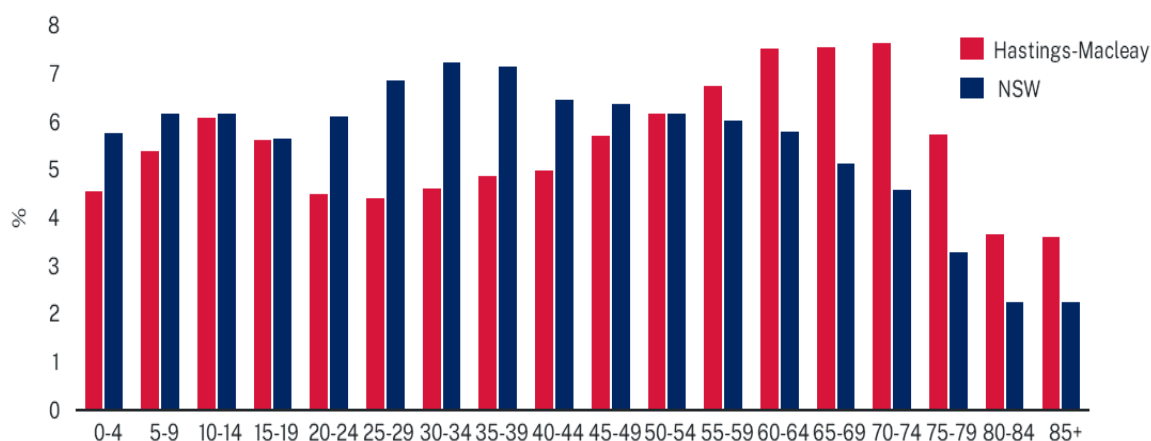


Figure 10: Hastings Macleay FER population by age, 2021 (ABS ERP, July 2022).

Low rental vacancy rates and significant house price increases present challenges to successfully accommodating a growing population in the region

The region has recorded a significant decline in housing availability and affordability since 2018, with COVID-19-related migration and the impact of floods likely to be key factors driving this outcome.

Housing availability

Residential vacancy rates in the Mid North Coast region recorded a steep decline between 2018 and the end of 2021, with the rate reaching a low of 0.4% in September 2021, as shown in Figure 11. The largest drop came during the early part of the COVID-19 pandemic between May and December 2020, where vacancy rates fell by 2.8%. As at August 2022, the residential vacancy rate has increased to 1%, which has improved since its lowest point, but still sits significantly below the 2018 rate.

Residential building approvals in the region have averaged around 65 per month between July 2018 and August 2022, with gradual growth observed across the period region. Flood events in 2021 and 2022 that damaged residential properties have added complexity to assessing whether increased residential building approvals will facilitate an expansion in the region's housing supply.

Housing affordability

Between June 2018 and June 2022, median house prices in the Kempsey LGA increased by 60% to \$555,000, while median house prices in the Port Macquarie-Hastings LGA increased by 51% to \$830,000.^[17] The price-to-income ratio for the region in July 2021 was estimated at 9.8, above the NSW average of 8.12,^[18] which suggests improving housing availability and affordability will need to form a key policy priority in the region. This will be important as the region seeks to attract more working age people to meet the workforce needs of key engine and emerging industries.

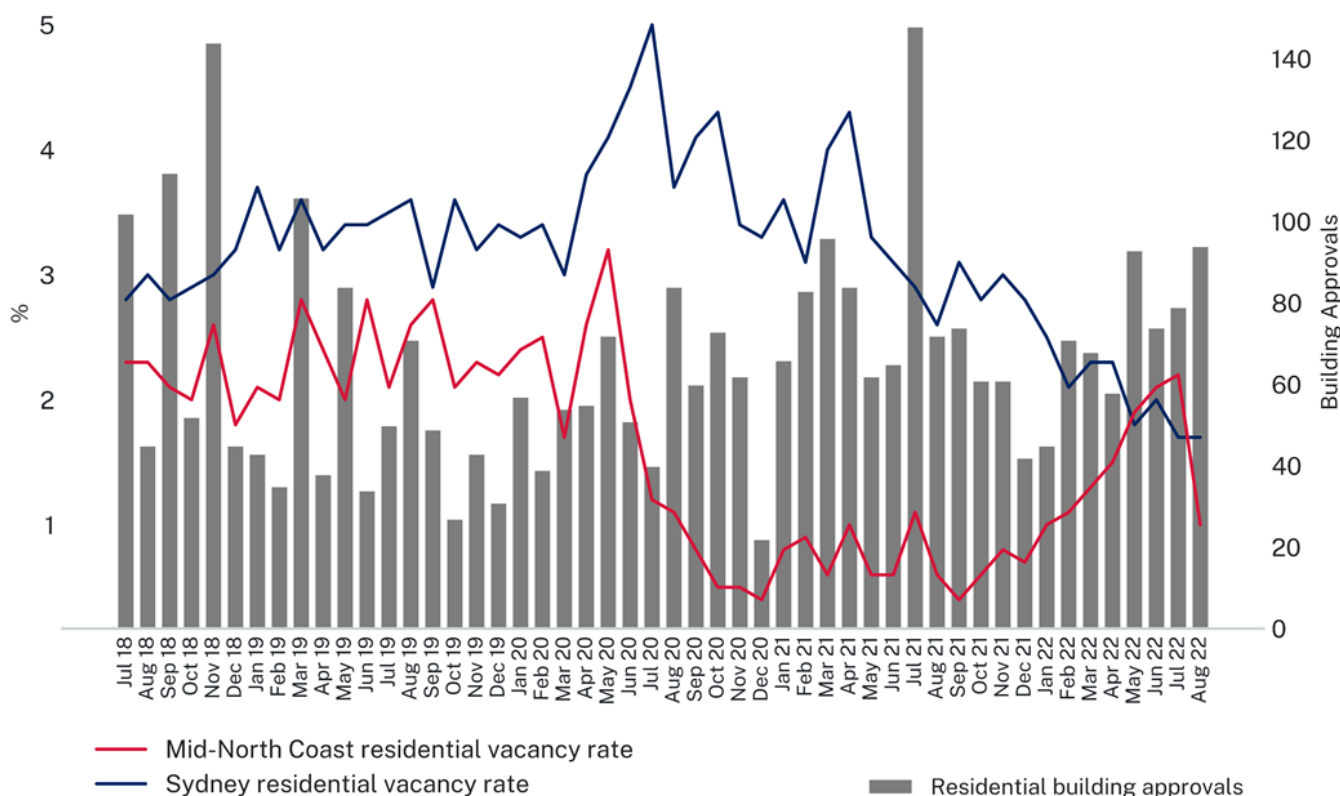


Figure 11: Hastings Macleay FER vacancy rate and building approvals, 2018-2022 (REINSW, 2022).

Note: REINSW vacancy data collection is not aligned with the FER boundary map, resulting in an overlap with other FERs. These results are therefore intended to provide an indication of housing vacancies in the region.

The region has seen a significant reduction in unemployment since 2020, while job vacancies have grown substantially over the same period

The Hastings Macleay region is experiencing a constrained labour market with job vacancies in the broader region nearly tripling between 2018 and 2022 despite major shocks to industry. The region identified a need to further develop skilled workforce attraction and retention initiatives in the 2018 REDS, but the recent tightening of the labour market has heightened the urgency of this need, especially given the demographic profile of the region (see page 20).

Employment

As at June 2022, the unemployment rate in Kempsey Shire LGA was 4.7%, while Port Macquarie-Hastings' rate sat at 2.4%, compared to the NSW rate of 3.3% (see Figure 12). Unemployment in the region steadily increased between mid-2018 and mid-2020 before a subsequent sustained decline in unemployment across the region. In line with the historical trend, Kempsey's unemployment rate remains above the NSW benchmark, but the gap between the 2 LGAs has significantly reduced since 2020.

Meanwhile, as shown in Figure 13 below, job vacancies in the broader NSW North Coast region have climbed from a low of 1,529 in March 2020 to a record level of 4,595 in August 2022. Although vacancies are wide ranging, population-serving sectors such as healthcare are facing significant shortages, with key roles such as medical practitioners and nurses (383 recorded online job vacancies) representing the greatest area of need.

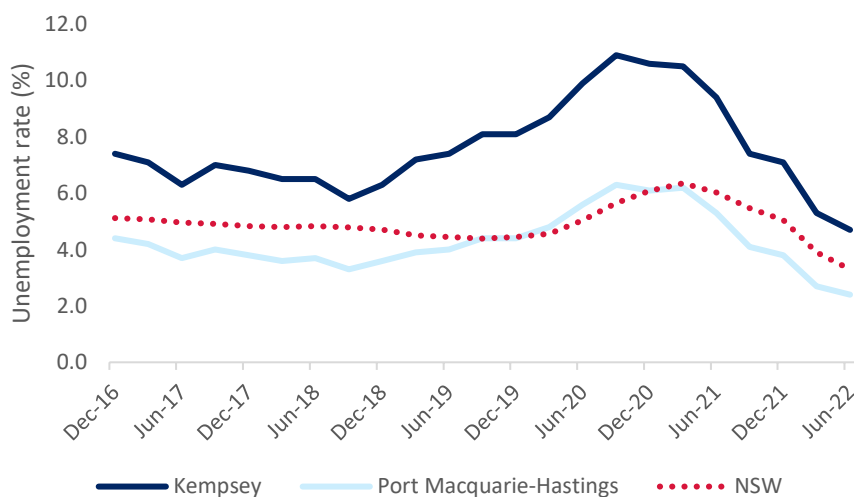


Figure 12: Hastings Macleay unemployment rates (%), 2016-2022 (National Skills Commission, 2022; ABS Labour Force, 2022).



Figure 13: Job vacancies, NSW North Coast region (2018-2022) (Regional IVI, National Skills Commission, 2022).

Note: The regional IVI - National Skills Commission job vacancy data collection is not aligned with the FER boundary map, resulting in an overlap with other FERs. Job vacancy data only includes online job vacancies. These results are therefore intended to provide an indication of job vacancies in the region.

Aboriginal employment

The Aboriginal unemployment rate in the Hastings Macleay region has dropped significantly from an estimated 18.5% in 2011 to 11.6% in 2021. This rate remains above the NSW Aboriginal unemployment rate of 9.8% and the whole of NSW unemployment rate of 4.9%.

While this result represents a significant improvement in employment outcomes for the Aboriginal community in the region, there remains an ongoing need to focus on actions and initiatives that can help ensure further improvement into the future. Ongoing collaboration between all levels of government, business, industry and representatives of local Aboriginal communities will be critical to supporting ongoing Aboriginal economic development in the region and continuing this positive trend.

Aboriginal unemployment rate: Hastings Macleay	2011	20.9%
	2016	17.1%
	2021	11.6%
NSW Aboriginal unemployment rate	2021	9.8%
NSW unemployment rate	2021	4.9%

Source: ABS Census 2021



Figure 14: Horseshoe Bay Beach, South West Rocks. Photo credit: Destination NSW.

Hastings Macleay region 2023 engine and emerging industries

The Hastings Macleay region has a \$6.1 billion economy. Despite significant shocks since 2018, the Hastings Macleay region’s engine industries have remained a key source of stability, as they continue to record strong levels of growth. The relative strength of each industry is measured using Location Quotient (LQ) analysis¹ as displayed in Figure 15, where industry size correlates with bubble size.

Engine industries

The region’s most significant specialisation is in the **energy supply (including renewables)** sector (LQ of 3.94), which contributed \$591 million to the region in 2020. Electricity distribution (LQ of 5.9) accounts for 87% of this value, in part due to Port Macquarie being home to a key regional office for Essential Energy, which manages the electricity distribution network across much of NSW.

Agriculture, forestry and fishing (LQ of 1.96) continues to be a key strength in the Hastings Macleay economy, leveraging the significant arable land endowment of the region. The industry added \$234 million to the local economy in 2020, with diverse sub-sector specialisations across sheep, grains, beef and dairy cattle (LQ of 1.4), aquaculture (LQ of 11.4) and forestry and logging (LQ of 2.0).

Despite recent shocks, the **tourism** sector (LQ of 1.51) continues to be a key part of the economy, with an estimated visitor spend of \$727 million in 2021.^[19]

The **healthcare** sector (LQ of 1.56) added \$676 million to GVA in 2020, with this amount evenly split between residential care and social assistance and healthcare services.

A key enabler of growth across a range of other sectors, the local **construction** industry (LQ of 1.39) also serves as a high-value contributor in its own right, adding \$647 million to GVA in 2020.

While not a specialisation for the regional economy, the **manufacturing** industry remains a high-value contributor, adding \$274 million to the local economy in 2020. Sub-sector specialisations within the industry include food manufacturing, sawmill product, and ship and boat manufacturing.

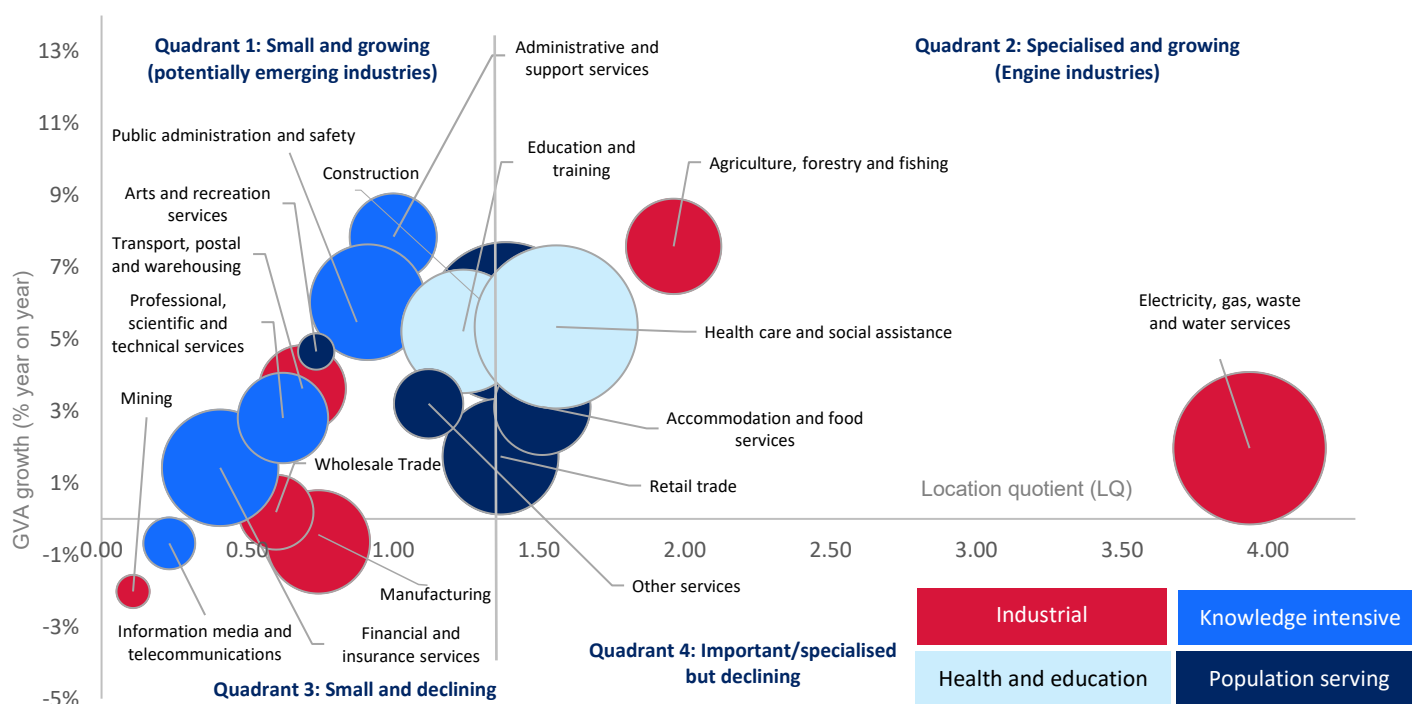


Figure 15: Location Quotient (LQ) Analysis by GVA, 2011-2020 (REMPLAN, 2020).

*While the 2018 REDS used employment data as the basis for LQ analysis, the 2023 Update has used GVA data. This allows for a clear demonstration of the changing economic impact of both engine and emerging industries across the regions.

¹ LQ analysis is used to measure industry specialisation by comparing the relative size of an industry in the region versus the whole of NSW.

Emerging industries

The region's emerging specialisations have shifted since the 2018 REDS, with a decline in manufacturing across the state reflected locally, while knowledge-intensive sectors have recorded strong growth.

Professional, scientific and technical services have recorded 2.8% growth year-on-year between 2011 and 2020, outpacing the NSW benchmark of 1.2%, with the sector contributing \$211 million to the regional economy in 2020. This sector is able to leverage the region's tertiary education endowments and may see further growth given COVID-19-related relocation of metropolitan workers to the region.

The **education and training sector** has also seen growth outperforming the NSW benchmark over the past decade, recording 5.2% average growth per year between 2011 and 2020. The sector's already high-value contribution to the regional economy (\$390 million in 2020) is set to benefit from recent investments in the industry, including the Charles Sturt University Port Macquarie Stage 2 expansion.

The **road transport** (LQ of 1.5) sector continues to be a growing strength for the region, adding \$114 million to the local economy in 2020, with growth averaging 3.6% per year in the roader transport sector from 2011 to 2020. This sector will also benefit significantly from major investments made to upgrade significant road infrastructure, in particular the Pacific Highway.

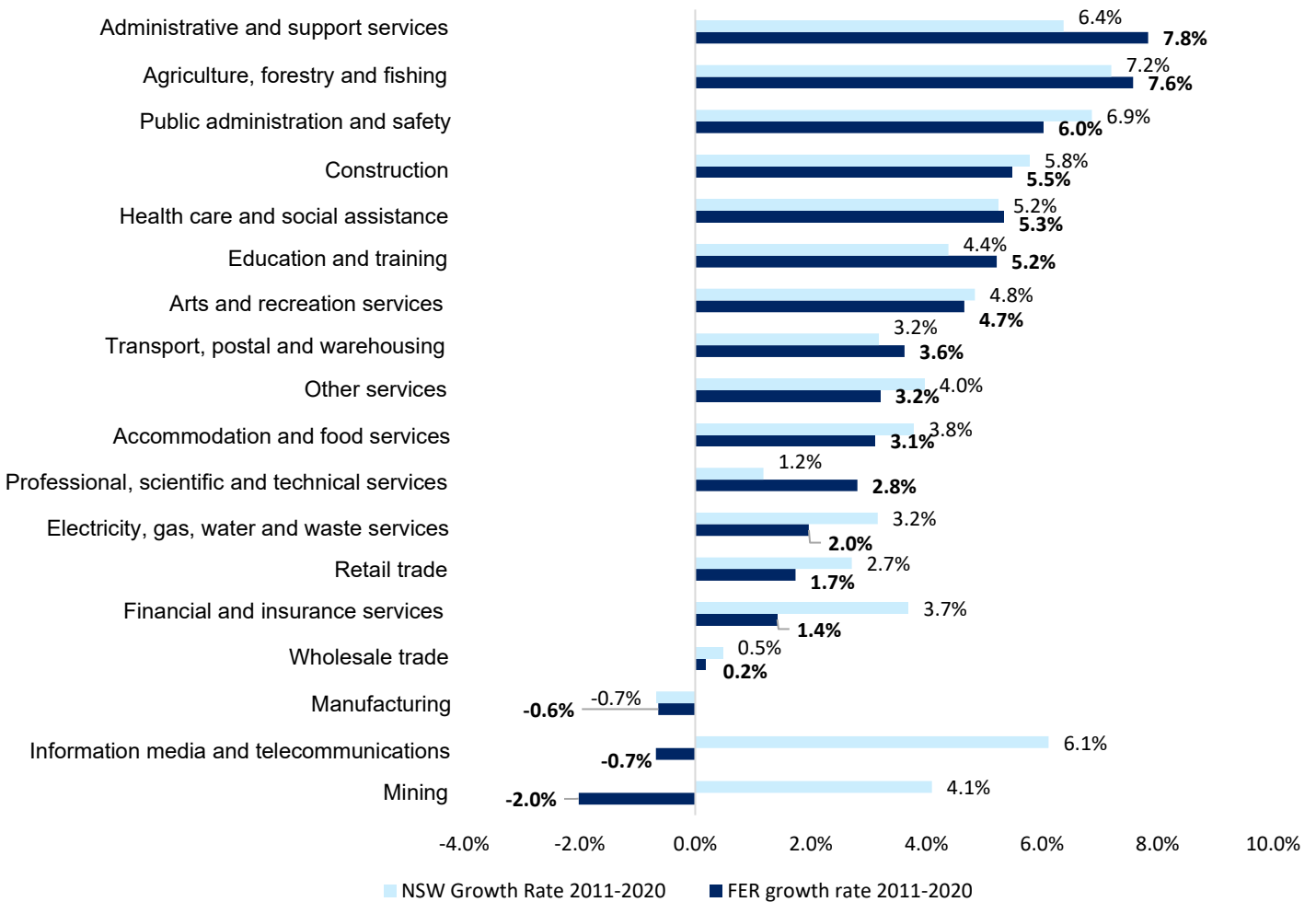


Figure 16: Change in Gross Value-Added by Industry (% YOY), 2011-2020 (REMPAN, 2020).

Hastings Macleay region 2023 endowments

Review of the 2018 endowments

The 2018 REDS identified a diverse range of endowments underpinning Hastings Macleay's economy and regional competitiveness (see page 11). Despite recent shocks impacting many key endowments, consultation affirmed these remain valid, with key endowments including:

- Transport infrastructure and services
- Health and education network
- Coastal, riverine and hinterland amenity
- Local and state government agencies
- Balance of lifestyle, social and economic opportunities
- Heritage and diversity

New endowments

While not yet reflected in the employment and industry specialisation (LQ) analysis, recent investments and policy efforts have led to the creation of enhanced sports and recreation infrastructure that underpin new economic opportunities for the region. The good availability of land in close proximity to services and transport connections has also been added as a key endowment for the region.

+ Sports and recreation infrastructure	Recent investment in sporting and recreation infrastructure, including the Mid North Coast High Performance Centre at South West Rocks, Macleay Valley Recreation Adventure Park and Verge & Eden Sporting Complex increases amenity in the region for both residents and visitors.
+ Land availability	The region has a good availability of land in close proximity to services and major transport routes. Facilitating development of these lands through investment in enabling infrastructure can help enable future population and economic growth.



Figure 17: Port Macquarie Camel Safaris, Port Macquarie. Photo credit: Lindsay Moller Productions.

8. Looking ahead: Strategic opportunities for growth, resilience and liveability

Opportunities and vulnerabilities in Hastings Macleay engine and emerging industries

Tourism

The Hastings Macleay region has been able to leverage its significant natural endowments to grow the tourism sector, despite recent challenges brought about by the COVID-19 pandemic and natural disasters.

Visitor spend (2021, \$m) ^[19]	727
Employment (2021) ^a	9,667
LQ score (2020) ^b	1.51
LQ Accommodation (2020)	2.2
LQ Food Services (2020)	1.3

^a Summation of ANZISC 1 digit Retail Trade, Accommodation and Food Services, Arts and Recreation Services.

^b LQ score is for the accommodation and food services industry.

Strengths

- The Hastings Macleay region benefits from significant natural endowments including national and state parks, Werrikimbe World Heritage area, Hastings and Macleay Rivers and hinterlands, as well as extensive beaches and coastline environments.

Vulnerabilities

- Externalities strongly influence industry performance. This has been demonstrated by the impact of COVID-19 pandemic restrictions, which reduced visitation by 26% between 2019 to 2020 and expenditure by 21%.^[19]
- Increasing frequency of natural disasters could jeopardise the region's attractiveness as a destination, alongside other climate-related events and challenges such as coastal erosion.

Opportunities

- Collaborating with other coastal regions in northern NSW, in part by leveraging the strategic focus of the North Coast Destination Management Plan, can aid the region to continue to build visitation.
- There is potential to diversify the region's visitor economy through a focus on developing offerings in emerging sectors such as agritourism, and providing experiential offerings that leverage new sports and recreational infrastructure in the region.
- The region's significant cultural heritage endowments offer opportunity for expansion of Aboriginal-led visitor economy initiatives, such as the development of the Bunyah Local Aboriginal Land Council Café and Gallery as part of the Cowarra State Forest tourism precinct.
- Development of the Five Headland Coastal Trail experience as a nature-based visitor attraction can provide a significant new attraction for the region.
- A unified marketing strategy for the region can help support the ongoing growth of the region's visitor economy, while also helping to encourage more people to permanently relocate to the region.

Construction

The construction sector remains a significant source of economic value for the Hastings Macleay region. If enhanced resilience going forward for the sector can be achieved, the industry stands to benefit from significant investments that continue to be made in the region.

GVA (2020, \$m)	647
Employment (2021)	4,601
LQ score (2020)	1.39
LQ Heavy & Civil Engineering (2020)	2.2
LQ Non-Residential Building (2020)	1.3

Strengths

- The region's construction sector has shown strong average annual growth of 5.5% from 2011 to 2020 in spite of significant disruption from natural disasters and supply chain challenges.
- Both residential and non-residential building construction make high-value contributions to the regional economy, contributing \$102 million and \$66 million respectively to GVA in 2020.
- Heavy and civil engineering also represents a key industrial strength for the region, with an LQ of 2.2.

Vulnerabilities

- Materials and processes used in the construction industry have been recognised as a major carbon emitter. As such, decarbonisation of the industry in the shift towards net zero will likely require innovation and adaptation actions from the construction sector.^[20]
- Global supply chain shortages and challenges are impacting the region, with meeting timelines and budgets for major projects proving a key current challenge for the sector. These issues are expected to continue over the short to medium-term, so will likely form an ongoing constraint on the industry.^[16]
- While rebuilding efforts needed after natural disasters add to industry demand, they can also fuel a 'boom-bust' cycle within the sector. Ensuring an ongoing pipeline of major projects is critical to sustained growth in the sector.

Opportunities

- The region is home to significant tracts of land which are close to utilities and services, as well as accessible via the upgraded Pacific Highway. This presents opportunities for continued industry growth if development of this land can be facilitated, leveraging the good availability of key enabling infrastructure.
- The region has received over \$120 million in grant funding since 2018, with a key focus on upgrades to infrastructure and major regional facilities. Continued delivery of projects associated with this funding, as well as broader private investment can support ongoing growth in the construction sector and aid efforts to retain skilled workers in the region.

Healthcare and social assistance

The healthcare and social assistance sector is supported by a robust health network and recent major investments in precinct-based growth will continue to support future growth .

GVA (2020, \$m)	63
Employment (2021)	9,360
LQ score (2020)	1.31
LQ residential care and social assistance (2020)	1.9
LQ Health care services (2020)	0.9

Strengths

- The region's health network includes allied health services and hospitals in Wauchope, Kempsey and Port Macquarie, offering emergency and specialised health services.
- The Shared Health Research and Education Campus (SHREC) and Charles Sturt University in Port Macquarie aids in developing a sustainable health workforce for the broader North Coast region through new allied health programs aligned to resident demands.
- Residential care and social assistance is a significant specialisation in the region with an LQ score of 1.9. The sector is supported by a wide range of major aged care facilities and retirement villages in the region.

Vulnerabilities

- A shortage of skilled workers acts as a key constraint for the sector. Significant challenges with filling key roles such as carers and aides is particularly concerning given the region's specialisation in residential care and social assistance.
- Exacerbating this issue is housing availability and affordability challenges, including meeting needs for key worker housing (see page 22). These challenges may restrict the capacity of service providers to attract and retain skilled health workers from outside the region.

Opportunities

- A growing and ageing population will continue to increase demand for health services across the region, providing ongoing opportunities for further growth in the sector.
- Recent investments into major health infrastructure, such as initial investments to deliver the Port Macquarie Health and Education Precinct vision will help enhance service delivery capability in the healthcare sector in the region.
- The region's emerging strengths in professional and scientific services, alongside tertiary education endowments such as Charles Sturt University and SHREC may represent an opportunity for future investment to further develop medical research and innovation capabilities. The Clinical Research Unit at Port Macquarie Base Hospital demonstrates the potential in this area.

Agriculture, forestry and fishing

The agriculture, forestry and fishing sector draws on the region's extensive natural endowments to create value across a diverse range specialisations.

GVA (2020, \$m)	234
Employment (2021)	1,459
LQ score (2020)	1.96
LQ Sheep, grain beef & dairy (2020)	1.4
LQ Forestry and logging (2020)	6.4
LQ Aquaculture (2020)	11.4

Strengths

- The agriculture, fishing and forestry industry represents a diverse economic strength for the region, which contributed \$234 million to GVA in 2020.
- The sector has a range of sub-sector specialisations including sheep, grain, beef and dairy, fishing, hunting and trapping, poultry and other livestock, aquaculture, and forestry and logging.
- The region has a range of substantial natural endowments including significant arable land, extensive coastline and river access, and large areas of forest.
- The region is well serviced by high quality transport infrastructure that creates strong links from the region to markets in the north and south, which acts as a key enabler for many parts of the industry.

Vulnerabilities

- The industry relies on viable climatic conditions for production, which may present vulnerabilities in the face of climate change and the increasing frequency of natural disaster events in the region.
- The forestry sector was significantly impacted by the 2019-2020 bushfires, which reduced long term supply in the region by up to 10 per cent.^[6]
- Macroeconomic factors beyond the control of producers may influence supply chains and commodity prices and therefore have an influence on the value of outputs.
- Recent inflationary pressures have placed upward pressure on key input costs such as production and freight transport costs (4.7% jump in service price in 2021-22).^[21]

Opportunities

- Investing in the uptake of agtech to enhance primary production processes can help increase industry resilience and productivity, and lead to greater yields and increase the value of output.
- Increased collaboration with the region's \$274 million manufacturing sector to explore new value-add opportunities can enhance the value yielded from outputs and help support future growth.
- Education and assistance to help producers implement changes that reduce carbon emissions can help build resilience in the sector, as well as unlock opportunities for innovation and sustained future growth in parts of the sector that are currently emissions intensive.

Key themes in stakeholder consultation

Stakeholders from the Hastings Macleay region noted the region is facing challenges associated with building a skilled workforce, but has significant opportunities associated with major future developments. Natural disaster events have brought to the fore the need to focus on enhancing resilience within infrastructure and the broader community against future shocks.

Social, environmental and economic resilience

The region has faced successive natural disasters since 2018, including drought, bushfires and multiple major flooding events. Ensuring infrastructure is planned and delivered with resilience against future climate changes and disaster events as a key focus was highlighted as a key outcome needed to ensure long-term economic success for the Hastings Macleay region.

Skills development and attraction

Stakeholders noted that while the 2018 REDS highlighted ongoing population growth as a goal, labour supply issues have since emerged that highlight a need to focus on building the skills capacity of existing residents, and targeting increased migration of skilled workers to the region.

Leveraging opportunities for growth

The Hastings Macleay region has significant physical space to grow, with relatively high availability of residential and employment lands, provided there is sufficient investment in enabling infrastructure. Stakeholders highlighted opportunities to attract investment with available lands, but steps are needed to improve the coordination of infrastructure projects so to ensure that critical infrastructure is available to activate potential sites.

Hastings Macleay REDS - 2023 Update strategies

During consultation, stakeholders noted that the 2018 strategies broadly remain relevant to the region and continue to provide a good focus for future growth. However, stakeholders noted that the strategies would benefit from a higher degree of specificity, with a particular focus on growing the supply of skilled workers in the region. They highlighted opportunities for growth by developing industry clusters and expanding the region's export based sectors.

Reflecting these changes, the 2023 REDS Update strategies for the Hastings Macleay region are listed below (amendments made to existing 2018 strategies are highlighted in **bold**):

Amended	Grow the region's skilled labour supply .
Amended	Foster industry development in engine and emerging industries, including through growth of industry clusters .
Amended	Grow the region's export-based sectors through better connections to markets and understanding of market opportunities .

Key enablers of economic growth

A number of key enablers have been identified to assist with delivering each of the strategies. This list is non-exhaustive, with a focus on identifying priority short- to medium-term enablers. Responsibility for implementation of these enablers sits with various levels of government, and in some cases may also include business, industry or non-government bodies. Collaboration across these entities at a local level will be key to achieving results.

Strategy	New Enablers		Lead and support	Rationale
Grow the region's skilled labour supply.	People and skills	Collaborate with local industry and training providers to develop the local skills base in line with industry needs, including through supporting targeted Aboriginal skills development initiatives.	Training Services NSW, Local councils, Local business chambers, Local universities, Department of Regional NSW (DRNSW), TAFE NSW, Registered Training Organisations	The region is experiencing labour supply shortages, however some parts of the FER have an unemployment rate above the NSW benchmark. Enhancing local skills capacity will aid in addressing these issues and support economic growth.
	Land use / utilities	Plan for and deliver greater housing diversity and affordability in areas that are at low risk from natural hazards and well connected to utilities and transport infrastructure.	Local councils, Department of Planning and Environment (DPE)	A shortfall in housing availability is a restraint on workforce attraction and retention. Recent natural disasters have highlighted the need to ensure future housing development is resilient.
Foster industry development in engine and emerging industries, including through growth of industry clusters.	Land use / Utilities	Facilitate the development of industrial and employment land throughout the region, including through enhancing and extending essential infrastructure connections such as roads, water and sewage.	Local councils, DPE, Transport for NSW (TfNSW)	The region benefits from good availability of land, with potential to leverage this advantage for future economic growth.

Strategy	New Enablers		Lead and support	Rationale
	Infrastructure / People and skills	Support initiatives to leverage key endowments such as the Port Macquarie Health, Education, and Innovation Precinct and the Airport Business and Technology Park to grow emerging sectors including knowledge-intensive sectors and circular economy opportunities.	DRNSW , Local councils, Charles Sturt University	The region has growing strengths in professional, scientific and technical services and is well located with available land to enable expansion into the circular economy sector.
	Infrastructure	Support research and feasibility studies to identify new industries and business within the region with the capacity to improve economic and supply chain resilience.	Local councils , DRNSW, Local business chambers	Industry growth will require efforts to enhance supply chain resilience to future shocks.
Grow the region's export-based sectors through better connections to markets and understanding of market opportunities.	Infrastructure / People and skills	Support collaboration between producers and value-add manufacturing businesses in the region to grow advanced manufacturing, diversify the regional product offering and attract investment.	DRNSW , Local councils, NSW Department of Primary Industries (DPI), Investment NSW	Leveraging the region's strengths in agriculture, forestry and fishing and manufacturing may aid in building local supply chain resilience.
	Infrastructure	Enhance the resilience of transport infrastructure against potential climate-related events, including through improving the flood resilience of major roads and scenario planning for future events.	TfNSW , Local councils	Recent climate-related shocks have shown the potential vulnerability of infrastructure. Suring-up key infrastructure will support industry resilience and long-term growth.

9. References

1. NSW Government (2022), *National disaster declarations*, <https://www.nsw.gov.au/disaster-recovery/natural-disaster-declarations>
2. Kempsey Shire Council (2020), *Kempsey Shire Council to lower water restrictions to Level 2 from Monday*, Media release, <https://archive.kempsey.nsw.gov.au/media-releases/2020/mr20200219.html>
3. Fitzpatrick, L (2020), *Council introduced Level 4 restrictions last month*, Port Macquarie News, <https://www.portnews.com.au/story/6609428/remember-we-are-on-severe-water-restrictions/>
4. Sati, W (2019), *Coastal dairy farmers and communities feeling effects of drought too*, ABC News, www.abc.net.au/news/2019-10-01/coastal-dairy-farmers-and-communities-feeling-drought-too/11560110
5. National Emergency Management Agency (2022), *LGA profiles database – year to 31 December 2022*, <https://nema.gov.au/data#/map>
6. DRNSW (Department of Regional NSW) (2020), *REDS Bushfire Addendum – Hastings Macleay*
7. Readfearn, G (2020), *Hundreds of thousands of fish dead in NSW as bushfire ash washed into rivers*, The Guardian, www.theguardian.com/world/2020/jan/17/hundreds-of-thousands-of-fish-dead-in-nsw-as-bushfire-ash-washed-into-river
8. Department of Customer Service (2022), *Outcomes of Business Sentiment Survey*
9. Port Macquarie-Hastings Council (2022), *Port Macquarie-Hastings Economic Development Strategy: Discussion Paper*, https://portmacquarie.infocouncil.biz/Open/2022/04/OC_21042022_AGN_files/OC_21042022_AGN_Attachment_10953_2.PDF
10. DSS (Department of Social Services) (2022), *DSS Payment Demographic Data*, <https://data.gov.au/data/dataset/dss-payment-demographic-data>
11. Noble, F (2021), *Evacuations at Kempsey on NSW Mid North Coast as river set to burst banks*, Nine News <https://www.9news.com.au/national/nsw-floods-mid-north-coast-evacuations-communities-damaged/ca467cb5-5ad9-40ac-a140-8cea7bbd2685>
12. PricewaterhouseCoopers (2022), *Flood Impacts Business Survey*
13. Landis-Hanely, J and Boseley, M (2022), *A flood-hit farmer’s lament for his lost cows*, The Guardian, www.theguardian.com/australia-news/2021/mar/23/a-flood-hit-farmers-lament-for-his-lost-cows-its-the-helplessness-of-hearing-them-bellowing
14. Patty, A (2021), *Fires, floods and now lockdown: On the coast, businesses are hanging by a thread*, Sydney Morning Herald, <https://www.smh.com.au/national/nsw/fires-floods-and-now-lockdown-on-the-coast-businesses-are-hanging-by-a-thread-20210815-p58iuw.html>
15. ABS (Australian Bureau of Statistics) (2022), *More growth in the regions during the pandemic*, <https://www.abs.gov.au/media-centre/media-releases/more-growth-regions-during-pandemic>
16. Export Finance Australia (2022), *World Risk Developments -November 2021*, <https://www.exportfinance.gov.au/resources/world-risk-developments/2021/november/world-economic-growth-will-be-constrained-by-supply-into-2022/>

17. Department of Communities and Justice (2022), *Rent and Sales Report – interactive dashboard*, <https://www.facs.nsw.gov.au/resources/statistics/rent-and-sales/dashboard>
18. Analysis using ABS census and CoreLogic median dwelling price data
19. Tourism Research Australia (2022), *Visitor and Expenditure data*, www.tra.gov.au/data-and-research
20. Assunção, P et al. (2022), *Net-zero steel in building and construction: The way forward*, <http://www.mckinsey.com/business-functions/sustainability/our-insights/net-zero-steel-in-building-and-construction-the-way-forward>
21. IBISWorld (2022), *Road freight service price June 2022*

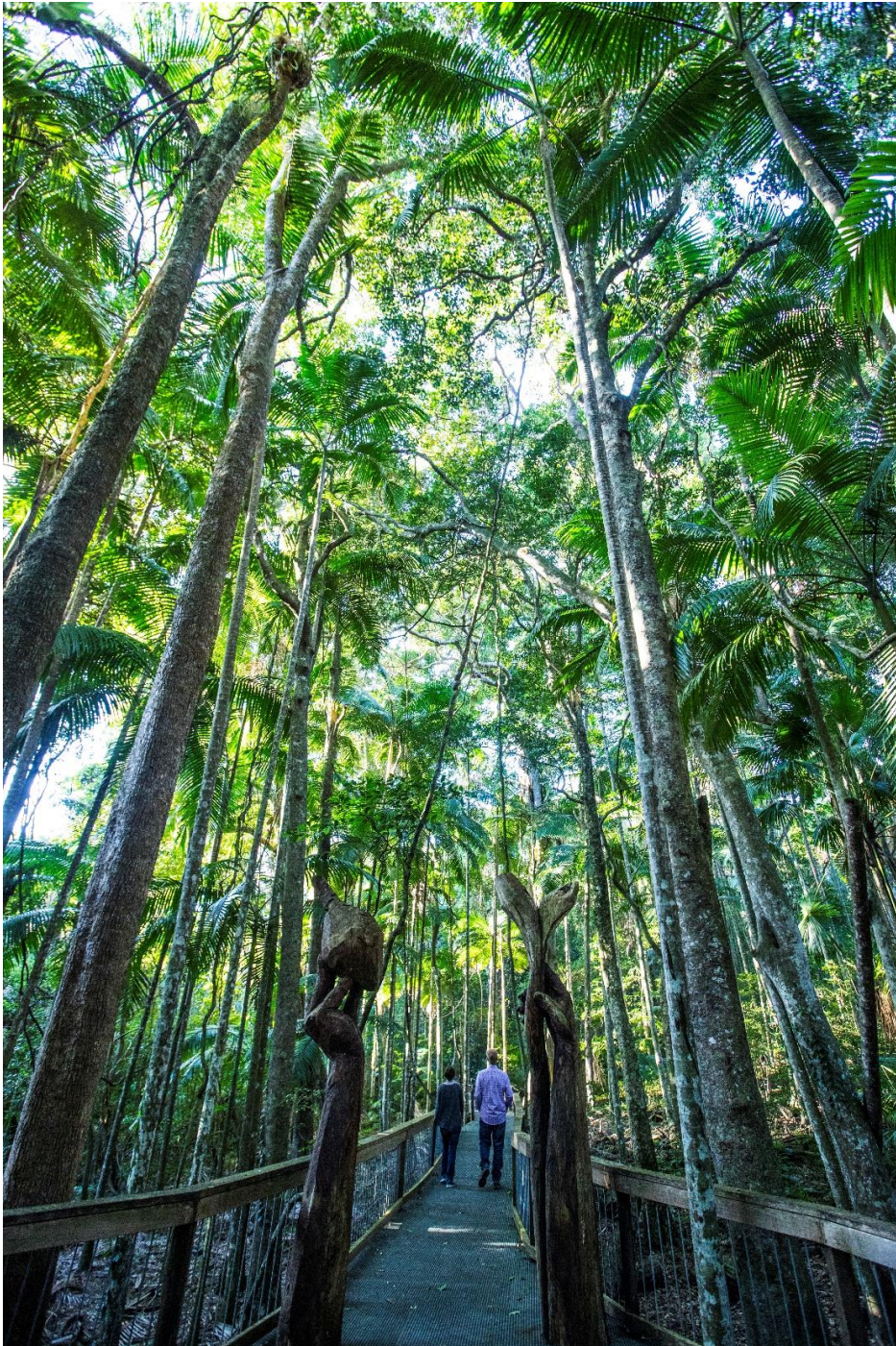


Figure 18: Couple enjoying a scenic walk through Sea Acres National Park in Port Macquarie. Photo credit: Destination NSW.