

Part 3 Strategic framework

3.1 Preliminary

- (1) The strategic framework sets the policy direction for the planning scheme and forms the basis for ensuring appropriate development occurs within the planning scheme area for the life of the planning scheme.
- (2) Mapping for the strategic framework is included in Schedule 2.
- (3) For the purpose of describing the policy direction of the planning scheme, the strategic framework is structured in the following way:
 - (a) the strategic intent — a shire where people, lifestyle, business and the natural environment flourish
 - (b) the strategic outcome(s) for development in the planning scheme area for each of the following five themes:
 - (i) Encouraging economic growth;
 - (ii) Facilitating responsible growth for rural and town living environments;
 - (iii) Avoiding and mitigating from the risks of natural hazards and hazardous human activities;
 - (iv) Safeguarding our environment and heritage; and
 - (v) Providing adequate and appropriately connected infrastructure.
- (4) Although each theme has its own section, the strategic framework in its entirety represents the policy intent for the planning scheme.

3.2 Strategic Intent

The Barcoo Shire is a remote rural shire located in western Queensland in the heart of the Channel Country. It covers an expanse of 61,974 square kilometres, including the towns of Stonehenge, Jundah and Windorah and surrounding properties. The shire's primary river systems are the Thomson and Barcoo, which amalgamate above Windorah to become Cooper's Creek. All rivers and creeks within the shire emerge and flow southwest towards South Australia, terminating at Lake Eyre.

The Barcoo Shire Council and its community understand that planning for the future development of the shire plays a role in creating an environment in which people, lifestyle, business and the natural environment flourish, and so that development occurs on its terms.

The planning scheme seeks to provide for development which meets and is relevant to the community needs, is economically viable, environmentally sustainable and socially responsible. It also seeks to refine, support and leverage from the shire's recognised contribution to the planning and development of the broader western Queensland region² and beyond.

The shire's main economic output is beef production and, to a lesser extent, wool production, opal mining, earthmoving works, tourism and hospitality. Recent times have seen the discovery of reserves of oil and gas within the shire, which has led to considerable development in these industries.

The shire is in the midst of a demographic and economic transition and over the life of this planning scheme, the council seeks to promote and stimulate the growth of both the shire and the broader western Queensland region, by facilitating the following:

² For instance, the strategic planning for the Remote Area Planning and Development (RAPAD) region through projects such as its Pathfinder process and planning instruments such as the Central West Regional Plan 2009

- Broadening sheep meat production and wool production to supply growing international markets;
- Supporting and promoting organic beef production;
- Supporting the growth of a new carbon farming industry within Queensland;
- Tourism growth to increase tourist numbers and expenditure, building on strengths of regional attractions;
- Infrastructure connections – ensure inter and intra connectivity and service delivery that enables the region to be globally competitive;
- Delivering low cost and stable energy sources with secure water access;
- Supporting services and infrastructure to cater for an aging population; and
- Creating an environment where the shire can contribute to remote area delivery of telecommunications and digital infrastructure for regional growth.³

In striving to create an environment in which people, lifestyle, business and the natural environment flourish, the Barcoo Shire Council envisages:

A shire of safe, vibrant, positive and sustainable communities

- A stable and sustainable population
- Improved resilience and for people and property to be safe from hazards
- Places and spaces for and to engage all ages
- An enhanced lifestyle, while preserving the rural attributes by which the shire and its communities can be distinguished and identified
- A rejuvenated and connected community
- Arts, cultural and heritage attributes, including Aboriginal knowledge, culture and tradition, that are protected, valued and appropriately promoted

A self-sufficient, strong and diverse economy

- A sustainable, robust local economy
- Innovation, technical advancement and creativity are supported and promoted
- Growing local jobs and enhancing local skills
- Strengthened and broadened tourism opportunities
- Natural attractions and cultural heritage features that are appropriately promoted and able to be appreciated
- Enhanced public infrastructure (including airports, road networks, power and trunk water) that is protected, well connected, stable and innovative

A sustainable, healthy and well-managed environment

- Habitats for migratory, threatened and local native species are preserved
- Unique biodiversity, landforms and landscape views are protected
- Development supports council's goal of eradicating weeds of national significance from the shire
- Built form throughout the region has been sustainably planned and designed.

³ Based on the 6 priority areas for the RAPAD region, of which Barcoo Shire is a part, as described in Regional Australia Institute, *RAPAD Pathfinder Project, Final Report* (July 2017).

The planning scheme realises the intent to grow the shire's economic opportunities by establishing a framework to promote and enhance economically viable, environmentally sustainable and socially responsible development in the shire by clearly articulating:

- Outcomes that satisfy Barcoo Shire Council's vision; and
- A development assessment framework to support the strategic outcomes for growing the economic opportunities of the shire into the future.

It does this by:

- Being focused on achieving the desired outcomes;
- Positively responding to change and encouraging appropriate development
- Ensuring that development decisions are transparent and accountable to the community.

The planning scheme identifies development that supports these fundamentals in terms of '**what we do**' (i.e. having a 'fit for purpose' development assessment regime) and '**where we do it**' (i.e. ensuring an adequate and appropriate land supply).

To support this vision of liveability and prosperity into the future (throughout the 20-year horizon of this planning scheme – to 2040), development should be strategically located in a safe and efficient manner that leaves a positive legacy to the community of the Barcoo Shire.

3.3 Strategic intent statements

3.3.1 Encouraging economic growth

Agriculture

Agriculture, primarily cattle and sheep grazing, plays a key role in the regional economy, along with organic beef and wool production. It is a major employer and contributor to the wellbeing and prosperity of the region.

Rural industries to support growth of sheep, goat and macropod production are supported as part of strengthening and diversifying the agricultural economic base.

Dry land cropping and small cropping have the potential to be accommodated, but water intensive agricultural uses are not supported.

A viable agricultural sector will be maintained by removing the potential for land use conflicts, protecting resources (including water sources) from inappropriate development and increasing opportunities for investment, production and diversification.

Given the importance of the rural areas to the economy and lifestyle of the region, the rural area will be protected from fragmentation that would result in diminished productivity of lands. Development in the rural area is to be consistent with rural values and not compromise the agricultural viability of properties. Active weed and pest management is encouraged, in conjunction with uses which aid the general management objectives. Exclusion fencing for wild dog control is also encouraged.

The value of diversification and secondary uses, such as farm-stays and other tourist activities, to both the local economy and sustainability of an agricultural operation is recognised. The planning scheme seeks to provide flexibility for appropriate secondary-use development on agricultural land.

Development of value-adding agricultural industries is supported, where they are located in rural areas and where they do not compromise the ability of the existing land uses to function safely and effectively. Infrastructure that supports the agriculture supply chain including, sale yards, abattoirs, water supply, road and rail networks and electricity infrastructure will be protected from inappropriate development.

The function, connectivity and pasture productivity of the stock route network is maintained for sustainable use by travelling stock on hoof. The stock route network is protected from developments (on or near stock routes) that have potential for conflict between use of the network and use of the adjoining areas. The stock route network is identified in [SPP mapping – Economic Development \(Agriculture – Stock Route Network\)](#).

Tourism

Tourism provides a significant contribution to the regional economy, especially in the peak period from April to October each year. Growth in tourism focused on the region's heritage, paleo tourism, nature-based tourism and Aboriginal cultural tourism will continue to be encouraged.

Rich in history, the Barcoo Shire has an outback experience to offer everyone. Along with unique rustic landscapes, distinctive flora and fauna, spectacular wildlife, freshwater fishing, golf, bird watching and stunning sunsets, the Barcoo is also home to Magee's Shanty (birth place of the famous Bush Christening renowned by Banjo Paterson). Other significant tourist sites in the shire include: Welford National Park, Thomson River, The Native Well, Barcoo Shire Memorial Park, Settler's Nature Drive, Archer Bros Pioneer Pathway, Cooper's Creek and 12km Nature Drive, Red Sandhills, Whitula Gate Museum, The J.C. Ruins, John Egan Pioneer Track, the Rock Holes, Swanvale Lookout and the Stone Address Book.

The three welcoming outback towns of Windorah, Jundah and Stonehenge can all be easily accessed via sealed roads and are located within a leisurely drive to the major towns of Longreach and Quilpie in the adjoining council areas.

Barcoo Shire is the gateway to Birdsville, Bedourie to the west, Innamincka and Quilpie to the south, and Longreach and Winton to the north.

The significant tourist sites of the shire will be protected from inappropriate development that detracts from the quality of the experience. Developments such as short-term accommodation, which value-add to these experiences and the tourism economies, are generally encouraged.

Event-based tourism is also important for the regional economy with major events (by way of example, but not limited to, the Stonehenge Bronco Branding, Rodeo & Gymkhana, Jundah Sheep Shenanigans and Woolly Cup and Windorah International Yabby Races) to be encouraged, where impacts on surrounding premises and neighbours can be adequately managed. Appropriate provision of necessary infrastructure for safe participation is to support such events.

With ongoing improvement of road infrastructure, Drive Tourism in the region is increasing, and developments that enhance and value-add to the drive tourists' experiences are encouraged. Such developments include:

- Additional tourist accommodation options for Stonehenge, Jundah and Windorah
- Regulation of camping around the Thomson River, Barcoo River and Cooper's Creek
- Opportunities for nature, Aboriginal and rural based activities.

Mining and Extractive Resources

The recent discovery of reserves of oil and gas within the shire, particularly the southern half, has led to considerable interest and increasing development in these industries. Development of industries to support conventional oil and gas extraction will be accommodated. The shire is not supportive of development associated with unconventional or untested extraction methods such as coal seam gas extraction.

Mining of minerals (other than coal) is accepted as contributing to the economy. The region has a long history of mineral resources being mined, primarily opals. Consequently, there are abandoned mines and workings in the shire, for instance on the northern boundary with Winton Shire (Opalton opal), south west of Stonehenge, west of Jundah (Raindance and Jundah opal), in the vicinity of Coorajah Creek in the far east of the shire (Yaraka opal).

Mining and extractive resources are protected for future use as important State and local economic resources. In order to realise growth potential in the shire's economy, it is important that associated uses can co-exist with other land uses. It is preferred that resource-related development, including non-resident workforce accommodation, in order of preference, either:

- utilise existing facilities, such as accommodation;
- be located and designed to integrate within existing towns;
- are constructed on-lease to minimise impacts on the infrastructure and resources of the Barcoo Shire Council.

No new mining towns will be established within the shire.

The Carpentaria Gas Pipeline is a significant high pressure gas pipeline, which extends from Mt Isa to Ballera in the south (petroleum pipeline licence PPL41), transecting the rural area in the west of the Barcoo Shire. High pressure gas pipelines identified on [SPP mapping – Safety and Resilience to Hazards \(Emissions and Hazardous Activities – High Pressure Gas Pipelines\)](#) are to remain protected from encroachment by development that would compromise their safe and effective function.

While no Key Resource Areas (as defined by the Queensland Government) have been identified within the Barcoo Shire, gidgee stone deposits are known to exist and have previously been quarried from areas around Stonehenge and Morney. These materials are suitable for aggregate and screening for use in construction and maintenance of roads and other infrastructure.

Potential for conflict between land use, resource extraction, mining tenements and pipeline infrastructure will be avoided. Resource sites are to be rehabilitated once the resource has been exhausted or the extractive industry use becomes no longer viable.

3.3.2 Facilitating responsible growth for rural and town living environments

The Barcoo Shire is made up of large rural properties that are serviced and supported by the towns of Stonehenge, Jundah and Windorah. It is home to around 300⁴ people.

⁴ Queensland Government Statistician's Office, *Estimated resident population by local government area (LGA), Queensland, 2007 to 2017*: For Barcoo (S), 30 June 2017 Estimated Resident Population of 267 people, with an averaged Estimated Resident Population of 335 people over the preceding 10 years, 2007 to 2016.
Queensland Government Statistician's Office, 2015 edition, *Projected population, by local government area, Queensland, 2011 to 2036*: Medium series projected population for Barcoo (S) of 302 people for 2036.

The lifestyle offered in the shire is prized by residents and visitors alike. While development and economic growth in the region is encouraged, the enhancement of this lifestyle is of great importance. The strong sense of community, opportunity to stand out from the crowd, low crime rate, quality of lifestyle and wide-open spaces enjoyed in the shire, are to be maintained.

It is not expected that significant population growth will be experienced in the life of this planning scheme. Residential land supply within the township areas are considered adequate to meet anticipated future housing needs. Adequate provision has also been made in the planning scheme to meet other development needs, including the identification of an industrial precinct. However, should unexpected growth occur, it will be accommodated first within, and then if need be consolidated around, existing towns in safe locations, which can be efficiently and viably serviced.

Context – Stonehenge

Stonehenge is the smallest settlement in the shire, which retains its historic function as a resting point for travellers and has a local community service centre function. It is situated close to the Thomson River, approximately 150km south west of Longreach and 70km north of Jundah. Stonehenge and its surrounding rural area is home to approximately 16%⁵ (2016) of the shire's residents. Public facilities in Stonehenge include a primary school, community centre, sports centre (tennis and cricket) and library.

Water for the township of Stonehenge is pumped from a nearby waterhole of the Thomson River during river flows to an off-stream storage. The water supply infrastructure includes a treatment system, ground level reservoir, high-level reservoir, pump stations and pipes. Development must not compromise the quality or supply of water for the township.

Context – Jundah

Jundah is the administration centre for the Barcoo Shire. It is situated on the floodplain of the Thomson River, downstream of Stonehenge and approximately 220km south of Longreach. Jundah township and rural surrounds are home to approximately 40%⁶ (2016) of the shire's residents, however it services the broader shire and rural community.

The town's existing water supply from the nearby waterhole on the Thomson River must remain protected from development that may compromise quality and supply. The town's water storages, pump station, rubbish tip and airport are located on the outskirts of town to minimise conflict with other land uses.

Public amenities, including parks and sporting facilities, Jundah Racecourse, Jundah Hospital, the Aquatic Centre, primary school and the amenity of Dickson Street remain central to the liveability of the community. The elements of buildings, facades, streetscape, and environmental and cultural landmarks that contribute to the town's character are to be preserved. New development may contribute to the character of the town through rejuvenation and regeneration of old buildings or meshing of old with new.

Context – Windorah

⁵ ABS, 2016 Census, based on State Suburb Classification for Stonehenge as a proportion of Local Government Area Classification for Barcoo Shire.

⁶ ABS, 2016 Census, based on State Suburb Classification for Jundah as a proportion of Local Government Area Classification for Barcoo Shire.

Windorah is home to approximately 43%⁷ (2016) of the shire's residents. As the shire's southern-most established settlement, Windorah, is located 35km south of where the Thomson and Barcoo Rivers converge to form the multi-channeled Cooper's Creek. Much of the traffic into and through the shire passes through Windorah, as it comprises the intersection between Quilpie-Windorah Road and Diamantina Development Road. On its eastern outskirts, Quilpie-Windorah Road also intersects with Thomson Development Road. Given the distances between service centres in western Queensland, Windorah is a strategic refueling and resupply centre. The Windorah Airport is also the only airport in the shire to offer refueling facilities.

The town's existing water supply from two nearby waterholes on the Cooper's Creek and associated infrastructure is to remain protected from development that may compromise quality and supply. The town's rubbish tip and airport are located on the outskirts of town to minimise conflict with other land uses.

Public facilities in Windorah include a community health care centre, primary school and library.

Lifestyle and liveability

Development in the shire will result in well-serviced, accessible, and attractive environments. Development will be designed and located to maximise the efficient use of existing services. Community health and safety, sensitive land uses and the natural environment are to be protected from the potential adverse impacts of hazardous air, noise and odour emissions from higher impact uses. Land identified as suitable for industrial development and resource areas (such as quarries), is to be protected from encroachment by development (such as sensitive land uses) that would compromise its safe and effective function once developed. New industrial development and resources activities should be designed, located and operated to avoid or mitigate adverse impacts on surrounding sensitive land uses.

Infill and renewal development within the established towns of Stonehenge, Jundah and Windorah is encouraged, as is diversification of housing stock and flexibility in housing options to suit changing community needs, especially an aging and active population.

In recognition of the special attributes that come with living in the shire's towns, it is important that the barriers to home construction, and establishment of new businesses and services remain low, while preserving the relaxed outback lifestyle and natural beauty our community considers important.

Residential block sizes should continue to be generous and consistent with existing properties, whilst allowing scope for innovation in lot sizes to accommodate infrastructure efficiency, changing community attitudes and needs of the future residents. Innovative development design and selection of construction materials, which offers protection to occupants from the region's climatic conditions, while providing for a high level of street appeal and neighbouring amenity are also encouraged. There is support for new home-based businesses that do not detract from the functions of the services within a town's retail and service core.

Residents should have a range of recreational spaces and facilities to enjoy in (or on the immediate fringe of) each of the shire's towns.

⁷ ABS, 2016 Census, based on State Suburb Classification for Windorah as a proportion of Local Government Area Classification for Barcoo Shire.

Rural residential living is not supported, as it is considered an inefficient land use being difficult to service with potable water and all-weather road standard, and potentially detracts from the stability of town living and may result in fragmentation of rural land.

Risks from flooding, bushfires and hazardous human activities are managed so as to not increase, and where reasonably practicable in fact reduce, the people, property or trunk infrastructure at risk.

New development is to be serviced with key infrastructure, including water, power and sewage disposal system. New development will continue to contribute to infrastructure including any trunk infrastructure networks. Innovation in power supply is supported for commercial, rural, industry and domestic purposes, but is to not risk local amenity or safety.

Enhancing commercial prosperity

The retail and service core of Stonehenge, Jundah and Windorah respectively, are to be maintained and enhanced. Future commercial and retail development are encouraged to locate:

- Fronting Stratford Street in Stonehenge
- Fronting Dickson Street in Jundah
- Fronting Albert Street in Windorah.

During the effective life of this planning scheme, it is envisaged that a heavy vehicle bypass and rest area may be realised in Windorah, diverting heavy vehicle traffic travelling via the Diamantina Development Road to use Wallace Street, rather than Albert Street, to traverse the township. If this occurs, future commercial or retail development, which is designed and located to be consistent with the intent of, and service, a heavy vehicle rest area would also be supported.

The co-location of commercial or retail uses with a residential use, is supported, given the context, scale and function of the shire's towns.

In the rural areas of the shire, short-term accommodation and hospitality-focused uses, such as tea rooms or food outlets, which operate in conjunction with and enhance user experience of drive tourism apps, as endorsed by Council, are encouraged. The potential associated with drive tourism apps is emerging as a result of government-supported digital technology projects involving the shire. The Barcoo Shire is well-positioned to provide connectivity for outback travelers with Winton to the north-west, Longreach to the north, Blackall to the east and Quilpie to the south.

Industrial opportunity

Industrial uses, other than high-impact industry and special industry uses, are to establish in the Industrial precinct identified within Jundah (bounded by Dickson and Griffith Streets to the south of Archer Street) and Windorah (adjacent to Quilpie-Windorah Road and opposite the airport).

Adjoining the Industrial precinct in Windorah, on its northern and western boundaries, is the Windorah Solar Farm with its iconic sun mirrored dishes (as at 2018, 5 dishes each 13.7m across), which provides daytime electricity to the town and serves as an installation of visitor interest.

Future industrial activity in the Industrial precinct at Windorah must not compromise the function and safe operation of the Windorah airport or the Windorah Solar Farm.

In the event an industrial use has a locational requirement for establishing in Stonehenge, it must be situated to avoid or mitigate adverse impacts of emissions on sensitive land uses and the natural environment. It must also be adequately serviced without adversely impacting service provision across the township.

Commercial-use chiller boxes for the storage of animal carcasses (for example, associated with macropod harvesting) and commercial or retail food manufacturing are recognised as valuable local economic contributors; however, these uses are considered inconsistent with established residential and accommodation uses and within the Township zone. Chiller boxes and food manufacturing facilities should be located where they can be serviced by reliable electricity and water sources suited to the purpose. When determining the appropriateness of a location for chiller boxes and food manufacturing facilities, consideration will be given to the hours of operation and extent to which associated noise and light impacts beyond the site are avoided or mitigated. It is preferred that chiller boxes are installed in a way that they can be readily unsecured and removed from the site if necessary, in response to an incident to protect public health and safety.

3.3.3 Avoiding and mitigating from the risks of natural hazards and hazardous human activities

As with all areas of Australia, the Barcoo Shire is prone to natural hazards. Flooding, bushfires, drought, storm damage and heatwaves present risks to the residents of the shire.

Flooding

The region has a long history with flooding and flooding-related impacts. The shire's population centres of Stonehenge, Jundah and Windorah are each established nearby the Thomson River or a confluence of it and have experienced the impacts of numerous flood events.

The surrounds of each of these towns, as well as the primary road routes of the shire, are subject to inundation during significant flood events. Consequently, the residents of these towns, as well as many others residing throughout the shire, are prone to isolation during flood events.

Development in the shire should not expose people or property to unacceptable risks of flood hazards. Future development should be located, sited, designed and constructed to tolerate, not worsen, and adapt to flood hazards.

To ensure that economic development is not adversely impacted by significant flood events, development throughout the shire is to be reasonably regulated⁸ to ensure flood resilience.

Flood assessment will be applied to development on sites affected by flooding as indicated by **Schedule 2 - Flood mapping**.

Bushfire

The region is also prone to bushfire events and identified risk areas are shown on [SPP mapping – Safety and Resilience to Hazards \(Natural Hazards Risk and Resilience – Bushfire Prone Area\)](#).

New development must take bushfire risks into account by making sure that development does not unduly burden disaster management response or recovery capacity, nor adversely impact the existing

⁸ For example, the increased category of assessment for development within the mapped flood hazard area or through regulation of minimum floor heights for buildings under the *Building Act 1975*.

capabilities of emergency services. New developments should avoid areas known to be bushfire-prone but, where unavoidable, must be built, designed, and located to be resilient to bushfire hazards.

Emissions and hazardous activities

Activities involving the use, storage and disposal of hazardous materials and hazardous chemicals, dangerous goods and flammable or combustible substances are located to avoid or mitigate potential adverse impacts on surrounding uses and minimise the health and safety risks to communities and individuals.

Sensitive land uses are protected from the impacts of previous activities that may cause risk to people or property including former mining activities and hazards.

The integration of pipelines carrying petroleum, such as the Carpentaria Gas Pipeline, is maintained and development does not encroach on pipelines or pipeline easements identified in [SPP mapping – Safety and Resilience to Hazards \(Emissions and Hazardous Activities – High Pressure Gas Pipelines\)](#).

3.3.4 Safeguarding our environment and heritage

The natural environment and heritage attributes of the shire, contribute to its health, liveability and economic potential. It is critical that these elements be safeguarded against inappropriate development.

Biodiversity

Barcoo Shire is primarily within the Channel Country bioregion (predominantly the Goneaway Tablelands subregion in the north among others and a combination of Sturt Stoney Desert, Lake Pure and Cooper-Diamantina Plains subregions in the south), but also encroaches into the Mitchell Grass Downs bioregion on the north-eastern fringe of the shire and the Mulga Lands bioregion on the south-eastern fringe of the shire.

The Channel Country bioregion is characterised by vast braided, flood and alluvial plains surrounded by gravel or gibber plains, dunefields and low ranges. Vegetation is predominantly Mitchell grass, gidgee and spinifex.

Significant threatened species of fauna and flora have been identified in the region, and these include:

Fauna	Flora
Common death adder (<i>Acanthophis antarcticus</i>)	Waddy (<i>Acacia peuce</i>)
Boggomoss snail (<i>Adclarkia dawsonensis</i>)	<i>Calotis suffruticosa</i>
Grey grasswren (<i>Amytornis barbatus</i>)	<i>Eremophila stenophylla</i>
Rusty grasswren (<i>Amytornis rowleyi</i>)	<i>Indigofera oxyrachis</i>
Woma (<i>Aspidites ramsayi</i>)	<i>Nyssanthes impervia</i>
Curlew sandpiper (<i>Calidris ferruginea</i>)	<i>Nyssanthes longistyla</i>
Kowari (<i>Dasyuroides byrnie</i>)	<i>Ptilotus maconochiei</i>
Yellow chat (<i>Epthianura crocea</i>)	<i>Solanum unispinum</i>

Grey falcon (<i>Falco hypoleucos</i>)	
Painted honeyeater (<i>Grantiella picta</i>)	
Major Mitchell's cockatoo (<i>Lophochroa leadbeateri</i>)	
Greater bilby (<i>Macrotis lagotis</i>)	
Dusky hopping-mouse (<i>Notomys fuscus</i>)	
Yellow-footed rock-wallaby (<i>Petrogale xanthopus celeris</i>)	
Night parrot (<i>Pezoporus occidentalis</i>)	
Koala (<i>Phascolarctos cinereus</i>)	
Plains rat (<i>Pseudomys australis</i>)	

The shire is host to Goneaway National Park, Hell Hole Gorge National Park, Welford National Park, Yamma Yamma, Lake Cuddapan and Cooper's Creek Overflow Swamps.

Biodiversity is also important to amenity, agriculture and tourism in the region.

Development must be located in areas that avoid significant adverse impacts on the State's biodiversity values and protects these while maintaining ecological connectivity. The State biodiversity areas are identified in [SPP mapping – Environment and Heritage \(Biodiversity\)](#).

Water quality

The Barcoo Shire is located within the Lake Eyre Basin and incorporates Cooper's Creek and Diamantina River catchments. Thomson River and Barcoo River join within the shire to form Cooper's Creek. Farrars Creek is another significant waterway in the west of the shire, which is less significantly impacted by development due to the remoteness of its situation. The region is also within the Great Artesian Basin, one of the largest groundwater basin complexes in the world. These water resources are defining features and valuable for the health and sustainability of local and extended communities, industry and environment.

The Barcoo Shire Council is the water service provider for the towns of Stonehenge, Jundah and Windorah. The source water for each of these supplies come directly from raw water in waterholes along the Thomson River and Cooper's Creek in proximity to the respective towns. Development must not compromise the security and quality of these supplies.

Development must facilitate the protection and enhancement of environmental values and the achievement of water quality objectives for all water resources in the shire, at all stages of development (including for instance construction and post-construction). In particular, it is recognised that stormwater run-off and discharge of wastewater not connected to a municipal sewerage system, can cause damage to water quality in waterways and groundwater, reducing the health of aquatic ecosystems and limiting uses of the water.

Development in the towns of Stonehenge, Jundah and Windorah must also:

- be located and designed to avoid or minimise disturbance of high-risk soils, natural drainage and landform features as well as impacts upon aquatic ecosystems and ground-water dependent ecosystems;
- retain and enhance natural drainage features and environmental corridors such as creeks, gullies, waterways, wetlands, habitats and vegetation and provide buffers to minimise and mitigate the impact of development on water quality.

Cultural heritage

Heritage places, landscapes and artefacts of cultural significance, either in built form or natural sites, are an important part of the fabric of the Barcoo Shire.

The shire is rich in both Aboriginal and early European cultural heritage, in the form of landmarks, sacred sites, historic buildings and artefacts. The unique historic, cultural and architectural qualities of places and artefacts are considered valuable and can contribute to:

- the character and identity of the region
- the wellbeing and identity of its people past, present and future; and
- where culturally appropriate, can serve as a tourist attraction and economic drawcard.

The traditional owners of lands within the shire include the Boonthamurra People, Mithaka People and Wongkumara People. The Boonthamurra People and Mithaka People have, at the time of making this planning scheme, had their Native Title rights over identified areas determined (refer to **Schedule 4** for mapping of determined native title areas). The Boonthamurra People have a connection to the land in the south-east of the shire, the Mithaka People have a connection to the land in the west of the shire and the Wongkumara People have a connection to the land in the south of the shire.⁹ Each of these peoples have places of cultural significance to them.

The shire's Aboriginal cultural heritage is acknowledged and respected. Known places and items of Aboriginal cultural importance are to be protected and development in these areas avoided or appropriately minimised, mitigated and managed.

Cultural heritage recognised as having significance to Aboriginal people, the Commonwealth and the State are to be protected in accordance with the various laws and instruments applicable to the circumstances. National heritage places and State heritage places (such as Welford Homestead and Haddon Corner) are identified on [SPP mapping – Environment and Heritage \(Cultural Heritage\)](#).

Adaptation and re-use of local heritage places, for the benefit of the community and to provide continuity in the history of the shire for future generations, is supported where it is done in a way that does not compromise the cultural heritage significance of the place. Local heritage places are identified in **Table SC3.1–Local Heritage Place of Schedule 3**. Development must conserve the physical features, fabric and contents that contribute to the cultural heritage significance of the local heritage place and avoid changes to the setting or context of the local heritage place that reduce understanding or appreciation of its cultural heritage significance. Any changes as a result of the development will be appropriately

⁹ Regularly updated regional maps depicting claimant applications as per the NTDA Schedule (as lodged in the Federal Court) and determinations of native title as per the National Native Title Register are accessible at <http://www.nntt.gov.au/assistance/Geospatial/Pages/Maps.aspx>. The *Southern and Western Queensland Region Map* covers the Barcoo Shire.

managed, documented and interpreted by encouraging their retention for appropriate development and ongoing use.

3.3.5 Providing adequate and appropriately connected infrastructure

It is imperative that infrastructure keep pace with growth and development in the region. The planning scheme aids in establishing a coordinated approach linking the provision of infrastructure, land use and economic development.

Transport infrastructure and integration

The road network servicing central western Queensland is of social and economic significance to Remote Area Planning and Development (RAPAD) councils, including Barcoo Shire. It is also integral to intra-state and inter-state connectivity.

The region and its communities are heavily invested in and reliant upon the quality of the road network for social and economic purposes. The effect of extreme temperature fluctuations and flooding provide challenges in delivering and maintaining an efficient and robust road network. The road network of the region caters for a wide variety of road users; for instance, from domestic scale use by residents, road trains for transporting stock and commodities (including triples), tourists in single vehicles and towing, to long-distance cyclists.

The Thomson Development Road, the highest order route through the region connecting Longreach and Windorah, also passes through Stonehenge and Jundah. Other important routes include:

- Diamantina Development Road
- Birdsville Development Road
- Jundah-Quilpie Road.

Any new development must not adversely affect the safety and efficiency of the road network identified in [SPP mapping – Infrastructure \(Transport Infrastructure\)](#).

Airports

Windorah Airport is unmanned and is located on the eastern side of town. The airport accommodates both commercial, private and medical operations, providing regular direct links to Brisbane and other regional centres.

Jundah Airport is unmanned and is located on the Southern side of town (no fueling facilities). The airport is utilised by private aircraft and for medical purposes (Royal Flying Doctor Service (RFDS)).

Stonehenge Airport is unmanned (no fueling facilities). The airport is utilised by private aircraft and medical purposes (RFDS).

These airports and airstrips play a vital role in delivering passenger and health services across the shire, and more broadly central western Queensland.

Aviation facilities of State interest are identified in [SPP mapping – Infrastructure \(Strategic Airports and Aviation Facilities\)](#). The non-directional beacon located adjacent to the Windorah Airport is identified as one such facility of State interest.

Any new development must not create incompatible intrusions or compromise aircraft safety or the operation of aviation navigation and communication facilities.

Energy, Water Supply and Communications

Due to the remote nature of the shire, electricity, water supply and telecommunication services are of vital importance to ensure the safety and wellbeing of local residents. Improvements in stability and capacity of this essential infrastructure also facilitates potential for future economic development and diversity in the shire.

Electricity is supplied to each of the towns, as at 2019, via:

- Ergon Energy's Single Wire Earth Return (SWER) network to Stonehenge
- an Ergon Energy operated diesel generating plant to Jundah
- Energy Energy's Windorah Solar farm for daytime electricity and diesel generator at other times to Windorah.

Some rural properties in the shire's north have connections to township supplies and some in the south have connections to Energy Energy's SWER network. The majority of the shire's rural properties however rely on on-site power generation facilities, for which installation and operation is the responsibility of the property owner or occupier, as the case may be.

Telecommunications services are provided within shire via:

- terrestrial radio systems (digital radio system and high capacity radio concentrator system) for basic voice services;
- satellite services; and
- the Barcoo-Diamantina fibre optic network installed in 2017 which provides connectivity from each of the shire's townships to the national fibre network for mobile phone and data services.

Barcoo Shire Council also operates and maintains an UHF radio repeater services through the shire which enables communication and emergency rescue facilities in the outback. Any new development must not interfere with the delivery or transmission of any of these telecommunications services.

The shire has ready access to self-sufficient energy sources through renewable energy (solar and wind). Innovation in energy storage would be of value to the shire, as these sources are by their nature intermittent. There is opportunity for government or private sector investment in renewable energy facilities for each town to assist to meet current and future energy needs, as well as to improve stability, security and capacity. Development of renewable energy facilities that are appropriately located, having regard to the best and highest use of the land, and network stability and capacity, is supported.

Development must enhance and not compromise the stability, security or capacity of energy, water and telecommunications infrastructure.

Existing and approved future major electricity infrastructure locations and corridors (including easements and electricity substations), and water supply infrastructure locations and corridors (including easements) are protected from development that would compromise the corridor integrity, and the efficient delivery and functioning of such infrastructure.

Town-based infrastructure

Barcoo Shire Council will continue to provide dedicated infrastructure services, including water, waste management, road networks and open space areas to the extent possible within the budget framework.

Future development will enhance and not adversely impact on provision of infrastructure services by the council. Trunk infrastructure information which may assist to inform development is available at **Schedule 4**.