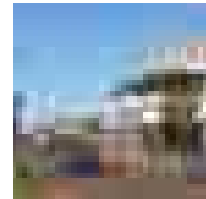
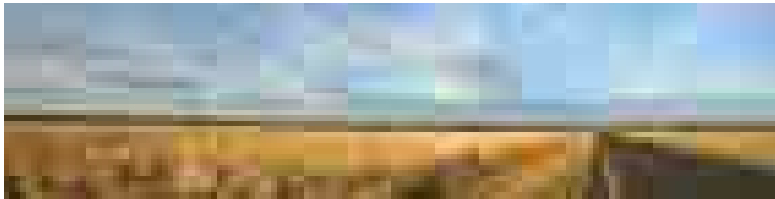


South West Regional Plan

*planning for a stronger, more liveable
and sustainable community*

August 2009



South West Regional Plan

Prepared by:

The Honourable Stirling Hinchliffe MP,
Minister for Infrastructure and Planning,
in accordance with the *Integrated Planning Act (IPA) 1997*, Division 4, Section 2.5A.

With assistance from:

Department of Infrastructure and Planning

In consultation with:

South West Regional Coordination
Committee

Published by:



The Department of Infrastructure and Planning brings together planning, local government and infrastructure responsibilities into one department enabling government to deliver integrated solutions, face the state's population and economic challenges and secure a sustainable future for Queensland.

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Published by the Queensland Government, August 2009, 100 George Street, Brisbane Qld 4000.

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ISBN: 978-0-9804831-7-8
RPS_0056_03_Pu

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Release notes

The *South West Regional Plan* is released by the Minister for Infrastructure and Planning, in accordance with the *Integrated Planning Act 1997*, section 2.5A.15. It is a statutory instrument under the *Statutory Instruments Act 1992*.

The regional plan applies to the South West regional local government areas as defined under IPA, section 2.5A.2. It replaces the *Draft South West Regional Plan* (the draft plan) released by the regional planning Minister on 5 August 2008. The draft plan was subject to community consultation and comment up to 30 November 2008. A consultation report, which summarised the issues raised during the consultation period was released on 13 August 2009. It is available at www.dip.qld.gov.au/southwest or by calling 1300 724 051.

The regional plan has been prepared in good faith, taking into account all public submissions, to provide a framework for the management and development of the South West for more than 20 years.

The regional plan represents an agreed Queensland Government position on the future of the South West region. Any plans, policies and codes being prepared or amended by state agencies or local government must reflect and align with the regional plan.

The regional plan does not commit or pertain to commit any government, industry or community organisation to implement, fund or otherwise resource specific activities or programs.

All maps are intended to represent general concepts for the purpose of broad-scale regional planning. These maps do not, and are not intended to identify, or give attributes or rights, including land use and development rights, to specific land parcels. Boundaries and locations are indicative only, and may be subject to further refinement. The Department of Infrastructure and Planning does not guarantee, or make any representations as to the accuracy or completeness of the information shown on these maps, nor does it accept any responsibility or liability for any loss or damage arising from its use.

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Copies of the regional plan are available:

online www.dip.qld.gov.au/southwest

for viewing at most council chambers, libraries and customer service centres within the local government areas covered by the regional plan

for free on CD-ROM or in hard copy by contacting Department of Infrastructure and Planning offices in Bundaberg and Brisbane

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South West Regional Plan

*planning for a stronger, more liveable
and sustainable community*

Regional vision

A region that has maintained a strong sense of community identity, resilience and respect for country, with well-resourced community services. A place where life continues to happen and where the natural sciences brand drives the region's economic development, prosperity and liveability.

A region where opportunities for strong, diverse and creative industries have been realised. A region where the natural environment has been managed sustainably and where adaptive approaches have been implemented to meet the challenges of the 21st century.



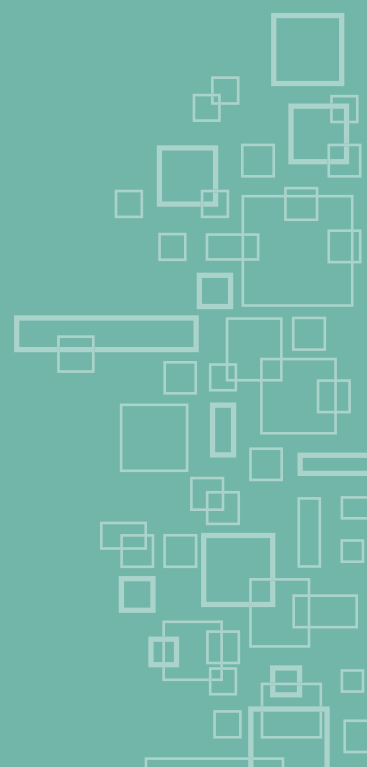
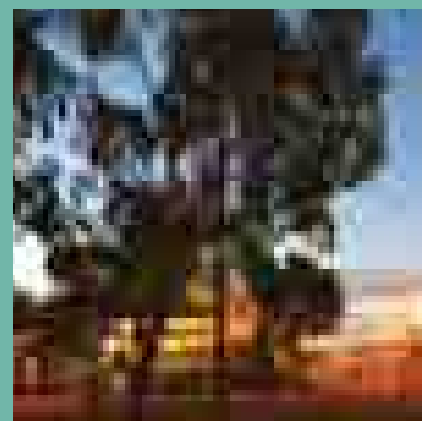
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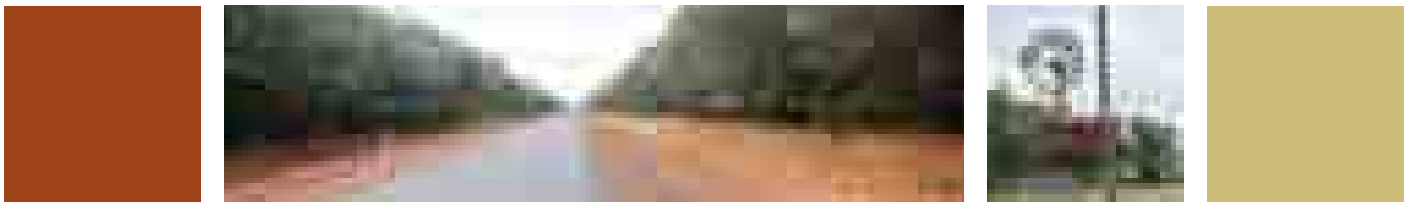
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South West Locality Map



Disclaimer: The information on this map should be treated as indicative only and subject to ongoing refinement. Based on or contains data provided by the State of Queensland (Department of Environment and Resource Management) 2008. In consideration of the state permitting use of this data you acknowledge and agree that the state gives no warranty in relation to the data (including accuracy, reliability, completeness, currency or suitability) and accepts no liability (including without limitation, liability in negligence) for any loss, damage or costs (including consequential damage) relating to any use of the data. Data must not be used for direct marketing or be used in breach of the privacy laws. Data source: Department of Environment and Resource Management and Department of Infrastructure and Planning.



Background and purpose

South West Queensland, characterised by its rural and natural landscapes, is one of the most remote areas in the state. The South West covers an area of 230 000 square kilometres and has a population of 8200¹ people. This equates to an average population density of 0.04 people per square kilometre. A further 300–500 people employed in the Cooper and Eromanga basins fly in and out on a regular basis.

The region comprises the local governments of Bulloo, Murweh, Paroo and Quilpie Shire Councils.

The South West is part of Australia's arid inland and experiences extreme temperatures, drought and floods. People who live and work in this part of the state are affected by a number of factors, including:

- long distances to essential services
- increased temperatures and extremes of drought and flood
- uncertainty in relation to climate change
- remoteness and limited access to transport networks

- limited access to local, national and international markets
- outward migration, especially of young people, from rural to urban areas
- difficulty in attracting and retaining skilled workers
- fluctuations in commodity prices.

Rural communities in the South West are exceptionally resilient, and while maintaining their strong rural traditions, they recognise the need to adapt to global, national and local trends.

Local communities have recently been hit hard by natural disasters such as drought and have also been adversely affected by significant rural industry shifts, including the decline in the wool market.

In response to these challenges affecting rural Queenslanders, the Queensland Government's *Blueprint for the Bush*² program and *Rural Economic Development and Infrastructure Plan* were developed to lay the foundations for the future sustainable, liveability and prosperity of these communities. The South West Regional Plan will be an essential mechanism for managing change and shaping the prospects of rural communities in the region by:

- addressing key economic, social and environmental issues
- prioritising infrastructure and service needs

- maximising benefits and managing impacts of major projects
- driving innovation and productivity
- ensuring the public, private and community sectors are working towards the same goal
- improving cooperation between all levels of government and local communities.

Future challenges that face communities in the South West include population loss in some centres, increased transport costs, climate change, natural resource degradation, renewable energy development and a shift to a more diverse economy.

To meet these challenges, the South West Regional Coordination Committee³ believes health, education, transport and sustainable natural resource management must be the region's top priorities. To grow the South West's potential as the 'home of the natural sciences'⁴, these services need to be provided and appropriately managed.

The regional plan, whilst meeting some of the government's *Blueprint for the Bush* commitments, is also part of a wider process— ensuring that a consistent and contemporary regional planning framework is operating across all of Queensland. This framework is a key mechanism for integrating federal, state and local government planning

¹ Australian Bureau of Statistics 2007, *Regional Population Growth Australia 1996–2006* (3218.0).

² Department of Communities, Queensland Government, *Blueprint for the Bush* (2006).

³ The South West Regional Coordination Committee (formerly South West Regional Planning Advisory Committee) was formed following the designation of the South West region under section 2.5A.2 of the IPA.

⁴ South West Regional Development Association Inc.

agendas, linking infrastructure and service provision to manage future population change, and providing certainty to communities and the business sector.

The regional plan applies to those local government areas within the South West region as defined in schedule 3A of the *Integrated Planning Regulation 1998*. It comprises the Murweh, Paroo, Quilpie and Bulloo shires.

Statutory regional plans

Recent amendments to the *Integrated Planning Act 1997* allow new or amended regional plans to take statutory effect. Under a statutory regional plan, all subject⁵ development and land use in the region will need to comply with the regional plan. The responsible local government authority must amend its planning scheme to reflect the regional plan, within 90 business days of the regional plan's gazettal. The regional plan prevails where there is inconsistency between it and a local government planning scheme within the region.

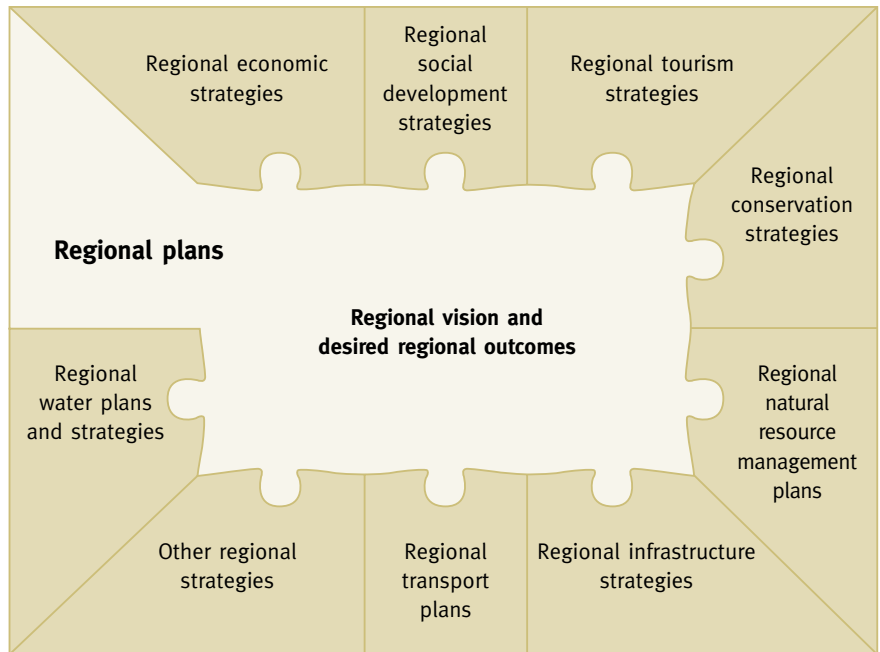
The regional plan does not include regulatory provisions in relation to land use, nor does it specify region-specific variations to current state planning policies.

Working with other plans and strategies

Other regional planning initiatives in the South West region include development of the non-statutory regional health services plan and the existing South West and Desert Channels Queensland natural resource management plans. These were considered in the development of the *Draft South West Regional Plan*.

Also considered were statutory planning activities including water resource and resource operations plans for the Warrego, Paroo and Bulloo River systems, the Great Artesian Basin water resource plan and the regional vegetation management codes for the western bioregions.

Figure 1. Relationship between this plan and other regional plans and strategies



Preparation

The regional plan has been developed with extensive advice from the Regional Coordination Committee under provisions of section 2.5A of the *Integrated Planning Act 1997*. The role of the Regional Coordination Committee is to:

- provide advice to the Planning Minister on regional planning matters
- assist with the preparation, implementation and review of the regional plan
- facilitate the resolution of regional planning issues
- promote a coordinated approach to regional planning.

The draft regional plan was initially made available for public comment for a period of 60 business days, as per the provisions of the *Integrated Planning Act 1997*. This was extended for a further 22 business days. After considering comments received from the public, local governments and other state agencies through formal submissions, the state government produced the final regional plan.

Application, implementation and review

The regional plan is a statutory instrument under the *Statutory Instruments Act 1992* and a planning instrument under the *Integrated Planning Act 1997*.

Local government planning schemes are the primary mechanisms for managing urban development. Best practice will be achieved through the implementation of local planning schemes resulting in sustainable regional communities.

Regional policies and strategies provide the planning principles and guidelines for managing future land use and development. Where appropriate, a combination of land use policies and aligned strategies are used to implement the desired regional outcomes for the regional plan.

Land use policies are those policies relating to land use matters under the jurisdiction of the *Integrated Planning Act 1997*. These are primarily implemented through local government planning schemes and

⁵ Some development assessment and approval processes lie outside the jurisdiction of the *Integrated Planning Act 1997*. For example, approvals relating to mining and energy developments on mining tenements and for state-significant projects are provided under other legislation. Regional plans are taken to be state interests under the *Integrated Planning Act 1997*, and to the extent that state interests apply in those legislative processes, the regional plan's policies apply.

any other mechanisms that fall under the *Integrated Planning Act 1997*.

Aligned strategies are designed to assist in achieving a desired regional outcome, generally through a collaborative approach, and are aligned with other legislation, plans, processes and voluntary programs.

They may be implemented by various stakeholders including local, state and federal governments, non-government organisations such as community groups or natural resource management groups, and the private sector. Resourcing of programs to achieve these policy outcomes may come from government, non-government or private sector investment. Aligned strategies do not commit the government to the provision of funding for any particular action or program.

The statutory regional planning framework provides for a formal monitoring and review process across the state, which is an important element in any regional land use planning framework. The outcomes and policies of the regional plans will be monitored and used in the formal review of the regional plan. A formal review will be undertaken at least every 10 years. Notwithstanding the above, the Planning Minister can amend the regional plan at any time under the procedures set out in the *Integrated Planning Act 1997*.

Structure of the regional plan

As shown in Figure 2, the regional plan comprises the following:

- Part A Introduction**—provides background material to establish the context and intent of the regional plan. It also outlines the need for the regional plan and its relationship with other planning processes and instruments.
- Part B Regional vision**—outlines the desired future for the South West region.
- Part C Strategic directions**—sets down the broad policy framework for the regional plan.
- Part D Regional activity centres network**—applies a statewide framework, used to characterise Queensland's centres, their facilities and services, to South West regional centres.
- Part E Regional policies and strategies**—provides the planning principles and guidelines for managing land use and development of the South West region. These should be reflected in all relevant plans, policies and codes being prepared or amended by the Queensland Government or local governments in the South West region.
- Part F Implementation, monitoring and review**—sets out the proposed governance arrangements for implementing the regional plan and describes how these will be monitored and reviewed.

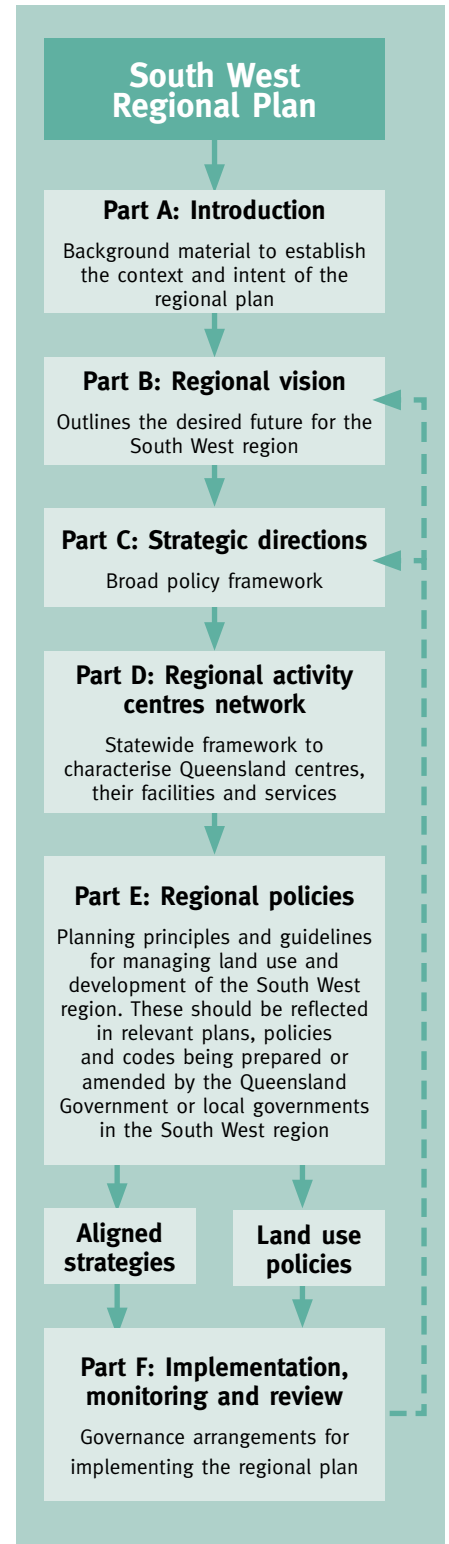
Maps

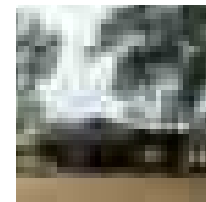
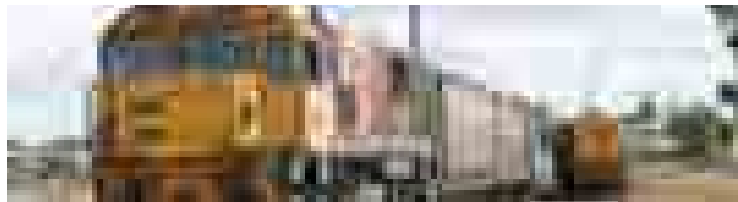
The maps contained in the regional plan are based on available data at the time of printing. The information sources used to prepare these maps vary, with respect to scale, accuracy and currency.

The Department of Environment and Resource Management has prepared mapping showing areas of ecological significance. The maps have been prepared from high quality data sets of terrestrial vegetation, key threatened species' habitats, and wetlands. The accuracy of mapping is considered reliable for planning purposes at a detailed level. Given the size of the region, the scale used in map 2 of the regional plan should only be used as general information. More detailed information on the region's areas of ecological significance is available from the Department of Environment and Resource Management website.

The maps in the plan are not regulatory maps and are to be used as information guides only.

Figure 2. Regional plan flowchart





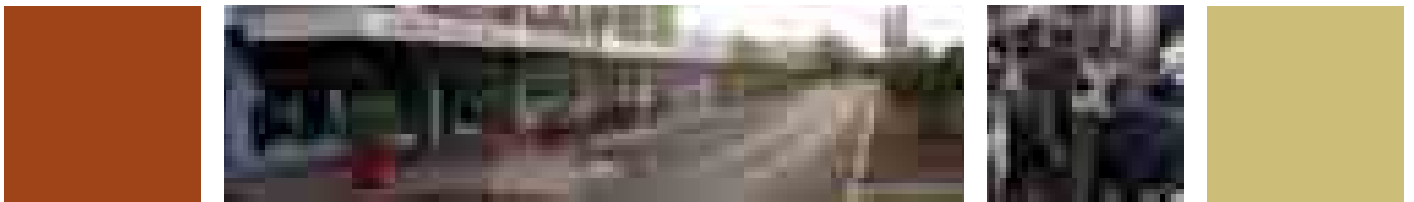
A region that has maintained a strong sense of community identity, resilience and respect for country, with well-resourced community services. A place where life continues to happen and where the ‘natural sciences’ brand drives the region’s economic development, prosperity and liveability. A region where opportunities for strong, diverse and creative industries have been realised. A region where the natural environment has been managed sustainably and where adaptive approaches have been implemented to meet the challenges of the 21st century.

The vision defines the region’s long-term objectives, focusing on the key elements of social wellbeing, economic prosperity and a healthy environment.

The vision was developed in collaboration with the Regional Coordination Committee, South West Regional Development Association, working groups and the wider community.

It promotes the notion of the South West region being the home of the natural sciences, which capitalises on the natural assets of the region and the lifestyle they afford. This concept highlights the region as a desirable place to live, work and visit and its promotion will help enhance the sustainability of the region’s economy.

The South West will focus on strengthening the sustainability of individual communities, while maintaining the riches of the natural environment and optimising the economic, social and lifestyle potential of the region.



To achieve the region's vision and desired outcomes, the regional plan proposes a range of policies to manage change and create a sustainable future for the South West. These policies are guided by strategic directions necessary to achieve change and sustainability in the region.

Creating a more sustainable future

A key objective of the regional plan is to ensure economic development is managed in an ecologically sustainable way. The region's open space and abundant sunlight make it ideal for alternative energy research and development.

The South West is a sparsely inhabited area, where both providing and accessing services such as health, education and information is challenging. The regional plan aims to support a network of centres, build and maintain community identity and improve service delivery. The regional plan also proposes improved access to up-to-date information and communication technology.

Protecting regional landscapes and supporting natural resource production values

The South West is characterised by distinctive rural and natural landscapes that support rural production, tourism, the extraction and use of non-renewable and renewable resources, as well as recreational, social and cultural activities, and Indigenous culture.

The region is vulnerable to the impacts of climate change and is likely to experience temperature increases and less rainfall, as well as more severe droughts, heatwaves and floods.

The regional plan recognises the importance of the landscape and natural resources as the basis for the region's future prosperity and liveability. The plan will assist in identification of threats to natural resources and deliver outcomes to ensure the sustainable use and protection of natural resources and the maintenance of the environmental values of the region.

Enhancing the identity of regional communities

The regional plan places emphasis on maintaining the unique character of towns and local centres, while maintaining and enhancing services to these communities by supporting a regional network of centres.

It is intended that the regional network of centres will assist in strengthening the strong sense of community that already exists. This will be achieved through access to community facilities such as schools, hospitals and other government services. Another intention of the network is to encourage appropriate private sector investment in housing and commercial enterprises.

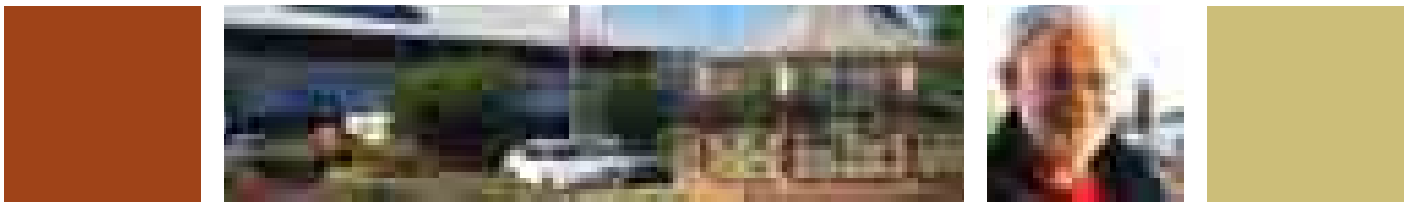
Providing infrastructure and services

Infrastructure and services required to support the future development of the region are identified in the regional plan. Human services and supporting infrastructure will be a key focus of attention across the region.

Integrating land use, transport and economic activity

Community wellbeing, quality of life and economic development opportunities can be enhanced by access to a good transport system. The system must balance the need for more efficient and effective access to local, regional, national and international markets with:

- the need to develop alternative transport strategies that reduce the region's carbon footprint
- increased expectations from an ageing community requiring access to health services.



A classification system has been developed to describe towns within regions based on their population, employment, business activities, facilities and services. The classification's purpose is to highlight significant service delivery roles, especially for small centres serving dispersed populations. This classification system, called the regional activity centres network, will help governments plan how and where to deliver services and infrastructure throughout the region.

There are four classifications of activity centres that apply to the South West:

- major rural activity centres
- district rural activity centres
- community activity centres
- specialist activity centres.

The regional activity centres network will help communities plan for services and infrastructure and identify the type of developments appropriate for each centre. It will improve social and economic benefits for the local community by:

- avoiding the loss of services and infrastructure that could undermine the sustainability of a centre
- providing justification for service provision over and above the use of population figures
- strategically identifying where growth should be encouraged and infrastructure and services located
- identifying the type and scale of developments and activities appropriate for each centre, and informing planning application decisions
- promoting access between communities
- promoting cost sharing of infrastructure and services between centres, in turn reducing competition between local governments in obtaining funding, services or facilities
- maintaining and enhancing the environmental values of the region.

The network of centres is dynamic and there may be changes over time. Subsequent reviews of the regional plan will reflect any significant change in role and function of the centres.

Major rural activity centres

Charleville

Major rural activity centres serve catchments of regional significance and offer employment and business

opportunities, convenience and retail shopping and other services. Populations generally range from 2000 to 5000 residents.

Charleville is the major rural activity centre in the South West region and has a population of about 3500. Although Charleville has a low urban density, compared to other activity centres in the state, it services—in conjunction with rural activity centres—a vast area of 232 500 square kilometres.

Charleville provides regional services for health, including the base hospital with visiting specialist services. Education to Year 12 is provided, along with a TAFE College, the School of Distance Education and Croxdale (former Department of Primary Industries and Fisheries research station), which will focus on teaching accredited bush skills for inter-regional and intra-regional students.

The Cosmos Centre and Coronas Hotel are two of Charleville's main tourist attractions, with the conservation efforts of the bilby captive breeding facility also providing a focus for tourists.

Charleville is a major rural regional administrative centre for a range of state government services including Queensland Health, Department of Environment and Resource Management, Queensland Police and the Department of Education and Training. Charleville is one of four Queensland bases for the Royal Flying Doctor Service of Australia.



Charleville has good access to the arterial road network outside the region, particularly between Roma and Longreach and is serviced by daily commercial flights from Brisbane.

Queensland Rail provides a twice-weekly passenger service to Charleville on the Westlander with connections to Cunnamulla and Quilpie. Coach services connect travellers to Brisbane, Mount Isa, Rockhampton and interstate. The town has road links to the four district rural activity centres of Cunnamulla, Quilpie, Thargomindah and Augathella.

Charleville is a significant focal point for employment and economic development, and provides a mix of businesses and services to the region. One example is the Charleville goat processing plant, operated by Western Exporters. It provides employment for around 85 people and exports meat primarily to the USA and Europe. The current global economic crisis may cause job cuts in all export focussed enterprises, posing considerable threats to centres like Charleville.

The need to sustain or increase the level of services in Charleville during the life of the regional plan will be dependent on population change, economic activity and alternative economic initiatives. Increases in economic activity and broadening the economic base of the region have the potential to increase services and improve community and cultural facilities in the centres.

District rural activity centres

Quilpie, Thargomindah, Cunnamulla, Augathella

District rural activity centres provide essential functions for local communities and surrounding districts. Populations generally range from 300 to 2000. These centres provide people with weekly shopping needs and essential services such as groceries and postal services within a travelling distance of one to two hours. They also offer local government and health services that may include

a local general practitioner and non-resident medical services, including visiting specialist medical services.

Quilpie is the local government administration centre for Quilpie Shire and provides a range of services to the community. The railway line to South West Queensland ends in Quilpie. It is an important railhead for the transportation of cattle and wool. Quilpie is also a centre for the opal industry in western Queensland.

Thargomindah is the administration centre for Bulloo Shire and provides a range of facilities for the community. It is also the nearest district rural activity centre to the far south-west gas and oil fields and the South Australian border.

Cunnamulla is the administration centre for Paroo Shire and provides significant local government services for the district. It is also a hub for some state government services and is located on the major inland highway link to New South Wales.

Augathella is the second largest town in Murweh Shire and provides a range of facilities including a primary school, hospital and some state government services.

Quilpie, Thargomindah and Cunnamulla have sealed airstrips and weekly flights by a commercial airline. These airports provide access for the Royal Flying Doctor Service and charter services.

Cunnamulla and Quilpie have educational facilities to Year 12, whilst the other centres have primary school facilities. All these centres have police stations. They have good road access to Charleville, however, roads are often cut for part of the year due to floods.

Each of these towns is a centre for district and regional community interactions, such as sports and social events. Historical trends show peaks and troughs in population, investment and employment, based on commodity prices, resource demand and climate.

Although population growth in these centres is not anticipated to be substantial, the need to

sustain services is recognised. The mechanisms used to deliver services in the future, however, may not necessarily reflect existing models.

Community activity centres

Eulo, Wyandra, Morven, Adavale, Eromanga, Noccundra, Yowah, Hungerford

Community activity centres in the South West provide essential services and social interaction for residents in rural and remote locations. They are characterised by low populations, usually fewer than 300 residents. These centres provide a limited range of services such as a single convenience store, primary school, service station, public bar or a combination of these. Most of these centres have limited education facilities, are linked to district health services, have limited access to other government services and may have a single-officer police station.

A town's current service level may be a reflection of a prior higher population. Some services exist due to a single industry or attraction. For example, Yowah and Eromanga are known for their opals. Eromanga is also located near one of the largest oil-producing areas in mainland Australia and includes a small-scale refinery. Other centres, such as Wyandra, were developed during construction of the railway line. Wyandra has a primary school, church, police station, post office and recreation facilities. Hungerford, Noccundra and other similar settlements have historic significance and provide recreational facilities for tourists and locals.

Although population growth in these centres is not anticipated to be substantial, the need to sustain services is recognised. As with district rural activity centres, the mechanisms used to deliver services in the future may not, however, necessarily reflect existing models.



Specialist activity centres

Jackson oil field, Ballera, Tarbot

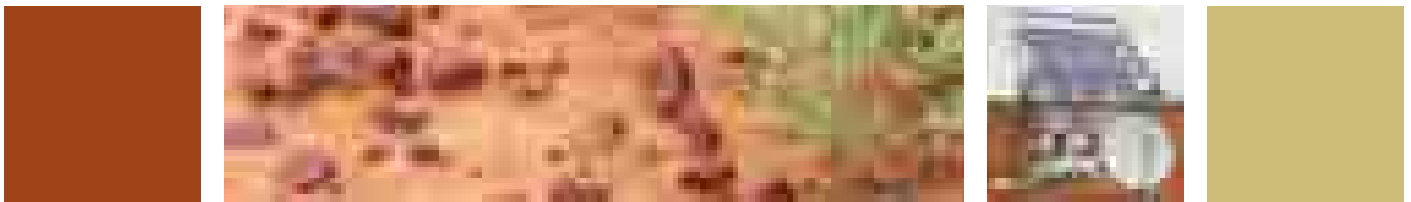
The oil field at Jackson and the gas reserves at Ballera and Tarbot are all located in the far south-western part of the region, centred on the Cooper and Eromanga basins. They are owned and managed by Santos Ltd. They are also the locations of the main workers' accommodation facilities in this part of the region, although there are several outlying satellite settlements such as Watson, Tickalara, Cooroo and Naccowlah.

The Jackson, Ballera and Tarbot settlements provide accommodation and facilities for between 300 and 500 workers who fly-in and fly-out on a regular basis to Adelaide, Brisbane and beyond. Ballera is serviced by a jet-capable, sealed airstrip. All three centres are accessible from Quilpie and Thargomindah via a sealed, single-lane road.

As these centres are privately owned and managed, their long-term futures will be dependent on the mining of existing oil and gas reserves and the development of new reserves. It is expected that the current reserves of gas and oil will be depleted during the first quarter of this century and within the lifetime of this plan. When that occurs, these centres will no longer exist in their current form.

Other community hubs

Other localities provide the focus for social interaction and services, often centred on a school, church or sporting facility. Due to their limited population and service diversity, these community hubs are not classified as part of the regional activity centres network.



This section outlines the fundamental principles, policies and desired regional outcomes that will guide planning and development assessment in the South West over the next 20 years.

The policies guide state and local government planning processes and decision making, as well as private investment in the region. They also assist the federal government in determining funding priorities for natural resource management under other federally funded programs.

The regional plan is the primary planning document in the South West. Local government planning schemes must be consistent with the intent of the desired regional outcomes, objectives and policies contained within this plan.

The policies are set out under the following headings:

1. Natural environment
2. Natural resources
3. Strong communities
4. Urban development
5. Economic development
6. Infrastructure

Underlying principles

Ecological sustainability

The overriding intent of the regional plan is to ensure a coordinated, sustainable response to future growth pressures in the region. The challenge is to enhance the region's economy and people's quality of life, without compromising ecological sustainability.

Since 1994, sustainable development principles have been included in a range of Queensland's legislative instruments such as the *Environmental Protection Act 1994*, *Integrated Planning Act 1997* and *Water Act 2000*. The Queensland Government is also a signatory to the *Intergovernmental Agreement on the Environment 1992* and the *National Strategy for Ecologically Sustainable Development 1992*.

The Queensland framework for ecologically sustainable decision making has been used to inform the development of objectives, policies and strategies in the regional plan. The framework comprises:

- integrated and long-term decision making—incorporating long- and short-term environmental, economic and social considerations
- Inter-generational equity—ensuring the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations

- intra-generational equity—ensuring a fair share of resources and opportunity among present generations
- precautionary principle—ensuring that where there are threats of serious or irreversible environmental damage, a lack of full scientific certainty is not used as a reason for postponing measures to prevent environmental degradation
- conserving biological diversity and ecological integrity—protecting the variety of all life forms, their genetic diversity and the ecosystem of which they form a part, recognising the various services they provide to humans as well as their intrinsic values
- internalising environmental costs—ensuring that the true costs and life-cycle costs (incurred from when inputs are produced through to waste disposal) of protecting from and restoring environmental damage are reflected in the price of a product or service.
- engaged governance—ensuring broad community involvement in decisions and actions that affect its members.

Sustainability and climate change

Queenslanders are becoming increasingly concerned about climate change and its impacts. There is overwhelming scientific evidence that human-induced climate change is occurring, primarily due to increasing concentrations of greenhouse

gases in the atmosphere. Increased temperatures, decreased rainfall, and increased severity of droughts are only some of the expected changes. The expected changes in temperature and rainfall are likely to affect the industries of the South West region. Table 1 portrays projected impacts.

International and Australian research indicates that there are significant benefits to be gained from responding immediately to climate change, by both reducing the emission of greenhouse gases, and adapting to climate change impacts that will occur regardless of global efforts to reduce emissions. In simple terms, earlier reduction of emissions and adaptation to climate change will mean fewer costs to economic growth and lifestyle.

Toward Q2: Tomorrow's Queensland sets a target to cut Queensland's carbon footprint by one-third, with reduced waste, fuel and electricity use by 2020. Regional climate change actions for the South West will also be influenced by statewide and national climate change initiatives and policies, including the Queensland Government's *ClimateSmart* strategy and the Commonwealth Government's proposed Carbon Pollution Reduction Scheme.⁶

Responding to oil supply

Most of the world is now dependent on a diminishing number of oil-producing countries for their oil needs. The amount of oil discovered each year peaked in the mid-1960s and has been falling steadily since. Whilst oil production has been essentially stable since 2005, current rates of production are predicted to decline within the next five years.

Australia and Queensland are becoming more dependent on imported oil and oil-based fuels, so that Queensland's consumption (and that of other states) is strongly linked to global supply and demand. As in many parts of the world, South West communities and economic

sectors are firmly structured around an abundant supply of low-cost oil, making the region vulnerable to changes in the supply and price of oil.

The target to cut the carbon footprint by one-third by 2020 is a key component in achieving the 'green ambition' outlined in *Toward Q2: Tomorrow's Queensland*. Given the region's dependence on vehicular transport and industries that are heavy users of oil-based fuels, such as agriculture and mining, mechanisms that contribute to the reduction of greenhouse emissions and reduce vulnerability to rising oil prices are incorporated throughout the policies in part E of the regional plan.

Table 1. Specific climate change projections for the South West region

Timeframe	Increase in annual temperature (degrees °C) <i>(Region: South West)</i>	Number of days greater than 35 degrees °C <i>(Location: Charleville)</i>
Present		64
2030 average (mid emissions)	1.1 [0.8–1.6]	84 [74–90]
2070 average (low emissions)	1.9 [1.2–2.7]	99 [85–116]
2070 average (high emissions)	3.6 [2.4–5.2]	130 [107–162]

(Source: CSIRO, baseline period 1971–2000)

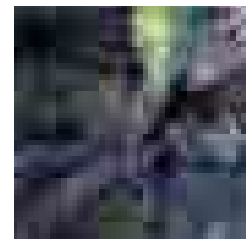
⁶ See www.climatechange.qld.gov.au



1. Natural environment

Desired regional outcome

A natural environment that is well managed to protect the region's rich biodiversity, ecological processes and water resources.



The South West is known for its vast natural landscapes, rivers and wetlands and diverse vegetation communities. This landscape, with its waters, plants and animals, has a continuing spiritual and physical connection for the Aboriginal people who live in the region. The region has a reputation as the home of the natural sciences.

The region's climate ranges from arid to semi-arid and has a highly variable rainfall, with an annual average of around 200 millimetres in the far west, to more than 400 millimetres in the east.⁷ Average annual daily temperatures range from 13.5 °C to 29.1 °C. Temperatures are, however, quite variable, with the highest temperature of 49 °C recorded in Thargomindah and the lowest temperature of -5 °C recorded in Charleville. Evaporation significantly exceeds precipitation throughout the region.⁹ Drought occurs regularly and floods play a major role in maintaining the ecosystems of the major river systems, particularly in the Channel Country. These conditions are predicted to occur more frequently under future climate change forecasts.

The South West contains two bioregions: the Channel Country and the Mulga Lands.¹⁰ The Channel Country supports 56 regional ecosystems, while the Mulga Lands support 66 regional ecosystems. The region has a diverse range of pasture communities, including bluegrass, wiregrass, Mitchell Grass Downs, channel pastures, hard and soft mulga, gidgee pastures and spinifex. In the south-west corner of the region, the landscape is dominated by dune fields and sand plains.

The South West takes in the catchments of the Warrego, Paroo and Bulloo Rivers and parts of Cooper Creek and the Balonne–Culgoa river system. The Warrego, Paroo and Nebine river systems form part of the northern headwaters of the Murray-Darling Basin, while the catchments in the west of the region, some of which form part of the Lake Eyre Basin, are internally draining. The Channel Country, which includes Cooper Creek, is a broad network of flooded alluvial plains, water courses and swamps. As floodwaters spread out into shallow inland rivers, they produce and rejuvenate pastures to provide excellent pasture growth.

In addition to surface water resources, the Great Artesian Basin provides groundwater for the pastoral industry, rural towns and natural springs. This is a unique and valuable resource that requires careful management, to ensure it is maintained into the future. The South West supports a range of wildlife, particularly birds that can be prolific after the onset of summer floods. The region provides habitat (Currawinya National Park) to the greater bilby, an iconic mammal that has attracted attention in recent years, due to its status as one of Queensland's 12 endangered mammals.

The South West forms the Country of the Wangkumarra, Bidjara, Boonthamurra, Kunja, Mardigan, Budjiti, Kooma and Kullilli Aboriginal Traditional Owner groups. It is vital to the implementation of this regional plan that the intricate links between natural resources, cultural heritage and the health of the country is

recognised as part of the ongoing support of contemporary Aboriginal culture.

Sustaining natural and cultural assets is recognised in *Blueprint for the Bush* as a major initiative in achieving long-term natural resource management.

1.1 Biodiversity

Conserving biodiversity is part of natural resource management and use, which underpins the economic, cultural, spiritual, social and physical wellbeing of the region, the home of the natural sciences. The need to protect and conserve biodiversity is an underlying principle of national, state, regional and local planning.

The South West supports 122 regional ecosystems that host a broad range of native species. The threat to biodiversity through habitat loss is lower in the Channel Country, one of South West Queensland's two bioregions, than in other Queensland regions. Nevertheless, the number of rare and threatened species remaining in the Channel Country shows that significant impacts on wildlife have occurred in this bioregion.

The story is different for the Mulga Lands bioregion, which is recognised as being degraded. Studies in the 1980s and 1990s demonstrated that two-thirds of Mulga Lands properties west of the Warrego River showed signs of serious land degradation. The causes of degradation are varied and have resulted in the loss of plant and animal species.¹¹

⁷ Department of Primary Industries (2006) *Overview of Western Queensland*. Queensland Government.

⁸ Canty and Associates LLC (2008) *Weatherbase*. www.weatherbase.com accessed 30/06/08.

⁹ Bureau of Meteorology (2007) www.bom.gov.au accessed 30/06/08.

¹⁰ Environmental Protection Agency (1999) *The Conservation Status of Queensland's Bioregional Ecosystems*, Queensland Government

¹¹ Environmental Protection Agency (1999) *The Conservation Status of Queensland's Bioregional Ecosystems*, Queensland Government.

A small proportion of the region's ecosystems is protected in national parks and reserves. Other ecosystems may be protected in national parks and reserves elsewhere—for example, the Sturt National Park and Innamincka Regional Reserve in neighbouring parts of New South Wales and South Australia, which protect the ecosystems of the desert country and the Lake Eyre Basin.

The Currawinya National Park is a protected area within the region and includes internationally significant wetlands. A number of other national parks, such as Tregole, Idalia and Lake Bindegolly, protect unique vegetation and wetlands.

Management of natural resources in the South West is the responsibility of a range of stakeholders including federal, state and local governments, regional bodies, landholders, and the broader community. The South West Queensland Traditional Owner Natural Resource Management and Cultural Plan, *Caring for Country, Culture and People*,¹² recognises the importance of natural resources to the physical and spiritual wellbeing of the Traditional Owners of the South West. The state government's commitment to protect biodiversity, reduce greenhouse gas emissions and manage economic and environmental problems such as salinity, soil degradation, erosion and declining water quality, has been demonstrated through the phasing out of broad-scale clearing of remnant vegetation.

There are significant biodiversity issues that need to be addressed in the South West. The *South West Natural Resource Management Plan 2008–2013*¹³ identifies and describes actions to address many of these issues, while providing a guide for investment under various government natural resource management programs.

The regional plan provides the framework for achieving an integrated and coordinated approach to biodiversity management, using both voluntary and statutory mechanisms.

Objective

To protect, manage and enhance the extent, diversity, condition and connectivity of the region's natural areas to maintain ecological integrity and processes, reverse biodiversity decline and increase resilience to the expected impacts of climate change.

Land use policies

- 1.1.1 Design and operate development for urban purposes within areas of high ecological significance, to avoid impacts on ecological values. Where avoidance is not possible, minimise the impacts and then offset residual impacts.
- 1.1.2 Design, operate and setback development for urban purposes adjacent to areas of high ecological significance, to avoid adverse impacts on the ecological values.
- 1.1.3 Design and operate development for urban purposes, in or adjacent to areas of general ecological significance, to avoid, or where avoidance is not possible, minimise any adverse impacts on ecological values.

Aligned strategies

- 1.1.A Environmental conservation strategies prioritise the protection of endangered, of-concern and threshold regional ecosystems, and the rehabilitation and management of corridors.
- 1.1.B Promote an understanding of how farm management planning can conserve the region's rich biodiversity values.
- 1.1.C Recognise the important role of Traditional Owners in managing natural resources, and involve Aboriginal people in natural resource planning and management decisions.

- 1.1.D Align natural resource management and planning actions by all levels of government and non-government organisations so that they are consistent and timely, and result in cost-effective outcomes.
- 1.1.E Promote an understanding of the region's rich biodiversity and how it may best be conserved.
- 1.1.F Prioritise revegetation programs so that they are undertaken within state and regional conservation corridors, or degraded areas of high ecological significance, using local native species in a mix that enhances ecological function.

Explanatory notes

Specific development controls are required in areas of high ecological significance (see appendix 1 and map 2—Natural environment in appendix 2), as identified by the state government. These areas include:

- wetlands
- protected areas
- endangered regional ecosystems
- essential habitat for endangered, vulnerable and rare species
- non-woody regional ecosystems
- priority regrowth areas.

Areas of general ecological significance include other areas containing remnant vegetation of particular conservation value, including not-of-concern vegetation under the *Vegetation Management Act 1999*.

Corridors establish connections between core areas of remnant vegetation and provide opportunities for flora and fauna to respond to climate change impacts.

Environmental offsets are positive measures taken to counterbalance negative environmental impacts that cannot otherwise be avoided or minimised, to ensure no net loss

¹² Far South West Aboriginal NRM Group (2008). *South West Aboriginal Natural Resources and Cultural Heritage Plan*. Charleville, Queensland, Australia.

¹³ South West Natural Resource Management (NRM) Ltd (2008) *South West Natural Resource Management Plan 2008–2013*.



of ecological values. An offset may be located within or outside the development site and should be legally secured. Approval of an offset requires, in the first instance, confirmation that the government's environmental standards are met. The Queensland Government's environmental offset policy, *Policy for Vegetation Management Offsets* September 2007, and draft policy, *Policy for Biodiversity offsets: consultation draft* December 2008, jointly provide a policy base and offset calculation methodology for achieving effective offsets.

Current programs and projects to achieve regional biodiversity benefits at property scale (individual landholders) include:

- the *Back on Track* species prioritisation framework—an initiative of the Department of Environment and Resource Management that prioritises Queensland's native species and guides species conservation and recovery¹⁴
- recovery plans for specific threatened identified species
- the Delbessie Agreement (formerly known as the Rural Leasehold Land Strategy)—one component of which awards longer term leases over state land, to reward improved management of biodiversity.¹⁵

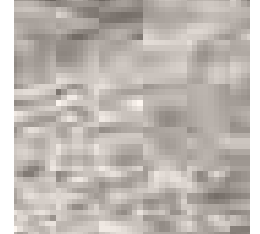
¹⁴ See www.epa.qld.gov.au/natureconservation/wildlife/backontrack-speciesprioritisationframework.

¹⁵ See www.nrw.qld.gov.au/land/state/ruralleasehold/strategy.

2. Natural resources

Desired regional outcome

The productive capacity of the region's landscapes and supporting ecosystems is maintained through the stewardship of informed resource managers, sustaining productivity, minimising impacts from extraction of energy and opal resources and by the early adoption of climate change strategies.



Land, water, vegetation, mineral and energy resources are critical to the economic development of the South West, as the home of the natural sciences. Aboriginal people used these natural resources in a sustainable manner with minimal impact on the natural landscape. Since European settlement, the region's wealth has largely been derived from exploitation of renewable and non-renewable resources.

Historically, woody vegetation in the region was viewed by early European settlers as an impediment to development. Considerable effort and public and private investment was made to clear native vegetation. The rate of vegetation clearing accelerated in the 1950s and 1960s with the availability of heavy equipment and increased land development, driven by high wool prices. Consequently, grazing is the dominant land use in the region, with almost all the non-desert parts of the region used for wool and beef production. The beef industry remains a major contributor to the wealth of the region. Whilst the outcomes for the sheep industry have not been as positive as for the cattle industry, there are still many wool producers who remain viable and committed to the industry. A number of operations within the region are now finding that diversification into dual-purpose wool and meat sheep breeds is strengthening their profitability. Organic beef and lamb are also of significant interest in the South West.

Goat farming for meat has the potential to become an alternative to traditional livestock enterprises for producers in the South West. Charleville, with its major feral goat processing plant, is well positioned to capitalise on this opportunity. Macropod and wild game

harvesting are significant industries in the region, with a processing plant opened in Charleville in 2005. Wild boar and goat meat are harvested for human consumption and, for the most part, are exported to Europe and Russia with by-products sold for pet food. Currently, the macropod harvest is largely processed for human consumption. It is anticipated that this will become a significant export industry.

Harvesting of macropods and wild game is managed according to environmental legislation. This industry—in cooperation with landholders—has the capacity to reduce grazing pressure on the land. The challenge for this industry is to move from an opportunistic approach—where the macropods are harvested as a pest species— to one where macropods are seen as a product of the natural environment that needs managing in a way that conserves the species and provides sustainable yields. In order to move in this desirable direction, the regulator, shooters, processors and landholders will need to address some common issues, especially in relation to supply and demand.

Other natural resources available in the region include arable soils for horticulture, petroleum products and several opal fields that produce precious opals, as well as a significant quantity of the world's output of semi-precious opal products.

The native timber industry, with a major focus on harvesting and milling of cypress pine, is a significant contributor to the local economy of Augathella. The statewide forest process will determine future forest management arrangements and supply commitments, however, in relation to state government controlled land in the region.

SunWater operates a water supply scheme at Cunnamulla on the Warrego River. This scheme provides water for the irrigation of grapes, melons, asparagus, small crops and organic wheat, as well as for Cunnamulla's parks. Artesian bores are the source of water for towns in the region, with some localities able to source surface water from local watercourses.

The region takes in some of the Cooper and Eromanga basins, which are currently the most significant wholly onshore petroleum basins in Australia. Oil is transported to refineries in Brisbane and Eromanga and these basins also supply gas markets in South Australia, New South Wales, the Australian Capital Territory and Queensland via gas pipelines.

In addition, the region provides a range of less tangible attractions, such as extensive landscapes that attract artists and broad, cloudless skies in which to observe the stars and planets. The region also boasts palaeontology sites for research and education and numerous opportunities for fishing, bird watching and camping.

The region's major threats to sustainable production in a natural environment include impacts from climate change, depletion of non-renewable resources and a range of social and economic factors that are addressed in other sections of the regional plan. However, the urgent adoption of national policies, particularly in relation to climate change and the depletion of fossil fuels, will provide significant opportunities for sustainable use of the natural resources of the South West, including its renewable energy sources.



2.1 Sustainable production

Primary production is a key component of the South West's economy, community, culture and historical identity. The importance of agriculture to the region is clear—almost one-quarter of workers are employed in this field.¹⁶ A vibrant, prosperous and sustainable rural sector is vital to the provision of social, economic and environmental wellbeing in the region.

The South West has a range of competitive advantages and important values in terms of primary production, including clean air, relatively low use of chemicals, unique vegetation and a small development footprint compared with agricultural development further east. The Great Artesian Basin provides reliable supplies of water for stock and towns, whilst suitably managed mulga country can provide a fodder reserve during drought and, to a limited degree, may have a role in future carbon credit or trading schemes.

In addition to the mulga country, there are significant areas of gidgee and channel pastures, Mitchell Grass Downs and *Aristida-Bothriochloa* pastures that support grazing of sheep, cattle, goats and native game.¹⁷

Primary production in the South West faces a series of current and emerging challenges. The Mulga Land bioregion is particularly prone to degradation and is difficult to rehabilitate. The introduction of hardier stock animals to the region, such as Brahman cattle and the potential expansion of goat production, may lead to a decrease in groundcover and an increase in soil degradation, particularly during times of drought. This may be mitigated, however, through best-practice grazing management.

Primary production in the South West will require adaptation to the challenges and opportunities presented by climate change. Current projections indicate

that a hotter, drier climate is likely, with increased evaporation and a decrease in soil moisture. In the far west, predictions indicate that there may be increased flows in the Channel Country due to increased precipitation in the upper catchment of the Cooper Creek system. Opportunities for the region to engage in the Carbon Pollution Reduction Scheme or the voluntary carbon market may come about through eligible reforestation, as corporations and governments seek to offset greenhouse gas emissions.

Objectives

- To support and encourage a diverse range of healthy and viable primary industries whilst ensuring the maintenance and improvement of the quality of land and water resources, flora and fauna, and regional landscapes.
- To support and encourage primary industries to capitalise on the region's competitive advantage and develop new opportunities.

Land use policy

- 2.1.1 Protect the viability of primary production through measures such as restricting inappropriate subdivision and development in rural areas.

Aligned strategies

- 2.1.A Improve community knowledge and encourage implementation of sustainable land management practices within an uncertain climate regime.
- 2.1.B Capitalise on the region's advantages through the adoption of new opportunities, management techniques, diversification and locally based value-adding to primary industry products.
- 2.1.C Encourage property management planning to incorporate the concept of a single comprehensive plan and current industry best practice.

- 2.1.D Use best practice management and property planning in marketing regional brand products.

- 2.1.E Employ appropriate adaptation strategies in areas used for primary production, based on the risks of adverse impacts to those lands arising from climate change.

- 2.1.F Encourage land suitability studies and research into land management practices to support sustainable rural land use.

- 2.1.G Adopt best practices to minimise the impacts of erosion and salinity.

- 2.1.H Promote the development of a regional hazardous waste management strategy that focuses on agricultural industries and provides for safe and cost-effective management of waste products.

- 2.1.I Encourage the planting of trees and other land uses and management practices that store carbon.

Explanatory notes

The South West's primary producers are under increasing pressure to compete in an uncertain global marketplace and in an environment of increasing legislative complexity and community scrutiny.

Primary producers in the South West are faced with the difficult challenge of growing and diversifying their businesses, whilst embracing the concept of being the 'home of the natural sciences'. They face increased expectations from the wider community to shoulder much of the burden of protecting and rehabilitating the environment.

A collaborative effort by primary producers, government, educational institutions and the community is required to overcome this challenge.

¹⁶ ABS 2008

¹⁷ Department of Primary Industries (2006) *Overview of Western Queensland*. Queensland Government.

The Australian Government has also produced a range of documents and agreements that support the principles of ecologically sustainable development.

Past and current land use practices have had a significant impact on the sustainability of the region's natural resources. Significant land degradation has resulted from the combination of over-stocking, inappropriate vegetation clearing and fire management regimes, drought, over-extraction of the Great Artesian Basin and floods. Pest plant and animal species are also a major cost for the industry and government.

The regional plan seeks to ensure that activities undertaken in the South West are sustainable. A set of indicators is needed to measure the level of sustainability that has been achieved in the South West over the life of the regional plan.

2.2 Water resources

Water is the region's most vital resource. Its availability underpins urban settlement, industry, agricultural production and development of the resources and energy sector. Water also supports wetlands of international, national and regional significance, and waterways in the Murray-Darling, Lake Eyre Basin and Bulloo catchments.

The Paroo and Warrego Rivers, Peery Lakes and other wetlands, lakes and springs of the region hold special meaning for the Traditional Owners, whose lives were closely tied to the irregular, seasonal flows of the region's rivers. Artesian mound springs continue to provide a reliable source of water during long dry spells.

The flow objective of the end-of-valley water resource plan for the Warrego River is flow equivalent to 89 per cent of pre-development flows. The flow objectives for the Paroo and Bulloo Rivers are flows equivalent to 99 per cent of pre-development flows. The Cooper Creek system is undeveloped and covered by a water management plan.

The Great Artesian Basin is essential for water security in the region. It provides water for urban, industrial and grazing uses and for natural springs. However, groundwater extraction has been unsustainable in the past, resulting in falls in pressure heads, drying up of springs and land degradation around free-flowing bores and bore drains.

The Great Artesian Basin water resource and resource operations plans regulate the availability of artesian water for potential development in the South West.

The Australian Government's Great Artesian Basin sustainability initiative is addressing the waste of Great Artesian Basin water from free-flowing bores and bore drains. A range of issues associated with the Great Artesian Basin will need to be addressed in the future. The regional plan can play a role in supporting the following:

- continuing the bore rehabilitation program
- ensuring new developments do not negatively affect current users or the sustainability of the resource
- considering opportunities for rangeland conservation and biodiversity enhancement in relation to bore capping and piping
- adopting adaptive water management practices (a need highlighted by prolonged drought periods and impacts of climate change on water supplies), focusing on:
 - improved understanding of climate change and variability
 - new water recycling and storage technologies
 - balancing competing uses of water to support ecological functions and meet consumption needs.

Water quality and quantity is expected to decline in some areas, due to higher temperatures, increased evaporation and lower rainfall. These conditions may suit algal blooms. When it does rain, heavy downpours will increase the risk of soil erosion, and the sediment and nutrient loads in waterways. The quantity of water available for ecosystem functioning (environmental flows) is also likely to decline.

The continued delivery of water to natural systems and consumers depends on the maintenance of both natural (wetlands, springs, waterways and aquifers) and built (storages, sewage treatment works, pumping facilities and reticulation networks) infrastructure.

Objective

To manage the region's river systems, ground water, wetlands and water resources for sustainable use and to protect dependent ecosystems and water quality.

Land use policies

- 2.2.1 Approve development only where it has secure access to adequate supplies of water of suitable quality to support proposed activity.
- 2.2.2 Plan, design and undertake urban development to protect environmental values and water quality objectives.
- 2.2.3 Adopt a catchment management approach for developments other than rural activities potentially impacting on the water quality and health of the Murray-Darling river system and the Lake Eyre Basin.
- 2.2.4 Adopt demand management principles in the planning, design and construction of water cycle infrastructure, including water supply, sewerage and drainage.
- 2.2.5 Ensure any development near waterways and wetlands is designed, located and operated to avoid impacts on water quality and aquatic ecosystems.

Aligned strategies

- 2.2.A Eliminate point source wastewater discharge of pollutants to waterways where practicable, or otherwise handle wastewater in accordance with best-practice environmental management to protect or enhance environmental values and meet water quality objectives of receiving waters.



- 2.2.B Support the development of appropriate management plans to protect or improve river systems, groundwater and wetlands of significance, particularly the Murray-Darling river system and the Lake Eyre Basin.
- 2.2.C Support the use of a range of mechanisms to protect, conserve, enhance and restore the environmental, social and economic values of river systems, groundwater and wetlands.
- 2.2.D Implement the Great Artesian Basin sustainability initiative (as identified in *Blueprint for the Bush*) throughout the region.
- 2.2.E Involve Traditional Owners in water planning and management.
- 2.2.F Encourage water-efficient technologies and practices and use water consumption targets for town water supply planning.

Explanatory notes

There are a number of government instruments, relevant to the *Integrated Planning Act 1997*, aimed at the ecologically sustainable management of water, waterways and wetlands. These include:

- Environmental Protection (Water) Policy 2008 Schedule 1 (environmental values and water quality objectives for waters) and the Queensland Water Quality Guidelines 2006, which provide environmental values and water quality objectives for water quality management and protection of aquatic ecosystems. The guidelines complement the National Water Quality Management Strategy.
- regional vegetation management codes, which provide criteria for assessing development in proximity to wetlands and waterways
- regional water resource plans, which set the balance between consumptive use and water release to sustain riverine ecosystems. Current water resource plans applicable to the region are:
 - *Water Resources (Coopers Creek) Plan 2000*
 - *Water Resources (Warrego, Paroo, Bulloo and Nebine Catchments) Plan 2003*
 - *Water Resources (Condamine and Balonne) Plan 2004*
 - *Water Resources (Great Artesian Basin) Plan 2006*
 - *Stormwater quality control guidelines for local government 1998*.

2.3 Pest management

An ongoing issue for both agriculture and the environment in the South West is the proliferation of weed species and pests. Land managers draw a distinction between woody weeds, on the one hand, and unpalatable plants that are widespread throughout the region, but which dominate and become a nuisance when the land is over-grazed, on the other hand. The impact of feral pigs, wild dogs, cats, foxes and goats is a major problem in the South West. The cost of managing weeds and pest animals is a significant burden on landholders and government agencies. The development of the feral animal harvesting industry provides an important pest-management strategy, but overall, the management of plant and pest animals is a major issue for sustaining the land's productivity.

Hotter weather, less rainfall, and carbon dioxide fertilisation will affect plant growth and productivity, and may change native and cultivated pastures. There could be a shift in the distribution of existing pests, diseases and weeds, and new ones may appear.

Objective

To manage animals and plants that are known pests, to protect present and future land use and economic opportunities.

Aligned strategies

- 2.3.A Prevent and monitor exposure to exotic and introduced pests, weeds and diseases in the region, through the combined efforts of government, industry, community and landholders.
- 2.3.B Support responsible pest management strategies that protect the environment and the productive capacity of natural resources, communities, industries and businesses.
- 2.3.C Improve the community's ability to manage and where possible eliminate pest weeds and animals, in a manner consistent with any endorsed pest or biosecurity management plans or strategies

Explanatory notes

Queensland's vegetation management framework regulates the clearing of native vegetation. It addresses land degradation problems such as salinity, soil degradation, erosion and declining water quality.

Under the framework, the Queensland Government ended the broad-scale clearing of remnant vegetation in December 2006, however, vegetation clearing is still allowed for certain purposes.

Clearing native vegetation for weed or pest management is one of the purposes for which landholders can apply for development approval.

Pests are weeds or pest animals declared under the *Pest and Stock Route Management Act 2002*.

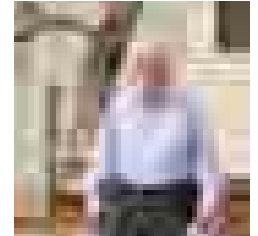
There are three classes of declared pests under this Act. These pests are targeted for control, because they cause, or have potential to cause, serious economic, environmental or social impacts.

Under the vegetation management framework, the term 'weeds' also includes non-native plants that are not declared.

3. Strong communities

Desired regional outcome

The South West is home to a sustainable, prosperous and healthy community that enjoys access to a wide range of high-quality services and an enviable way of life.



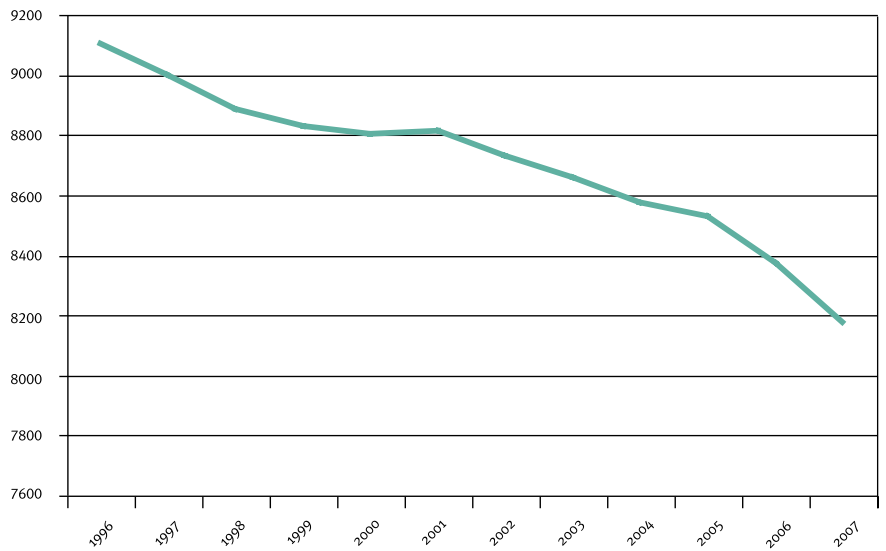
The South West is sparsely populated with a total regional population of 8176.¹⁶ This equates to a regional population density of about 0.04 persons per square kilometre. The largest urban population centres in the region are Charleville, with an approximate population of 3500, and Cunnamulla, with an approximate population of 1300. These two centres accounted for more than half the region's population in 2006. The other settlements in the region all have populations of fewer than 1000 people. The major settlements in the South West region are Charleville and Augathella in Murweh Shire, Cunnamulla in Paroo Shire, Quilpie in Quilpie Shire, and Thargomindah in Bulloo Shire. These five major population centres are home to over 70 per cent of the region's population, with the balance located in the rural and remote areas of the region.¹⁸ Table 2 Shows population data for South West Shires.

Table 2. Estimated resident population figures for the South West region shires

Area	Estimated resident population (2007 preliminary) ¹⁹
South West region	8176
Murweh Shire	4786
Paroo Shire	2001
Quilpie Shire	1012
Bulloo Shire	377

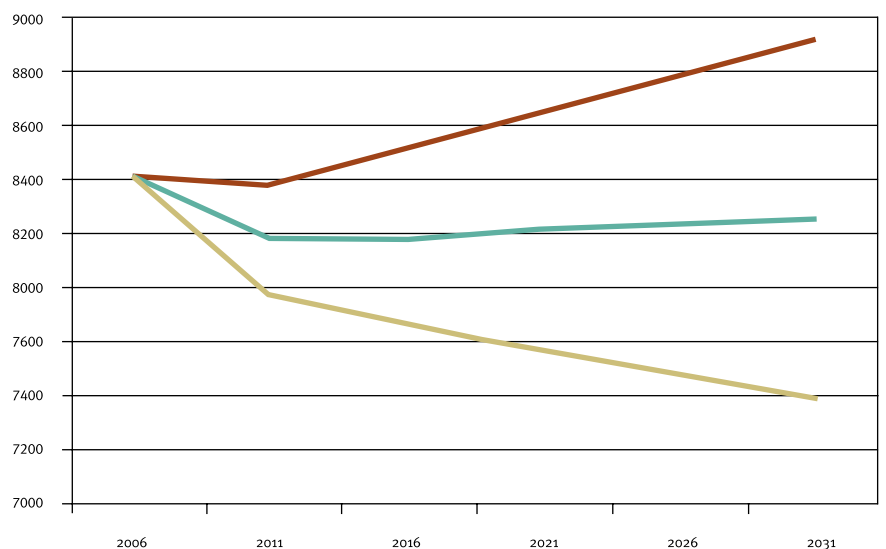
(Source: ABS 2007, Regional Population Growth Australia 1996-2006 (3218.0)²⁰)

Figure 3. Estimated resident population 1996-2007



(Source: Planning Information and Forecasting Unit 2007).

Figure 4. Population projections to 2031



(Source: Planning Information and Forecasting Unit 2007).

— Low — Medium — High

¹⁸ Australian Bureau of Statistics (2007) *Regional Population Growth Australia 1996-2006* (3218.0).

¹⁹ Planning Information and Forecasting Unit (2007), Queensland Government

²⁰ ABS (2007) *Regional Population Growth Australia 1996-2006* (3218.0).



The change in the South West's overall estimated resident population between 1996 and 2006 can be seen in Figure 3. Medium series population projections indicate that the South West's population is expected to continue to experience a slow decline over the next two decades, although this decline is expected to be at a slow rate of -0.1 per cent per annum (see Figure 4).²¹

The age distribution of the South West's population is predicted to remain largely stable over the next 20 years, with a decrease in the proportion of the population aged 0–14 and an increase in the population aged over 65. By 2026, the median age of the region's population is expected to increase from 34 to 37. This compares with a projected increase in average age from 36 to 41 for Queensland as a whole.²²

People in the South West are more likely to have Australian citizenship and speak only English at home than the Australian average. The South West has a lower proportion of people born overseas than the Australian average.²³ In contrast, the South West has a significantly higher proportion of Indigenous people than Australia as a whole. The proportion of Indigenous people in the South West rose from 10.6 per cent of the total population in 1996 to 13.2 per cent in 2006,²⁴ whereas the Indigenous proportion of the Australian population was 2.3 per cent in 2006.

The South West's population has lower education levels than the Queensland average. For example, data from the 2006 census revealed that the proportion of people in the South West with tertiary qualifications was lower than the Queensland average.²⁵ Community organisation South West Natural Resource Management (NRM) Ltd recently noted however that in agricultural families it is common for a spouse or partner to hold a tertiary degree.

The difference in qualification levels among the population of the South West, when compared with the state average, reflects access to education opportunities and regional industry structures. A significant proportion of workers are employed in beef cattle, sheep and grain farming. Other significant employment categories in the region include education, hospitals and local government administration.²⁶

3.1 Promotion, perception and advocacy

Despite the employment and lifestyle benefits offered by the region, the low residential density supports a general belief that the South West struggles to meet employment, social, cultural and recreational needs. The South West is commonly perceived as lacking access to adequate health and education services. A number of these perceptions are related to constraints that result from sparse population, distance and differences in infrastructure delivery, compared to other regions. Addressing these issues will assist in resolving negative perceptions. The South West needs to promote a shift in the broader community's perceptions of life in a rural area.

The South West will need to adopt an integrated marketing and promotional approach to highlight the region's unique assets, focusing on:

- the natural environment
- being the home of the natural sciences
- lifestyle
- cultural heritage
- community belonging and diversity
- business and employment opportunities.

Objective

To capitalise on the South West's competitive advantages and promote the region as a great place to work, raise a family and enjoy a unique lifestyle.

Aligned strategy

- 3.1.A Promotion of the South West is undertaken in a coordinated regional manner in order to maximise benefits.

3.2 Health

Delivery of health services is a key priority in the South West and is essential to ensuring safe, healthy and sustainable communities. Without such services, the South West will not be able to meet its regional vision.

The small size and remoteness of communities in the South West pose a challenge for the delivery of adequate health services. This, coupled with the difficulties of recruiting health care professionals to these areas, means that small communities in the South West are generally unable to provide stand-alone health services. Many residents requiring health services have to travel long distances to access health care. Support networks are needed for travelling health service clients and their families, particularly those accessing specialised health care. Community transport is recognised as particularly important in providing access to services for the transport-disadvantaged.

Queensland Health identifies the need to plan for the delivery of safe and sustainable health services to small communities—those with populations of 200 to 2000 people. This includes developing a minimum suite of health services that each community will be

²¹ Department of Infrastructure and Planning (2007) Urban and rural population change and population movement in Western Queensland planning regions p.6.

²² Planning Information and Forecasting Unit (2007), *Population and Housing Fact Sheet: South Western Region*, Department of Local Government, Planning, Sport and Recreation. www.lgp.qld.gov.au accessed 30 June 2008.

²³ Australian Bureau of Statistics (2006) *Census data* www.censusdata.abs.gov.au

²⁴ *ibid*

²⁵ *ibid*

²⁶ *ibid*



able to access. These are known as the universal service obligations. The range of services offered will address the needs of the community, be linked to services provided in larger communities and be delivered in a safe and sustainable way.

A range of health services is currently funded by Queensland Health for the South West communities. These services are provided from the activity centres of Charleville, Cunnamulla, Quilpie, Augathella, Thargomindah and Morven or through access to larger facilities in Toowoomba and Brisbane. A number of visiting specialist services are also provided and service delivery varies, with some services offered daily, while others range from weekly to annually.

Charleville is the key health service provider for the South West, with Cunnamulla the secondary service provider. Primary emergency services are available out of each centre, with the exception of Morven, where after-hours emergency services are provided through Charleville. Uncomplicated birthing services for the South West are offered in Charleville, with access to complicated birthing services available in Brisbane or Toowoomba.

Future service decisions will be guided by changes in need, demand, service models, workforce demographics and other parameters.

Queensland Health is considering possible service options that could be delivered by a range of providers and funding partners, as it will not be possible for Queensland Health to be the sole provider. In many cases, the suite of services may be provided through existing organisations such as the Division of General Practice, community-controlled health services, Queensland Police, Education Queensland, Department of Community Safety, Royal Flying Doctor Service of Australia and other community organisations. The next step will be consultation with both the communities and service providers to determine sustainable service options.

The regional network of centres will guide the location of health infrastructure and support services within the South West. Such decisions will also be guided by appropriate needs assessments and analyses of current service delivery arrangements and patterns of use.

Objective

To ensure that the South West community has access to high-quality, safe and sustainable health services that promote preventative strategies for maintaining healthy lifestyles and provide appropriate acute care, where required.

Land use policies

- 3.2.1 Develop health infrastructure and services in a manner consistent with the regional activity centres network, where appropriate.
- 3.2.2 Ensure new development promotes a healthy lifestyle and social interaction by incorporating the following features:
 - safe, attractive and conveniently located parklands, playgrounds and open space
 - connected and well-lit street and pathway networks incorporating facilities to encourage walking, cycling and other forms of active transport
 - buffering of high-impact land uses and separation from residential areas
 - provisions for personal safety
 - access to flexible transport options for transport-disadvantaged community members.

Aligned strategies

- 3.2.A Provide health services in a way that is consistent with the agreed universal services obligations.
- 3.2.B Actively involve consumers in the planning of health services to ensure these services are responsive to the needs of those who use them.
- 3.2.C Deliver services through effective partnership arrangements between agencies and sectors that make an important contribution to health.
- 3.2.D Provide culturally sensitive services for Indigenous people.
- 3.2.E Promote availability of health services to improve the community's understanding of how to access the services they need in the South West.



3.3 Young people

The South West's young people, like many other rural residents, are generally attracted to the educational, occupational and social opportunities of larger centres. The South West consistently experiences a substantial loss of young people in the 15 to 24 year age bracket. Despite the continuing decline in the South West's overall population in recent years, the percentage of Indigenous people has risen, as non-Indigenous people leave the region to pursue education and employment opportunities. This difference is highlighted in data²⁷ from the 2006 census for the 0-24 year age category—in the non-Indigenous population 35.3 per cent comprises people of these ages, whereas in the Indigenous population, 55.7 per cent of people are in this age category.

Demographic modelling suggests that around one-third of the people who leave the region are leaving for the South East Queensland centres of Brisbane, Toowoomba and the Gold Coast.²⁸ The remaining people migrate to other areas of Queensland or interstate.

However, it is not necessarily a negative trend that young people move away, as they gain work experience, education and a broader focus that allows them to make a greater contribution should they return to the region.

In the South West, the inability of some young people to move from education to employment, given the limited local access to alternative education, traineeships and apprenticeships. The South West has a relatively low level of tertiary study opportunities via external studies. This is reflected by the lower proportion of students in the South West undertaking tertiary studies than the Queensland average.²⁹ It is recognised that the financial and social costs of supporting a student living away from home are generally high. Students may be assisted by education bursaries, which encourage higher youth retention in tertiary studies.

The Queensland Governments' *Blueprint for the Bush* identified that young people in rural Queensland require access to a range of educational and career opportunities. The initiative supports ventures such as the Outback College of Rural Education, to be located at the former Croxdale research facility at Charleville.

There is a need to uphold existing strategies and develop further initiatives that keep young people in the community, including initiatives that support them when they move away for study or work experience and encourage them to return to the community. One organisation that fulfils this role is the Isolated Children and Parents Association.

Objective

To recognise the South West's young people as a vital component of the region's future and provide them with access to educational, recreational, social and employment opportunities.

Land use policies

3.3.1 Ensure land use and open space planning takes into account the needs of young people, including the development of suitable recreation and sporting spaces and the development of safe walking and cycle paths.

3.3.2 Provide for flexible planning mechanisms to accommodate the development and upgrade of educational facilities within the South West.

Aligned strategy

3.3.A Involve young people in and foster their ownership of community groups and decision-making processes.

3.4 Partnerships, networks and coordination

People, organisations and government agencies are responsible for the management of the region's natural, economic and social assets. Improved understanding and knowledge is essential to the sustainability of regional communities.

The region therefore needs an adequately resourced, community-based, policy-making structure supported by appropriate research. This structure may involve collaboration between governmental human services agencies, to develop holistic responses to community needs from local to regional levels.

The capacity of community-based organisations to improve service delivery can be strengthened by identifying opportunities to network and collaborate with government, other community groups, education, training and business organisations using current and accurate data. Collaboration can have a number of benefits for organisations, including the sharing of overhead costs.

The Regional Managers' Coordination Network and Regional Ministerial Community Forums are mechanisms that could be further exploited to work across government agencies, in order to drive action and the exchange of information across the region. Sharing of knowledge and understanding is a critical factor in achieving best practice management in the region. Organisations serving natural resource stakeholders need to effectively serve local interests and strive for better understanding and application of science.

A number of organisations already exist within the South West to engage with the community and local and state government, to achieve mutually beneficial partnerships and to transfer and share knowledge. South West Natural Resource Management (NRM) Ltd and Desert Channels Queensland

²⁷ ABS 2007, 2006 Census - Community profile series, South West statistical division (Catalogue No. 2002.0)

²⁸ Department of Infrastructure and Planning (2007) *Urban and rural population change and population movement in Western Queensland planning regions*, p19.

²⁹ Population Information and Forecasting Unit (2007), Queensland Government.

are community-based organisations that identify and develop ways to address community and key stakeholders' issues. For example, South West Natural Resource Management (NRM) Ltd provides an information hub and information-brokering role in the natural sciences, capacity building and cultural heritage. The South West Regional Development Association focuses on small business development through state government-funded regional business advisory services.

To ensure the best possible outcomes, cooperative partnerships are essential to realising the region's aspirations.

Objective

To establish and maintain effective, cooperative working partnerships that encourage improved environmental, economic and social outcomes, through shared and improved understanding of the South West's resources and capacity to achieve sustainable outcomes.

Aligned strategies

- 3.4.A Investigate avenues to support growth, productivity and prosperity within the region.
- 3.4.B Establish processes for government and non-government organisations, to increase coordination in the delivery of services and knowledge.
- 3.4.C Facilitate an information hub and information-brokering services within the region.
- 3.4.D Facilitate communication and collaboration between community, industry and government organisations, to identify and resolve key knowledge gaps.
- 3.4.E Enhance understanding of the geographic challenges of the South West among decision makers in government departments.
- 3.4.F Strengthen volunteer organisations through strategies to improve resources and efforts to attract and retain volunteers.

3.5 Skills, recruitment and retention

Access to skilled employees, employment and training is vital to the social and economic wellbeing of the South West. The region is currently experiencing a shortage of skilled workers, particularly tradespeople and professionals, including health practitioners.

Blueprint for the Bush outlines a series of initiatives being undertaken to deliver better training opportunities for regional Queensland, as part of the *Queensland Skills Plan 2008*.

Employers in the South West find it difficult to attract and retain suitable workers for a number of reasons, including geographic and professional isolation, limited local training opportunities, negative perceptions of working in rural areas and limited government accommodation.

There is a general lack of recognition in the broader community of the contributions that skilled workers can make to rural communities.

In an effort to address the shortage of workers, some private employers are hiring foreign workers on temporary work visas under Commonwealth legislation. It must be recognised that these workers face many challenges in adapting to life in rural Australia, especially without adequate housing and English language skills.

It is recognised that the energy sector is a significant employer in the South West and may be in a position, through a partnership arrangement, to take on apprentices and provide training for people who live in the region.

In order to increase the South West's attractiveness as an employment destination, the region's virtues must be better marketed. Opportunities for employer-funded training outside the South West, increased flexibility of work arrangements and employee sharing programs will improve staff retention.

Factors likely to make the South West a more attractive place for employees include:

- provision and maintenance of high-quality housing
- well-planned communities
- cultural, sport and recreation facilities
- efficient transport
- enhancement of health and education facilities.

The regional activity centres network will inform the location of training facilities (see part D, Regional activity centres network).

Objective

To attract, train and retain appropriately skilled staff to meet the social and economic needs of the South West.

Aligned strategies

- 3.5.A Educational institutions recognise the broad experience and multi-skilling opportunities professionals experience when working in a rural or remote area.
- 3.5.B Facilitate innovative and combined approaches to skill development and recruitment within the South West.
- 3.5.C Provide government employees with access to appropriate accommodation.
- 3.5.D Exploit advances in communication technologies to increase opportunities to establish high-quality distance education hubs in the South West.
- 3.5.E Encourage collaboration and partnerships between local businesses and industries for planning, designing and delivering regional training programs and apprenticeships.



3.6 Education and training

Education is an essential building block for sustainable communities. It increases people's work and life skills, provides individual fulfilment, assists in gaining employment, supports the wider community and provides for economic growth. Social and economic development of the South West is dependent on the provision of, and access to, adequate and equitable education, training and skill development services by both community and businesses.

Local education opportunities need to embrace delivery modes suited to all learning styles, not simply concentrate on online and distance education strategies. Developing a method for recognising the prior learning of residents will benefit the region. Regional support for all students is essential. For example, Bulloo Shire provides educational bursaries to support students undertaking tertiary education.

Objective

To encourage and support a regional culture of lifelong learning.

Aligned strategies

- 3.6.A Facilitate the use of cadetships, bursaries and traineeships for younger residents of the South West.
- 3.6.B Promote collaboration between government, industry and businesses to provide local professional development training.

Explanatory notes

One of the core aims of the *Blueprint for the Bush* initiative is to educate children and give them skills for the future. It recognises the need for a high-quality education system that meets peoples' needs during their school and working years.

Within the South West some residents perceive that education past Year 10 does not enhance future work opportunities.

This perception is built on a cultural identification with manual tasks that were undertaken in the past. In many cases, these manual skills are still important, however, if the South West is to move forward, a new culture of learning and skills development needs to be fostered to provide residents with a diversity of skills.

Murweh Shire, in conjunction with educational institutions, has recently acquired Croxdale, and is investigating opportunities to provide courses that are specifically focused on teaching a range of accredited bush skills to young people from the coastal urban environment and from rural Queensland. This type of enterprise is consistent with the vision for the South West.

Opportunities for enhancing educational opportunities in the South West include:

- improving access to, and quality of, early childhood education
- improving partnerships between local education providers and the resources industry
- broadening the curriculum offered at high schools
- establishing tertiary education access points in the region and creating flexible education delivery packages that take advantage of new communication technologies to reduce the impact of remoteness
- improving recognition of prior learning and rural life skills.

3.7 Arts, culture, sport and recreation

Blueprint for the Bush highlights the significance of arts, culture, sport and recreation events and activities for the social wellbeing of rural communities. However, the remote nature of the South West can make it difficult for some members of the community to participate in, and enjoy the benefits of, these activities.

Access to these activities has many benefits, including better physical and mental health and stronger community

foundation. This is particularly true for the South West, where activities and events bind communities dispersed over long distances.

Objective

To ensure the region's infrastructure and social capacity support arts, culture, sport and recreation activities that are diverse, accessible and affordable.

Land use policy

- 3.7.1 Ensure planning schemes allocate sufficient land for open space, parkland, recreational and community facilities.

Aligned strategies

- 3.7.A Strengthen the organisational capacity of clubs and societies in order to maintain and encourage use of facilities and to support opportunities for participation.
- 3.7.B Promote the South West's towns as centres for arts and culture.
- 3.7.C Provide sport, recreation and cultural facilities in a coordinated and integrated manner.
- 3.7.D Organise and schedule events in a coordinated manner to maximise tourism benefits.
- 3.7.E Support community access to higher level sporting competitions and encourage community involvement in sport and cultural activities.

Explanatory notes

The South West will benefit from a regional approach to developing opportunities, infrastructure and organisational capacity to support arts, culture, sport and recreation.

The provision of infrastructure for regional events must be able to demonstrate a long-term benefit to the local community and preferably allow for multiple uses. Local authorities must ensure their planning schemes provide adequately

zoned land in appropriate locations for sport, recreation and open space facilities.

Local authorities and business owners have a crucial role to play in supporting local artists and school children in order to make the South West's towns into hubs of arts and creativity.

Employment and economic opportunities provide a reason or means to live in a remote area. Education, health and services provide the support mechanisms to influence decisions to move to—or remain within—a community. Choosing to live within a community may be influenced by the natural environment, but community is further enhanced by the arts, culture, sport and recreation on offer.

3.8 Cultural values

The South West has a proud Aboriginal and European cultural heritage. A summary of the major historic events is included in the explanatory notes to this section. This historic summary gives insights into settlement patterns and the impact of climate and global market influences on the prosperity of the South West. It also links major events to the social and economic development of the region. These events include the introduction of railway services, air services, the first commercial use of water from the Great Artesian Basin and road development.

Indigenous history research estimates that there were at least 40 small, nomadic tribal groups in the area now covered by southern and south-west Queensland.³⁰ Aboriginal people have elaborate cultural rituals, sacred sites and social structures aligned with their rich relationship to country. The arrival of Europeans and the subsequent treatment of Aboriginal people have seen the loss of much of that knowledge and active connection to country.

In spite of this loss, Aboriginal groups within the South West continue to value the physical and spiritual qualities of

the landscape and are re-establishing links with, and knowledge about, this country to pass on to future generations.

Of significance are burial grounds, fish traps, fireplaces, rock works, and knowledge of bush tucker and traditional medicine. It is important that these sites and artefacts are recognised and protected from inappropriate development.

Objective

To identify, protect and maintain the South West's unique identity and cultural heritage values.

Land use policies

- 3.8.1 Identify heritage places in local government planning schemes.
- 3.8.2 Ensure development adjacent to heritage places, or on heritage sites, does not compromise the cultural heritage significance of those places.

Aligned strategies

- 3.8.A Encourage local governments to identify places of cultural heritage significance through a heritage survey using key historical themes for South West Queensland.
- 3.8.B Identify and add local cultural heritage places to the local heritage register.
- 3.8.C Support the management and preservation of the cultural heritage values of significant places.
- 3.8.D Support the development of a regional arts and culture strategy that aims to protect, educate and promote the unique cultural heritage values of the region.
- 3.8.E Incorporate activities and events related to the South West's cultural heritage into regional tourism promotions.

Explanatory notes

The regional plan acknowledges the South West Queensland traditional owner natural resource management and cultural heritage plan, *Caring for Country, Culture and People*.³¹ This plan confirms the link between the wellbeing of Aboriginal people, their health, education, employment and social interaction, and country and culture. Strong partnerships with Aboriginal people will be necessary to help them manage country. The policies in this section of the regional plan only address the strong physical links to country, while the regional plan as a whole addresses health, education and social aspects, in relation to Aboriginal people's wellbeing.

The Department of Environment and Resource Management maintains databases of significant sites, as required under the *Aboriginal Cultural Heritage Act 2003*. This Act requires that when carrying out a development activity, all reasonable and practicable measures are taken to ensure that it does not harm Aboriginal cultural heritage (the 'cultural heritage duty of care').

Europeans have lived in the South West since the mid-1800s. They, too, have left many significant historical and cultural sites. The South West is home to many historic buildings, Cobb and Co routes, old timber road bridges, farm cottages and antique equipment.³² Today, the region's rich rural history plays an important part in the development of the tourism industry, as evidenced by the importance of regional attractions such as Myendatta Homestead in Murweh Shire and Ray Station in Quilpie Shire. The numerous hotels such as the Noccundra Hotel, Coronas Hotel in Charleville, Trapper's Inn in Cunnamulla and Toompine Pub, all provide an insight into early settlement.

The pastoral industry has historically provided the main economic base, with sheep in the east and cattle more prominent in the west

³⁰ Norman Tindale (1974), *Aboriginal Tribes of Australia*, University of California Press, Berkeley, USA, 1974.

³¹ South West Natural Resource Management (NRM) Ltd (2008) *South West Natural Resource Management Plan 2008–2013*.

³² Environmental Protection Agency (2002), *Heritage Trails of the Queensland Outback*, Queensland Government.



Artesian water has been crucial to the development of the pastoral industry.

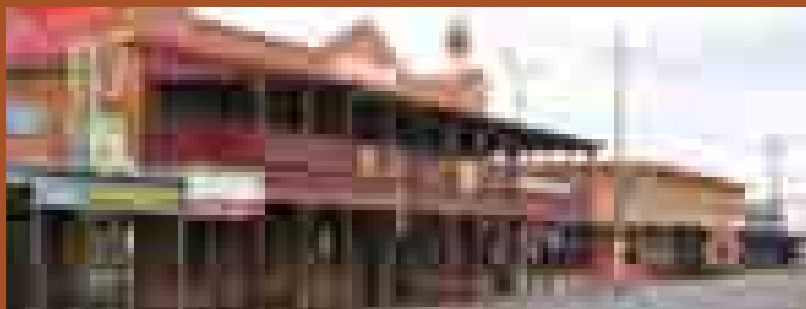
Examples of places which may be of cultural heritage significance include:

- sites associated with the pastoral industry, including homesteads, shearing sheds, yards, dips and stock routes
- dingo barrier fence
- station and town fringe camp sites of Indigenous groups
- artesian bores and drains
- sites associated with explorers
- railway sites (stations, bridges)
- adobe and earth construction buildings.

Non-Indigenous cultural heritage includes artefacts, places and buildings of European origin. The major piece of historic cultural heritage legislation is the *Queensland Heritage Act 1992*. Development of a place registered under the Act is an assessable development. This Act requires a local government to keep a local heritage register of places of cultural heritage significance in its local government area. The *Queensland Heritage Regulation 2003* includes a local heritage place code, which is an Integrated Development Assessment System code for development on a local heritage place.

The Department of Environment and Resource Management is currently undertaking a statewide survey of Queensland's heritage places. Key historical themes that are relevant to the South West have been identified in the *Queensland Cultural Heritage Places Context Study—Report to the Environmental Protection Agency*. Local governments should be guided by these themes when undertaking a local heritage survey of their area.

The regional plan provides a position for the South West in relation to the identification, protection and management of cultural heritage, which is consistent with state legislation.



Historic overview

The South West region includes the country of many Aboriginal tribes who lived in the area prior to European settlement.

Aboriginal inhabitants used the land for food, established spiritual connections with the land and developed sites for ceremonial purposes.

The first European to travel to this region was Charles Sturt, who led the South West Queensland expedition of 1845, following the Cooper Creek.

The expedition of Burke and Wills in 1860 passed through the area now known as Bulloo Shire.

The arrival of pastoralists in the region in the 1860s had a significant impact on Indigenous populations. These impacts included the loss of lands, death and dislocation.

The pastoral industry has been a major economic activity in the region since the 1860s. Pastoral runs were first established in the late 1850s and by the early 1880s most of the region had been occupied by pastoralists.

Early pastoralists faced significant challenges such as drought, floods and distance to markets and supplies. A significant economic boost occurred in the 1880s with the discovery of artesian water.

The regional stock route network was established from the 1860s onwards and continues to be important for travelling stock.

Settlements were usually located next to a river and developed to serve the pastoral industry. Centres emerged at Charleville (1868), Cunnamulla (1860s), Thargomindah (1874) and Quilpie (1915). Aboriginal fringe camps often emerged on the outskirts of towns.

Opals were discovered at Listowel Downs near Adavale in 1869.

A Cobb and Co depot was established in Charleville in 1876.

The first proven artesian bore of any significance in Australia was developed on Thurulgoonia Station, near Cunnamulla, in 1887.

Rail reached Charleville in 1888, Cunnamulla in 1898 and Quilpie in 1917. The expansion of the railway played a major role in the development of the region, because it resulted in lowering transport costs to the coast.

During the 20th century, economic growth was steady, although the region experienced the Great Depression in the 1930s and then an economic boom period in the 1950s, due to the increased demand for wool.

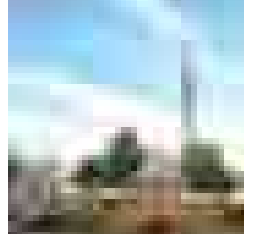
Since the 1960s, a slow decline in population has been the result of a series of setbacks in the region, including major drought and a falling commodity price for wool.

The discovery of oil and gas reserves in the 1980s saw the development of significant resources and the establishment of the energy industry in the far South West region.

4. Urban development

Desired regional outcome

South West regional towns provide appropriate levels of services and incorporate a high-quality built environment that contributes to the region's amenity, lifestyle and health, while respecting and preserving its heritage.



The built environment of the South West is characterised by small rural towns separated by long distances. They are connected by road, rail and air to other towns in the South West and to other regions to the north, south and east. There are a number of very small towns (populations fewer than 200 people) and localities spread throughout the region. The South West is vulnerable to natural events, including storms, floods and soil erosion, which can cause structural and infrastructure damage.

The region's towns have maintained much of their history, with historic buildings such as hotels adding greatly to the region's attractiveness and character. A significant proportion of the South West's population, however, is widely dispersed on rural properties, with limited access to services. Workers' camps have been established around isolated petroleum and gas wells, particularly in the western area of the South West, around the Jackson oil field, Eromanga and Noccundra districts. In some cases, these workers' settlements—such as the Jackson oil field and Ballera gas field—are larger than the major towns in the shire.

Land tenure in the South West is dominated by pastoral leases that remain in the ownership of the state. There are significant areas of freehold land in and around the major population centres and in the eastern parts of the South West. The region's settlements are generally located near reserves or commons, which in some cases can limit expansion of urban areas.

4.1 Regional activity centres network

The settlement pattern of the South West is characterised by relatively small population centres separated by considerable distances. Settlement size and location is primarily based on historical influences, such as river crossing points, transport routes and resource availability.

The region's relatively small and dispersed population makes the efficient and effective provision of services and infrastructure a challenging task.

Objectives

- To support regional growth, particularly within locations that can be efficiently serviced by infrastructure and are the logical extension of existing centres, to ensure continued amenity.
- To create opportunities for the further development of urban centres, by providing timely and appropriate infrastructure.

Land use policy

- 4.1.1 Ensure all new urban development supports the regional activity centres network, as defined in the regional plan, unless a clear need for departure is indicated by strong, sustained local population growth or other significant development opportunities.

Aligned strategies

- 4.1.A Support the regional activity centres network through the provision of new services and facilities.
- 4.1.B Recognise and address the need to support people who reside in community activity centres.

Explanatory notes

Changes in centres are most likely to be influenced by economic conditions and socio-economic factors.

4.2 Housing

An inadequate supply of quality and affordable accommodation that meets the needs and expectations of the community has been identified in the South West. A low level of investment in the private housing market has seen a decline in the quality and quantity of the region's private housing stock. A lack of suitable housing limits the South West's opportunities to attract and retain workers and affects people's quality of life.

Objective

- To ensure the South West provides incentives and certainty to encourage private investment in business and housing.
- Housing design is environmentally sensitive, affordable, well maintained and of an appropriate quantity and mix.



Land use policies

- 4.2.1 Allocate and service sufficient land to allow residential development over the life of the planning schemes, based on projected growth in housing requirements and taking into account population growth, changing demographics and household sizes.
- 4.2.2 Ensure planning schemes allow sufficient flexibility to provide a variety of housing options for the region.
- 4.2.3 Develop new housing in areas that are close to essential services and infrastructure, and minimise residents' exposure to the risk of flooding.
- 4.2.4 Encourage the development of a variety of dwelling types in major rural activity centres and district rural activity centres, close to services, facilities and employment opportunities.

Aligned strategies

- 4.2.A Ensure state government-owned housing is innovative and designed to meet climatic challenges in a cost-and energy-efficient manner.
- 4.2.B Facilitate early collaboration with resource companies regarding the future use of temporary accommodation.

Explanatory notes

A number of State Planning Policies and supporting documents provide guidance in relation to implementation of land use policies 4.2.1 and 4.2.2. These include:

- SPP 1/07 *Housing and residential development*
- SPP 1/03 *Mitigating the adverse impacts of flood, bushfire and landslide*
- SPP 1/92 *Development and the conservation of agricultural land and Guideline 2, Separating agricultural and residential land uses*

- SPP 2/07 *Protection of extractive resources and its accompanying guideline.*

Housing supply has been affected by inequitable access to finance and home ownership, low rental and business investment returns, high construction costs and a lack of skilled tradespeople. To attract professional workers into the South West, employers are forced to provide accommodation for their staff, thereby limiting housing choice and affordability for low to moderate income earners who are then squeezed out of the market.

Key housing deficiencies include emergency housing and a lack of temporary accommodation for trainees, students (particularly in the health sector) and apprentices. The high costs of construction and maintenance in the South West discourage the building and renovation of accommodation in the private sector. New housing in the South West should also be suitable to the region's highly variable climate. This includes appropriate design, orientation and use of energy-efficient appliances and materials.

4.3 Planning and design

Effective planning and design of the South West's towns can have an ongoing positive impact on the environmental, as well as economic, social and cultural health of the region, in both a direct and indirect manner. Well-planned towns protect areas of environmental value, encourage investment, provide safe and attractive public spaces, and enhance local character.

It is vital that the South West's towns are designed at a scale appropriate to the number of people. New development should be well-connected to existing developments within centres. It should encourage sustainable transport options, such as walking and cycling, and provide pleasant and safe pedestrian experiences. Streetscapes should avoid long blank

walls, excessive vehicle cross-overs and large areas of car parking. Wherever possible, car parking should be moved to the rear of premises, allowing priority access to pedestrians and enhancing the appearance of the town and streets.

New development that is likely to generate a significant amount of activity, such as a regional tourist attraction or major retail development, should be located close to existing town centres. This positioning will assist in building hubs of activity for the South West and provide benefits to existing businesses.

Objective

To ensure the design of new developments has a positive focus for the towns and is climate friendly, attractive, convenient, safe and promotes the distinctive outback character of the South West.

Land use policies

- 4.3.1 Ensure development contributes positively to the region's public realm and outback character through appropriate design, including material selection, use of colour, texture and lighting, movement of people and vehicles, and landscaping.
- 4.3.2 Ensure all new development is carried out in accordance with the principles of crime prevention through environmental design.³³
- 4.3.3 Ensure new developments support the retention and reinforcement of the existing town centre's economic viability.
- 4.3.4 Ensure planning schemes identify natural hazard areas and risks from climate change, to inform land use planning, development assessment and disaster management plans.
- 4.3.5 Adopt urban design principles in new developments—for both industrial and residential uses that:

³³ Geason, Sand Wilson, P. *Designing Out Crime: Crime prevention through environmental design*, Australia Institute of Criminology, Canberra, 1989 at www.aic.gov.au/publications/crimprev/cpted/

- make best use of available infrastructure
- minimise greenhouse gas emissions
- minimise the impacts of air and noise emissions, so that environmental standards for the air and acoustic environments³⁴ are not exceeded at the boundary of sensitive land uses
- adequately buffer intensive uses³⁵
- cater for energy-efficient, eco-friendly and climate sensitive design.

4.3.6 Locate new walking and cycle paths in town centres, near waterways and on public land.

4.3.7 Integrate land use and transport planning to support efficient land use, efficient movement of people and goods, and industry competitiveness and growth.

4.3.8 Identify sites for integrated waste disposal, including recycling and reuse, and incorporate regionally specific, best-practice waste management that is applicable to sparsely populated, low-density communities that are separated by substantial distances.

Aligned strategies

4.3.A Encourage programs for planting drought tolerant trees in and around towns, in order to make them green and attractive places and to provide climate change benefits.

4.3.B Support the development of an integrated approach to avoid waste generation, and in instances where waste generation cannot be avoided, implement practices to reuse, recycle or recover wastes and materials prior to disposal.

4.3.C Support education and promotion of best practice models that address waste reuse, composting, recycling, waste to energy conversion and safe disposal.

4.3.D Consider the needs of communities in the planning and delivery of reliable and safe public transport services considers the needs of communities in rural and remote towns and special needs groups, such as the elderly and disabled.

4.3.E Investigate cost-effective and environmentally sustainable, sewerage treatment systems that are suitable for recreational areas and isolated tourist nodes.

Explanatory notes

The South West has many examples of excellent rural character and attractive streetscapes, including:

- the attractive town centre of Cunnamulla
- the shaded verandas of the Coronas Hotel in Charleville
- the pleasant village parks, sports grounds and river walk of Thargomindah
- the distinctive design of the Quilpie tourist information centre.

Local authorities must ensure that new development has a positive impact on the landscape, scenic quality, rural character and streetscape of the locality. The character, location, bulk, height and design of new development should always contribute in a positive manner to the streetscape and the achievement of the strategic objectives of this regional plan.

The South West faces a number of opportunities and challenges in developing successful and attractive towns. The opportunities include:

- retaining historic buildings
- designing compact and walkable town areas

- developing large areas of publicly accessible space such as parks, town commons and land beside rivers
- maintaining and enhancing the region's distinctive character.

Challenges include:

- limited funding for town beautification
- relatively low levels of private development
- limited community appreciation of the benefits of investment in developing attractive towns
- very low-density development
- high level of investment required to maintain historic buildings.

The South West's highly variable and sometimes extreme climate makes it important to establish settlements and streetscapes as refuges of shelter and shade. Streetscape upgrades and planting programs will make the region a more amenable place for residents and visitors. Appropriate building siting and vegetation selection can ensure access to sun during the cool winter months.

Community safety will also be enhanced through the provision of safe open spaces and recreational and sporting areas, based on high-quality urban design and appropriate buffering of hazardous land uses. The application of crime prevention through environmental design principles in new developments can assist in building safer communities.

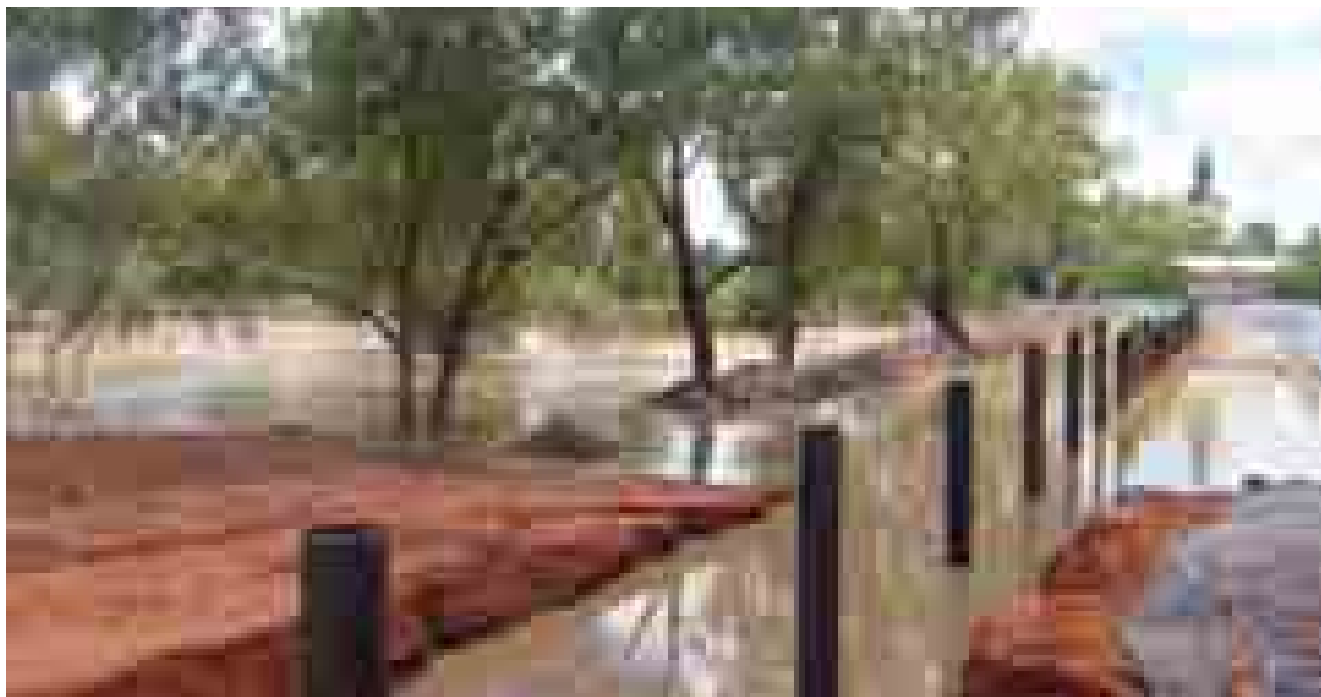
Air and noise pollution is currently managed under the *Environmental Protection Act 1994* and specific statutory instruments of that Act, including:

- *Environmental Protection Regulation 2008*
- *Environmental Protection (Air) Policy 2008*
- *Environmental Protection (Noise) Policy 2008*.

Historically, there has been widespread use of chemicals in common farming practices. Residual chemicals persist in soils and buildings and on specific

³⁴ Environmental indicators and goals under the Environmental Protection (Air) Policy 2008 and environmental objectives under the Environmental Protection (Noise) Policy

³⁵ Garnaut Climate Change Review, *Resource developments, intensive agriculture and hard to locate sport and recreation areas 2008* at www.garnautreview.org.au



sites such as dips and stockyards, with potential risk to people, animals and the environment. Several programs offer safe collection and recycling of cleaned chemical containers and the collection of unwanted rural, agricultural and veterinary chemicals. The ChemClear program³⁶ provides for the collection of agricultural and veterinary chemical containers, while the drumMUSTER program³⁷ has also been set up for the collection and recycling of certain chemical containers. Management strategies are required to address issues regarding contamination.

4.4 Disaster management

Objective

To prepare, review and exercise emergency and disaster management plans addressing the response to, and recovery from, hazards likely to affect the region.

Land use policy

4.4.1 Development is not located in areas that are at risk of being affected by natural hazards.

Aligned strategies

4.4.A Ensure disaster management for the region includes mitigating the impact of natural disaster on the community, development, infrastructure and the environment. This includes strategies to raise awareness of the implications of inappropriate development and infrastructure within areas prone to natural hazards.

4.4.B Develop, implement and review a coordinated regional approach among all levels of government, industry and community, to disaster management that integrates regional, subregional and local level plans for risk assessment, disaster mitigation and emergency planning.

Explanatory notes

The Queensland Government has released the State Planning Policy 1/03: *Mitigating the Adverse Impacts of Floods, Bushfire and Landslide*, which provides policy to ensure development is not affected by these natural hazards.

Queensland Police and the Department of Community Safety are currently preparing interim arrangements for district disaster coordinators and relationships between district disaster management groups and local disaster management groups.

³⁶ ChemClear program (see Agsafe at www.chemclear.com.au)

³⁷ drumMUSTER program (see Agsafe at www.drummuster.com.au)

5. Economic development

Desired regional outcome

A growing and prosperous regional economy that is diverse, innovative, sustainable and provides attractive investment opportunities.



Economic activities in the South West consist of oil, gas and gemstone (opal) extraction, beef, sheep and game meat processing, and some cropping. Tourism is also a major contributor to the economy, particularly during cooler times of the year. Retail trade is a significant employer in the rural centres. Agricultural production in the South West is typically worth around \$162 million per annum, with the vast majority of this value made up of stock production and sales.³⁸

SunWater operates one water supply scheme in the region, based on a 4350 megalitre storage capacity at Allen Tannock Weir on the Warrego River at Cunnamulla. This storage allows the irrigation of crops, including dates, grapes and organic wheat.³⁹

In 2006, 23.3 per cent of the South West's population was employed in the agriculture, forestry and fishing industries. This is significantly higher than the Queensland average of 3.4 per cent.⁴⁰ The second largest sector of employment was retail trade. The South West has a higher percentage of people employed in public administration and safety than the Queensland average.

The South West Regional Development Association Inc commissioned an economic development strategy for the region in 2003. This strategy nominated the South West's natural gas resource as a primary competitive advantage. Other competitive advantages include the potential to develop a gas-fired power station, the intersection of the Mitchell

and Warrego highways, the potential for carbon credit trading, regional tourist attractions such as Charleville's Cosmos Centre, and the abundance of affordable residential and commercial land.⁴¹

A strong and resilient regional economy is essential to the sustainable development of the South West and underpins the health and wellbeing of the regional population. Efficient transport connections to and within centres is also important. Land use planning needs to recognise the importance of sustainable economic development and ensure the planning framework facilitates such development, particularly in relation to the provision of adequate land and the prevention of incompatible land use.

Subsequent to the release of the South West Regional Development Association's report, the Queensland Government's *Blueprint for the Bush* identified a range of initiatives to support economic development in rural Queensland. These include growing business and industry, rural infrastructure, and jobs and skills development.

5.1 Marketing a resilient region

The South West is home to a diverse, resilient and proud community that enjoys the lifestyle advantages afforded by living in a rural area. The South West boasts a wide range of natural,

cultural and economic assets that make it an attractive place to live, work and invest. Enormous potential exists within the South West to become a centre for natural sciences, which builds on the region's natural advantages and provides an increasing international focus on sustainability and the environment.

The South West's natural assets include unique wildlife, wilderness landscapes, national parks, internationally recognised wetlands, natural rivers, the Great Artesian Basin and the brilliant outback night skies. Cultural assets include a rich Indigenous heritage, the presence of innovative and creative people committed to the region's future, museums, recreational activities, historically significant buildings and a strong sense of community pride. The South West's economic assets include substantial oil and natural gas reserves, productive grazing land, a growing tourism industry, the potential for clean and green production industries, and road, rail and air transport infrastructure.

Objective

To market and promote the region's values and potential to attract people and investment.

Aligned strategies

- 5.1.A Government, community and industry bodies work collaboratively to effectively market and promote the South West in an innovative and creative manner.
- 5.1.B Facilitate promotion of a distinctive South West brand.

³⁸ Department of State Development (2007), Queensland Government

³⁹ SunWater (2007) Cunnamulla water supply scheme, www.sunwater.com.au, accessed 29/06/08.

⁴⁰ Australian Bureau of Statistics (2008) Census data www.censusdata.abs.gov.au.

⁴¹ Pacific South West Strategy Group Pty Ltd (2003)



- 5.1.C Local governments and the community capitalise on their unique competitive advantages within the regional marketing context.

Explanatory notes

The importance of the meat processing industry to the economic strength and stability of the South West is well recognised, however, the South West must move into the future by challenging misleading perceptions of what the region comprises and take full advantage of the unique and quality lifestyle available. To achieve the vision set out in this regional plan, the South West must position itself to be able to take advantage of future opportunities.

An important factor in better marketing the South West is to foster a more coordinated and integrated approach to marketing and promotional activities, market development and market access, and industry partnerships. The government and the wider community need to become more adept at recognising the values in the South West that perhaps a local's eye may pass over, but would potentially be of considerable interest to a visitor, potential resident or investor.

A key task is for each of the South West's shires to identify their unique strengths and use these to develop strategies to maximise economic benefits for the region. Over the next 20 years, a range of opportunities has the potential to build the South West's economic foundation. These include:

- carbon trading and geo-sequestration⁴²
- sustainable management of the Great Artesian Basin
- renewable energy opportunities
- eco-tourism and education
- green production.

These opportunities have the potential to attract new residents who seek employment opportunities and a relaxed lifestyle.

5.2 Tourism

Blueprint for the Bush identified that tourism can play an important role in creating economic development opportunities through marketing rural areas as an attractive place to visit, live and work. Rural Queensland's share of the state's visitor nights in 2004–05 was 19.5 per cent. This is significantly higher than rural Queensland's share of both population and tourism sector employment, demonstrating the region's potential to convert tourism into further economic development opportunities.

In the South West, tourism is emerging as a prominent industry, moderating the impacts of fluctuations in other industries and providing support to the region's retail and hospitality sectors. Tourism provides opportunities for new businesses to establish and for existing businesses to expand and diversify, however, it is recognised that in isolation, tourism is unlikely to be the South West's primary economic driver in the future.

The South West has experienced an increase in tourism in recent years. Attractions and experiences include natural landscapes, national parks, educational tourism, and unique products such as the Quilpie boulder opal and boutique timbers. The South West also has a number of regional attractions such as the Cosmos Centre, farm-stay experiences and unique outback events such as camp drafts.

Objective

To support sustainable tourism that builds on the South West's unique, natural competitive advantages and experiences, while increasing understanding of the input tourism has to the region's economic, social and cultural fabric.

Land use policy

- 5.2.1 Tourist facilities are located within easy access to infrastructure to support and reinforce existing centres' economic and service delivery functions.

Aligned strategies

- 5.2.A Promote partnerships and cooperation in tourism packaging and branding across the South West, while supporting the most cost-effective application of marketing and promotional funds.
- 5.2.B Encourage the development of tourism niches, such as conferences and sport and recreation events.
- 5.2.C Encourage the Indigenous community to be involved in the region's tourism industry.

Explanatory notes

The South West's tourism industry faces many challenges in order to continue its development and contribute further to the economic and social wellbeing of the region. There is a need to increase out-of-season and shoulder-season visitation, in order to spread visitor numbers more evenly across the year. A longer season would allow operators to focus more on developing tourism initiatives. The rise of the baby-boomer tourism market has seen an increase in self-contained caravans that contribute less to the regional economy than other visitor types. The impact of waste disposal is also proving a challenge to local authorities in relation to the provision of toilet and waste facilities.

The South West has opportunities to develop sport and recreation tourism based on events such as camp drafts, polocrosse and race meetings. This form of tourism provides visitors with authentic experiences that encourage return visitation. Providing high-standard events and support services such as accommodation and transport is essential for developing tourism of this nature.

Blueprint for the Bush recognises that governments and businesses must work collaboratively, in order to promote Queensland's outback as a tourist destination.

There is a need for cross-regional promotion so that international tourists,

⁴² A process of trapping carbon dioxide directly into systems other than the atmosphere, usually underground, to assist in limiting detrimental greenhouse gas emissions.

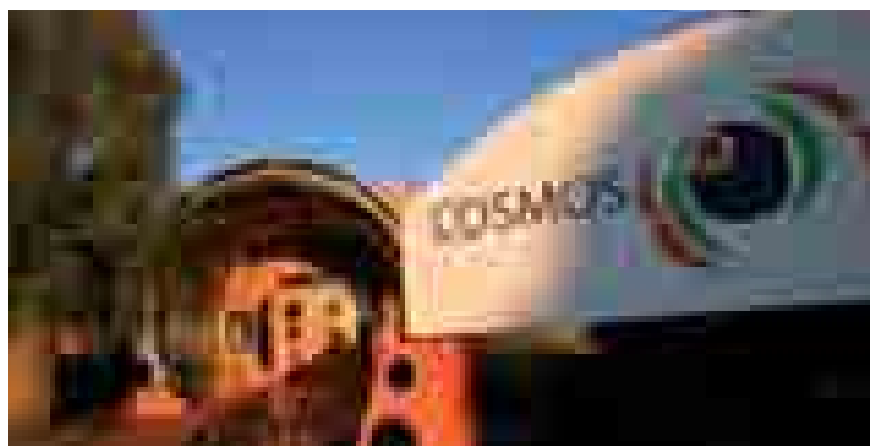
in particular, can visit a range of sites and attractions in western Queensland, while taking advantage of a range of interconnected transport modes—air, bus, train and vehicle. The coordinated timing and promotion of regional events such as annual shows, festivals and sporting occasions encourages visitation and provides an incentive for longer and repeat stays.

The tourism industry in the South West is primarily drive-based, which makes it susceptible to possible peak oil price rises. Other factors inhibiting the development of the industry include a lack of suitable infrastructure, which restricts development opportunities outside the major towns, and a general need to improve the standard of accommodation and restaurants in the South West to meet the increasing expectations of visitors.

5.3 Energy and mineral resource development

The Cooper and Eromanga basins are the main sources of oil from mainland Australia. The fields originally contained more than 360 million barrels of oil, of which about 110 million barrels will be recovered. To date, about 95 million barrels have been produced.⁴³ Additional reserves have been discovered in the South West.

The Jackson oil field facility accepts production from about 40 oil fields containing about 182 oil wells through



approximately 250 kilometres of pipelines and flowlines. Produced oil was dewatered and sent via the 797 kilometre pipeline network connecting Jackson oil field to the Lytton oil refinery in Brisbane until its closure in 2007. Crude oil is trucked or transported via pipeline to Brisbane and South Australia. Oil from Tarbot is also piped to the Jackson oil field. The Ballera facility accepts production from about 45 gas fields containing about 130 producing gas wells, through approximately 450 kilometres of pipeline and flowlines.

Gas goes to Mt Isa via an 800-kilometre pipeline and to Wallumbilla for transportation on to Brisbane via an 1100 kilometre pipeline. Gas is also sent to Adelaide.

The South West’s extensive network of pipelines provides for further exploration and development of the energy industry in the region. Table 3 details pipeline projects in the South West currently being considered. There is strong potential for continued growth in the gas industry,

as the Queensland Government plans to increase the proportion of electricity generated, using gas from the current target of 13 per cent to 18 per cent by 2020.⁴⁴ The provision of infrastructure to support future growth in the gas and petroleum industries will depend on its commercial viability.

Ballera has a jet-capable, sealed airstrip that provides workers with access to the Jackson oil field and Ballera, as well as the facilities in the basin. Accommodation is currently provided for some 300–500 workers on a fly-in and fly-out basis.

A large proportion of Queensland’s gem-quality opals are mined in the South West. Opal mining also plays an important part in the region’s tourism economy. Natural precious opals are found in boulder opal, which is unique to Queensland. Found in weathered sedimentary rocks in the state’s west, they range in size from less than a few centimetres to more than 20 centimetres. Yowah, in the South West, is known for Yowah-nuts, where concretions form distinct bands through the ironstone.

Table 3. Gas pipeline projects—South West Queensland

Project/site name	Company	Activity type	Council/LGA	Resource potential
Pipeline licence no 64	Santos Ltd	Pipeline	Bulloo	proposed
Pipeline licence no 113	Santos Ltd	Pipeline	Bulloo	proposed
Pipeline licence no 129	Epic Energy Queensland	Pipeline	Bulloo	proposed
Pipeline licence no 112	Santos Ltd	Pipeline	Quilpie	proposed

(Source: Department of Mines and Energy, January 2009)

⁴³ Santos (2008) www.santos.com accessed 30/06/08.

⁴⁴ Department of the Premier and Cabinet (2007), *ClimateSmart 2050—Queensland climate change strategy 2007: A low carbon future*. Queensland Government, at www.thepremier.qld.gov.au accessed 30/06/08.



Objective

To continue to broaden the South West's economic base, employment opportunities and community infrastructure, through the opportunities afforded by further development of the oil, gas and opal extraction industries.

Land use policy

5.3.1 Identify, map and include in planning schemes petroleum, gas and other resource leases and infrastructure easements, and protect these uses from conflicting land use.

Aligned strategies

5.3.A Encourage collaborative responses by government, extraction companies and the community, to the social, economic and environmental pressures associated with energy resource projects.

5.3.B Use social research conducted as part of social impact assessment processes, to assist local and state government in guiding future development decisions and strategic planning for resource communities.⁴⁵

5.3.C Share the outcomes of social impact assessments through existing regional forums, to ensure a greater understanding of the social impacts of new mining developments.

Explanatory notes

Issues relating to the energy extraction and gem stone industry include:

- social impacts associated with major resource developments
- protection of pipeline corridors from other development that may impact on safety and viability of these pipelines

- safety concerns about ageing pipeline infrastructure and potential risks to the environment.

The Queensland Government is working to get the balance right between meeting the state's increasing energy demands, the world's increased demand for minerals and food, and the government's priority of building sustainable communities.

Resource developments can potentially bring significant benefits for surrounding communities, including:

- increased employment opportunities
- investment attraction
- economic diversification
- attraction of new people to the region
- retention of young people in the region.

On the other hand, large-scale developments also present local communities with a range of challenges, including increased demand for infrastructure and services.

Challenges facing resource communities in mining regions include:

- increased demand in the housing market, resulting in high rents and property prices and reduced affordability
- increased pressure on local medical, dental and social services
- potential impacts of dust, noise and vibrations
- an increase in the number of drive-in and drive-out and fly-in and fly-out workers employed
- demand for new road infrastructure to support proposed new development.

The Queensland Government has signed the Sustainable Resource Communities Policy.⁴⁶ The policy focuses on resource communities where rapid development, resulting from the resources boom, is having significant impacts on community infrastructure and services, and on the

social structure of local and regional communities.

The policy outlines a partnership between the state government, the Queensland Resources Council, local government and the Local Government Association of Queensland. This policy builds on the previous Sustainable Futures Framework for Queensland Mining Towns. Key initiatives of the policy include:

- coordination of responses to cumulative social impacts and regional issues through the partnership group
- improved planning processes to strengthen regional land use planning and infrastructure coordination
- minor legislative amendments that require the establishment of social impact plans for all new mines and major mine expansions, as part of social impact assessment processes.

The Sustainable Resource Communities Policy includes a partnership agreement, aimed at strengthening links between all levels of government. The partnership will improve the guidelines around social impact assessment that will govern all new major mines and expansions.

5.4 Business and land development

In order to continue to develop as a prosperous and sustainable region over the coming decades, the South West needs to be able to attract and maintain commercial, industrial and residential investment from both the private and public sectors.

Essential enablers for these development opportunities include effective information and communication technology, with timely provision of required infrastructure and services.

⁴⁵ Resource communities are those local or regional communities that depend on, or are affected by, mineral extraction and associated activities, including petroleum and gas proposals.

⁴⁶ Department of Tourism, Regional Development and Industry, August 2008. At the time of plan preparation the policy is only being implemented in relation to resource development activities in the Surat and Bowen Basins and in north west Queensland.



5.5 Rising transport costs and oil vulnerability

Future land use planning needs to focus on reducing dependence on conventional transportation modes such as vehicles. Measures could include collocation of uses and non-motorised transport infrastructure.

Governments, business and communities must take up the challenge of investing in resource mitigation strategies for reducing the impacts of rising oil costs.

Objectives

- To present the South West as an attractive and profitable location in which to invest.
- To realise opportunities for research and innovation in the renewable energy field.

Land use policy

- 5.4.1 Planning schemes provide sufficient land for industrial and business development that is:
- accessible
 - serviced by an adequate level of infrastructure
 - able to address natural hazards
 - buffered from sensitive land uses, and
 - does not detrimentally impact on ecologically significant areas as depicted in map 2—Natural Environment (appendix 2).

Aligned strategies

- 5.4.A Encourage support from all sectors of the community in the promotion of the region and for the establishment of a regional economic development organisation.

- 5.4.B Encourage business and housing investment.

Explanatory notes

There are many positives for investment in the South West, including a good supply of residential and industrial land, infrastructure and services, information technology and opportunities to add value to agricultural products.⁴⁷ Future opportunities have the potential to provide catalysts for regional investment. These include sustainable industry initiatives, expansion and further value-adding of the wild game processing industry, carbon credit trading, development of a boutique timber industry, organic production, growth of the tourism industry and renewable energy. Western Queensland's solar energy potential is greater than any other area in Australia.⁴⁸

Key issues that discourage investment in the South West include the perception that smaller capital gains are achievable, compared to other regions. Also, there is a lack of access to equitable finance, with lenders refusing to offer the same finance conditions for western areas that are offered in the city or on the coast. Construction costs are higher in western Queensland than on the coast, due to transportation costs and restricted availability of labour.

Objective

To enable the South West to adapt to the global challenge of declining oil supplies and manage the rising costs of transport and oil-based products.

Land use policies

- 5.5.1 Protect and buffer existing and identified transport corridors from inappropriate development.
- 5.5.2 Ensure that land use planning takes into account the likelihood of increased transportation costs, through appropriate siting of residential, employment and recreation facilities.

Aligned strategies

- 5.5.A Investigate the potential for the production of biofuels and regionally based renewable energy sources and production.
- 5.5.B Investigate local production of fresh fruit and vegetables as a means of off-setting rising freight costs.

⁴⁷ Pacific South West Strategy Group Pty Ltd (2003)

⁴⁸ Department of the Premier and Cabinet (2007), *ClimateSmart 2050—Queensland climate change strategy 2007: A low carbon future*. Queensland Government, www.thepremier.qld.gov.au accessed 30/06/08.



Explanatory notes

Over the last century, the global economy has been underpinned by the availability of cheap and accessible oil. Oil is used for transportation, plastics, agriculture and petrochemicals. Extracting from smaller and harder-to-access oil fields, such as deep-ocean drilling, requires significantly more time, energy and investment, progressively increasing the cost of oil.

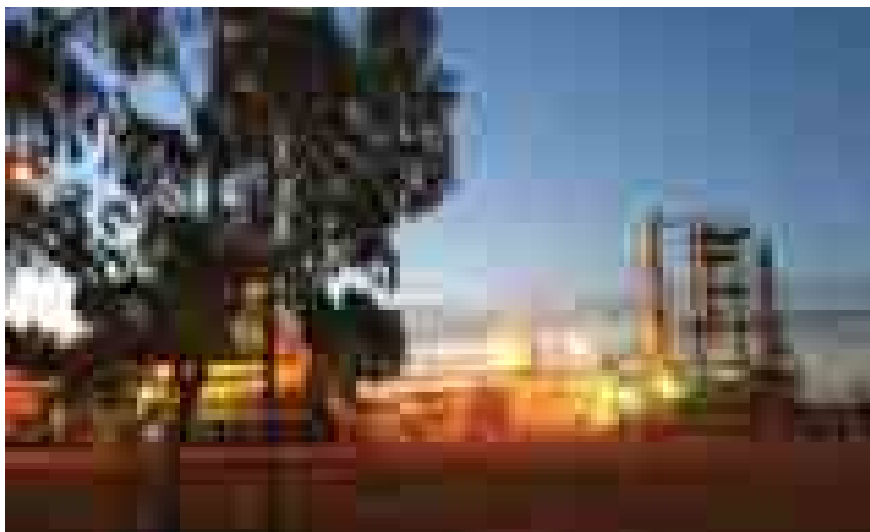
Peak oil has the potential to impact greatly on the South West's social and economic fabric. The vast distances between towns and markets makes the region highly dependent on vehicle travel and vulnerable to increases in fuel costs. Agricultural production and property management are also highly dependent on oil and oil products, particularly diesel fuel and petrochemicals. There is potential that air travel will also rise in price considerably, as fuel costs increase. In order to adapt, the South West will need to find alternative energy resources and technologies. These will include the use of more fuel-efficient vehicles and alternative energy systems.

5.6 Energy

Renewable energy sources, such as domestic rooftop photo-voltaics, solar and wind, have application in the South West due to favourable weather conditions.

Potential electricity generation from geothermal resources in, or just outside the South West, may become viable as technologies further develop. National legislative changes to encourage higher mandatory renewable energy contributions may speed up the development of this resource.

In a carbon-constrained society, the South West has substantial non-renewable and renewable energy resources that provide opportunities for the region to be independent of eastern supplies.



Key opportunities in the energy sector for the South West relate to:

- long-term sustainable supplies
- creation of economic growth
- reduced local energy costs in the long-term
- affordable and efficient supplies
- development of renewable energy from within the South West.

Objective

To encourage the development of alternative renewable energy and maintain affordable and efficient energy supply.

Aligned strategy

5.6.A Research and advance opportunities for alternative energy sources and generation.

Explanatory notes

The South West has extensive renewable and non-renewable energy resources. The non-renewable gas and oil resources are currently being exploited and are piped from the region to areas within

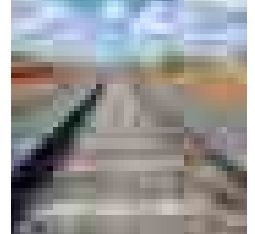
Queensland and interstate. The need to reduce the state's carbon footprint and reduce dependence on non-renewable energy sources is highlighted by both state and Australian governments. There is growing pressure for a greater share of Australia's electricity generation to be obtained from renewable energy sources. Current legislation targets renewable energy supply of 9500 gigawatt hours (GWH) per annum by 2010. The Australian Department of Climate Change is preparing new legislation that will increase the Renewable Energy Target to 20 per cent of total electricity generation, with the target defined as 45,000 gigawatt hours over the period 2010 to 2020. The Queensland Government's vision *Toward Q2: Tomorrow's Queensland*, is also aligned and advocates a one-third reduction in the carbon footprint of Queensland households by 2020.

The South West Regional Development Association has recognised the potential for a gas-fired power station to be located in the South West. This would address problems with the unreliability of existing electricity supplies and the use of plentiful supplies of low-cost gas in the region.

6. Infrastructure

Desired regional outcome

A coordinated, safe and efficient network of all facets of infrastructure, which is well maintained and underpins the social, economic and environmental health of the region.



The South West's large area and dispersed population make delivery of an efficient, well-maintained and cost-effective infrastructure network a challenging task.

The term infrastructure does not solely refer to hard infrastructure such as roads, rail, electricity transmission, information and communication technology, and water. The term also refers to the region's 'soft' infrastructure assets and requirements, such as health services, fire and ambulance facilities, access to community services, skills, knowledge, and the strength of local relationships and networks. These assets are addressed in section 3. Strong communities.

A third dimension of infrastructure is natural infrastructure, which includes the region's natural ecosystem services such as rivers, landscapes, soils and water resources. This is addressed in section 1. Natural environment and section 2. Natural resources.

An overview of the region's hard infrastructure is presented in map 5 — Infrastructure (see appendix 2). The most important transport networks and nodes are:

- Bulloo Developmental Road (Adventure Way), which runs east–west through the Paroo and Bulloo Shires, where it meets the Cooper Developmental Road, which is expected to be sealed to the South Australian border by 2010
- Diamantina Developmental Road, which links Charleville to Quilpie and continues to Windorah

- Warrego Highway, which links the region via Charleville to the east
- Mitchell Highway, which links New South Wales to Cunnamulla, Charleville, Augathella and Tambo
- Rail links—Brisbane to Charleville and Charleville to Cunnamulla and Charleville to Quilpie
- Airports serviced by regular commercial flights—in Charleville, Cunnamulla, Quilpie and Thargomindah.

The infrastructure needs of local communities will need to be managed in planning for any growth in the resource sector in the South West. As reported at the 2008 resource summits,⁴⁹ the benefits and opportunities that will be created by growth are recognised by local communities, however, challenges will also need to be addressed to ensure the current quality regional lifestyle is maintained.

Road infrastructure, for example, will be impacted by increased traffic volumes in areas where mining exploration is undertaken. The provision of regional infrastructure, including the maintenance and funding of roads, will therefore require collaborative planning solutions that will need to be developed in consultation with all key stakeholders.

Greater communication between all levels of government and the local community will be achieved by working together to develop regional infrastructure solutions, through planning partnerships founded on shared ambitions, shared responsibility and shared action.⁵⁰

The South West is served by a passenger rail link to Brisbane, which operates twice a week. The passenger rail service terminates at Charleville and services Quilpie, Cheepie, Cooladdi, Wyandra and Cunnamulla by connecting coach services. The presence of rail provides an important freight link to the markets to the east.

Privately operated coach services operate to Charleville, Cunnamulla, Quilpie and Thargomindah.

Air services to and from Brisbane are available in the South West, although the reliability of these services outside Charleville is inconsistent. The Royal Flying Doctor Service of Australia plays a vital role in providing emergency health care.

There is an extensive network of oil and gas pipelines in the South West. These pipelines transport oil and gas extracted from the region to Brisbane and Adelaide. Infrastructure for petroleum and gas extraction will be provided in the region on a commercial basis.

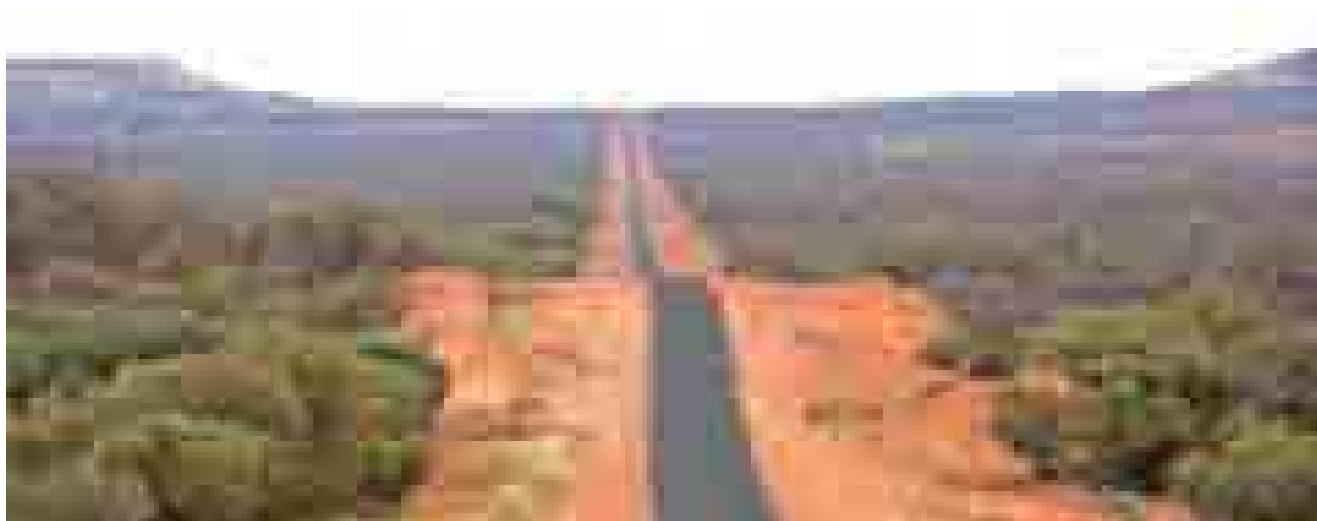
The South West relies heavily on high-quality communications technology, which is vital in such a remote region.

The key infrastructure concerns facing the South West include:

- transport services that provide access to other government services
- increasing costs to transport goods by rail
- upgrading information and communications technology.

⁴⁹ Bowen Basin resource summit, 20 November 2008; Dalby resource summit, 21 November 2008; Mount Isa resource summit, 28 November 2008.

⁵⁰ Queensland Government, *Toward Q2 Tomorrow's Queensland*, September 2008: p10



6.1 Delivering regional infrastructure

Transport infrastructure is fundamentally important to the social wellbeing and economic viability of the South West. Other needs, such as access to information using the best available communication technology, are also a priority.

The South West's transport infrastructure consists of road, rail, air, stock routes and pedestrian and cycle links (see map 4—Transportation in appendix 2). Ensuring efficient functioning and high quality of this infrastructure is of vital importance to a remote region such as the South West, given the long distances between services, people and markets.

Objective

To provide and maintain all facets of infrastructure in a transparent, coordinated and planned manner that is adaptable to the challenges of the 21st century, including peak oil and climate change.

Land use policies

- 6.1.1 Ensure land use planning supports and encourages:
- sustainable transport modes
 - consideration of major natural hazards
 - consideration of the risks from climate change
 - transport systems that protect and enhance public safety and facilitate safe and efficient movement of goods and services.
- 6.1.2 Maintain the transport network to meet current and projected community and industry needs. This includes linking rural and remote areas to surrounding regions and major regional markets, and facilitating access within and between centres.
- 6.1.3 Protect existing and future infrastructure corridors from development encroachment and inappropriate uses that may compromise the corridor's existing purposes or future opportunities.
- 6.1.4 Deliver infrastructure planning and charging through priority infrastructure planning, as a component of local government planning schemes.

Aligned strategies

- 6.1.A Provide an adequate level of utilities and communication infrastructure to new development.
- 6.1.B Develop drinking water, waste disposal and electricity infrastructure for urban settlements to best practice standards.
- 6.1.C Manage the regional stock route network for use by travelling stock and ensure its biodiversity, cultural and amenity values are retained.
- 6.1.D Ensure airport facilities and infrastructure meet the requirements of passenger, freight and emergency services users and are maintained at an appropriate level to cater for demand.
- 6.1.E Consider safety, energy-efficiency, compatibility with existing land uses, cost-effectiveness and climate change vulnerability in regional infrastructure planning, delivery and maintenance.
- 6.1.F Support local governments to upgrade sewerage treatment operations in urban locations, as appropriately determined by need and available funds.
- 6.1.G Investigate cost-effective and environmentally sustainable sewerage treatment systems that are suitable for recreational areas and isolated tourist nodes.

Explanatory notes

Roads are currently the primary means of movement in the South West. These roads carry a higher than average proportion of commercial heavy vehicles and tourist caravans and campervans. Some major routes are experiencing significant traffic increases, particularly of heavy vehicles. It is anticipated that the upgraded Adventure Way from Brisbane to Adelaide will also see increased tourist and transport usage and provide further development opportunities in Bulloo Shire.

Rail use has declined in the South West, although it still plays a vital role in the transport of freight to the Port of Brisbane. Passenger rail services also play a role in the development of the region's tourism industry, however, challenges to rail's viability include road transport and increasing freight charges. The planned Wandoan to Banana rail link (Surat Basin Railway) will connect the region to the Port of Gladstone, improving the South West's access to international markets.

Air transport has experienced an increase in passenger and freight volumes and this is expected to continue into the future. Scheduled passenger services currently operate from Brisbane to Charleville, Cunnamulla and Thargomindah. Air transport plays an important role in the development of the region's oil and gas resources, with its dependence on a fly-in and fly-out workforce.

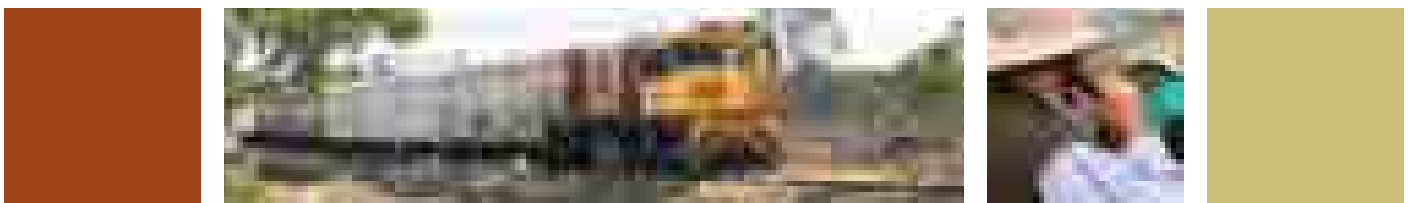
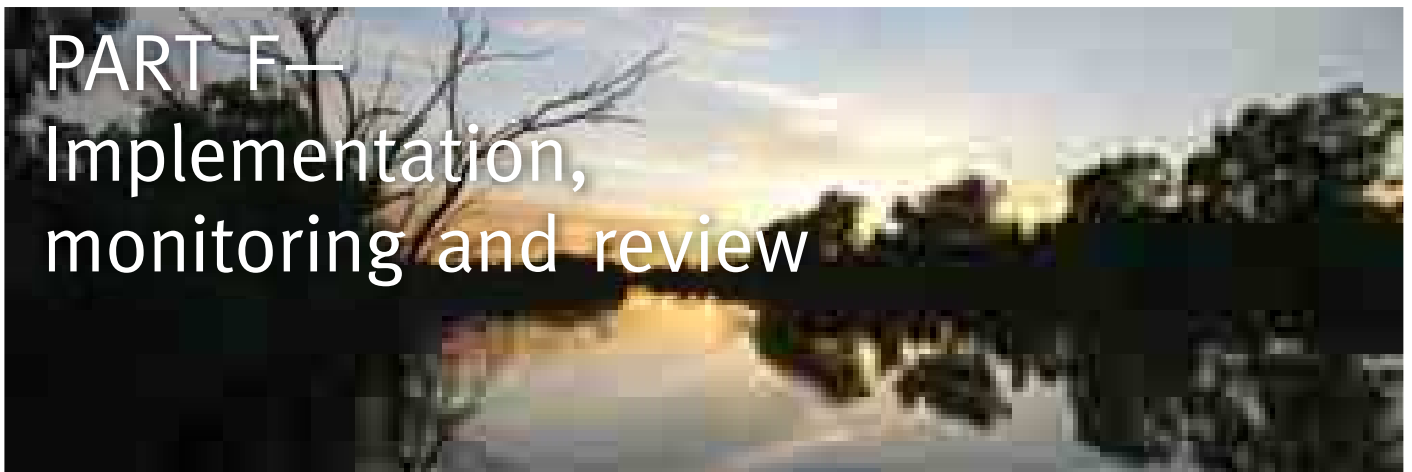
Stock routes are an important part of the transport network and are regulated under state legislation and managed by local government. Stock routes provide vital links for graziers moving stock around the region, or moving stock from one region to another, particularly during drought. The stock route network may play an increasingly important role in the future, in response to peak oil and rising fuel costs, as well as the effects of climate change. Stock routes also provide important biodiversity refuges. The stock route network must be well-managed to protect its inherent values and to ensure it is available to serve its intended purpose. Aboriginal residents could provide invaluable management skills to assist rural protection boards in managing stock routes.

Walking and cycling links have the potential to play an important role in short-distance transport and contribute to healthy lifestyle choices for residents. Low traffic volumes, flat terrain and a dry climate make the region's towns ideal for cycling, particularly in the cooler months.

Challenges to the South West's transport infrastructure include:

- minimising the impact of heavy vehicles on roads and the safety and amenity of residents
- continually improving the quality and safety of the road network
- ensuring the continuation of freight and passenger rail services
- supporting economic development
- servicing a dispersed settlement pattern.

To address these challenges, government and private service providers need to collaborate to identify and implement transport infrastructure strategies that meet regional needs.



The *South West Regional Plan* establishes a basis for better planning, management and development in the region. The value of the regional plan will be largely determined by how successfully its outcomes are supported and implemented by government and the community.

Effective implementation requires cooperation by community stakeholders and coordination of state and local government activities and plans. Implementing the regional plan involves coordinating and reviewing a range of plans, infrastructure and services.

The monitoring and review elements are critical to charting the progress of land use planning achievements and are essential to a performance-based approach. The monitoring and review cycle provides a feedback loop to allow adaptive management as a response to changing circumstances and new information. If land use plans are to achieve their goals and objectives, the planning process (Figure 5) must be designed to be cyclical and should not begin or end at a distinct point in time. Instead, the process should always be structured to include monitoring, evaluation and feedback, in recognition of the need to learn and therefore adapt over time.⁵¹

The regional plan provides the broad framework for addressing priority issues in the South West over the next 20 years. It also considers the need to ensure that planning decisions made today do not compromise opportunities to meet longer term regional needs.



Figure 5. The adaptive management planning process

Plan making

The regional plan is a statutory instrument under the *Statutory Instruments Act 1992*, with effects of the regional plan established under section 2.5A of the *Integrated Planning Act 1997*.

Relevant provisions of the *Integrated Planning Act 1997* include:

- establishing a Regional Coordination Committee to advise the Planning Minister on regional issues
- ensuring local government planning schemes reflect the regional plan
- ensuring state and local governments take into account the regional plan when preparing or amending a plan, policy or code that may affect a matter covered by the regional plan
- ensuring development assessment processes, including referral agency obligations for development applications address matters covered in the regional plan
- allowing the Planning Minister to exercise ‘call-in’ powers—the Minister’s ability to call in development applications that are outside the scope of planning schemes
- establishing processes for amending the regional plan.

⁵¹ Low Choy DC, Worrall RH, Gleeson J, McKay P and Robinson J (2002) In *Environmental Planning Project: Volume 1, Management Frameworks, Tools and Cooperative Mechanisms*. CRC for Coastal Zone Estuary and Waterway Management, Technical Report 4. 243pp.

Implementation

Implementation requires the cooperation and involvement of all three levels of government, non-government organisations, the private sector and the community. Implementation mechanisms will include:

- incorporating regional planning outcomes into capital works and service programs and policy-making processes of state and local government
- incorporating regional planning outcomes into local government policies, corporate plans, development assessment processes and local government planning schemes.

The effective implementation of the regional plan requires an efficient coordination system to guide, monitor and assist implementation activities. In addition, the implementation process should, wherever possible, make use of existing administrative structures and frameworks, and avoid duplication of process.

Primary implementation responsibilities or elements of the regional plan will generally be designated to either state government agencies based on portfolio responsibilities, or to local government in the region. Lead agencies will be responsible for coordinating the actions of any other agencies that have a role in the implementation of strategies.

A five-year action plan will be prepared in consultation with the Regional Coordination Committee, to outline the key priorities for implementing the regional plan within this time frame. The action plan will identify the projects, the actions required, and the lead agencies.

The implementation process also requires the preparation of detailed action plans, work programs, budget estimates and resource requirements. This work will be coordinated by nominated government agencies. Longer-term planning for infrastructure will also be guided by the policies of the regional plan.

Roles and responsibilities

The Regional Coordination Committee advises the Queensland Government, through the Planning Minister, on the development and implementation of the regional plan.

The rights and responsibilities of individual agencies, authorities and bodies are to be respected and retained, including the responsibility for the development, resourcing and funding of programs within their portfolio interests.

Monitoring and reporting

Regional planning is a dynamic process and will not end with the completion of the regional plan. There is a clear need to establish mechanisms to:

- monitor progress and changes in the region
- identify new and emerging issues
- monitor implementation of the outcomes and strategies of the regional plan
- periodically review the status of the region and initiate changes to regional strategies and priorities where required.

Implementation will also involve a wide range of community and industry groups and individuals, particularly at the subregional and local levels. The regional plan sets out the need to involve all levels of government, industry and the community in the planning, development and management of the region.

Review process

The review process guides further policy development and assists in setting future priority projects and actions. This will be reviewed formally at least every 10 years in accordance with section 2.5A.10 (2) of the *Integrated Planning Act 1997*. In addition, the Planning Minister may amend, replace or approve minor revisions of the regional plan at any time, if required.

Any review will include input from government and the community. It will provide an open and accountable process that will involve and inform the community of the outcome of any regional monitoring program.

Community involvement in implementation

The regional plan sets out the need to involve all levels of government, industry and the community in the planning, development and management of the region.

In regard to the implementation of the regional plan outcomes, it is important that appropriate consultation and negotiations are undertaken with the community and relevant stakeholders about the implementation of specific strategies and actions arising from the plan. The extent, level and timing of consultation will depend on the particular strategy or action conditions. The responsibility to ensure that appropriate community and stakeholder consultation is undertaken will primarily rest with the lead agency for a particular strategy in the plan.

Members of the community and specific interest groups can also provide input into the implementation process through the Regional Coordination Committee.

Appendix 1

Mapping methodology for areas of ecological significance

The Department of Environment and Resource Management (DERM) has prepared mapping showing areas of ecological significance. The maps have been prepared from high-quality data sets of terrestrial vegetation, key threatened species habitats and wetlands. The accuracy of mapping is considered reliable for planning purposes.

To prepare maps the Department of Environment and Resource Management (DERM) takes data for specific ecological resources and, using geographic information system methodologies, identifies areas of relative significance. More information is available from the The Department of Environment and Resource Management (DERM) website.

Areas of high ecological significance

The Department of Environment and Resource Management (DERM) used the following data and ecological significance assessment methods to map areas of high ecological significance:

Conservation estate: These areas include The Department of Environment and Resource Management (DERM)-managed areas such as national parks and conservation parks—excluding forest reserves, state forests and timber reserves.

Wetlands areas: In the catchments of the Queensland Murray-Darling Basin, wetland mapping prepared under the Queensland Wetlands Program was used as a base. The Department of Environment and Resource Management (DERM) tool AquaBAMM is being used for aquatic conservation assessments throughout the Queensland Murray-Darling Basin and, where completed, high ecological significance areas can be identified from sites assessed as being of ‘very high’ or ‘high’ significance under this system. Included in wetland areas

are specific wetland decisions that have ‘state’ significance from the Brigalow Belt and Mulga Lands biodiversity planning assessments and have been designated as areas of high ecological significance. Specifically, areas of artesian springs have been identified and designated high ecological significance through the biodiversity planning assessments process.

Terrestrial areas: Essential habitats were outlined as high ecological significance by either having a habitat suitability map or EVR⁵² points that have been buffered by double the precision of the point data. The following are assigned a high ecological significance value:

- biodiversity planning assessment B1 status = ‘high’ or ‘very high’
- nature refuges
- criterion B2 very high regional ecosystem value = ‘very high’
- biodiversity planning assessment special areas—state significance that have terrestrial values.

Corridors: Terrestrial corridors that are a part of the State Corridor Network—used within biodiversity planning assessments and some outside of biodiversity planning assessments—are used as a centre line. Remnant vegetation that has 30 per cent of its total area within the corridor buffer is selected as high ecological significance. Corridor buffer outlines indicate areas of non-remnant high ecological significance. Riparian corridors are based on major rivers that have been identified with the biodiversity planning assessment process. Again, remnant vegetation that has 30 per cent of its total area within the buffer of the riparian corridor is high ecological significance, as is a 100 metre buffer of any non-remnant areas.

Threshold ecosystems: Regional ecosystems that are at risk of the remnant extent falling below 30 per cent of its pre-clearing extent, or having a remnant extent of less than 10 000 hectares.

Assessable⁵³ non-remnant or regrowth endangered and of concern regional ecosystems.

Further information about The Department of Environment and Resource Management (DERM)’s biodiversity mapping methodology can be found on the agency’s website.

For wetland areas:

www.epa.qld.gov.au/wetlandinfo/site/SupportTools/AssessmentMethods/AquaBAMM.

For terrestrial areas:

www.epa.qld.gov.au/publications?id=471

Areas of general ecological significance

The Department of Environment and Resource Management (DERM) used the following data and ecological significance assessment methods to map areas of general ecological significance:

Wetland areas: The following are assigned a general ecological significance value:

- wetland biodiversity planning assessment special areas that have regional significance
- Queensland wetland mapping—where approved
- topographic lakes layer taken from GEODATA Australia 1:250K map where Queensland Wetlands Program is not approved.

Terrestrial areas: The following are assigned a general ecological significance value:

- biodiversity planning assessment fauna/flora habitat models
- biodiversity planning assessment B1 status—not of concern in subregions with less than 30 per cent of remaining vegetation
- biodiversity planning assessment special areas that have regional significance
- essential habitats—models of high mobility vulnerable or rare species

Mapped remnant vegetation: including not of concern regional ecosystems.

Assessable non-remnant or regrowth endangered and of concern regional ecosystems.

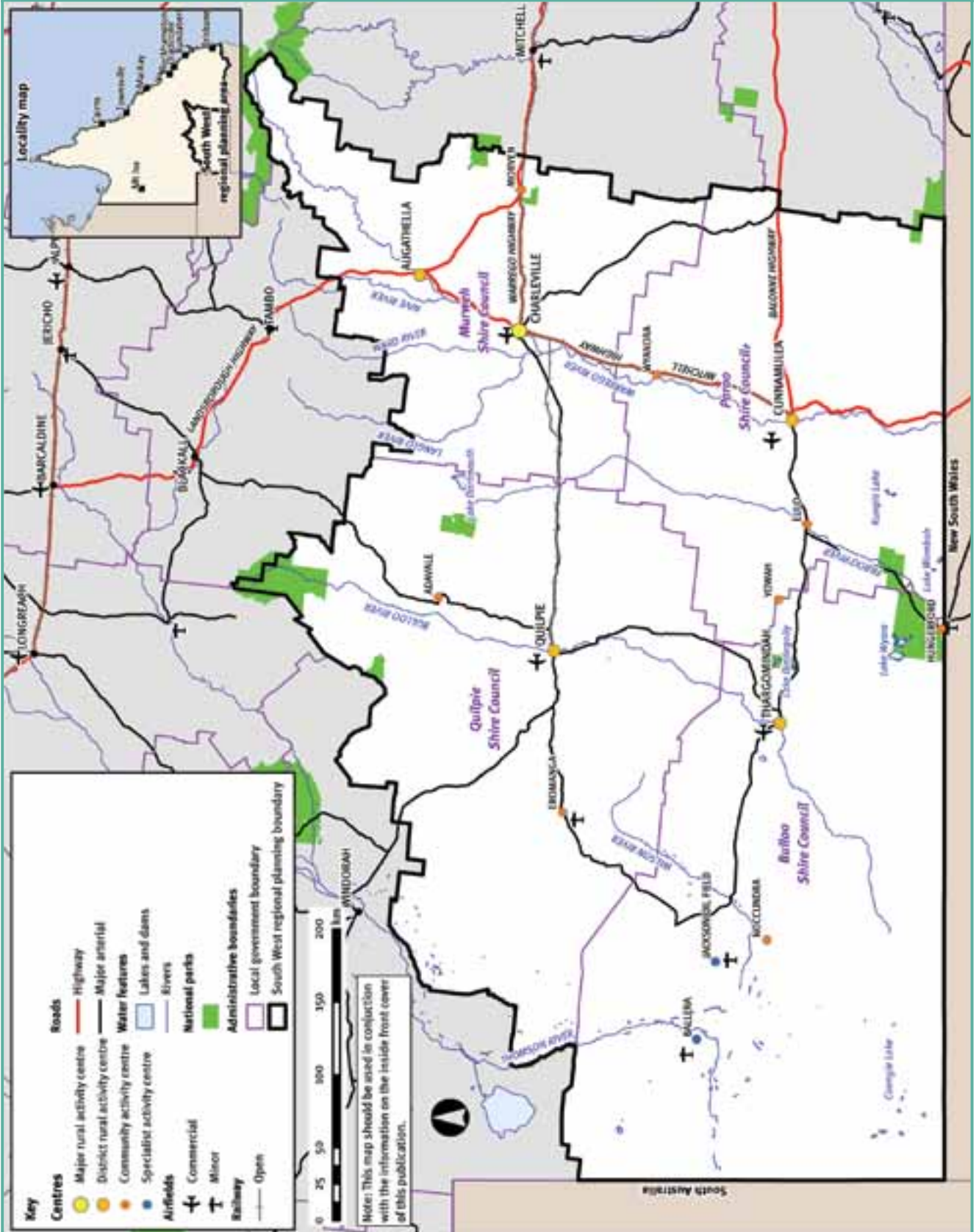
⁵² E-endangered, V-vulnerable and R-rare—designations of abundance for native species scheduled under the *Nature Conservation Act 1992*.

⁵³ Requiring an approval under the *Vegetation Management Act 1999* for clearing.



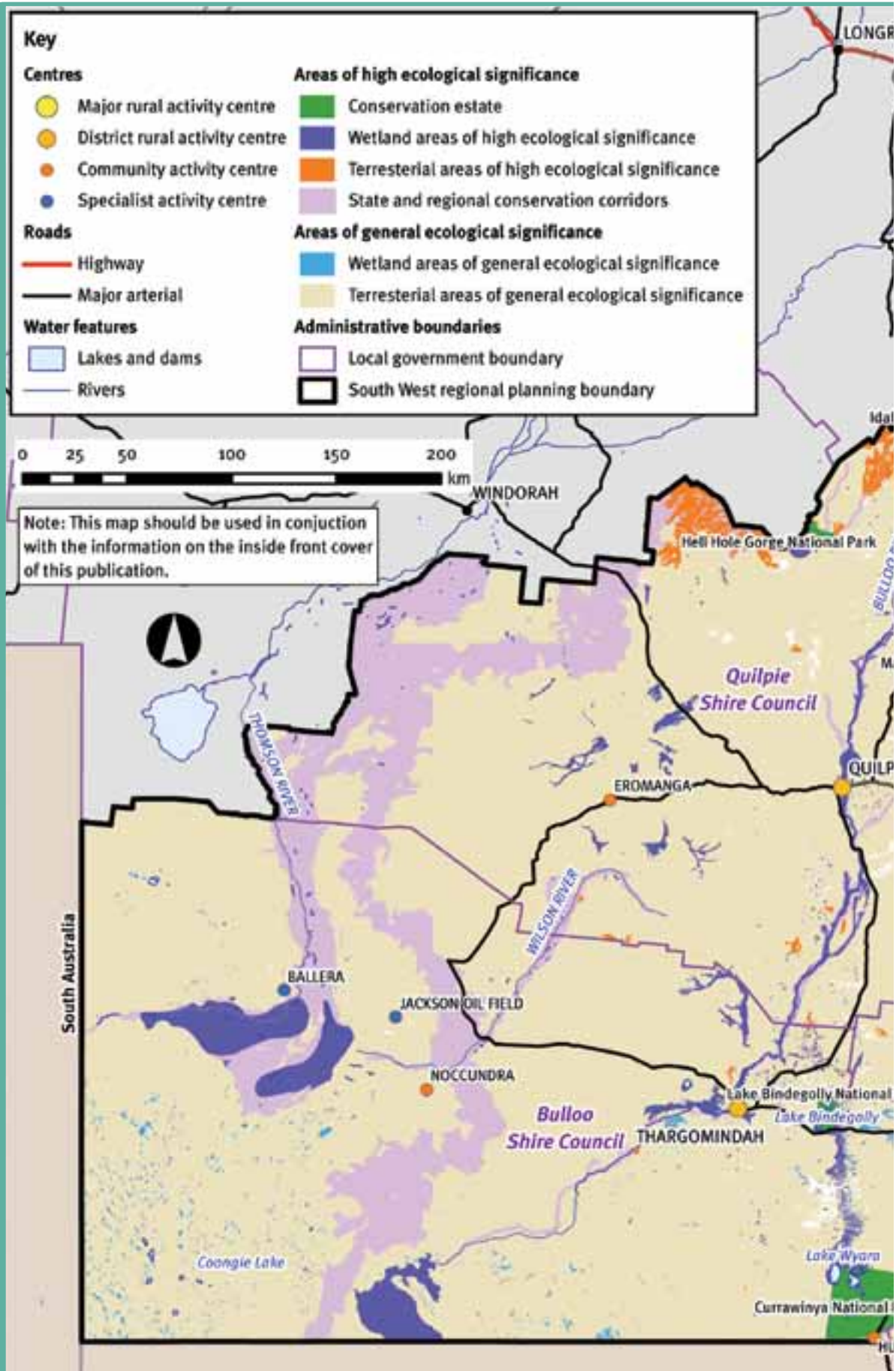
Appendix 2

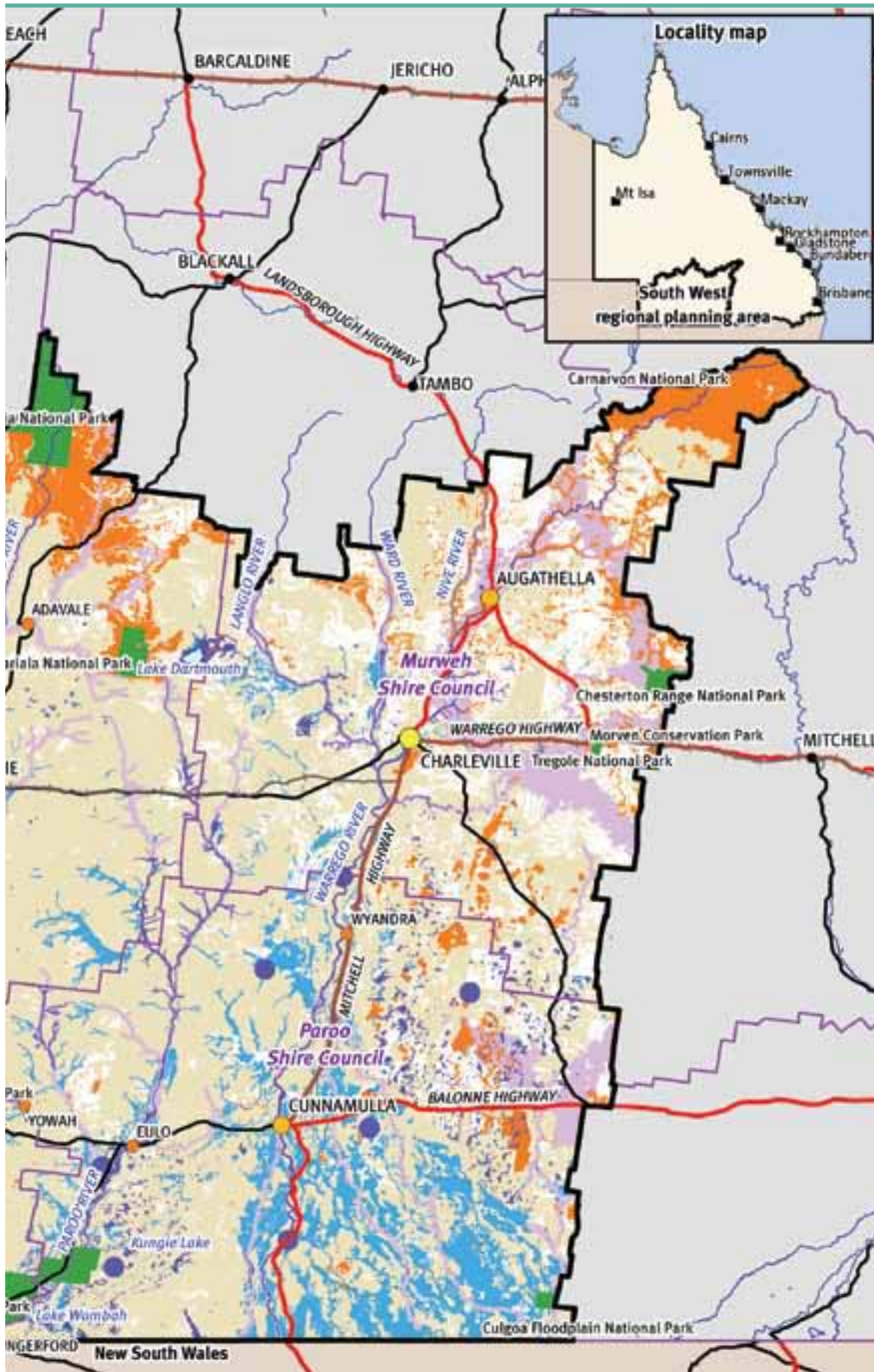
Map 1: Regional activity centres



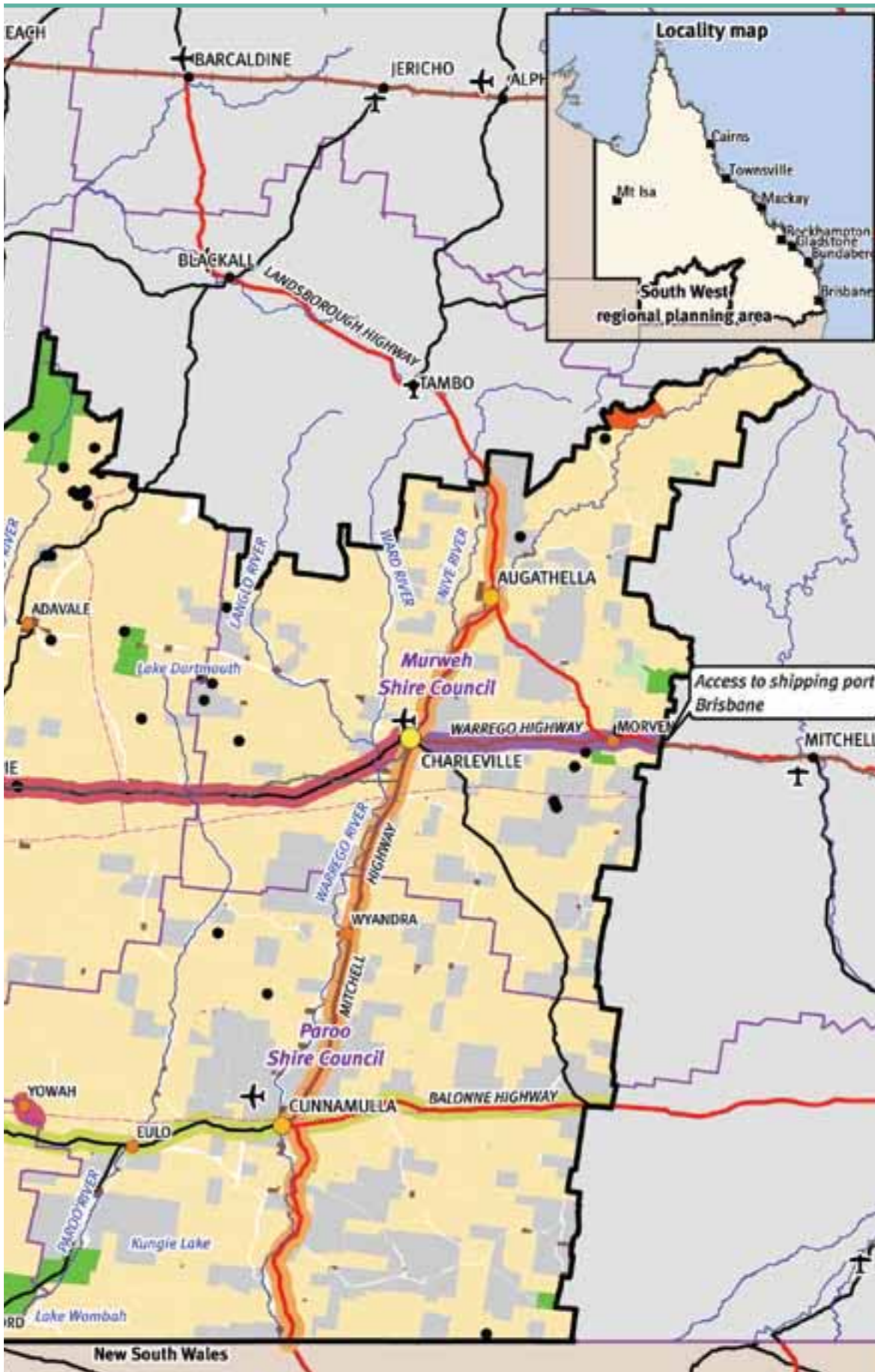
Disclaimer: The information on this map should be treated as indicative only and subject to ongoing refinement. Based on or contains data provided by the State of Queensland (Department of Environment and Resource Management) 2008. In consideration of the state permitting use of this data you acknowledge and agree that the state gives no warranty in relation to the data (including accuracy, reliability, completeness, currency or suitability) and accepts no liability (including without limitation, liability in negligence) for any loss, damage or costs (including consequential damage) relating to any use of the data. Data must not be used for direct marketing or be used in breach of the privacy laws. Data source: Department of Environment and Resource Management and Department of Infrastructure and Planning.

Map 2: Natural environment



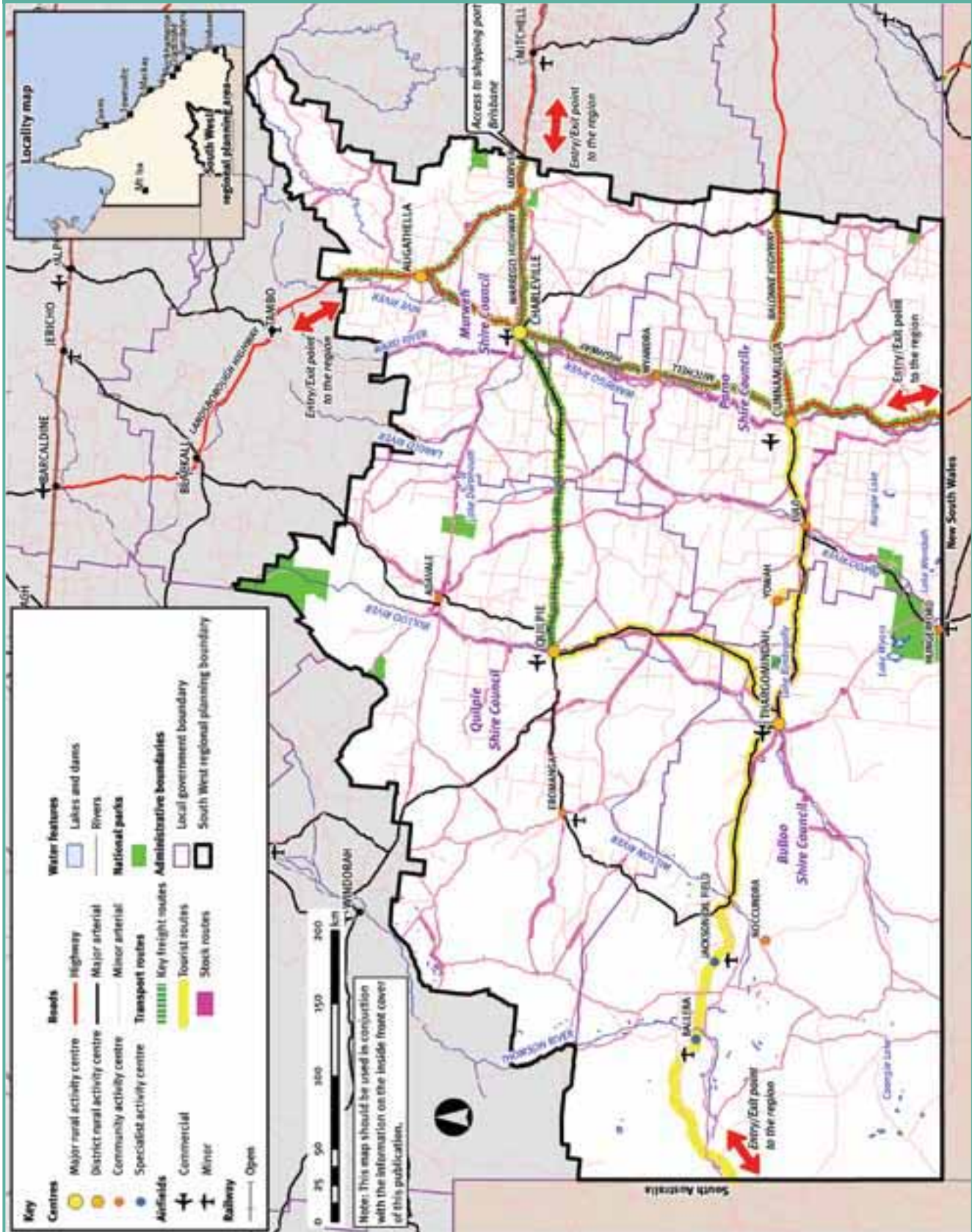


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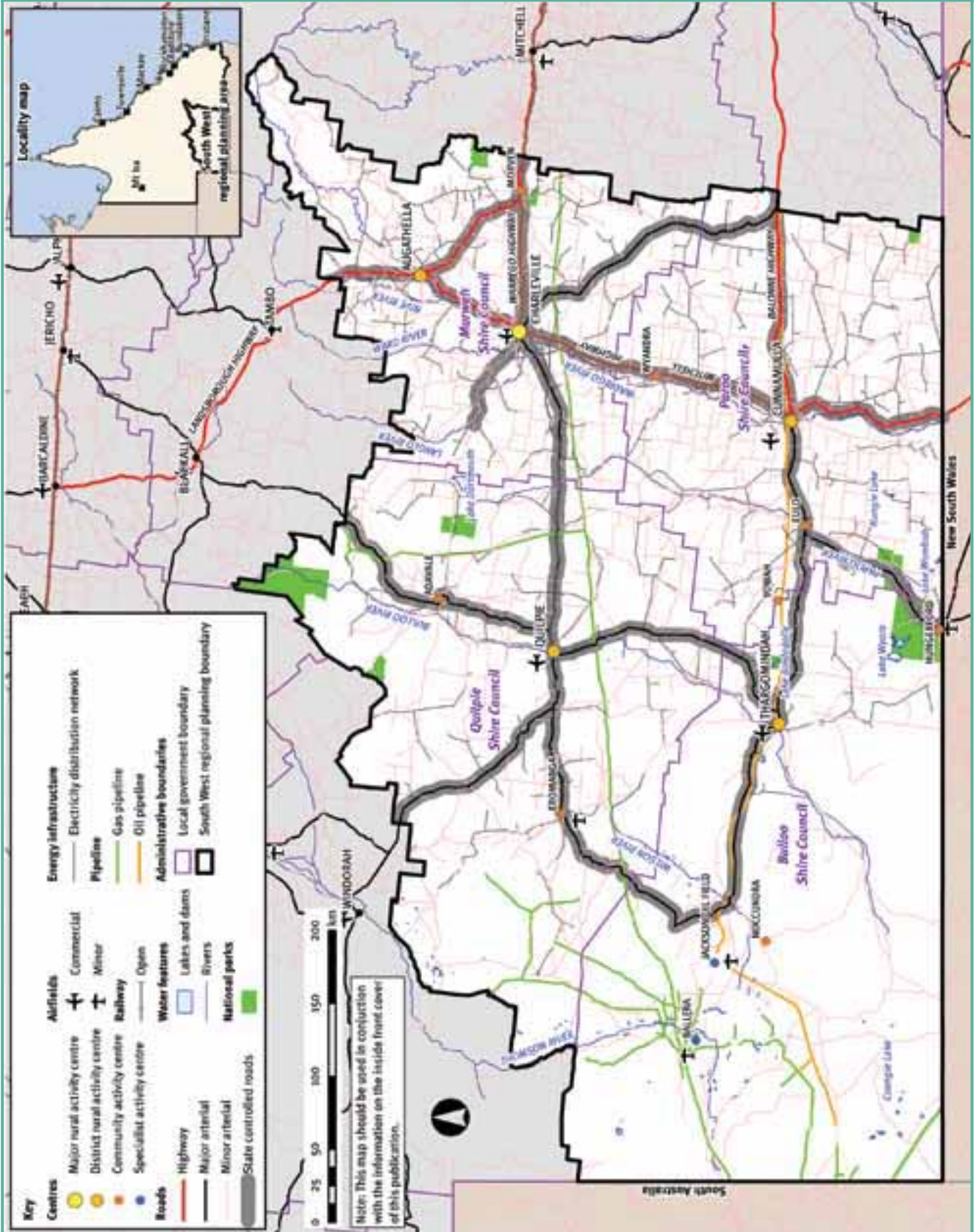
Map 4: Transportation



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Map 5: Infrastructure



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Glossary

Agriculture: The production of food, fibre and timber, including grazing, cropping, horticulture and forestry.

Aligned strategies: Aligned strategies are statutory principles designed to achieve a desired regional outcome, generally through a collaborative and voluntary approach, and are aligned to other legislation, plans, processes and voluntary programs. They may be implemented by various stakeholders, including local, state and federal government; non-government organisations such as community or natural resource management groups; and the private sector.

Biodiversity: The variety of all life forms including the different plants, animals and micro-organisms, the genes they contain and the ecosystems of which they form a part.

Bioregion: The primary level of land classification in Queensland based on regional geology and climate, as well as major biota.

Climate change: A change of climate, which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere, and is in addition to natural climate variability observed over comparable time periods.

Conservation: The protection and maintenance of nature while allowing for its ecologically sustainable use (section 9 of the *Nature Conservation Act 1992*).

Cultural heritage: A place or object that has aesthetic, architectural, historical, scientific, social or technological significance to present, past or future generations.

Desired regional outcome: Regional policies set out the desired regional outcomes, principles and policies to address growth management in a region. The policies guide state and local government planning processes and decision making. Local government planning schemes must be consistent with the intent of the desired regional outcomes, objectives and policies.

Development: Carrying out building, plumbing or drainage work; operational work; reconfiguring a lot; or making a material change of use to premises.

Ecological sustainability: A balance that integrates protection of ecological processes and natural systems at local, regional, state and wider levels; economic development; and maintenance of the cultural, economic, physical and social wellbeing of people and communities.

Ecosystem: A community of organisms interacting with one another and the environment in which they live.

Ecosystem services: Services provided by the natural environment essential for human survival.

Ecotourism: Nature-based tourism that involves education and interpretation of the natural environment and is managed to be ecologically sustainable.

Historical themes: Places or objects that have anthropological, archaeological, historical, scientific, spiritual, visual or sociological significance or value, including such significance or value under Aboriginal tradition or Torres Strait Island custom.

Indigenous cultural heritage: Landscapes, places, objects, art and intangible aspects such as language, song and stories that hold significance for Indigenous peoples.

Indigenous Land Use Agreement: A voluntary agreement between a native title group and others about the use and management of land and waters.

Integrated Development Assessment System: Established under chapter 3 of the *Integrated Planning Act 1997*, the system through which development applications are assessed by the relevant assessment manager.

Land use policies: Policies that have a land use planning focus and can be delivered through a range of *Integrated Planning Act* planning tools, for example, planning schemes, priority infrastructure plans and the Integrated Development Assessment System.

Landholder: A landowner, land manager, person or group of people with an interest in the planning area through special lease, mining claim, occupational licence, occupation permit, exploration permit, stock grazing permit, pastoral holding or permit to occupy, and trustees of land set aside for public purposes.

Natural resources: Soil, vegetation, plants, animals, minerals, air and water that are used for economic benefit and/or community wellbeing.

No net loss: Habitat losses must be offset into areas with equal or higher biodiversity values.

Pest species: Plant and animal species that have established in areas outside their naturally occurring distributions.

Planning Minister: The Minister administering section 2.5A of the *Integrated Planning Act 1997*.

Planning scheme: An instrument made by a local government under division 3.8, section 2.1.1 of the *Integrated Planning Act 1997*.

Population density: The number of persons per square kilometre.

Population projection: A population prediction that is the most likely outcome over the 20-year time frame of the plan.

Precautionary principle: Where there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation (refer to the underlying principles in part E of the regional plan).

Protected area: National parks, conservation parks, resources reserves, nature refuges, coordinated conservation areas, wilderness areas, world heritage management areas and international agreement areas under section 14 of the *Nature Conservation Act 1992*.

Protected wildlife: Presumed extinct, endangered, vulnerable, rare or common wildlife, as defined in the *Nature Conservation Act 1992*.

Glossary continued

Regional activity centre: A centre or proposed centre identified in the regional activity centres network. These centres support a concentration of activity, including higher density living, business, employment, research, education and services.

Regional Coordination Committee: The committee established by the Planning Minister under section 2.5A.3 of the *Integrated Planning Act 1997* to advise the Queensland Government through the Planning Minister on the development and implementation of the regional plan.

Regional plan: The South West Regional Plan, developed in accordance with section 2.5A of the *Integrated Planning Act 1997*.

Regional Planning Advisory Committee: The committee established by the Planning Minister under section 2.5.2 of the *Integrated Planning Act 1997* to advise the Queensland Government through the regional Planning Minister on the development and implementation of the regional plan.

Residential development: Development for a residential purpose that is at a scale greater than a single dwelling on an existing lot.

Riparian: The banks of land next to a waterway or wetland that contribute to its ecological balance, preservation and continuation.

Settlement pattern: The spatial distribution of urban and rural land use, employment, population, centres and infrastructure.

Traditional Owners: Members of an indigenous group that has a particular connection with land under Indigenous tradition.

Transit: The term used to describe public transport, for example, bus, rail or ferry services.

Urban purposes: Purposes for which land is used in cities or towns, including residential, industrial, sporting, recreation and commercial purposes, but not including environmental, conservation, rural, natural or wilderness area purposes.

Vision: The community's long-term aspirations for the region.

Water resource plan: A plan approved under section 50 (2) of the *Water Act 2000*.

Waterway: River, creek, stream, watercourse or inlet of the sea (*Fisheries Act 1994*).

Wetland: Areas of permanent or periodic/intermittent inundation, with static or flowing water that is fresh, brackish or salt, including areas of marine water.

Zoned land: Land allocated or identified as a zone or other like term such as domain or area in a planning scheme, including a strategic plan in a transitional planning scheme.



Acknowledgements

This regional plan is the result of contributions from a wide range of government and stakeholder groups and the community. Members of the South West Regional Coordination Committee (previously the South West Regional Planning Advisory Committee) and representatives of the region's stakeholder groups have contributed significant time and resources to the planning process in order to meet the project time frames. The planning team members have also put in a tremendous effort, which is greatly appreciated. Although it is not possible to list every contributor, their input is recognised and valued.

The contributions of the following groups are acknowledged:

- South West Regional Coordination Committee
- regional stakeholder groups
- local government
- state government
- Commonwealth Government
- staff from the Department of Infrastructure and Planning.

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- **Ms Linda Brown**—Administration Officer, Southern Region Division, Department of Infrastructure and Planning

Special thanks to:

Members of South West Regional Coordination Committee

- **Hon Stirling Hinchliffe MP** (chair), Minister for Infrastructure and Planning
- **Hon Paul Lucas MP** (former chair), Deputy Premier and Minister for Health and former Minister for Infrastructure and Planning
- **Councillor Mark O'Brien**—Mayor of Murweh Shire Council
- **Councillor John 'Tractor' Ferguson**—Mayor of Bulloo Shire Council
- **Councillor Jo Sheppard**—Mayor of Paroo Shire Council
- **Councillor Dave Edwards**—Mayor of Quilpie Shire Council
- **Mr Royce Brown**—Director, former Department of Tourism, Regional Development and Industry
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- **Mr Peter Hand**—Regional Director, Department of Communities
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- **Ms Carol Vale**—Indigenous Engagement Officer, Department of Communities
- **Ms Debra Alick, Ms Gail Kellar and Mr Roger Meany**—Queensland Health representatives
- **Mr Greg Field**—South West Regional Managers' Coordination Network
- **Mr Tom Garrett**—Chair, South West Natural Resource Management (NRM) Ltd
- **Ms Carmel Meurant**—South West Tourism representative
- **Ms Tricia Agar**—AgForce representative
- **Mr Barry Braithwaite**—Chair, Southern Inland Queensland ACC
- **Mr George Donohue**—Murweh community representative
- **Ms Donna Gentle**—Bulloo community representative
- **Ms Monica James**—Quilpie community representative

- **Ms Jenny Hewson**—Quilpie community representative
- **Cr Alan Travers**—Paroo community representative
- **Cr Karen Ticehurst**—Paroo community representative
- **Mr Chris Blanch**—CEO of Murweh Shire Council
- **Mr Mike Hayward**—CEO Bulloo Shire Council
- **Mr Mark Watt**—CEO of Paroo Shire Council
- **Mr Carl Ninine**—CEO of Quilpie Shire Council

Queensland Government departments

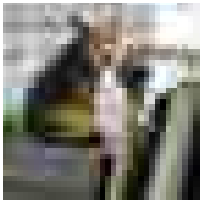
- Department of the Premier and Cabinet
- Queensland Health
- Queensland Treasury
- Department of Employment, Economic Development and Innovation
- Department of Public Works
- Department of Environment and Resource Management
- Department of Education and Training
- Queensland Police
- Department of Community Safety
- Department of Transport and Main Roads
- Department of Infrastructure and Planning
- Department of Communities
- Department of Justice and Attorney-General

Other important contributors

- **Ms Elizabeth Yeo**—Community Development Advisor, Queensland Resources Council
- **Mr Geoff Edwards**—Former CEO, South West Natural Resource Management (NRM) Ltd

Images courtesy of:

- **Ray Cash** Photography



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