



Planning &
Environment

Draft **Central West**

and **Orana** Regional Plan



DRAFT CENTRAL WEST AND ORANA REGIONAL PLAN
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Draft Central West and Orana Regional Plan
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Cover Images:

Left: Hay bales, Central West, courtesy of Amber Hooper

*Right: Warrumbungle National Park,
courtesy of Susan Wright, Destination NSW*

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Foreword

The diversity of the Central West and Orana region makes it a wonderful place to live and a great place to visit.

Productive agricultural lands and rich mineral and energy resources have contributed to thriving regional cities, towns and villages. Residents enjoy a variety of lifestyles and ready access to many of the capital cities in eastern Australia, as well as diverse landscapes including scenic mountain ranges, renowned rivers and wetlands and vast western plains.

The *Draft Central West and Orana Regional Plan* is a plan with a vision for a sustainable future for this important region.

It aims to grow and diversify the economy over the next 20 years by creating more jobs, strengthening the region's cities, centres, towns and villages, and sustainably managing its agricultural, mining and natural resources. In doing so, it will help to build strong, resilient communities that can adapt to changing economic, social and environmental circumstances.

The draft Plan outlines goals and actions to achieve these outcomes. It encourages more investment, innovation and diversification in agribusiness – one of the region's key sectors – and a transformation of the manufacturing sector through advanced and value-adding manufacturing opportunities.

Protecting productive agricultural lands and important environmental assets, maintaining healthy waterways and catchments, and sustainably managing mineral and energy resources are key priorities.

So too are generating more jobs, providing more housing, delivering more services and improving transport in and between the region's cities, centres, and surrounding towns and villages.

The region occupies a pivotal position on national freight corridors and the draft Plan identifies opportunities to enhance the region's freight and logistics network, leverage greater productivity across the region's agribusiness, mining and manufacturing sectors, and increase access to markets outside the region.

We want to know what you think about the vision, goals and actions in this 20-year plan for the Central West and Orana so we can achieve a sustainable future for this important region.

Have your say.

A handwritten signature in black ink that reads "Sarah Mitchell".

Sarah Mitchell MLC

Parliamentary Secretary for Western NSW



Introduction

The *Draft Central West and Orana Regional Plan* (draft Plan) applies to 20 local government areas, covering an area of 125,666 square kilometres.

Central West Local Government Areas

Lachlan, Forbes, Weddin, Cowra, Blayney, Bathurst, Oberon, Lithgow, Mid-Western Regional, Orange, Cabonne and Parkes

Orana Local Government Areas

Dubbo, Wellington, Warrumbungle, Coonamble, Gilgandra, Narromine, Warren and Bogan

The region is made up of two equally important areas – the Central West and the Orana. Each has its own unique economy, environment and settlements. Recognising and strengthening the role of the Central West and Orana will mean that communities can continue to access the infrastructure and services they need to sustain healthy, vibrant lifestyles.

Central West

The Central West is characterised by a concentrated settlement pattern of small towns and villages, scenic landscapes, including the World Heritage listed Blue Mountains, and its relaxed rural lifestyle. The eastern part of the Central West is closer to Sydney, making it an attractive destination for tourists, day-trippers and for people relocating from Sydney to a regional or rural centre. This area has also become a highly sought after location for rural residential development.

The Great Dividing Range defines the east of the region, with the slopes and plains distinguishing the west. Rich volcanic soils and

major river systems, including the Macquarie and Lachlan Rivers, support a diverse and productive agricultural industry.

The Central West is home to the regional cities of Orange and Bathurst which are located in close proximity to each other, as well as the dispersed regional centres of Lithgow, Mudgee and Parkes. The regional cities and their supporting regional centres provide services and commercial, residential, cultural and industrial opportunities to their rural communities. The Central West has strong inter-regional and interstate transport connections and is one of the key 'gateways' for freight and passenger transport from Western NSW.

The economic strengths of this part of the region lie in manufacturing and mining, including coal mining concentrated around Lithgow and Mudgee, as well as gold, silver and copper mining in other parts of the region. Renewable energy opportunities are growing, with wind farming around Blayney and Lithgow. The Central West produces a diverse range of agricultural products and is renowned for its cool climate wines and major events such as the Bathurst 1000 Motor Race.

Orana

The Orana is characterised by its diverse natural environments, including the vast plains to the west, the internationally significant Macquarie Marshes wetlands, irrigated agricultural districts around Narromine and Warren, and the Warrumbungle mountain ranges in the north east. These areas contribute to the Orana's economic prosperity.

High-level commercial, residential, cultural and industrial services are located in Dubbo – Orana's only regional city. Other smaller towns and villages rely primarily on agribusiness and are also highly reliant on the services and facilities provided in Dubbo.

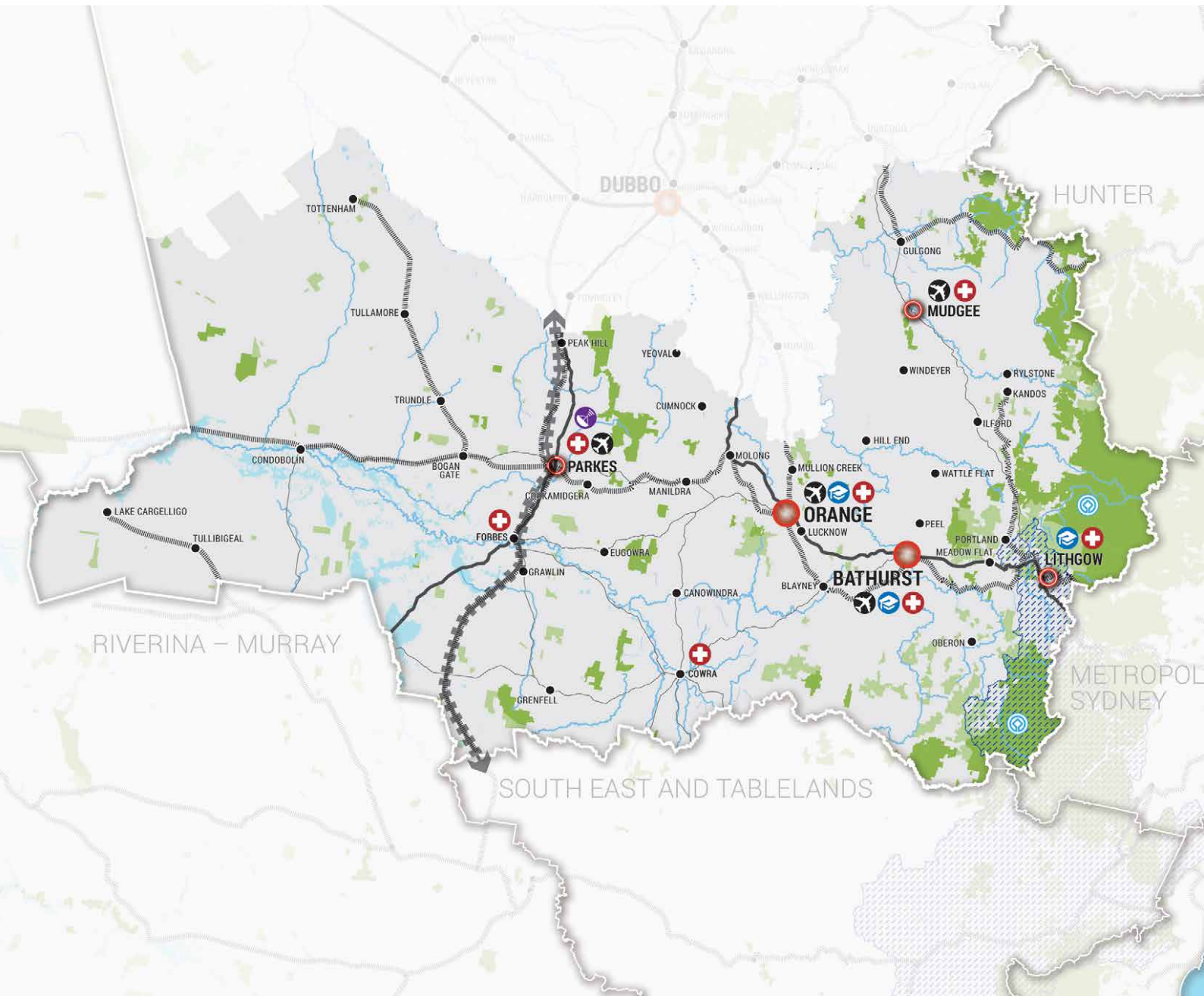
Dubbo is a major freight and passenger transport hub at the confluence of major interstate highway networks including the

*Top:
Flavours of Mudgee
food and wine festival,
courtesy of Mid-
Western Regional
Council*

*Middle:
Dubbo, courtesy of
Dubbo City Council*

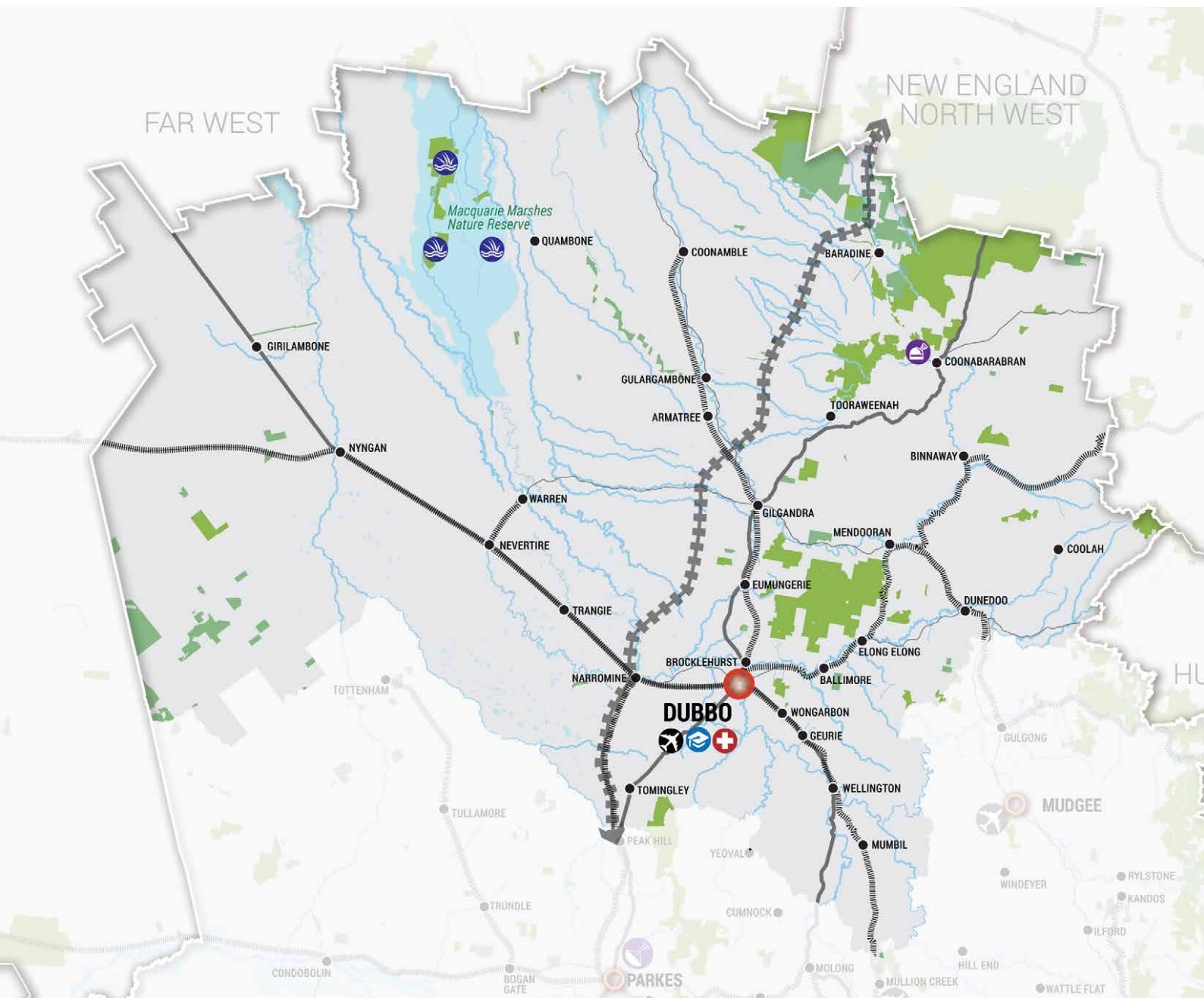
*Bottom:
Dunns Swamp, Wollemi
National Park, courtesy
of Evolving Images,
Destination NSW*

FIGURE 1: CENTRAL WEST



	Regional City		Proposed Melbourne-Brisbane Inland Rail Corridor (2015)		Wetland
	Regional Centre		University		Sydney Drinking Water Catchment
	Town/Village		Hospital		National Park and Reserve
	Railway		Regional Airport		State Forest
	Highway		Parkes Radio Telescope		Waterway
	Main Road		Greater Blue Mountains World Heritage Area		

FIGURE 2: ORANA



	Regional City		Main Road		Ramsar Wetland
	Regional Centre		Proposed Melbourne-Brisbane Inland Rail Corridor (2015)		Wetland
	Town/Village		Hospital		National Park and Reserve
	Railway		Regional Airport		State Forest
	Highway		Siding Spring Observatory		Waterway



Mitchell, Newell and Golden highways, and the Main Western Rail Line. Dubbo provides services to most parts of the neighbouring Far West region and is home to the iconic Taronga Western Plains Zoo.

High levels of annual solar insolation in the west of the Orana make it attractive for solar energy generation – the largest solar farm in the southern hemisphere is located in Nyngan. The Orana has economic strengths in agribusiness, with significant broadacre cropping and grazing and agricultural processing activities. Health care and social assistance, education and retail, as well as an emerging mining sector, are also driving growth in Orana.

Regional drivers of change

By 2036, the population of the Central West and Orana region is projected to grow by 18,750 to 302,450. An additional 13,600 homes will be needed to accommodate the population growth and change in the region. While some parts of the region, including the regional cities and some of the regional centres will experience population growth, in other parts of the region the population will stabilise or decline. These changes will have significant implications for infrastructure, service provision, housing and the economy.

The region's ageing population will also have significant implications for housing and services. The proportion of people aged 65 years and over will increase from 18 per cent

(52,950 people) in 2016 to over 25 per cent (76,700 people) in 2036.¹ The people in this age group are likely to be healthier, more active and more productive than previous generations, which means there are opportunities to harness their skills and knowledge so they can remain engaged in the workforce. There are also opportunities to expand the products and services on offer to this age group, including education and training, supported housing, health and leisure, tourism and recreation, and home services. Many of these opportunities have land use and transport implications. In locations experiencing a stable or declining population, there is likely to be greater demand for health services and changing housing needs, as well as pressure to find people of working age.

Freight volumes are expected to increase significantly in coming years, resulting in the need for substantial upgrades and expanded transport networks. Pinch points in the freight network will have to be resolved to improve efficiency, reliability and capacity.

There are significant drivers of change emerging for the regional economy. These include increasing productivity in agriculture, including broadacre cropping, an expanding mining sector, diversification of manufacturing, including value-add, manufacturing of local agricultural produce, and growing health and education sectors.



Left: Warren, courtesy of Warren Shire Council

Right: Portland Bottle Kilns, courtesy of Lithgow City Council

Climate change will also have a significant effect on the economy, environment and communities of the region through the availability of water, and the frequency and severity of natural hazards such as droughts, floods and bushfires. Minimising these impacts will require ongoing adaptation, mitigation and innovation.

This draft Plan provides the strategic policy, planning and decision-making framework to guide the region to sustainable growth over the next 20 years. It integrates economic, social and environmental considerations in the interests of achieving ecologically sustainable development.

The draft Plan supports the development of a strong, diverse and competitive economy as this will be central to building prosperity and resilience in the region and meeting any economic, social and environmental challenges that arise.

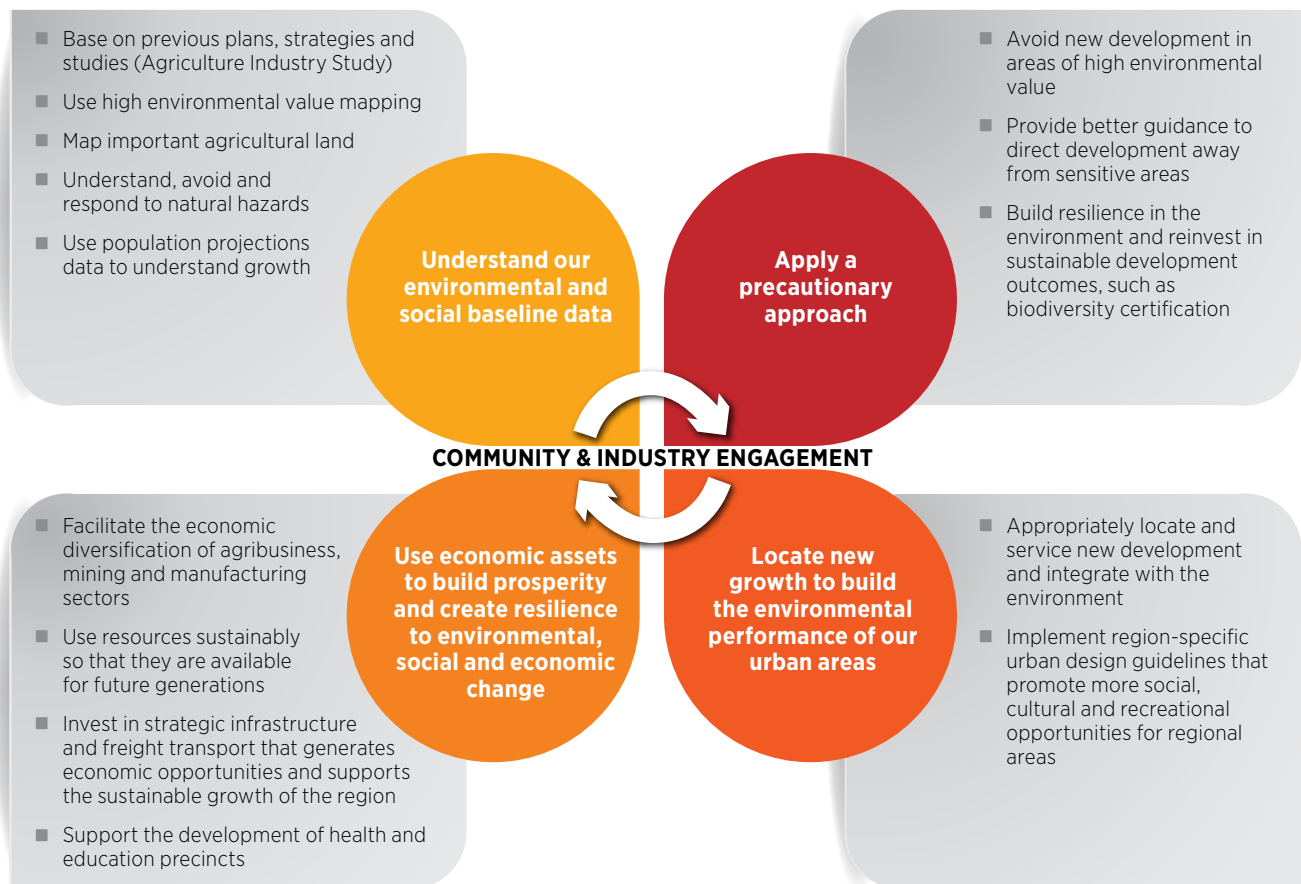
Growth will be planned to manage competing land uses such as agriculture, mining and settlement. It will focus on developing existing urban areas to capitalise on access to jobs, services and transport, and new urban areas that will be designed to support sustainable, healthy communities.

Underpinning the planning framework for this draft Plan are the following key principles:

- facilitate economic growth, environmental management and social wellbeing;
- facilitate economic activities consistent with changing market demands and industry needs;
- respond to long term structural economic and demographic changes, with a focus on ageing, migration patterns and productivity;
- inform infrastructure and services investment, coordinated with land use;
- guide the locations for new housing and provide a diversity of housing choice;
- respond to the region's landscape, environmental assets, natural and cultural resources; and
- address the implications of a changing climate and build resilience to natural hazards.



FIGURE 3: BUILDING THE DRAFT PLAN





Left: Agribusiness, Narromine, courtesy of Peter Kierath

Right: Viticulture, Mudgee, courtesy of Amber Hooper

Developing the Plan

The NSW Government has engaged with councils across the region, and importantly, members of the Joint Organisations of Councils and the Regional Organisation of Councils while developing this draft Plan. Their input has helped to inform the draft Plan.

The draft Plan is also underpinned by a strong evidence base. Data and evidence has been gathered and analysed on population growth and change; the regional economy; housing and employment market; the location of important environmental and resource areas; and natural hazards.

Inputs to the draft Plan include:

- mapping of areas of potential high environmental value in the Central West and Orana, prepared by the Office of Environment and Heritage (see Figure 17);
- council community strategic plans and local planning strategies; and
- the Draft Agricultural Lands Development Study (2015 – still being prepared by RMCg).

A range of NSW Government plans have helped to inform the draft Plan including the:

- *Economic Development Strategy for Regional NSW* (2015);
- NSW Trade and Investment's *Central West Regional Economic Profile* (2015);
- *Rebuilding NSW - State Infrastructure Strategy* (2014);
- *NSW Freight and Ports Strategy* (2013);
- *Central West Regional Transport Plan* (2013); and
- *NSW Long Term Transport Master Plan* (2012).

The work of other stakeholders has also been of value, including Regional Development Australia's *Central West Freight Study* (2014), *Orana Regional Plan 2013-2016* and the *Central West Regional Plan 2013-2016*.



Vision

The vision for the Central West and the Orana is for a sustainable future centred on a thriving economy, with a diverse range of economic industries across each local government area; productive rural lands and natural resources; strong, resilient and well-served communities; and a healthy environment.

Residents and visitors will continue to enjoy the region's diverse natural environment – the Blue Mountains in the Great Dividing Range, vast western plains, major river systems and internationally significant wetlands. These environmental assets will be valued and actively managed so that future generations can continue to enjoy them.

The regional cities of Orange, Bathurst and Dubbo, and the network of supporting regional centres, will continue to grow. They will provide greater housing choice and diverse job opportunities, supported by health and education services. The regional cities will be essential to servicing the needs of the wider region and supporting the strength and resilience of smaller towns and villages. In particular, the region's ageing population will be offered greater housing choice in locations with good access to essential services. This will help to meet the needs of singles, families, low-income households and seasonal and itinerant workers.

The region's agribusiness sector will continue to make a significant long term contribution to the regional economy, with extensive broadacre cropping, grazing, and intensive agriculture and horticulture. Highly productive agricultural land will be identified, protected and used sustainably. The agribusiness sector will be supported by an associated, value-add, manufacturing sector, which will diversify the economy and provide more jobs to the region.

A sustainable mineral and energy resource sector will remain a major contributor to the regional economy, particularly in the Central West, with additional mining operations

established in the Orana. The region's mining communities will be more adaptive and resilient to change across the mining lifecycle. There will be opportunities to capitalise on the economic benefits of renewable energy (such as wind, solar and biofuels) across the region.

An increased demand for higher capacity freight networks will be achieved by defining the networks and better coordinating investment. This will provide opportunities for productivity growth across the agribusiness, mining and manufacturing sectors. The Melbourne to Brisbane Inland Rail Corridor will transform the freight network. A coordinated and collaborative approach to improving local road and rail networks, and connectivity to the wider regional and State network, will better link the region to Sydney, Newcastle and Wollongong, as well as interstate and global markets.

Positive regulatory settings and policies that overcome barriers to investment will help the region to grow and prosper. Greater prosperity will be used to invest in protecting and restoring the environment. The region's communities will be more adaptive and resilient to the impacts of climate change, including water availability and natural hazards.

To achieve this vision, we have set the following goals:



















- GOAL 1: A growing and diverse regional economy;
- GOAL 2: A region with strong freight transport and utility infrastructure networks that support economic growth;
- GOAL 3: A region that protects and enhances its productive agricultural land, natural resources and environmental assets; and
- GOAL 4: Strong communities and liveable places that cater for the region's changing population.

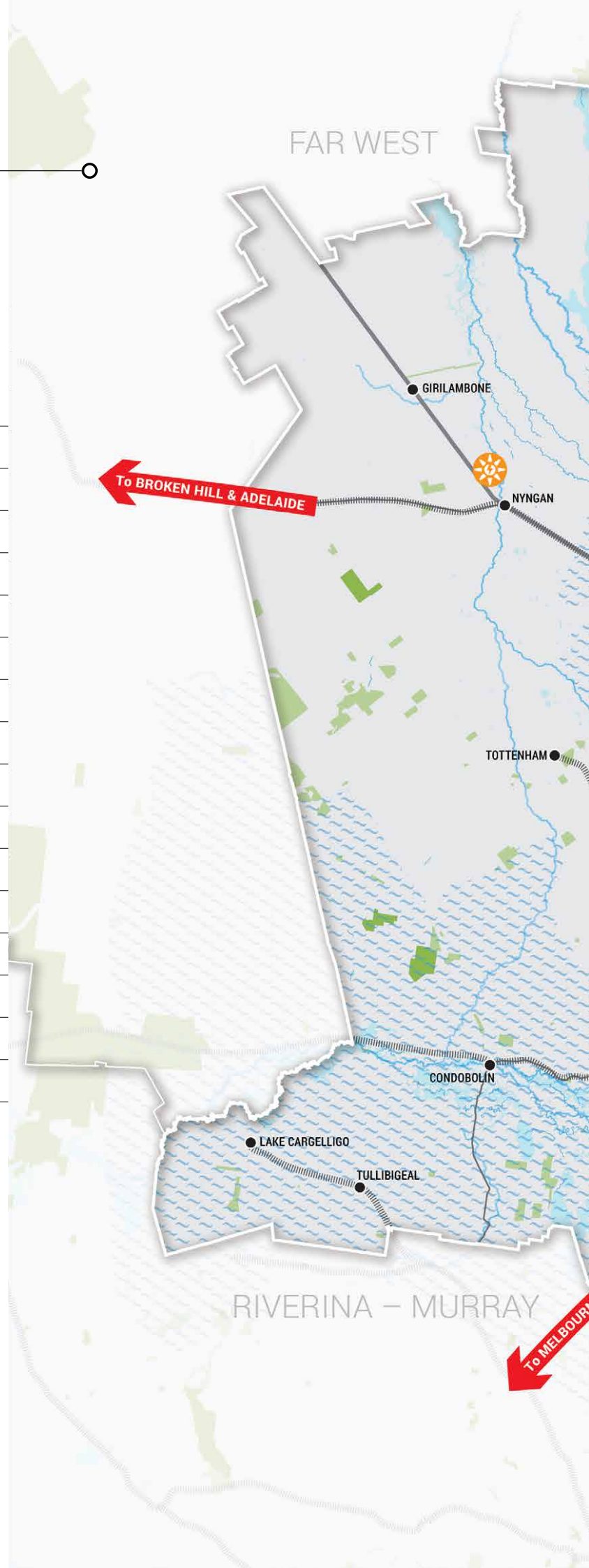
Top:
Sofala, courtesy
of Hamilton Lund,
Destination NSW

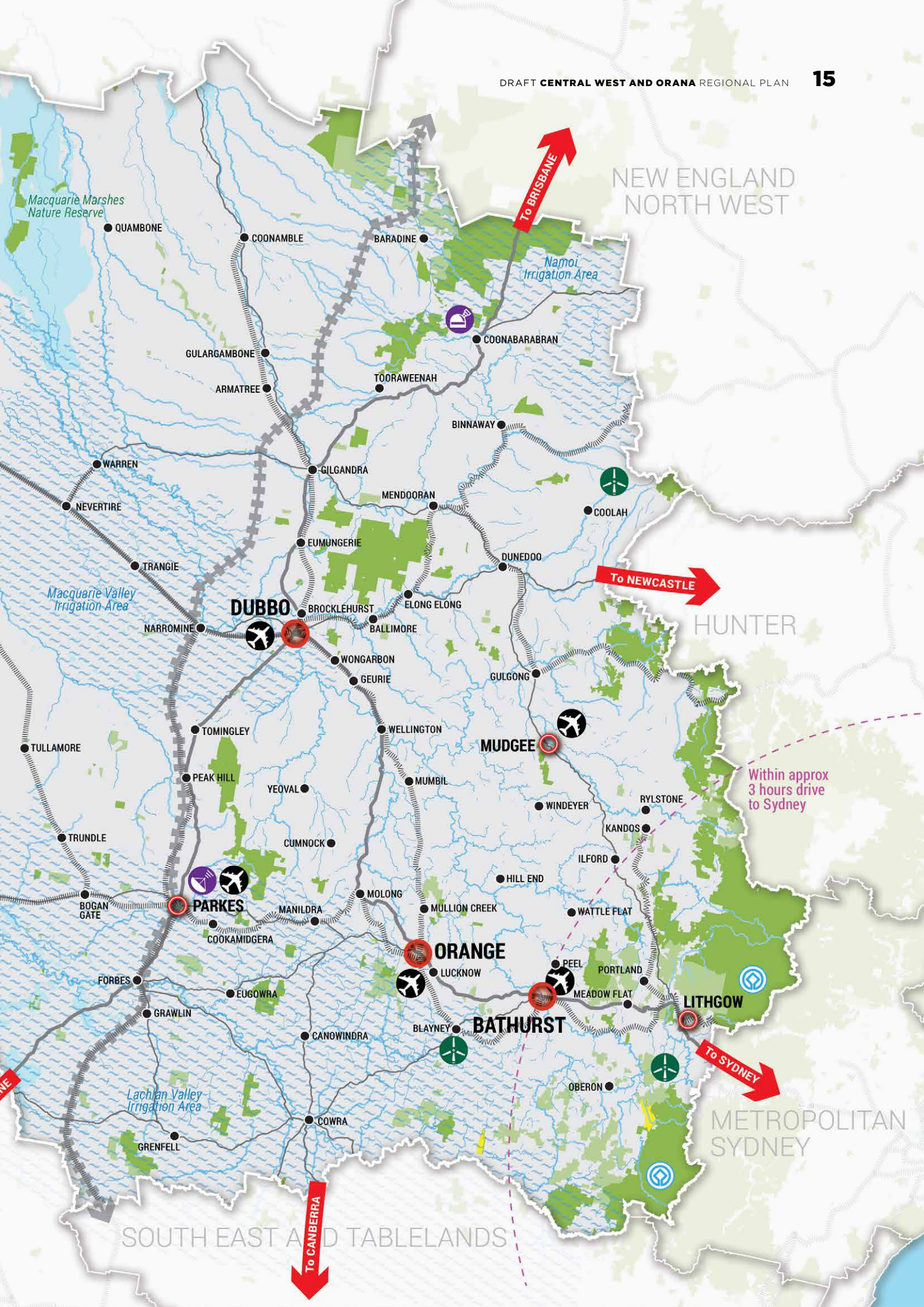
Middle:
Japanese Garden,
courtesy of Cowra
Tourism

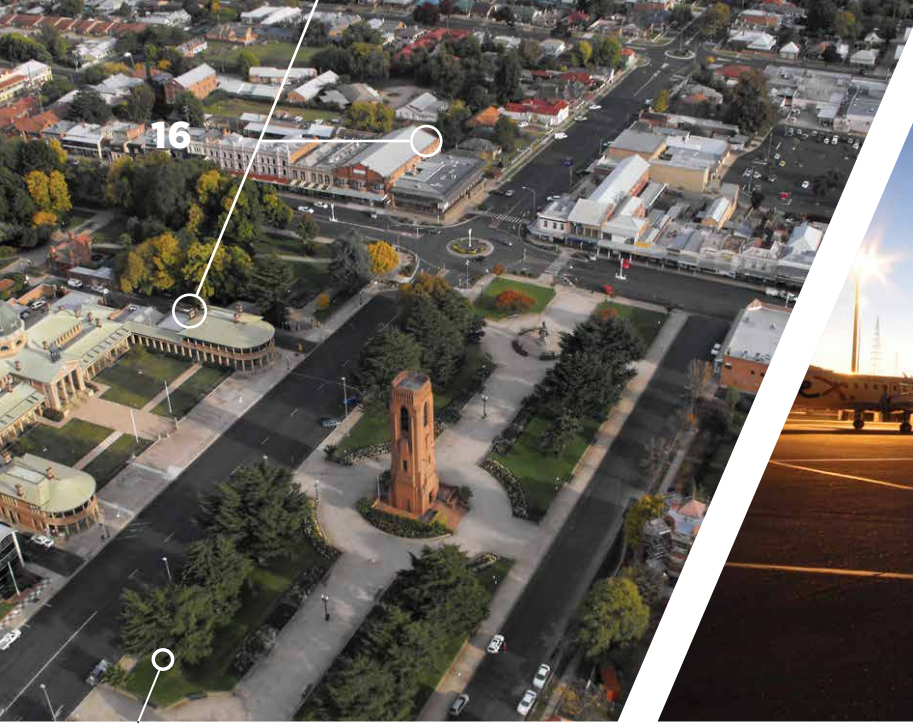
Bottom:
Courtesy of Taronga
Western Plains Zoo,
Dubbo

FIGURE 4: REGIONAL ASSETS

	Regional City
	Regional Centre
	Town/Village
	Railway
	Highway
	Main Road
	Proposed Melbourne-Brisbane Inland Rail Corridor (2015)
	Regional Airport
	Parkes Radio Telescope
	Siding Spring Observatory
	Solar Power
	Wind Turbines
	Greater Blue Mountains World Heritage Area
	National Park and Reserve
	State Forest
	Wetland
	Irrigation Area
	Waterway







Left: Bathurst, courtesy of Bathurst City Council

Right: Dubbo Regional Airport, courtesy of Dubbo City Council



Delivering the Plan

Achieving the vision and the goals of the final Plan will be a shared responsibility that will require the ongoing commitment of all stakeholders, including councils, State agencies and the development and services sectors.

Governance

A Coordination and Monitoring Committee will be established to oversee the implementation of the final Plan. It will be chaired by the Department of Planning and Environment and comprise representatives from the Joint Organisations of Councils and Regional Organisation of Councils and other key agencies (see Figure 5). It will be supplemented by representatives from other State agencies or specific groups to manage particular issues or projects, for example, Regional Tourism Boards, peak industry bodies, service providers, utility providers, technical experts and other relevant stakeholders.

The committee will:

- coordinate and drive the delivery of actions, supported by an Implementation Plan;
- identify potential policy interventions or resourcing issues;
- establish a framework to monitor issues such as:
 - population;
 - housing;

- economy and employment; and
- natural environment and resources;

- prepare an annual report on the implementation of the actions identified in the final Plan, to provide recommendations for land use and infrastructure funding priorities to councils, infrastructure and utility service providers; and
- provide input to the review, update and revision of the Plan every five years, or as necessary.

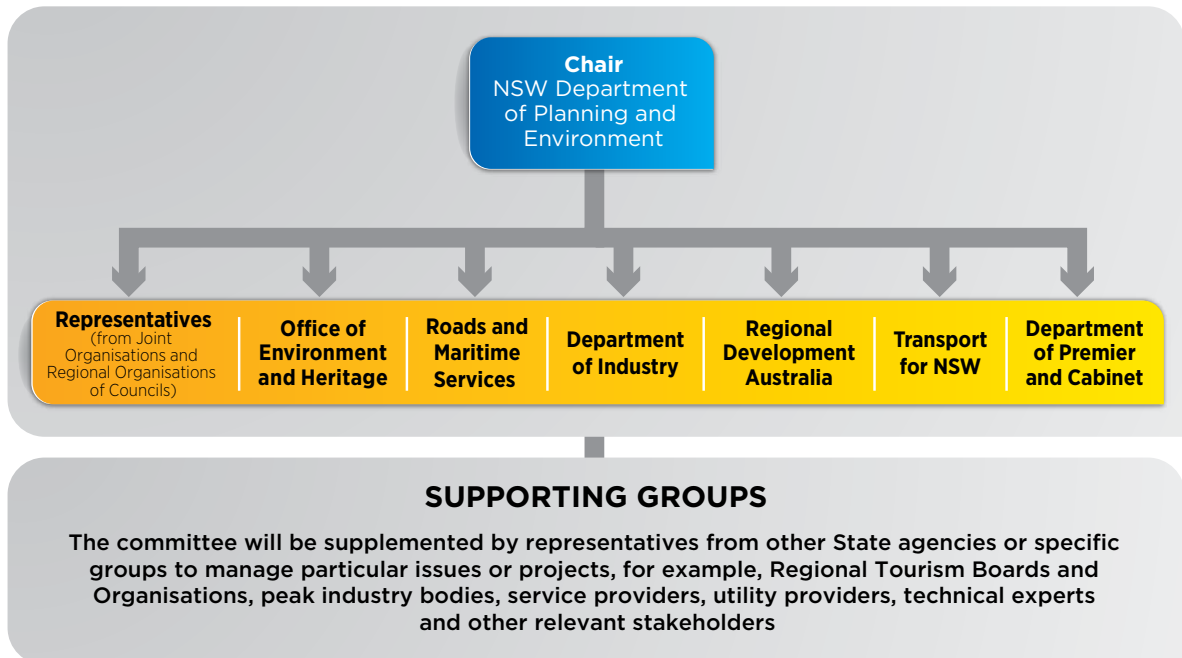
Implementation

The actions in the final Plan will be implemented through a number of mechanisms, including:

- local planning directions under section 117 of the *Environmental Planning and Assessment Act 1979*, issued by the Minister for Planning, which require council planning strategies and controls to be consistent with the aspirations of the final Plan;
- whole-of-government policy alignment; and
- regional collaboration across government, business, key stakeholders and the wider community for specific projects and processes.

The NSW Government will be responsible for implementing these actions and will work with councils on relevant initiatives.

FIGURE 5: COORDINATION AND MONITORING COMMITTEE



Infrastructure coordination

The draft Plan aligns regional planning for housing and economic activity to existing and planned infrastructure investments. The infrastructure context and priorities in this draft Plan are drawn from the *Rebuilding NSW – State Infrastructure Strategy* (2014), the *NSW Freight and Ports Strategy* (2013) and the *NSW Long Term Transport Master Plan* (2012).

The NSW Government will use the final Plan and the annual monitoring of development activity to advise infrastructure agencies about the timing of new developments, to inform ongoing planning and delivery of infrastructure, asset management and services. Opportunities for private sector delivery of infrastructure will also be explored to support growth.

The NSW Government will continue to work with State infrastructure providers to plan and deliver infrastructure that responds to place and community needs across regional NSW. This includes:

- aligning future infrastructure priorities to support planned growth and change;
- coordinating infrastructure delivery to support strategic employment and housing land; and
- exploring innovative design and delivery approaches across infrastructure sectors.

Local planning initiatives

A Ministerial Direction will require all councils to implement the objectives and actions of the final Plan, appropriate to their local area, in their council planning strategies and local environmental plans. When councils review or amend planning strategies and local environmental plans they will need to be consistent with the policies and actions in the final Plan. This will provide a connection between this Plan and the statutory requirements of the plan-making process under the *Environmental Planning and Assessment Act 1979*.



GOAL 1 – A growing and diverse regional economy

Economic diversity is critical for the region's future, to strengthen the region's economy, create economic resilience, and spread the benefits of growth more widely across the entire region.

Many communities are largely reliant on a single industry, such as mining or agriculture. This presents challenges during fluctuations in commodity prices or global demand. New opportunities to diversify economic activities, such as value-add manufacturing and tourism, will help the region become more resilient to economic, social and environmental shifts.

In 2011, the total gross regional product for the Central West and Orana region was \$12.5 billion. Mining was the biggest contributor at \$2.5 billion and employed 4,885 people.² Agriculture, forestry and fishing was the second biggest contributor at \$1.3 billion and employed

10,978 people.³ This represents 18 per cent of the total gross regional product for agriculture, forestry and fishing across NSW and makes the region the second largest contributor in this sector.⁴ Health care and social assistance was the other dominant contributor at \$1.1 billion, and employed 13,660 people – the largest proportion of the region's workforce (13.1 per cent).⁵

Improved access to domestic and international markets will stimulate economic growth in the region. Proximity to Sydney and Newcastle – and their respective ports – provides important economic connections, as does the Newell Highway for north-south road connections to Brisbane and Melbourne.

The planned Melbourne to Brisbane Inland Rail Corridor will expand economic opportunities for business in the region.

FIGURE 6: ORANA TOP 5 INDUSTRIES BY GROSS REGIONAL PRODUCT IN 2011 (\$m)

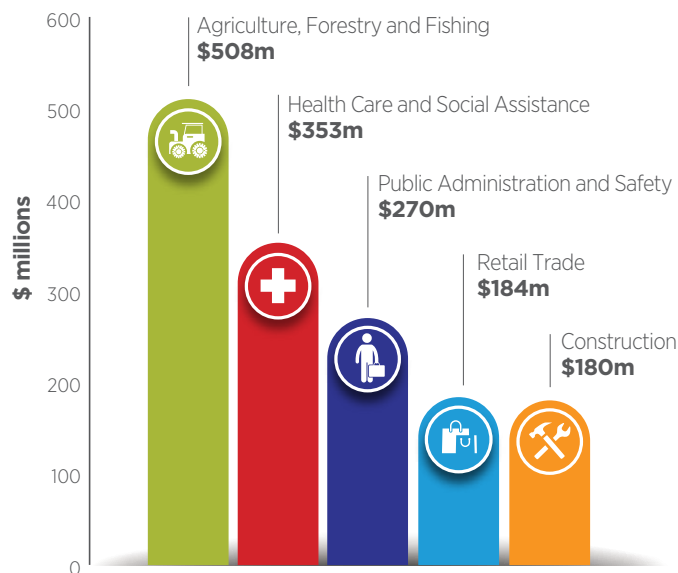


FIGURE 7: CENTRAL WEST TOP 5 INDUSTRIES BY GROSS REGIONAL PRODUCT IN 2011 (\$m)

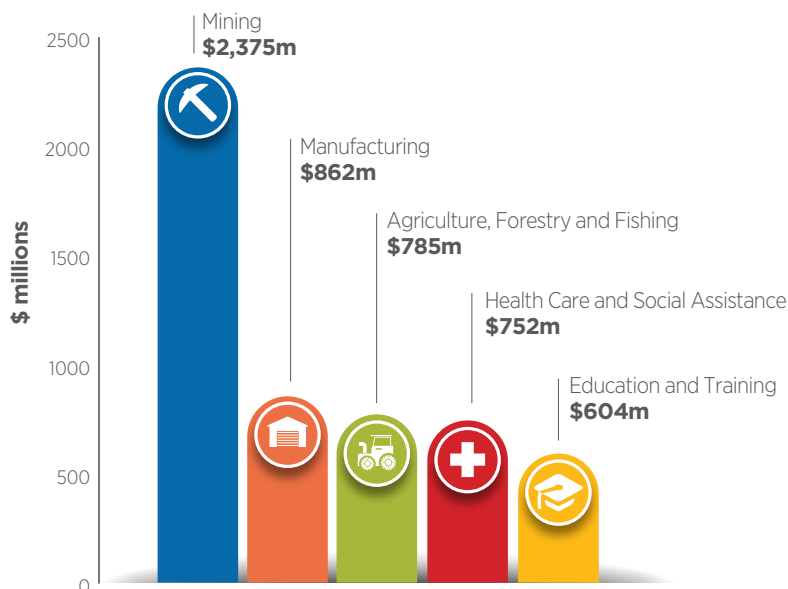
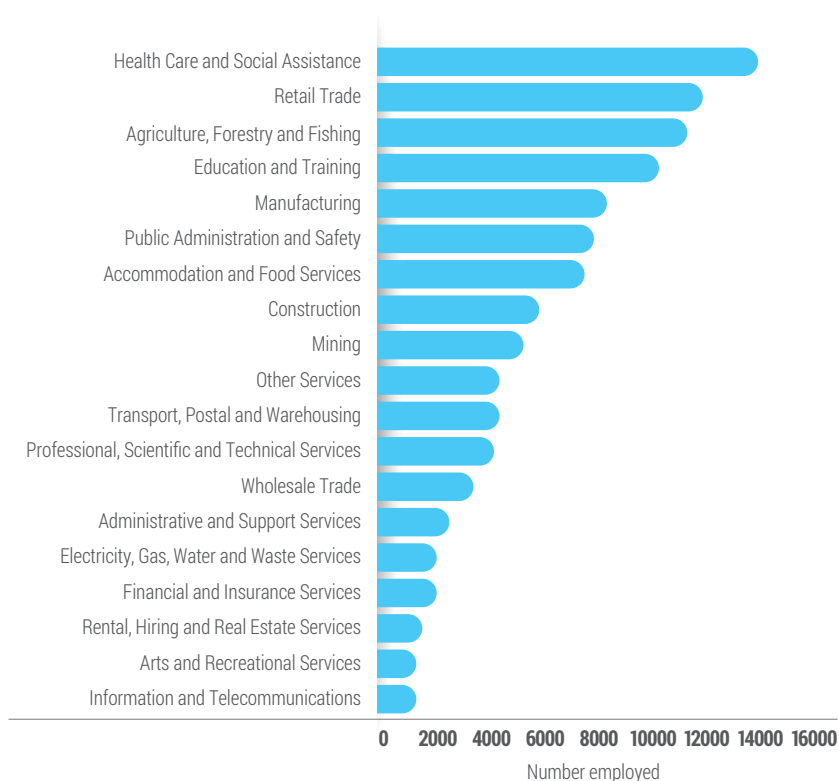


FIGURE 8: CENTRAL WEST AND ORANA HIGHEST EMPLOYERS BY SECTOR 2011⁶



This draft Plan outlines how the NSW Government will respond to the competing needs of the region's natural resources, growing agribusiness and manufacturing opportunities, and the mining sector, and how it will encourage diversity in the region's economy. A stronger, more diverse economy will make the region better placed to care for the environment and improve sustainability.

DIRECTION 1.1 Grow the economic potential of the agribusiness sector

The region's rural and regional communities are historically and intrinsically linked to the agriculture sector. Agriculture in the region ranges from intensive and irrigated crops – including vegetables, fodder, stone fruits, viticulture and cotton – to extensive broadacre cropping, meat and wool production. It is supported by a range of agribusinesses such as professional services, transport and logistics, storage and warehousing, machinery and equipment, food, beverage, and other retail outlets. Diversification has helped to expand agricultural activities, businesses and markets across the region, making agribusiness one of the most important economic sectors.

In 2010-2011, the gross value of agricultural production in the region was \$2.2 billion.⁷ This created an economic multiplier – equating to \$5 billion⁸ – in the form of additional spending and demand for goods, services and employment across the broader agribusiness sector.

Agricultural productivity is increasing as a result of technology, innovation and farm mechanisation. These factors have also contributed to a decline in employment in agriculture over the past decade. Despite this, agriculture remains a large employer in the region, with 10,980 people employed in this sector in 2011 (11 per cent of the workforce).⁹

The economic potential of the region's agribusiness sector is influenced by:

- land use conflict between rural activities and urban land uses;
- a changing climate;
- water availability;

- infrastructure needs;
- economic competitiveness;
- skilled labour shortages;
- market access restrictions and fluctuations; and
- potential resource scarcity due to urban development and climate change.

The region is well-placed to take advantage of global demands for food and fibre, particularly from Asia, due to a stable investment policy, the climate, and proximity to regional, national and international markets. There is potential to build on this competitive advantage to stimulate further economic development and to provide more local jobs in the agribusiness sector. The draft Plan includes actions that will enable the region to take advantage of future opportunities.

The NSW Government is committed to delivering information, to encourage innovation, increase productivity gains and build resilience in the agribusiness sector. The NSW Department of Industry (through the Department of Primary Industries and Local Land Services) provides industry and stakeholders with agricultural research to encourage innovation, deliver best-practice agricultural management, and to identify opportunities for future agribusiness and industry diversification.

ACTION 1.1.1 Provide enabling planning controls to facilitate diversification and attract investment in the agribusiness sector

Agribusiness provides the economic base of many rural and regional towns in the region and creates jobs and economic wealth in rural communities.

The planning system needs to be responsive to industry requirements to enable future innovation, diversification and increased investment in the agribusiness sector. Councils will need to identify local planning impediments to potential diversification, such as land use permissibility, zoning and other local provisions. The NSW Government supports ongoing strategic planning to identify barriers to agricultural operations, ancillary processing industries, and storage facilities.

The region's agricultural supply chain needs to be protected and enhanced to enable the agribusiness sector to increase economic output and sustain employment. The agricultural supply chain includes key transport infrastructure and facilities such as silos, abattoirs and saleyards, secondary processing facilities, and transport and logistics industries. For example, the Central West and Dubbo Regional Livestock Exchanges are critical pieces of infrastructure that support the region's livestock industry.

Central West Livestock Exchange (Forbes)

The \$25.4 million Central West Livestock Exchange is located 12 kilometres from Forbes and adjacent to the Newell Highway. Over the past decade, this facility has expanded significantly, with the opening of a cattle auction facility in 2006, a new sheep auction facility in 2010, and a pig auction facility in 2012.¹⁰

Dubbo Regional Livestock Market (Dubbo)

The Dubbo Regional Livestock Market is a multi-million dollar facility and is considered one of Australia's major regional livestock sales centres.¹¹ It has been operating for over 50 years and has a combined sheep and cattle throughput in excess of 1.3 million sheep and 200,000 cattle each year.¹²

The NSW Government will:

- work with councils to identify potential local planning impediments to agribusiness industry diversification and value-adding opportunities;
- require councils to undertake local strategic planning to protect the agricultural supply chain; and
- work with key stakeholders across a number of sectors to identify opportunities and barriers to supply chain infrastructure investment, to facilitate the growth of agribusiness.



Small Acres Cyder, Orange, courtesy of Destination NSW

DIRECTION 1.2 Transform the region's manufacturing sector through advanced and value-add manufacturing opportunities

In 2011, the manufacturing sector contributed over \$1 billion to gross regional product and employed 8,078 people.¹³ More than half of those employed in manufacturing in the region worked in agriculture-related manufacturing, processing and wholesaling.¹⁴

Prominent manufacturers and employers in the region include Fletcher International Exports, Nestlé Purina, Simplot Australia, MSM Milling and Mars Petcare. Each of these companies manufacture a variety of food and pet food products, largely produced from domestic and regional agricultural produce.

In addition to supporting agriculture-related manufacturing, the region has also historically supported non-agricultural manufacturing such as domestic appliances, rail engines and building materials. Some of these longstanding industries have declined or closed in recent years, with a significant effect on employment.

Global macro-economic forces are a challenge for manufacturing in the region due to increased international competition, fewer tariffs and protections, and high local production costs (higher nominal wages and energy prices), compared to the Asia-Pacific region. The availability and cost of freight associated with transporting goods manufactured within the region to the broader market, and sourcing and maintaining a skilled workforce, are other challenges.

The manufacturing sector has responded to these challenges to date by identifying opportunities for innovation, diversity and transition to new technology, to help sustain and generate new jobs. This has resulted in the emergence of smaller scale, high-technology advanced manufacturing, food and beverage production, and mining manufacturing industries.

New investment in freight infrastructure, which can facilitate the efficient and timely movement of manufactured products to market, will underpin the growth of the manufacturing sector across the region. Freight infrastructure

is critical to making manufacturing industries commercially viable and competitive.

ACTION 1.2.1 Support the growth of value-add manufacturing

There is a significant opportunity for value-add manufacturing of agricultural produce – still largely exported from the region in base commodity form – but it requires a better understanding about how to leverage opportunities at a local and regional scale.

Value-adding

'Value-adding' is the enhancement of products or services offered by a business, prior to the product or service being made available to customers. This 'value' can be added in a number of ways: through marketing and service provision or by transforming the product into something better from the customer's perspective. The diversity of the region's key commodities and products has enormous potential given the region's road, rail and port connections.

Examples of value-adding in food and beverage manufacturing include organic and free-range production methods; milling of grain and oilseeds; ginning and spinning of cotton; packaging of raw fruits, vegetables and meats; and preparing processed foods such as olives or dairy products.

Manufacturing and intensive operations should be strategically located in areas where the significant investment made by businesses in industry development and infrastructure can be protected from land use conflict. Co-location of related manufacturing industries should be encouraged, where appropriate, to maximise opportunities for co-efficiency, decrease supply chain costs, increase economies of scale and attract further investment. There are also opportunities for industries that co-locate to use the by-products and waste materials of other industries to create new products and services.

The NSW Government will:

- work with Regional Development Australia Central West and Industry NSW to prepare and implement a value-adding strategy for the Central West area; and
- work with councils to identify potential land use planning impediments to manufacturing in the region.

DIRECTION 1.3 Manage the region's mineral and energy resources sector in a sustainable way

Mining operations have been a key driver of many local economies in the region, mainly in the Central West. This sector is also beginning to emerge as a significant economic driver in the Orana.

In 2011, mining contributed \$2.3 billion (25 per cent) to gross regional product in the Central West – 55.6 per cent (\$1.3 billion) of this was from coal mining concentrated around Lithgow and Mudgee. Mining was also the fastest growing industry employer in the Central West. Between 2001 and 2011, employment in mining increased by 131 per cent, with 4,600 people employed in 2011.¹⁵ By comparison, in the Orana, where mining is an emerging economic driver, the sector contributed \$134 million to gross regional product (4.35 per cent) in 2011.¹⁶

In addition to coal, there are major gold and copper mines operating at Cadia near Orange, Northparkes Mines and Tomingley near Parkes, Tritton in Nyngan and Mineral Hill in Condobolin. The potential for coal seam gas extraction is concentrated mainly in the Orana around the Pilliga in Warrumbungle, Gilgandra and Coonamble Shires. Opportunities for mining rare earths and metals have emerged across the region, with the most significant deposit located in Dubbo Local Government Area.

Cadia Valley Gold Mine

Cadia Valley Gold Mine south west of Orange is one of Australia's largest mining operations, producing 667,418 ounces of gold and 73,697 tonnes of copper (to end June 2015). The mine was constructed in 1999 at a cost of \$2.2 billion, employing over 2,300 contract employees during peak construction. Currently the mine employs more than 780 permanent staff.

Dubbo Zirconia Project

The Dubbo Zirconia Project, located approximately 25 kilometres south of Dubbo, comprises a small-scale open cut mine, supplying ore containing rare earths and metals. The mining processing facility is valued at over \$1 billion.¹⁷ Part of this project also includes the upgrade and reopening of a section of the disused Dubbo – Molong Rail Line.¹⁸ Over the next 20 years, the facility is projected to process over 19.5 million tonnes of ore. It has an estimated mine life of 70 plus years and is projected to employ up to 400 people during construction and 250 permanent staff during operation.¹⁹

Construction materials, though of low per-tonnage value, are critically important for the development of infrastructure and play a vital role in many local economies within the Central West and Orana. The region contains numerous hard rock aggregate, and sand and limestone quarries, which provide resources for the building industry and need to be protected for future use.

The mineral and energy resources sector (including renewable energy industries) has significant economic and employment benefits in the region and care must be taken to manage the impacts of mining to produce long term sustainable outcomes. If this sector is to be a key economic driver into the future, areas containing mineral and energy resources must be protected and managed to ensure multiple land use opportunities.



Education, courtesy of Narromine Shire Council

ACTION 1.3.1 Implement a robust assessment process to consider social, economic and environmental implications of mining activities and manage these throughout the life of the project

The assessment process provides the final opportunity to assess mining applications, and specifically, to identify and manage potential land use conflicts that may arise during the life of a project. The mineral and energy resource industries are monitored annually for compliance with their conditions of title. A robust and transparent approach is required to balance social, economic and environmental implications.

The NSW Government already closely manages the mining industry by:

- imposing and monitoring mine operations through consent conditions on development approvals, mining leases, activity approvals, mine operation plans, extraction plans and rehabilitation plans, to name a few;
- imposing legally binding pollution reduction programs on all existing coal mines, requiring current operations to be assessed against best management practice and to use all reasonable and feasible measures to reduce their dust emissions;
- requiring all new coal mines and applications seeking to modify existing approvals to benchmark their proposals against best management practice to minimise dust emissions;
- requiring open cut coal mines to develop strategies to manage and minimise blast fumes; and
- considering options for addressing noise impacts from emerging mining precincts, including through a recent review of the *Industrial Noise Policy*.

The NSW Government is currently responding to community concerns about mining by clarifying the requirements for assessing and determining mining applications through the development of an *Integrated Mining Policy*. The policy will improve the transparency, consistency and accountability of assessment decisions. Providing consent authorities with a more comprehensive understanding of environmental impacts and proposed mitigation measures will improve decision-making. The policy will not change environmental standards or community consultation requirements.

Existing processes to manage and mitigate the environmental impacts of a mining development will be further supported by improving methods to assess the cumulative impact of all relevant activities (including mining) on air, water and soil quality around settlements and strategic agricultural lands.

The NSW Government will:

- work with councils and industry to implement the *Integrated Mining Policy*, including finalising economic assessment guidelines;
- develop a cumulative impact assessment methodology to manage the cumulative health and amenity impacts of all relevant activities (including mining) and coal seam gas proposals, which:
 - considers whether cumulative impact thresholds or tipping points can be adequately described and predicted; and
 - considers cumulative impacts on agricultural lands and water resources;
- investigate appropriate methods for encouraging best-practice rehabilitation and visual impact management for mines; and
- prepare a development assessment guideline for impacts on human health from dust (including dust generated by mining and other activities).

ACTION 1.3.2 Support communities to capture the economic benefits and manage the impacts of mineral and energy resource extraction

Through the work of the Western NSW Mining and Resource Development Taskforce, the NSW Government is investigating how western NSW communities can capitalise on the economic benefits and manage the impacts of the mining sector.

The taskforce is working with councils across the Central West and Orana (as well as a number of councils in the New England North West and the Far West) to review the social and economic benefits and impacts of mining on regional communities. It will also identify ways to diversify and transition the community and economy in areas where resource and mineral extraction is slowing.

Mining lifecycle

Communities are likely to experience a range of socio-economic impacts across the lifecycle of a mining operation. For example, there is significant employment growth during the construction and initial operational phases, which increases the population and investment and development. This situation changes once a mine enters later operational phases, commences shutdown or experiences decreased production, with flow-on effects to business, industry and community liveability.

The nature of employment in mining operations (shift work and fly-in fly-out workers) may alter the demographic make-up of communities and affect the needs of the existing workforce and the community, for retail, health, education, and community and emergency services. Rehabilitating former mines provides an opportunity for a new development or use, which can contribute to economic, social and environmental values in the region.

Understanding a community's needs (schools, health care, emergency services and utilities, infrastructure) prior to mining operations commencing is paramount for successful lifecycle planning.

Developing scenario plans at a regional scale can enable a better understanding of the benefits that will be realistically distributed across affected communities. For example, scenario planning can better prepare communities and service providers for the impact of mining and reduce the risk of one community being overly disadvantaged compared to another which receives a full economic benefit.

The NSW Government will:

- work with councils to scope the application and implementation of a scenario planning or impact modelling tool to be applied at a regional level to help communities plan for the impacts of mining.

DIRECTION 1.4 Increase jobs in the health, education and tourism sectors

Health, education and tourism are among the fastest growing economic sectors in the region. Together, they employed a total of 23,711 people in 2011. The tourism sector contributed \$1 billion in direct expenditure in 2014, with over four million people visiting the region in that year.²⁰

As the region's population changes so too will the demand for health and education services, particularly aged care and online services. Regional cities will be pivotal to providing the highest level health and education services and regional centres will provide alternative local access for smaller communities.

The NSW Department of Education is reviewing its approach to asset and network planning. It is preparing a Long Term Strategic Plan to 2031, as well as regional plans and school cluster plans, to identify schooling needs throughout the State. This will guide education providers in the future. Private schools will continue to play a major role in the provision of primary and secondary education.

ACTION 1.4.1 Support employment and investment growth in the healthcare and social assistance sector

The proportion of people aged 65 years and over is forecast to increase from 14 per cent in 2016 to over 25 per cent in 2036. This is likely to change the way that health care is delivered and planning for health infrastructure and passenger transport networks will need to respond accordingly. Tailored health care options that focus on 'ageing in place' will be required.²¹

There are a number of significant health facilities and specialist services in the region's cities – Dubbo, Orange and Bathurst. They often provide services for communities located outside the region, for example, Dubbo Base Hospital is the primary hospital for the Far West region, providing essential services such as obstetrics for the Bourke, Walgett and Brewarrina communities.



Old Dubbo Gaol,
courtesy of
Pip Blackwood,
Destination NSW

Investment in health infrastructure will help to underpin economic growth and influence population and settlement patterns. Over \$400 million has already been invested in the development of 60 Multipurpose Services across NSW, including in the following towns in the Central West and Orana region: Baradine, Blayney, Coolah, Coonamble, Dunedoo, Eugowra, Gilgandra, Gulargambone, Gulgong, Nyngan, Oberon, Peak Hill, Rylstone, Trangie, Tottenham, Trundle, Tullamore and Warren.

The Multipurpose Services model tailors healthcare needs for the local community, integrating health, aged care, and emergency and urgent care services, to provide flexible health service delivery. Other major health infrastructure investment projects include the Lachlan Health Service Project which encompasses the redevelopment of Parkes Hospital and the refurbishment of Forbes Hospital; the Dubbo Hospital Redevelopment and the redevelopment and expansion of the Molong Multipurpose Service.²² In addition, the NSW Government plans to upgrade Mudgee District Hospital to expand and reconfigure inpatient and ambulatory care services.²³

Through the *NSW Rural Health Plan* (2014), the NSW Government is investing in the redevelopment and expansion of health services across the Central West and Orana. The plan aims to build healthy rural communities, reduce inequities between rural and metropolitan areas, support Aboriginal health workers, and promote education, training and targeted recruitment to further enhance the rural health workforce.²⁴

The move toward localised community-based healthcare facilities may reduce the projected population decline in some smaller communities by retaining locally based services, easily accessible to the community.

Co-location of complementary activities in existing health precincts will improve access for patients and opportunities for business synergy. During consultation, a number of councils indicated that it would be beneficial for a range of health facilities and associated training institutions to be provided in the region, in addition to aged care and support services. For example, the Charles Sturt University Dentistry and Nursing School in Dubbo, the University of Sydney School of Rural Health in Orange and Dubbo, and the Forbes health precinct provide training, conference and accommodation facilities for health and education purposes.²⁵

Multipurpose health services provide co-location of emergency and acute care, general practice, aged care, dentistry and also allow hosting of visiting specialists. They also generate new transport needs, potentially for both intra-regional and inter-regional access.

The NSW Government will work with councils to:

- identify areas surrounding existing hospitals and associated health facilities to create defined health precincts;
- plan for multipurpose, flexible and adaptable health and education infrastructure that can respond to changing and emerging community needs over time; and
- protect existing and planned health facilities from incompatible land uses.

ACTION 1.4.2 Support employment and investment growth in the education and training sector

The delivery of quality tertiary education can encourage young people to stay in the region. It provides local access to courses, retraining opportunities and the acquisition of new skills (particularly through vocational training). Quality tertiary education also helps to attract and retain a skilled workforce.

The region's education and training sector is anchored by a range of primary and secondary schools, universities and other higher education providers. Key educational facilities in the region include:

- Charles Sturt University, with campuses in Bathurst, Orange and Dubbo;
- Western Sydney University in Lithgow;
- Notre Dame University's rural clinical schools in Orange, Bathurst and Lithgow;
- The University of Sydney School of Rural Health in Dubbo and Orange;²⁶
- Alsco Learning Centre; and
- TAFE NSW Western Institute, which has 21 colleges across the region.

The region has a shortage of skilled workers, particularly in agribusiness, mining, energy, health, education and manufacturing. Vocational training will be crucial to addressing these local skill shortages across the region. Communities need to identify skills gaps and resource capabilities, to prepare for future workforce demands.

There are opportunities for the region's education and training providers to partner with government and private industry to address regional skills shortages and to improve partnerships between local government, industry, research, education and training providers, to provide the right tailored regional training programs.

The NSW Government is working to deliver better community access to quality vocational education and training to support global competitiveness and innovation.

Managing the range of demographic, climatic, social and economic changes in the region will be important in sustaining local jobs. For example, recent and projected growth in the aged care sector highlights an opportunity to generate new jobs for a skilled workforce. Expanding tertiary education services is necessary to attract, train and retain skilled staff to take advantage of this opportunity.

The NSW Government will:

- work with councils to remove planning barriers to the expansion of the education and training sector.

ACTION 1.4.3 Deliver enabling planning controls to diversify regional tourism markets and increase the range of tourism opportunities

The Central West and Orana region has a growing and diverse tourism industry that generates significant investment and visitor spending. Significant longstanding events such as the Bathurst 1000 Motor Race in Bathurst and the Elvis Festival in Parkes attract over 200,000²⁷ and 20,000²⁸ visitors to the region respectively. The region also has other significant tourism assets, including the internationally recognised Siding Spring and Parkes Observatories and the Taronga Western Plains Zoo, which is currently being improved through construction and restoration projects.

The region provides residents and visitors with extensive opportunities for nature and heritage-based tourism, which is becoming one of the fastest growing and most dominant tourism markets in the State.²⁹ Major attractions in the region include the World Heritage listed

Jenolan Caves in Oberon, the iconic Blue Mountains area and the Macquarie Marshes, an internationally recognised wetland.

Diversifying tourism markets, such as ecotourism and agritourism, will help support the long term economic and social sustainability of the region. Recently, there has been a more coordinated regional approach to agritourism and food tourism as a strategy for growth and to improve the resilience of individual businesses and rural communities.³⁰ Examples of this include F.O.O.D Week (Food of Orange District) in Orange, and Paddock to Plate and the 100 Mile Diet Initiatives, which connect consumers directly with local producers.

Prioritising tourism investment in the region is important for long term growth. One way to increase the number of visitors and their expenditure in the region is to expand the visitor assets on offer, to encourage visitors to extend their stay overnight or longer.

Three Regional Tourism Boards cover the region – Blue Mountains, Central NSW and Outback NSW. Each of these boards has developed a Regional Destination Management Plan to grow visitation and to assist the Government and industry to prioritise investment opportunities in tourism facilities, and products and services. Lithgow and Oberon are covered by the Blue Mountains Tourism Board but do not have a current Destination Management Plan. The *Central West Regional Transport Plan* (2013) includes actions to improve tourism-related transport services.

The NSW Government will:

- work with Lithgow City and Oberon Shire Councils and Destination NSW to develop/update the Destination Management Plan for the Blue Mountains tourism area;
- review and update local plans to remove barriers to appropriate tourism development, to enable innovation and flexibility, while protecting the values that contribute to tourism opportunities;
- work with councils to align local land use and tourism strategies with relevant Destination Management Plans; and
- work with councils to improve tourism-related transport services.



Industrial land, courtesy of Dubbo City Council

DIRECTION 1.5 Support business activities with well-located and serviced industrial lands and commercial centres

Regional cities and regional centres are expected to have the highest take-up of commercial and industrial employment land, primarily focused in CBDs and zoned industrial areas. Towns and villages will also provide land for local business and industrial activities.

As agricultural output increases, agribusinesses will require well-located and serviced land to establish processing and manufacturing facilities. The timely supply of this land is necessary to support the projected growth of agribusiness, and provide regional-scale facilities that can process agricultural products sourced within the region.

Councils need to identify the supply and uptake of employment land and infrastructure requirements in local land use strategies. The NSW Government supports monitoring of employment lands to help identify when and where infrastructure is needed to promote economic development.

ACTION 1.5.1 Implement an industrial land monitoring program to maintain a supply of well-located and serviced industrial land

Councils have indicated there is a sufficient supply of industrial land across the region to meet projected demand over the next 20 years. In some cases, this land may not be adequately located, zoned or appropriately serviced. Councils should identify and maintain an adequate supply of appropriately located and zoned industrial land in their planning

strategies and local environmental plans to support ongoing economic growth.

The NSW Government will develop mechanisms to monitor industrial land supply to assist the timing of, and the locations for infrastructure that will promote further economic development.

Industries need to operate and be able to expand without the risk of land use conflict. It is important to protect industrial land, primary and secondary production land and related supply chain infrastructure, such as regional saleyards, silos and abattoirs, from the encroachment of sensitive land uses. Councils should protect and separate significant industrial land from inappropriate or incompatible land uses by applying the Draft Principles for Industrial Land Identification, (see Table 1) when planning for new or expanded industrial areas. These draft principles will inform the preparation of Statewide land release criteria.

The NSW Government will:

- prepare Statewide land release criteria to assess locations for industrial uses across regional NSW;
- develop and implement an industrial land development program for the region, to monitor the supply and demand of industrial land, and to identify future employment land requirements; and
- require that councils protect regionally significant industrial land from potential land use conflicts arising from inappropriate and incompatible surrounding land uses.

TABLE 1: DRAFT PRINCIPLES FOR INDUSTRIAL LAND IDENTIFICATION

Principle 1	New industrial land should meet the long term needs of industry growth for the region.
Principle 2	Industrial land should be protected and separated from environmentally sensitive and incompatible land uses.
Principle 3	Isolated, unused or under-used pockets of industrial land should be consolidated to create opportunities over the long term.
Principle 4	Regionally significant industrial lands should be retained and supported to meet the changing needs of industry.
Principle 5	At a regional-scale, industrial land supply should provide capacity to enable the development of specialised industry clusters.
Principle 6	Infrastructure should be planned and managed to encourage the sustainable development of industrial land, including access to markets and workers, and connectivity to the existing freight network.
Principle 7	Co-location should be encouraged, where appropriate, to maximise opportunities for co-efficiency and decreased supply chain costs.

ACTION 1.5.2 Develop and deliver strategies that strengthen the commercial function of the CBDs of regional cities and regional centres, and local town centres

Strengthening the commercial core of the region's centres is essential for future growth and to attract future investment. This is equally important for smaller town centres, where clustering commercial activities creates a more vibrant and sustainable main street and a focus for community activities.

The NSW Government's preference is to place retail activity into existing centres to capitalise on existing infrastructure and strengthen the role and function of these areas. Proposals for new retail centres (including retail proposals) should demonstrate how they:

- respond to retail supply and demand needs;
- respond to innovations in the retail sector;
- maximise the use of existing infrastructure (including public transport and community facilities) commensurate with the scale of the proposal; and

- enhance the value of the public realm and consider net community benefit.

Councils need to provide an adequate supply of serviced commercial employment land without compromising their core commercial and retail centres. In some instances, this may require planning and revitalisation to promote the CBD as the central place for retail and business.

Where it is not possible to expand or accommodate growth in existing centres, or where there is significant market demand, new centres of an appropriate size and scale relative to their purpose and to the area they will serve, may need to be considered. Future growth should be accommodated on or adjacent to existing business centres and should not be supported without strategic justification.

The NSW Government will work with councils to:

- provide strategic direction for commercial land use in CBDs and town centres; and
- focus retail activity in existing commercial centres, unless there is a demonstrated need and positive social and economic benefits for the community.



GOAL 2 – A region with strong freight transport and utility infrastructure networks that support economic growth

The Central West and Orana region is located in the centre of NSW, with access to Sydney, Newcastle, Brisbane and Melbourne, and western connections to Broken Hill and Adelaide via the Mitchell and Barrier Highways. This provides a competitive advantage to maximise economic activity, particularly for towns located at the confluence of a number of transport corridors such as Dubbo, Parkes and Gilgandra.

The NSW Government already has a suite of strategies to improve transport infrastructure across the region including:

- NSW Freight and Ports Strategy (2013);
- NSW Long Term Transport Master Plan (2012);
- Central West Regional Transport Plan (2013); and
- Newell Highway Corridor Strategy (2015).

Transport for NSW and Roads and Maritime Services are progressively preparing network and corridor strategies to cover every State road in NSW to better manage transport infrastructure and maximise benefits for all road users. Other corridor strategies for the Golden Highway and Great Western Highway are due to be finalised by the end of 2016.³¹

Network and corridor strategies provide the following benefits for the State road network:

- a plan for network/corridor improvement with consideration of all modes of transport;
- transparency for the community, councils and other government agencies with regard to planning and investment decisions;

- consistency in the planning, management and operation of roads; and
- the integration of road safety, traffic and asset maintenance projects.

Regional infrastructure requirements and investment needs to be coordinated to deliver maximum benefit to the economy and broader regional community. A coordinated approach to improving local road networks and connectivity to the wider regional and State network will improve links from the region to Sydney, Melbourne, Brisbane and other markets, and improve the region's economic competitiveness.

The NSW Government will continue to work with stakeholders to improve network reliability and efficiency to make best use of infrastructure, and provide ongoing network capacity to allow the region's settlements, industries and agribusinesses to grow.

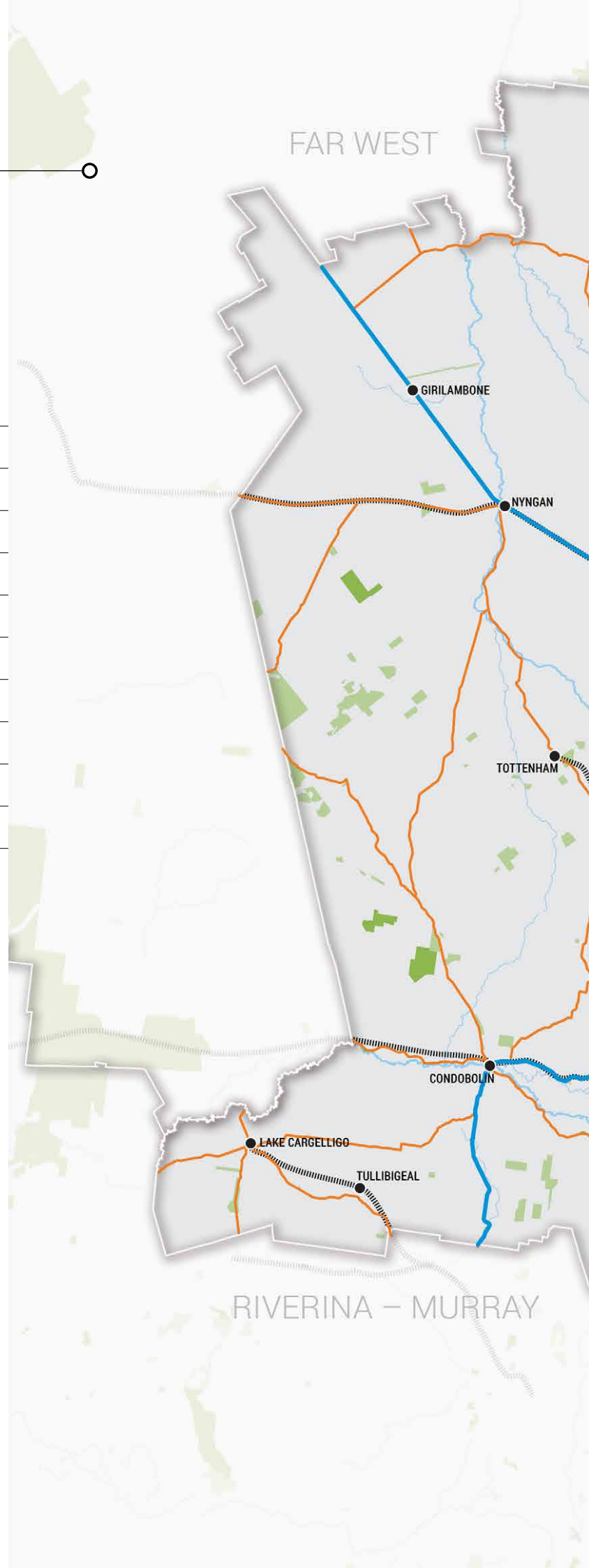
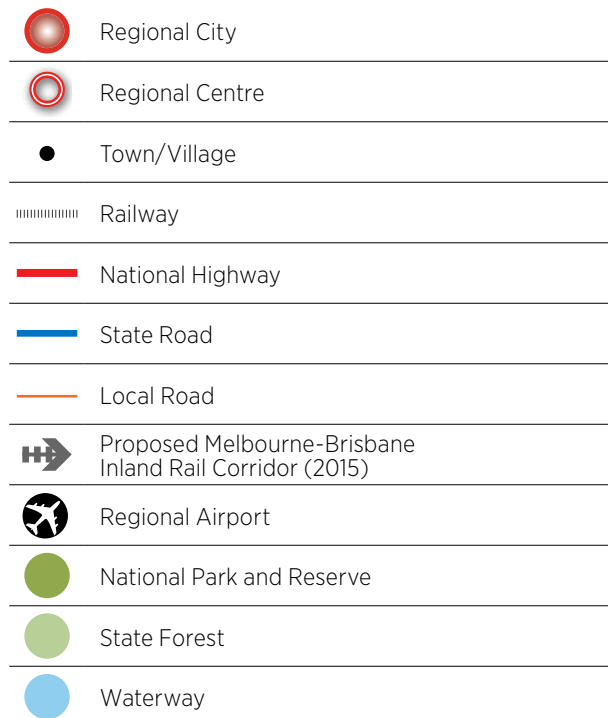
DIRECTION 2.1 Improve the region's freight transport networks and access to external markets

Regional agricultural output and productivity are projected to increase into the future, increasing freight demand. Freight volumes across NSW are projected to double by 2030 and triple by 2050.³² A large portion of this growth is expected to occur in the Central West and Orana, which will result in the need for substantial expansion and upgrade of the existing transport networks.

Top: Courtesy of MSM Milling, Orange

Bottom: Rail freight, courtesy of Narromine Shire Council

FIGURE 9: REGIONAL TRANSPORT







Apple harvest,
Orange, courtesy of
Destination NSW

Much of the freight generated from the region's agriculture, and food and beverage manufacturing and processing, starts and travels on local roads. These roads were not designed to take the load of larger vehicles and consequently are either failing under the pressure of increasing freight movements or constraining efficient and reliable freight movements. This issue will become increasingly challenging as freight movements grow in the future.

The private sector has started to capitalise on the region's locational advantage by committing investment to intermodal terminals in the region. These proposals offer business and industry the opportunity to move freight more efficiently, reliably and competitively.

ACTION 2.1.1 Support coordinated investment in the freight network to improve network efficiency

Infrastructure requirements and investment needs to be coordinated to deliver maximum benefit to the economy and broader regional community. Infrastructure investment has been provided to date in a piecemeal way, resulting in ad hoc or misaligned priorities across the region. In some instances, this has restricted freight and logistics growth.

Identifying and addressing potential network impediments will improve network efficiency. Transport for NSW administers two coordinated programs directly addressing this issue:

- *Fixing Country Rail* is a program to remove productivity and efficiency constraints on the regional rail network; and
- *Fixing Country Roads* is a program to provide targeted funding to local councils for road projects that will eliminate connectivity constraints on local roads in NSW.

Identifying the region's defined freight network and road pressure points, and then developing a program of improvement works in collaboration with local government, will support the growth of freight and logistics in the region. The efficient operation of the rail network is also important in supporting the region's mining sector – with minerals exported from the Central West to Port Kembla via rail.

The NSW Government will:

- work with stakeholders to coordinate investment in the freight network to improve network efficiency.

ACTION 2.1.2 Identify and prioritise pinch points within the existing freight network

More than seven million tonnes of freight are moved annually through the Central West and Orana by either road or rail.³³ Freight network efficiency and reliability can be further enhanced by identifying ways to improve connectivity within the existing freight network, such as potential town bypasses and bridge crossings. Some barriers in the freight network are well known, while others are unquantified.

The NSW Government is committed to better understanding where connection improvements are needed in the freight network and has announced funding for various programs to address freight pinch points on regional roads and rail, including:

- \$200 million for a *Regional Freight Pinch Point and Safety Program*;
- \$443 million for *Fixing Country Roads*; and
- \$400 million to the *Fixing Country Rail Program (Rebuilding NSW)*.

The Government is currently undertaking a number of projects to improve the freight network for the region, including:

- the Bells Line of Road corridor works;
- upgrades to the Great Western Highway between Lithgow and Katoomba;
- planned upgrades to the Great Western and Newell Highways; and
- a heavy vehicle bypass at Parkes and investigations into heavy vehicle bypasses at Dubbo and Coonabarabran.³⁴

Reducing barriers and congestion

The main barriers to freight movement in the region are congestion and freight restrictions on the Great Western Highway and Main Western Rail Line over the Blue Mountains. These barriers severely restrict freight access to Sydney and coastal ports. Congestion and capacity restrictions reduce the efficiency of the network, causing time delays and costs which can affect the economic viability of delivering produce from the region to elsewhere in the State and other markets.

Blayney-Demondrille Railway Line

The NSW Government investigated the feasibility of upgrading and re-opening the Blayney-Demondrille Railway Line as an alternate rail connection to Sydney and to Port Kembla via the Moss Vale to Unanderra line. A tender process was completed in April 2015 that was unable to identify a proponent that could meet the criteria to restore, operate and maintain the railwayline.

Where sustainable freight demand exists, non-operational railway lines could be brought back into operation in the future.

Golden Highway

The Golden Highway offers an alternate connection for freight transport between the Far West and Central West and Orana regions to the Port of Newcastle and on to Sydney. It may also alleviate congestion on routes via the Blue Mountains. Under *Restart NSW*, funding of \$200 million has been committed to a *Regional Freight Pinch Point and Safety Program*. This includes \$85 million funding for proposed improvement works on the Golden Highway.³⁵ There is a need to further examine access restrictions and safety, particularly for level crossings and bridges along the corridor, to facilitate increased freight transport efficiency. The draft Golden Highway Corridor Strategy will be released for community consultation in mid-2016.³⁶

Bells Line of Road

The Bells Line of Road provides an alternative route to the Great Western Highway across the Blue Mountains to Sydney. In February 2014, the *Restart NSW Fund* provided \$28 million towards the \$48 million upgrade to the Bells Line of Road Corridor Improvement Program. This project will improve road safety through improvements such as more overtaking lanes, wider sealed shoulders and improved clear zones. This project was identified in the NSW Government's *State Infrastructure Strategy* (2014) as a priority for regional freight access to markets.

Bypasses

Town and city bypasses improve freight efficiency by reducing travel times and costs, while improving safety for road users and town amenity. The *NSW Long Term Transport Master Plan* (2012) proposes to develop a program of town bypasses, based on priorities determined through community consultation and defined criteria.³⁷ Councils and State agencies should consider the viability of local bypasses, and strategically plan for bypass corridors such as the heavy vehicle bypass at Parkes, and investigations into heavy vehicle bypasses at Dubbo and Coonabarabran.³⁸

Bridge crossings

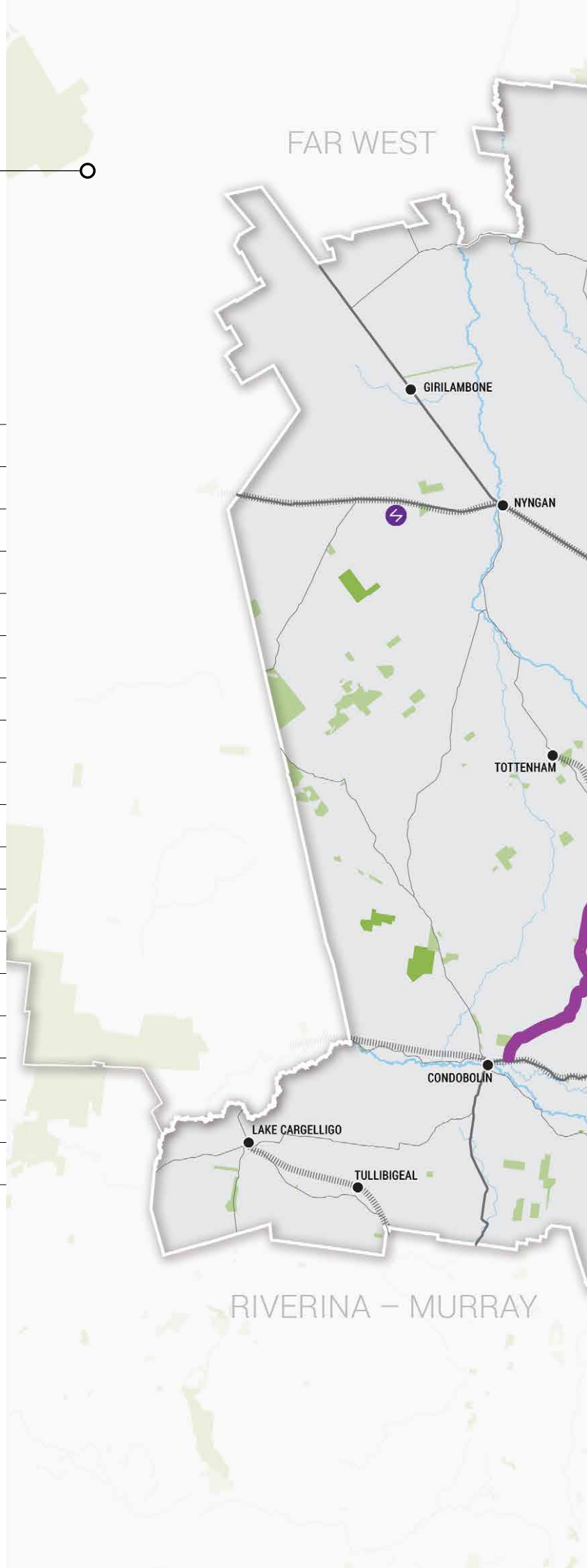
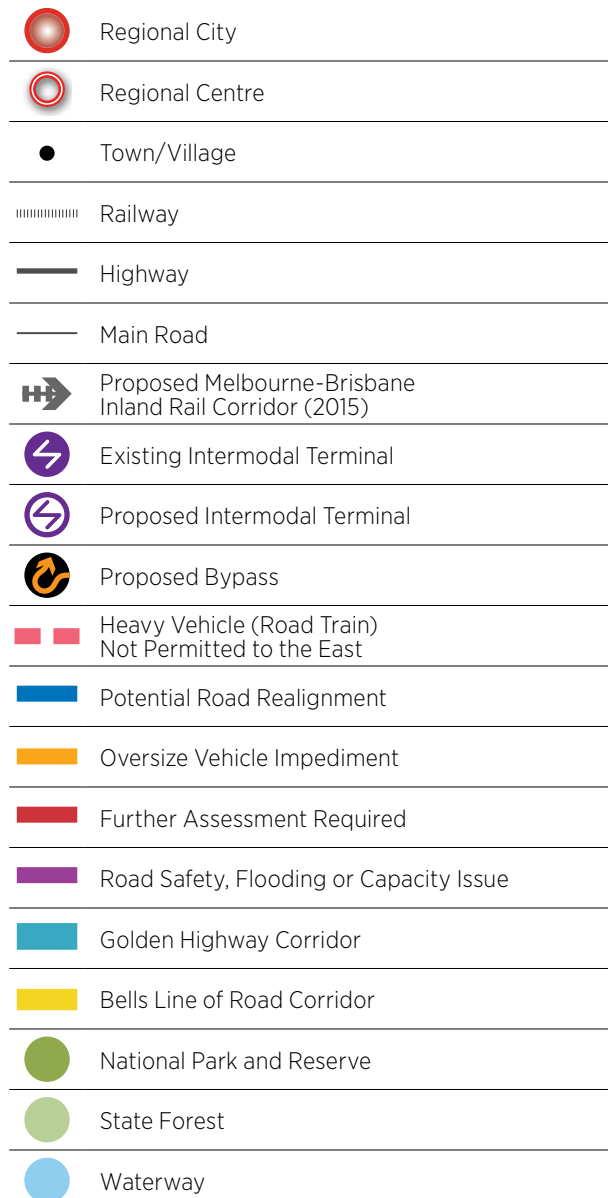
The NSW Government manages bridge upgrades and improvements through the \$145 million *Bridges for the Bush* initiative. This initiative will improve the capability and capacity of a number of bridges in the region to support modern freight vehicles. Consideration is being given to the upgrade and replacement of a number of timber bridges in the region including:

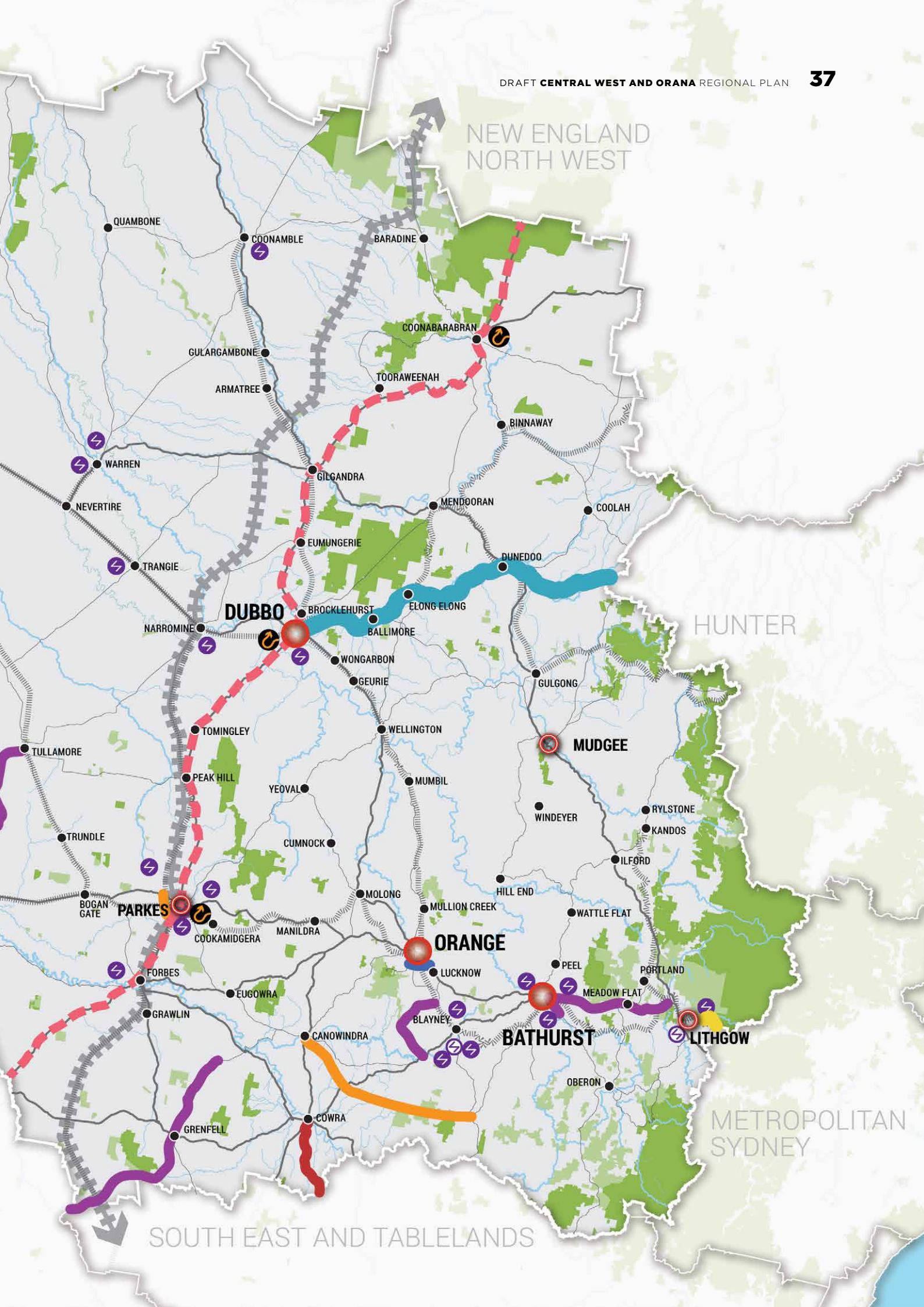
- an upgrade to the McKanes Bridge over the Cox's River in Lithgow Local Government Area;
- an upgrade to Warroo Bridge across the Lachlan River in Forbes Local Government Area; and
- the replacement of the Holman Bridge at Gooloogong, connecting Cowra and Cabonne Local Government Areas.³⁹

The NSW Government will work with councils to:

- investigate road and bridges which provide potential impediments to the existing freight network; and
- progressively deliver improvements to the freight network.

FIGURE 10: FREIGHT NETWORK IMPROVEMENTS MAP







ACTION 2.1.3 Identify and prioritise opportunities to improve regionally significant local road connections

Local road connections in the region, which feed into the State and national road freight network, are important for transporting agricultural produce, manufactured goods and mining resources. The restriction on the size of freight vehicles using local roads and the cost of local road maintenance are significant impediments to the road freight network.

Initial work has already been completed by the Central West Regional Organisation of Councils to identify local road pressure points within the regional freight network (see Figure 10). A prioritised rolling program of works to upgrade and improve local roads that connect to the State and national road freight network needs to be developed.

The NSW Government acknowledges that these constraints can substantially affect economic productivity.⁴⁰ The *NSW Freight and Ports Strategy* outlines the NSW Government's commitment to improving connectivity between transport networks and key freight precincts. Transport for NSW is proposing to investigate the development of a Defined Freight Network⁴¹ to improve coordination between all levels of government and stakeholders.

The NSW Government will work with councils to:

- identify, coordinate and prioritise the delivery of local road projects which help support the regional freight network.

ACTION 2.1.4 Investigate opportunities for new intermodal terminals and rail freight facilities

Intermodal terminals and rail freight facilities have the potential to reshape the way freight is moved. Major intermodal facilities are located in both Parkes and Dubbo, with a series of smaller intermodal facilities located elsewhere in the region.

Transport for NSW established a NSW Cargo Movement Coordination Centre in 2014 to optimise freight movements from regional NSW, including the Central West and Orana region, and to coordinate and increase the movement of cargo to and from Port Botany and Port Kembla.⁴² Business Development Managers from this centre work with transport operators to identify network constraints.

The NSW Government supports regional intermodal terminals and their ongoing role in the freight system. Transport for NSW is committed to engaging with councils to explore planning issues associated with the development of intermodal facilities within industrial precincts, including adjoining land use and road and rail access to proposed sites.



Left: Grain storage, courtesy of Dubbo City Council

Right: Freight movement, courtesy of Bathurst City Council

National Logistics Hub (Parkes)

The Parkes National Logistics Hub – a 600-hectare site near Parkes – was created to promote freight connections between most major capital cities. It is a national transport node of strategic significance to freight logistics. It is at the intersection of the Transcontinental (Broken Hill railway line) and the Parkes-Narromine railway lines and accessible from the Newell Highway. It has been located and designed with the intention of accessing 80 per cent of Australia, in less than 12 hours. The facility is also well-placed to take advantage of the proposed Melbourne to Brisbane Inland Rail Corridor.

Fletchers International Exports Intermodal (Dubbo)

This intermodal terminal was built to alleviate freight access and interface issues with the existing intermodal terminal in Dubbo.⁴³ The rail terminal services the movement of containerised agricultural commodities, mining commodities, and sheep meat products from Dubbo to Port Botany and represents a significant private investment in meeting the needs of regional producers.

It is important that intermodal facilities are protected from the encroachment of sensitive land uses to enable future expansion and the ongoing efficient and reliable movement of agricultural, manufacturing and mining products from the region. Local plans should provide appropriate industrial zones around freight hubs, to support co-location of compatible uses. Incompatible land uses, such as housing and commercial development, should be located to prevent future land use conflict.

The NSW Government will require that councils:

- implement local planning controls to protect freight and transport corridors, and freight and logistics facilities from encroachment of sensitive land uses; and
- protect freight and transport corridors and strategically locate freight hubs to support further industry development.

ACTION 2.1.5 Work with the Australian Government on the proposed Melbourne-Brisbane Inland Rail Corridor through the region

The *2010 Melbourne-Brisbane Inland Rail Alignment Study*, prepared by the Australian Rail Track Corporation (ARTC), identified the preferred corridor for inland rail, passing through the region in Parkes and Narromine.⁴⁴ The fine-scale alignment of the corridor is yet to be settled. The Australian Government and ARTC are working to finalise planning, engineering design and assessment for the corridor.

The NSW Government will:

- work with the Australian Government to develop an agreement to finalise planning, engineering design and assessment of the Melbourne-Brisbane Inland Rail Corridor.



First Solar,
Nyngan,
courtesy of
AGL Energy

DIRECTION 2.2 Coordinate infrastructure delivery to facilitate economic opportunities

Settlements and industry across the Central West and Orana are supported by energy, water, waste water and telecommunications networks. These networks will need to be upgraded at various times throughout the next 20 years to meet demand generated by new developments, as well as to maintain existing services.

Improved coordination between the delivery of local, State and private infrastructure investment will better align user demands with utility capacity and enable infrastructure to be better planned, resulting in potential cost-savings. The NSW Government aims to deliver a more coordinated approach to infrastructure investment, maximise economic opportunities and make best use of existing infrastructure across the region.

The region relies on high-quality information and communications technology to service industries and drive future economic competitiveness. Access to reliable telecommunication services during emergency events is critical, particularly in communities subject to natural hazards such as bushfire and flooding. The Australian Government is delivering the National Broadband Network which is critical for the economic future of the region. Currently, access to telecommunications is inconsistent across the region, and this affects the ability to attract jobs, grow business and deliver e-programs for health and education.

ACTION 2.2.1 Coordinate the delivery of infrastructure to support the future needs of residents, business and industry

There is a need to better coordinate infrastructure planning and delivery for industrial-zoned land across the region. Making efficient use of existing infrastructure, including the coordination and delivery of new infrastructure, is essential to attract and enable future large-scale industry investment, for example, high energy-consuming industries. The coordination and timely delivery of

infrastructure is particularly important for regionally significant industrial land releases in the regional cities and regional centres, as well as some other smaller centres which are important as hubs, such as Blayney.

Electricity, gas, water, waste water and telecommunications services are typically required to enable the take-up of zoned residential and employment lands. The reliable and timely delivery of local and capacity infrastructure is essential to attract investment and facilitate further development.

Providing adequate burial space in locations where the population is ageing is an important issue for governments and communities. Land needs to be identified and protected so that burial space is available into the future. The NSW Government will support councils and infrastructure providers to identify appropriate sites and capacity infrastructure such as cemeteries and crematoria.

Energy

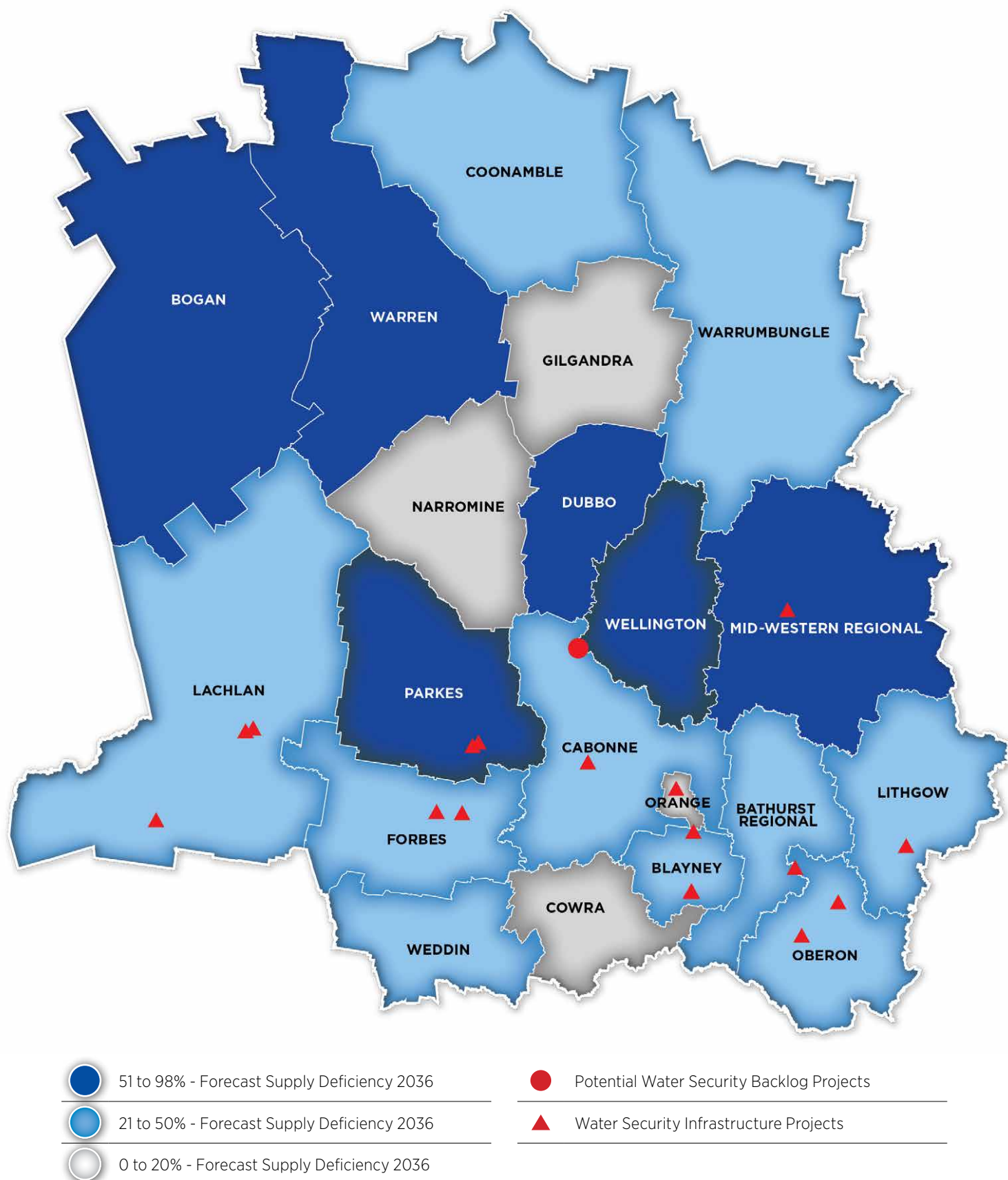
Access to energy, including electricity and gas, is an essential requirement for residential and industrial development. Energy transmission networks (such as major electricity transmission lines and gas pipelines) feed energy to homes and businesses and are of State and, in some cases, national importance. Appropriate buffers should be provided for inter and intra-state energy transmission networks so that surrounding development is compatible with, and does not adversely affect their viability, integrity, operation and maintenance.

The challenge of providing cost-effective extended and upgraded services to some remote areas in the region creates opportunities for stand-alone alternative energy generation, and the use of renewable energy options, such as wind and solar generation to meet local energy needs.

Water and waste

Population and industry growth will continue to put pressure on the region's water and waste resources. The region is covered by two water utility alliances – CENTROC and Lower Macquarie – which operate cooperatively to develop resource sharing opportunities and implement best-practice water management, such as integrated water cycle management,

FIGURE 11: REGIONAL WATER SECURITY PROJECTS





Left: Lake Burrendong, near Wellington, courtesy of WaterNSW

Right: Lake Wallace, Wallerawang, courtesy of Lithgow City Council

for their communities. A number of councils in the region have already developed a range of water management initiatives such as stormwater harvesting in Orange (Blackmans Swamp Creek and Ploughmans Creek) and Dubbo (Apex Oval) to better use and manage water.

The key catchments include the Macquarie, Lachlan, Bogan and Castlereagh Rivers; all of which form part of the Murray Darling Basin. Important water infrastructure includes Burrendong Dam, Trangie-Nevertire Irrigation Scheme, Suma Park at Orange, Carcoar Dam, Wyangala Dam and Windermere Dam at Mudgee. In addition, the Macquarie River to Orange Pipeline has been constructed and was commissioned in 2015.

The NSW Government has committed \$1 million towards scoping studies for a new dam on the Belubula River (Lachlan River Valley) in the 2014-2015 budget.⁴⁵ The damming of the Belubula River at Cranky Rock was identified as the most suitable site.⁴⁶

The region's water supply infrastructure is projected to meet future demands across the majority of the region. Supply deficiencies of greater than 50 per cent by 2036 are forecast in Mid-Western, Wellington, Dubbo, Parkes, Bogan and Warren Local Government Areas.⁴⁷

The NSW Government supports councils investigating capacity issues to accommodate growth. Central West and Orana councils have already started identifying capacity and water security issues in their respective local government areas. Dubbo City Council has identified the need for further investigations to improve the reliability of the water supply during emergencies, such as an interruption to supply or extreme drought conditions.

The NSW Government is committed to establishing the \$1 billion Regional Water Security and Supply Fund to deal with water challenges across the State, and for backlog water quality and waste water projects in identified communities.⁴⁸

The NSW Government will also invest in the completion of 71 Statewide projects already identified through the *Country Town Water Supply and Sewerage Program*.⁴⁹ Securing urban water supplies for the future is essential to enable and support growth, and sustain existing populations.

Technological advancement in waste management may result in new ways to manage waste in urban areas. Currently, sufficient landfill capacity exists to manage the region's waste to 2036.

The NSW Government will:

- work with councils and servicing agencies to coordinate infrastructure planning and delivery for residential zoned land and regionally significant industrial zoned land;
- work with councils to enable the use and development of standalone alternative energy generation and renewable energy options;
- work with key stakeholders to adopt an integrated approach to water-cycle management across the region, taking into account climate change, water security, sustainable demand and growth, and the natural environment;
- work with councils to secure town water supplies across the region's settlements; and
- support councils and infrastructure providers to identify appropriate sites for local and capacity infrastructure, such as emergency service facilities, energy production and supply, waste disposal areas, cemeteries and crematoria.



Restart NSW

Restart NSW is the NSW Government's dedicated infrastructure fund. It was established in 2011 to improve the economic growth and productivity of NSW. By the end of 2014-15, more than \$9 billion had been deposited in the *Restart NSW* fund.⁵⁰ Thirty per cent of *Restart NSW* funds are committed to projects in regional NSW (outside Newcastle, Sydney and Wollongong).⁵¹

Water Security for Regions

Funds totalling \$366 million have been reserved for *Water Security for Regions* from *Restart NSW*. The funds are dedicated to helping communities prepare for future drought conditions. Eleven water security projects across the region are currently funded for a total of \$104 million.⁵²

Almost \$38 million of this funding has been committed to two major new projects which will support the regional pipeline in the Central West, including:

- \$21 million for Orange City Council and Central Tablelands Water's proposal for a five-stage potable water supply pipeline from Orange to Blayney and Carcoar Dam; and
- \$17 million for Orange City Council and Cabonne Shire Council's proposal for a potable water pipeline from Orange to Molong Dam and then from Molong to Cumnock and Yeoval.⁵³

Regional Water and Waste Water Backlog Program

Funds totalling \$110 million from *Restart NSW* have been committed to clearing a backlog of projects in regional and rural towns affected by ongoing water quality and sewerage problems.⁵⁴ The funding will be delivered under the *Regional Water and Waste Water Backlog Program*, and managed by the NSW Department of Primary Industries, Water.

ACTION 2.2.2 Establish monitoring mechanisms to enable better demand forecasting to inform infrastructure coordination

Establishing mechanisms to monitor development will enable councils, industry and infrastructure providers to improve planning for future infrastructure requirements. This is particularly relevant for infrastructure that has longer delivery lead times and needs to be

planned strategically, in conjunction with councils. This type of infrastructure includes schools, emergency service facilities, bus depots, energy generation and supply facilities, waste disposal areas, cemeteries and crematoria, and a range of other infrastructure.

The NSW Government will:

- monitor land release to inform and coordinate infrastructure needs.



GOAL 3 – A region that protects and enhances its productive agricultural land, natural resources and environmental assets

The region's economic success, its character, heritage, rural areas, urban centres, attractions and environment, all rely on the careful management of natural resources and the environment. This is becoming more apparent due to the increasing competition between agriculture, industry and the environment.

The region's future prosperity depends on industries, notably agriculture, mining and renewable energy that rely on access to land, water and other environmental assets. These natural resources must be managed to minimise the potential for land use conflict, avoid unintentional sterilisation and maximise future economic opportunities.

generation, rural living and tourism. Dealing with land use conflict is an ongoing challenge particularly when rural residential development results in the loss of productive agricultural land through land fragmentation and consequently a decline in investment certainty in future commercial agriculture. Protecting agricultural land from urban encroachment and further fragmentation also helps to preserve biodiversity.

The NSW Government has developed the *Right to Farm Policy*, which presents a comprehensive approach to dealing with the right of farmers to undertake lawful agricultural practices without conflict or interference arising from complaints from neighbours and other land uses.

DIRECTION 3.1 Protect regionally important agricultural land

While the total land area available for potential agricultural use is large, there are a comparatively small number of locations with a high economic productive capacity due to access to water, high quality soils and suitable climates. The NSW Government will actively plan to protect productive agricultural lands to manage the pressures from increasing domestic and global demand for food and fibre, the risks of declining productivity from land fragmentation, climate change, biosecurity risks and land use conflicts.

The co-location of incompatible land uses can restrict growth and discourage investment in good agricultural practices and productivity. It is important to protect primary and secondary production land, and related supply chain infrastructure.

Travelling Stock Reserves are parcels of Crown Land reserved under legislation to provide pasture for travelling or grazing stock. These parcels are an important agricultural production asset for the region and can be beneficial in times of drought, bushfire or flood. They are also used for public recreation, apiary sites and conservation. This land is managed by Local Land Services to balance the needs between travelling stock and the conservation of native species. Many travelling stock reserves have high biodiversity and Aboriginal cultural heritage values. These lands need to be protected from the encroachment of incompatible uses.

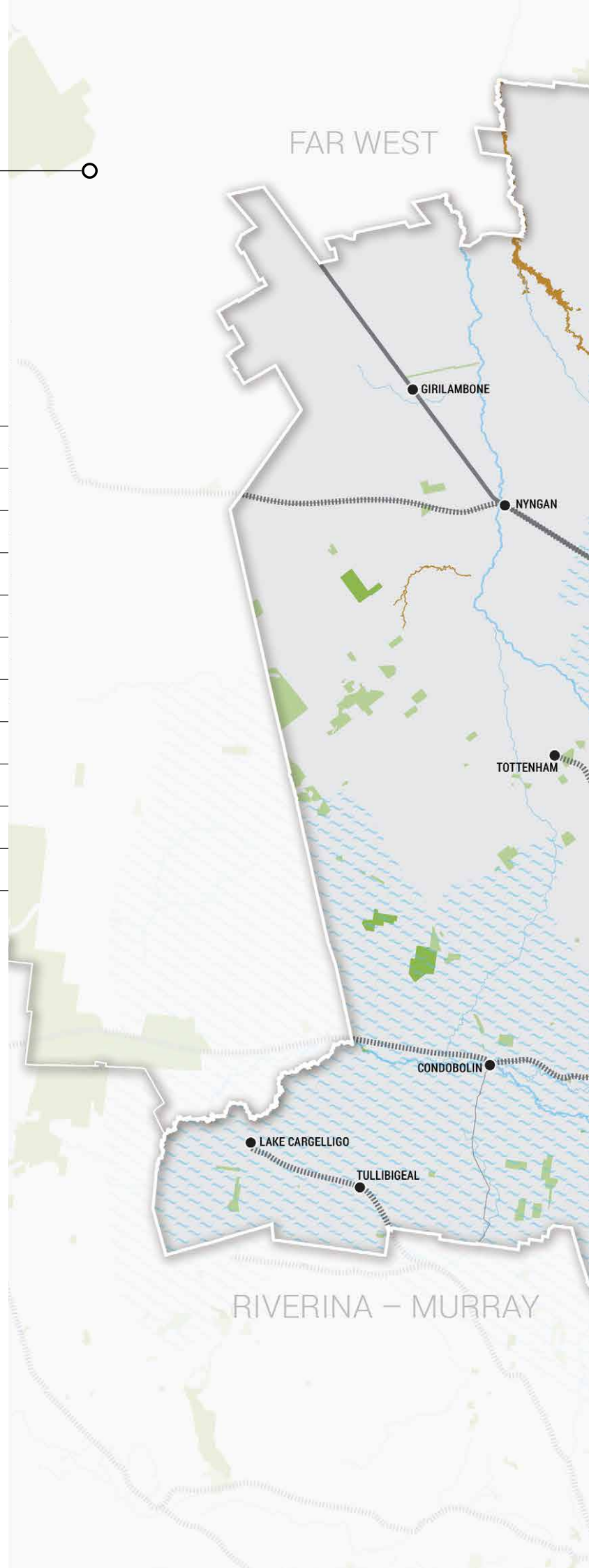
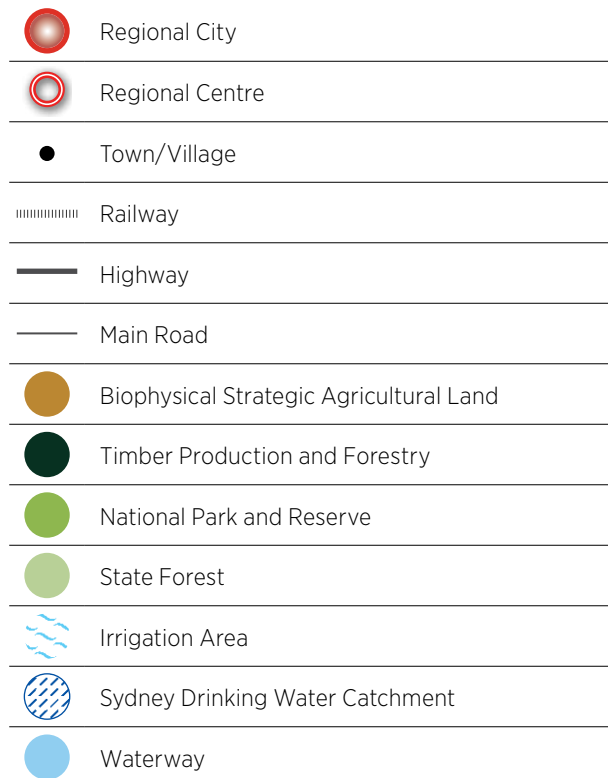
Top:
Macquarie Marshes
Nature Reserve,
Warren, courtesy of
Cameron Muir

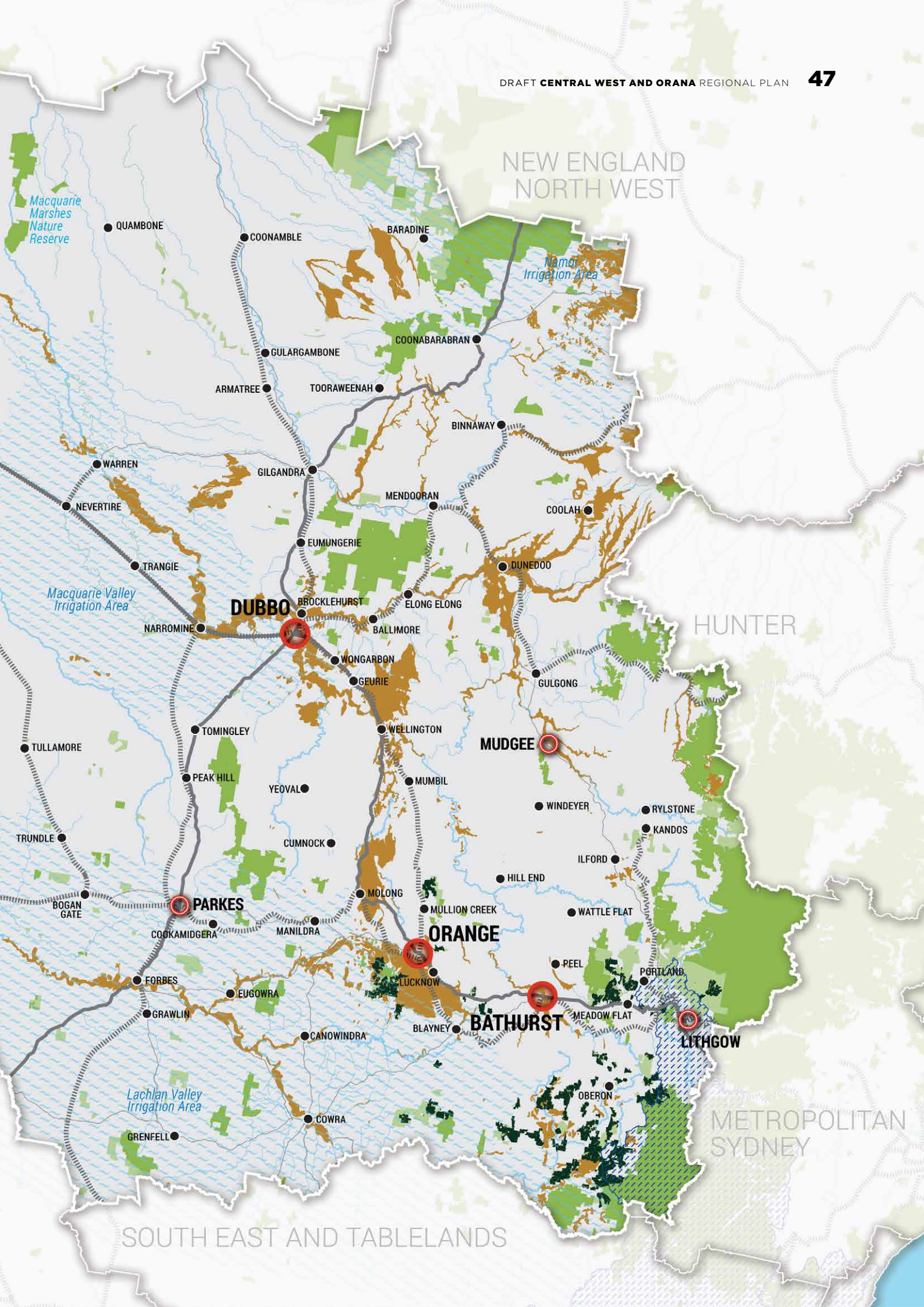
Middle:
Canola, courtesy of
Cabonne Shire Council

Bottom:
Beef cattle, courtesy
of Lachlan Shire
Council

The potential for land use conflict across the region's agricultural lands is high with competing demands for the use of agricultural land from resource extraction, forestry, energy

FIGURE 12: RESOURCES







Wheat harvest,
Grenfell, courtesy of
Five Hours West

ACTION 3.1.1 Identify and protect regionally important agricultural lands

The biophysical and socio-economic requirements for sustainable agricultural production vary between individual agricultural industries. Each industry requires access to a specific combination of resources including land and water, favourable climatic conditions, labour, infrastructure, and proximity to markets and processing facilities. To be sustainable they must operate with the available resources, protect and restore the natural resource base, and manage onsite and offsite impacts. Maintaining agricultural land efficiently, and preventing fragmentation, are critical to sustainable and profitable agricultural production.

The co-location of incompatible land uses can restrict growth, and discourage investment in good agricultural practices and productivity. It is important to protect primary and secondary production land, and related supply chain infrastructure such as regional saleyards, silos and abattoirs, so that these industries can continue to operate without restriction. A critical mass of agricultural industries must be maintained to support important parts of the supply chain, including ancillary services, infrastructure, markets, processing facilities and related industries.

The NSW Government's 2014 Biophysical Strategic Agricultural Land mapping identifies agricultural land in the region that is of significance to the State (see Figure 12). This land is capable of sustaining high levels of production for a variety of agricultural industries due to high quality soil and water resources, and a lack of constraints. The value of this land, and its ongoing viability, must be considered when determining the relative merits of coal and coal seam gas extraction.

There is an opportunity to complement the existing Biophysical Strategic Agricultural Land mapping with additional regional-scale mapping that reflects regional climatic and geological conditions, as well as regional industry needs. Mapping that incorporates biophysical, infrastructure and key socio-economic factors can be used to inform strategic land use planning for diverse agricultural sectors.

The NSW Government will:

- prepare a Regional Agricultural Development Strategy to map important agricultural land, identify emerging opportunities, and give guidance and direction for local planning of agricultural development, to complement the existing Biophysical Strategic Agricultural Land mapping;
- require councils to recognise and protect the potential of productive agricultural land in local planning controls; and
- implement the Government's *Agriculture Industry Action Plan - Primed for growth: investing locally, connecting globally* (Nov 2014).

ACTION 3.1.2 Establish a strategic planning framework to protect the productive values of agricultural land

The planning system is currently being reviewed so it can provide the strategic and legal framework to protect rural land uses, natural resources, developing industries, dependent industries and communities.

An updated policy framework will help guide local strategic planning to provide certainty and consistency, support investment in new and existing agricultural industries, and enable planning to manage future risks such as climate variability.

Such a framework can inform local planning, support ongoing investment and employment, and capture new opportunities for the sustainable use of agricultural land.

The NSW Government will:

- deliver an updated strategic policy framework that:
 - recognises the importance of agricultural lands;
 - protects land and resources for key agricultural industries from inappropriate development;
 - provides clear and consistent direction for the management of agricultural lands;

- provides guidance on managing the interface between agricultural lands and other rural and urban land uses;
- considers the potential impacts associated with climate change; and
- provides direction to councils about the sustainable management of agricultural lands when they are preparing evidence-based local strategies; and
- work with councils to protect productive agricultural land through land use zoning, and where possible, increase opportunities for agricultural and horticultural uses to keep fresh foods available locally.

ACTION 3.1.3 Encourage the increased use of biosecurity measures to protect the region's agricultural assets

Effective biosecurity is important because it contributes to the wellbeing and prosperity of the region, and more broadly the nation. A biosecurity event has a negative impact not just on an industry, but may also extend to surrounding activities and associated industries such as manufacturing and processing, transport and tourism.

Potential biosecurity risks are increasing due to the globalisation of trade, population growth, climate variability, and competing priorities for resources, including land use conflicts.⁵⁵

Biosecurity risks can be minimised by appropriate land zoning and land uses in local environmental plans, and by applying buffers to separate different land uses, through distance, vegetation or topography.

The NSW Government's commitment to strengthening and maintaining biosecurity measures across NSW is provided across a number of documents, including the *NSW Biosecurity Strategy 2013-2021*,⁵⁶ the *NSW Weeds Action Program 2015-2020* and the *Draft NSW Invasive Species Plan 2015-2022*. Local Land Services will continue to play a key role in this issue, in collaboration with other organisations such as the NSW Department of Primary Industries.

The NSW Government will require councils to:

- identify opportunities to minimise biosecurity risks for current and future industries through biosecurity plans and strategic planning, including a review of land use zones in local plans; and
- promote the application of buffer areas to minimise biosecurity risks when assessing the potential impacts of new development.

DIRECTION 3.2 Protect the region's mineral and energy resources

Australian and State Government policies relating to the mining and energy resource industries are continually evolving in response to governments' improved understanding of national issues and opportunities. Enhancing our collective understanding of the location, value and attributes of mineral and energy resources, throughout the Central West and Orana, is an important step toward the sustainable long term management of these sectors within the region.

ACTION 3.2.1 Identify mineral and energy resource lands to support the sustainable management of mining industries and diversification of NSW energy supplies

Energy resources are important both to the region and the State economy. Coal mining will be an ongoing important industry, predominantly due to its export value. Over the coming decades, the region will continue benefiting from the economic and employment flow-on effects of the coal mining industry and through the development of new industries that can provide alternative energy supplies for the State. This may include gas and renewables.

The NSW Government has identified energy resource lands for coal and gas across the State. Within the Central West and Orana region, these are in the established coalfields in the east of the region around Lithgow and Mudgee shown on Figure 13 and the petroleum exploration areas in the north east of the region, which are shown on Figure 14. The NSW



Cadia East Mine,
Orange, Courtesy of
Newcrest Mining Ltd

Government is currently working with the Australian Government to identify additional lands capable of accommodating large-scale renewable energy projects to support the development of these industries.

In addition to energy resource lands, the NSW Government has also identified mineral resource lands, shown on Figure 15, which contain an array of other mineral resources that have extractive value. Many of these also provide affordable supply sources for other industries operating within the region, including for example:

- agricultural industries which use limestone as fertiliser and clay to pelletise stockfeed;
- manufacturing industries that process clays into ceramics and bricks, limestone into cement, and sands into pigments and glass; and
- construction industries, which use fine aggregates to make concrete and asphalt and coarse aggregates as road and rail ballast.

Figures 13, 14 and 15 (see pages 52-57), show the location of existing exploration and production titles for the following respectively (based on information known at February 2016):

- coal;
- gas (petroleum) areas and areas where exploration titles have been bought back by the NSW Government; and
- minerals and quarries (excluding coal).

The maps for coal and gas exclude areas with high potential for and/or identified resources. Information regarding potential and/or identified mineral and energy resources is available from the Division of Resources and Energy. The data will be updated as geological knowledge is acquired. Up-to-date mapping of resource titles is available on the Common Ground website and geoscientific data is housed in the Department of Industry's Geoscience Data Warehouse.

The NSW Government has several policy and legislative tools to support the sustainable

growth of the mining industry, with resource planning across the State currently guided by the:

- *NSW Gas Plan*;
- *NSW Mining Act 1992* and the *NSW Petroleum (Onshore) Act 1991*;
- *State Environment Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007*, which includes coal seam gas exclusion zones around towns and villages;
- *Land Use Conflict Risk Assessment Guide*; and
- the *Draft Preliminary Regional Issues Assessment for Potential Coal and Petroleum Exploration Release Areas Guidelines*.

To support the sustainable economic growth of the mining industry and diversification of energy supplies for NSW within the Central West and Orana, the NSW Government will:

- develop analytical tools to identify and map large-scale renewable energy potential, building on new information such as the Australian Government's Australian Renewable Energy Mapping Infrastructure, as it becomes available;
- provide geoscience information available related to the resources and energy sectors in NSW and transparently monitor development activity. Up-to-date mapping of resource titles is available on the Common Ground website and geoscientific data is housed in the Department of Industry's Geoscience Data Warehouse; and
- work with councils and industry to identify and support opportunities for smaller-scale renewable energy projects such as those using bioenergy or waste coal mine methane, supporting greater energy security within the region.

The NSW Government will use this information to work with councils and industries within the Central West and Orana to plan for the future of mining industries; identify the short, medium and long term development priorities to guide investment decisions for these industries; and identify new opportunities for renewable energy industries.

Definitions

COAL SEAM GAS – natural gas from coal seams.

EXTRACTIVE MATERIAL – sand, gravel, clay, soil, rock, stone or similar substances, but does not include turf.

GAS – natural gas found in several different rock types including sandstone, limestone, shale and coal.

MINERAL – a solid naturally occurring substance including, but not limited to, coal, oil shale, agate, bauxite, copper, diamond, emerald, fluorite, gold, graphite, iron, lead, opal, potassium, rutile, ruby, selenium, silver, topaz, vermiculite, zinc, zirconia but does not include petroleum.

A full list of minerals can be found in Schedule 1 of the NSW Mining Regulation 2010:

<http://www.legislation.nsw.gov.au/maintop/view/inforce/subordleg+619+2010+cd+0+N>

MINERAL AND ENERGY RESOURCES – minerals, petroleum, gemstones, extractive materials and renewable energy.

MINING INDUSTRIES – industries that mine mineral and petroleum resources.

PETROLEUM (INCL. OIL & GAS) – any naturally occurring hydrocarbon, whether in a gaseous, liquid or solid state, or a mixture thereof.

Coal Seam Gas

The Gunnedah Basin coalfield extends partly into the Warrumbungle Local Government Area. The petroleum exploration licence (PEL) titles in the local government areas of Gilgandra, Coonamble and Warrumbungle are shown in Figure 14 (see page 54).

As with other industries, coal mining and coal seam gas extraction have the potential to affect water supply, security and infrastructure. These risks can be managed and it is important that these proposals continue to be assessed and regulated, informed by the best available science.

The Government's *NSW Gas Plan* was released in November 2014 and establishes a clear strategic framework to deliver world's best practice standards and regulation of the coal seam gas industry.

The *NSW Gas Plan* is based on scientific and rigorous analysis by the independent NSW Chief Scientist and Engineer and her Office. The Chief Scientist's report concluded that the gas industry can be managed with the right regulation, engineering solutions and ongoing management. The Government has accepted all of the 22 recommendations in the Chief Scientist's final report.

Explanatory note: Current Coal Mining Activities and Exploration Areas map

Figure 13 (over) identifies the current coal mining activities in the Central West and Orana, based on existing licences issued under the *Mining Act 1992*. These include:

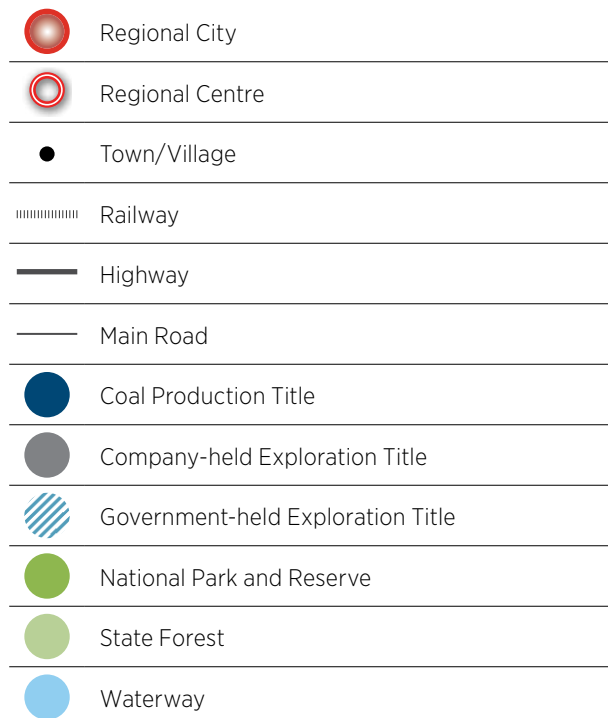
- **coal exploration titles** – identifying areas where an exploration licence or assessment lease has been granted to enable title holders to establish the quality, quantity and commercial viability of underlying coal resources. The map identifies those titles that are held by the NSW Government and those that are held by private companies; and
- **coal production titles** – identifying areas where a mining lease has been granted to allow coal to be extracted. Land subject to coal production titles may contain a range of mining-related activities, including open cut or underground mines and surface infrastructure such as roads or rail, as well as buffer zones to sensitive uses or other non-operational areas.

There are also locations where mining activities are excluded by the:

- *National Parks and Wildlife Act 1974*; and
- *State Environmental Planning Policy (Mining Petroleum Production and Extractive Industries) 2007*.

The data shown draws on information relating to existing title approvals and is correct at February 2016. The data does not indicate the nature, timing or location of specific mining activities. Further information about recent or current development applications for mining projects in specific locations can be found on the Department of Planning and Environment's Major Projects website at: <http://majorprojects.planning.nsw.gov.au/>.

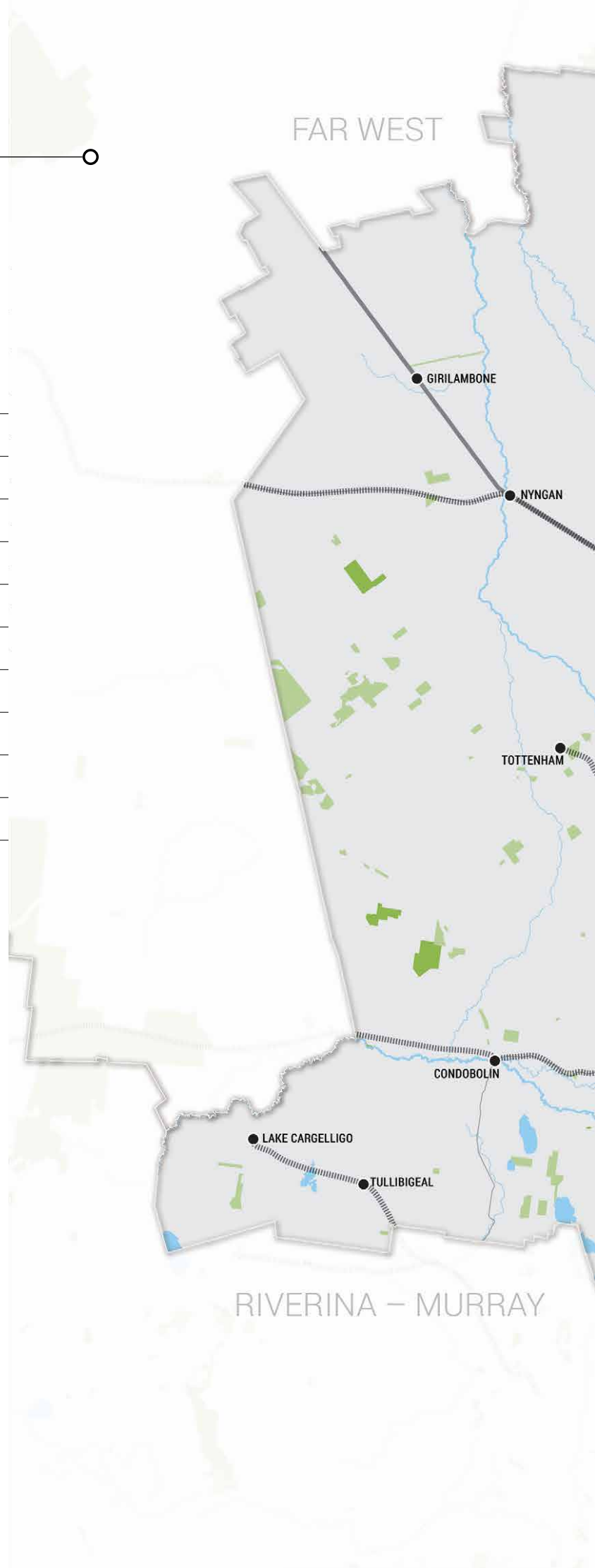
FIGURE 13: CURRENT COAL MINING ACTIVITIES AND EXPLORATION AREAS



Disclaimer:

Exploration titles show where applications can be made for mining activities. They do not infer a right to mine.

Mining is excluded in National Parks and Historic Sites.



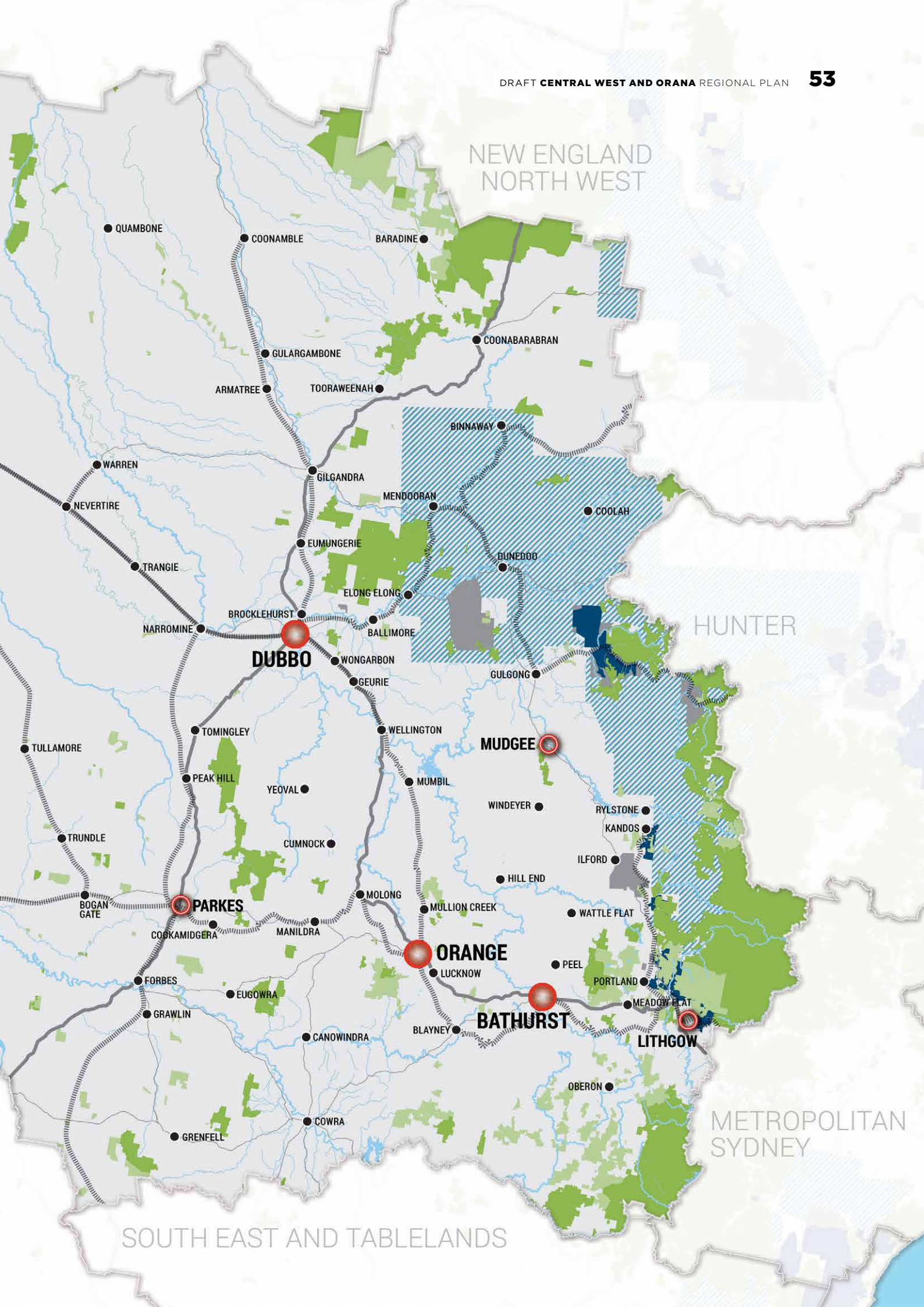
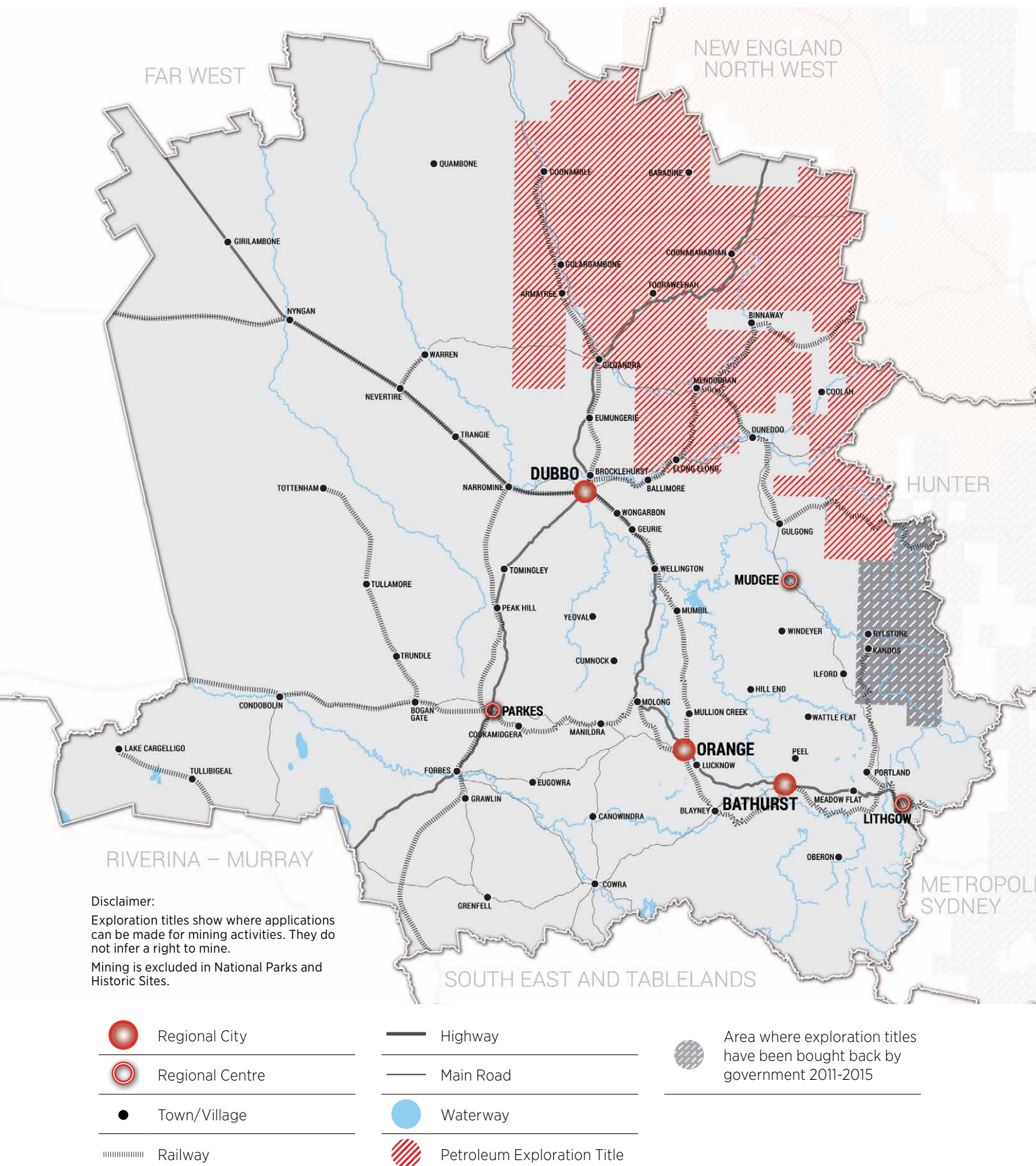


FIGURE 14: CURRENT PETROLEUM EXPLORATION TITLES AND AREAS WHERE EXPLORATION TITLES HAVE BEEN BOUGHT BACK BY NSW GOVERNMENT 2011-2015



Explanatory note: Current Petroleum Exploration Titles and Areas where Exploration Titles have been bought back by NSW Government 2011-2015 map

Figure 14 identifies the current location of petroleum mining activities in the Central West and Orana, based on existing licences issued under the *Petroleum (Onshore) Act 1991*. Industry activities are currently limited to exploration and assessment to establish the quality, quantity and commercial viability of petroleum resources, which may include conventional and coal seam gas.

Mining activities may also be excluded by the *National Parks and Wildlife Act 1974*. In addition to this, *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007* also excludes gas exploration and production in critical industry clusters and around existing settlements.

This figure also shows where exploration titles have been bought back by the NSW Government, following the release of the *NSW Gas Plan* in 2014.

The data shown on these maps draws on information relating to existing title approvals and is correct at February 2016. The data does not indicate the nature, timing or location of specific mining activities. Further information about recent or current development applications for mining projects in specific locations can be found on the Department of Planning and Environment's Major Projects website at: <http://majorprojects.planning.nsw.gov.au/>.

Explanatory note: Current Mineral Resource Titles and Exploration Areas map

Figure 15 (over) identifies the mineral resources, other than coal, that are known to occur in the Central West and Orana, including mineral sands, industrial minerals, gemstones and other metals. The map shows:

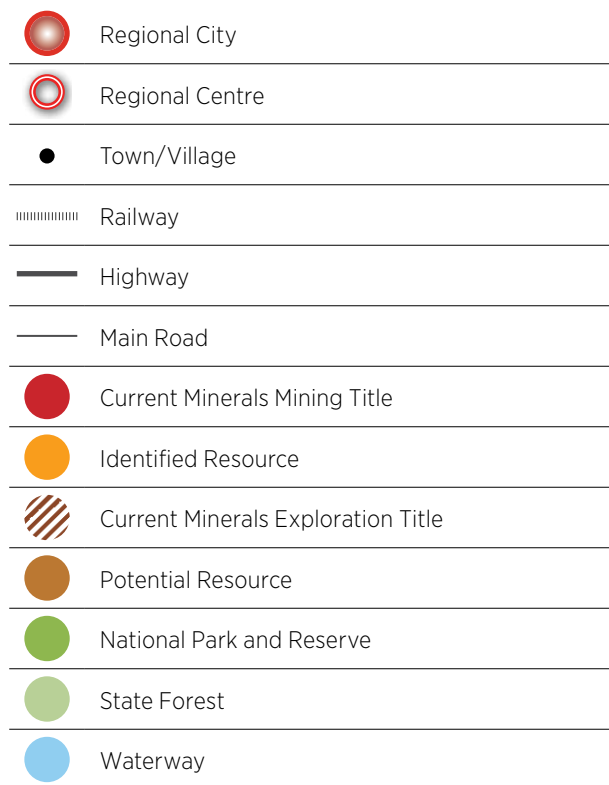
- **current minerals mining titles** – identifying areas where a mining lease has been granted to allow the mineral to be extracted;
- **identified resources** – identifying where previous exploration or assessments have confirmed the presence of a mineral resource. The areas shown include an adjacent transition area around the identified resource, where planning and management should consider the current or future implications of extractive activities;
- **current minerals exploration titles** – identifying areas where an exploration licence or assessment lease has been granted to enable title holders to establish the quality, quantity and commercial viability of underlying mineral resources; and
- **potential resource areas** – where geological surveys suggest there may be a high likelihood of a particular resource, which may be confirmed through future exploration and assessment.

There are also locations where mining activities are excluded by the:

- *National Parks and Wildlife Act 1974*; and
- *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries), 2007*.

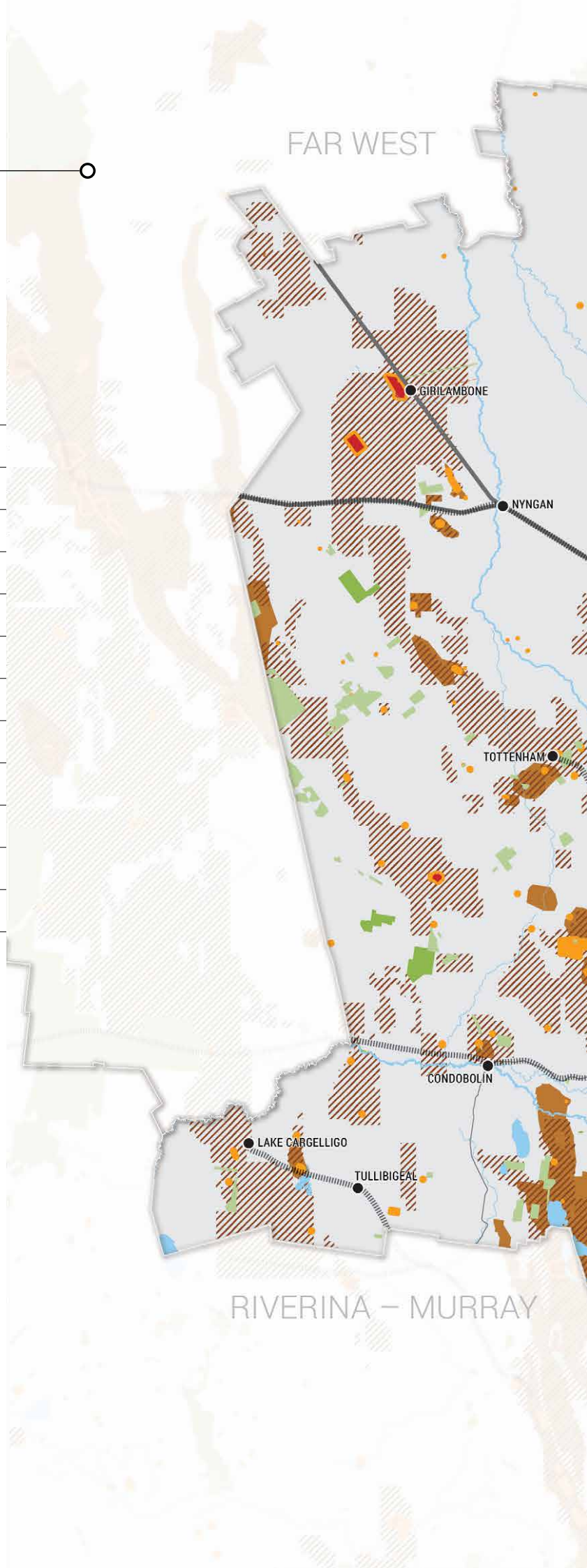
The data shown reflects the NSW Government's *Minerals Resource Audit*, finalised in 2015 and includes existing title approvals issued under the *Mining Act 1992*, current at February 2016. This data does not indicate the nature, timing or location of specific mining and quarrying activities. Further information about recent or current development applications for mining projects in specific locations can be found on the Department of Planning and Environment's Major Projects website at: <http://majorprojects.planning.nsw.gov.au/>.

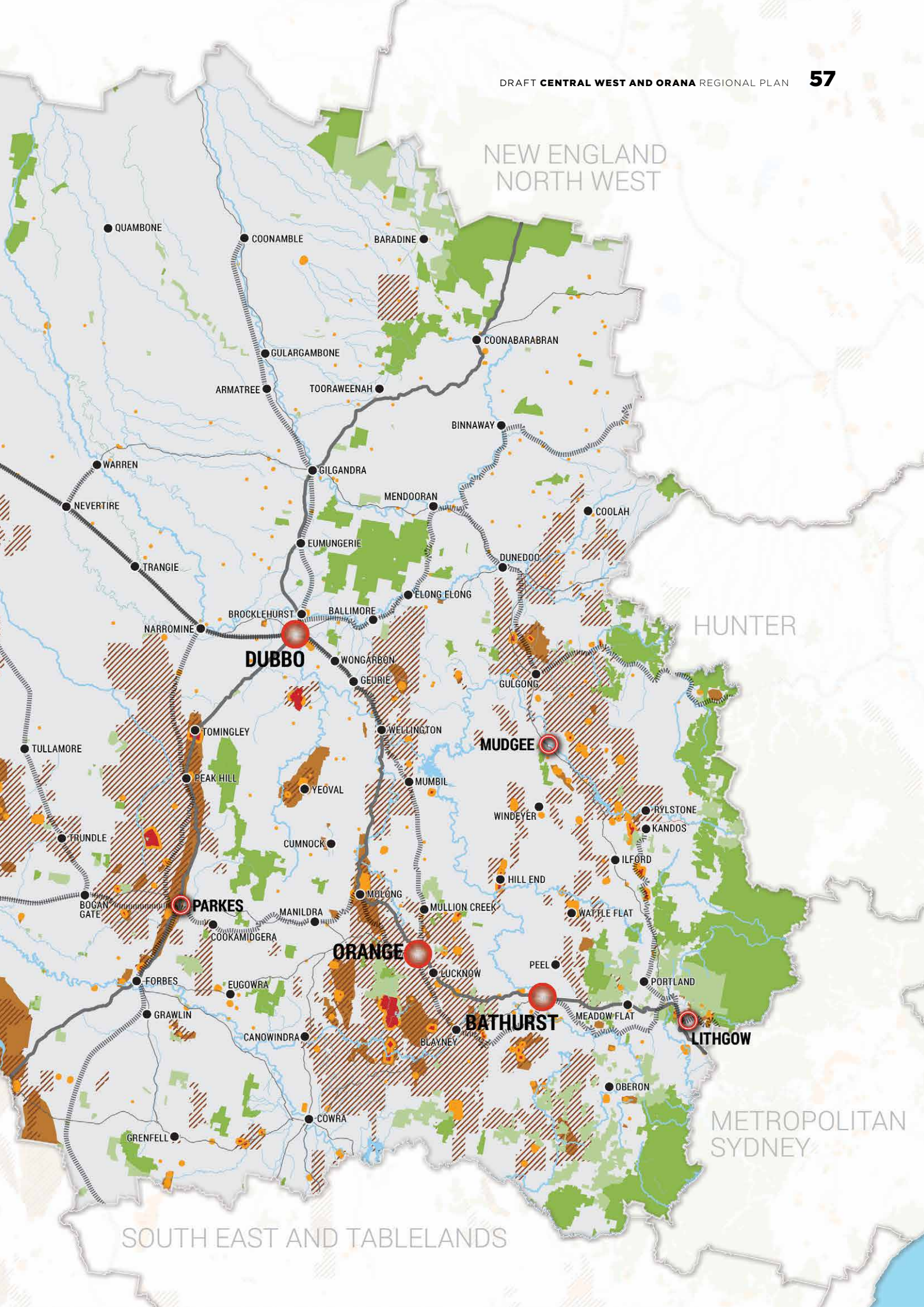
FIGURE 15: CURRENT MINERAL RESOURCE
TITLES AND EXPLORATION AREAS



Disclaimer:

Exploration titles show where applications can be made for mining activities. They do not infer a right to mine. Mining is excluded in National Parks and Historic Sites.







First Solar, Nygan, courtesy of AGL Energy

ACTION 3.2.2 Plan for the ongoing productive use of mineral and energy resource lands

Mining activities have specific operational needs that can compete with other sensitive uses. However, they are also temporary, dependent on the productive life of the facility or resource. Once extractive resource lands have been identified, there may be opportunities to identify interim activities that will enable lands to be used productively, without sterilising the future potential to extract the underlying resource. However, any land use changes contemplated in advance of the extraction of resources must be carefully considered.

The Council of Australian Governments Standing Council on Energy and Resources prepared a *Multiple Land Use Framework* to assist in planning and managing multiple land uses. The framework includes a series of planning principles that can assist in planning around known resource areas, where other high value land uses also exist.

Developing land use plans that respond to the lifecycle of the extractive resource area will enable all stakeholders to better understand the long term productive value of the land and provide greater certainty for investments. These land use plans may consider how identified extractive resource lands may accommodate a range of uses, either sequentially or simultaneously with extraction-related activities.

Having a staged approach to land use planning for a resource area will recognise the sequential nature of activities:

- **lead-in stage** – to determine the project's suitability and viability consideration needs to be given to the potential local and cumulative environmental or social impacts and benefits of the proposed activity, and the productive value of the resource and the investments in land and infrastructure required to support ongoing operations;
- **operational stage** – consideration needs to be given to the requirements that should be set to manage the production of resources in line with global and national demands, and to maintain buffers to sensitive uses; and
- **transitional stage** – consideration needs to be given to transitioning to other land uses, once the underlying resources have been extracted.

Throughout the lifecycle of the resource, consideration should also be given to opportunities to provide:

- rural and agricultural activities;
- conservation – to protect biodiversity and sustain habitat connectivity; and
- housing – to accommodate long term demands for expanding cities, towns and villages (this will be informed by and support a separate action for long term settlement planning).

The NSW Government will:

- work with relevant councils, communities and industries to prepare land use plans that respond to the lifecycle of resource activity for active and emerging mining areas in the Central West and Orana.

ACTION 3.2.3 Implement the NSW Renewable Energy Action Plan to increase renewable energy generation

The NSW Government has prepared a *NSW Renewable Energy Action Plan* (2013) to help achieve the national target of 20 per cent of

energy generation by renewable energy by 2020. These targets have been a driver of wind and solar farm proposals across NSW.

The *NSW Renewable Energy Action Plan* details three goals and 24 actions to most efficiently grow renewable energy generation in NSW. The three goals are to:

- attract renewable energy investment and projects;
- build community support for renewable energy; and
- attract and grow expertise in renewable energy technology.

The NSW Government will:

- implement the actions in the *NSW Renewable Energy Action Plan*.

Developing alternative energy sources in the Central West and Orana

In the coming decades, coal mining will continue to be an important industry within the Central West and Orana region, meeting global and State demands for energy. New opportunities will also emerge within the region, allowing the region to diversify its energy sector through the development of alternative energy sources, including gas and renewables.

GAS

The State imports the vast majority of its gas supply and the NSW Government is investigating options to develop its own gas resources to meet a greater proportion of its demand.

RENEWABLES

The region also has recognised opportunities for developing alternative energy resources, with identified undeveloped resources and emerging opportunities for renewables. It has a number of operational solar, wind and bio-energy projects.

The western parts of the region such as Warren, Coonamble and Bogan Local Government Areas are well-suited to solar energy generation due to the high level of annual solar irradiance/insolation. The

landmark Nyngan Solar Plant occupies an area of 250 hectares and is currently the largest solar farm in the southern hemisphere producing 102 megawatts of electricity from approximately 1.36 million solar photovoltaic modules.

The south-eastern parts of the region are well suited to wind generation and already have wind farms, including Blayney Wind Farm with 15 turbines⁵⁷ and Hampton Park in Oberon with two turbines. A number of new wind farms have been proposed, including Bodangora Wind Farm with 33 turbines⁵⁸, Flyers Creek Wind Farm with 43 turbines⁵⁹ and the Liverpool Range Wind Farm with 288 turbines.⁶⁰

The Australian Government is currently working to establish a consistent approach to mapping the potential for these resources around the country.

Other opportunities may also emerge to generate energy from products including biomass (for example, agricultural products, forestry products or municipal waste), carbon sequestration or waste coal mine methane. These energy alternatives can support a more sustainable energy future within the region by reducing demands for energy as well as the emissions generated by the energy industry.



Left: Cotton bales, courtesy of Pippy Simmons, Warren Shire Council

Right: Local business, courtesy of Bathurst City Council

DIRECTION 3.3 Manage competing and conflicting interests in agricultural, mineral and energy resource areas to provide greater certainty for investment

As the region continues to grow, and new economic development opportunities emerge for rural and resource industries, there is potential for conflict to arise. The potential for conflict is likely to occur where development of mineral and energy resources coincides with:

- land that currently, or may in future, accommodate agricultural activities;
- land that may in future accommodate urban activities; and
- water resources.

There is also potential for conflict if new housing encroaches into rural and resource areas leading to increased management costs, or if it affects the potential to sustain or grow rural and resource industries. Land use planning can provide greater certainty for investment in rural and resource industries by establishing clear parameters and transparent processes to support new development.

One example of how government is managing conflict in the case of mining is through the strategic release framework, which takes into account the viability of the resource and economic, environmental and social impacts of new areas for coal and petroleum exploration. However, consideration also needs to be given to exploring the possibility of identifying areas of strategic importance to agricultural industries at the State level. This information will assist decision-making about releasing new areas for coal and petroleum.

Strategic Release Framework

The region holds a rich and diverse geology creating a future potential for mineral and energy resource exploration and extraction.

It is recognised that there are competing uses for land in this region and that there is a need to balance these interests in order to deliver the vision for this region. That is, to deliver a region with a sustainable future that maximises the advantages of its diverse climates, landscapes and resources.

As part of the process to achieve balanced outcomes, the NSW Government has introduced a Strategic Release Framework for coal and gas. This is a mechanism to review and define which lands may constitute new exploration release areas.

New exploration licences will only be issued in areas released by the Minister for Resources and Energy after an assessment of resource potential, and economic, environmental and social factors.

Community consultation and an upfront assessment of social, environmental and economic matters will occur through a preliminary regional issues assessment.

Overall, the new framework resets the NSW Government's approach to issuing exploration titles to be transparent, informed and consistent with the NSW Government's broader mineral and energy resource strategies.

Further work is also currently under way to improve the regulatory environment for coal and coal seam gas development. The Strategic Statement on NSW Coal will guide the growth and performance of the NSW coal sector. The Statement's objectives aim to deliver strong and sustainable economic growth by balancing resource development and management of other land uses and the environment.

ACTION 3.3.1 Avoid urban and rural residential encroachment into identified agricultural and extractive resource lands when preparing long term settlement strategies

Urban and rural residential encroachment into identified agricultural and extractive resource lands impacts on the viability and future growth potential of rural and resource businesses in the Central West and Orana.

Local demand for housing in long term settlement strategies should be assessed based on regional priorities, including support for the sustainable growth of agricultural and mining industries in the Central West and Orana. Long term settlement strategies should recognise and respond to:

- opportunities to provide similar housing outcomes in other locations within the region;
- the specific operational requirements of existing or potential future agricultural, mining and extractive industries; and
- effective and efficient provision and management of associated infrastructure and services.

The NSW Government will:

- work with councils to avoid the impacts of urban and rural housing encroachment into identified agricultural and extractive resource areas when preparing local strategies. This will support the ongoing success of agricultural and mining industries within the Central West and Orana; and
- work with councils and industry to identify where demands for additional urban lands coincide with identified extractive resources and develop strategies to sequence the release of these in line with mining activities.

DIRECTION 3.4 Manage and conserve water resources across the region

Water underpins the success of the region's communities, economy and the environment. It is a limited and precious resource and must be managed both for immediate needs and for long term social, economic and environmental sustainability. Water resource management is an issue that is external to land use planning.

The Central West includes part of the Sydney Drinking Water Catchment and specific planning and development controls apply to proposals within this catchment. Developments in this catchment must have a neutral or beneficial effect on water quality and should not reduce the quantity of water reaching reservoirs. These protections are provided in a suite of legislation including *State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011*; local planning direction 5.2 *Sydney Drinking Water Catchments* issued under Section 117(2) of the *Environmental Planning and Assessment Act 1979*, the *Water NSW Act 2014* and the *Water NSW Regulation 2013*; and the *Water Management Act 2000*.

The health of the region relies on maintaining and protecting water catchments, watercourses and riparian land. Healthy water systems enable the best water quality, biodiversity, recreation and economic outcomes. Responding to less water allocation and climate change impacts will be a major challenge for the region and its producers.

ACTION 3.4.1 Support the sustainable use and conservation of water resources

Historic water use and drought have meant that water supply for all water users, including the environment, has been prioritised and rationalised. The major water users in the region are councils, water utilities, and mining and agricultural industries such as cotton, dairy, wool and wheat. Sharing water equitably between competing water users and the environment, particularly during periods of drought, is a key issue.

Water resource management is complex and is vested across all three tiers of government. At



Castlereagh River, Coonamble, courtesy of
Gecko Photographics, Destination NSW

all levels therefore, government must develop policies that provide a sustainable supply of water for present and future generations.

The *Murray-Darling Basin Plan* limits water use at environmentally sustainable levels by determining long term average sustainable diversion limits.⁶¹ Integrated responses to the management of water supply, recycling, conservation and efficiency, across all sectors, are already being implemented through the *Basin Plan*.

Water resource plans are currently being prepared to implement the outcomes of the *Basin Plan* and existing water sharing plans are expected to be a component. These plans establish rules for sharing water between the environmental needs of the river or aquifer and water users, and also between different types of water use, such as town supply, rural domestic supply, stock watering, industry and irrigation. The following water sharing plans exist in the region:

- Macquarie Bogan Unregulated and Alluvial Water Sources;
- Macquarie and Cudgegong Regulated Rivers Water Source;
- Lachlan Regulated River Water Source;
- Lachlan Unregulated and Alluvial Water Sources;
- NSW Murray-Darling Basin Fractured Rock Groundwater Sources;
- NSW Murray-Darling Basin Porous Rock Groundwater Sources;
- NSW Great Artesian Basin Groundwater Sources;

- Belubula Regulated River Water Source;
- Castlereagh River (above Binnaway) Water Source;
- Castlereagh River (below Binnaway) Unregulated and Alluvial Water Sources;
- Mandagery Creek Water Source;
- NSW Great Artesian Basin Shallow Groundwater Sources;
- Lower Macquarie Groundwater Sources; and
- Lower Lachlan Groundwater Source.

Subdivision for rural residential land has dramatically increased the number of landholders who are able to extract water, without the need for a water licence. It is important that this incremental extraction of the region's water is sustainably managed.

The region is adapting to water scarcity and the effects of climate change by using more efficient irrigation technologies. The NSW Government will support efficiencies in irrigation that continue to create a demand for agricultural land and provide appropriate opportunities for agribusiness growth through projects such as *Restoring the Balance*.

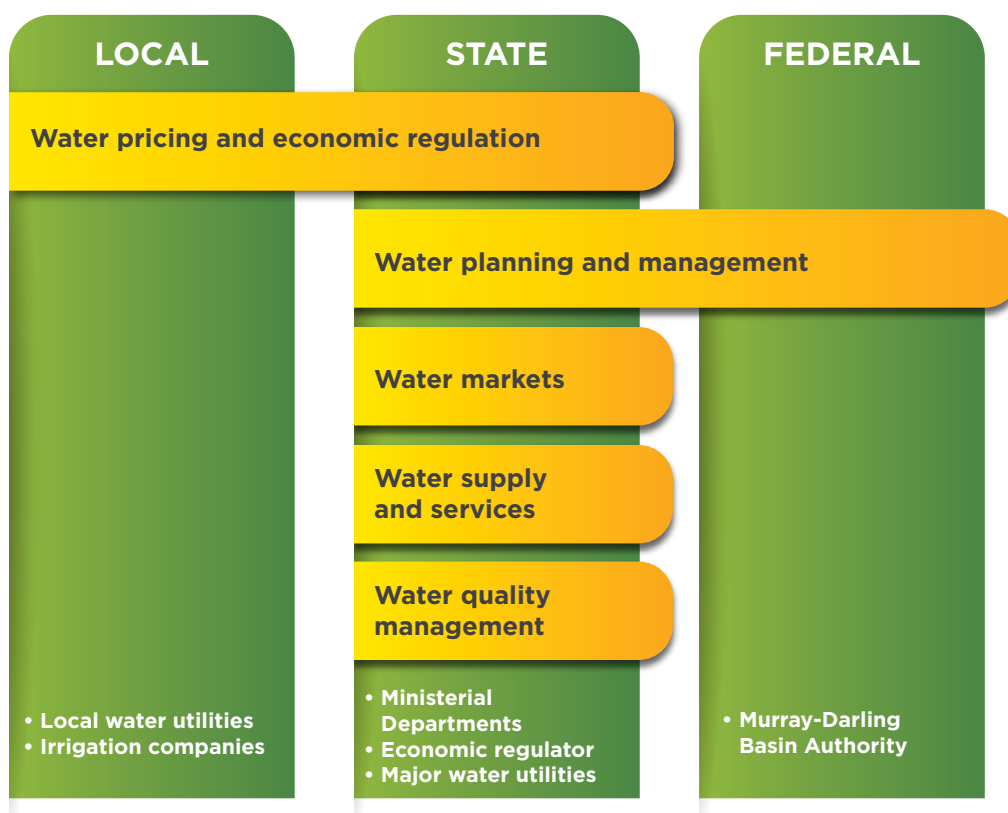
Restoring the Balance

Restoring the Balance is part of a 10-year Australian Government initiative called *Water for the Future*, to help Australia plan for a future with less water. Without sufficient water the Murray Darling Basin's ecosystems will continue to deteriorate, threatening many species and the viability of farming, non-rural production, cities and towns. As part of the initiative, \$3.1 billion will be used to purchase water entitlements from irrigators. There is compelling scientific evidence that the basin is facing a future with less water. The purchase of water entitlements is part of an integrated effort to meet this challenge.

The NSW Government will:

- support the Murray-Darling Basin resource allocation plans and collaborate with industry and stakeholders to provide clarity to producers on changes to and management of water allocations; and
- recognise and plan for the pressures of a changing climate on water availability and use for the environment, agriculture, settlements and communities, and industry.

FIGURE 16: WATER GOVERNANCE⁶²





DIRECTION 3.5 Protect and manage the region's environmental assets

The Central West and Orana region's landscape underpins its cultural heritage, settlement and agricultural character. It comprises dryland and wetland landscapes, riparian systems, alpine communities, grasslands karst systems and semi-arid shrublands. These important landscapes support native flora and fauna, endangered ecological communities and a number of threatened and vulnerable species.

The Macquarie-Castlereagh catchment includes the internationally significant Macquarie Marshes Wetlands which are about 200,000 hectares in size. The Macquarie Marshes Nature Reserve was listed under the Ramsar Convention in 1986. It covers 19,850 hectares and contains significant cultural values.⁶³

Groundwater dependent ecosystems and aquatic habitats also have high environmental values. Aquatic habitats in the region have been mapped by the Department of Primary Industries, Fisheries.

The region also has a significant number of reserves gazetted under the *National Parks and Wildlife Act 1974*, including the Wollemi National Park, which forms part of the Greater Blue Mountains World Heritage Area. This area is recognised nationally and internationally as a UNESCO Biosphere Reserve.⁶⁴

This draft Plan takes a landscape-based approach to regional planning. It recognises the importance that the community places on the region's unique environmental features and their associated cultural, tourist and recreational values. It is vital that these environmental assets are not only protected but also actively managed and restored.

Many of the region's natural features are already subject to a high level of regulation. Land use planning can identify locations where these high environmental values are likely to occur and strategic planning can help to protect their values through the right regulatory environment that avoids or minimises impacts on their values.

Areas with a high probability of high environmental value are identified in Figure 17. High environmental value assets in the region include (but are not limited to) the following:

- areas protected for conservation, including national parks, state flora reserves and Crown reserves;
- native vegetation of high conservation value, including over-cleared vegetation types and vegetation within over-cleared landscapes;
- known habitat for threatened species and populations;
- endangered ecological communities;
- wetlands and lagoons, such as Dunns Swamp and 'the Drip' near Mudgee and the Macquarie Marshes near Warren;⁶⁵
- areas of geological significance, such as karst landscapes like Jenolan, Abercrombie, Borenore and Wellington Caves;⁶⁶ and
- the volcanic landscapes of Coolah Tops and the Warrumbungles.⁶⁷



Left: Macquarie River, courtesy of Cabonne Shire Council

Middle: Warrumbungle National Park, courtesy of Susan Wright, Destination NSW

Right: Cathedral Cave, Wellington, courtesy of Gecko Photographics, Destination NSW

Explanatory note: Environment map

Figure 17 (over) shows vegetation of potentially high environmental value across the Central West and Orana region. These areas relate to natural features that have existing protections under legislation, regulation, policy or intergovernmental agreement. This mapping helps to identify regionally important conservation areas and areas that should be avoided by development. When preparing planning strategies and local environmental plans, councils will need to consider appropriate environmental protection measures to protect key environmental assets.

A range of criteria were used to map high environmental values land including:

- existing conservation areas, including national parks and reserves, marine parks, declared wilderness areas, Crown reserves dedicated for environmental protection and conservation, and flora reserves;
- native vegetation of high conservation values, including vegetation types that have been over-cleared or occur within over-cleared landscapes, old growth forests and rainforests;
- threatened ecological communities and key habitats;
- important wetlands, coastal lakes and estuaries; and
- sites of geological significance.

The data used to identify high environmental values in this draft Plan are intended to provide a regional-level overview for the purposes of strategic planning. Some areas not identified on the map, including terrestrial and aquatic environments, may also contain high environmental values.

This data will continue to be updated as new information becomes available. Interested parties should contact relevant agencies, including the Office of Environment and Heritage for further information and to obtain the most recent spatial data.

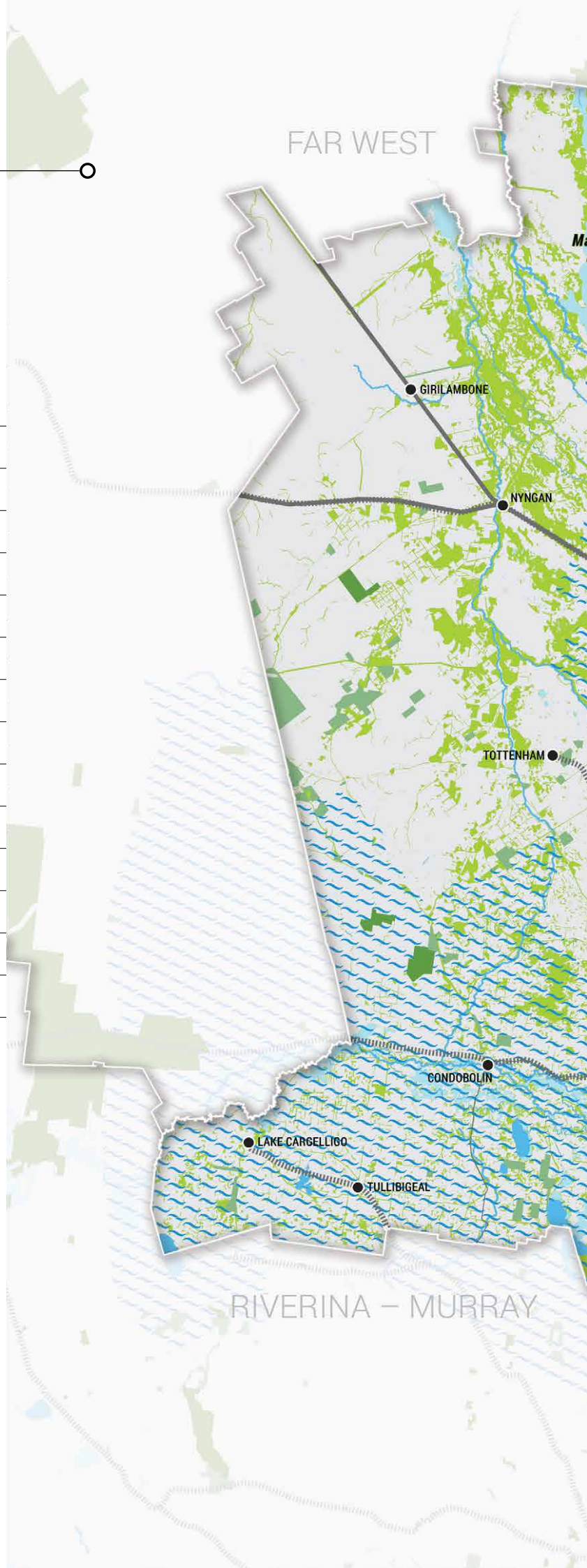
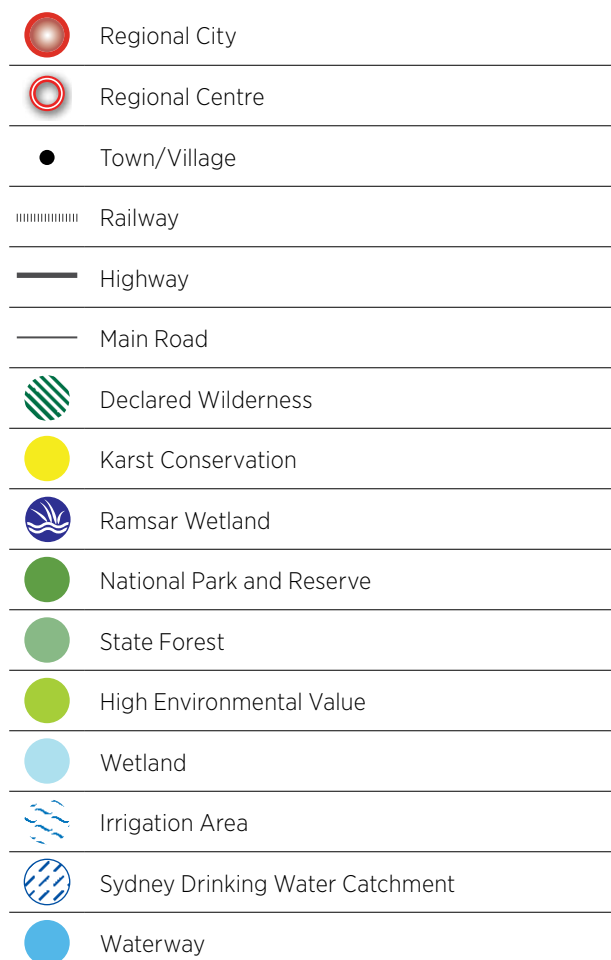
ACTION 3.5.1 Facilitate improved access to quality information relating to high environmental values and use this information to avoid, minimise and offset the impacts of development on significant environmental assets

Currently, the availability of local scale field-validated vegetation mapping varies across the region. Field-validated vegetation mapping is used to identify, protect and manage environmental assets at a local scale, and to validate any new growth areas. Areas identified for new or more intensive development can then be located to avoid or mitigate potential impacts on these values. Where it is not possible to avoid impacts, councils will be required to consider how impacts can be managed through planning controls or other environmental management mechanisms such as biodiversity offsets.

The *NSW Biodiversity Offsets Policy for Major Projects* applies to all biodiversity in NSW, including aquatic biodiversity. All other offsets or compensation requirements are covered by the Department of Primary Industries' policy and guidelines for fish habitat conservation and management (updated in 2013).

The NSW Government will continue to refine the potential high environmental value mapping as new information arises. Councils will need to consider environmental protection measures for key environmental assets when preparing local planning strategies and amending local environmental plans.

FIGURE 17: ENVIRONMENT





The NSW Government will:

- work with councils, when they are preparing planning strategies or local environmental plans for new or more intensive development, to:
 - identify and implement appropriate planning controls to protect areas of high environmental value;
 - implement the 'avoid, minimise, offset' hierarchy, by striving to avoid and minimise impacts on areas of high environmental value, and where impacts cannot be avoided, identify and secure appropriate biodiversity offsets through an offset strategy; and
 - consider the use of biodiversity certification.
- continue to refine the potential high environmental values mapping as new information arises to assist decision-making.

ACTION 3.5.2 Maintain healthy waterways and wetlands, including downstream environments

Water quality is an important factor influencing the ability of waterways and aquifers to sustain healthy aquatic ecosystems. The Department of Primary Industries' *Policy and Guidelines for Fish Habitat Conservation and Management* (2013) provides guidance, and assists in managing and protecting our important aquatic resources.

New and enlarged developments need to be appropriately located, designed, constructed and managed to minimise impacts, including downstream impacts, on key fish habitats. The NSW Government's Water Quality and River Flow Objectives are a resource councils should use to guide catchment and local strategic plans.

Key fish habitats are those marine, estuarine and freshwater habitats that are important for the preservation of fish communities and for the ongoing productivity of recreational and commercial fishing and the aquaculture industry. Key fish habitats have been mapped by the Department of Primary Industries, Fisheries, and along with the fish community

status and aquatic threatened species distribution maps, will be used by councils during strategic planning and when they are developing local environmental plans.

The NSW Government will require that councils:

- use appropriate provisions to protect water catchment areas and groundwater sources from potential impacts from development. Any development should have a neutral or beneficial effect on water quality; and
- minimise the impacts of development on fish, fish habitat, aquaculture, commercial and recreational fishing and waterways (including watercourses, wetlands and riparian lands), and meet the Water Quality and River Flow Objectives.

DIRECTION 3.6 Protect people, property and the environment from exposure to natural hazards and build resilient communities

The region's natural environment presents a number of challenges for hazard management and planning. Major natural hazards such as floods, bushfires and drought are already a challenge and are expected to be exacerbated by climate change.

All local government areas in the region are exposed to the threat of natural hazards, although the extent of the threat varies. Some areas are more prone and exposed to floods such as Narromine, Bogan, Coonamble, Forbes and Warren, while other heavily forested areas such as Lithgow, Oberon, Bathurst and the Warrumbungles, are more prone to bushfires.

Climate change poses a significant risk to the region's ecosystems, agricultural productivity and the sustainability and resilience of smaller communities. In December 2014, the NSW Government released climate projections and impact information at scales relevant to local decision-making.⁶⁸ The NSW and ACT Regional Climate Modelling⁶⁹ projections for the future suggest that the region will be particularly vulnerable to rising temperatures and changing rainfall patterns.

The impact of climate change

The region is likely to be affected by a changing climate in the future with several climatic changes predicted including:

- a drier and warmer future climate, resulting in increased evaporation, increased occurrence of heat waves, extreme winds and fire risk;
- potential for increases in seasonal extreme rainfall events leading to changed flood behaviour;⁷⁰
- an overall change in rainfall, with the rainfall patterns projected to vary across the region, but with a drier spring and wetter autumn predicted generally;
- substantial reduction in stream flow, for example, in the Macquarie River, an 11 to 30 per cent decrease in flows upstream by 2030;
- combined climatic changes likely to affect natural systems, species and ecosystems, and those that cannot adapt likely to decline, contract or become extinct;
- hotter climate with days projected to be on average +0.4 to 1°C hotter across all seasons by 2030, and +1.8 to 2.7°C hotter by 2070;
- minimum temperatures are projected to increase in the near future by 0.5 to 0.9°C and in the far future by 1.5 to 2.6°C;
- increased frequency of very high or extreme fire-risk days – the temperature increases are likely to increase fire intensity across the region;
- substantial reduction in the magnitude, frequency and duration of broad-scale floods;
- increased short and intense rainfall events, resulting in increased localised flooding events from smaller urban streams and urban drainage systems;⁷¹ and
- average fire weather, and severe fire weather days, projected to increase in summer, spring and winter.

ACTION 3.6.1 Review and map natural hazard risks to inform land use planning decisions

Understanding the nature and location of hazards is an important part of strategic planning. Most councils include hazard mapping in local environmental plans, for example, flood prone land and karst land maps, which provide a level of certainty about site constraints and risks.

Mine subsidence is known to affect part of the historic coal mining areas around Lithgow and may also affect other parts of the region where mining has occurred. The NSW Government already provides strategic advice and support to councils and landowners to plan, manage and respond to risks and hazards from mine subsidence through the Mine Subsidence Board. Decisions made on new infill and greenfield development, particularly around the Lithgow area, need to consider the potential risks and hazards associated with mine subsidence.

Hazard mapping is currently based on the best available information, which in some cases means councils must rely on historical data and individual site assessments. A more strategic approach to mapping is required, including the progressive updating of regional hazard datasets, and improved communication with councils about updated data.

Managing flooding is an important priority for the NSW Government and councils.⁷² The Office of Environment and Heritage provides both financial and technical support to local government so they can develop and implement Floodplain Risk Management Plans to manage flood risk in local communities.

Bushfire hazards and risks are identified on maps of bushfire prone land, which are prepared by councils and certified by the Commissioner of the NSW Rural Fire Service. The extent of bushfire prone land may increase with climate change and it is prudent for mapping to be reviewed and monitored at regular intervals.



To reduce the community's exposure to flood hazards, the NSW Government will require councils to:

- update and implement new flood planning levels (where necessary) using updated flood mapping from floodplain risk management plans; and
- update flood planning area maps in local environmental plans, using updated information from endorsed floodplain risk management plans.

The NSW Government will:

- update and share current information on environmental assets and natural hazards with councils to inform planning decisions.

ACTION 3.6.2 Minimise the potential impacts of naturally occurring asbestos on communities

Some parts of the Central West and Orana are subject to naturally occurring asbestos with potential impacts from ground disturbing activities. Areas where naturally occurring asbestos is found include the Coolac Serpentinite in south west NSW, the Gilmore Suture Serpentinities in south central NSW, Ordovician to Early Silurian rocks east of Orange and ultramafic complexes in central west NSW including areas near Fifield, south west of Dubbo.⁷³ Naturally occurring asbestos is found in the local government areas of Wellington, Cabonne, Orange, Cowra, Blayney and Bathurst.

Naturally occurring asbestos only poses a health risk when elevated levels of fibres are released into the air, either by human activities or by natural weathering, and the fibres are inhaled by people.

The Local Government and Shires Association of NSW has developed a *Model Asbestos Policy for NSW Councils* on behalf of the Heads of Asbestos Coordination Authorities. The policy has been developed to help councils formulate asbestos policies and to promote a consistent approach to asbestos management.

The NSW Government will:

- require councils that are affected by areas of naturally occurring asbestos to use appropriate approaches to manage the risks of disturbance.

ACTION 3.6.3 Support communities to build resilience to the impacts of natural hazards and climate change

A systematic and coordinated approach is necessary to manage climate change risks. Communities in the region need skills and knowledge about the issue, and need to be prepared with adaptive measures across the economic, social, environmental and infrastructure sectors to mitigate the effects of climate change.

Agricultural productivity is likely to be affected by climate change with predicted lower rainfall, higher temperatures and prolonged dry periods (drought). Farmers are already preparing for and managing severe cyclical variations by improving irrigation; trading water; adopting innovative technology, machinery and crop and animal genetics; using climate forecasting; and adopting new approaches to marketing. In urban areas, domestic water restrictions and low water use landscaping is being used.

The NSW Government can help communities prepare for climate change through land use planning, investment in technology, infrastructure and education. The Office of Environment and Heritage has commenced



Left: Sheep grazing, Mandurama, courtesy of Destination NSW

Right: Courtesy of Parkes Shire Council

rolling out a series of Enabling Regional Adaptation Projects across the State, including the Central West and Orana, which will help local decision-makers identify and implement actions to address the potential risks of climate change. It will identify regional climate vulnerabilities and potential adaptations at a regional and sub-regional scale through a series of facilitated workshops with agencies, local government, and the Regional Organisations of Council and pilot Joint Organisations.

The Office of Environment and Heritage will continue to develop information to help manage and protect vulnerable ecosystems. Councils can recognise and prevent development pressures in and adjacent to vulnerable areas in their local environmental plans.

To reduce the community's exposure to natural hazards, the NSW Government will require councils to:

- incorporate best available hazard information into local planning controls;
- prohibit new urban releases in high flood hazard areas and designated waterways, consistent with floodplain risk management plans;
- implement the findings of flood studies, modelling and floodplain risk management plans, for example, by including amendments to planning instruments and incorporating findings into local strategic plans; and
- locate developments away from areas of known high biodiversity value and high bushfire and flooding hazard.

The NSW Government will:

- consider the outcomes of the Regional Climate Change Adaptation Planning Program to inform future land use planning decisions;
- adopt a whole-of-government approach to information exchange to support climate change adaptation and preparedness; and
- work with councils to understand and respond to climate-related risks by applying and communicating fine-scale climate information to support decision-making.



GOAL 4 – Strong communities and liveable places that cater for the region’s changing population

The Central West and Orana Region is projected to grow by 18,750 people, from 283,700 in 2016 to 302,450 in 2036.

Population change will have implications for the patterns, roles and functions of the region’s diverse settlements. Success across the region will be measured by growth in the cities and regional centres and the strength and resilience of smaller towns and villages.

The draft Plan aims to create attractive, healthy and sustainable communities which are great places for people to live, work and visit.

and a range of jobs that support key economic sectors such as agribusiness, mining and tourism.

Some towns and villages are projected to experience population growth, particularly those in Cabonne and Blayney Local Government Areas that are close to the regional cities of Bathurst and Orange. Other settlements, which predominantly support agricultural production and mining activities, are projected to remain relatively stable or in some cases experience decline as a result of changes to employment opportunities and demographic change.

DIRECTION 4.1 Manage growth and change in the region’s settlements

The regional cities of Dubbo, Orange and Bathurst will experience the highest rate of population growth in the region. The regional centres of Lithgow, Mudgee and Parkes will also experience growth as they become more attractive places for people to live and work. The prosperity and liveability of the region is dependent on the strong interrelationships and dependencies that exist between these six larger settlements and the many smaller towns and villages. These smaller towns and villages provide local level services and offer more affordable housing, attractive lifestyle choices

The NSW Government supports efforts to grow the region and create strong and diverse communities resilient to economic, social and environmental changes. Partnership-based initiatives such as the ‘Evocities’ program have been successful in attracting new residents and investment into regional cities like Dubbo, Orange and Bathurst. Both the Australian and NSW Governments support for this partnership initiative has resulted in increased funding and dedicated resources.

Top:
Housing, courtesy
of Narromine Shire
Council

Middle:
Grenfell
playground,
courtesy of Five
Hours West

Bottom:
Dubbo Regional
Theatre, courtesy
of Dubbo City
Council

FIGURE 18: BATHURST REGIONAL CITY

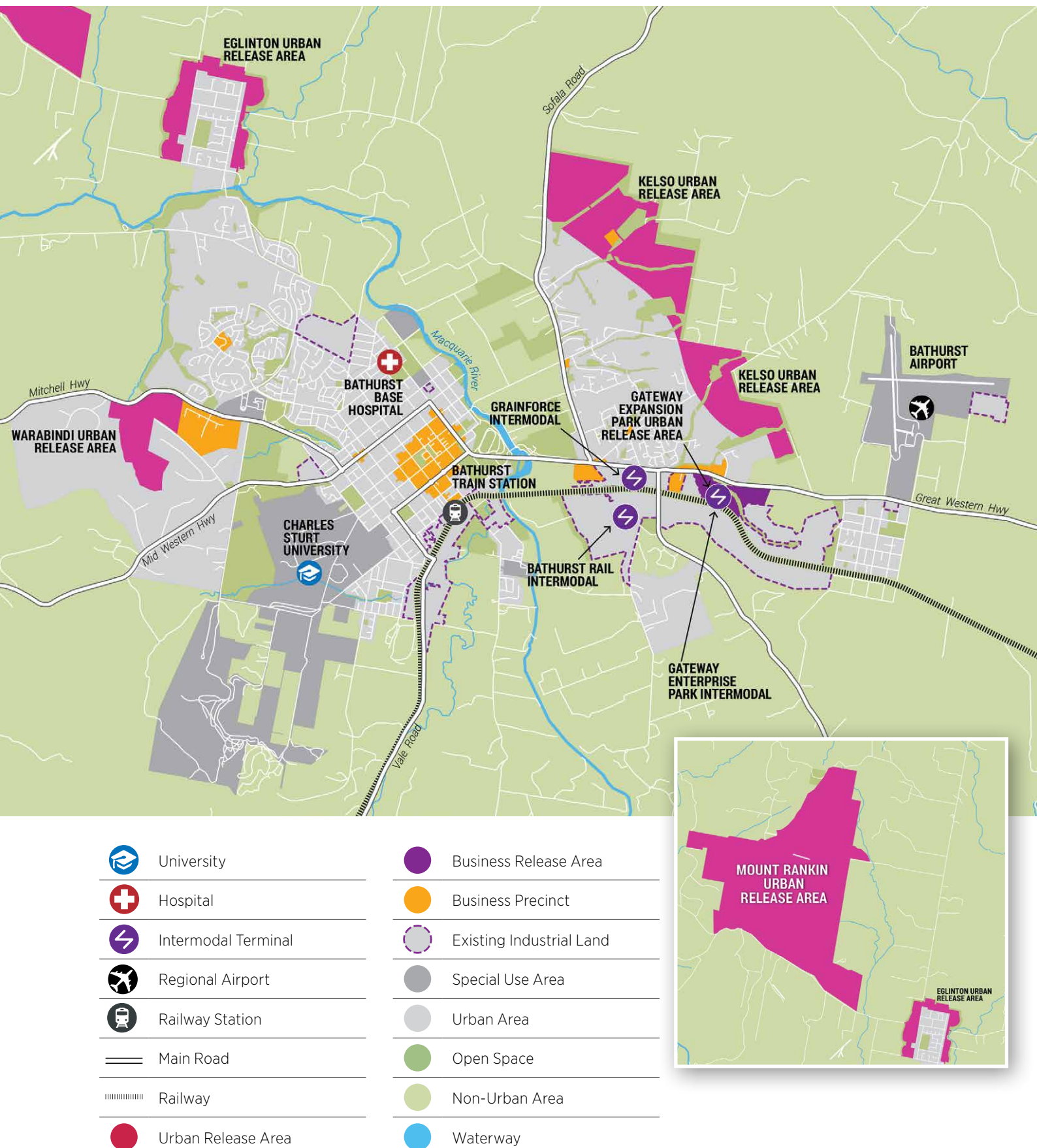


FIGURE 19: ORANGE REGIONAL CITY

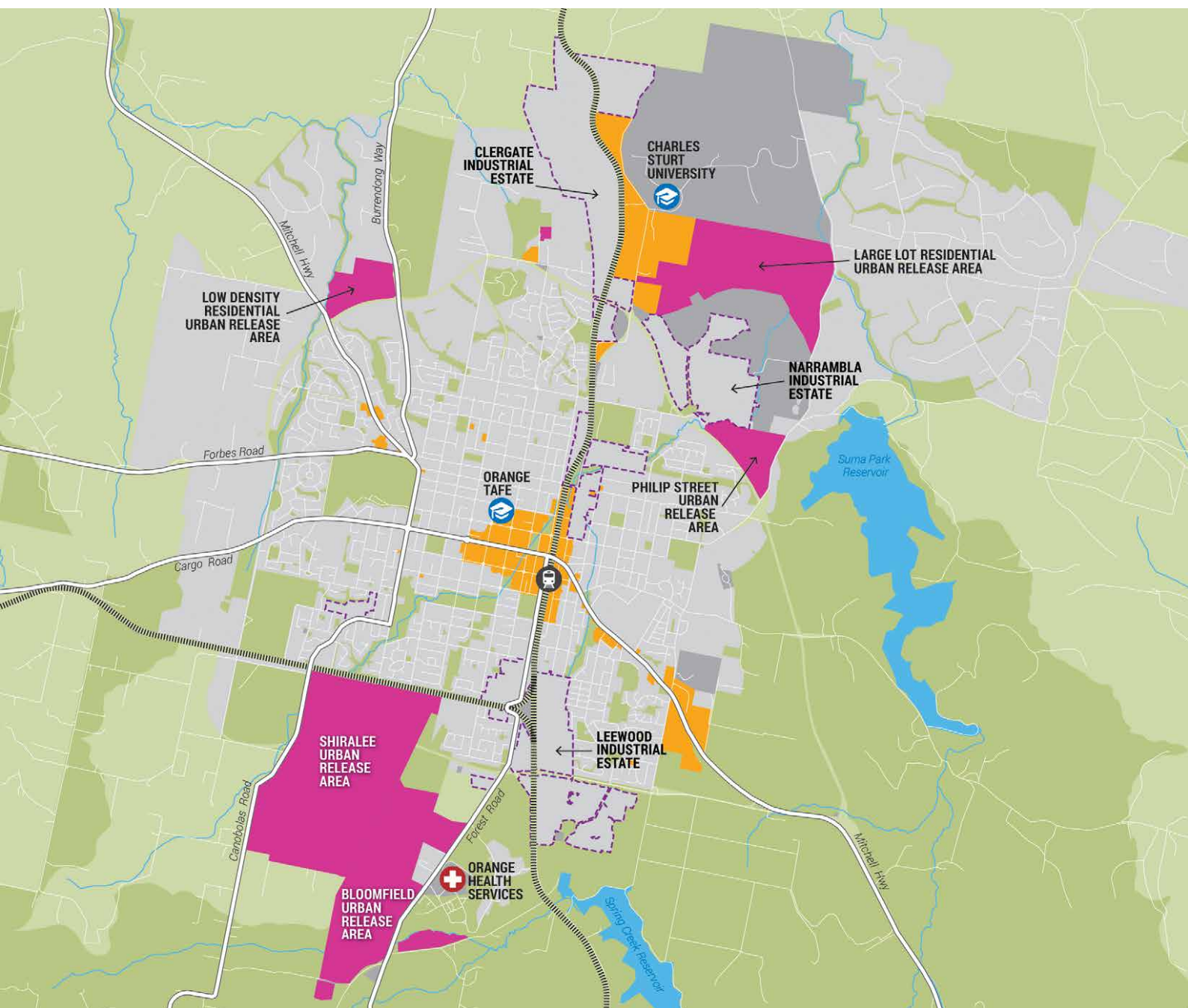
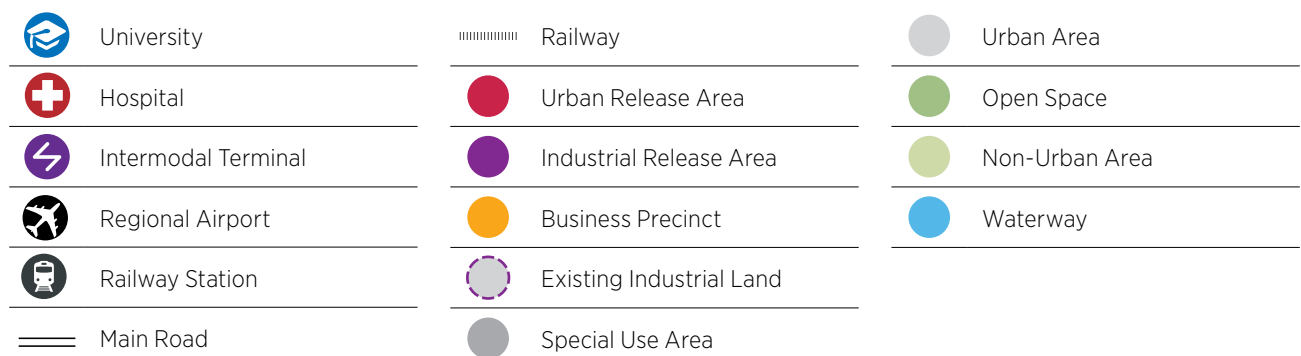
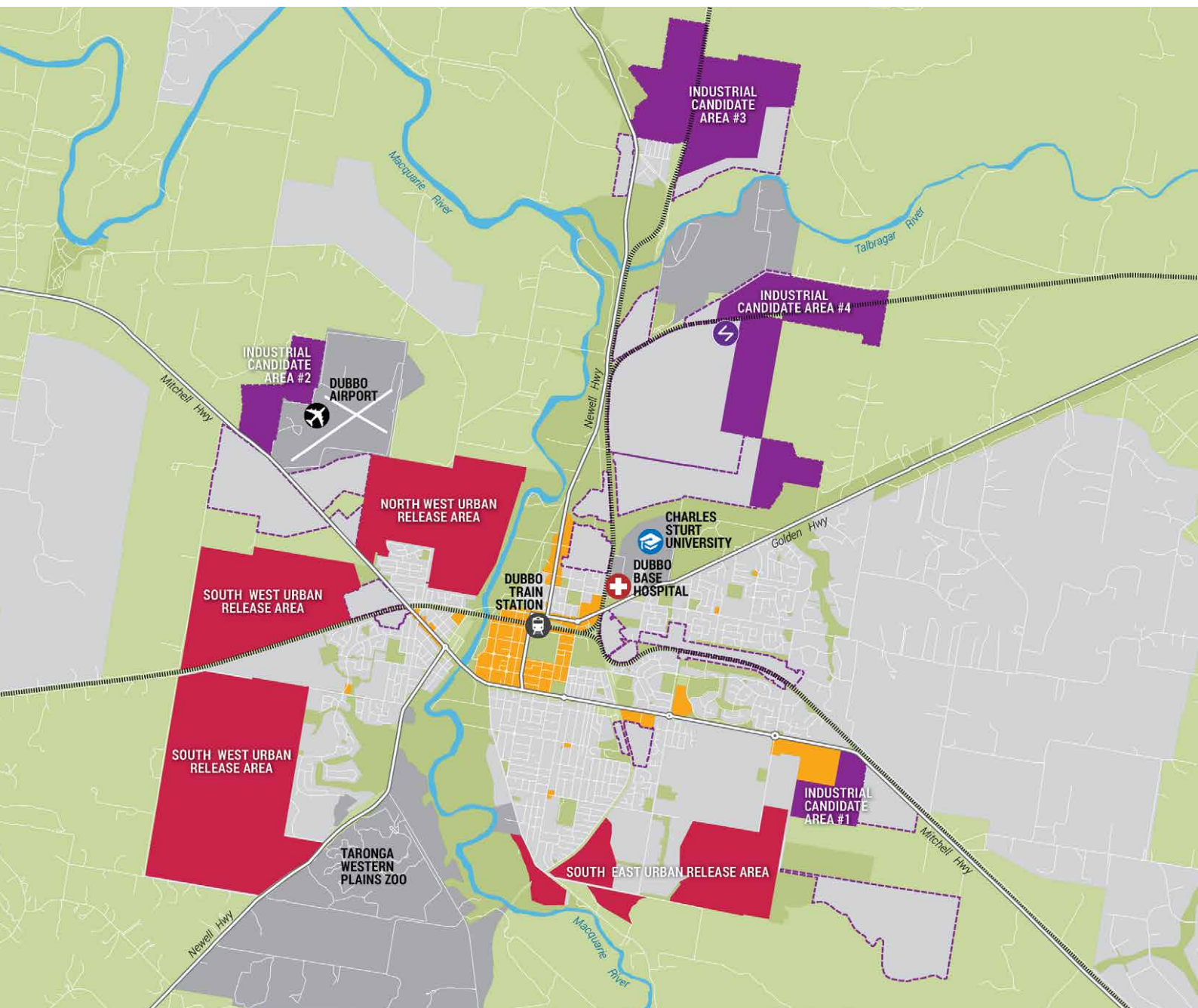


FIGURE 20: DUBBO REGIONAL CITY



'Evocities' - Local Government Partnership Initiative

Seven of the State's largest regional cities – Albury, Armidale, Bathurst, Dubbo, Orange, Tamworth and Wagga Wagga – formed a partnership in 2010 to encourage capital city residents to relocate to and invest in Evocities.

The Evocities have collectively welcomed 2,375 new households (June 2015) generating over \$225 million in additional annual direct spending. The initiative has also helped to lift median incomes, encourage business growth, increase tourism and grow participation in community groups.

ACTION 4.1.1 Support the role and function of the regional cities and regional centres

By 2036, the number of residents living in and around the regional cities will grow by 23,250 from 126,100 in 2016 to 149,350 in 2036. The regional cities are supported by the three regional centres – Mudgee, Parkes and Lithgow – which together form the backbone of a diverse, interconnected and interdependent network of centres.

The regional centres perform similar roles and functions to the regional cities as they provide a range of supplementary services, facilities and employment opportunities. These centres service a broader area beyond the local surrounding settlements and have a population generally greater than 10,000 people. However, the highest level of services and facilities generally remain located in the regional cities, which provide commercial, residential, cultural and industrial opportunities and higher-order services to their surrounding catchments. Dubbo acts as the primary service centre for the Far West and has a catchment population that extends well beyond the boundaries of the region, to more than 120,000 people.⁷⁴

The growth of the regional cities will encourage future investment throughout the region, helping to grow and diversify industry and

increase job opportunities and services. This will benefit the immediate and broader regional community. These centres are well-placed to capitalise on growth with their location on various national highways and the rail network. Bathurst and Lithgow are also able to capitalise on their close proximity to Sydney.

Detailed strategic planning is required to maximise the role of the cities as centres of influence, to optimise outcomes for economic growth, the delivery of infrastructure and long term planning that meets the future needs of communities and industry. Making best use of existing transport infrastructure networks (road and rail), and removing barriers to development such as unsuitable zoning and restrictive land use controls, will attract future investment.

The NSW Government will work with:

- Dubbo, Bathurst and Orange City Councils to develop a regional cities strategy which:
 - investigates linkages between health and education precincts;
 - manages areas of growth;
 - coordinates infrastructure delivery across residential, industrial and rural land;
 - considers the role, function and relationship of the regional cities with other centres; and
 - assigns responsibility for actions and projects across all levels of government.

ACTION 4.1.2 Deliver improved tools and partnerships to build community capacity in towns and villages to strengthen community resilience

Resilience is important for all settlements in the region. Towns and villages are more vulnerable to the effects of demographic and economic change than larger cities and towns, due to their size and sometimes isolated locations. Communities need to be able to develop, implement and sustain solutions to these challenges for long term prosperity. This can be achieved by capitalising on community assets such as heritage, lifestyle amenity and the environment, and by offering specialised services and products.



Celebrating Aboriginal cultural heritage, courtesy of Dubbo City Council

Communities need to build skills and capacity, identify opportunities, and enhance their involvement in decision-making to become more resilient to change. The NSW Government supports opportunities to work collaboratively with stakeholders to build community capacity. The pilot Joint Organisation of Councils governance model promotes capacity building and resource-sharing across councils, to jointly advocate and pursue common issues and goals.

Other tools and resources such as the *NSW Strengthening Rural Communities Resource Kit* (2001) can be used by communities to enhance their capabilities and become more self-sufficient. This resource needs updating to accurately reflect the challenges currently facing communities.

Resilient communities depend on the quality of, and access to, core services such as health, education and transport. Continued equitable access to these services, and particularly aged care, will help smaller regional communities retain and potentially grow population and improve their liveability. Connectivity, through initiatives such as the National Broadband Network, will enable future economic growth in these centres.

Successfully building resilient and prepared communities is highly dependent on access to accurate information. This enables communities and government to more accurately understand and plan for current and future services. There is a need to develop a standardised set of baseline data across the region, underpinned by improvements in the collection, interpretation and use of data.

The NSW Government will:

- work with CENTROC (Central NSW Councils) and other stakeholders to investigate the issues around standardisation of baseline data collection in the region;
- work with councils to review and update existing tools, resources and strategies, focused on building capacity and resilience in rural and regional communities; and
- work with councils to improve partnerships with industry, research, and education and training providers to align skill shortages with tailored regional training programs.

ACTION 4.1.3 Support the continued identification and protection of the region's heritage

The Central West and Orana has diverse Aboriginal and European cultural heritage, with 137 identified heritage items listed on the NSW State Heritage Register and over 1,967 local heritage items listed in local environmental plans. There are nine Aboriginal Places identified and protected under the *National Parks and Wildlife Act 1974*. All of these assets enrich the landscape and cultural value of the region.

The natural history of the region has shaped and influenced the Wiradjuri, Gamilaraay and Wayliwan regions, as well as many non-Aboriginal settlements across the region. This rich heritage is reflected in the various settlements, transport routes and place names given to natural features. It is also reflected in nature reserves, national parks and other protected lands.

Heritage protection and promotion can support tourism that can help to sustain smaller communities. Councils can maximise their heritage assets through interpretation and adaptive reuse. There is a need to investigate the potential barriers to the adaptive reuse of heritage items in the region to enable councils to retain tangible connections to their settlement history and to further promote the benefits of reuse, particularly in smaller communities.

Preserving and protecting history is important to the identity of many people in the community, particularly Aboriginal communities. Aboriginal cultural heritage includes places and items that are of significance to Aboriginal people because of their traditions, observances, lore, customs, beliefs and history. It is dynamic and may comprise physical (tangible) or non-physical (intangible) elements. Aboriginal cultural heritage also relates to the connection and sense of belonging that people have with the landscape and each other.

It is important to acknowledge and respect the indigenous cultural heritage of the region and confirm that sites of cultural importance to the Aboriginal community are recognised and appropriately managed.

Aboriginal Cultural Heritage

Councils have identified a need to strengthen the way that Aboriginal cultural heritage is considered in the planning system. The NSW Government's model for standalone Aboriginal cultural heritage legislation was released in September 2013. It aims to remove all Aboriginal cultural heritage provisions from the current *National Parks and Wildlife Act 1974* and introduce them in a new act.⁷⁵

Public consultations to collect information and consult about the reforms have been conducted. A strategic approach to Aboriginal cultural heritage will enable consideration of Aboriginal cultural values in the future planning and management of the region, and will help Aboriginal communities to maintain a sense of place and community.

The NSW Government will:

- support councils to undertake and implement heritage studies to inform strategic plans, including regional Aboriginal cultural heritage studies;
- work with CENTROC to undertake a scoping study to investigate the barriers to adaptive reuse of heritage items in the region;
- investigate opportunities to increase the protection of heritage items and the revitalisation of main streets and town centres, through community education and development incentives in local environmental plans; and
- require that councils recognise and protect sites that have Aboriginal and European cultural significance, by including appropriate heritage provisions in local environmental plans.

DIRECTION 4.2 Enhance the economic self-determination of Aboriginal communities

OCHRE (Opportunity, Choice, Healing, Responsibility, Empowerment) is the NSW Government's plan for Aboriginal affairs. It focuses on revitalising and promoting Aboriginal languages and culture; creating opportunities; increasing the Aboriginal community's capacity; providing choice; and empowering Aboriginal people to exercise that choice, as well as giving them the tools to take responsibility for their own future.

ACTION 4.2.1 Conduct a strategic assessment of land held by the region's Local Aboriginal Land Councils to identify priority sites for further investigation of their economic opportunities

Many of the OCHRE actions are outside the planning system; however, there is an opportunity to look at the landholdings of Local Aboriginal Land Councils to see how they can best be planned, managed and developed for the benefit of the local Aboriginal community. This will allow Aboriginal people to gain economic benefit from their land and provide greater opportunities for economic independence.

Together, Aboriginal Affairs NSW and the Department of Planning and Environment will work with the Land Councils to identify their landholdings and to map the level of constraint at a strategic scale for each site.

This information can be used to develop practical solutions to the potential commercial use of the land; for example, for Aboriginal housing and employment opportunities. It has potential to provide economic returns to the Local Aboriginal Land Councils that can be invested in assistance programs in the region.

The NSW Government will:

- work with the Local Aboriginal Land Councils to identify priority sites that can create a pipeline of potential projects.



New housing development, courtesy of Bathurst City Council

DIRECTION 4.3 Increase and improve housing choice to suit the different lifestyles and needs of the population

An additional 13,600 homes will need to be constructed across the region to cater for population growth and demographic change over the next 20 years. The majority of this housing growth is projected to occur in and around the regional cities where job opportunities are growing. While there is generally sufficient zoned land available across the region to cater for anticipated growth, there is a growing need for greater housing diversity to meet the needs of the region's population, particularly those aged over 65 years.

By 2036, over 25 per cent of the region's population will be aged over 65 years old (a 44 per cent increase from 2016). The regional cities are projected to have the smallest percentage of population aged 65 years and over, while Gilgandra, Weddin, Cowra, Oberon and Lithgow are projected to have the largest population percentage (greater than 30 per cent).

It is important that older residents have greater housing choice to meet their needs. Having choice can help older residents retain a connection to their community and more easily transition into high needs aged care within their local communities, if necessary.

In addition to providing housing choice, the spatial distribution of the aged population will have implications for the delivery of transport services, infrastructure, health care and social assistance, and community based services.

Demand for housing across the region fluctuates at different times of the year depending on seasonal employment, special events or as a result of major development activities employing itinerant workers. In mining communities, demand for housing can fluctuate across the lifecycle phases of mining operations, with high demand during construction. Greater housing diversity needs to be available to cater for these seasonal employment needs.

The region's close proximity to Sydney and other metropolitan centres makes it a highly sought after location for rural residential development. This type of development needs to be carefully planned so that it does not create land use conflict, increase land speculation or put pressure on infrastructure and services – all of which can affect the productivity of agricultural industries.

ACTION 4.3.1 Deliver enabling planning controls that facilitate an increased range of housing choices, including infill housing close to existing jobs and services

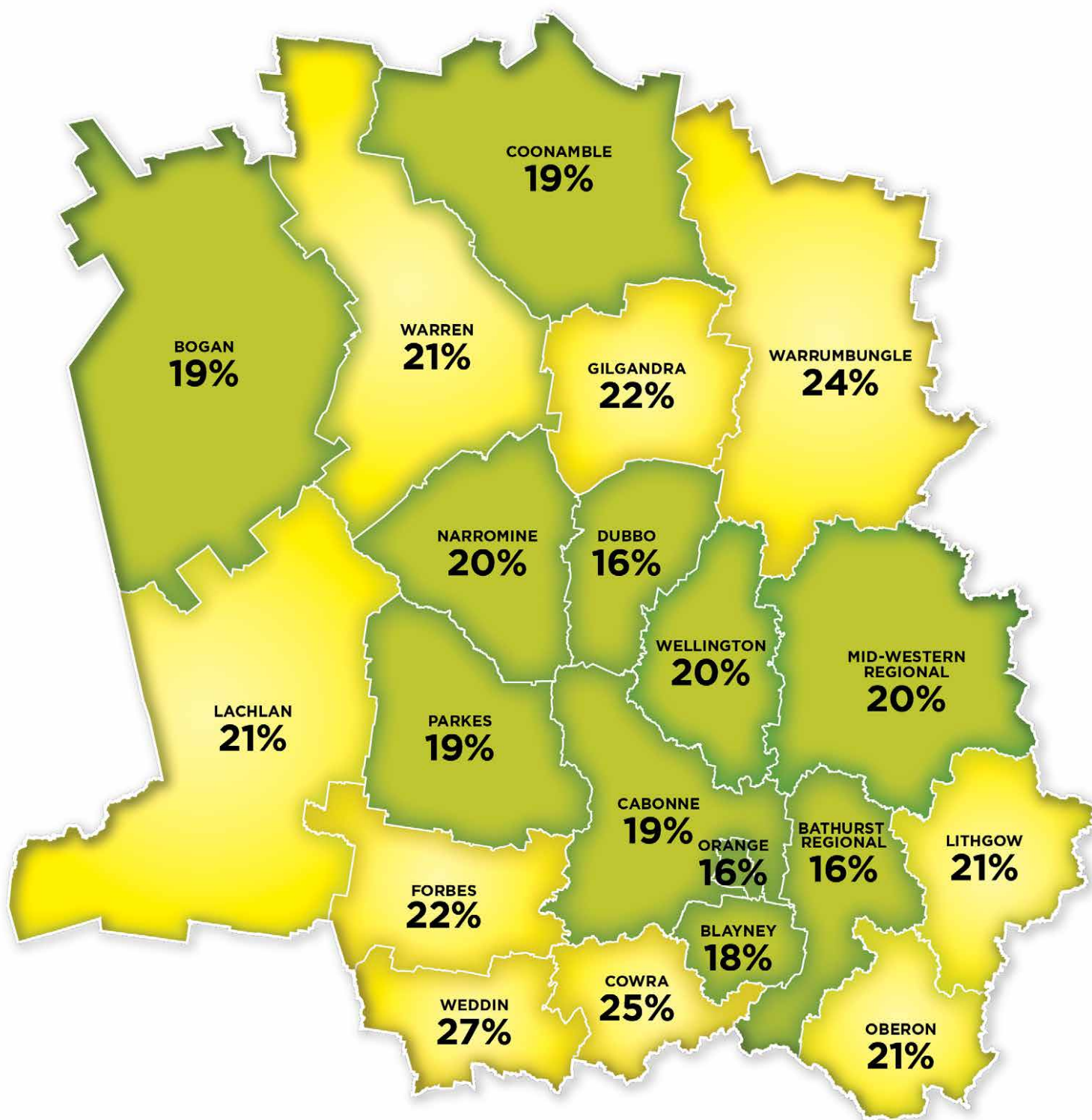
The region has sufficient zoned land to accommodate projected residential growth over the next 20 years. The majority of housing supply is likely to be delivered in land release areas and primarily concentrated around the regional cities and regional centres.

Towns and villages will continue to play an important role in providing housing choice. Even in areas with stable or no population growth there will still be demand for new dwellings, with smaller households seeking a greater variety of housing types.

Councils should consider the aspirations of local communities when planning for the future. Aspirations for greater growth are reflected in land use planning decisions, for example, making land or infrastructure available for development in strategically identified locations. This may influence population growth patterns.

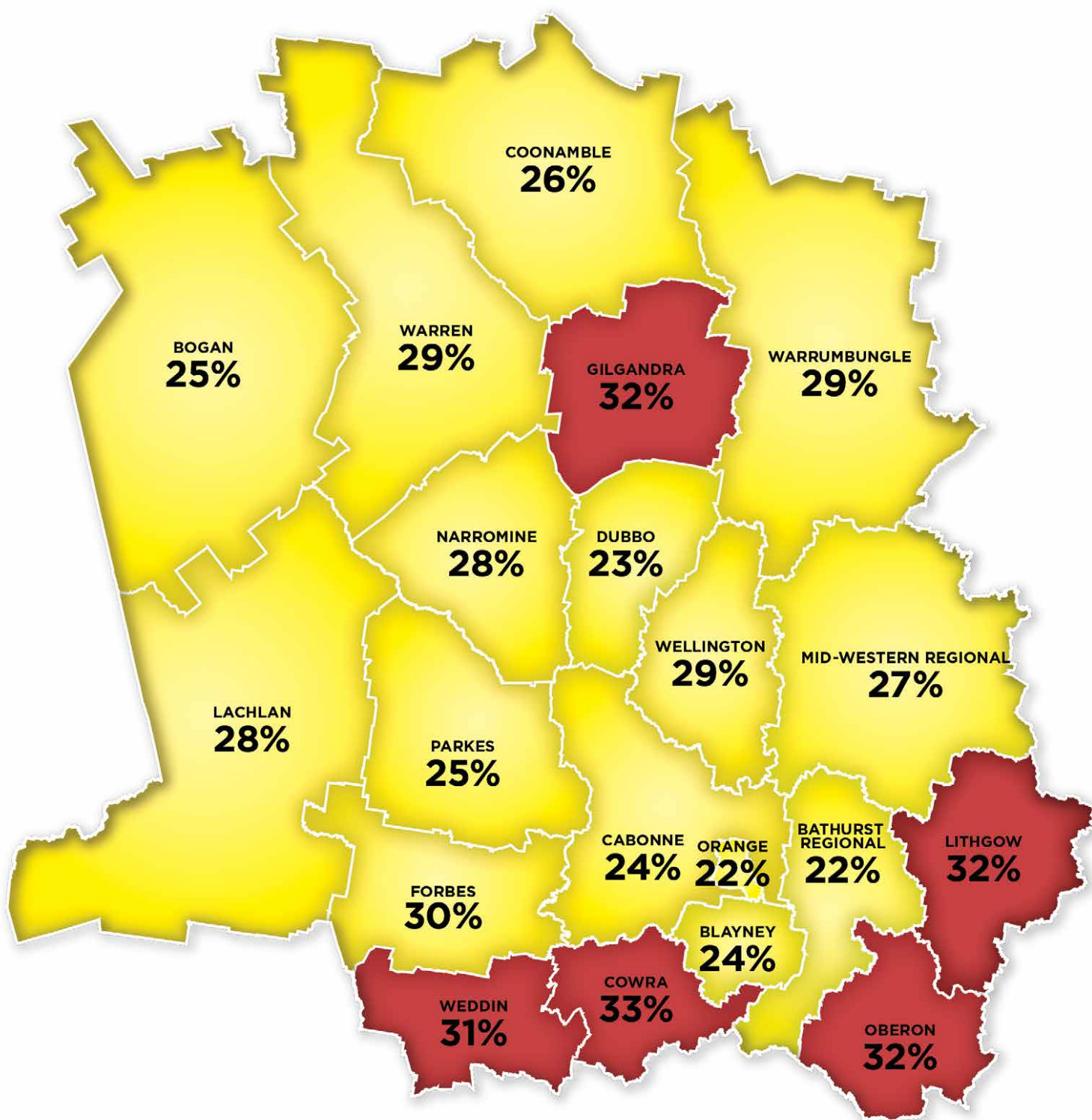
The NSW Government supports upfront, evidence-based strategic planning of land release areas. Given the amount of land already zoned for housing, councils will be required to undertake strategic assessment of new land release options, prior to land rezoning. As part of the strategic assessment, councils should consider existing transport infrastructure and services and future transport infrastructure requirements.

FIGURE 21: AGEING POPULATION BY LOCAL GOVERNMENT AREA 2016



- 11-20% of the LGA population is aged 65 years and older
- 21-30% of the LGA population is aged 65 years and older

FIGURE 22: AGEING POPULATION BY LOCAL GOVERNMENT AREA 2036



● 21-30% of the LGA population is aged 65 years and older

● 31-40% of the LGA population is aged 65 years and older

The NSW Government will work with councils to:

- develop and implement a land monitoring program for residential land across the region to identify future strategic requirements and monitor regional supply and demand;
- review planning controls in existing urban areas to identify opportunities to increase the range of housing options, including townhouses, villas and apartments, in regional cities and locations close to existing services and jobs;
- prepare Statewide land release criteria to assess locations for residential uses across regional NSW, to be used as an input to settlement planning;
- align infrastructure planning with land release areas, to provide new developments with adequate infrastructure; and
- regularly review and update local strategic plans, where required, to provide a range of housing types which reflect the changing needs of the community.

ACTION 4.3.2 Facilitate a more diverse range of housing for seniors

Providing sufficient housing for people as they age helps to retain their connection to the community and provides opportunities for local employment in related service industries. Housing for seniors ranges from smaller housing that is specifically built to meet the needs of people as they age, to communal independent living arrangements, residential aged care facilities, and hospital and palliative care facilities.

Councils have advised that there is an undersupply of appropriate housing for seniors across the region and that the demand for appropriate accommodation for seniors is increasing.

There is potential to support housing for seniors through medium density development. These developments should be located in close proximity to existing town centres and villages, to capitalise on existing infrastructure and services (including health services). This will allow residents to downsize to smaller, more manageable homes, close to the services they require.

There is potentially a role for councils, non-government and local not-for-profit organisations to develop and operate such facilities, to meet the increasing demand and to enable ageing in place. Any new facilities should be appropriately located in close proximity to existing services and facilities, and located on land free from hazards, including flood and bushfire risk.

There are State planning policies which streamline approval processes for seniors housing. Developers use these policies to provide larger-scale public and aged care housing. The incentive provisions contained in these policies need to be reviewed to better suit regional circumstances. Often they do not deliver benefits for private developers due to higher development costs and lower demand (because facilities need to cater for smaller populations compared to metropolitan areas).

The NSW Government will:

- work with councils to investigate the demand for seniors housing and to identify barriers to providing a range of low care and independent seniors accommodation options across the region; and
- review the *State Environmental Planning Policy (Housing for Seniors or People with a Disability) (2004)* and determine how to make it more applicable for private developers in regional areas.

ACTION 4.3.3 Develop a framework to facilitate a range of accommodation options for the seasonal, itinerant and mining workforces

Seasonal and itinerant workers are needed across the region to support agribusiness and mining.⁷⁶ The region experiences a large influx of seasonal workers during harvest periods, particularly in the irrigation areas.

Currently, the region does not have an adequate range of accommodation options or capacity to appropriately accommodate seasonal, and itinerant or mining workers. This undersupply can result in increased rental housing pressures, and health and safety concerns from overcrowding and makeshift housing in sheds, containers and rural buildings.



Tourism and visitor accommodation providers also experience accommodation pressures by renting rooms to seasonal and mining workers, which reduce their availability for the visitor economy.

Further guidance is required for the development of temporary mining accommodation, required for short periods of time during mining construction, operation or shutdown.

Temporary housing villages

The introduction of temporary housing to provide short term accommodation for construction and mining employees has been used to address temporary peak demand for housing.

Temporary housing can help to address difficulties in expanding permanent housing stock quickly, and to avoid a potential oversupply of permanent housing in the longer term. Planning for temporary housing villages must be undertaken strategically, and in partnership with the affected communities, to mitigate potential impacts to established towns.

Temporary housing villages should avoid duplicating services and facilities available in the existing townships. In some circumstances, locating temporary populations on the outskirts of established centres may be preferable to enable temporary residents to use and contribute positively to facilities that serve the entire community, and to better integrate into these communities. This decision must be informed by an understanding of the likely changes to economic opportunities for the town over time.

The NSW Government will:

- prepare guidelines to help councils plan and manage seasonal and itinerant worker accommodation; and
- prepare planning guidelines for the temporary accommodation of mining employees to support workforce needs during mining construction, operation or shutdown.

ACTION 4.3.4 Develop and implement principles for rural residential development

Poorly located rural residential development can create land use conflict with other land uses, result in the loss or alienation of agricultural lands, socially isolate residents, increase the demand and cost for services and facilities, and adversely impact the environment. Managing this type of development will become increasingly important as the regional economy diversifies and as development pressure for this type of housing increases.

In the Central West, demand for rural residential development is driven by the desire for a rural lifestyle, particularly in close proximity to the regional cities of Orange and Bathurst, and in some cases, close proximity to Sydney. In the Orana, this type of development has been seen as a way of attracting population to reverse or stabilise decline. Councils have indicated that this type of development increases pressure for additional services, outside existing settlements, and the additional service costs are borne by councils and the broader community.

Directing future growth to locations that can sustain additional housing, and are readily serviced, will provide for the efficient and sustainable development of land. To achieve this outcome, proposals that seek to rezone additional land for rural residential purposes will need to address the Draft Settlement Planning Principles outlined over. These draft principles will inform the preparation of Statewide criteria.



Left: Glen Willow sports fields, Mudgee, courtesy of Mid-Western Regional Council

Right: Housing choice, courtesy of Dubbo City Council

TABLE 2: DRAFT SETTLEMENT PLANNING PRINCIPLES

Principle 1	New rural residential areas will only be supported if identified through an endorsed comprehensive strategic planning process and comprehensive housing strategy.
Principle 2	New rural residential areas will be located in close proximity to existing urban settlements to maximise the efficient use of existing infrastructure and services, including water, sewer and waste services.
Principle 3	New rural residential areas will be located to avoid and minimise the potential for land use conflicts with productive, zoned agricultural land and natural resources.
Principle 4	New rural residential areas will avoid areas of high environmental, cultural and heritage significance, regionally important agricultural land or areas affected by natural hazards.
Principle 5	New rural residential areas will be designed to provide an alternative housing choice and enhance the semi-rural character of the area.

The NSW Government will:

- prepare Statewide land release criteria to assess locations for rural residential uses across regional NSW, to be used as an input to settlement planning; and
- work with councils to apply the criteria to locate rural residential development in appropriate areas.

ACTION 4.3.5 Facilitate the delivery of more affordable housing options through improved planning policies

The cost of housing in the region is relatively affordable in comparison to other areas of NSW. Areas with high levels of social disadvantage and areas with rental supply shortages generally experience issues with housing affordability. Between 2001 and 2014,⁷⁷ there has been a decline in the proportion of housing that is affordable for very low and low income households in the region.

Housing Affordability

Affordable housing is housing that is appropriate for the needs of very low to moderate income households and priced so that these households are also able to meet other basic living expenses. Housing stress occurs when lower income households are spending more than 30 per cent of their income on rent or mortgage costs. There is strong demand in the region for housing for rent and purchase by lower income residents, students, single person households and seniors.

Low income households are most disadvantaged by housing affordability. It forces residents to obtain cheaper housing in isolated locations, away from employment opportunities, essential services and public transport connections, exacerbating issues associated with social disadvantage. Similarly, affordability issues can affect students, where onsite accommodation is unaffordable or unavailable, or where rental housing is costly or unavailable close to the location of the tertiary education facility.



Local jobs, courtesy of Bathurst City Council

The centralisation of welfare and community services in Dubbo places a significant demand on affordable and social housing and ancillary support services. There is currently a large stock of social and public housing located in the city. The NSW Land and Housing Corporation is currently reviewing social housing estates across NSW and the draft Plan will provide input about the affordability issues relevant to the Central West and Orana.

The NSW Government recognises that more needs to be done to meet the housing needs of people on very low, low and moderate incomes.

Councils can help to improve affordable housing by including the following in their planning strategies and local environmental plans:

- model controls that require the inclusion of affordable housing in developments. For instance, councils may consider a bonus provision requirement to deliver a percentage of affordable housing in a development;
- development controls and reduced contributions, or other development incentives that may boost construction of secondary dwellings as alternative affordable housing. Councils could also consider planning incentives under the *State Environmental Planning Policy Affordable Rental Housing* (2009); and
- promote new caravan parks and manufactured home estates on unconstrained land in existing settlements, and new land release areas in the urban growth areas. Councils can identify sites strategically through their local planning strategies.

The NSW Government will:

- prepare guidelines for local housing strategies;
- work with councils to prepare local housing strategies that plan for a range of housing types and to consider local affordable housing needs and strategies; and
- consider amendments to relevant environmental planning instruments informed by updated strategies.

DIRECTION 4.4 Enhance community access to jobs and services by creating well-connected places, designed to meet the needs of a regional community

Places should be designed to meet the different needs of the population – children, young people, families, singles, people with disabilities, and the ageing community. Good urban design can contribute to cultural, economic and physical wellbeing.

Over the next 20 years, the region's public transport needs will change as the population ages and workplaces change, although it is likely that communities will remain highly car dependent. Demand for reliable and affordable transport options will increase between regional cities, regional centres and towns and villages.

The NSW Government has identified a need to improve public transport interchanges to make it easier, particularly for the elderly and people with mobility limitations, to get around.⁷⁸ Currently, the NSW Government funds several regional community transport programs including:

- *NSW Community Transport Program*;
- *Regional Transport Coordination Program*;
- *Country Passenger Transport Infrastructure Grants Scheme*; and
- *Home and Community Care Program* (a jointly funded NSW and Australian Government initiative).

The NSW Government has introduced a range of programs designed to provide new infrastructure in regional cities and towns to encourage active transport alternatives where appropriate, including:⁷⁹

- *Walking Communities Program*;
- *Connecting Centres Cycling Program*; and
- *Cycling Towns Program*.

ACTION 4.4.1 Identify opportunities to provide improved and increased transport connections between the region's towns and villages to the regional cities

Public transport services will be vital to connecting people to jobs, housing, services (including health care and education), and for community interaction.

The *Central West Regional Transport Plan* (2013) recognises the importance of investing in public transport infrastructure and services, to improve connections with urban areas and help reduce social disadvantage. Detailed plans to implement and deliver these strategies through integrated timetables, and more flexible and demand-responsive transport options, are currently being developed.

With an increasing ageing population, public transport will be important to sustain access to services and quality of life. Transport for NSW will work with bus operators to develop routes and timetables to improve bus services in the region's major centres and their connections with regional communities. It will also work with local transport operators and councils to develop programs that focus on serving the unique characteristics of each town. Community transport providers (in most cases councils) will need to identify and plan for future community transport needs.

Transport for NSW is committed to developing a long term plan for regional rail to improve services to the regional cities and regional centres, and the connections to metropolitan cities, including Sydney, Canberra and Melbourne.⁸⁰

Festival and event service plans will be developed with local councils, festival organisers and transport providers (including airports). These plans will outline the services required for festivals and events and the responsibilities of all parties.⁸¹

The NSW Government will:

- investigate opportunities to improve bus operations in regional cities and their connections with regional communities;
- develop strategies to better link the region's towns and villages to regional cities and regional centres; and

- work with local transport operators and community transport providers to investigate a range of delivery models for flexible transport, to determine what works best for different areas.

ACTION 4.4.2 Implement local planning controls that protect regional airports from the encroachment of incompatible land uses

Regional economic growth will be underpinned by the continued operation and expansion of air travel and related facilities across the region. Due to the region's distance from capital cities and other large centres, air travel is crucial. It is the fastest mode of travel, particularly for tourism, business and health service connections to Sydney and Brisbane.

Commercial air services are provided in Bathurst, Orange, Dubbo, Mudgee and Parkes, with a number of other airports/airfields providing aviation bases for agricultural and private services, for example Cowra.

Fly-in Fly-out

Commuting patterns across the region have changed as a result of the continued growth in the mining industry, with a large number of chartered 'fly in fly out' movements from both capital cities and other regional centres.⁸²

It is not only the airports owned and operated by resources companies that facilitate Australia's participation in the world trade in minerals, but also general purpose airports which transport fly-in fly-out workers.⁸³

Strategic planning will need to be undertaken by airport operators and the NSW Government to identify opportunities for long term investment and expansion. Councils should include provisions in local plans to protect and plan for expansion opportunities for regionally significant airports and avoid encroachment from incompatible development.



National Ultra-light Fly-in, Narromine airport,
courtesy of Gecko Photographics, Destination NSW

Growth in regular passenger services and demand for the Royal Flying Doctor Service, NSW Rural Fire Service operations and general aviation users has prompted the development of a *Dubbo City Regional Airport Master Plan*. In addition, Bathurst, Mudgee, Narromine and Orange have prepared master plans to guide the future development of their respective airports and facilities.

The NSW Government supports the allocation of the 20 per cent of flight slots into Kingsford Smith Airport to regional NSW services and aims to obtain a greater allocation in peak periods.⁸⁴ These flight slots are critical to supporting business within the region and enabling access to the Sydney CBD.

The NSW Government will:

- implement controls in local environmental plans to protect airports from the encroachment of incompatible development.

ACTION 4.4.3 Deliver regionally specific urban design guidelines

Good urban design has the capacity to add to the community's cultural, economic and physical wellbeing. Communities should be safe and socially inclusive places that promote social, cultural and recreational opportunities. Places should be designed to meet the different needs of the population – children, young people, families, singles, people with disabilities and the ageing community.

When planning and redeveloping town and city centres, design and environmental considerations such as pedestrian movement, vegetation, water management (water sensitive urban design) and public domain infrastructure should be incorporated into the planning process. New and existing development in the region should also be designed to provide opportunities for active transport (such as walking and cycling), where appropriate.

Urban design guidelines are commonly developed with a metropolitan focus and are often not applicable to regional and rural environments (areas located outside Newcastle, Sydney and Wollongong). Developing regional urban design guidelines will help councils when they are preparing their local environmental plans and development control plans. Regionally contextualised urban design guidelines are also valuable in guiding the revitalisation of regional town centres, new release areas and infill development.

The NSW Government will:

- develop regional urban design guidelines that can be used by councils when preparing amendments to local environmental plans and assessing development proposals.

Appendix A – Centres Classification Definition

Regional Cities

- Have the largest commercial component of any location in the surrounding region.
- Provide a full range of higher-order services including business, office and retail uses with arts, culture, recreation and entertainment centres.
- Have a population of 30,000 or more and are expected to be a focus for growth over the next 20 years.
- Service the wider community through principal referral hospitals, tertiary education services and major regional airports.
- Have economic roles that are significant to the entire population catchment.
- Have opportunities for housing growth and choice.
- Have centres that may not fulfil all of the above criteria but may substitute economic roles and population levels with an important geographical role within a region.

- Have a different population and economic profile, depending on their location, surrounding assets and development history.

Regional Centres

- Service a broad area, beyond the local surrounding settlements.
- Share similar functions to regional cities but serve smaller catchments and have a more limited range of services, facilities and employment opportunities.
- Generally have a population of 10,000 or more and are expected to be a focus for growth supporting the regional cities over the next 20 years. And/or their remoteness and importance to their wider catchment elevates their role to regional centres.
- May not have a diverse industry base like a regional city, but it can be classified as a centre due to its importance to a specific industry (for example, tourism, agriculture and mining).

Centre Name	LGA	Category	2016 Population	Centre Population (ABS Urban Centre Locality) ⁸⁵
Orange	Orange	Regional City	41,250	34,990
Dubbo	Dubbo	Regional City	41,950	32,330
Bathurst	Bathurst Regional	Regional City	42,900	31,300
Lithgow	Lithgow	Regional Centre	21,000	11,140
Parkes	Parkes	Regional Centre	15,250	10,030
Mudgee	Mid-Western Regional	Regional Centre	23,650	9,830

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