



Planning &
Environment

DRAFT **Hunter** REGIONAL PLAN



DRAFT HUNTER REGIONAL PLAN

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FOREWORD

The Hunter is the most populous region in NSW outside Sydney and the largest regional economy in Australia. The population of the region's metropolitan area, together with its hinterland, is expected to grow to around 750,000 over the next 40 to 50 years.

Planning for the future of the Hunter therefore is not just critical for the future prosperity of the region but also for the State.

This *Draft Hunter Regional Plan* is a 20-year plan for the region and it has been developed after considering community and stakeholder input to the *Upper Hunter Strategic Regional Land Use Plan* and the *Your Future Lower Hunter Discussion Paper*, and targeted research for the Australian and NSW Governments' joint Regional Sustainability Planning initiative for the Lower Hunter.

Responding to that community input, for the first time the draft Plan for the future of the region will encompass both the Upper and Lower Hunter, and include the Great Lakes Local Government Area.

It prioritises growing and diversifying the Hunter economy so that it remains the biggest and most productive regional economy in Australia; protecting the environment, and supporting robust regional communities.

Goals and actions are geared to developing the region as a powerhouse economy, a centrepiece of environmental protection and one of the great places to live in the State.

The draft Plan also identifies four discrete subregional landscapes- Western Hunter, Northern Tops, North East Coast and Hunter City (including Inner Newcastle) - and the actions that will maximise the economic and/or environmental values of each landscape and support their local communities.

The draft Plan highlights the pivotal role that Hunter City will play in the future prosperity of the region given its capacity for growth and its great coastal and lakeside environments. Planning for the future of the City is outlined in greater detail in a *Draft Plan for a Growing Hunter City*, a companion to this draft Regional Plan.

We want to know what you think about the proposals outlined in the *Draft Hunter Regional Plan* and the *Draft Plan for a Growing Hunter City* so that we can work together with a common purpose to achieve this region's boundless potential over the next 20 years.

Have your say.

Scot MacDonald MLC

Parliamentary Secretary for the Hunter

Top:
Vineyards, Pokolbin

Centre:
Muswellbrook mine

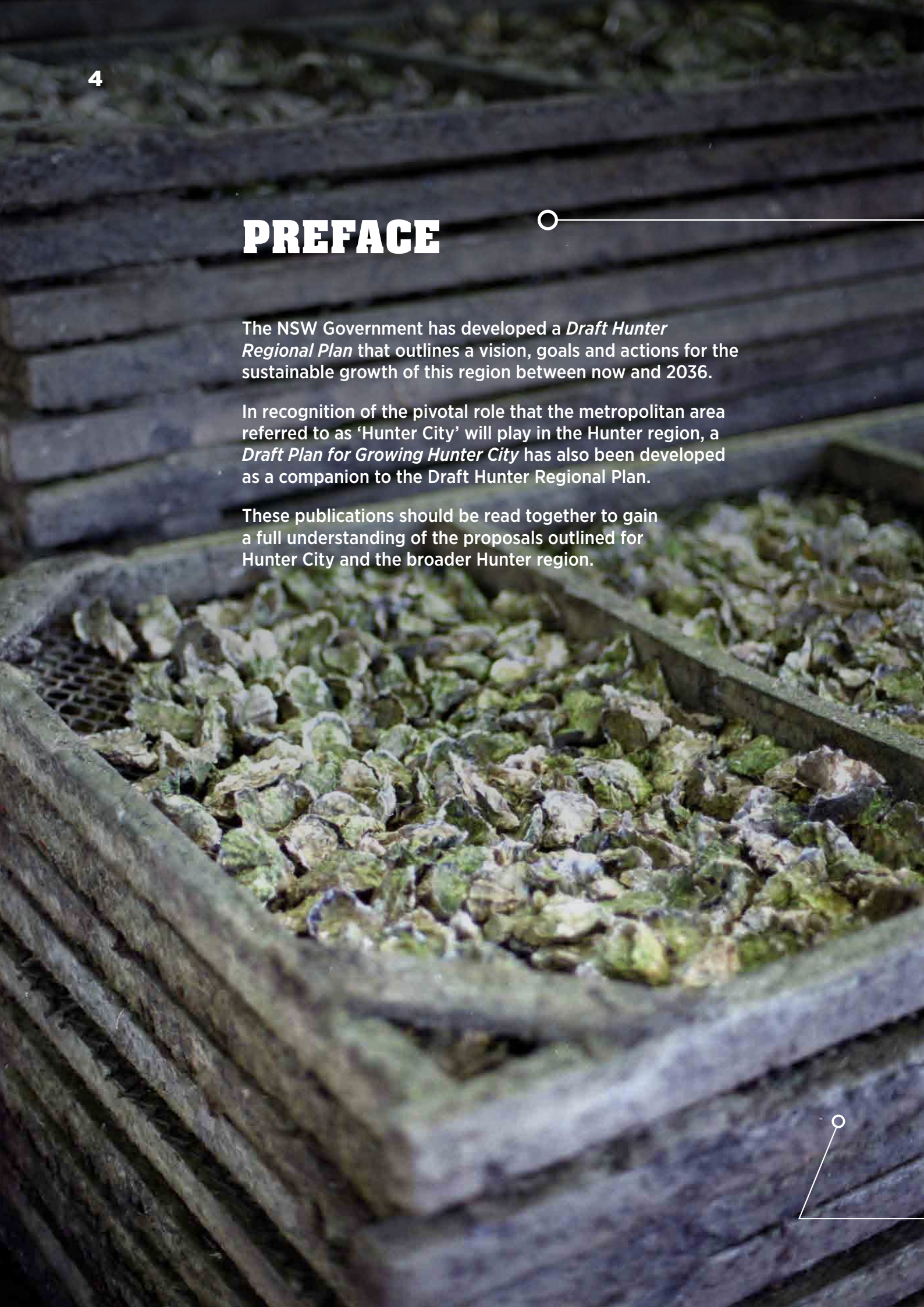
Left:
Equine activities, Scone

PREFACE

The NSW Government has developed a *Draft Hunter Regional Plan* that outlines a vision, goals and actions for the sustainable growth of this region between now and 2036.

In recognition of the pivotal role that the metropolitan area referred to as 'Hunter City' will play in the Hunter region, a *Draft Plan for Growing Hunter City* has also been developed as a companion to the Draft Hunter Regional Plan.

These publications should be read together to gain a full understanding of the proposals outlined for Hunter City and the broader Hunter region.



INTRODUCTION

The Hunter region has a rich and diverse natural environment, scenic landscapes, extensive resources, bustling urban environments, international industries and local character-filled communities. It is the most populous region in NSW outside Sydney and the largest regional economy in Australia.¹

By 2036, an additional 117,850 people are expected to be living in the region. This *Draft Hunter Regional Plan* aims to guide the delivery of homes, jobs, infrastructure and services to support the growing and changing needs of the Hunter.

This region is one of only three places on Australia's eastern seaboard where inland ecosystems stretch to the coast with its natural amenity and unique biodiversity. The Great Dividing Range and Great Escarpment are dominant landscape features and form part of a national habitat corridor. The World Heritage values of the Greater Blue Mountains and Gondwana Rainforests of Australia are present in Wollemi, Yengo and Barrington Tops National Parks. These natural areas are highly valued by residents and are major drivers for tourism in the region.

The region's natural systems support the rural and resource industries that have traditionally underpinned regional economic growth and settlement patterns. Australia's first coal mine was established near Nobbys Head in the 1790s, making the Hunter Australia's oldest and most productive coal mining region. The region has a multi-billion dollar thoroughbred horse breeding industry, with the second largest concentration of stud farms in the world and one of only three International Centres of Thoroughbred Breeding Excellence in the world. The Hunter Valley is also Australia's oldest wine producing region, initially established around 1825 and now exporting world-class wines internationally. The region's river estuaries (Hunter, Port Stephens and Myall Lakes) are collectively the largest oyster producers in NSW.

Newcastle is one of Australia's oldest cities. Over the last 200 years it has grown on the strength of its natural environment and resources and through the diversity of its economy and the enterprise of its people. Maitland is also one of the oldest regional

cities in Australia, and has its own unique history of growth and change. Over time, these two cities, along with many other communities on the lower reaches of the Hunter River, such as Raymond Terrace, and communities on the shores of Lake Macquarie like Swansea and Toronto, have grown and emerged as a single, metropolitan city – the seventh largest in Australia.

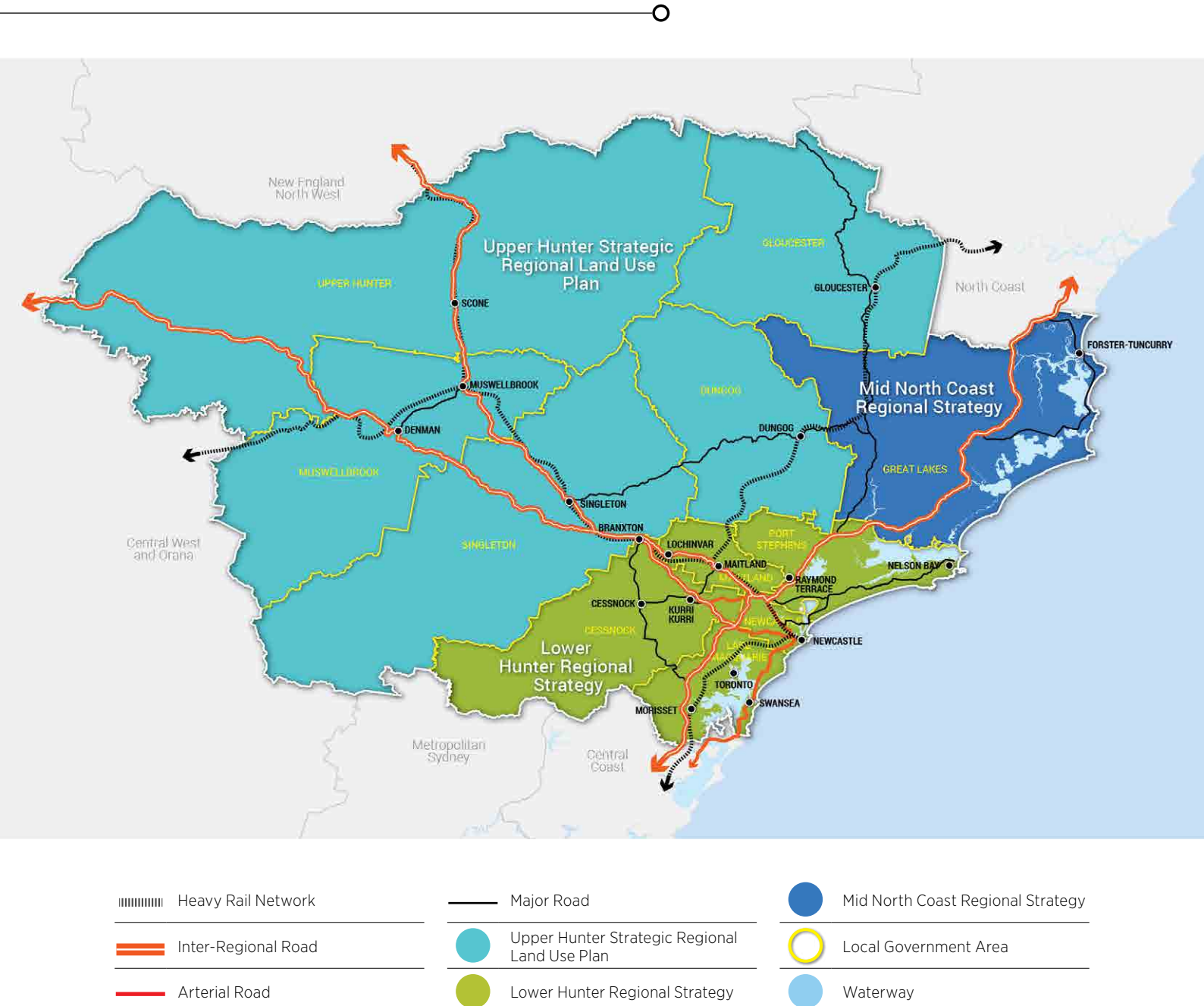
Hunter City is a city of national significance and is critical to the future prosperity of NSW and Australia. It has diverse natural landscapes, a network of centres and transport connections, and multiple local government boundaries that criss-cross the City.

Across the City, travel patterns for work or education, housing markets, and the connections between business and community institutions demonstrate the interconnectedness of activities, and the need for growth to be managed across the whole City in a holistic and coordinated way.

For the first time, the NSW Government has prepared a long term plan for Hunter City that will take a coordinated approach to planning and investment. It will maximise the opportunities that come with growth to create a strong and successful city. It will take a more coordinated approach to planning for the 60,000 new homes the City will need by 2036. The focus will be on locations where there are opportunities to grow and there is demand, and growth is not constrained by local government boundaries. The draft Plan takes a more coordinated approach to planning for industrial and business activity, to make land available for economic investment right across the City. It will take a holistic approach to the environment by looking at sustainability at the landscape scale. It will pave the way for closer integration of land use and transport planning by recognising the specific opportunities and challenges for transport in the State's second largest city.

Around 64 per cent of the Hunter's population already live in Hunter City.² Further growth within the City is being accommodated through the renewal of some of its established areas,

FIGURE 1: HUNTER REGIONAL BOUNDARY



including the revitalisation of Newcastle's historic city centre, and through the development of new land release areas. At its heart, Inner Newcastle is the primary focus for specialised services such as health, education and research in the region. Inner Newcastle offers unique experiences such as international sporting and cultural events, and these are increasingly attracting people into the area.

The Hunter's larger towns of Cessnock, Muswellbrook, Singleton, Morisset, Forster-Tuncurry and Nelson Bay are each already home to between 10,000 to 20,000 people. They provide an important focus for local jobs and services. The region's dispersed villages and rural communities sustain the Hunter's traditional rural and resource industries, providing attractive lifestyle opportunities and offering a starting point for visitors to explore the region's rural, coastal and natural areas.

Trade in extractive and agricultural resources from the Hunter and surrounding regions has driven investment in transport networks and gateways within the region. National road and rail networks converge within the lower Hunter, providing access to the Hunter's transport gateways – the Port of Newcastle and Newcastle Airport – as well as offering convenient connections between Sydney and Brisbane.

The Hunter's transport gateways offer world-class facilities. The Port of Newcastle is the largest coal exporter in the world and a growing cruise ship destination. Newcastle Airport's terminal redevelopment has set a new benchmark for regional aviation in Australia, offering international services from 2016. The Royal Australian Air Force base Williamtown is the premier pilot training facility in Australia, accommodating a new fleet of Joint Strike fighters. These facilities connect the communities and industries in the Hunter and surrounding regions to national and global markets via the Pacific Motorway to Sydney, the Pacific Highway to Brisbane, New England Highway to Tamworth and Golden Highway to Dubbo. The heavy rail network supports passenger and freight services including the Hunter Valley Coal Chain and passenger links along the east coast. This level of connectivity gives the Hunter a unique competitive advantage and a basis for continued growth and prosperity.

Accommodating future population growth in the Hunter region will occur by building on the region's rich past. The ongoing use of land

and natural resources to support jobs growth will be balanced with the need to protect the region's biodiversity and environment. Ongoing development of natural resources will allow industries to grow. Growth in professional services, health and education will increase the competitiveness of the region.

About this draft Plan

This draft Plan provides an overarching framework to guide development and investment in the Hunter region to 2036.

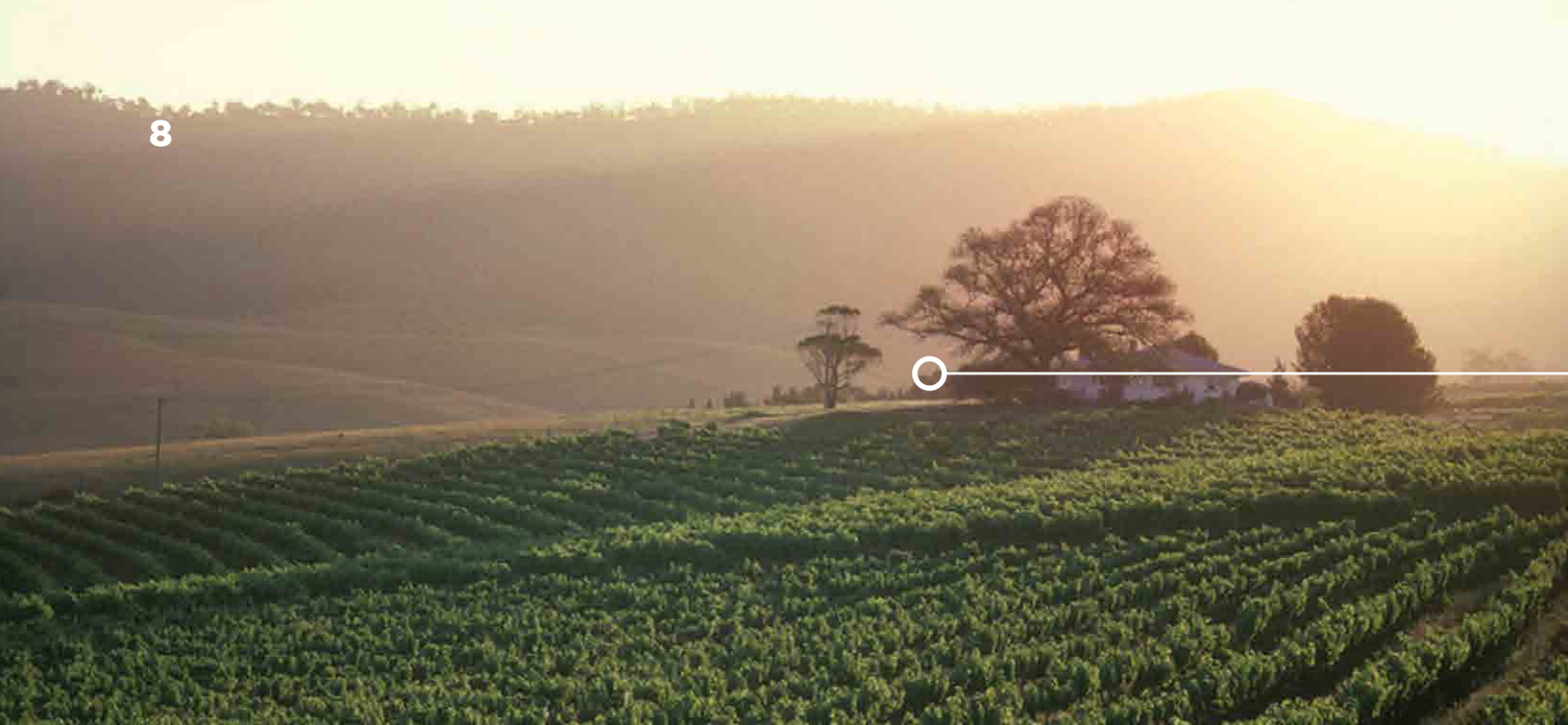
For the first time, it consolidates strategic planning considerations for land use and infrastructure for the 11 local government areas of:

- Cessnock
- Dungog
- Gloucester
- Great Lakes
- Lake Macquarie
- Maitland
- Muswellbrook
- Newcastle
- Port Stephens
- Singleton
- Upper Hunter

The draft Plan applies to the areas shown in Figure 1.

Once finalised, this draft Plan will replace current strategies/plans applying to the 11 local government areas referred to above. These strategies/plans are:

- the *Lower Hunter Regional Strategy* released by the NSW Government in 2006 and re-endorsed in 2010 for Cessnock, Lake Macquarie, Maitland, Newcastle and Port Stephens Local Government Areas;
- the *Mid North Coast Regional Strategy* released by the NSW Government in 2009 for Great Lakes Local Government Area; and
- the *Upper Hunter Strategic Regional Land Use Plan* released by the NSW Government in 2012 for Dungog, Gloucester, Muswellbrook, Singleton and Upper Hunter Local Government Areas.



VISION

The NSW Government's vision is:

“ The Hunter region will capitalise on its diversity and connectivity to capture growth, using its natural resources and amenity, economic strengths, and its communities, to actively manage change and attract investment. It will offer an array of quality lifestyles within sustainable and healthy environments. ”

To achieve this vision, the NSW Government has set four goals:

GOAL 1: Grow Australia's next major city

Hunter City will have an internationally competitive economy that builds on its global gateways and strengths in health, education, manufacturing and research to embrace new opportunities. Hunter City will offer a high standard of living with infrastructure and services.

GOAL 2: Grow the largest regional economy in Australia

Longstanding coal mining, viticulture and equine industries will continue to prosper on the world stage. The region's service, knowledge and value-adding sectors will grow and diversify, supporting the Hunter region to retain its position as the biggest and most productive regional economy in Australia. The region will support the diversification of the NSW energy sector through the development and diversification of its energy (coal, gas and renewable) resources.

GOAL 3: Protect and connect natural environments

The ongoing use and development of land and resources to accommodate growth will be balanced with measures to protect the Hunter's unique terrestrial and aquatic environments, supporting healthy and resilient natural systems, communities and the economy.

GOAL 4: Support robust regional communities

The Hunter region will provide an array of lifestyles in city, coastal and rural settings. Communities will have access to a range of housing opportunities and jobs. Access to jobs, services, shops, recreation, entertainment and the arts will deliver quality living.

Top:
Vineyards, Cessnock

Centre:
Great Lakes coastal
communities

Left:
Muswellbrook town
centre

FIGURE 2: LANDSCAPE SUBREGIONS



Structure and operation of the Plan

For the Hunter region to thrive and maximise its potential, ongoing action from governments, industry and the community must respond to change and local conditions. **The draft Plan sets out a series of directions and actions that will collectively deliver the goals identified for the Hunter region.**

The draft Plan also recognises that growth and change will occur differently across the region and identifies four distinct landscape subregions, responding to the local landscape and providing a focus to address opportunities and challenges. These landscape subregions are shown on Figure 2 and are:

- Hunter City;
- Western Hunter;
- Northern Tops; and
- Hunter's North East Coast.

In addition, there is an area around Hunter City where growth and change are significantly influenced by activities within the metropolitan area, as well as within surrounding regional towns such as Cessnock and Nelson Bay, and by the region's rural and resource industries. This hinterland, while not a distinct landscape subregion, is also identified on Figure 2.

As Hunter City is the State's second largest metropolitan area, the NSW Government has prepared, for the first time, a draft plan that is specifically for Hunter City – *Draft Plan for Growing Hunter City*. It enables a coordinated approach to planning across the City, reflecting the needs and aspirations of an emerging metropolis, and it should be read as a companion document to this draft Plan. Directions for the rest of the region are set out in this draft Plan.

The NSW Government will work with councils and communities in the Hunter region in the coming months to finalise these draft Plans and begin work on implementation.

Delivering the Plan

The Minister for Planning will issue a local planning direction under section 117 of the *Environmental Planning and Assessment Act 1979* to require that future planning proposals and reviews of local environmental plans are consistent with this draft Plan, once it is finalised.

The NSW Government will continue to work with infrastructure providers to coordinate the delivery of infrastructure that meets community needs. The final Plan, along with the annual monitoring of development activity, will inform the timing of new investments.

The delivery of the final Plan will be overseen by a Coordinating and Monitoring Committee, comprising representatives from the NSW Government and councils across the Hunter region. The committee will review and recommend plans, projects and actions to advance the delivery of the final Plan.

The intent is that the actions identified in the final Plan will be progressively implemented through a mix of mechanisms and initiatives that will be the responsibility of the NSW Government, the 11 local councils and the associated Hunter Pilot Joint Organisation.

Regular reporting will occur on the delivery of the Plan. This will include the ongoing monitoring of housing and employment land supply and delivery through the establishment of a *Hunter Urban Development Program*.

Establishing the Hunter Regional Plan Coordination and Monitoring Committee

A Hunter Regional Plan Coordination and Monitoring Committee will be established, with membership from the NSW Government and councils. This committee will:

- coordinate and drive the delivery of actions;
- establish a framework to report progress on the following issues:
 - population
 - housing;
 - economy and employment; and
 - natural environment and resources.



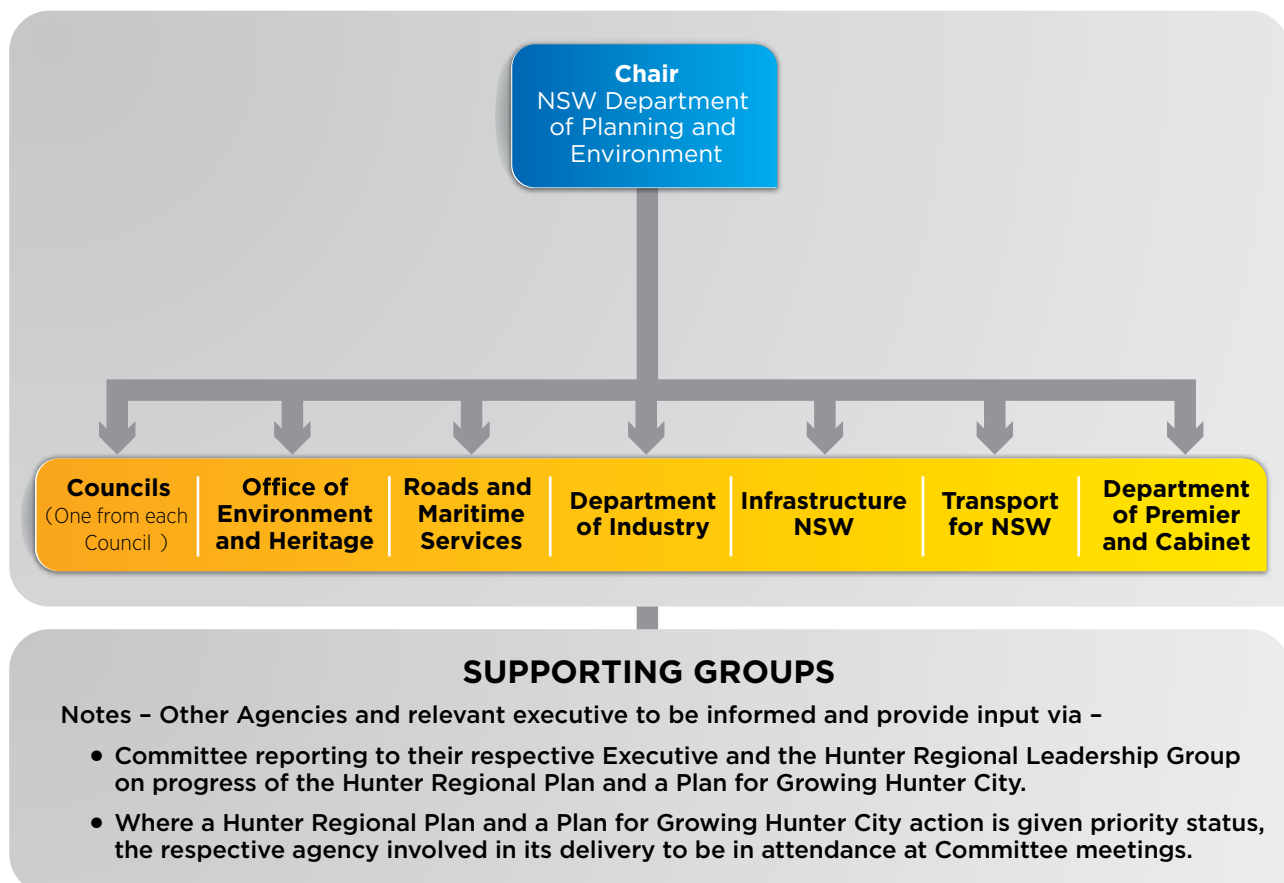
Left: Hunter coastal foreshore at night
Right: Port of Newcastle entrance, Hunter City

- prepare an annual report detailing progress against the actions identified in the final Plan and providing recommendations for land use and infrastructure planning to inform local and State planning priorities and budgets. This will assist the delivery of the final Plan over the following one to five years.

Annual reporting will assist State and local governments to align tools, such as local environmental plans, infrastructure funding priorities and the directions outlined in this draft Plan.

The final Plan will be reviewed every five years. Amendments to the Plan may also occur between major reviews to reflect and advance the latest Government policy and commitments.

FIGURE 3: HUNTER REGIONAL AND HUNTER CITY PLANS COORDINATING AND MONITORING COMMITTEE



GOAL 1 – GROW AUSTRALIA’S NEXT MAJOR CITY

Hunter City is the metropolitan area extending from Toronto and Swansea in the south to Raymond Terrace in the north and from Newcastle harbour in the east to Lochinvar in the west. It includes part of the Lake Macquarie, Maitland and Ports Stephens Local Government Areas and all of the Newcastle Local Government Area.

Hunter City is the seventh largest city in Australia and the second largest in NSW. It is already home to around 430,000 people, 64 per cent of the Hunter region’s total population.³ The population of Hunter City and the communities in its surrounding hinterland is expected to grow to around 750,000 over the next 40 to 50 years.

Hunter City offers a pool of skilled workers, global gateways to international markets, a strong and growing professional services sector, a major Central Business District in Newcastle, a growing knowledge economy built on education and health services and a strong tourism sector.

The success of Hunter City is essential to the prosperity of the Hunter region. It connects the region’s produce and resources to Australian and global markets.

To maintain strong growth in the regional economy, and participate in rapidly growing global markets, the region must create many more high-value service jobs. These types of jobs are, and will continue to be, concentrated in Hunter City. Supporting the services sector in Hunter City, by providing the right regulatory environment and infrastructure for growth and innovation, will assist the region to grow.

The service sectors provides approximately 60 per cent of jobs and 45 per cent of total economic value created in the Hunter region.⁴ The University of Newcastle is the base from which to grow the knowledge

sector, principally around education and research. The John Hunter Hospital (with the John Hunter Children’s Hospital) creates opportunities for medical research, and therefore knowledge jobs.

Hunter City’s manufacturing sector will remain important to the region. Innovation and new practices will help manufacturing businesses adapt to changing global and national markets. Delivering infrastructure that supports innovation in manufacturing will support the regional economy.

Hunter City has the preconditions for growth – a growing population, a strong and diverse economic base, plentiful natural and human resources, connections to local and international markets and a community that cares for the City’s future.

DIRECTION 1.1 Grow and sustainably manage Hunter City

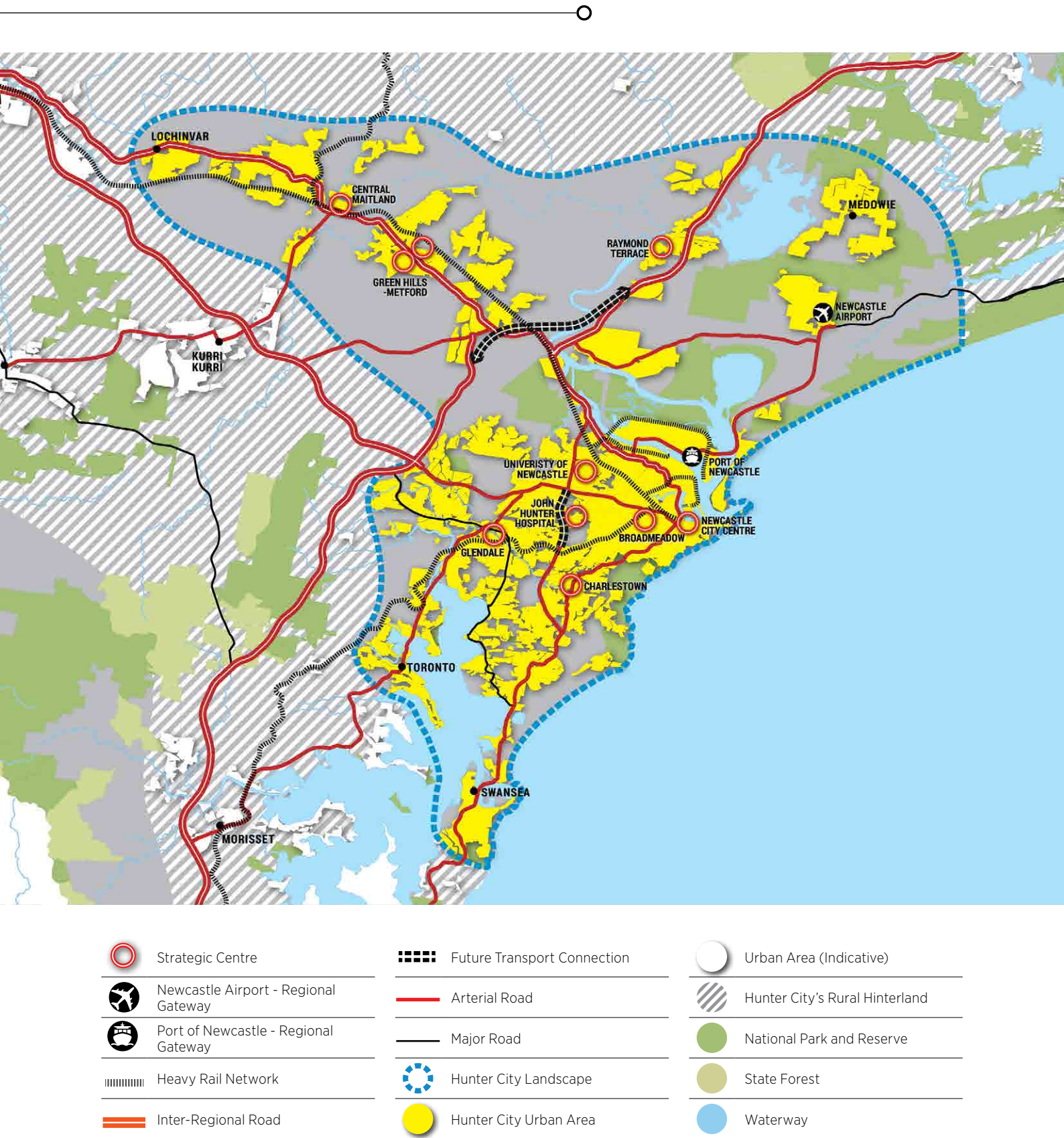
Traditionally, most strategic planning has occurred separately for Newcastle, Lake Macquarie, Maitland and Port Stephens Local Government Areas. Yet the majority of the urban areas of these local government areas form Hunter City.

Planning for Hunter City as a metropolitan area will improve resource allocation and infrastructure delivery. It provides a broader perspective to identify opportunities for growth. It also recognises the roles and functions of the existing urban area.

Hunter City has:

- a network of centres with well-established transport systems;

FIGURE 4: DEFINING HUNTER CITY



- a diverse natural landscape – influenced by the amenity and challenges of its coastal and lakeside environments, river valleys, and ridgelines;
- a unique choice of highly desirable lifestyles; and
- access to high quality facilities and services, similar to that of capital cities.

Providing better connections between the urban areas of Hunter City will improve productivity and help build the economic success of the region.

ACTION 1.1.1 Deliver a Plan for Growing Hunter City

The scale of Hunter City and its significant potential warrant a metropolitan approach to planning.

Metropolitan planning for Hunter City will be based on the following principles:

Principle 1: Development will contribute to connected communities

Hunter City's population is concentrated in an urban area with access to a range of housing choices, employment, amenities and services. Development within the existing urban footprint supports connected communities. Infill development and new land releases will support the efficient use of land and an efficient transportation network.

Principle 2: Investment will support a sustainable and diverse economy

Land use planning and transport systems will support a strong regional economy for the long term, delivering land for economic development and associated infrastructure. Planning and investment will promote economic innovation and growth. Commerce will be concentrated in centres throughout the City.

Principle 3: Protect the environment and respond to climate change impacts

The City will provide the essentials – clean air and water. Protected natural areas provide residents and visitors with diverse recreational opportunities. Development will respond to environmental constraints, potential climate change impacts and priorities.

The NSW Government will:

- deliver a metropolitan plan for Hunter City to 2036 that:
 - identifies housing options to cater for existing and future demand with good access to jobs, services, recreation and community life;
 - supports the needs of a growing economy, jobs growth and the success and prosperity of the Hunter region;
 - identifies a city-wide transport network that improves options for public transport, walking and cycling options in addition to addressing pinch points in the road network;
 - sets out actions to improve amenity and promote healthy lifestyles; and
 - identifies multiple centres with the ability to deliver jobs, housing, vibrant neighbourhoods and services.

The above matters are addressed in the *Draft Plan for Growing Hunter City*, which is a companion document to this draft Plan.



GOAL 2 – GROW THE LARGEST REGIONAL ECONOMY IN AUSTRALIA

The Hunter region is the largest regional economy in Australia, ranking above Tasmania, the Northern Territory and the Australian Capital Territory in terms of economic output.⁵ It drives around 28 per cent of regional NSW's total economic output and is the largest regional contributor to the State's gross regional product.⁶

In the coming decades, the region's traditional economic and employment drivers, including mining and manufacturing, will continue to be influenced by global and national structural changes. The Hunter region will need to maximise its economic competitiveness and at the same time, become more resilient to global influences. The factors that will allow the Hunter region to become more innovative, competitive and resilient include:

- a positive business environment;
- diverse export industries and increased industry capabilities to reach new markets;
- strong centres that attract investment;
- efficient infrastructure and competitive international gateways,
- access to a diverse skilled workforce; and
- a liveable city with high standards of living.

Capitalising on these opportunities will require:

- productive partnerships with business, industry, research institutions and the community;
- sustainable use of and access to natural resources;
- quality regulatory and operational frameworks;

- information about economic opportunities and challenges; and
- access to and efficient delivery of skills and vocational education that align with labour demand and support global competitiveness.

Improvements in infrastructure to move goods and services to market also improve access to skilled labour. Land use planning can help industries foster innovation and sustain economies of scale. It can also affect how efficiently infrastructure can be delivered.

The draft Plan seeks to strengthen the region's economic resilience, protect its well-established economic and employment bases and build on its existing strengths to foster greater market and industry diversification.

The draft Plan addresses the need to anticipate and manage competing interests in the region's natural, rural and resource areas. It recognises the value of the region's environmental quality, amenity, productive natural resources and inter-regional connections as social and economic drivers of growth.

The draft Plan's companion document, *Draft Plan for Growing Hunter City*, makes the intensive development of strategic locations across the City a priority, including the revitalisation of Newcastle city centre, and the growth and diversification of multiple centres and specialised services in and around the University of Newcastle, John Hunter Hospital, Hunter Stadium, new Maitland Hospital and the Hunter's transport gateways – the Port of Newcastle and Newcastle Airport. Growth in these locations will expand the region's economic opportunities and support more jobs close to where people live.

Top:
Hunter wine production

Bottom:
Port of Newcastle



Hunter region

DIRECTION 2.1 Promote investment to grow regional rural and resource industries

The Hunter's natural features and resources sustain some of the most mature, diverse and successful rural and resource industries in Australia. The region is already recognised as a major supplier of coal, energy, wine, thoroughbred horses and oysters, to global and national markets. The value of these industries to the national and state economies has driven investment in transport and energy infrastructure within the region, and will continue to underpin the growth and diversification of the Hunter's regional economy and employment base.

The Hunter has benefitted from the growth and development of the coal mining industry, becoming a major energy region in Australia. Coal produced in the Hunter and surrounding regions is predominantly exported via the Port of Newcastle to meet global demands. The undeveloped coal resources available in the Hunter and Newcastle coalfields, supported by the efficient connections to the Port of Newcastle afforded by the Hunter Valley Coal Chain, provide immediate and long term opportunities for growth.

Coal supplied by the Hunter and surrounding regions is also used within the region to supply energy for NSW. In the coming decades, new opportunities will emerge within the region through the NSW Government's ongoing investigations to secure energy supply through the development of alternative energy sources. The Hunter has undeveloped potential to supply coal seam gas resources in its Hunter and Newcastle coalfields and the Gloucester Basin, and the potential to develop large-scale renewable energy projects from wind, solar and geothermal sources. Supporting these industries to establish and grow will capitalise on the region's existing energy supply and distribution infrastructure (for example, power stations and transmission lines) as well as its industry experience and expertise.

In the coming decades, the growth and diversification of the Hunter's mining and energy industries will be influenced by global and national energy demands and policies. Land use planning can assist by identifying the land and infrastructure requirements that can support the future development of the Hunter's coal and alternative energy resources, including gas and renewables. It can also manage the interim use of identified lands to safeguard future access to these resources. This will enable the Hunter to respond to new opportunities as they emerge.

The Hunter's viticulture, equine and oyster aquaculture industries are as mature as its coal mining industry. The region is a recognised supplier of high-end wine, and thoroughbred horses and oysters, to global and national markets. These industries will continue to benefit from the quality of the region's natural features and systems (topography, soils, water and air) for their ongoing success, and from capitalising on new and emerging opportunities in both the domestic and Asian markets. Land use planning can assist by maintaining the availability and quality of terrestrial and aquatic resources that have the potential to sustain these industries within the region. More integrated planning and management of industry clusters will support their long term viability.

The draft Plan enables the Hunter to remain successful and competitive within global and national markets, capitalising on its existing strengths and future capabilities to meet growing and changing demands for energy (coal, gas and renewables), wine, thoroughbred horses and oysters. As part of this goal, the draft Plan also supports the growth of the Hunter's global and national rural and resource industries through:

- enhanced inter-regional connections;
- opportunities to grow and diversify supply chains and specialised services; and
- improved processes for managing competing interests and interfaces between various urban, rural and resource industries within the region.

ACTION 2.1.1 Identify energy and mineral resource lands to support sustainable growth of mining industries and diversification of NSW energy supplies

Federal and State policies relating to the mining and energy 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 Hunter, is an important step toward the sustainable long term management of these sectors within the region.

Energy resources are important both to the region and the State economy. Coal mining will be an ongoing priority industry, predominantly due to its export value. Over the coming decades, the region will continue benefitting from the economic and employment flow-on effects of the growth 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 (see box to the right). The NSW Government has identified energy resource lands for coal and gas across the State. Within the Hunter, these are in the Newcastle and Hunter coalfields and the Gloucester Basin, which are shown on Figure 5 (coal) and Figure 6 (gas). The NSW 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 8, 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

Developing alternative energy sources in the Hunter

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

GAS

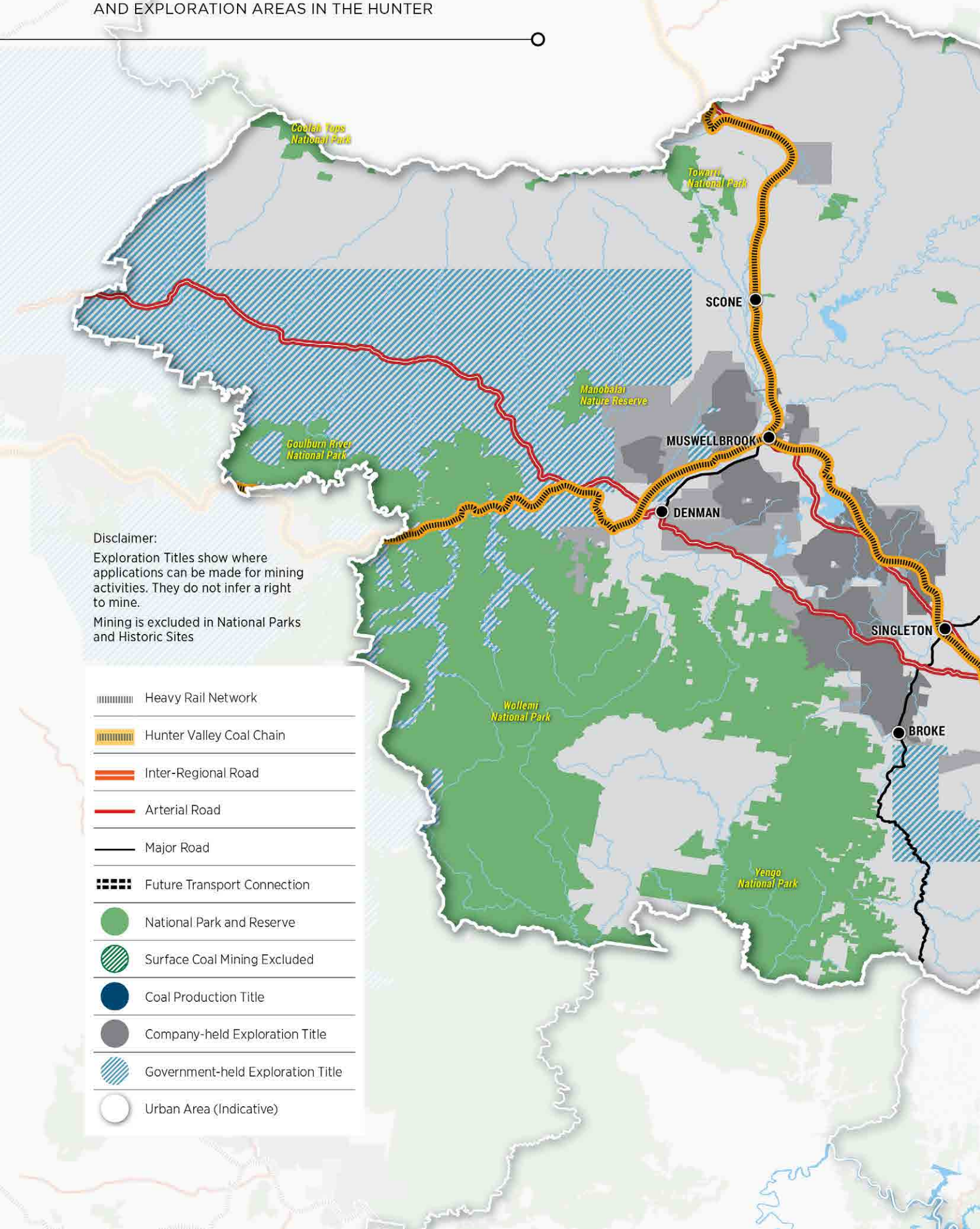
The State imports the vast majority of its gas supply and the NSW Government is investigating options to develop its own gas resources to meet a greater proportion of its demand. The Hunter is already playing an important role through the recent opening of a gas storage facility at Tomago and through proposed gas extraction projects in the Gloucester Basin.

RENEWABLES

Previous studies have indicated that the Hunter has the potential to supply energy to NSW through renewable energy resources. It has natural solar, wind and geothermal resources to deliver large-scale projects and it is already home to some landmark projects including CSIRO's solar farm in Newcastle and the Kyoto Energy Park in Scone. 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) or waste coal mine methane. They 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.

FIGURE 5: CURRENT COAL MINING ACTIVITIES AND EXPLORATION AREAS IN THE HUNTER



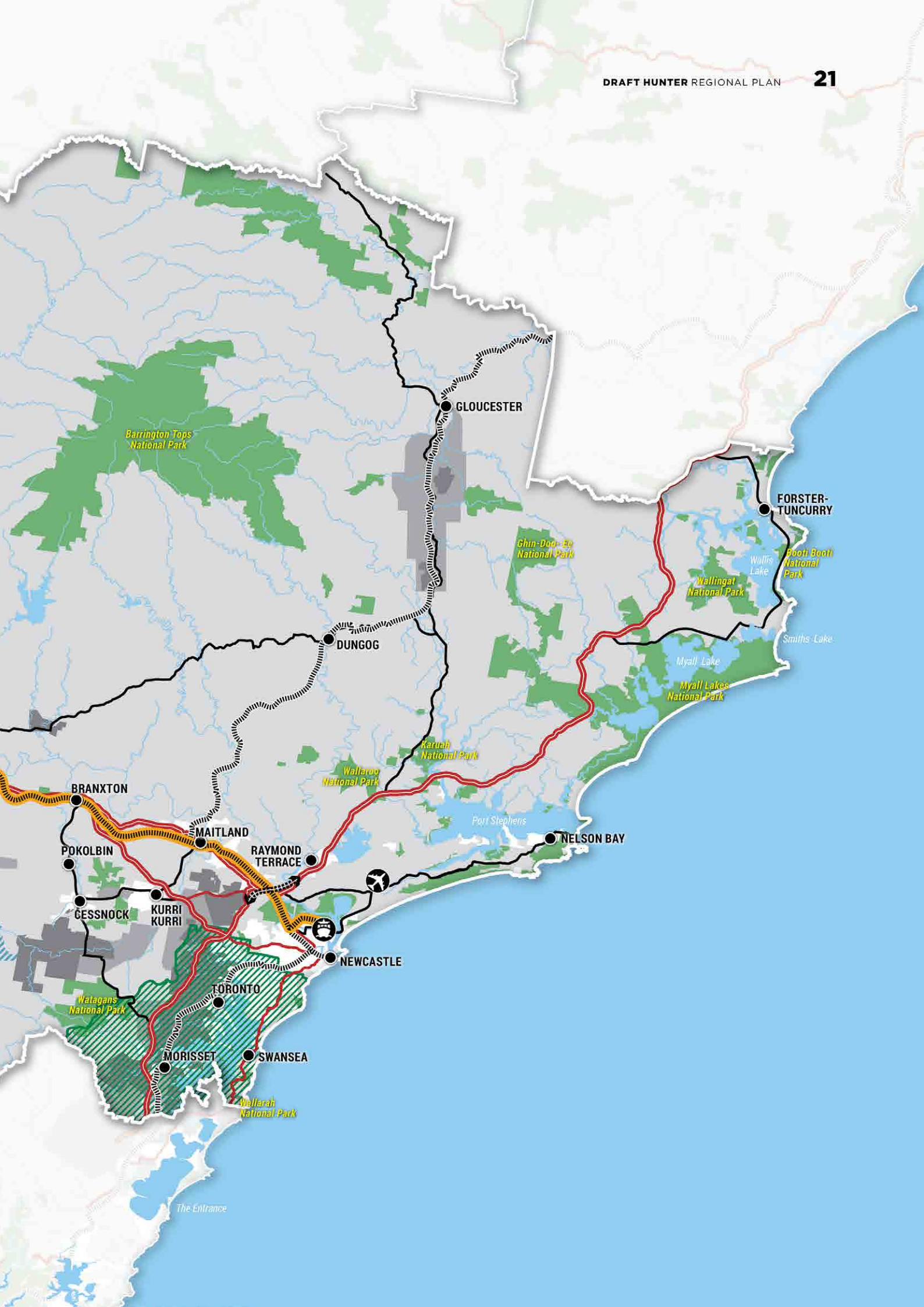
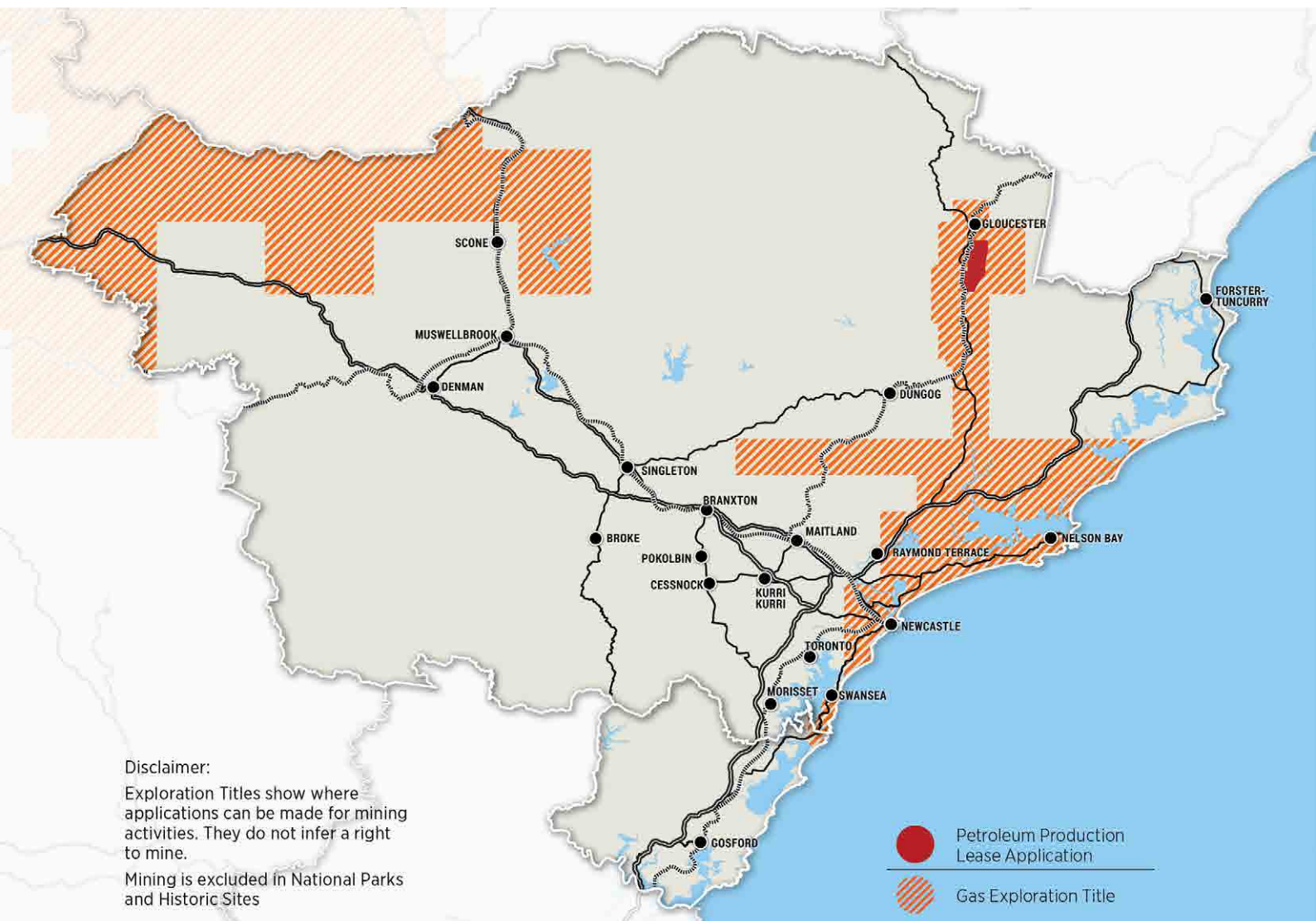


FIGURE 6: CURRENT GAS PETROLEUM PRODUCTION LEASE APPLICATIONS AND EXPLORATION AREAS



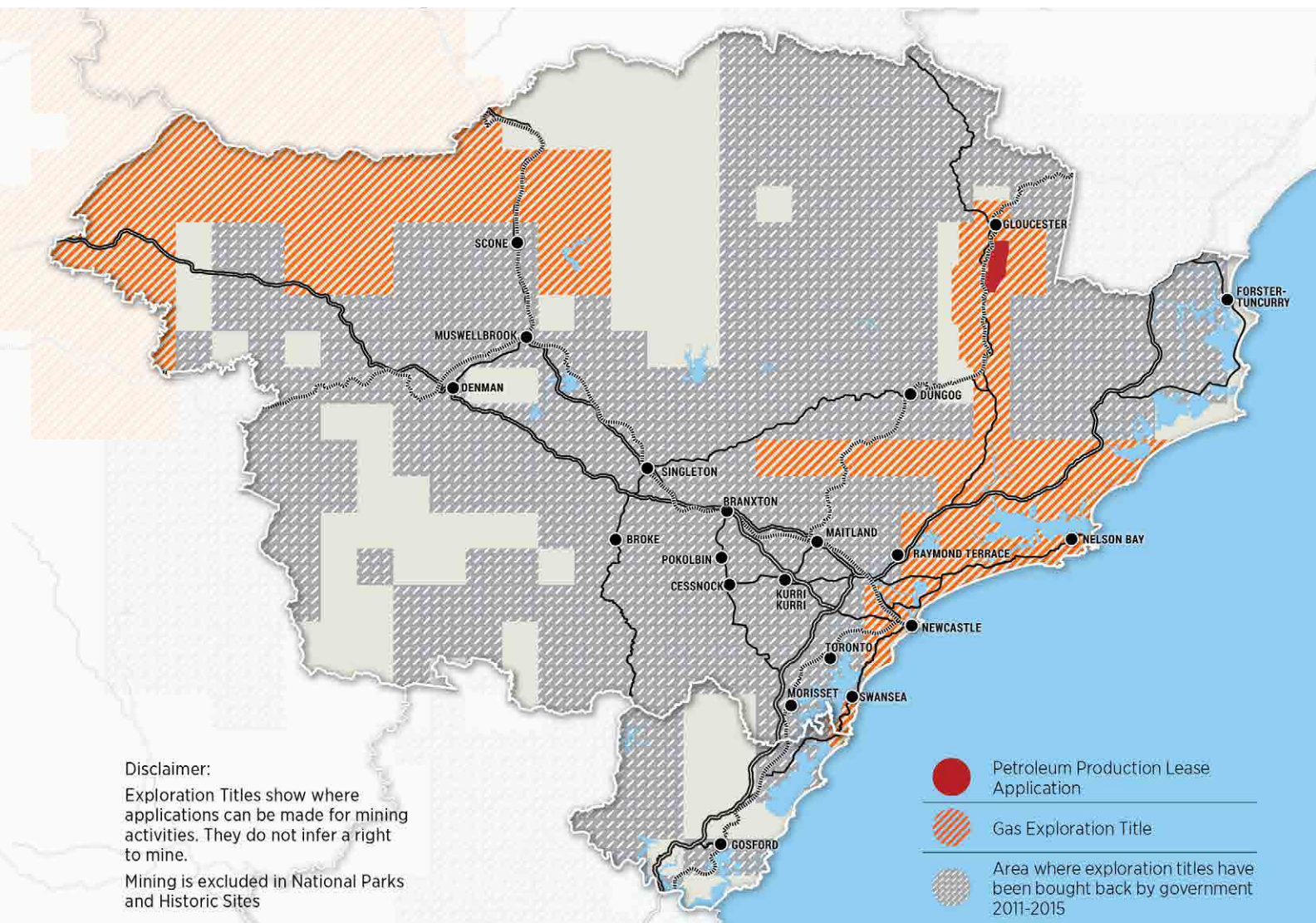
- construction industries, which use fine aggregates to make concrete and asphalt and coarse aggregates as road and rail ballast.

Figures 5, 6 and 8 show areas where mining and quarrying operations are ongoing or proposed, where additional resources have been identified but not yet developed, and where further exploration is anticipated, which may lead to mining activities in future. The ongoing exploration and extraction of resources will be conducted sequentially. Understanding the nature and location of these resources, particularly in relation to the infrastructure necessary to support their extraction, is important for anticipating the likely timing of mining activities around the region.

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*, which includes the Petroleum Exploration Licence (PEL) buy-back scheme (under which the NSW Government recently purchased licences in the Hunter Valley and southern Lake Macquarie);
- *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*;
- *Draft Strategic Release Framework for Coal and Petroleum Exploration*; and

FIGURE 7: AREAS WHERE EXPLORATION TITLES HAVE BEEN BOUGHT BACK BY NSW GOVERNMENT 2011- 2015



- the *Draft Preliminary Regional Issues Assessment for Potential Coal and Petroleum Exploration Release Areas Guidelines*.

To support the sustainable growth of the mining industry and diversification of energy supplies for NSW within the Hunter, 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;
- maintain a database of mineral and energy resource lands, and monitor development activity. Information

will be made available through online resources such as the Common Ground website, as well as through the *NSW Mineral Resources Audit*; 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 Hunter 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.



Explanatory note: Current Coal Mining Activities and exploration areas in the Hunter map

Figure 5 identifies the current coal mining activities in the Hunter, 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 October 2015. 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 found on the Department of Planning and Environment's Major Projects website at: <http://majorprojects.planning.nsw.gov.au/>.

Top:
Local mining employees

Centre:
Newcastle Port and coal
infrastructure

Right:
Bayswater power station

Explanatory notes: Current Gas Petroleum Production Lease Applications and Exploration Areas map

Figure 6 identifies the current location of petroleum mining activities in the Hunter, 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.

The petroleum production lease applications shown on Figure 6 indicate where a viable resource has been identified. All applications for licences and development approvals remain subject to assessment and determination under current policy.

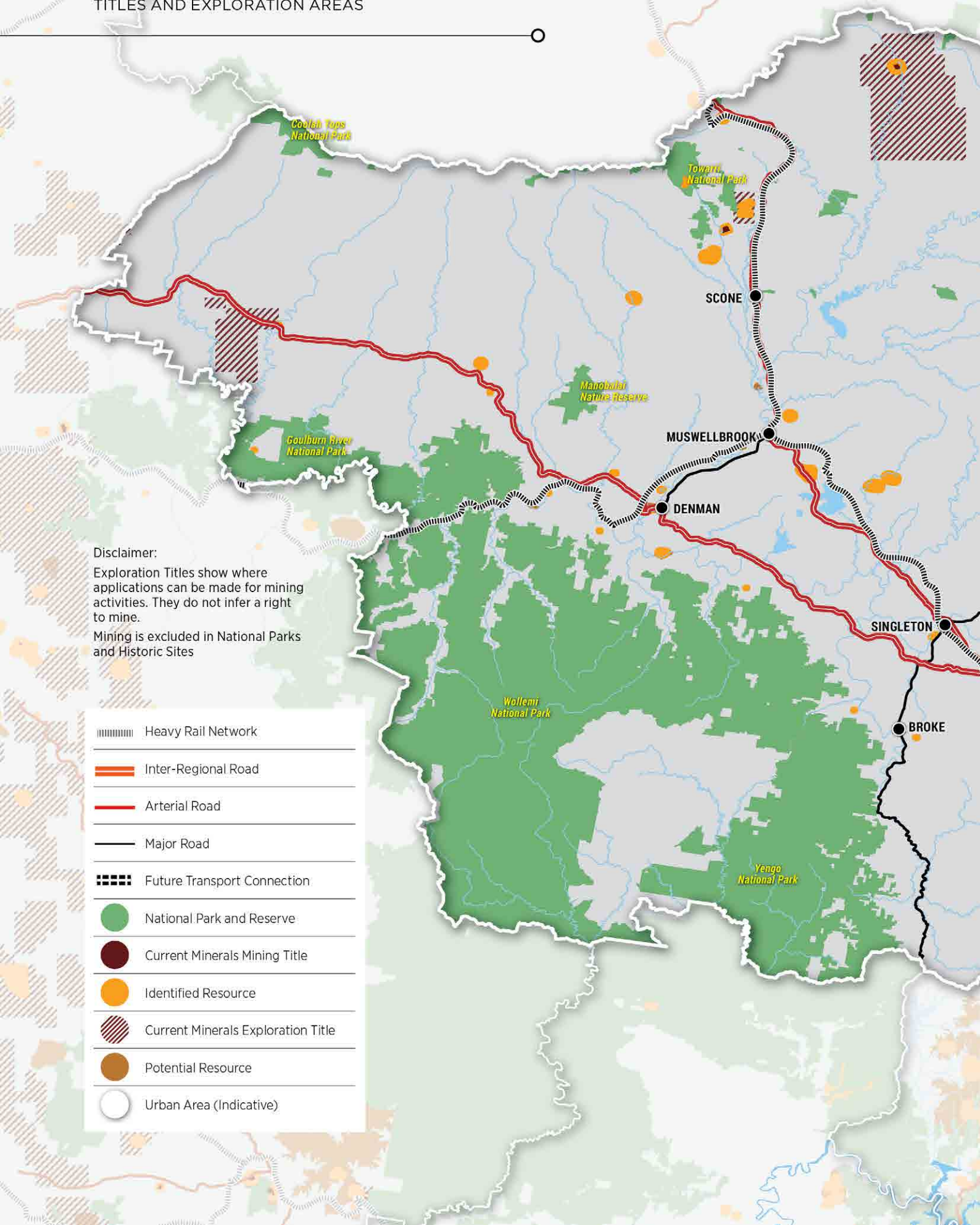
Mining activities may also be excluded by the *National Parks and Wildlife Act 1974*. In addition to this, *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007* also excludes gas exploration and production in critical industry clusters and around existing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

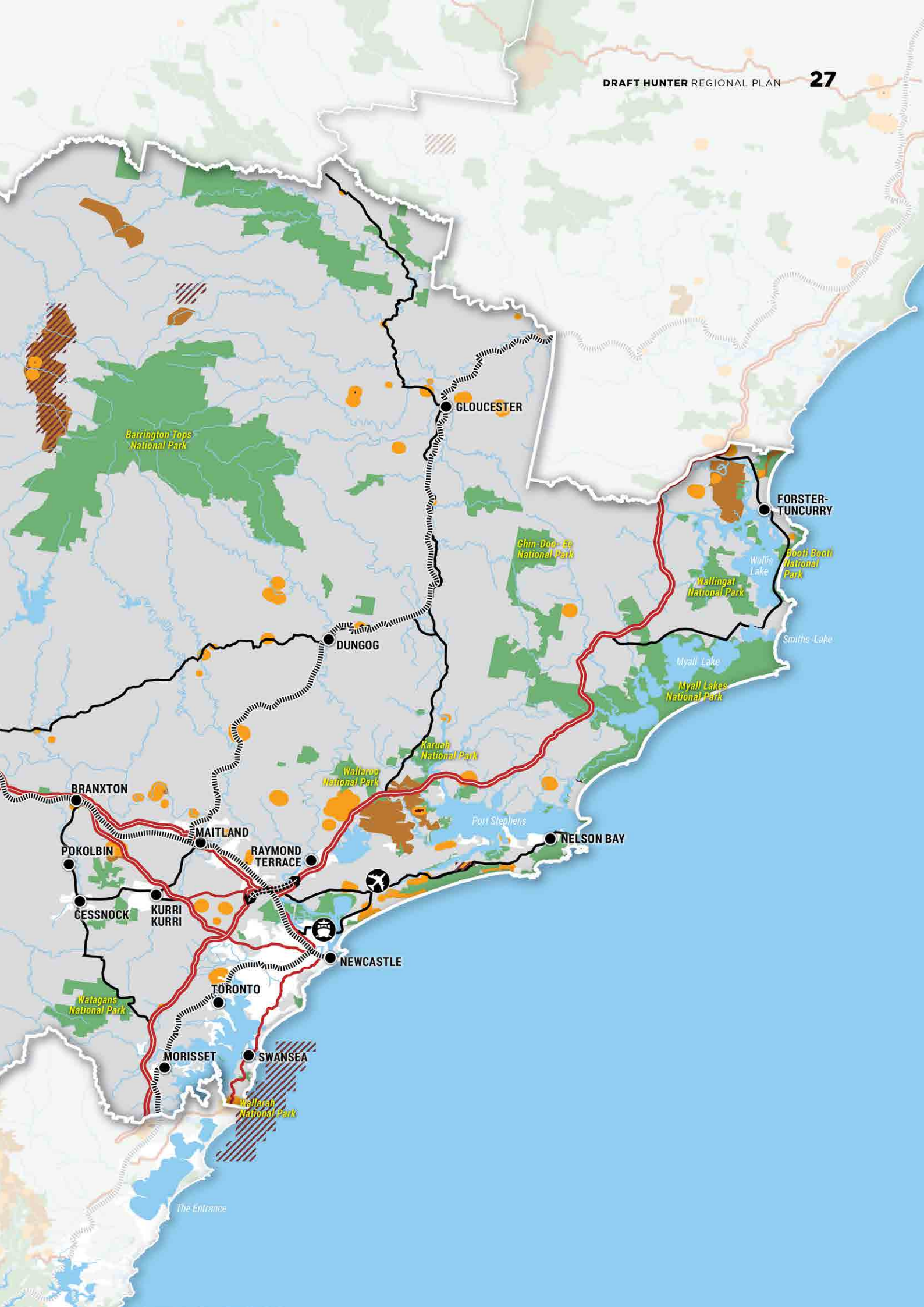
Areas where Exploration Titles have been bought back by NSW Government 2011- 2015 map

Figure 7 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 October 2015. 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 found on the Department of Planning and Environment's Major Projects website at: <http://majorprojects.planning.nsw.gov.au/>.

FIGURE 8: CURRENT MINERAL RESOURCE
TITLES AND EXPLORATION AREAS







Explanatory note: Current Mineral Resource Titles and Exploration Areas in the Hunter map

Figure 8 identifies the mineral resources, other than coal, that are known to occur in the Hunter, 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 October 2015. 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 found on the Department of Planning and Environment's Major Projects website at: <http://majorprojects.planning.nsw.gov.au/>.

ACTION 2.1.2 Support the growth of the region's important primary industries

Land use planning will support sustainable agribusiness within the Hunter by maintaining a supply of lands with the right conditions for industries to operate. It will also help manage the onsite and offsite impacts of agriculture, the fragmentation of lands and the degradation of the natural resources or other conditions, upon which agricultural industries rely. The requirements for sustainable agricultural production vary between individual industries, with each requiring ongoing access to a specific combination of resources and other conditions such as quality land and water supplies, favourable climate, labour, supply chains, processing facilities and markets.

In recent years, the NSW Government has worked with councils, industry and communities to identify **strategic agricultural lands**, which are important to the State's

economy. Figure 9 indicates the locations of selected primary industries that support well-established industries supplying global and national markets, including:

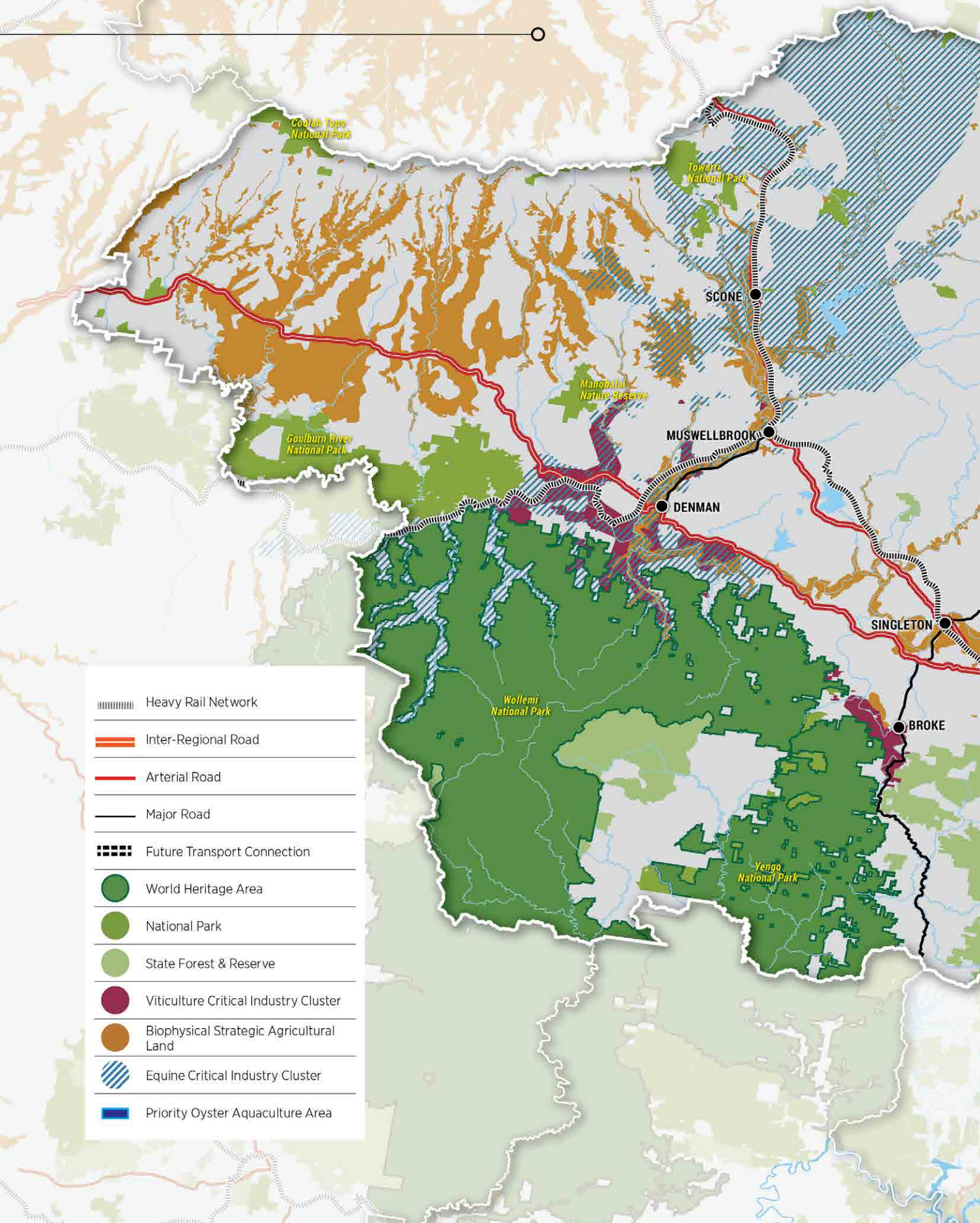
- **viticulture** critical industry clusters around Broke, Pokolbin and Denman;
- **equine** critical industry clusters around Scone and Denman;
- priority **oyster** aquaculture areas in the Hunter, Port Stephens and Wallis Lake estuary; and
- **biophysical strategic agricultural lands** that have the right conditions (levels of soil fertility, land and soil capability, and access to reliable water and rainfall levels) to sustain a variety of productive agricultural industries, with extensive coverage along the Merriwa Plateau and the Hunter River floodplains.

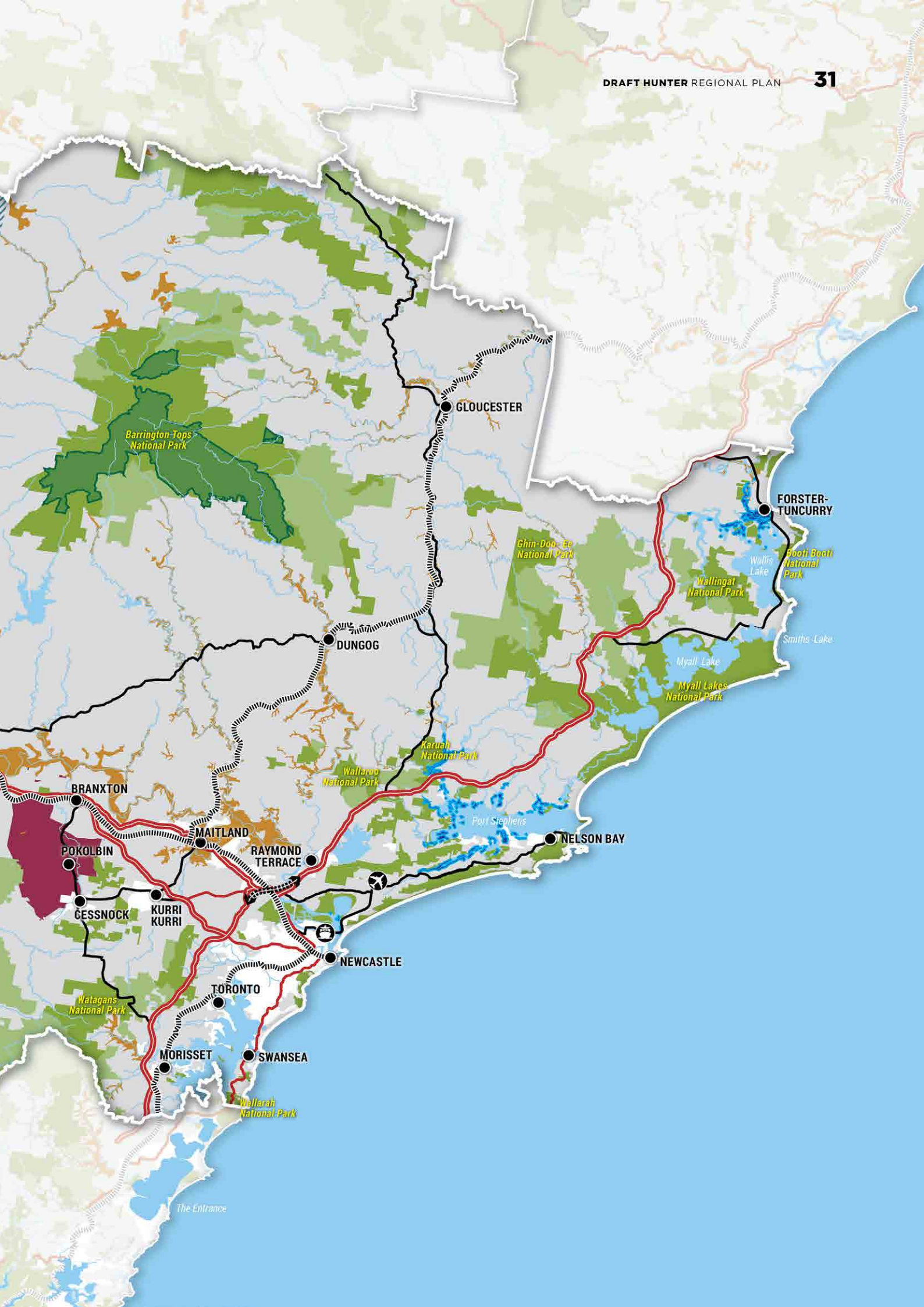
Top:
Timber industry,
Stroud

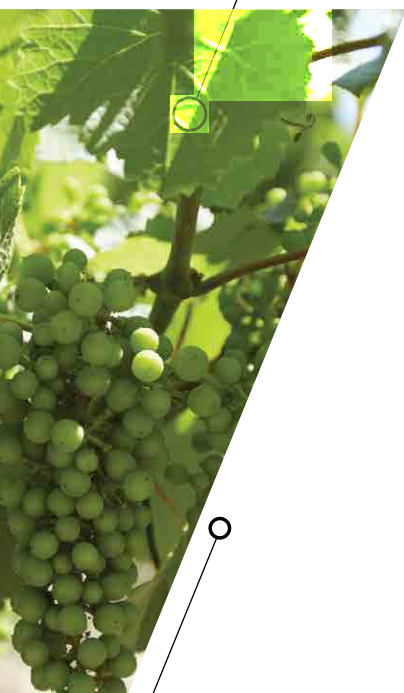
Centre:
Lake Glenbawn

Left:
Rural landscape,
Gloucester

FIGURE 9: SELECTED PRIMARY INDUSTRIES







Viticulture within the Hunter region

Considering the specific needs of agricultural industries through land use planning

The NSW Government has worked with industry to identify important primary industries, and to better understand the right conditions for the sustainable growth of the viticulture, equine and oyster aquaculture industries. This work has enabled the Government to improve planning and management to support the ongoing success of the Hunter's agribusinesses, for example:

- the potential impacts of proposed mining activities to strategic agricultural lands are currently considered through the Gateway process under the *State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) Amendment (Resource Significance) 2013*; and
- the NSW Government is in the process of buying back coal seam gas licences around the Hunter's viticulture critical industry clusters at Broke and Denman.

The NSW Government has also developed a range of guidelines to assist decision-making for proposed developments and to identify appropriate conditions for land use and management in and around strategic agricultural lands, and important primary industries including the:

- *NSW Policy for the Maintenance of Agricultural Land*;
- *Guideline for Agricultural Impact Statements at the Exploration Stage*;
- *NSW Oyster Industry Sustainable Aquaculture Strategy*; and
- *NSW Biosecurity Strategy, 2013–2012*.

To support the ongoing success of the Hunter's priority agricultural industries, the NSW Government will:

- work with industry to develop and maintain sector-specific considerations for the viticulture, equine and oyster aquaculture industries, to guide strategic land use planning and approvals processes (see box to the left);
- provide the right regulatory environment to prioritise the protection of strategic agricultural lands; and
- refine and enhance biophysical strategic agricultural land mapping to reflect updated data.

ACTION 2.1.3 Develop local strategies to support sustainable agriculture and agribusiness

In recent years, the NSW Government has also worked with councils and industry to develop methodologies to identify other important locations for agriculture within the region. Pilot studies conducted by the Australian Government, NSW Government and Hunter councils have provided further insights into the extent and capability of some of the region's important agricultural land. This work has identified that additional areas that support agribusinesses are important to maintaining a supply of fresh produce for local communities and supplying other agricultural industries within the region, such as:

- cattle (beef and dairy) and hay and hemp cropping within Singleton and Muswellbrook Local Government Areas in Western Hunter,⁷ and
- poultry (meat and eggs), cattle (beef and dairy), protected cropping (nurseries, cut flowers, vegetables and berry fruits), cut turf and broadacre cropping (hay, grain and canola) predominantly in Hunter City's surrounding hinterland.⁸

To support sustainable growth of an array of agribusinesses within the Hunter, the NSW Government will continue to work with councils and industry to:

- develop a uniform methodology for identifying and mapping land important for agriculture at a regional level to inform the development of local strategies and planning controls supporting sustainable agriculture; and
- in the longer term, develop and maintain a region-wide database of important agricultural lands.

DIRECTION 2.2 Grow and connect service-based industries to support regional communities and provide a competitive edge for businesses

The Hunter is home to an array of service-based industries that add value to rural and resource industries within the region and further afield. They are well-placed to grow and compete in national and global markets, by capitalising on the high level of inter-regional connectivity provided by the Hunter's transport networks and gateways. These connections will be enhanced by NSW Government investments in transport networks and through Australian Government and private sector investments in telecommunications infrastructure that will grow the region's digital economy.

The Hunter's existing strengths and competitive advantages in health, manufacturing, defence, international education and research, tourism and events (including creative industries), and professional services, provide solid social and economic drivers for growth. This is reflected in the scale, range and quality of services and facilities on offer in commercial and specialised centres located throughout the region.

Retailing is an important economic activity in the region, one of the largest employment sectors, and a key feature of the region's centres. In 2014, 10.2 per cent of the Hunter workforce was employed in retail.⁹

The scale and location of retailing across the region will help to shape the pattern of economic activity, particularly in centres. Retail also has a significant influence on the demand for travel from shoppers and retail workers. The scale and location of retail will be planned to support an efficient transport system.

Hunter City, and particularly Inner Newcastle, is the pre-eminent location for jobs within the region. The *Draft Plan for Growing Hunter City* identifies how land use planning can support the city's various centres to grow, diversify, better connect to communities, and provide additional services to support a high standard of living and a competitive advantage for growing and emerging industries throughout the Hunter.

This draft Plan supports greater diversity in the Hunter's economy by enabling service-based industries to innovate and respond to the changing needs of communities and businesses throughout the region. Strengthening the region's skill base, facilities and infrastructure, and supporting innovation, will better connect it to national and global markets, enabling the Hunter to become even more competitive and resilient to global economic influences in the future.

ACTION 2.2.1 Support the region's key sectors and regional competitiveness with appropriate planning controls

International education and research, visitor economy and manufacturing are regional strengths, and they are reflected in existing centres and facilities within Hunter City and around the region.

Professional services, creative industries and the digital economy also have a presence in the Hunter, particularly in Hunter City. These will continue to be accommodated in existing centres, and supported through investments to grow, to enhance each centre's ability to attract business.

Health and defence are also dominant sectors in the region's economy and major employers.



Mountain biking around
Dungog

The NSW Government will enhance opportunities for the region's service-based industries to grow by working with councils and industry to:

- plan for the future needs of industries by identifying land and infrastructure requirements that can support their ongoing success; and
- apply appropriate planning controls to create the right conditions, opportunities and capacity for growth in these industries.

ACTION 2.2.2 Develop strategies for enhancing tourism infrastructure to increase national competitiveness

The Hunter has competitive advantages due to the appeal of its urban, rural and natural areas and has the potential to grow the tourism sector. In the year ending June 2015, visitors to the Hunter (excluding Great Lakes Local Government Area) spent nearly 8.8 million nights in the region, which is 13.5 per cent of visitor nights spent across regional NSW.¹⁰ Tourism is important to the economy with 8.8 per cent of the region's workforce in the accommodation and food services sector, compared with 6.8 per cent for the rest of NSW.¹¹

Inner Newcastle attracts visitors to its harbour, beaches, growing cultural and dining scenes, heritage character and its venues, including Hunter Stadium and Newcastle Entertainment Centre. The *Newcastle Destination Management Plan, Final Report* (June 2013) identified several emerging markets that should be targeted for growth in Newcastle's visitor economy: education; visiting friends and relatives; events; sports; cruises; medical; overnight short breaks and driving tourism.

The Hunter Valley's vineyards and cellar doors support a range of complementary tourism activities including accommodation, recreation, conference centres, and increasing opportunities for leisure events such as concerts, supported by centres such as Cessnock and Singleton.

The Hunter's pristine natural areas are also popular attractions for residents and

people visiting the region. Nelson Bay and Forster-Tuncurry provide important entry points to national and marine parks in Port Stephens and Great Lakes, respectively. Scone, Gloucester and Dungog provide entry points to the vast World Heritage Area of Barrington Tops National Park.

Towns and villages around Lake Macquarie, such as Warners Bay, and along popular tourist routes, such as Morpeth, have also become tourist attractions in their own right, showcasing the Hunter's diverse built and natural heritage and character.

The tourism industry is supported by a range of local infrastructure, including roads such as The Lakes Way, Bucketts Way, Nelson Bay Road and Wine Country Drive, as well as regional infrastructure such as the Hunter Stadium, Broadmeadow Racecourse and Newcastle Entertainment Centre.

The NSW Government will:

- work with stakeholders to identify and prioritise infrastructure that will support the tourism industry, including connections to the tourism gateways and attractions; and
- investigate options to accommodate a more diverse range of economic uses in natural areas to support tourism and conservation.

ACTION 2.2.3 Identify and manage the supply of industrial lands to support manufacturing, construction, transport and supply chain industries

Manufacturing, construction, transport and other supply chain industries, in particular, support the ongoing success of the Hunter's rural and resource industries. They also, facilitate the delivery of new infrastructure and urban growth. These are major employers in the region, with manufacturing employing 9 per cent of the Hunter's workforce, compared with 8.1 per cent for the rest of NSW.¹²

The region has around 15,000 hectares of land zoned for employment purposes. Approximately 7,400 hectares are estimated to be suitable for industrial use.¹³ Further

investigation is required to understand the capability of this supply to meet ongoing industry needs – for example, changing operational needs – as well as the influence of investments in transport networks on freight travel patterns within the region.

As the region grows, a variety of industrial land will be required to support local services and provide employment opportunities. A strategic approach is needed to improve monitoring of the industrial land supply, and specifically servicing, development of, and projections estimating when new industrial land will be required and where it should be located.

Supporting industry clusters close to the Hunter's inter-regional transport networks and gateways will improve efficiencies, and make the region more attractive for investment. There are opportunities to grow industries within the Port of Newcastle, Tomago, Hexham, Rutherford, Hunter Economic Zone, Singleton, Morisset, and at the convergence of the national road network around Thornton, Beresfield and Black Hill.

The release of zoned employment land to the market is influenced by a number of factors, including demand and the strength of the economy. Employment lands that are 'shovel ready' will be more attractive to new business. The timely and coordinated delivery of infrastructure can make land more attractive for business and also contribute to market demand.

As Hunter City grows, the encroachment of urban activities and take-up of industrial lands by retail uses will influence where manufacturing, construction, transport and supply chain industries prefer to locate. Industries looking to expand and attract new investment can take advantage of the high level of connectivity provided by the Hunter Expressway and John Renshaw Drive.

To provide a supply of industrial lands that will enable the Hunter to remain competitive, the NSW Government will:

- work with councils and industry to establish an industrial land monitor that identifies land available, servicing status and projected demand for land;

- investigate opportunities for new industrial locations, prioritising locations that have good access to the Hunter's inter-regional transport network, such as the Hunter Expressway corridor; and
- work with councils and servicing agencies to prioritise infrastructure planning and delivery for industrial lands.

ACTION 2.2.4 Provide the right regulatory environment to support small business

Small businesses are a large employer in the Hunter region and a significant contributor to the regional economy. The *Hunter Region Employment Lands* report prepared by the Hunter Development Corporation found that small businesses were driving the take-up of industrial land.

Providing the right regulatory environment for small business is important to support jobs growth in:

- manufacturing,
- professional services; and
- creative industries such as internet and digital services, design, music and performing arts, noting:¹⁴
 - the Hunter has the largest concentration of people employed in creative industries in regional NSW (excluding Sydney), with one in four people employed in this industry living in the region;
 - over 97 per cent of business in this sector is small business; and
 - most of the region's 'creative' jobs are located in the Newcastle Local Government Area.

The NSW Government is working to support small business through the partnership between the Office of the NSW Small Business Commissioner and the NSW Business Chamber Small Business Friendly Councils Program. The program gives NSW



Motorway Expansion

councils the opportunity to be formally recognised as 'Small Business Friendly'.

The NSW Government will:

- work with councils to identify and implement strategies to support small business growth and innovation; and
- work with councils and industry to prepare industry-specific planning strategies that support growth and a regionally-consistent planning approach to tourism.

DIRECTION 2.3 Enhance inter-regional transport connections

The Hunter region has several national freight networks which link the Hunter region to its global transport gateways – the Port of Newcastle and Newcastle Airport. The freight network and the global transport gateways support the economic growth and diversification of regional NSW.

Planning and management will recognise the benefits of these assets being located within a growing metropolitan city and it will help them to remain viable and capable of adapting to the changing demands of communities and industries within the Hunter and further afield.

The Australian Government is investigating opportunities for a high-speed rail network to reduce travel time between capital cities along the east coast. This may generate new opportunities for economic development in the region.

ACTION 2.3.1 Identify and deliver transport corridors to enhance inter-regional networks

Improvements to transport corridors will be needed to maintain efficiencies in the network, particularly for freight, and to allow for future growth. Planning for transport corridors includes managing surrounding land uses. Improvements to extend the M1 Pacific Motorway to Raymond Terrace, complete the Newcastle Inner City Bypass, and provide a freight rail bypass around Newcastle's residential suburbs are already being planned.

Transport for NSW is progressively preparing network and corridor strategies to cover every State road in NSW, to respond to the challenge of managing transport infrastructure to maximise benefits for customers. These strategies provide the following benefits for the State road network:

- a plan for network/corridor improvement that considers all modes of transport;
- transparency for the community, councils and other State agencies about planning and investment decisions;
- consistency in planning, management and operation of roads; and
- the integration of road safety, traffic and asset maintenance projects resulting in cost savings.

The NSW Government will:

- work with stakeholders to maintain efficiencies in transport networks and upgrade network capacity in line with changing demands; and
- continue to deliver corridor strategies to support the long term management and operation of State roads in the Hunter.

ACTION 2.3.2 Support the growth and diversification of the Hunter's global transport gateways (Port of Newcastle and Newcastle Airport) to maintain competitiveness

The Hunter's communities benefit from direct access to global economic markets. This has enabled the Hunter to become the largest regional economy in Australia, with a solid employment base and a platform to build more opportunities for growth well into the future.

The region's ongoing economic prosperity will rely on its ability to capitalise on these strategic assets:

- Port of Newcastle – the primary hub for maritime exports and a focus for uses and activities that service the region's export industries such as coal and agriculture. More recently, the port has become an entry point for cruise ship visitors. Its highly adaptable infrastructure will continue to reflect the economic strengths and diversity of the Hunter and surrounding regions;

FIGURE 10: INTER-REGIONAL TRANSPORT CONNECTIONS





Left: Commercial shipping off Port of Newcastle
Right: Newcastle coal haulage



- Newcastle Airport – the commercial facilities at the airport cater for a growing population across the Hunter and surrounding regions and provide an entry point for domestic and, from 2016, international visitors. New opportunities for growth are already being created in defence and aerospace-related industries, capitalising on the co-location of the Royal Australian Air Force base, Williamtown; and
- New gateway and interchange facilities at the confluence of national freight and passenger transport networks. These facilities will capitalise on the convenient access these converging networks provide to the Hunter's global gateways and to Sydney and Brisbane.

The NSW Government will:

- support gateway facilities and their associated networks to adapt and grow through appropriate planning and approvals frameworks;
- encourage the co-location of activities and services that benefit from or further enhance gateway facilities, to create new opportunities for growth, particularly in the knowledge and tourism industries;
- maintain efficient connections to gateway facilities, recognising the needs of freight and industry, as well as urban transport systems; and
- monitor and manage the impacts of ongoing industrial operations and freight networks on environmental quality and urban amenity.

DIRECTION 2.4

Manage competing and conflicting interests in rural and resource areas to provide greater certainty for investment

Ongoing investment to develop rural and resource industries will underpin the sustainable growth, economic prosperity and ongoing productivity of the Hunter region. This draft Plan identifies strategic locations and priorities for protecting energy and mineral resource lands (Figures 5, 6 and 8), strategic agricultural lands (Figure 9), water catchments and drinking water supplies (Figure 14), future transport corridors (Figure 10), and the anticipated regional growth demands driving urban expansion within Hunter City and other towns and villages around the Hunter.

As the Hunter continues to grow, and new economic development opportunities emerge for rural and resource industries, there is potential for conflict to arise, and for competition over water resources and the infrastructure necessary to support other uses.

The potential for conflict is likely to occur where development of extractive resources (coal, gas and other minerals) coincides with:

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

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.

Land use conflicts require a whole-of-government response. The NSW Government is already responding to community concerns about the long term future of coal and gas mining around the State by developing a policy framework for the strategic release areas for coal and petroleum exploration licences and assessment leases (see below).

Draft Strategic Release Framework for Coal and Petroleum

The NSW Government has introduced a Draft Strategic Release Framework to release new areas for coal and petroleum exploration.

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

The framework recognises there are competing uses for land, and seeks to balance these interests. Community consultation and an upfront assessment of social, environmental and economic matters relating to a potential release area, for example, through a preliminary regional issues assessment are essential.

Overall, the new framework resets the NSW Government's approach to issuing prospecting titles so that it is transparent, informed and consistent with the Government's broader coal and petroleum strategy.

ACTION 2.4.1 Plan for the ongoing productive use of extractive 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 (Action 2.1.1), 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
 - 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:



Mount Owen mining and coal production

- rural and agricultural activities;
- conservation – to protect biodiversity and sustain habitat connectivity (this will be informed by regional conservation planning initiatives – see Direction 3.1); 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 Western Hunter, around Singleton and Muswellbrook, the Northern Tops, around Gloucester and in Hunter City.

ACTION 2.4.2 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 Hunter.

This is particularly relevant in Western Hunter, which contains the region's most extensive and valuable supply of strategic agricultural and mining lands. The amenity and accessibility of the Hunter Valley vineyards, in particular, are attractive to people seeking a rural lifestyle in close proximity to the city.

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 Hunter. 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 Hunter; 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.

ACTION 2.4.3 Protect the region's wellbeing and prosperity through increased biosecurity measures

Biosecurity contributes to the wellbeing and prosperity of the Hunter. The adverse impacts of a biosecurity event are not limited to agriculture. They can also affect surrounding or associated industries such as manufacturing and processing, transport and tourism.

Within the Hunter, managing biosecurity risks is relevant to:

- supporting the globalisation of trade;
- managing population growth and supporting healthy communities;
- responding to climate variability; and
- prioritising access to land and resources.¹⁵

Strategic planning can support the effective management of biosecurity risks. This is particularly the case where the expansion of residential development into rural areas, or the expansion of rural or resource industries, increases the risk of animal and plant pests and diseases affecting food production, the environment (particularly wildlife) and human health.

Biosecurity risks can often be minimised through appropriate land zoning as well as by applying buffers to separate different land uses by distance, vegetation or topography.

The *NSW Biosecurity Strategy 2013-2021* outlines the NSW Government's commitment to strengthen and maintain biosecurity measures across NSW.¹⁶ Local Land Services will continue to play a key role in this in collaboration with other organisations such as the NSW Department of Primary Industries.

The NSW Government will work with councils to:

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

ACTION 2.4.4 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. 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 legally binding pollution reduction programs on all existing coal mines, requiring them to assess their current operations 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;
- considering options for addressing noise impacts from emerging mining precincts, including through a recent review of the *Industrial Noise Policy*; and



- improving mechanisms to protect biodiversity and manage offsets in mining areas, as demonstrated by the strategic biodiversity assessment of proposed mines in the Upper Hunter.

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 closed mines; and
- prepare a development assessment guideline for impacts on human health from dust (including dust generated by mining and other activities).

Top:
Open cut mining,
Singleton

Centre:
Port of Newcastle Coal
Loader

Bottom:
Muswellbrook mining
infrastructure



GOAL 3 - PROTECT AND CONNECT NATURAL ENVIRONMENTS

The Hunter's diverse natural environments include some of the most unique ecological systems in Australia.

Much of the Hunter's pristine natural areas are already conserved in a network of protected areas and open spaces – from the World Heritage values of the Greater Blue Mountains and Gondwana Rainforests of Australia present in Wollemi, Yengo and Barrington Tops National Parks, to the Port Stephens-Great Lakes Marine Park and Hunter City's urban parks and beaches.

The Hunter's natural environments sustain important terrestrial and aquatic ecological systems. They support a high level of habitat connectivity, including part of a national corridor extending from Victoria to Far North Queensland. They also give the region a natural resilience to hazards such as bushfires, flooding, coastal erosion and sea level rise, which can be supported by good planning, management and response.

The quality and accessibility of the region's natural areas provide residents and visitors with an array of unique experiences. They enhance the region's identity and the health of its communities and are an important focus for recreational and tourism activities and investment, as well as an influential factor in where people choose to live.

The Hunter contains natural features that are important to Aboriginal communities as cultural heritage. Conserving these assets, and respecting the Aboriginal community's right to determine how they are identified and managed, will preserve some of the world's longest-standing spiritual, historical, social and educational values.

Land use planning influences when and how the potential impacts to the natural environment are identified, considered and managed over time.

The draft Plan and its companion document the *Draft Plan for Growing Hunter City* will protect and enhance the Hunter's natural environment, including a connected network of habitats, to enhance the liveability of the region.

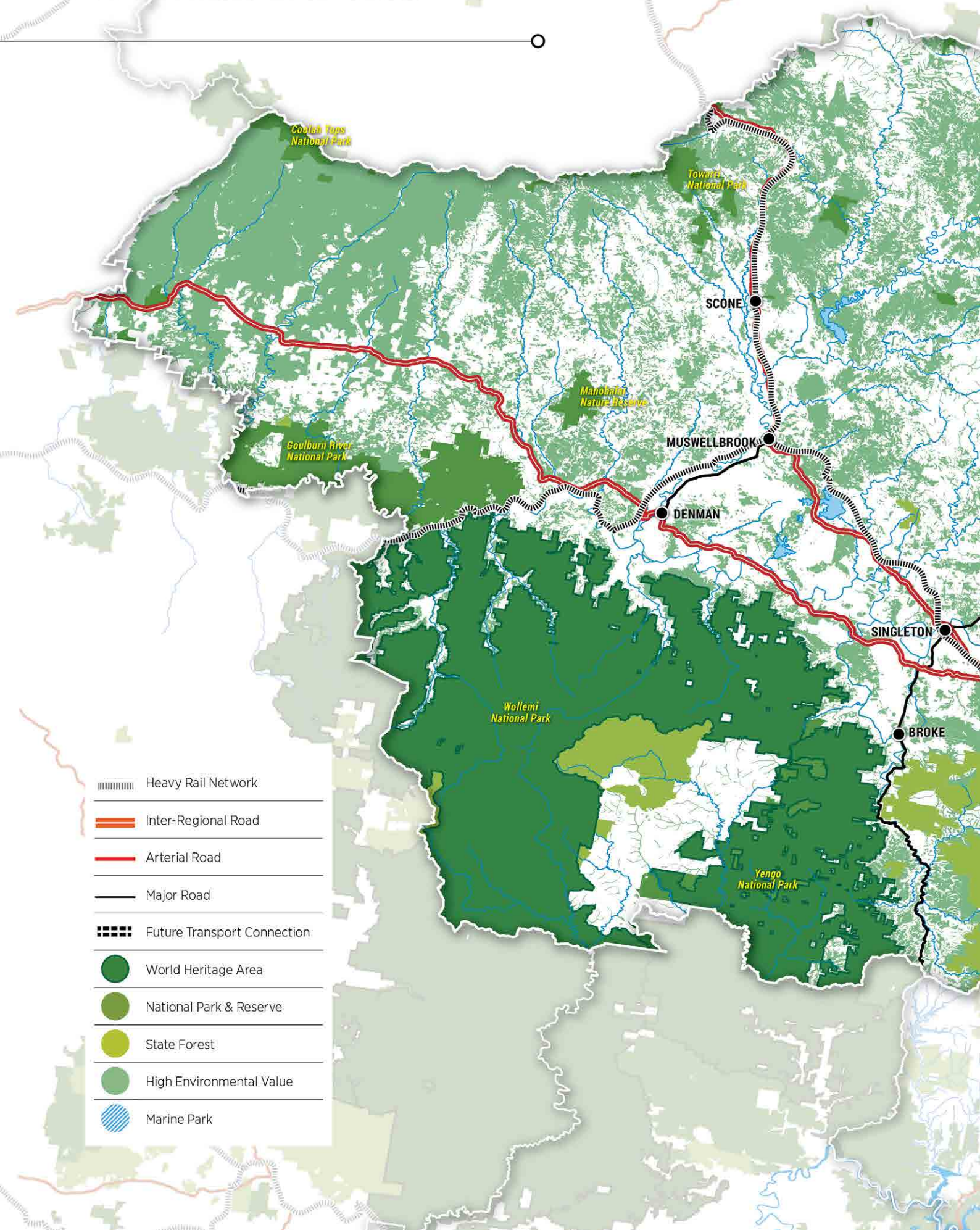
As the region continues to support growth in both its rural and resource industries, and its urban areas, good planning and design will be more critical than ever to protect the environment and build greater resilience to natural hazards.

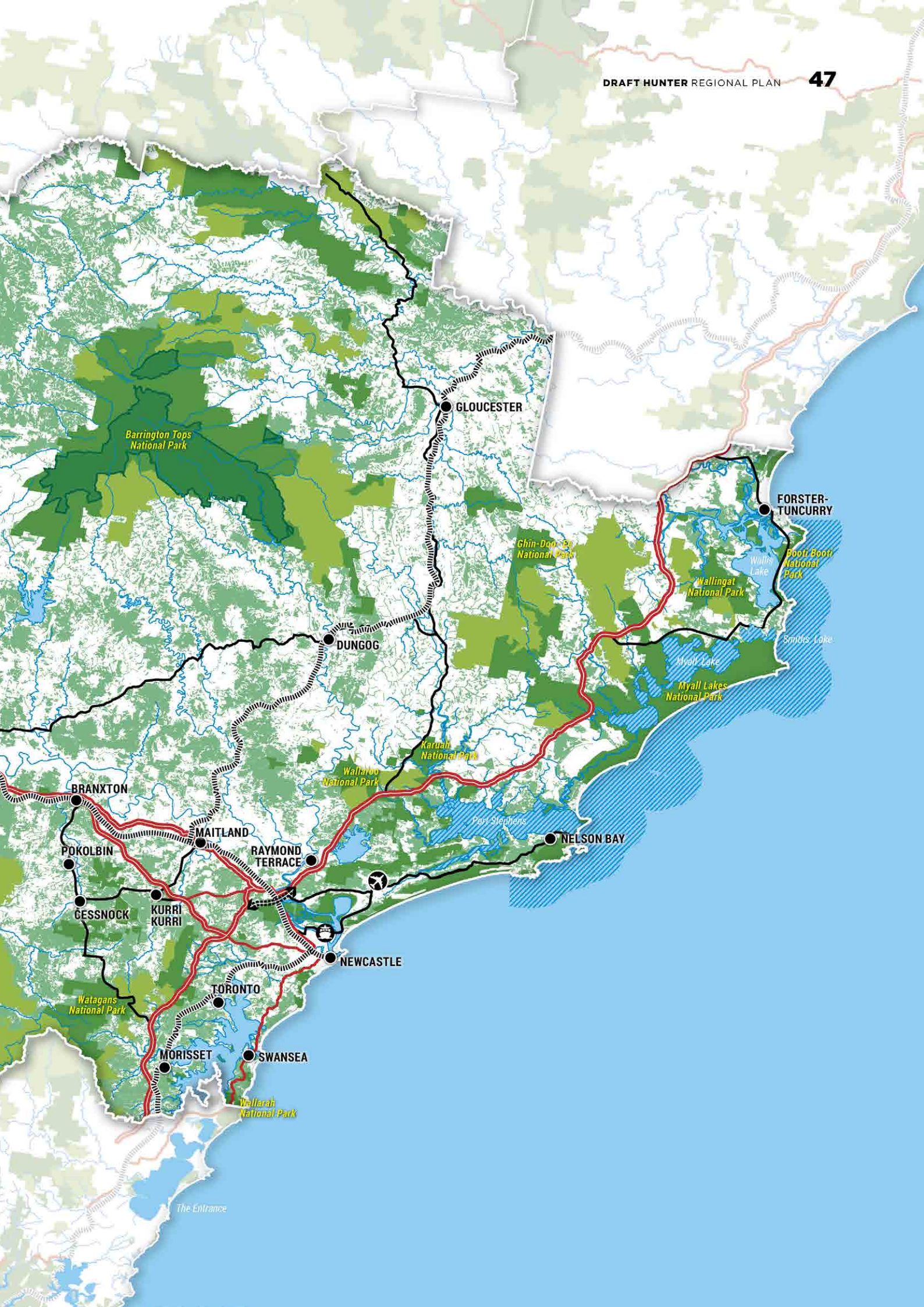
DIRECTION 3.1 Protect the natural environment and biodiversity

Within the region, three terrestrial bioregions – the Sydney Basin, North Coast and Brigalow Belt South – and two marine bioregions – the Hawkesbury and Manning shelves – converge, providing the basis for highly diverse ecological and biological systems. Many of the ecological communities found in the Hunter are only found in this region, reflecting its World Heritage values and providing critical habitat for 181 vulnerable species, 70 endangered species, and 13 critically endangered species listed under the NSW *Threatened Species Conservation Act 1995*. The region is also home to 13 endangered populations, 30 endangered ecological communities and vulnerable ecological communities.¹⁷

Many of the region's natural features are already subject to a high level of regulation to protect their environmental values. Strategic land use planning should identify and take account of the location and extent of these areas of high environmental value. Any potential impacts on these areas can then be considered upfront, rather than at the development assessment stage.

FIGURE 11: HIGH ENVIRONMENTAL VALUES







Explanatory note: High environmental values map

The areas identified with high environmental values in **Figure 11** have natural features that have existing protection under legislation, regulation, policy or intergovernmental agreement.

A range of criteria were used to identify and map land with high environmental values 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 value, 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 is intended to provide a regional-level overview for the purposes of strategic planning. This data will be updated as new information becomes available. Interested parties should contact relevant agencies, including the Office of Environment and Heritage and the Department of Primary Industries, for current data and further support.

Groundwater dependent ecosystems and aquatic and marine habitats also have high environmental values. Maps, including those related to fish community status, aquatic threatened species distributions and key fish habitat, are available from the Department of Primary Industries.¹⁸

Land use planning can also support improved environmental outcomes by directing investment to conserving or enhancing biodiversity values, to offset unavoidable impacts of development in locations that have been identified for growth. The uniqueness of the region's biodiversity means that it must often be conserved in place, in line with current NSW and Australian Government environmental legislation and policy.

Many of the areas already identified for growth in the region contain high environmental values that will be protected through sensitive design and management. The *Draft Plan for Growing Hunter City* supports this by incorporating land with high conservation values into the City's network of open spaces.

The NSW Government is also supporting streamlining of the biodiversity assessment and offsetting processes to support growth in the rural and resource areas. A strategic assessment of biodiversity impacts arising from new and expanding mining activities in the Upper Hunter Valley was recently concluded. This has provided a coordinated mechanism to deliver investment in conservation.

Multiple benefits can be achieved where investments in conservation, including offsets, are directed to protect and where possible, enhance habitat connectivity across the Hunter. The Great Dividing Range, Great Escarpment, Hunter Valley and eastern seaboard are important landscape features within the Hunter. They also form part of a national corridor that has potential to sustain habitat connectivity from Victoria to Far North Queensland. The NSW Government is working with the Australian Government to strengthen this corridor as part of the Great Eastern Ranges initiative.



Left: River habitat Dungog
Centre: Merriwa rural landscape and agricultural production
Right: Barrington Tops

Focus areas for sustaining regional habitat connectivity

- **Jilliby to Wallarah Peninsula link** – recognises corridors previously identified in the *Lower Hunter Regional Strategy 2006-2031* and *North Wyong Shire Structure Plan (2012)*. It encompasses major new land release areas in the Hunter and Central Coast regions, accommodating urban and employment uses. The aim of conservation planning in this area will be to identify and create habitat corridors and stepping stones to maintain connectivity between Jilliby State Conservation Area, Wallarah National Park and the Munmorah State Conservation Areas. This will be important for the planning and delivery of new release areas in southern Lake Macquarie and the Central Coast region.
- **Watagans to Stockton link** – was first proposed by the *Lower Hunter Regional Strategy 2006-2031*. It represents an area that is proposed to accommodate further development to support national transport infrastructure as well as urban and industrial uses. The aim of conservation planning in this area will be to identify and create habitat stepping stones between Watagans National Park, Pambalong Nature Reserve and Hexham Swamp Nature Reserve. It represents an important opportunity to enhance north-south connectivity, particularly through the delivery of national transport infrastructure, as well as through planning and delivery of new release areas in Hunter City and the western and northern parts of its hinterland. This is considered in more detail in the *Draft Plan for Growing Hunter City*.
- **Upper Hunter Valley link** – was identified as part of the national Great Eastern Ranges initiative. It extends across an area that is currently one of the most productive mining districts in NSW. The aim of conservation planning will be to protect large patches of existing vegetation between the Wollemi National Park, Manobalai Nature Reserve and Barrington Tops National Park and to use the ongoing management and progressive rehabilitation of mining activities to enhance north-south connectivity.
- **Merriwa Plateau link** – was identified as part of the national Great Eastern Ranges initiative. It is an area with strong potential for sustained agricultural productivity and contains undeveloped coal, gas and renewable energy potential. The aim of conservation planning will be to use riparian links to connect the Liverpool Ranges, Coolah Tops and Towarri and Wollemi National Parks. This will be important for long-term planning for the future development and diversification of the energy sector, to maintain the existing north-south connectivity this area affords.
- **Barrington Tops to Myall Lake link** – encompasses fauna corridors first identified in the *Mid North Coast Regional Strategy (2006)*. It extends across an area that the NSW Government is currently investigating as a future location for producing gas resources to diversify the State's energy supply. This is an emerging (economic) growth area and further development of vegetation data and predictive tools is required to identify the priorities for maintaining east-west connectivity. This will be an important consideration for planning for coal and gas industries in the Northern Tops.



Modelling connectivity is an important first step to identifying and protecting existing habitat links and then establishing new links to support animal movements across the landscape. There are a range of factors influencing the conditions required to sustain habitat connectivity – from changing climate trends to changing land use.

The Australian and NSW Governments have undertaken a series of studies to better understand and map the locations of biodiversity corridors across the Hunter, focusing on areas where higher levels of activity are anticipated to accommodate urban, agricultural and mining growth.

Figure 12 identifies broad locations where the NSW Government will focus planning and management initiatives to protect and enhance regional habitat connectivity. These locations are anticipated to experience greater levels of land use change. The NSW Government will aim to, in the case of:

- Jilliby-Wallarah Peninsula and Watagans-Stockton links, conserve habitat and enhance connectivity through the sensitive design and management of biodiversity offsets to deliver new release areas and transport corridors;
- Upper Hunter Valley link, progressively increase habitat connectivity through coordinated planning and rehabilitation of mining; and
- Merriwa Plateau link, manage rural and riparian lands to sustain habitat 'in situ'; and
- Barrington Tops to Myall Lake link, sustain habitat connectivity through whole-of-life cycle planning for extractive resource industries as they emerge.

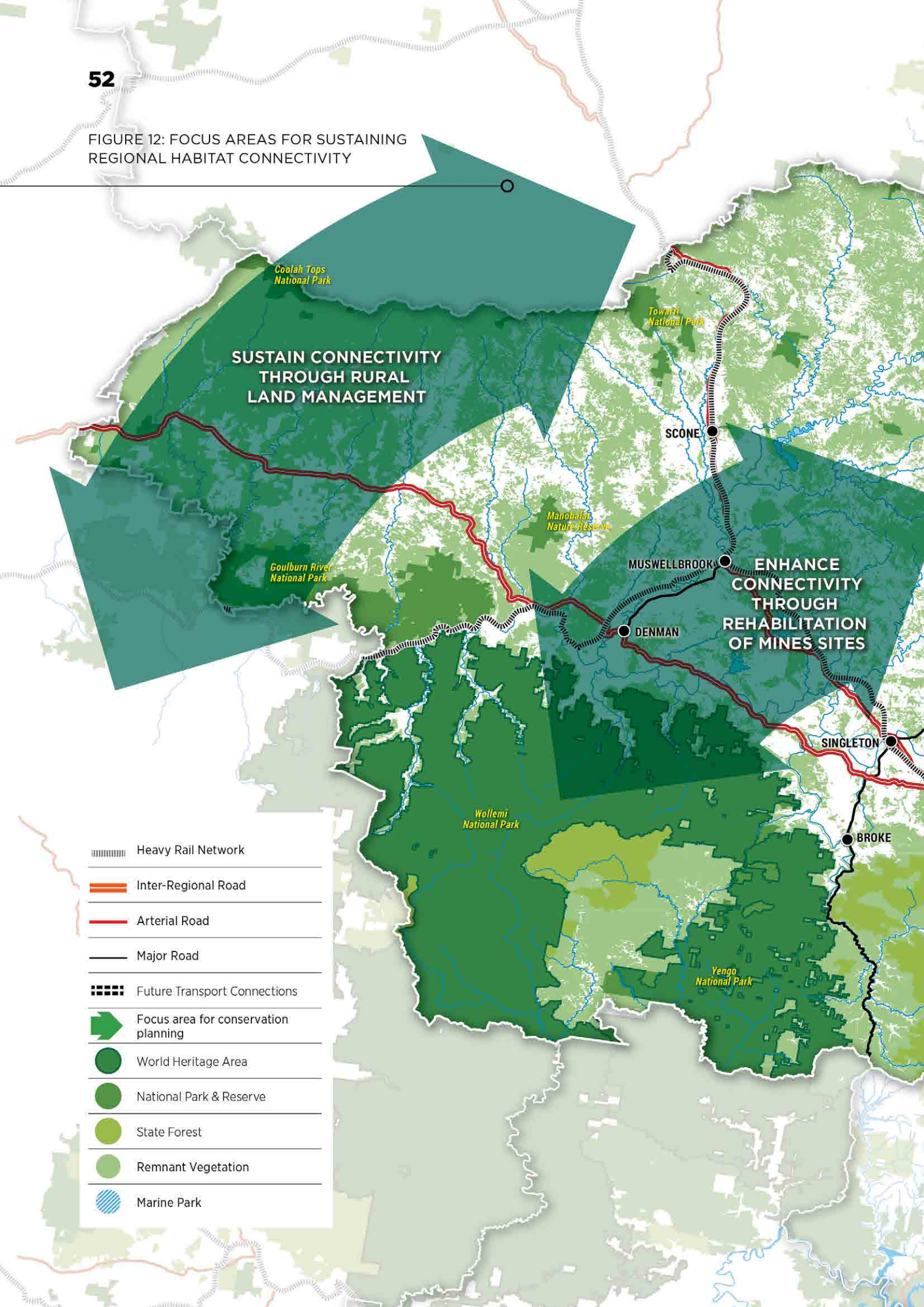
ACTION 3.1.1 Improve the quality of and access to information relating to high environmental values and use this information to avoid, minimise and mitigate the impacts of development on significant environmental assets

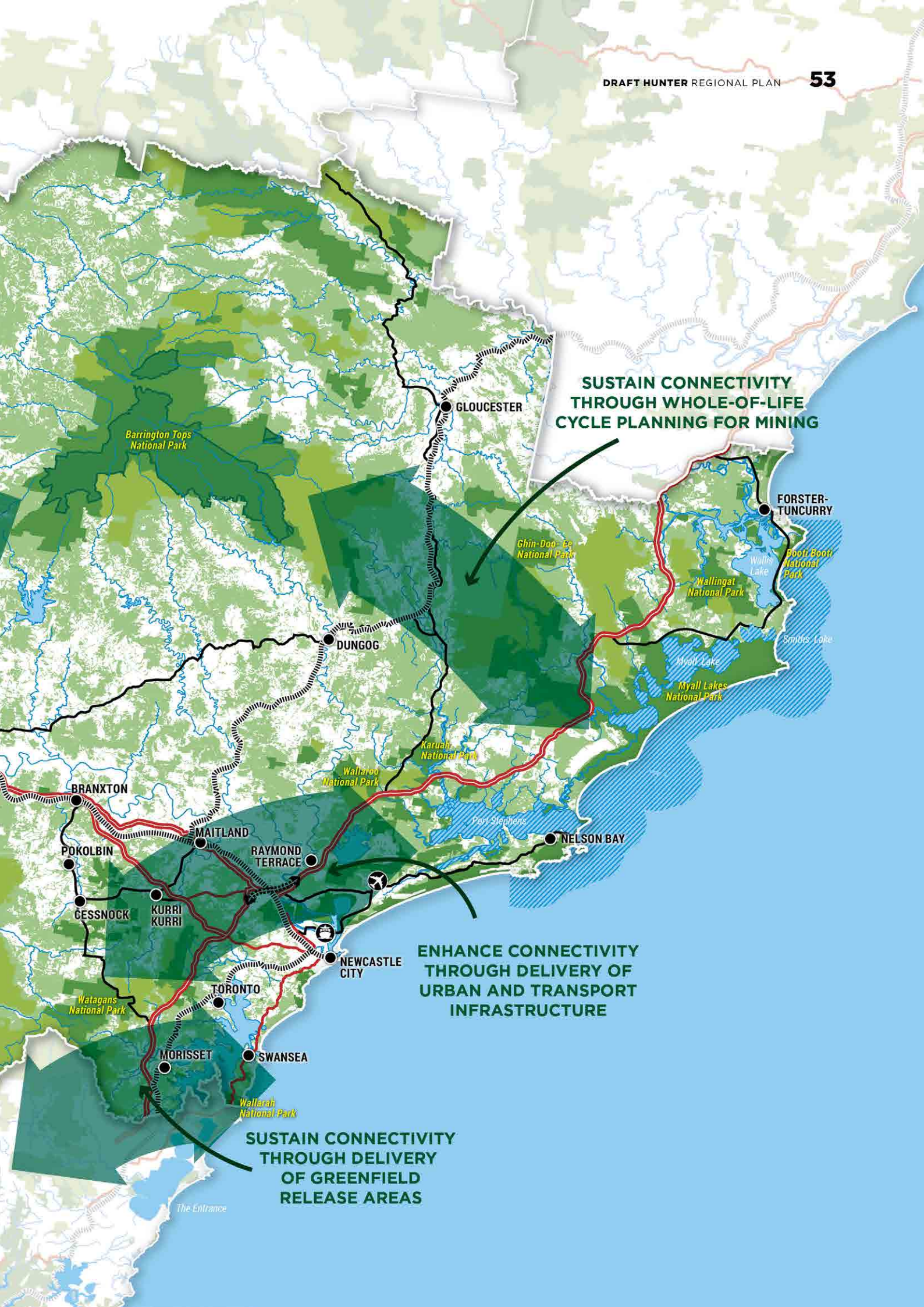
In areas identified with high environmental values (see Figure 11) and aquatic and marine biodiversity and habitat values, the NSW Government will work with councils to protect biodiversity by:

- creating the right regulatory environment and implementing appropriate protection measures to conserve validated high environmental values, including through the application of planning controls;
- developing local strategies to avoid and minimise potential impacts arising from development on areas of high environmental value, and subsequently considering appropriate mechanisms to identify offsets or other mitigation mechanisms for unavoidable impacts; and
- identifying and assessing the potential impacts to biodiversity and establishing plans to manage offsets, or at the earliest stage of the planning approvals process, using appropriate assessment methodologies.

The NSW Government will also update information about and map high environmental value areas to assist decision-making. It will continue to make this information publicly available, including through the use of the Planning e-viewer.¹⁹

FIGURE 12: FOCUS AREAS FOR SUSTAINING REGIONAL HABITAT CONNECTIVITY







Exploring the Dungog ecology

ACTION 3.1.2 Identify priority investment within regional habitat corridors and prepare local strategies to protect and manage corridors

Identifying regional habitat corridors and implementing appropriate strategies to protect and manage habitat connectivity within them, will provide greater certainty for investment.

Priority investment areas for biodiversity, including corridors, will continue to be identified using current NSW Government guidelines. The high level of ecological diversity across the Hunter's three terrestrial bioregions means there is no single solution or approach for the region. Distinct strategies will need to be developed to suit the specific ecological context for each corridor.

The regional habitat links identified in this draft Plan are not the only locations that will be relevant to maintaining habitat connectivity – councils will also identify and maintain local habitat corridors within their jurisdictions.

The NSW Government will:

- support councils to further develop, share and continuously update strategic planning tools including vegetation data and modelling toolkits; and
- provide more options for investing in and conserving land, including managing biodiversity offsets as part of the planning approvals process.

ACTION 3.1.3 Encourage greater participation in private conservation schemes to provide more flexibility and options for investing in conservation, including biodiversity offsets

The impacts of a proposed development on biodiversity values are considered at various stages through the planning process. Any unavoidable impacts must be 'offset' by protecting, in perpetuity, similar biodiversity values in another location. There are a number of tools already in place to identify and manage offsets.

Due to the rarity of the Hunter's biological and ecological diversity, securing like-for-like offsets can prove challenging. The extent and value of the Hunter's agricultural and mining resources can also create challenges to securing ongoing conservation management arrangements. These factors can influence the timing or viability of projects in areas that have already been identified for growth.

In recent years, the NSW Government has increasingly supported the use of private conservation schemes, such as BioBanking, to manage biodiversity offsets and accommodate growth and change. Private conservation schemes are an emerging market in NSW and have been popular within the region, with a wide distribution of sites generating conservation credits available for purchase.

The NSW Government will continue working with councils and landowners to encourage greater participation in private conservation schemes by:

- providing strategic advice and landscape-scale assessments of biodiversity within the region, to identify areas and opportunities to raise further awareness or incentivise participation.

Regional sustainability planning

The Australian Government's *Sustainable Regional Development Program* (SRDP) supported a range of studies to consider sustainable development outcomes across the Lower Hunter. The scope of these studies was identified as a result of a gap analysis carried out in consultation with councils in 2012 and funded by the Australian Government through this program and the *National Environmental Research Program* (NERP).

These studies included ecological mapping and modelling to improve landscape-scale data by:

- identifying the extent of habitat for specific species, including koalas, swift parrots, regent honeyeaters and flying foxes; and
- developing habitat modelling methodologies and tools for undertaking landscape-scale assessments of habitat connectivity, to identify priority biodiversity investment areas and local biodiversity corridors.

The studies are available online²⁰ and include:

1. *Multi-criteria analysis and connectivity science to enhance conservation outcomes at the regional scale in the Lower Hunter*. Lechner, A. and Lefroy, T. University of Tasmania (NERP-funded), 2014.
2. *Commonwealth Lands Mapping – Lower Hunter Region NSW*, Omnilink (SRDP-funded), 2012.
3. *Swift Parrot and Regent Honeyeaters in the Lower Hunter Region of NSW: An Assessment of Status, Identification of High Priority Habitats and Recommendations for Conservation*, Birdlife Australia (SRDP-funded), 2013.
4. Purchase of Birdlife Australia Data. NSW Office of Environment and Heritage (SRDP-funded), 2013 (unpublished).
5. *EPBC Act Listed Ecological Communities Mapping In the Lower Hunter Region*. Parsons Brinckerhoff (SRDP-funded), 2013.
6. *Greater Blue Mountains World Heritage Area Values Study in Cessnock Local Government Area and Surrounds*. Parsons Brinckerhoff (SRDP-funded), 2013.
7. *Grey-Headed Flying Fox Management Strategy for the Lower Hunter*. GeoLINK (SRDP-funded), 2013.
8. *Lower Hunter Vegetation Mapping*. Parsons Brinckerhoff (SRDP-funded), 2013.
9. *Lower Hunter Koala Study*. Ecological Australia (SRDP-funded), 2013.
10. *General Approach to Planning Connectivity from Local Scales to Regional (GAP CLoSR): combining multi-criteria analysis and connectivity science to enhance conservation outcomes at the regional scale in the Lower Hunter*. Lechner, A. and Lefroy, T. University of Tasmania (NERP-funded), 2014.



Hunter coastal and urban landscape

Assessing impacts to biodiversity and identifying biodiversity offsets

In recent years the NSW Government has introduced a variety of mechanisms to better assess the impact of land use and development on biodiversity. They enable planning authorities to apply assessment and protection methods that are relevant to the characteristics of the site being investigated. They are supported by a range of tools that assist with identifying appropriate assessment methodologies in the early stages of planning for growth.

- The Biodiversity Certification Scheme enables a planning authority to identify the offsets required for development of any land utilising the Biodiversity Certification Assessment Method. This method calculates biological and ecological credits that must be offset and converts these credits to hectares of land or financial contributions that must be provided by the developer. It is supported by the Biodiversity Certification feasibility process, which can assist planning authorities to determine whether this is an appropriate assessment method in the early stages of planning.
- The Biodiversity Banking and Offsets Scheme enables 'biodiversity credits' to be generated by landowners who commit to enhance and protect biodiversity values on their land through a BioBanking agreement. These credits can then be sold, generating funds for the management of the site. Credits can be used to counterbalance

(or offset) the impacts on biodiversity values that are likely to occur as a result of development. The credits can also be sold to those seeking to invest in conservation outcomes, including philanthropic organisations and government.

- Voluntary Planning Agreements enable developers to negotiate an acceptable solution for managing biodiversity offsets with planning authorities and the NSW Government, including the Office of Environment and Heritage and the Department of Primary Industries.
- The *NSW Biodiversity Offsets Policy for Major Projects*, released in 2014, employs the 'framework for biodiversity assessment method'. It allows biodiversity offsets to be secured in a number of ways, including, but not limited to:
 - dedicating lands for conservation, either within the development site or elsewhere;
 - carrying out environmental improvements in line with threatened species recovery plans; or
 - purchasing relevant BioBanking credits from a publicly registered supplier.

The NSW Government is currently investigating further opportunities to improve the legislative and policy framework for biodiversity conservation and native vegetation management through a reform process.

DIRECTION 3.2 Secure the health of water resources and coastal landscapes

The Hunter region encompasses important coastal lakes and lagoons, coastal wetlands, sensitive estuaries and the protected waters of Port Stephens and the Great Lakes. The environmental, social and economic values of these environments can be affected by natural or climatic processes, over-extraction of water, or contamination arising from activities that take place either on land (for example, housing or industry) or in the water (maritime transport, tourism or recreation).

Agreed environmental values and goals for the State's surface waters are set out in *NSW Water Quality Objectives*: They set out:

- the community's values and uses for our rivers, creeks, estuaries and lakes (i.e. healthy aquatic life, water suitable for recreational activities like swimming and boating, and drinking); and
- a range of water quality indicators to help assess whether the current condition of our waterways supports those values and uses.

Systems that are particularly susceptible to the impacts of land use and development are identified as sensitive estuaries. Protecting, maintaining or restoring the water quality and ecological condition of these sensitive estuaries requires a higher level of management intervention.

Other significant water bodies are protected under *State Environmental Planning Policy No. 14 – Coastal Wetlands* and the *Directory of Important Wetlands in Australia*. They are also mapped as having high environmental values in Figure 11.

As the region grows, coastal areas such as Lake Macquarie, Hunter River estuary, Port Stephens estuary, Wallis Lake estuary and the Hunter's adjacent marine waters will need to be protected.

ACTION 3.2.1 Protect the Hunter's water supplies to meet the needs of the environment and support the growth and development of towns and industries

Water sharing plans form the basis of water sharing and water allocation in the Hunter. They establish rules for sharing water between the environmental needs of the river or aquifer and water users, and include different types of water use such as town supply, rural domestic supply, stock watering, industry and irrigation.

Relevant water sharing plans for the Hunter region currently include:

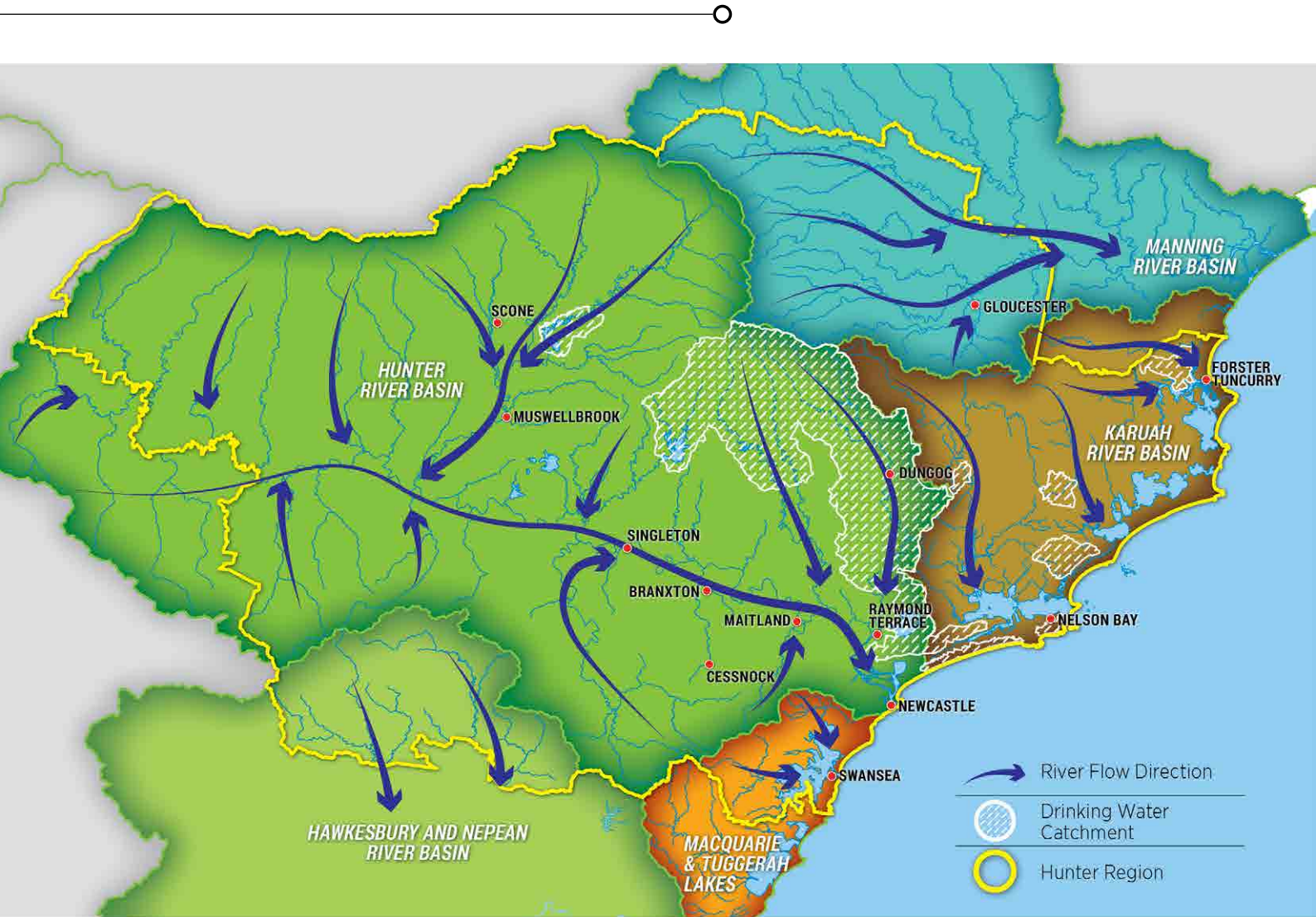
- *Hunter Unregulated and Alluvial Water Sources 2009*;
- *Hunter Regulated River Water Source 2003*;
- *Karuah River Water Source 2003*;
- *Wybong Creek Water Source 2003*;
- *Tomago Tomaree Stockton Groundwater Sources 2003*;
- *Paterson Regulated River Water Source 2007*; and
- *Lower North Coast Unregulated and Alluvial Water Sources 2009*.

Appropriately monitoring and managing growth, and the impact of existing land uses, is necessary to protect the quality and security of the region's water supplies. Planning to manage development is a priority within the Hunter's drinking water catchments (located to the north of Hunter City and in its northern hinterland), to balance the needs of growing towns and villages, and rural and resource industries in Western Hunter.

The NSW Government will work with councils to:

- manage growth in identified water supply districts through the application of appropriate planning controls;
- require that proposals for new or intensified uses or activities in identified water supply catchments demonstrate a neutral or beneficial impact on water quality; and

FIGURE 13: HUNTER'S RIVER CATCHMENTS



- support healthy, productive watercourses and waterfront land by promoting best practice, through the implementation of NSW Government policies and guidelines such as the *Water Guidelines for Controlled Activities*.

ACTION 3.2.2 Develop a risk-based decision-making framework to manage water quality and waterway health outcomes for all coastal lakes and estuaries in the region

To help support and manage potential water quality impacts, the Environment Protection Authority and the Office of Environment and Heritage have developed a risk-based decision-making framework to integrate the *NSW Water Quality Objectives* into the strategic planning process. This framework follows the risk-based methodology outlined in the *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (2000 ANZECC guidelines), and focuses on setting management targets that meet the community's expectations of estuary health. The Hunter Estuary Coastal Zone Management Plan (*Hunter Estuary Management Plan, 2008*) is already in place for the Hunter.

The NSW Government will:

- apply the risk-based decision-making framework as a model to manage coastal lakes and estuaries where there is planned development. This will inform the consideration of water quality outcomes in all strategic planning decisions for the region.

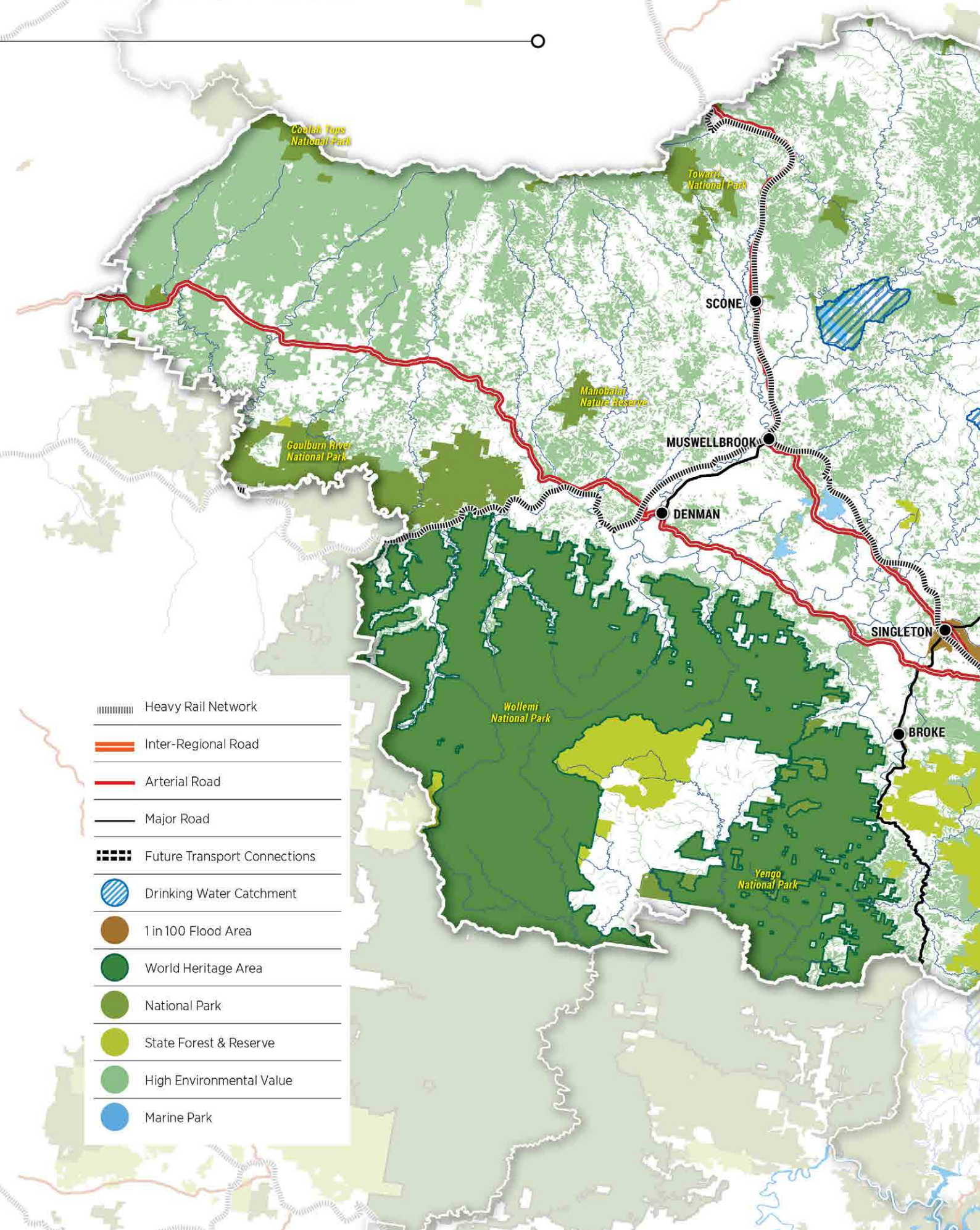
ACTION 3.2.3 Investigate opportunities to integrate the marine estate and adjacent coastal land uses

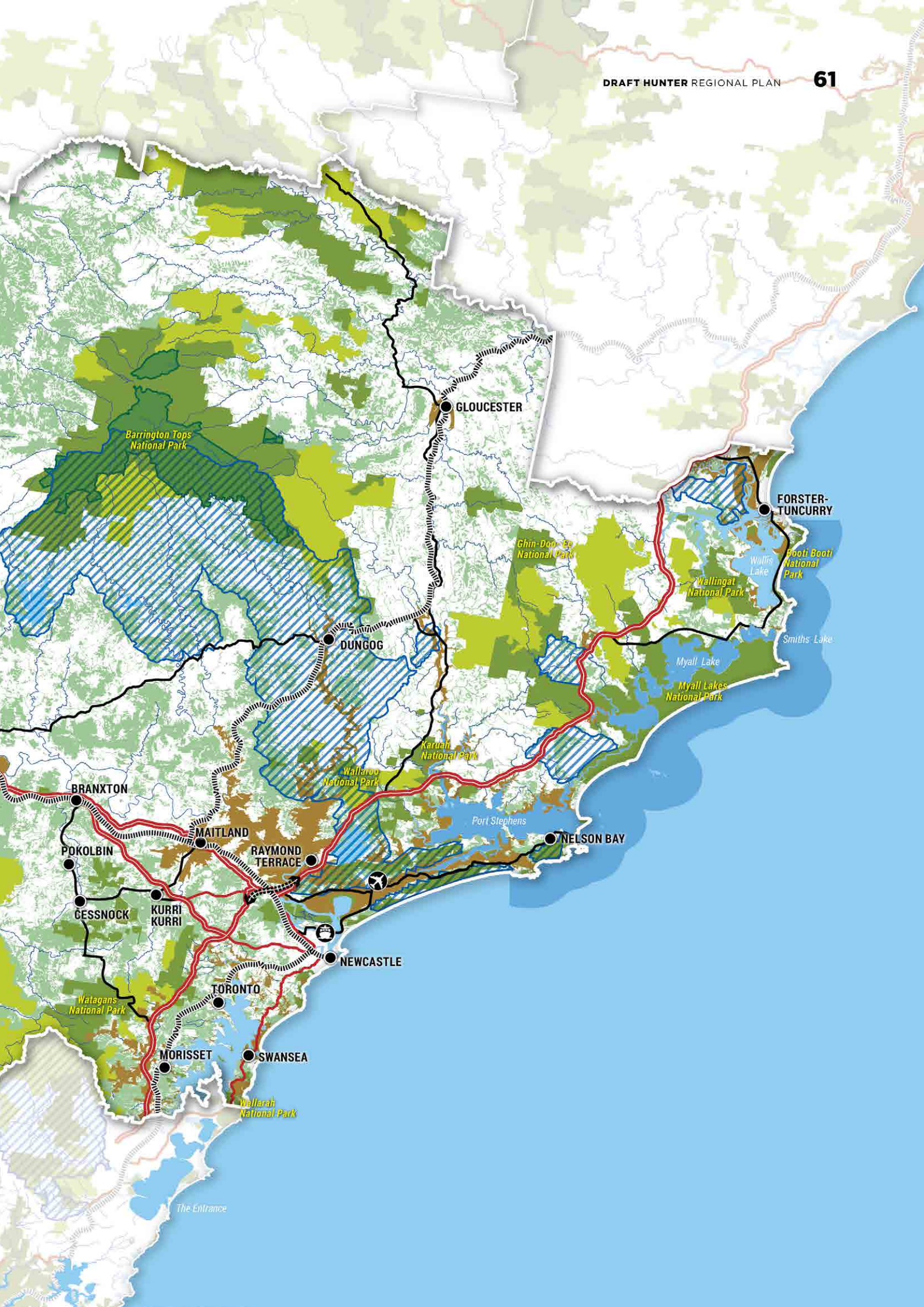
Activities on land have the potential to influence natural systems along the coast. To better manage these potential impacts, the NSW Government will improve the coordination of marine and coastal (land based) activities.

The NSW Government will:

- prepare a Marine Estate Management Strategy for NSW, in partnership with key stakeholders, to respond to the outcomes of threat and risk assessments for the Hawkesbury and Manning bioregions. This will consider the marine estate, including its social, economic and ecological values, and will determine the management priorities for the estate;
- prepare a Local Environmental Planning Practice Note to guide councils about how to apply natural, recreational and working waterway zones during the preparation of local environmental plans, while considering things like foreshore access and foreshore building lines; and
- develop regional boating plans to improve boating safety, boat storage, and waterway access on major waterways.

FIGURE 14: WATER CATCHMENTS







GOAL 4 – SUPPORT ROBUST REGIONAL COMMUNITIES

The Hunter is home to the largest and some of the most diverse regional communities in NSW. The settlement pattern is reflected in Figure 15. It shows that the region's population is predominantly urban, with most residents choosing to live in Hunter City and its surrounding hinterland, or in communities of 10,000 or more people focused around Morisset, Cessnock, Singleton, Muswellbrook, Forster-Tuncurry and Nelson Bay.

Around 4 per cent of the Hunter's population live in dispersed villages of less than 5,000 people,²¹ such as Denman, Dungog and Gloucester. They provide important centres for rural communities, which are responsible for managing the majority of the region's productive lands and natural areas.

The scale and distribution of employment, housing and demand for services in towns and villages around the Hunter will change in the coming decades. Towns and villages will respond to the impacts of broader structural changes in the regional economy, industry innovation and a growing preference for more urban lifestyles and services. Change will be greatest in towns and villages that are heavily influenced by employment demands generated by the mining industry, such as Singleton and Muswellbrook, as well as towns and villages which are increasingly attracting visitors and retirees, such as Forster-Tuncurry and Nelson Bay.

Careful planning and management will enable regional towns and villages to better anticipate and accommodate change. The draft Plan encourages robust regional communities. It supports towns and villages across the region to adapt to the changing needs of their residents and the industries that sustain them, while also maintaining an array of lifestyle choices and high standards of living.

Along with its companion document, the *Draft Plan for Growing Hunter City*, this draft Plan makes the timely and cost-effective delivery of new and more diverse forms of housing and infrastructure in the region a priority. The draft Plan supports collaborative approaches to planning for and managing land and infrastructure, particularly in towns and villages in mining areas and with rapidly ageing or highly seasonal populations.

DIRECTION 4.1 Focus housing and service growth towards Hunter City and the region's existing towns and villages

As the Hunter grows, Hunter City and the region's towns and villages will experience pressure to expand to provide the housing and services that the communities need. The Hunter already has a sufficient supply of land available in established and new release areas to meet anticipated demand.

Rural living is also a popular lifestyle choice in the Hunter as it allows residents to enjoy convenient connections to regional towns and villages, as well as Hunter City. The region also has a sufficient supply of land for rural living and any additional areas will have to sustain the region's agricultural and environmental values and minimise the costs of providing services.

The encroachment of housing into rural and natural areas can have cumulative impacts on rural and resource productivity, scenic amenity and biodiversity and environmental values. It also leads to more dispersed populations that present challenges to maintaining viable service networks, including public transport, health, education and emergency

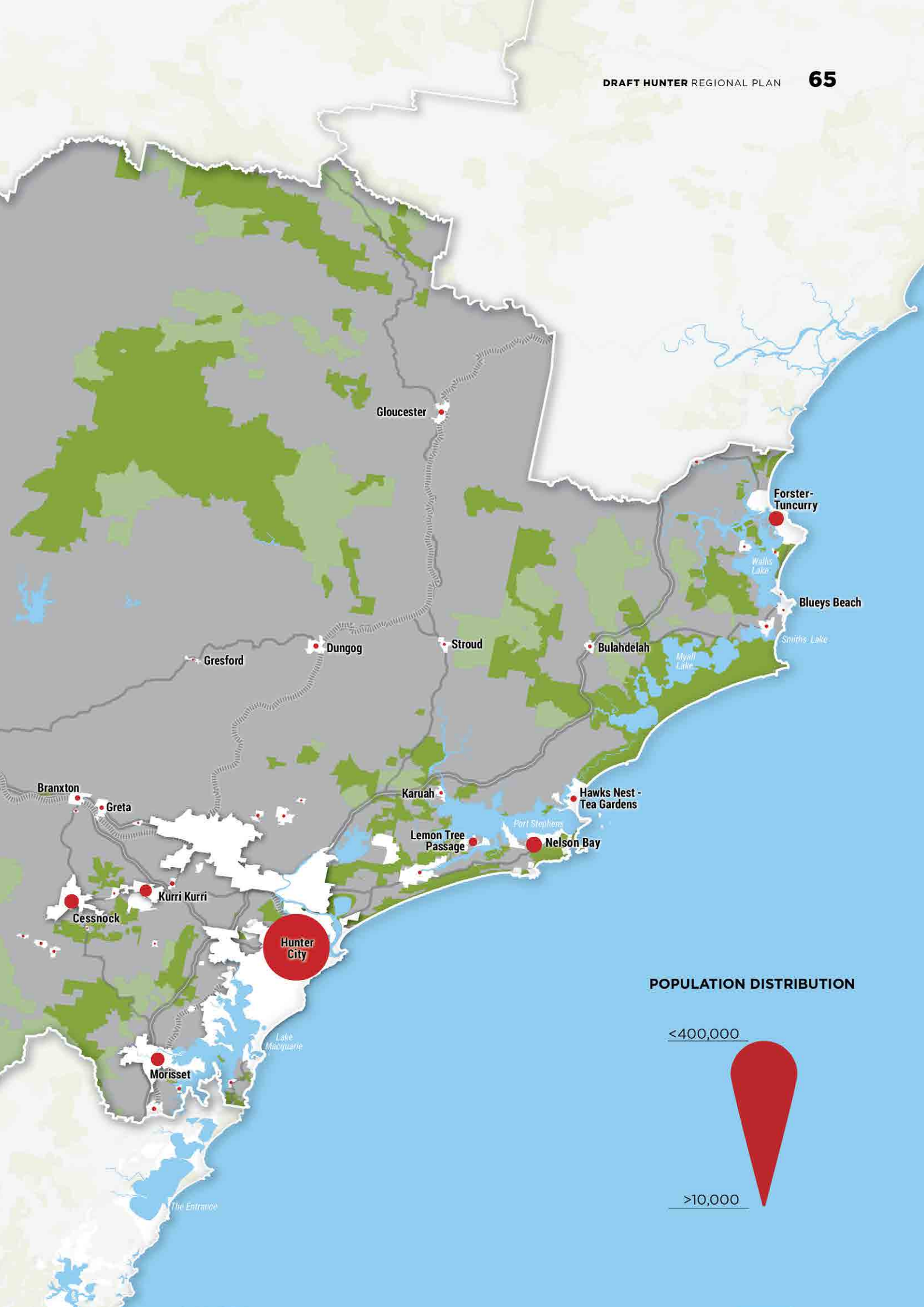
Top:
Maitland Housing

Middle:
Muswellbrook

Bottom:
Muswellbrook

FIGURE 15: POPULATION DISTRIBUTION







Housing development

response, as well as providing appropriate protection against the threat of natural hazards such as flooding and bushfire.

Focusing housing and service growth towards Hunter City, and the region's existing towns and villages, will make more efficient use of existing urban lands, infrastructure and service networks. Locating people close to existing centres will also help services to remain viable and accessible locally, particularly in rural areas.

Providing enough room for regional towns and villages to expand will be critical so they can accommodate growth in the long term. This is particularly relevant for towns and villages such as Singleton, Muswellbrook, Denman and Gloucester, and for towns in the Hunter City's hinterland, where current or proposed mining activities are located in close proximity to established communities.

The NSW Government, councils and communities identified future land requirements for regional towns and villages in the Upper Hunter as part of the process to prepare the *Upper Hunter Strategic Regional Land Use Plan* (2012). These areas are now protected from the encroachment of coal seam gas activities through NSW Government policies.

Goal 2 of this draft Plan identifies how the NSW Government will continue to work with councils, communities and industry to better manage the quality of the environment with the long term growth potential of regional towns and villages in mining areas. It does this through actions that manage the interface between mining and settlements and sequence new release areas with mining activities to support settlements to expand sustainably.

This draft Plan also identifies how the NSW Government will support more efficient use of existing urban land and infrastructure in regional towns and villages, to accommodate growth and provide a choice of housing and services for regional and rural communities. It is supported by the *Draft Plan for Growing Hunter City*, which provides a framework for delivering a range of new housing in the city and growing tertiary services in Hunter City's centres for the region's broader communities.

ACTION 4.1.1 Investigate demand for and options to accommodate long-term housing growth in regional towns and villages

The NSW Government will work with councils and industry to investigate demand for, and opportunities to accommodate new housing growth in regional towns and villages. It will investigate options to encourage a more diverse range of new housing types, particularly in release areas, to provide a choice of housing. This will assist in meeting local communities' needs, as discussed in Direction 4.2.

The NSW Government will:

- investigate opportunities to accommodate long term housing growth;
- work with council's to review planning controls in conjunction with development feasibility analysis, to develop controls that will encourage more medium density housing in appropriate locations; and
- monitor the demand for and delivery of housing

ACTION 4.1.2 Manage the supply of housing in rural areas to protect social, environmental and economic values

Outside Hunter City and the major towns of Cessnock, Singleton, Muswellbrook, Scone, Morisset, Nelson Bay and Forster-Tuncurry, the region's villages and communities have relatively small footprints within a rural environment. This allows the Hunter to offer rural lifestyles surrounded by pristine natural environments within two to four hours of Sydney and 20 to 30 minutes of Hunter City's major centres.

As the regional population grows, and improvements to national transport networks reduce travel times to and through the region, demand for housing in rural areas is expected to increase, including rural lifestyle lots and resort-style living. This will need to be appropriately managed to protect the social, environmental and economic values of the region.

The NSW Government will:

- work with councils to identify appropriate locations for new housing in rural areas, giving priority to:
 - growing established rural communities;
 - protecting the productive value of rural and resource lands;
 - managing high environmental values, including biodiversity and water quality;
 - managing service infrastructure and networks; and
 - delivering existing and committed rural and urban residential lands supplies.

DIRECTION 4.2

Provide housing and services that meet local communities' needs

In the coming decades, the needs of the Hunter community are expected to change and this will affect towns and villages around the region differently.

The predominant challenge for towns and villages is to improve planning for housing and services, to meet the changing needs of communities that:

- are rapidly ageing;
- have highly seasonal populations; or
- rely predominantly on mining or related industries for employment.

ACTION 4.2.1 Investigate options to integrate the delivery of housing with infrastructure

By 2036, the Hunter is expected to be home to around 69,500 more people over the age of 65 years.²² While the majority of these people are expected to live in Hunter City, this is expected to have a significant influence on the demands for housing and services such as health and aged care support, emergency response and public transport, in towns and villages around the region.

Communities in Port Stephens, Great Lakes, Dungog and Gloucester, which are all popular destinations for retirees, are expected to age more rapidly than other parts of the Hunter (see Figure 16).

The NSW Government is already supporting rapidly ageing communities by providing more integrated health services close to where people live, including through the expansion of services provided in local health centres as well as the delivery of community and home-based services.

The *Hunter Regional Transport Plan* supports the ability of people to access regional health facilities, including via public transport from rural areas to nearby towns and villages, and onward to Hunter City or other centres such as Taree and the Central Coast. It includes actions to:

- improve passenger rail services;
- integrate NSW TrainLink coach services with regional bus services;
- improve the integration of community transport services into the passenger transport system; and
- develop a sustainable model for community transport service provision.

Improving telecommunications networks in regional areas will also support ageing communities by reducing the need for, and distance and frequency of travel required to access health services.

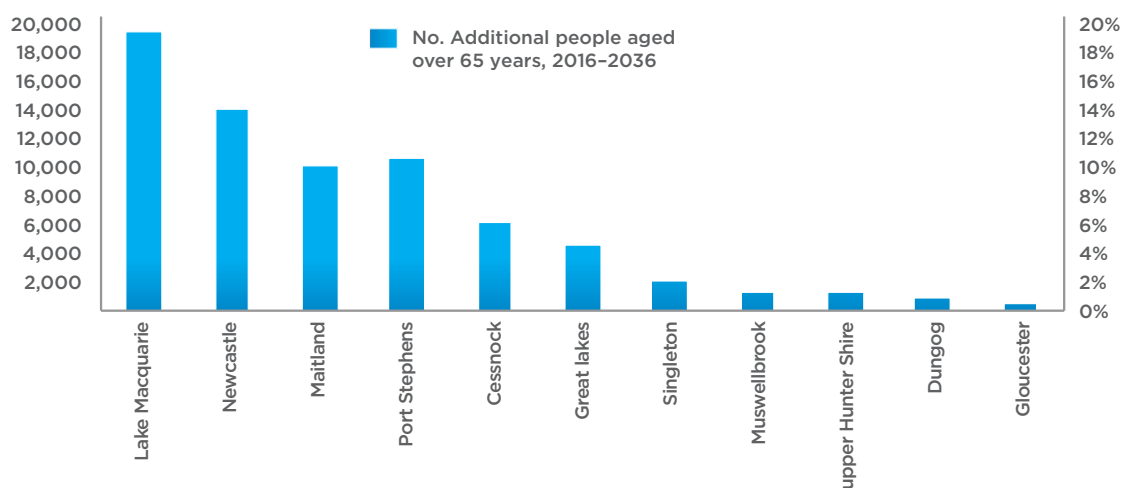
The NSW Government will assist by:

- working with telecommunications providers to improve existing network connections for rural communities; and
- investigating opportunities for telecommunications initiatives to be piloted in the Hunter's rural communities, specifically those that relate to aged health care and education, such as virtual classrooms and telehealth programs.



Left: Singleton farmers' markets
Centre: Singleton livestock sale yards
Right: Maitland housing

FIGURE 16: AGEING REGIONAL POPULATION, BY LOCAL GOVERNMENT AREA



ACTION 4.2.2 Investigate options to establish monitoring and strategic frameworks to better respond to the changing needs of communities with seasonal populations in regional towns and villages

The natural appeal and proximity of the Hunter's coastal, lakeside, and rural towns and villages to Sydney, makes these popular locations for weekend and seasonal visitors. This influences local housing markets, driving demand for short term accommodation and second homes in these areas.

In 2011, census data showed high rates of vacant dwellings in the Hunter, including:

- 5,670 unoccupied dwellings (27 per cent of total dwellings) in Great Lakes Local Government Area;

- 5,300 unoccupied dwellings (17 per cent of total dwellings) in Port Stephens Local Government Area;
- 450 unoccupied dwellings (18 per cent of total dwellings) in Gloucester Local Government Area; and
- 580 unoccupied dwellings (15 per cent of total dwellings) in Dungog Local Government Area.

Typically, these are also the areas expected to experience rapidly ageing populations. Further investigation is required to better understand the relationship between these trends and anticipate what influence this has on housing and service demands.



The NSW Government will:

- work with councils to develop monitoring and strategic planning frameworks to inform planning for housing and services in these locations.

ACTION 4.2.3 Deliver housing to meet the varied needs of communities

Growth in the number of single or couple-only households is significant and is set to continue, contributing to strong growth in the demand for smaller dwellings.

There are some sectors of the Hunter community that require particular types of housing, for example, students, older people, short-term visitors to the region, visitors accessing health services and low income households.

Many people in the Hunter with low incomes find it difficult to access housing in the private rental market without compromising their ability to pay for other essentials. Social and affordable housing is important in meeting the needs of people on low incomes. Each local community will have different needs for affordable housing and local solutions will need to be developed. Increasing the overall supply of housing can also help reduce upward pressure on the cost of housing.

Preparing a local housing strategy will assist councils to identify their communities' housing needs and strategies to meet those needs. A housing strategy may form part of a council's Community Strategic Plan.

The NSW Government will require councils to prepare a local housing strategy that:

- identifies the housing needs of the community, the range of housing types required to support the future population, and related infrastructure needs; and
- identifies affordable housing needs and strategies for delivery.

ACTION 4.2.4 Develop local strategies to create flexible employment, housing and service delivery that responds to changing markets

Growth and change in the Hunter's towns and villages is influenced by changing markets, including at the global or national level. This is particularly relevant where a community predominantly relies on one industrial sector for employment.

Employment demands generated by the mining sector, in particular, can be major drivers of population growth and change in local areas around the region, and are heavily influenced by external economic markets and policies. Acute and, at times, unforeseen fluctuations can directly affect local demand for employment, housing and services, including health and education.

Monitoring the influence of employment demands in the resources sector on housing and service markets, particularly in Muswellbrook and Singleton, will improve planning for communities in the region's established and emerging mining areas.

The NSW Government will:

- work with councils and industry to develop local strategies to support diversification of local employment opportunities in regional towns and villages.



Local children at play

ACTION 4.2.5 Support retail growth in centres to promote vibrant, liveable communities

Access to shopping is important for communities. Shopping is now often combined with other social and recreational activities and together they contribute to vibrant, liveable communities.

Planning for retail space needs to recognise the current supply of space, and the demand for new space to meet community needs into the future.

Retail is also a significant employer and generator of demand for travel.

Planning for local centres will consider how they can accommodate more retail growth. In areas where there are no opportunities for existing centres to grow, local planning will need to consider where new retail space can be developed. Planning of local centres, including new centres, should prioritise the creation of mix-used hubs, with high quality public areas, walking connections, and good transport connections.

The NSW Government will:

- work with councils to develop a new supply and demand database to guide planning for retail space, which takes into account the changing demand for different types of retail, including supermarkets and large-format retail stores.

ACTION 4.2.6 Plan for schools to meet growing and changing needs

School needs in the region are constantly changing. By 2036, there are expected to be around 5,600 more primary school students and 4,100 more high school students in public schools in the Hunter region. The number of students attending private schools in the region is also expected to increase. Schools in existing centres will experience the greatest growth in enrolments.

At present, some schools have reached capacity and some are underused. There are opportunities to improve the provision and distribution of school places across the region.

To meet the growing and changing needs of the region's communities, the NSW Government will:

- develop a revised service model and a new approach to planning school assets in the region.

ACTION 4.2.7 Plan for the expansion of health facilities to service the region

Population growth, the Hunter's ageing population, and higher than average rates of smoking and obesity²³ will place increased pressure on the health network in the future. Delivering healthier built environments will help to deliver better health outcomes.

Service demands across the health network will also be influenced by:

- the delivery and location of urban growth, particularly in Hunter City's new release areas;
- changing travel patterns arising from recent and proposed changes to the Hunter's transport networks including the recent completion of the Hunter Expressway, future completion of the Newcastle Inner City Bypass and the planned M1 Pacific Motorway extension to Raymond Terrace; and
- new service delivery models including remote delivery.

The Hunter region is supported by a network of health services including John Hunter Hospital, John Hunter Children's Hospital, Calvary Mater Newcastle and district and community hospitals and health services located at Maitland, Kurri Kurri, Belmont, Cessnock, Singleton, Tomaree and Dungog.

To meet the region's future health needs, the NSW Government will:

- support planning and delivery of a new hospital at Metford to provide new and expanded services close to rapidly growing communities; and
- investigate opportunities to improve access, including by public transport, to all major hospitals.

ACTION 4.2.8 Coordinate the planning and delivery of cemeteries and crematoria

With a growing and ageing population, providing adequate burial space is an important issue for governments and communities. Land needs to be identified and protected so that there is sufficient burial space today and into the future.

The NSW Government will:

- support councils and infrastructure providers to identify appropriate sites and capacity for cemeteries and crematoria.

DIRECTION 4.3 Build the region's resilience to natural hazards

The majority of the Hunter's population live near the coast, bushland or near the Hunter River. The threat of natural hazards, including flooding, tidal surges, coastal erosion and bushfires to community safety, homes and livelihoods is an important consideration for planning in Hunter City, and towns and villages throughout the region.

The Hunter River and its major tributaries, the Paterson and Williams Rivers, are heavily flood-prone.²⁴ Over 200 flood events have occurred on the Hunter River since European settlement. Flooding is less frequent for the Hunter River's tributaries, with the Paterson River recording 26 major events since 1929 and the Williams River recording five events since 1950.²⁵ This is a significant factor when locating and managing regional growth within the Hunter and in delivering local flood mitigation measures through, for example, the Hunter Valley Flood Mitigation Scheme.

The Hunter's coastal communities are also vulnerable to the threat of coastal recession and, over the longer term, sea level rise. Bushland areas, particularly in Newcastle, Lake Macquarie and Port Stephens areas, are also fire-prone.²⁶

Natural hazards also affect the Hunter's rural and resource industries, many of which rely on hazard-prone lands. The Hunter Valley floodplains accommodate coal mining

activities, provide some of the region's most fertile soils and are host to inter-regional freight connections to the Port of Newcastle, including the Hunter Valley Coal Chain. Coastal estuaries are particularly important for oyster production.

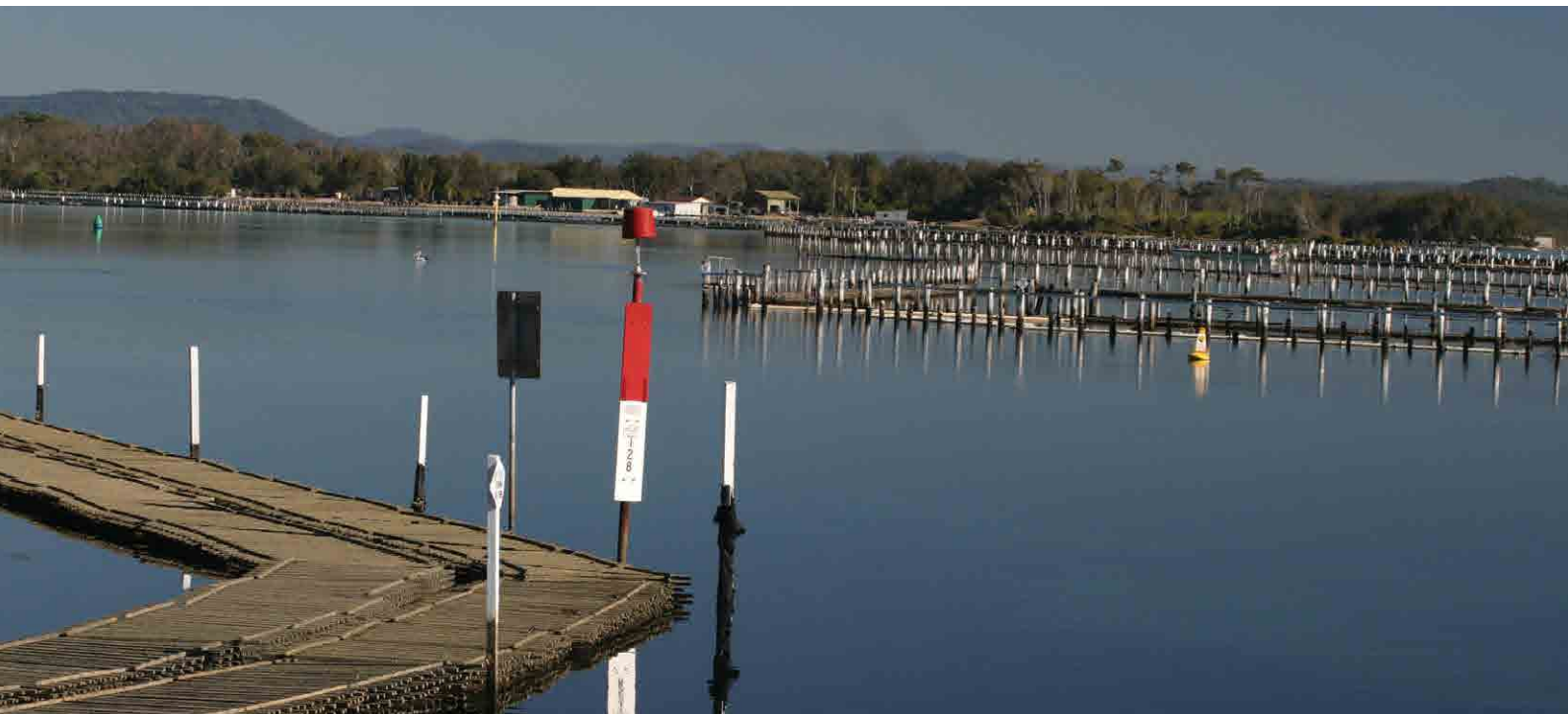
The economic, social and environmental consequences of natural hazards – through the loss of life, property and productivity – have been significant within the Hunter, with benchmark events including the:

- 1955 Hunter Valley floods – where enough water to fill Sydney Harbour four times over claimed 25 lives, affected 2,180 homes and cost \$1.3 billion in today's dollars;²⁷
- 1989 Newcastle earthquake – which claimed 13 lives, injured 160 people and cost \$4.5 billion;²⁸
- 2007 'Pasha Bulker' storms – which claimed 10 lives, left 105,000 homes without power and cost an estimated \$1.35 billion;²⁹ and
- 2015 Hunter 'super storm' – which claimed four lives and caused an estimated \$1.55 billion in insurance claims and widespread disruptions to power supply.

As climate trends continue to change, many of these hazards are expected to occur more frequently and in some cases, with greater intensity in the future.

Some areas in the Hunter (defined by the Mine Subsidence Board) are affected by mine subsidence arising from the mining history of the region. These are:

- in Hunter City:
 - East Maitland;
 - Killingworth/Wallsend;
 - Lake Macquarie and Extension; and
 - Newcastle;
- in the surrounding hinterland:
 - West Lake;
 - Swansea North Entrance and Extension;
 - Mandalong; and
 - Tomalpin
- in Western Hunter:
 - Muswellbrook;
 - Patrick Plains; and
 - Mitchells Flat



Land use planning can build community resilience to hazards by supporting changes to the physical environment and infrastructure to avoid or manage threats. Councils will remain predominantly responsible for identifying and managing these threats. The NSW Government will support councils to develop evidence and provide strategic advice to inform decision-making.

The draft Plan establishes a framework to enable councils and other stakeholders to consider the influence of natural hazards earlier in the planning process and identify appropriate mitigation and response strategies. This will:

- protect the natural environment and communities by prioritising growth in locations where the threat of natural hazards can be appropriately and feasibly managed; and
 - support existing and planned communities by investing in infrastructure to reduce the threat of harm to people and property and provide safe evacuation and appropriate response during a hazard event.
- consolidating information and making this publicly available through the Department of Planning and Environment's Planning Portal and the Office of Environment and Heritage's website, *Adapt NSW*;
 - supporting joint council investigations into managing the threat of natural hazards in the region; and
 - working with councils to develop local strategies and planning controls for urban and rural lands and related infrastructure.

ACTION 4.3.2 Integrate risk-management frameworks for coastal, floodplain and other hazards into local strategies and planning controls, prioritising areas identified to support regional growth

The threat of natural hazards does not always preclude development, including urban development, particularly where these threats can be managed through the sensitive location and design of development. The delivery of mitigating infrastructure can also help to defend whole communities from flood, fire or coastal erosion and facilitate safe evacuation during hazard events.

The NSW Government is already responding to community concerns about coastal hazards through a coastal reform process. These changes will deliver longer term improvements in the way councils and landowners manage coastal erosion risks.

Councils are responsible for preparing and implementing floodplain management and emergency response plans. The NSW Government provides strategic advice on these issues and has already provided support to councils and landowners to plan, manage and respond to mine subsidence around the region. This includes investing in strategic mitigation measures to address risk and supporting the revitalisation of Newcastle City Centre.

The NSW Government will:

- work with councils to:
 - review and update local floodplain and coastal risk management plans; and

ACTION 4.3.1 Investigate opportunities to improve the quality and consistency of hazard data within the region

Recent research to identify priorities that will build community resilience to hazards affecting Hunter City and its surrounding hinterland³⁰ revealed inconsistencies in local approaches, particularly where standard or statewide methodologies are not appropriate. This is particularly relevant for flooding and sea level rise, which are the hazards that present some of the greatest threats to the Hunter's communities and economy.

The uncertainty in projections of future sea level rise means that there is no single projection that councils can use. This allows councils to consider local conditions when determining local future hazards.

The NSW Government will:

- continue to support councils to consider the long term implications of climate change in decision-making; and,
- where possible, take a more consistent and coordinated approach to plan and manage hazards by:

Top:
Marina, Wickham

Middle:
Wallis Lake oyster farm

Bottom:
Fishing at Forster, Great Lakes

Coastal Reform Process

The NSW Government is responding to community concerns about coastal hazards through a coastal reform process. The reforms include:

NEW COASTAL MANAGEMENT ACT

The NSW Government aims to replace the *Coastal Protection Act 1979* with a new act that is less complex, and a better fit with land use planning and local government legislation. The new act will establish requirements for State, regional and local land use planning instruments. It will require councils to undertake coastal zone management planning within the local government Integrated Planning and Reporting Framework.

IMPROVING SUPPORT TO COUNCILS

The second element of the coastal reform package is focused on improving the way the NSW Government supports council decision-making. The NSW Government will work in partnership with councils to co-design a new coastal management manual. The manual will provide a single, consolidated source of tools for coastal management, to meet local circumstances.

SUSTAINABLE FUNDING AND FINANCING ARRANGEMENTS

The third element of the reform package identifies more sustainable funding and financing arrangements for coastal management strategies. They will be based on a set of cost-sharing principles to fairly and transparently identify who benefits from proposed coastal management actions and who should contribute to the costs. To support the new approach, the Office of Environment and Heritage will review various funding and financing mechanisms for use by councils.

NSW COASTAL MANAGEMENT REFORMS

The NSW Government is currently preparing a package of reforms that will allow for a more integrated approach to coastal management across NSW. This package includes a draft Coastal Management Bill, an Explanation of Intended Effect for the proposed new Coastal Management State Environmental Planning Policy Bill (SEPP), and key elements of a draft coastal management manual.

left: Cultural art mural, Muswellbrook
Right: Aerial photo of Smiths Lake, Great Lakes



- incorporate the best available information on physical and infrastructure resilience to hazards when planning for new growth opportunities.
- prioritise investigations into how hazard mitigation infrastructure may be improved.
- develop strategic, incident-based and emergency management actions such as bushfire, flood and coastal response plans; and
- integrate planning for emergency response infrastructure to support the above.

DIRECTION 4.4 Strengthen the economic and cultural 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 4.4.1 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, but 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, Crown Lands and the Department of Planning and Environment, will work with the Local Aboriginal 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

options for the potential commercial use of the land, for example, for Aboriginal housing and employment opportunities. This 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 Forster, Karuah, Worimi, Mindaribba, Awabakal, Bahtabah, Koombahtoo and Wanaruah Local Aboriginal Land Councils to identify priority sites so that each Local Aboriginal Land Council can create a pipeline of potential projects.

ACTION 4.4.2 Identify and protect Aboriginal cultural heritage values

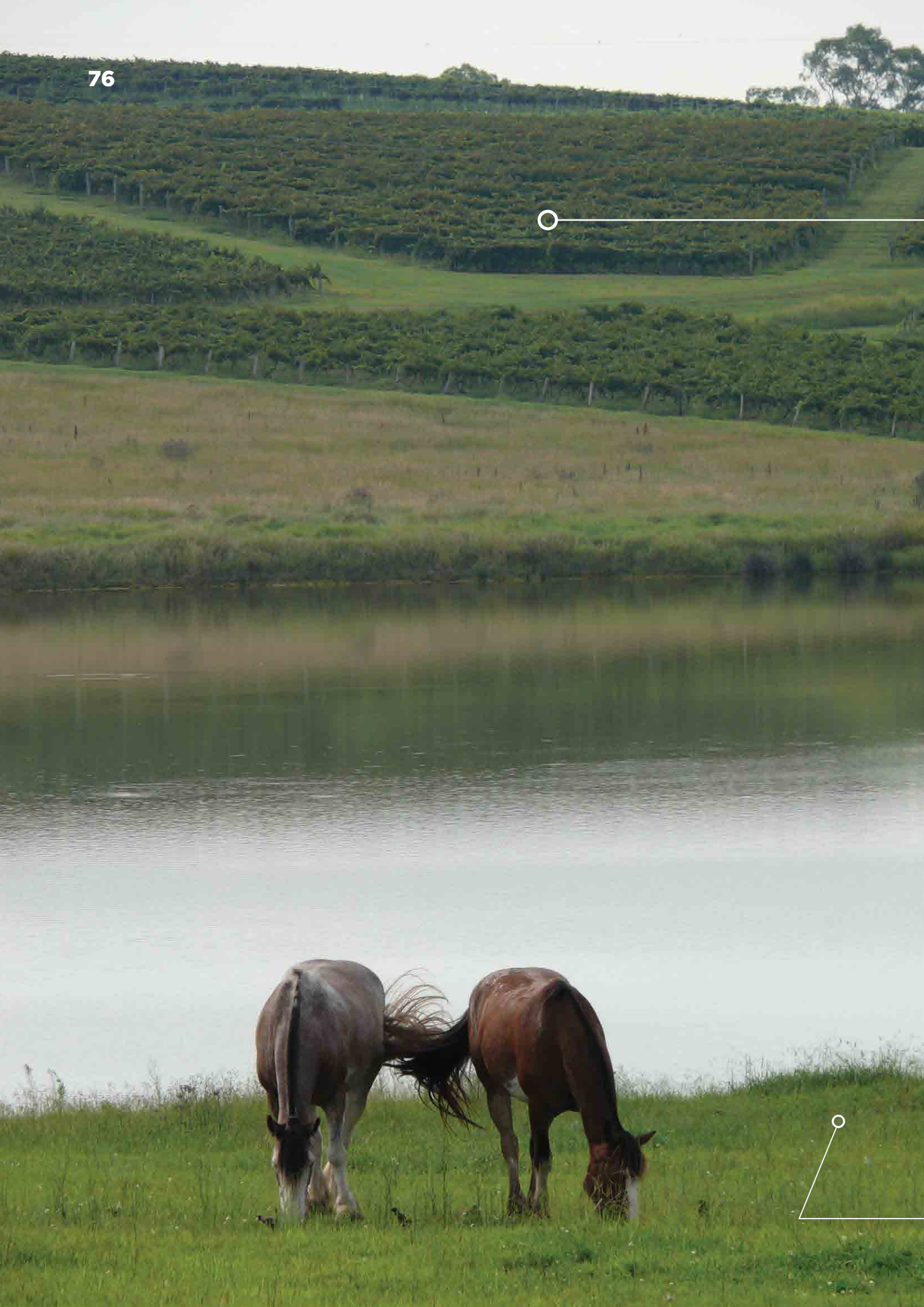
In the coming decades, there will be increased demands for land to be used and developed, to support the growth of Hunter City and other regional towns and villages, as well as the ongoing success of the region's rural and resource industries. This change has the potential to affect recognised and yet to be identified sites and places that are important to Aboriginal cultural heritage, particularly in natural areas across the Hunter.

The NSW Government is currently improving the way that Aboriginal cultural heritage is identified and protected through a reform process. This aims to respect Aboriginal communities' rights to determine how their culture is revealed, protected and managed in areas where change is expected.

Strategic land use planning will be supported by predictive models, such as the Aboriginal sites decision support tool.³¹ This will help to identify areas that have a greater capacity to contain Aboriginal cultural heritage values, based on natural features, historic evidence and previous studies, earlier in the planning process. Aboriginal communities will continue to be involved in investigations for specific projects, to protect and manage cultural heritage values as part of the planning and assessment process.

The NSW Government will:

- support the preparation of appropriate heritage studies to inform the development of strategic plans, including regional Aboriginal cultural heritage studies.



THE HUNTER'S LANDSCAPE SUBREGIONS

The NSW Government will work with each council to deliver the directions and actions set out in this plan. Work will be targeted across four landscape subregions:

- Hunter City;
- Western Hunter;
- Northern Tops; and
- North East Coast.

Priorities for each landscape subregion in the Hunter are set out in the following sections. These will guide further investigations and implementation of the final Hunter Regional Plan.

The priorities build on the directions and actions in this draft Plan to achieve outcomes on the ground. Planning for landscape subregions will encourage infrastructure delivery that targets the needs of its communities. It will also encourage efficiencies in the allocation of resources and investment, to improve the liveability and sustainability of the region.

Planning for the landscape subregion identifies locations for growth and how they will be balanced with improvements to the environment and open space assets and how the big picture planning directions in this draft Plan will be implemented through planning controls. It will also allow planning across local government boundaries where coordination between State and local government is required.

Hunter City

At the interface between Hunter City and its surrounding landscape subregions is an area which is influenced by its proximity to activities in Hunter City (and Cessnock) – the hinterland. While the

hinterland is not a landscape subregion itself, it requires specific consideration.

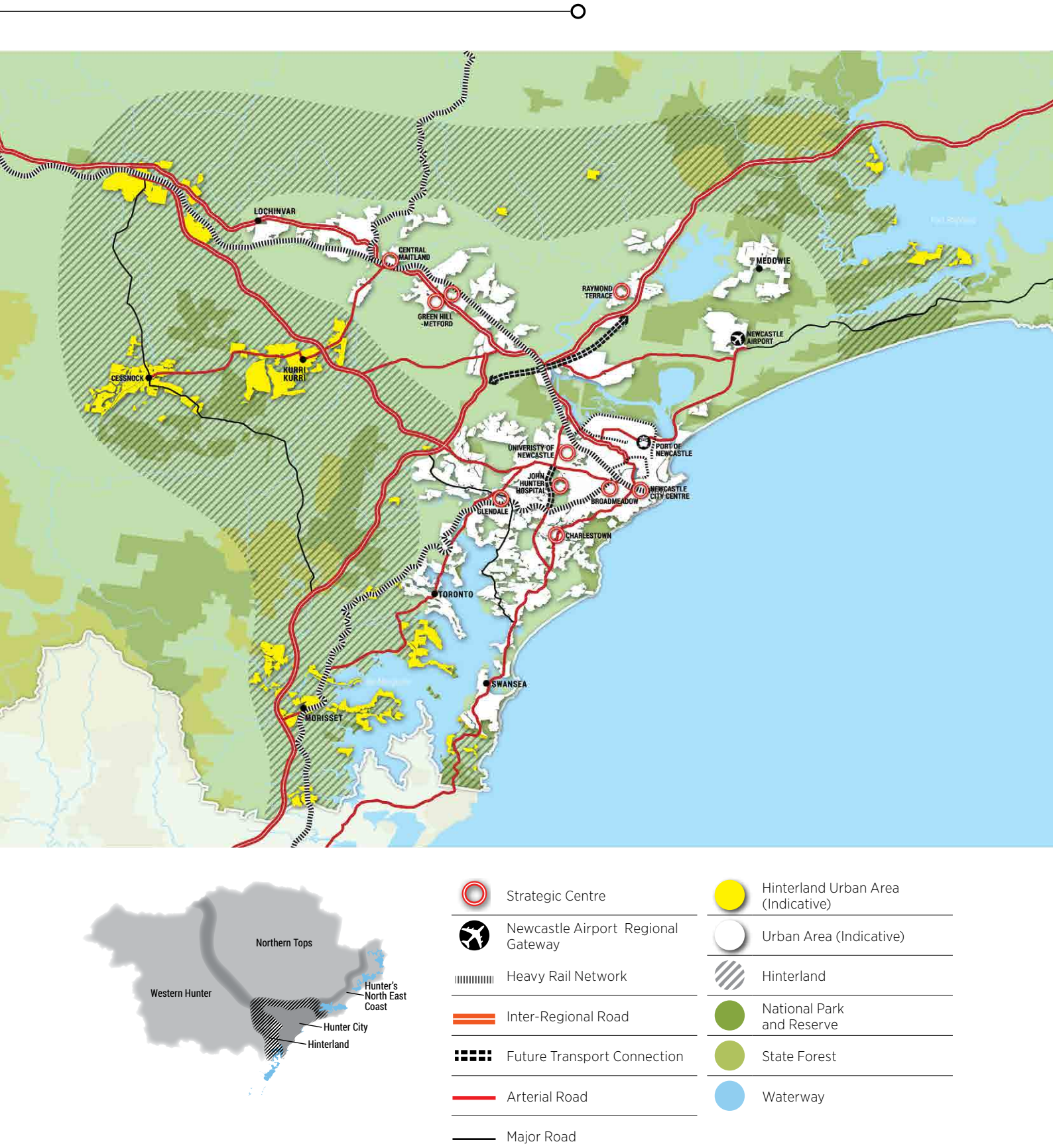
The priorities for the NSW Government in Hunter City are provided in the companion document to this draft Plan, a *Draft Plan for Growing Hunter City*.

The hinterland encompasses the towns, villages and rural areas within 30km – or approximately 20-30 minutes by road – of the metropolitan area and Cessnock. The hinterland shares many of the qualities of surrounding landscape subregions, with its valuable natural resources, and rural and coastal amenity, however is distinctive in that it has many smaller towns and villages, more densely spaced than in other the Hunter's other landscape subregions. While the character of towns and villages in the hinterland is quite different from the metropolitan areas of Hunter City or the regional towns such as Cessnock and Nelson Bay, they are subject to outward growth pressure as people and businesses take advantage of the proximity this area offers to these urban areas, without some of the costs. This pressure needs to be carefully managed.

The hinterland sustains a diverse range of productive resource industries including mining, extensive agriculture (grain, sheep and beef), intensive agriculture (viticulture, poultry and horticulture), commercial fishing and aquaculture. The growth and development of these industries has led to demand for value-adding activities in manufacturing, tourism, research and training.

Industries and communities located in the hinterland have historically benefitted from convenient connections to Cessnock, Hunter City, Sydney and regional NSW. Towns and villages established next to coal mines and along historic trade routes, such as Morisset, Kurri Kurri, Greta and Branxton, have been sustained for generations by

FIGURE 17: HUNTER CITY’S HINTERLAND



the employment and service demands of predominantly resource-based industries.

As Hunter City and Cessnock grow, the hinterland will become an increasingly popular lifestyle destination, with towns, villages and surrounding rural areas subject to greater demand for new housing, including visitor accommodation, and associated infrastructure. Balancing growth in rural and resource areas will continue to be a challenge.

The draft Plan supports the hinterland remaining a productive and predominantly rural landscape for the long term benefit of the community. This will allow the hinterland to sustain its rural production values and the protection of floodplains and wetlands. The draft Plan also supports the growth of existing communities within the hinterland where it supports increased use of existing local facilities.

The types of issues that will need to be managed in the hinterland around Hunter City and Cessnock are also relevant around the towns of Singleton, Muswellbrook and Forster-Tuncurry, and planning in these areas will need to consider these issues from time to time.

The following priorities will be considered and addressed in the Hunter City landscape subregion:

Grow the Hunter's regional economy:

- identify and protect the productive mineral, energy and construction material;
- identify appropriate buffers to productive mineral and energy resources;
- protect productive agricultural and aquaculture resources by planning for the infrastructure and land use needs of these activities;
- protect the Lower Hunter's drinking water catchment by requiring new development, particularly within the Tomaree and Tomago sandbeds to demonstrate a neutral or beneficial effect on water quality;
- investigate options to accommodate a more diverse range of economic uses in natural areas to support tourism and conservation; and
- identify infrastructure required to support the tourism industry, including connections to the tourism gateways and attractions.

Protect and connect natural areas:

- apply a risk-based decision-making framework to manage coastal land, lakes and estuaries where there is development.

Support robust regional communities:

- investigate opportunities to accommodate long term housing growth;
- develop strategies to deliver the housing needs of the hinterland communities;
- support councils to consider long term implications of climate change;
- work with councils to review and update floodplain and coastal risk management plans;
- establish appropriate decision-making processes to prevent new housing development from encroaching into productive rural land, resource land or natural areas. This will include protecting the region's water supply from pollution; and
- develop a sustainable model for community transport.

Western Hunter

The Western Hunter subregion is an economic powerhouse. It contains diverse natural resources including coal, gas and mineral deposits, fertile agricultural lands and well-established rural industries. These resources are set within a striking rural landscape with some of the most unique natural features in NSW.

The subregion includes:

- some of Australia's most mature coal mining and energy industries, supported by well-established and adaptable export and energy supply infrastructure;
- opportunities for alternative energy supply industries, including emerging opportunities in renewable energy industries and longer term potential for developing gas industries;
- some of Australia's most mature viticulture and equine industries, as well as one of the most fertile agricultural areas in NSW on the Merriwa Plateau; and



Viticulture and wine production within the Western Hunter

- the Great Dividing Range and Great Escarpment, with some of the nation's most unique natural heritage forming part of a national habitat corridor and coinciding with natural areas of value to Aboriginal culture.

Rural and resource industries in the subregion support growth in specialist services across the Hunter, including the manufacturing and knowledge sector industries driving regional employment growth.

The success of these industries is supported by:

- the area's natural environmental qualities and resources, including its moderate climate, fertile soils, deposits of coal and gas and supply of water resources;
- convenient connections to markets via long-standing inter-regional trade routes – the New England Highway, Golden Highway and heavy rail, including Hunter Valley Coal Chain – which brings supplies from regional NSW and within the Hunter to Newcastle for export; and
- value-added activities in the region such as energy generation, manufacturing, research, training and tourism, including links to the University of Newcastle (Newcastle Institute for Energy Research), CSIRO.

The subregion's settlements are mostly situated along the New England Highway and Golden Highway, and are heavily influenced by the changing employment demands of rural and resource industries. Population

growth in recent decades has reflected the progression of mining up the Hunter Valley, and is shown in the table below.

The Western Hunter's natural and rural areas are also rich in biodiversity. While many of the unique ecological communities remain intact in northern parts of the subregion, there are opportunities for improved planning and management of rural and resource industries to support conservation and rehabilitation initiatives. This will strengthen the broader national habitat corridor linking World Heritage values in the Greater Blue Mountains to those in the Liverpool Ranges (across the Merriwa Plateau) and Barrington Tops (across the Upper Hunter Valley). This will also support the preservation of natural areas important to Aboriginal cultural heritage, enabling Aboriginal communities to retain close connections to their land.

This draft Plan aims for the Western Hunter to remain globally and nationally competitive, attracting investment to support the development and diversification of its rural and resource industries. Larger towns will continue to provide services for industries and surrounding communities. The sustainable management of agricultural production and resources extraction is a priority.

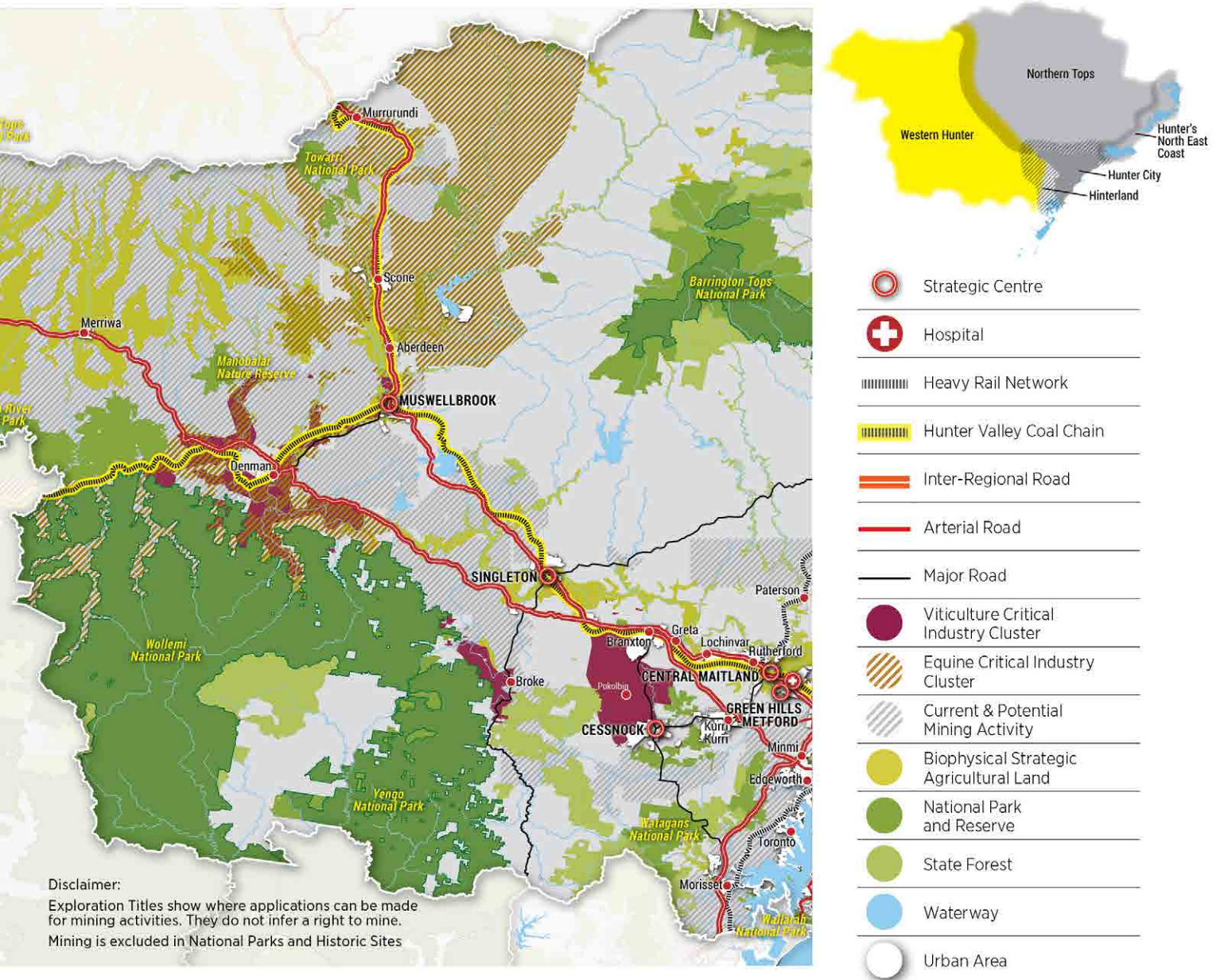
The following priorities will be considered and addressed for the Western Hunter:

Grow the Hunter's regional economy:

- balance competing land use requirements for rural and resource production;
- manage and monitor the direct and cumulative impacts of rural and natural resource industries;
- protect rural and resource production (including mining, viticulture and equine production) from the impacts of new urban activities; and
- work with industry to develop and maintain sector-specific considerations for the viticulture and equine industries to guide considerations for both strategic land use planning and approvals processes.

Settlement	Population (2011) ³²
Cessnock	20,000
Singleton	13,900
Muswellbrook	11,000
Scone	5,100
Aberdeen	1,800
Denman	1,400
Merriwa	975
Murrurundi	845

FIGURE 18: WESTERN HUNTER

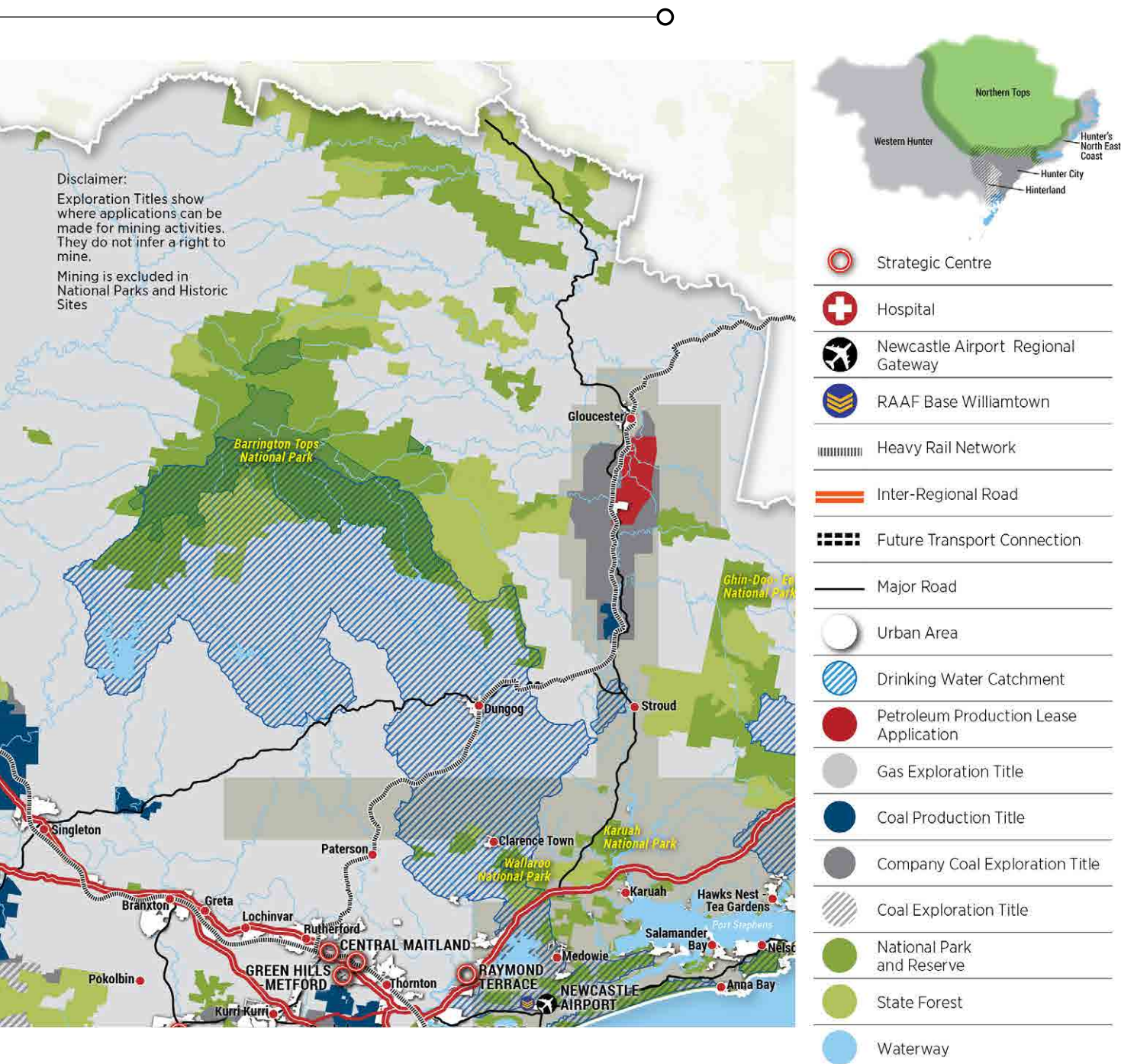
**Protect and connect natural areas:**

- protect and enhance areas of high environmental value;
- manage water use to sustain natural systems and accommodate long term diverse water users;
- accommodate the long term demands of a diverse range of water users, including town water supplies and agricultural and mining industries; and
- monitor and investigate risks from natural hazards, including flooding and bushfire, to inform future planning and management.

Support robust regional communities:

- balance competing land uses to allow the growth of regional communities;
- monitor and manage the impacts of rapidly changing employment demands (particularly associated with mining) on local housing and service demands; and
- locate further urban growth and large-scale short term accommodation within and interconnected with established towns and villages.

FIGURE 19: NORTHERN TOPS LANDSCAPE



Northern Tops

The Northern Tops will continue to be a prized part of the region, characterised by its World Heritage wilderness areas, pristine waterways and rich agricultural lands. While the area is unlikely to experience significant growth, its capacity to use alternative means of service provision, and its natural assets, to generate economic growth and diversity, will see its communities succeed well into the future.

As part of the Great Dividing Range, the Barrington Plateau gives rise to a striking topography, cut by river valleys, therein defining the Hunter's Northern Tops landscape. This topography has shaped the way that people move through and settle within this landscape. Towns and villages have always been relatively small including:

- Gloucester – the main administrative centre, is served by heavy rail and situated along Bucketts Way/Thunderbolts Way. This local freight route traditionally supported timber, dairy and coal industries and is increasingly accommodating tourist traffic to Barrington Tops National Park;
- Clarence Town – the third oldest town declared in the region (after Newcastle and Maitland) grew around its harbour (furthest reach for boats on Williams River – supported timber trade and shipbuilding) – and is part of Hunter City's hinterland.

This area will continue to be important to the future growth of the Hunter, with its natural features and rural communities supporting:

- water security for the Hunter and surrounding regions – water is supplied from the Hunter, Paterson, Allyn and Williams Rivers and the area including Glenbawn, Glennies Creek, Lostock, and Chichester Dams;
- sustainable agribusiness, including the Hunter's world-class horse thoroughbred breeding industry based around Scone;
- energy security for NSW – including the Gloucester Basin, which is one of three areas in NSW currently being considered to supply gas to meet statewide demands; and
- a range of minerals supplies, supporting regional manufacturing and construction industries.

The following priorities will be considered and addressed for the Northern Tops:

Grow Hunters regional economy:

- develop and strengthen connections with tourist markets from within the Hunter, Sydney and overseas;
- enhance tourism infrastructure and connectivity, reinforcing the importance of Bucketts Way/Thunderbolts Way;
- enhance links to regional services in Hunter City and Taree; and
- prioritise the provision of high quality and reliable telecommunication links to and within rural communities.

Protect and connect natural areas:

- protect water quality, rural amenity and the natural assets that characterise the region;
- monitor and manage natural hazard risks including flooding and bushfire;
- monitor and support the impacts of ageing populations on the accessibility and servicing of rural communities; and
- enhance regional-level habitat connectivity, while recognising the need to continue to accommodate rural and resource industries.

Support robust regional communities:

- locate growth within existing towns and villages using existing and committed urban infrastructure and services;
- provide alternative methods of service provision to cater for remote access;

Left: Raymond Terrace
Right: Gloucester landscape





Forster Beach

- strengthen the roles of existing communities and the regeneration of towns and villages that build on their rural identity and form; and
- monitor and respond to the potential influence of future energy sector activity on local employment, housing and service demands.

North East Coast

The Hunter's North East Coast is defined by its pristine natural environment including estuarine lakes, coastal wetlands, beaches, lagoons, islands and marine waters. These natural landscapes are biologically diverse and include rich Aboriginal cultural heritage.

The quality of the area's natural environment has driven population and economic growth, with the evolution of national road and rail networks in the early 20th century and rising car ownership in the 1950s, increasingly attracting visitors from Sydney and Newcastle. The coastal towns and villages, anchored by the larger settlements of Forster-Tuncurry to the north and Nelson Bay-Corlette to the south, and clustered within the coastal hinterland, including Hawks Nest-Tea Gardens, Seal Rocks and Blueys Beach, are now some of the most popular visitor destinations in the Hunter. They are also increasingly attracting second-home buyers and retirees.

Growth and change will predominantly impact on three areas of the Hunter's North East Coast:

- Forster-Tuncurry;
- Tomaree Peninsula; and
- Tea Gardens - Hawks Nest.

The area's economy and employment base is largely service-based and highly seasonal, reflecting its tourism economy and rapidly ageing communities. The quality of its natural environment also underpins valuable rural and resource industries. It is the largest oyster producing area in NSW and supplies a range of minerals used for the construction and manufacturing industries in the Hunter and surrounding regions.

The following priorities will be considered and addressed for the Hunter's North East Coast:

Grow Hunter's regional economy:

- prioritise urban growth within existing communities, particularly where using existing and committed urban infrastructure and services. This includes facilitating urban infill and higher residential densities in Nelson Bay and Forster-Tuncurry;
- enhance tourism infrastructure and connectivity, recognising the importance of:
 - regional and inter-regional connections via the Pacific Highway and the Newcastle Airport and cruise ship gateways; and
 - local routes such as the Lakes Way and Nelson Bay Road;
- enhance links to regional services in Hunter City and Taree; and
- prioritise the provision of high-quality and reliable telecommunication links to and within coastal communities.

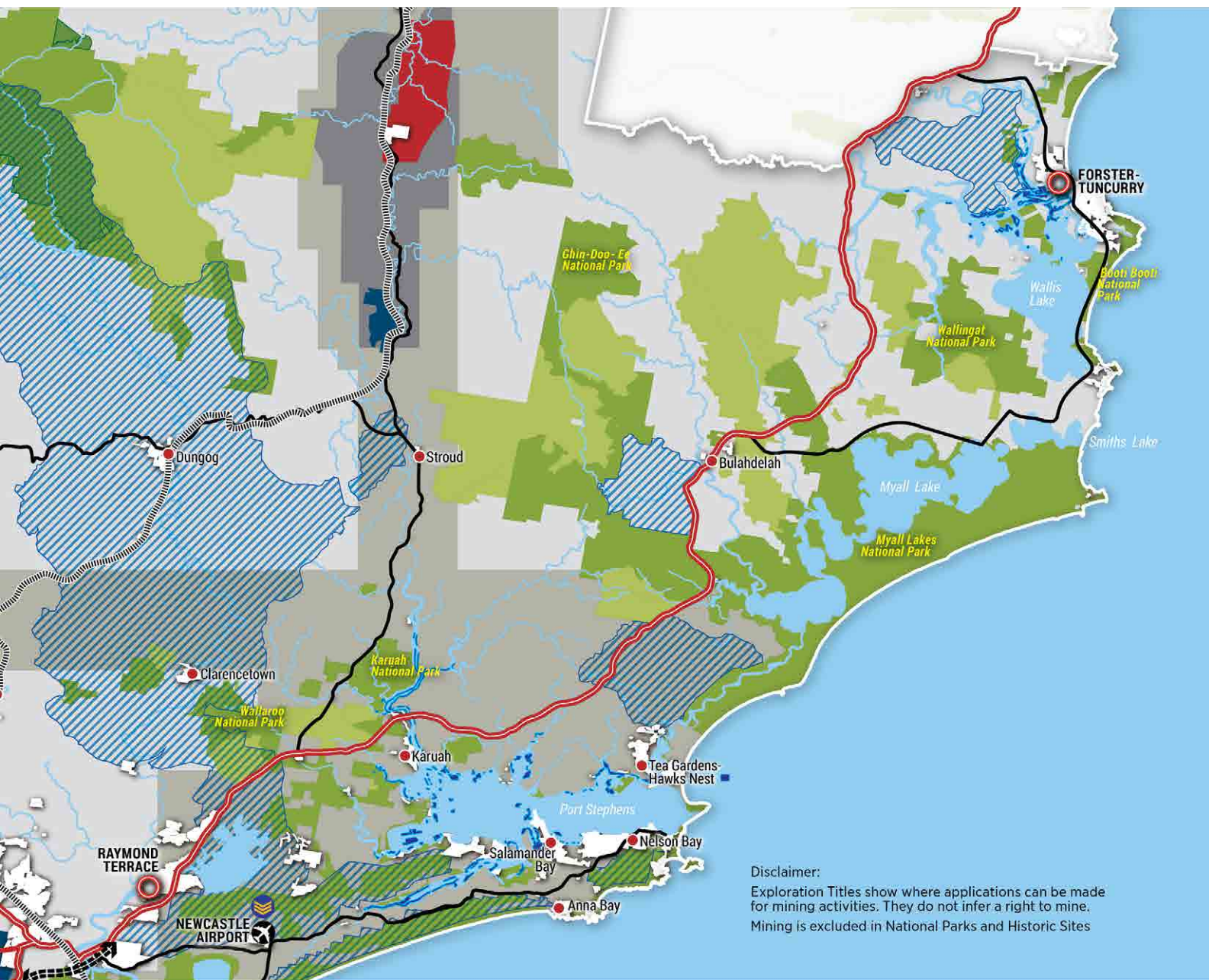
Protect and connect natural areas:

- protect the water quality, estuarine lakes, coastal environments and natural assets that characterise the region;
- monitor and manage natural hazard risks including coastal inundation, local flooding and bushfire; and
- monitor and support the impacts of the ageing population on the accessibility and servicing of coastal communities.

Support robust regional communities:

- strengthen the roles of existing communities and the accessibility and vibrancy of town centres and main streets, particularly within Forster-Tuncurry and Nelson Bay;
- support urban infill and the regeneration of town centres that builds on coastal village identity and form; and
- support economic diversity and further tourism opportunities that focus on reducing the impacts of the seasonal nature of tourism and its effect on local economies.

FIGURE 20: NORTH EAST COAST



- Strategic Centre
- Newcastle Airport Regional Gateway
- RAAF Base Williamtown

- Heavy Rail Network
- Inter-Regional Road
- Future Transport Connection
- Major Road
- Urban Area
- Drinking Water Catchment
- Petroleum Production Lease Application

- Gas Exploration Title
- Coal Production Title
- Company Coal Exploration Title
- Priority Oyster Aquaculture Area
- National Park and Reserve
- State Forest
- Waterway

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