



Berrigan Shire Local Strategic Planning Statement

Regional Profile March 2020

Mayors Message

The Berrigan Shire Local Strategic Planning Statement (LSPS) establishes a 20-year vision for economic, social and environmental land use planning. Living on our iconic Murray River provides a wealth of outdoor recreational experiences and being in close proximity to Melbourne represents a thriving visitor economy. We have nationally significant export-oriented irrigation agriculture industry, assets and infrastructure, efficiently connected to the Port of Melbourne. The LSPS provides us with a guide for community stewardship of our iconic cultural, environmental and economic assets to enhance our community into the future. This Berrigan Shire LSPS lists our community's assets and identifies actions we can use to

support future development. Of significance, this Berrigan Shire LSPS emphasises the community's economic, social and environmental links with Victoria and the need for cross border NSW and Victoria strategic planning.

This Berrigan Shire LSPS identifies the special characteristics that contribute to the Berrigan Shire's identity as a rural shire with an active lifestyle. It recognises the shared community values to be enhanced and ensures our communities continue to enjoy an active lifestyle and modern urban amenity that is the envy of our Neighbours.

General Managers Message

The Berrigan Shire Local Strategic Planning Statement (LSPS) sets out a 20-year vision for land use planning in Berrigan Shire LGA, as stated below.

The Berrigan Shire LSPS vision is consistent with the Berrigan Shire 2027 Our Community Strategic Plan and the Riverina Murray Regional Plan. The Berrigan Shire LSPS contains six strategic themes, which highlights the Berrigan Shire LGA's local rural character, active lifestyle, identity, assets and opportunities.

To achieve the 20-year vision, the Berrigan Shire LSPS details challenges to be addressed to enable growth and change. The Berrigan Shire LSPS will guide Council's finer grained strategic planning and policy review, provide actions to utilise the planning system to address challenges and direct economic and social relations required by Council to advocate for the Berrigan Shire LGA.

Our Vision

Contemporary standard of urban amenity facilitating an active lifestyle in a rural community characterised by its proximity to Melbourne and a thriving visitor economy valuing and enhancing our communities' informed stewardship of

- *our nationally significant export-oriented irrigation agriculture industry, its assets and infrastructure, and*
- *our iconic cultural, environmental and economic assets.*

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Acronyms

| | |
|---------|---|
| ABC | Australian Broadcasting Corporation |
| CPP | Community Participation Plan |
| CSP | Community Strategic Plan |
| DCP | Development Control Plan |
| DPIE | Department Planning, Industry and Environment |
| IP&R | Integrated Planning and Reporting Framework |
| LEP | Local Environmental Plan |
| LGA | Local Government Area |
| LSPS | Local Strategic Planning Statement |
| MDBA | Murray Darling Basin Authority |
| NSW | New South Wales |
| POW | Place of Work |
| Qld | Queensland |
| | |
| RAMJO | Regional and Murray Joint Organisation |
| RDA | Regional Development Areas |
| The Act | <i>Environmental Planning and Assessment Act 1979</i> |
| Vic | Victoria |

About this Statement

Purpose

The Berrigan Shire Local Strategic Planning Statement (LSPS) sets out the 20-year vision for land use planning for the Berrigan Shire Local Government Area (LGA) in line with the Riverina Murray Regional Plan. This LSPS identifies the special characteristics that contribute to the identity of the Berrigan Shire LGA and recognises the shared community values to be maintained or enhanced. This LSPS highlights the strategic planning priorities that will direct future economic, social and environmental land use development to ensure the vision is achieved. It sets out the assets and investment opportunities of the Berrigan Shire LGA and the challenges facing the LGA to achieve the vision. It includes specific actions for the Berrigan Shire Council to address these challenges and the means for monitoring and reporting on these actions.

The LSPS is a pivotal tool that will guide local and State Government strategic planning within

a strategic-led planning framework. It provides the detailed local level strategic planning that is consistent with the State Government's strategies and plans for regional growth and development. It is the link between the Berrigan Shire 2027 Our Community Strategic Plan and strategic land use planning, which has a similar, yet broader vision on how Council will meet the community's needs. Of significance, the Berrigan Shire LSPS will give effect to regional and district plans. At local government level, it will provide a rationale to the finer-grained planning level on what updates are required in the Council's Local Environmental Plan and Development Control Plan.

The line of sight between the local and State Government strategic-led planning framework is illustrated in figure 1 below.

Berrigan Shire Council: Our Vision

Contemporary standard of urban amenity facilitating an active lifestyle in a rural community characterised by its proximity to Melbourne and a thriving visitor economy valuing and enhancing our communities' informed stewardship of

- *our nationally significant export-oriented irrigation agriculture industry, its assets and infrastructure, and*
- *our iconic cultural, environmental and economic assets.*

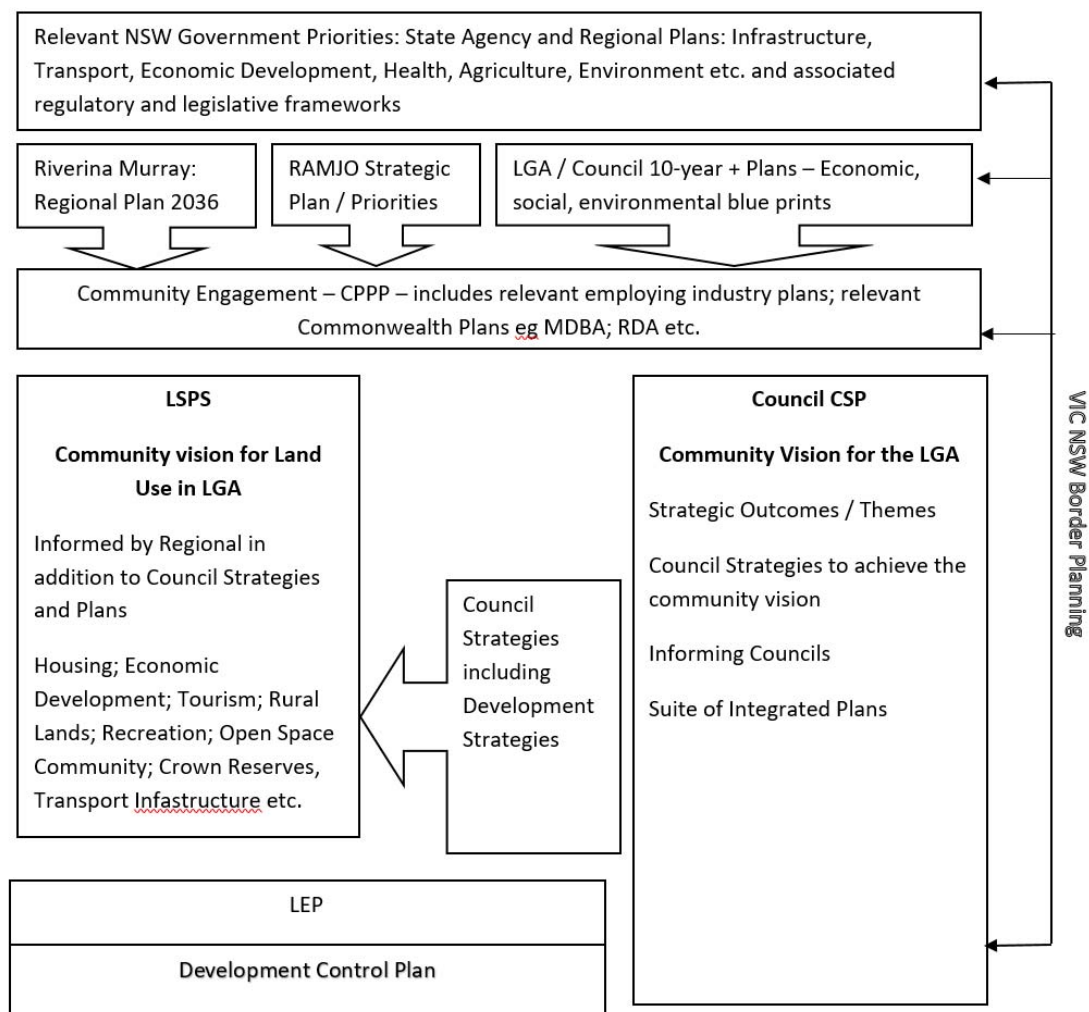
Policy Context

The Berrigan Shire LSPS has been prepared in accordance with section 3.9 of the *Environmental Planning and Assessment Act 1979* (the Act) which requires that it include or identify the following:

1. the basis for strategic planning in the area, having regard to economic, social and environmental matters
2. the planning priorities for the area that are consistent with any strategic plan
3. the actions required for achieving those planning priorities
4. the basis on which the council is to monitor and report on the implementation of those actions.

applying to the area and (subject to any such strategic plan) any applicable community strategic plan under section 402 of the *Local Government Act 1993*

Figure 1 – Line of Sight Strategic-Led Planning Framework



Community Engagement

Council prepared the Berrigan Shire LSPS by building upon the results of extensive engagement undertaken in the development of Council's Berrigan Shire 2027 Our Community Strategic Plan during 2011-2016, including community feedback regarding what residents most like and dislike about Berrigan Shire, and what residents would like to see retained and changed. It also draws on the extensive community engagement in developing the shire's town masterplans (Berrigan, Barooga, Finley and Tocumwal) during 2014-2018 and the Berrigan Shire Land Use Strategy during 2018. Collaboration was also sought between councils in the region due to the wider role that Berrigan Shire Council's strategic planning has within a strategic context and the cross border networks. The LSPS was workshopped with the Berrigan Shire Council councillors in early 2020 to confirm the values and planning direction for Berrigan Shire articulated in Council's current strategic plans. All consultation requirements of the Berrigan Shire Community Participation Plan 2019 were addressed.

Consultation

Further to the above, the NSW Department Planning, Infrastructure and Environment (DPIE), Riverina and Murray Joint Organisation (RAMJO) member councils and other relevant State Government agencies were consulted to confirm the values and planning direction for Berrigan Shire articulated in Council's current Community Strategic Plan, Land Use Strategy and various policies.

Monitoring and Reporting

The LSPS describes the 20-year vision for the Berrigan Shire LGA to 2040 and is intended to be a living document that should be revised on an ongoing, as-needs-basis so that the LSPS remains responsive, relevant and local. To this end, it is intended that the statement will be updated upon completion of the various actions

identified throughout the document. Revisions to the LSPS may also be required in response, to fine-tune it to changes within the LGA and the regional perspective, such as business ventures and employment opportunities.

Council will monitor and report on the progress of the LSPS priorities, actions and outcomes in an annual report. This will inform adjustments to the LSPS to ensure local planning policy is effective, responsive and delivering on local community aspirations.

Community feedback will be regularly sought. It is anticipated that this consultation will identify continuous improvement opportunities and will ensure that the LSPS continues to reflect the community's social and economic needs as well as their vision of the future desired state of the local environmental area.

There will be a need to continue collaboration with other councils in the region to ensure the LSPS is in line with regional strategic planning perspectives, including cross border initiatives, responses and changes.

Council will monitor, review and report on the LSPS to ensure that its planning priorities are being achieved, using the existing Integrated Planning & Reporting framework (IP&R) in accordance with the *Local Government Act 1993*.

The Berrigan Shire LSPS will be reviewed at least every seven years pursuant to section 3.9 (1) of the Act.

Funding and Investment

Strategies and studies required by this statement will primarily be funded in delivery programs and annual operational plans of Council, although availability of funding via the Regional Growth Fund and other state agency opportunities will also be explored.

Snapshot of Berrigan Shire LGA

Berrigan Shire LGA is located in southern NSW, on the iconic Murray River and the border of NSW and Victoria. It is three hours driving time (270 km north) of Melbourne and seven hours driving time (670 km south west) of Sydney.

We are a rural shire with established Murray River based tourism and an extensive irrigation agriculture industry. Our proximity to Melbourne, efficient transport links and nationally significant and iconic assets represent continued opportunities to meet growing market demands.

Our rural and cross-border communities provide unique active lifestyles, attract substantial amounts of visitors and are connected to the higher-order centres of Shepparton (a distance of 79 km) and Albury Wodonga (a distance of 144 km). Recent population growth has been in the Murray River border townships of Barooga and Toomumwal attracting families to the rural lifestyle and retirees from metropolitan Melbourne.



What makes us unique

In the context of NSW and the Riverina Murray region, the key and regionally distinguishing characteristics of the shire that makes us unique is the cross-border political, and social economy of the shire, the extent of irrigated agriculture and the LGA's population density.

Our Communities

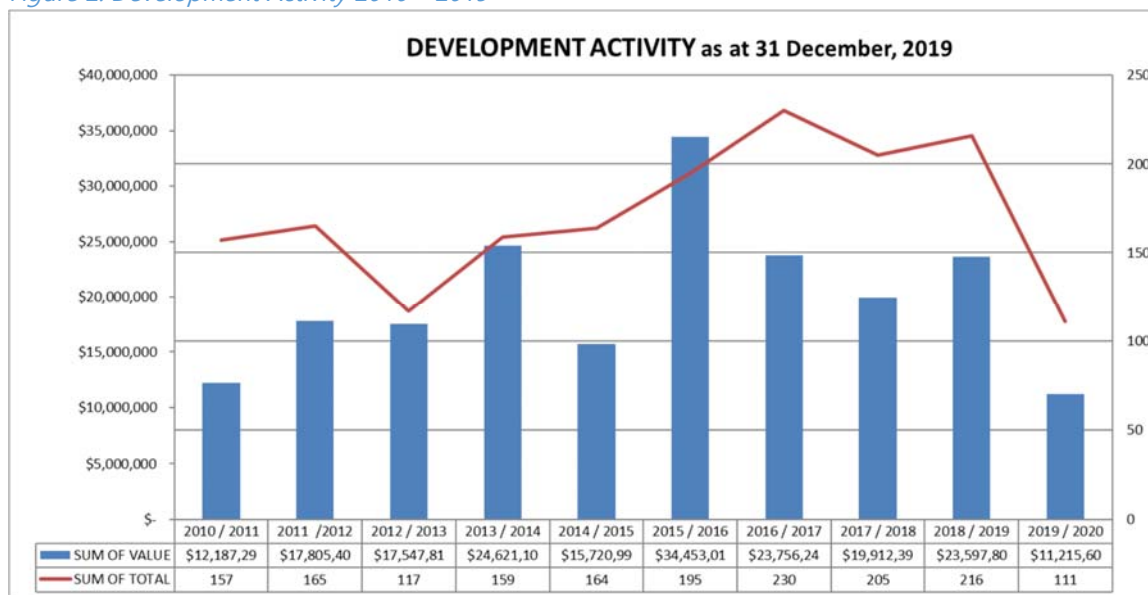
Population

Berrigan Shire LGA has a population of 8707ⁱ encompassing the rural townships of Berrigan, Toomumwal, Finley and Barooga. Established on the NSW/Victorian border are the townships of Toomumwal and Barooga. Cobram-Barooga is a cross-border settlement with a combined population of 8138ⁱ. The average distance between Berrigan Shire LGA townships is 25 km. Berrigan Shire LGA is the most densely populated rural council in the Murray region compared to neighbouring rural shires (4.16 people per square kilometreⁱ) followed by the Murray River Council (1.7 people per square kilometreⁱ). Finley and Berrigan are built on the transport networks of the Newell Highway and the Riverina Highway.

... our region includes the Victorian town of Cobram ...

Berrigan Shire LGA experiences positive population growth and with the population of the LGA estimated to increase in the period 2020 – 2036ⁱ by 10.77% or 0.68% per annum. Growth consistent with the NSW Dept. of Planning dataⁱⁱ forecasting an annual population growth rate in the period 2021 – 2026 of 0.2. Population data (Australian Bureau of Statistics – Census 2016 usual place of residence) sourced via id.data.berriganⁱⁱⁱ also notes that as at the 2016 Census 28.6 % of the LGAs population was aged 65 years and over. Household data from this Census also found that 19.7 % of the LGAs population are 'couples with children'. While a further 7.6% of households are identified as 'single parents with children'. Data supported (Figure 1) by the number of development applications and the value of development approvals.

Figure 2: Development Activity 2010 – 2019



History

The river Murray and its floodplains were originally utilised by indigenous Australians to find food, shelter and materials and it has long been important for sustenance and spirituality for its people. The river Murray was utilised as a thoroughfare for transport and the trees were utilised for bark canoes. The banks of the Murray today still have a relatively large number of older trees, some with the wood exposed where bark for canoes was cut out in the early 19th century or before (symbolised as scar trees). Significant Aboriginal sites are protected within the Berrigan Shire LGA including the Blowhole in Tocumwal which is said to be sacred to the Ulupna and Bangaragn Aboriginal tribes, and Boat Rock Reserve between Berrigan and Savernake, a unique site

in Aboriginal history containing ancient engineering with identified water catchments.

The significant eras of European settlement include early pastoralists, rail heritage, Murray River transport, World War 2 soldier settlements, pioneer irrigation establishment, Tocumwal Aerodrome World War 2 and general aviation history and travelling stock routes.

The Shire of Berrigan was established in 1906 and during its early years, the population fluctuated in response to economic and environmental conditions. This changed with the expansion of irrigated agriculture and led to the development of mature agriculture service centres with a range of services and facilities.

In recent years agriculture industry restructure and the implementation of the Murray Darling Basin Plan contributed to the Berrigan Shire LGA developmentally mature towns of Berrigan and Finley experiencing sluggish growth and the development of two-part or

two-speed economy. In an economy characterised by continued and steady growth, development in our Murray River towns is offsetting structural adjustment in the rural-sector-dependent towns of Finley and Berrigan.



Local Centres

Cobram-Barooga, Berrigan, Finley and Tocumwal have their own unique function as local service centres and are among the 23 local service centres in the Riverina Murray Regional Plan. Each township is pivotal around local retail, tourism, health, and education services, recreational and sporting facilities and cultural heritage.



How we move around our region

Berrigan Shire LGA is identified as NSW Southern Riverina. It is economically, socially and functionally part of the northern Victorian Murray Goulburn Valley region. The LGA's dominant transport, freight, education, travel, sports, health and social service supply chains and flows are to the south into Victoria. The rural service centre of Cobram in Victoria (10-40 km to the south) is utilised by the LGA and higher order services in the City of Shepparton in Victoria (80 kilometres to the south) for higher-order health, financial services, tertiary education, national and global services accessed by residents and businesses from the greater Melbourne metropolitan area, the Port of Melbourne and Melbourne Airport.

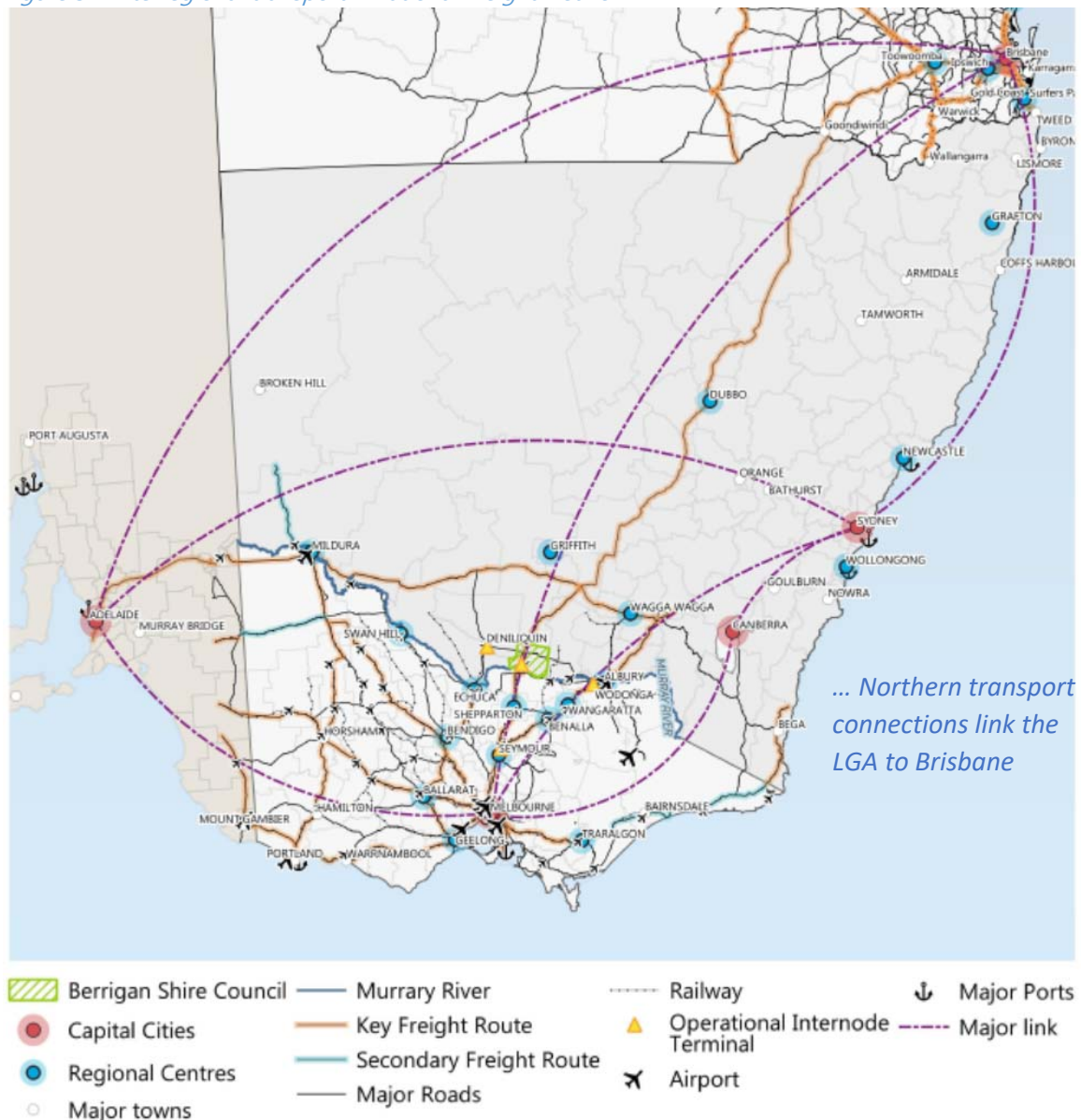
Concurrently, Albury NSW (a cross border city Albury Wodonga, a distance of 144 km to the east) is the LGA's principal NSW regional service centre, although a much lower-order flow is experienced due to distance and lower order road connections. The neighbouring NSW rural service centres provided by Mulwala and Corowa (Mulwala 60 km and Corowa 80 km east of the LGA) has limited use by Berrigan Shire LGA businesses and residents and is primarily social with some industry-based

... Higher-order health, education and social services are provided by our regional service centre Shepparton ... also in Victoria

... Regional transport connects flow to the south reflecting proximity to the Port of Melbourne and Melbourne Airport ... linking to other cities such as Sydney

connectivity and networks. Service flows and regional connectivity to City of Wagga Wagga (220km to the north-east) are at-best functionally maintained, although not appreciably developed, by the various NSW State agencies regionally responsible for the Riverina-Murray region.

Figure 3 – Interregional transport – National Freight Network



Berrigan Shire LGA
in context of National Strategic Freight Network
Local Strategic Planning Statement Mapping
Berrigan Shire Council

0 50 100 150 200 km

THOMSON HAY
LANDSCAPE ARCHITECTS

Prepared for:
Berrigan Shire Council

Date: March 2020
Scale: 1:350,000 @ A3
Drawn: GC

Connections to the west of the LGA specifically to the rural service centre of Deniliquin (60-70 km west) are similar to Wagga Wagga connections – institutionally maintained by NSW and

Commonwealth agencies. These include the rural – health services provided by Murrumbidgee Health Services as they are not offered locally LGA residents are required to travel to utilise these services. As are Riverina TAFE services.

Connections to the north of the Berrigan Shire LGA (into the Riverina region) are limited by distance and where these are evident, are primarily social, educational or agricultural industry-related involving primarily the communities of Jerilderie (40 km north) and Narrandera (150 km north). The regional centre of Griffith (170 km north) is important in so much as a number of the regionally based non-government services that outreach to the Berrigan Shire LGA also service Griffith. The effectiveness of the services that provide outreach services to the Berrigan Shire LGA from the Riverina regional centres is limited, as these services do not have functional social, economic or political communities of interest.

Social Economy - Connection to Victoria

Travel to work and place of residence data highlights the connectivity and social economy of the LGA. 60% of Berrigan Shire LGA residents live and work in the LGA, and a further 20% of residents work in the neighbouring Victorian LGA of Moira. Less than 4% of LGA residents work in the neighbouring NSW LGAs of Murrumbidgee (to the north), Federation (east), Murray River and Edward River (west). This data reinforces the cross-border as opposed to intra-regional Riverina-Murray social and economic connectivity of the LGA.

Table 1: Travel to work

| Residents Place of Work (POW) | N | % |
|--------------------------------------|----------|----------|
| Berrigan (A) | 2,069 | 60.6 |
| Moira (VIC) | 649 | 19.0 |
| POW State/Territory undefined NSW | 363 | 11.0 |
| | | |
| POW not stated | 91 | 2.7 |
| Greater Shepparton (VIC) | 54 | 1.6 |
| Jerilderie (A) | 56 | 1.6 |
| Edward River | 49 | 1.4 |
| Federation | 25 | 0.7 |
| Albury | 11 | 0.3 |

Source: ABS Census 2016

Electronic media. Television and radio, including the ABC are broadcast from Victoria, and newspaper production is based in Victoria. All home phone numbers in Berrigan Shire LGA are based on the Victorian numerical system. The postal system is based

... Another option to the east is Albury, the LGA's NSW regional centre which connects shire residents and business to Sydney ...

... The most densely populated LGA in the Murray Region (outside of Albury) ...

... Less than 4% of shire residents work in neighbouring NSW LGAs ...

... 40% of young people attend school in Victoria

...

around the Victorian network and the township of Barooga has a postcode number utilised for Victoria. Also administered in Victoria is Commonwealth level social support services, as is telecommunications infrastructure as part of the Greater Shepparton region.

Education opportunities. At a community level, parents make decisions about the educational opportunities available to their children. There are primary school facilities in each township, a high school facility within the LGA and multiple education facilities within a comfortable day trip in Victoria. School buses transport data indicates that 40% of the shire's primary school and secondary school-aged children are transported to Victorian schools in Cobram, Yarrawonga, Shepparton and Nathalia⁵.

... Endogenous growth factors (lifestyle, liveability) account for inward migration from Melbourne, Moira (LGA) (VIC) and Greater Brisbane (QLD) ...

Sporting Clubs. Sporting club affiliations and competitions are also governed by Victorian associations. The LGA's Professional Golf Association (PGA) standard golf courses (Barooga and Tocumwal) regularly host Victorian PGA-affiliated golf tournaments.



Social Economy – Local Liveability and Amenity

The shire's population growth reflects endogenous (local factors) which include the liveability and amenity of shire towns and facilities. This includes the shire's proximity to Melbourne, its popularity as a Victorian family holiday destination, and as a low-cost retirement option for metropolitan Melbourne retirees.

ABS 2016 data notes that, of those moving to an address in Berrigan Shire LGA, 42% had moved from elsewhere in Berrigan Shire LGA. After that, the next five places people relocated from were:

1. Greater Melbourne
2. Moira LGA (VIC)
3. Murrumbidgee (NSW)
4. Greater Shepparton (VIC), and
5. Greater Brisbane (QLD).

Therefore, nuanced and localised strategic planning is required, as regional-level modelling cannot, and does not, account for what continues to be a sustained pattern of growth.

Political Economy – North to South Connectivity

Nationally Significant Export-Oriented Agriculture. In common with neighbouring NSW Central Murray River shires, the region's local and export-oriented agriculture product (that is either processed locally or in Victoria) has a total value of \$109 million per annum (2015^{vii}). It is transported to Victorian markets and overseas through Victoria's Port of Melbourne.

Freight Transport. Strategic planning for transport, freight and logistics needs to consider not only cross-border anomalies but also north-south connectivity to Port of Melbourne via Victoria's Goulburn Valley. This north-south connectivity is therefore a strategic planning objective that in the context of this LSPS is prioritised over the Riverina-Murray Regional Plan's focus on strengthening east-west connectivity.

...rural populations will commute twice as far as urban populations ...

...north-south connectivity for transport, freight and logistics is a critical and defining characteristic in the context of the Riverina-Murray Regional Plan's priority for east-west connectivity

Our Strategic Assets

Irrigation Infrastructure – Agriculture and Environment Assets

Irrigation Infrastructure. Berrigan Shire LGA has irrigation infrastructure to service more than 75% of its landmass. It is therefore, the most intensively irrigated LGA within the Riverina Murray region. Water is supplied, in accordance with the Murray Darling Basin Plan, via Murray Irrigation Limited and the West Cororgan Irrigation Scheme, which draw water from the Murray River. Recognised for the first time in this LSPS is the importance of the irrigated landscape and its role in supporting not just agricultural production, but the economic and social livelihood of shire residents.



... Processed locally or in Victoria, the gross value of agricultural product is \$109 million per annum ...

Environmental Networks. Irrigation networks also support an ecologically diverse network of riparian habitats, adding to the biodiversity of the LGA and forming vital strategic links. A strategic and planned approach to irrigation is acknowledged for both

productive purposes and the environmental value of eco-systems that have developed in response to irrigation.

This requires consideration of irrigation, its operation and development in the Berrigan Shire LGA and the suitability (given the scarcity of water) of extending the footprint within the broader Riverina Murray of irrigation networks.

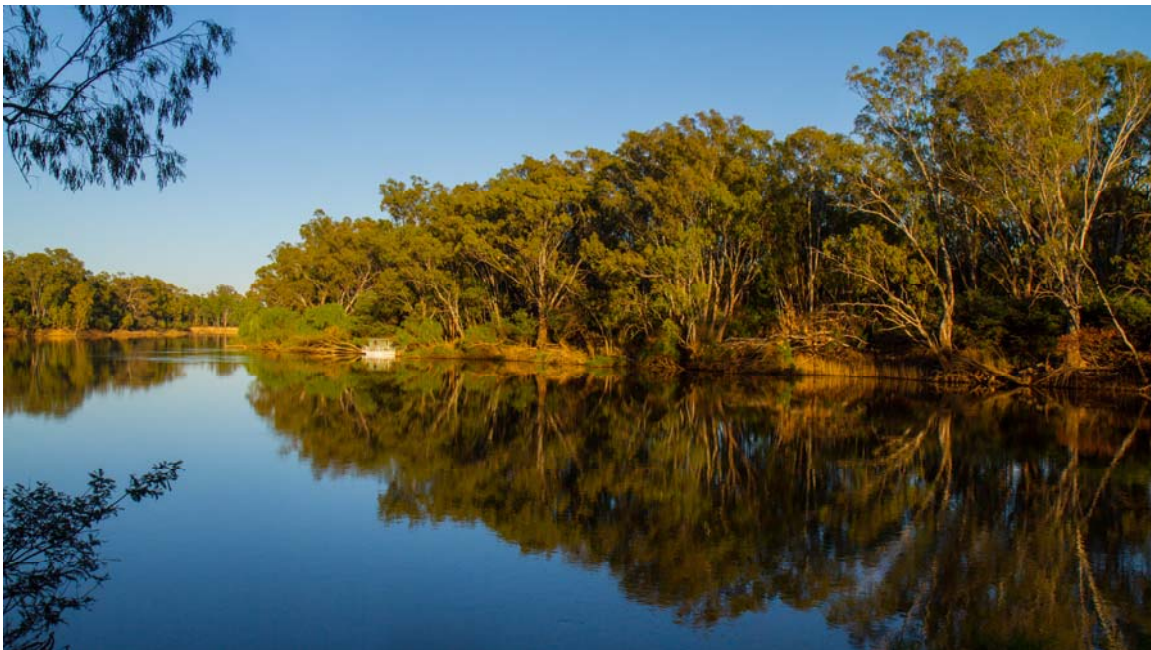
Iconic Murray River: Environmental and Visitor Economy Assets

The Berrigan Shire LGA covers 130 kilometres of the iconic Murray River corridor, including its associated tributaries and water bodies such as Tuppal Creek and Bullaginya Lagoon.

National and Regional Parks – River Red Gum Forest

Sections of the Murray River corridor have been declared national and regional parks. The NSW Murray Valley National Park and Murray Valley Regional Park - former state forests - were identified following an assessment of the Riverina Bio-region by the Natural Resources Commission in 2009. They were reserved under the *National Park Estate (Riverina Red Gum Reservations) Act 2010* and the *Riverina Red Gum Reservations Act*. Together with the Victorian Barmah National Park, Tocumwal and Cobram regional parks, Millewa, Moira and Gulpa Island precincts, they protect the largest contiguous stand of iconic River Red Gum (*Eucalyptus camaldulensis*) Forest in Australia. The forests are recognised for their outstanding natural and indigenous values and have also been declared Ramsar wetland sites of international significance (Parks NSW, 2014).

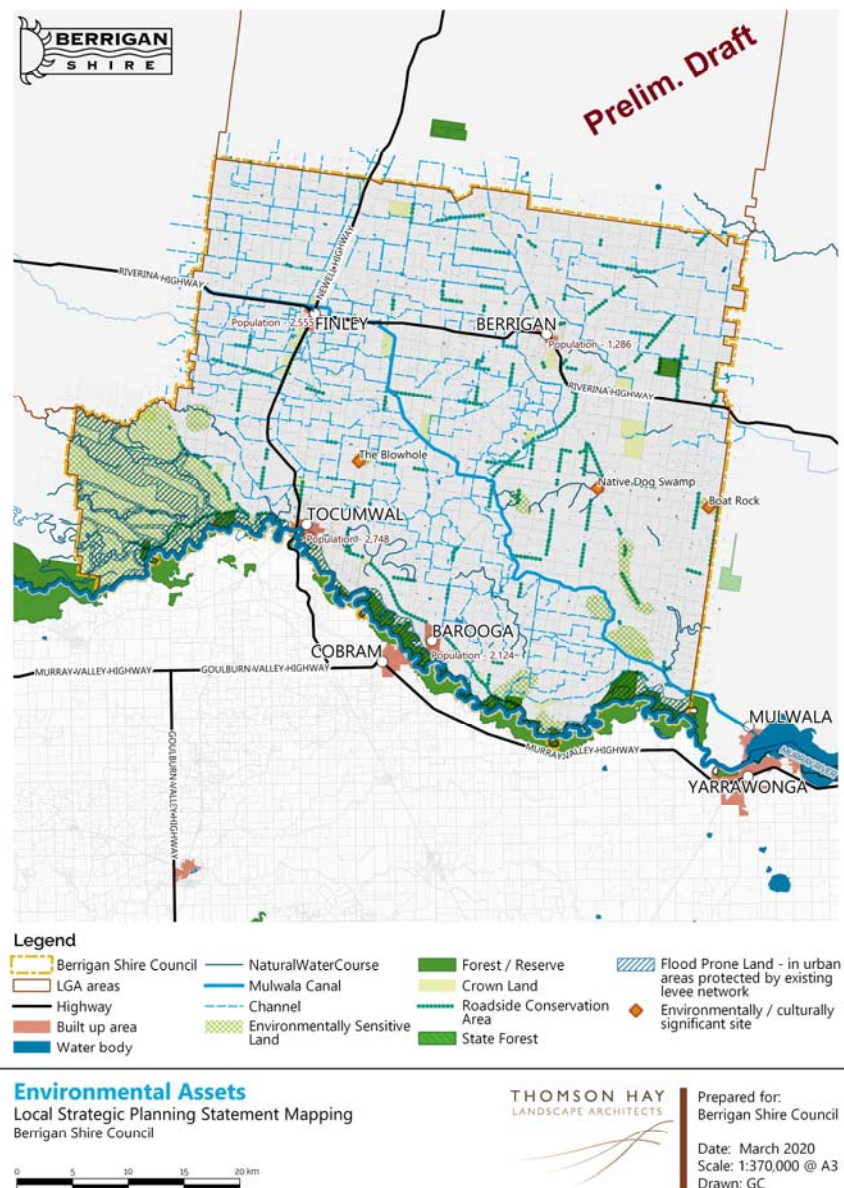
*... Home to the largest
contiguous stand of
river red gum
(Eucalyptus
camaldulensis) forest
in Australia ...*



Murray River Tourism is a major industry in the Berrigan Shire LGA. Berrigan Shire LGA is one of the closest Murray River access points from Melbourne and visitors utilise the Murray River corridor extensively for outdoor recreation and river beach camping. They enjoy activities such as water skiing, swimming, fishing, canoeing, kayaking, jet skiing, hiking and cycling. The townships of Barooga and Tocumwal enjoy pedestrian and cycling access to the national and regional parks and cater for visitors to the Murray River corridor.

*... The gross value of
tourism is \$122m per
annum ...*

Figure 4: Environmental Assets



Tourism Services. Strategic planning for tourism services (gross value per annum 2017/18 being \$112 million^{vii}) is primarily driven by the Murray Regional Tourism Board and tourism industry engagement via Murray Regional Tourism cross-border Destination Management Plan.

The recent reformulation of Destination NSW Strategic Plan for the Riverina-Murray region extends the strategic reach of the LGA's tourism operators, highlighting the need for the LSPS to continue to

... Cross-border tourism product strengths (non-golf and river-related) are sport at Barooga, and cultural events at Tocumwal ...

support development of the LGA's tourism. The identified product strengths include:

- events
- sport and recreation
- nature and parks
- rivers and waterways
- business and conferencing.

Industry also identified opportunities to promote further development of the industry with the following tourism products:

- arts and culture
- dining and local produce
- wine, brewing and distilling
- destination tourism.

This LSPS facilitates the continued growth and emergence of environmentally sound tourism development.

*... Emerging
development
opportunities – arts,
culture and dining ...*

Future Challenges and Opportunities

Megatrends

Based on research undertaken by the CSIRO the following megatrends will impact all of regional Australia, requiring therefore, strategic land use planning that considers how development will:

1. improve time and distance travelled
2. capitalise and mitigate effects of global exposure
3. respond to divergence in urban growth and population
4. grow new economies
5. respond to environmental risks.

Improve Time and Distance Travelled

The community and business expectations trend includes a reduction in travel time and freight costs and while rural populations will still commute twice as far as urban populations, it is expected that commuting times will reduce. Similarly, freight volumes which have quadrupled since the 1970s will continue to increase, while rail freight will double by 2030. For Berrigan Shire LGA car-dependent communities located at the cross roads of national, regional and local transport networks, strategic planning needs to consider how the LSPS can respond to and meet the challenges imposed by the 'improve time and distance travelled' megatrend. Also of importance is how communication and digital technology can overcome barriers related to distance and time, as well as the impact of digital communication and technology on how we move about our communities (supply chains and infrastructure). For example, on-line retail verses main street retail, and online sale of stock/grain verses on-farm storage and direct delivery.

Capitalise on global exposure

The 'capitalise on global exposure' trend considers change in markets and agricultural commodities. Asian demand for clean, safe, reliable, quality agricultural and horticultural product is the very provenance of products in the rural region. It also considers the services industry growth primarily related to personal services and visitor economy. Global exposure and movement of capital (overseas investment) are disrupting boom and bust cycles. There is a continued and growing demand for meat, fresh fruit, milk products and vegetables which has implications for rural and regional agribusinesses that set up to service local or national markets. What are the implications of continued growth in corporate agriculture (movement of capital and investment) for the sustainability and viability of Berrigan Shire LGA towns and the business model of its agricultural sector (family companies)?

... freight volumes will continue to increase on our highways with implications for other road users and town amenity ...

... online retail v/s main street retail will change the space requirements of our retail shopping strips

... growing demand for meat, fresh fruit and vegetables ...



Respond to divergence in urban growth and population

Given the visitor numbers and increasing urban amenity, our communities are quarantined from the negative impact of demographic trends that characterise the long-term decline of small towns in regional Australia. Young people will continue to leave for education and employment in regional centres and capital cities, however, this will continue to be offset by continued growth in amenity of the Murray region; its national parks, and lifestyle attracting retirees, visitors and young professionals from Melbourne, neighbouring Victorian LGAs and intrastate. Young professionals are attracted to service industries due to the improvements in time/distance heralded by the 'improved time and distance' megatrend.

Grow new economies

There is a megatrend of an increasing consumer demand for clean energies which will continue to drive growth and demand for renewable energy such as solar. Our communities recognise the natural attributes of our solar assets (hours of daylight and solar exposure 365 days per year). As technologies develop in battery storage and solar, new developments and developers (such as housing, accommodation, tourism product, manufacturers and retail businesses) will need to consider requirements for battery storage, grid connectivity and electric motor vehicle charging. Consideration will also need to be given to implications for driverless vehicles, drones, and automation and infrastructure that will support and drive growth on new economies.

Respond to Environmental Risks

In common with other regional communities, it is expected that the frequency of heat waves will increase. Historical rainfall distribution patterns are changing, representing a risk to the LGA's agribusinesses as demand for agricultural water is expected to increase. Bio-security risks are also more likely to increase due to the global movement of people, livestock and produce. Increased

... continued growth in tree-change lifestyle driven by the amenity of the Murray region ...

... responsiveness to consumer and business demand for solar grid connectivity and removal of transmission constraints ...

Preferred Scenario: Natural Advantage

- *diverse human capital*
- *limited technological progress and capacity.*

investment in technologies will be required to enhance the productivity of agriculture, water use and to manage bio-security risks.

Scenario Strategic Planning

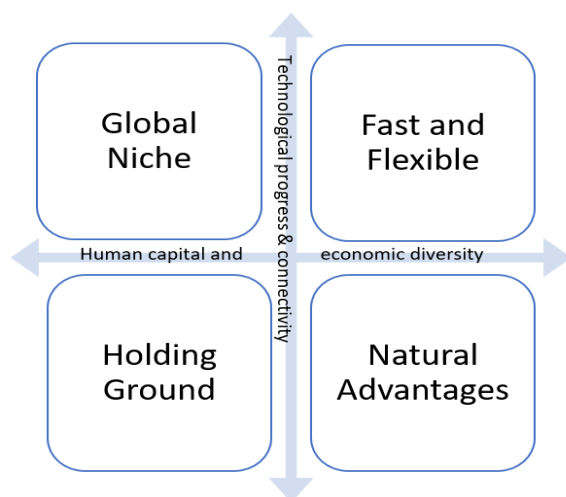
Using the following scenario-quadrant analysis, this LSPS is designed to assist our communities to respond to megatrends in a manner that is consistent with the overall vision of Berrigan Shire 2027 Our Community Strategic Plan. Namely, that we will build on our natural assets and advantages to create employment and economic activity to attract residents, families and tourists.

The quadrant analysis identifies the risks and development implications of each scenario on two axes:

1. the extent of technological progress and connectivity, and
2. the level of human capital and economic diversity.

Our preferred scenario focuses on attracting development, using the planning system to address limitations in technology and connectivity needed to shift our communities from a future where we are holding ground, to a future where we can capitalise on our natural advantages.

Figure 5: Scenarios



(Measham, Taylor, Walton et al 2019)

Characterised by:

- *successful multi-purpose land use*
- *growth in new carbon and energy markets*
- *corporate investment*
- *strong sustainability values and lifestyles*
- *cohesive community*
- *varied employment opportunities*
- *growing population – attracted by employment and amenity*
- *adaptive capacities are mixed*
- *growing marginalised segment.*

Risks: *Business unable to compete on productivity and efficiency, reducing long-term viability and opportunities to expand and grow. Increasing cost of living pressures from population growth and low-income segment*

Achieving our Vision

Planning Priorities

To achieve the LSPS 20-year vision for land use, Berrigan Shire Council has identified strategic planning themes that align with the Riverina Murray Regional Plan strategic direction and the Berrigan Shire 2027 Our Community Strategic Plan outcomes to guide future strategic planning in the Berrigan Shire Council and State Government.

- agriculture and agribusiness
- enabling Infrastructure
- transport and logistics
- visitor economy
- urban amenity
- protect and enhance cultural and natural environmental assets.

The strategic themes are identified in the following six Planning Priorities:

The integration of the LSPS strategic themes with regional planning and the Community Strategic Plan is outlined in the table below.

Table 2: Integration of LSPS, Regional Planning and Local Community Strategic Planning

| Regional Plan Strategic Directions | Berrigan Shire 2027 Our Community Strategic Plan Outcomes | LSPS Strategic Themes |
|---|---|--|
| A growing and diverse economy | Diverse and resilient business | Agriculture and agribusiness Visitor economy Enabling infrastructure |
| Efficient transport and infrastructure networks | | Transport and logistics |
| Strong, connected and healthy communities | Supported & engaged communities | Urban amenity Visitor economy Agriculture and agribusiness |
| A healthy environment with pristine waterways | Sustainable natural and built environments | Protect and enhance Cultural and natural Environmental assets |

Actions

Berrigan Shire Council Planning Priorities will be delivered through actions and policy commitments which will be upheld by Council over the coming years. These may include ensuring future development is consistent with a particular position, research of identified planning issues, preparation of strategies or policies, implementation of specific projects, or amendment to existing Council plans such as the Local Environmental Plan or the Development Control Plan.



Implementation, monitoring and reporting

Council will monitor and report on the implementation of the actions to ensure that the planning priorities are being achieved. This will, as much as possible, be aligned to other Council review and reporting processes such as the review of Berrigan Shire Council's finer grain Local Planning including:

- Local Environmental Plan (every five years)
- Development Control Plan (every five years).

This approach is consistent with the Integrated Planning and Reporting (IP&R) framework under the *Local Government Act 1993*, which recognises that council plans and policies are inter-connected.

This statement will be reviewed at least every seven years pursuant to section 3.9 (1) of the Act.



Planning Priority 1 - Agriculture and Agribusiness

Agriculture is the major industry in the Berrigan Shire LGA and future megatrends indicate growth in Asian Economy and growth in markets for fresh produce. Berrigan Shire LGA has extensive irrigation infrastructure and extensive established agribusiness investment in the agriculture industry. With agriculture the centre of a circular local economy, we need to future-proof our irrigation agriculture industry through the development of a Riverina Murray Regional Plan Land Use Irrigation Agriculture Strategy.

Why is this important?

Agriculture is the major industry in the Berrigan Shire LGA. Recognised in the Riverina Murray Regional Plan, the agriculture industry is the largest regional contribution to export-oriented agriculture production in NSW (\$1.4 billion). In Berrigan Shire LGA, the total value of the industry in 2015/16 was \$109 million^{vi}. It employs 22% of Berrigan LGA's workforce which is the largest employment industry for the LGA^{vi}. The Berrigan Shire LGA is strategically located, benefiting from national connections to export markets through the Port of Melbourne within a three hour driving time. Given the growing Asian economy and market growth for fresh produce, this presents an exciting future for the agriculture industry in Berrigan LGA, particularly for refrigerated produce. The Berrigan Shire LGA also directly benefits from markets in the Victorian Murray Goulbourn Valley.

Irrigation Assets

The Berrigan Shire LGA has extensive irrigation infrastructure to service more than 75% of its landmass. Furthermore it has extensive established agribusiness investment in the agriculture industry to support the irrigation assets. The LGA has large tracts of highly productive soil types, favourable climate, and is located adjacent to a reliable irrigation water source, the Murray River.

Key commodities from the Berrigan LGA agriculture industry are export-oriented cereal and dairy products with growth in horticulture figures (citrus and stone fruit).

Circle of Economy

The agriculture industry contributes to a vital circular economy in its local communities by injecting funds into the local economy, sustaining employment in communities, contributing to localised investment and building the social capital in the local community.

Challenges

Historically agribusiness in the Berrigan Shire LGA has utilised adaptive farming practices to respond to environmental conditions such as reducing yield to ensure a response to water availability while maintaining the viability of their holdings. The challenge for Berrigan Shire LGA is the changing water allocation, and availability in recent years has had significant impacts on primary production in the region. Establishment of large-scale permanent plantings downstream of Berrigan Shire LGA reliant on the purchase of water rights from the Murray River has impacted on the overall water availability particularly during drought conditions, which has impacted on existing irrigation agriculture development in the

Berrigan Shire LGA. A lack of irrigation water severely modifies an agriculture business especially with an investment in irrigation infrastructure, usually located on a reduced acreage parcel of land designed for irrigation agricultural methods. This modifies the land value of the investment property and makes future agribusiness investment decisions problematic.

Furthermore, with trends in climatic conditions indicating a drying climate putting greater pressure on both the environmental systems and the irrigation systems, along with new farming methods and developments, make forecasting demand difficult. Planning priorities in the Riverina Murray Regional Plan need to include policy settings to support the significant irrigation agriculture industry including in the Berrigan Shire LGA with significant amounts of established irrigation infrastructure and supporting agribusiness investment with recognised export oriented produce when coupled with irrigation water allocations. The policy settings need to ensure that the region continues to future-proof irrigation agriculture and agribusiness, to support local communities, employment and the environment.

This lack of policy setting on irrigation assets is compounded, for the purpose of this LSPS, by the lack of an irrigation agricultural strategy for the region. Therefore it is necessary that this LSPS establish a set of principles to guide and inform investment in irrigation agriculture in the Berrigan Shire LGA.



To deliver this Planning Priority, Council will:

- advocate for the development of a Riverina Murray Regional Plan Land Use Irrigation Agriculture Strategy
- manage land use conflict by supporting pre-existing, lawfully operating agriculture land uses in the case of nuisance complaints and in a manner consistent with the NSW Right to Farm Policy
- encourage complementary value-add agriculture opportunities through flexible planning provisions in local strategies and local planning controls.

Planning Priority 1 - Action

- develop a Berrigan Shire LGA Land Use Irrigation Agriculture Strategy.

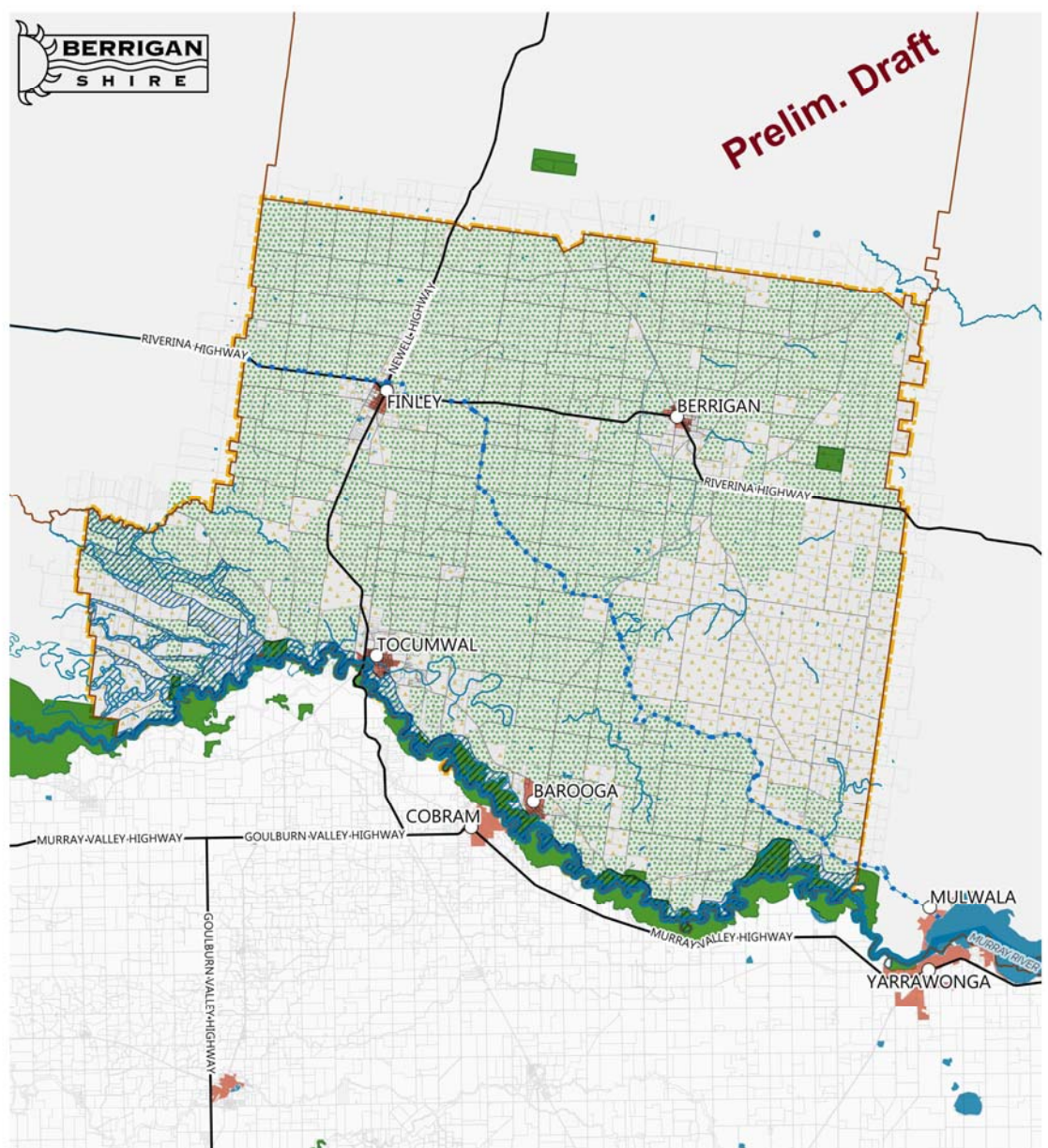
Monitoring and Reporting

- provide a progress report of LSPS outcomes achieved from defined actions as an addendum to the Council's end of term report.

Relationship to Other Plans

- Riverina Murray Regional Plan – D1 and D13
- Berrigan Shire 2027 Our Community Strategic Plan outcome SO1

Figure 5 – Irrigation Agriculture Assets

**Legend**

- | | | | |
|---------------|----------------------|---|----------------|
| BSC copy | Water body | Flood Prone Land - in urban areas protected by existing levee network | Irrigated Land |
| LGA areas | Murray River | Forest / Reserve | Dry Land |
| Highway | Natural Water Course | | |
| Built up area | Mulwala Canal | | |

Irrigation Agriculture
Local Strategic Planning Statement Mapping
Berrigan Shire Council



THOMSON HAY
LANDSCAPE ARCHITECTS

Prepared for:
Berrigan Shire Council

Date: March 2020
Scale: 1:370,000 @ A3
Drawn: GC

Planning Priority 2 - Enabling Infrastructure

The Berrigan Shire LGA has substantial economic assets for renewable energy investment and is in close proximity to market sources in Victoria and the city of Melbourne. Cross-border planning will identify efficient strategic links between renewable energy assets and market sources

Why is this important?

The Berrigan Shire LGA has substantial economical assets and opportunities for renewable energy development with vast rural landholdings, renewable energy resources such as a favourable climate for solar generation, and is located both inland and in proximity to market sources in Victoria's Murray Goulbourn Valley and Melbourne. Enabling infrastructure to efficiently transport energy production from Berrigan Shire LGA to market sources will facilitate renewable energy development and strengthen connections to valuable market sources.

Renewable Energy Industries

Given increasing national energy costs, pressure in uncertainties from climate change research and a push for net-zero emissions, an increasing emphasis is being placed on the renewable energy market. Furthermore, increasing technologies supporting renewable energy manufacturing, storage, and transportation are emerging from this industry. The Riverina Murray Regional Plan states that this represents opportunities for a new industry, new economy and a growing employment base. In recent times, renewable energy industries have emerged in the region including a large-scale solar development within the Berrigan Shire LGA in Finley. Given the substantial economic assets within the Berrigan Shire LGA, there is substantial investment potential in this growing industry.

Challenges

The challenge for the Berrigan Shire LGA is that further investment in the renewable energy industry is limited by the capacity of the existing energy infrastructure to transport energy off-site, which is currently at capacity, in particular to distribute energy directly to market sources in Victoria and Melbourne.

Furthermore, there is limited government support for emerging industries to provide economically viable energy storage solutions. A further challenge for the Berrigan Shire LGA, as per the previous theme, is the protection of significant irrigation agriculture land within a network of the greater national economy, which currently is the very heart of a local circular economy. Planning priorities in the Riverina Murray Regional Plan and other state government policy mechanisms such as the NSW Renewable Energy Action Plan (2013) need to include policy settings to prioritise both the location of productive agriculture land and appropriate renewable energy priority zones (particularly zones which are in close proximity to market sources). Furthermore cross border planning is crucial to recognise efficient interstate connections between zones and market sources such as the example of Berrigan Shire LGA economic assets to market sources in Victoria. Future investment into the renewable energy sector requires guidance to determine appropriate locations for development close to market sources and they require certainty that

future commodity produced can be efficiently delivered to market sources (or stored efficiently).

To deliver this Planning Priority, Council will:

- advocate for investment of critical high voltage transmission network to ensure the network has the capacity to enable further development of industry in Berrigan Shire LGA and the region
- advocate for cross-border strategic planning for the high voltage transmission network.

Planning Priority 2 - Action

- facilitate appropriate smaller-scale renewable energy projects
- work with cross-border commission on increasing line capacity in Murray and Northern/North West Victoria with joint projects, such as the Snowy 2.0 project.

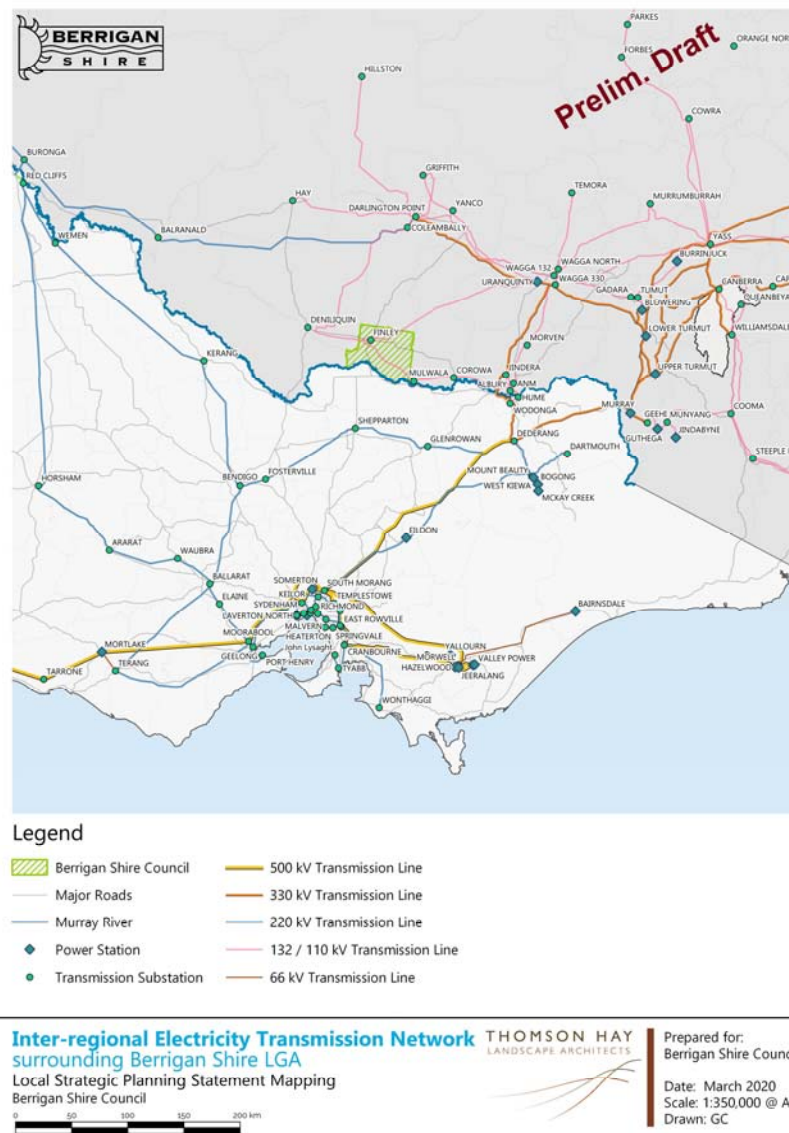
Monitoring and Reporting

- provide a progress report of LSPS outcomes achieved from defined actions as an addendum to the Council's end of term report.

Relationship to Other Plans

- Riverina Murray Regional Plan – D21
- Berrigan Shire 2027 Our Community Strategic Plan outcome SO4.

Figure 6 – Inter-regional Electricity Transmission Network surrounding Berrigan Shire LGA



Planning Priority 3 - Transport and Logistics

Efficient freight transport infrastructure connects export oriented agriculture produce through the Port of Melbourne from the Berrigan Shire LGA and the Riverina Murray Region

Why is this important?

Efficient Inter-Regional Transport

The freight transport connections (road and rail) from the Berrigan Shire LGA are efficiently connected to transport nationally significant export-orientated agriculture produce from the Berrigan Shire LGA and the Riverina Murray to export markets through the Port of Melbourne. Transport connections take less than three hours drive from north-south to link produce to export markets. The existing Tocumwal Intermodal and Logistics Terminal in the Berrigan Shire LGA delivers products daily to the Port of Melbourne on the Victorian railway network (via the Victorian inland cities of Shepparton and Seymour) or via the national highway route (Melbourne to Brisbane). This plan reflects the shire's location in the context of a national strategic freight network framework rather than a Riverina Murray Regional Planning context.

Challenges

There are significant opportunities for the development of services to support the freight and logistics industry along key freight infrastructure within the Berrigan Shire LGA. Of particular importance is cross-border government strategic planning to deliver both NSW and Victorian infrastructure to develop the transport logistic industry at the Tocumwal Intermodal Terminal and Logistics Precinct. Berrigan Shire Council has conducted preliminary strategic planning for the Tocumwal facility and has zoned vacant land within the precinct as General Industry to facilitate future business development. Berrigan Shire Council actively advocates for the development of required infrastructure to further develop this facility and future industries within the precinct. With Victoria investing of its regional and

freight rail capacity with a further \$10 million allocated to the Shepparton Rail Freight Study⁴, Berrigan Shire Council actively advocates for the development of freight infrastructure within the LGA to support current and future freight demands. The challenge for the Berrigan Shire LGA is that State Government transport planning needs to recognise and prioritise north-south connectivity of the region's economic markets and supply chains, requiring therefore, active consideration and management of social and environmental conflicts. Given the infrastructure is within Victoria and NSW, a further challenge relates to planning and funding for transport infrastructure including the Tocumwal Intermodal Precinct which requires national strategic and cross-border transport and logistics planning and funding commitments.

As per figure 7 indicates, townships within the Berrigan Shire LGA interact with the transport infrastructure within the Berrigan Shire LGA. The economic prosperity and social wellbeing of local business, employees, and residents are linked to the transport infrastructure. A challenge for Berrigan Shire LGA is that future land use for the townships needs to ensure a thriving economy that encompasses the highway corridors and balances the community development to provide a contemporary standard of urban amenity.

Figure 7 – Local Centres and Freight Transport Network

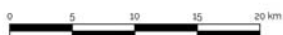


Local Centres and Freight Transport Network
Local Strategic Planning Statement Mapping
Berrigan Shire Council

THOMSON HAY
LANDSCAPE ARCHITECTS

Prepared for:
Berrigan Shire Council

Date: March 2020
Scale: 1:370,000 @ A3
Drawn: GC



To deliver this Planning Priority, Council will:

- advocate for a heavy vehicle bypass around townships in Berrigan Shire LGA and work with State Government agencies to facilitate projects where possible

Planning Priority 3 - Action

- investigate development controls for Electronic Vehicle charging in new retail, accommodation, residential and transport logistic developments and retrofitting
- continue to support investment in Tocumwal Intermodal and Logistics

Precinct rail link and infrastructure for industry development

- enhance the connectivity and efficiency of the freight network from Tocumwal to the Port of Melbourne.

Monitoring and Reporting

- provide a progress report of LSPS outcomes achieved from defined actions as an addendum to the Council's end of term report.

Relationship to Other Plans

- Riverina Murray Regional Plan – D17 and D18
- Berrigan Shire 2027 Our Community Strategic Plan outcome SO4

Figure 8 – Berrigan Shire LGA in context of NSW and Victoria



Planning Priority 4 - Visitor Economy

Tourism is a major industry in the Berrigan Shire LGA with the iconic Murray River as a Tourism assets, along with Sports, Events and Eco-Tourism and Tocumwal Aerodrome.

Tourism is a growth industry and Berrigan Shire LGA needs to ensure that it has sufficient visitor amenity to cater for the growth and expectations in the tourism industry.

Why is this important?

Murray River Tourism

Tourism is a major industry in the Berrigan Shire LGA. Tourism assets of the Berrigan Shire LGA include Murray River tourism especially for the townships built on the banks of the river, Barooga and Tocumwal. Along the entire Murray River in the Murray Valley national and regional parks, tourism is a growth industry with visitors predominantly coming from Melbourne and regional Victoria. Berrigan Shire

LGA is one of the closest Murray River access points from Melbourne with 130 kilometres of the Murray River corridor within the Berrigan Shire LGA and over 50 river beaches within 10 kilometres of Tocumwal and Barooga. Visitors enjoy camping, outdoor sports and recreation such as water skiing, fishing, canoeing, kayaking, jet skiing, hiking and cycling. The river townships have picturesque river-view parks and easy walking/cycling access to the forests from the urban centres.



Planning Priority 4 - Visitor Economy

Sports, Events and Eco-Cultural Tourism

The unique picturesque qualities of the Berrigan Shire LGA, the quality of sporting facilities and large land areas provide a great opportunity for sport tourism, events tourism and eco-cultural tourism. The quality of golf courses in Berrigan Shire LGA contributes to the Murray region being the number one destination in Australia

for golfing holidays. The unique features in each of the townships, including their cultural and heritage assets and unique rural local atmosphere, provide opportunities for Berrigan Shire LGA to increase day trip visitation and stopover visitation for travellers given its proximity to Melbourne on the Newell Highway and its situation on the scenic Riverina Highway.



Tocumwal Aerodrome

Travelling by light aircraft, the Berrigan Shire LGA is a comfortable day trip from regional cities and Melbourne for visitors. The Tocumwal Aerodrome WW2 history also provides a point of difference for the region to enhance tourism opportunities. Furthermore, the large land area and relic infrastructure from its former use provides opportunities for air show events. The Berrigan Shire LGA is renowned for air sport gliding, attracting international visitors to experience the existing aircraft hangers (relics from World War 2 developments), the vast lands surrounding the aerodrome, picturesque views and favourable climate.



Challenges

Tourism in the Berrigan Shire LGA is a growth industry and there are further opportunities to expand tourism including an increased visitation from regional NSW and Canberra. The challenge for the Berrigan Shire LGA is ensuring that product and industry development and infrastructure relating to community and visitor amenity efficiently caters for future growth and expectation in the tourism industry. Berrigan Shire Council is implementing all township entry programs including the Tocumwal Foreshore Master Plan (Splash Park) and the Barooga Adventure Park in conjunction with

other levels of government. Berrigan Shire Council has adopted its 2019-2023 Berrigan Shire - Tourism Strategy. The Berrigan Shire Council actively seeks partnerships with regional tourism boards (Murray Regional Tourism Board, Destination Riverina Murray) and continues to encourage events into the region offering sponsorship through the Major Events Funding program and Sports Tourism program within Moira Shire and Cobram Barooga Business and Tourism. Investment in infrastructure is needed to drive job growth in the visitor economy, such as the redevelopment of Tocumwal Foreshore.

To deliver this Planning Priority, Council will:

- continue to collaborate with Murray Regional Tourism to enhance cross border visitor experience
- encourage infrastructure that supports tourism
- continue to support event proponents and planners to facilitate events in the Berrigan Shire LGA.

Planning Priority 4 - Action

- implement master plans for each township to attract and retain visitors to the area.

Monitoring and Reporting

- provide a progress report of LSPS outcomes achieved from defined actions as an addendum to the Council's end of term report.

Relationship to Other Plans

- Riverina Murray Regional Plan – D7
- Berrigan Shire 2027 Our Community Strategic Plan outcome SO1 and SO4

Figure 9 – Location Map Tocumwal

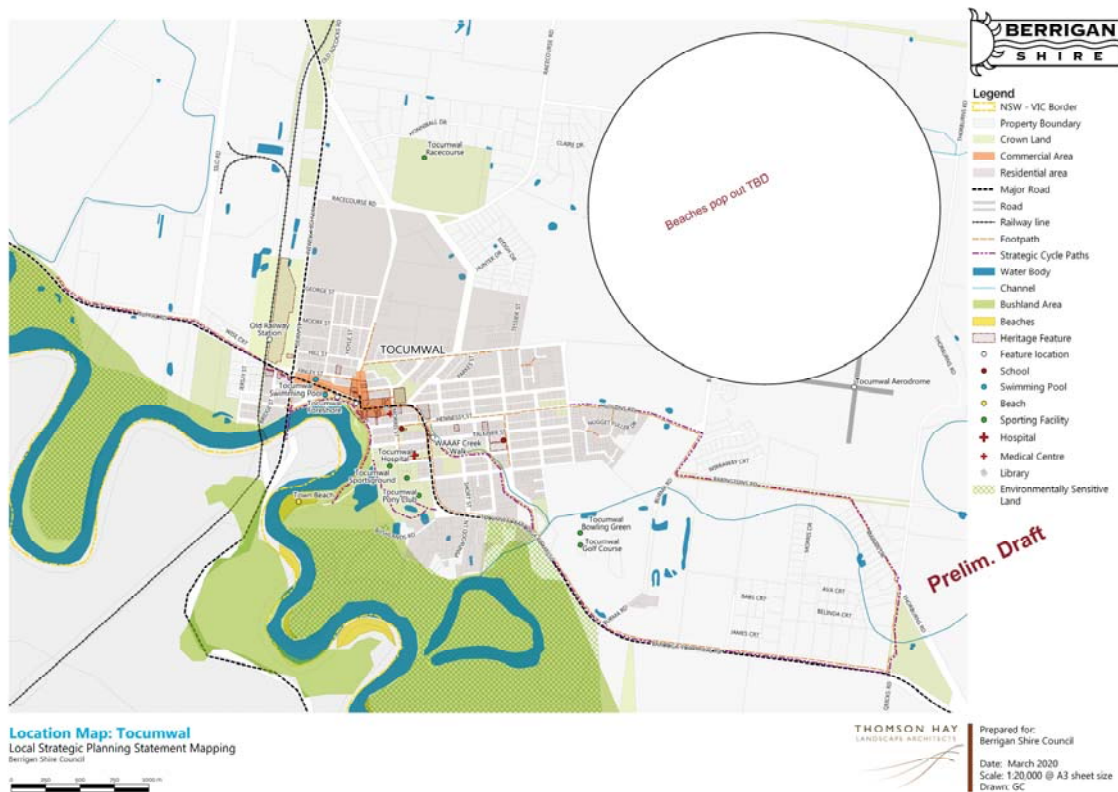


Figure 10 – Location Map Barooga



Planning Priority 5 - Urban Amenity

Cobram-Barooga (cross-border settlement), Berrigan, Finley and Tocumwal uniquely function as local service centres. To achieve a contemporary standard of urban amenity, bespoke place-based planning will be required that will enhance the uniqueness of each township and its sense of place.

Why is this important?

Active Lifestyle

The rural townships of Berrigan Shire LGA have evolved since European settlement (in the mid-19th century) with an identity shaped by the experience of the people who have called them home. Cobram-Barooga (cross-border settlement), Berrigan, Finley and Tocumwal uniquely function as local service centres. They are among the 23 local service centres in the Riverina Murray Regional Plan which play a pivotal role around local retail, tourism, health, and education services, recreational and sporting facilities, and cultural heritage. Each township has central local services, and is well connected being an average of 25 kilometres apart. The proximity and transport links to

Melbourne along with the unique local centre experience attracts retirees from Melbourne and young families to settle in the LGA. This also provides opportunities for townships to provide a contemporary standard of urban amenity and given the local assets and resources, can promote an active lifestyle for residents and visitors. The townships of Barooga and Tocumwal create a landscape and urban form central to their identity. They are built on the banks of the iconic Murray River corridor, the towns are framed with magnificent Red Gum trees, they are home to premier golf courses and sit adjacent to Murray Valley National Park, regional parks and river beaches. Finley and Berrigan are identified as rural service centres with outstanding medical facilities and commercial access to the Newell and Riverina highways.



Population growth is estimated to increase at a rate of 0.2 % per year reflecting historically strong patterns of increasing growth in the number of development applications and the value of yearly approvals. A historical pattern is

illustrated in Figure 2 Development Activity 2010 – 2019 (above) informing a forecast of future dwelling and development as indicated in Table 3 below.

Table 3: Forecast dwellings and development

Table 1 Forecast dwellings and Development

| Berrigan Shire | 2016 | | 2036 | | Change between 2016 and 2036 | |
|-------------------------------|--------|-------|--------|-------|------------------------------|-------|
| Area | Number | % | Number | % | Number | % |
| Berrigan Shire | 4,334 | 100.0 | 4,948 | 100.0 | +614 | +14.2 |
| Berrigan - Finley & District | 1,940 | 44.8 | 2,008 | 40.6 | +68 | +3.5 |
| Tocumwal - Barooga & District | 2,394 | 55.2 | 2,940 | 59.4 | +546 | +22.8 |

Population and household forecasts, 2016 to 2036, prepared by [.id](#), the population experts, November 2017.

Challenges

The challenge for the Berrigan Shire LGA, like other regional centres, is that the townships are dominated by three bedroom dwellings (88% of all housing^{vi}), an aged housing stock with minimal climate control around central business streets and minimal shade in, for example, urban transport corridors. This trend conflicts the requirements of an ageing population. Furthermore, if current trends in climate conditions continue, Berrigan Shire LGA in the future will experience an increased occurrence of natural hazards such as floods and fire, and more extreme temperatures during summer and winter. A further challenge is the local service centres of the Berrigan Shire LGA have development pressures influenced by cross-border settlement, and strategic centres are located outside the Berrigan Shire LGA in particular higher-order services located in City of Shepparton, Victoria (76 km). NSW centred planning limits strategic planning and funding for services for Berrigan Shire LGA, an area with strong social and economic connections, which extend across the border into Victoria.

To achieve a contemporary standard of urban amenity in Berrigan Shire LGA, the Berrigan Shire Council will need to implement bespoke place-based planning that will enhance the uniqueness of each township and its sense of place. It will need to ensure that planning caters for changing demographics of the Berrigan Shire LGA by providing a range of housing choices, namely small houses that are located in central urban areas close to services. It will also need to provide an urban canopy along key walkability corridors, and retain significant trees in urban corridors and urban parks. Berrigan Shire Council is currently implementing actions from a recently adopted town masterplan for each of the townships to improve town entry and visitor amenity. To mitigate against current trends in climatic conditions, Council will need to ensure that new buildings have adequate climate protection. Whilst the existing levee banks provide Murray River flood protection for the townships of Barooga and Tocumwal,

Berrigan Shire Council will need to build on these protections and develop an understanding of the impact of changing weather patterns. This must include informed mapping of both flood-prone and bushfire prone land guides for future development.

To deliver this Planning Priority, Council will:

- promote local character and facilitate contemporary urban amenity by:
 1. reviewing guidelines for new subdivision
 2. identifying areas of special amenity including waterfront areas, large lot residential (rural residential), and trees and developing guidelines to ensure development adds to the amenity of that area
 3. enhancing heritage items and heritage conservation areas as per heritage guidelines.
- seek to resolve the conflict between agribusiness, heavy transport, large lot (rural) residential and urban living
- support and promote development of new buildings with adequate climate

Monitoring and Reporting

- provide a progress report of LSPS outcomes achieved from defined actions as an addendum to the Council's end of term report.

protection and the redevelopment of existing serviced residential lots

- develop and extend the urban tree canopy in Berrigan Shire LGA
- facilitate the revitalisation of the town centres
- advocate for cross border NSW and Victoria strategic planning to consider strategic links between local and strategic centres.

Planning Priority 5 - Action

- undertake a formal audit of social housing in Berrigan Shire LGA
- facilitate the redevelopment of existing serviced residential lots
- refer to regional flood and bushfire mapping to inform local land use and planning.

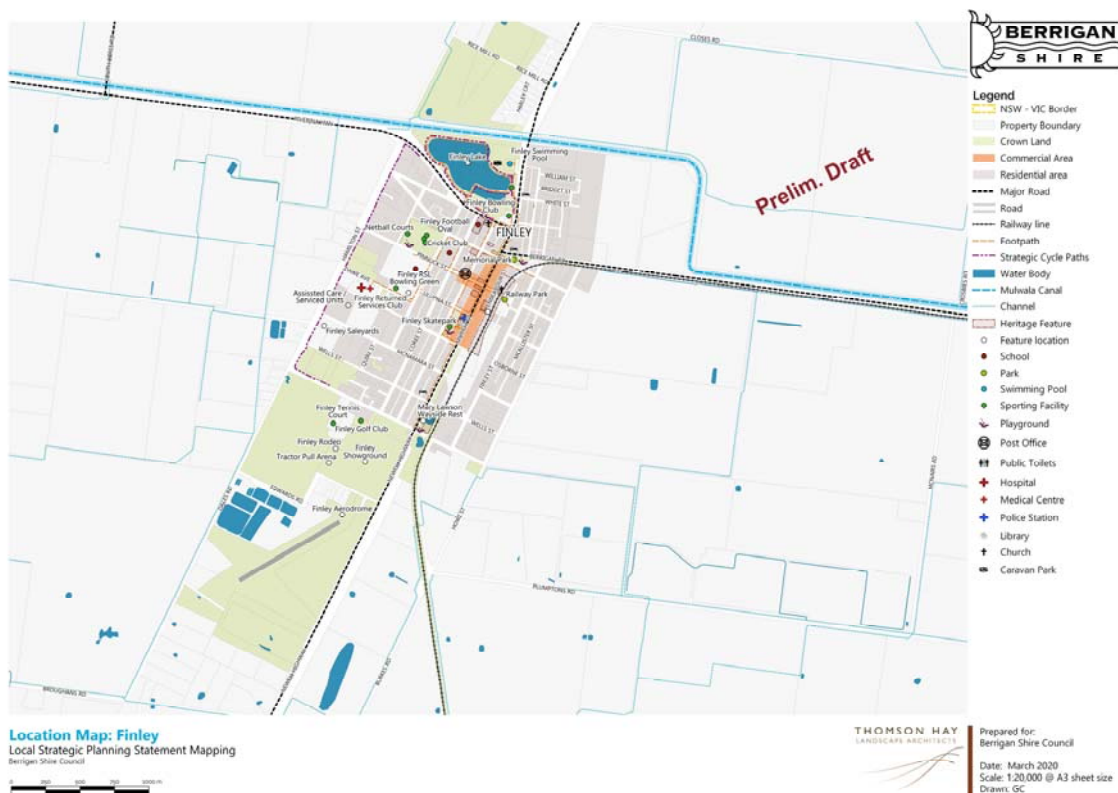
Relationship to Other Plans

- Riverina Murray Regional Plan – D16, D23, D24, D25, D26 and D28
- Berrigan Shire 2027 Our Community Strategic Plan outcome SO3

Figure 11– Location Map Berrigan



Figure 12 – Location Map Finley



Planning Priority 6 - Protect and Enhance Cultural and Natural Environmental Assets

The incorporation of biodiversity into agribusiness value-adds to the agriculture industry. The iconic Murray River and irrigation infrastructure are key cultural and environmental assets providing vital strategic corridors and habitats for threatened species recovery. Informed stewardship of our environmental and culture assets provide opportunities to further expand eco-cultural tourism and within the LGA.

Why is this important?

Biodiversity Stewardship

The incorporation of biodiversity into agribusiness value-adds to the agriculture industry. Effectively utilising, for example, natural organic matter, natural pest controls and natural biological systems to cleanse valuable irrigation water resources and water storage areas, increases production outcomes, reduces operational costs and therefore adds value to land. Utilising native vegetation, for

example, protects soils from erosion, reduces land degradation and stores carbon. Utilising this methodology also represents an opportunity to enter into a megatrend, increasing market for ecological and ethically sustainable products. Furthermore, there are opportunities to gain offset biodiversity credits to trade on an open market, by entering into informed biodiversity stewardship of environmental assets, as per the *Biodiversity Conservation Act 2016*.



Photo Credit: Rosie Nicolai

Image – Foundation for National Parks & Wildlife ^{ix}

Iconic Murray River Eco-Cultural Tourism

The iconic Murray River traverses 130 kilometres along the Berrigan Shire LGA and its corridor includes its associated flood plain, tributaries and water bodies such as Tuppal Creek and Bullaginya Lagoon. The internationally recognised NSW Murray Valley and Vic Barmah National Parks to the east of the Berrigan Shire LGA (and pockets within the Shire) and NSW Murray Valley, NSW Tocumwal and Vic Cobram Regional Parks protect one of the largest River Red Gum forests in the world, Ramsar wetlands, fauna and flora, and resources used by its Aboriginal people. The Murray River provides water to these environmental significant areas.

Given the opportunities in the visitor economy for the Berrigan Shire LGA (as discussed in previous themes) and given the vast amount of agricultural land and various reserves in the Berrigan Shire LGA, identification and informed stewardship of these iconic cultural and environmental assets provide opportunities to

further expand eco-cultural tourism within the LGA.

Irrigation Networks

The Murray River has also historically provided irrigation water through a network of established irrigation system for the agriculture industry in the Berrigan LGA that provide local riparian habitats and strategic water course corridors for flora and fauna. There are opportunities for informed stewardship of these sites to protect established flora and fauna and to enhance these ecosystems to support threatened species recovery.

There are pockets of biodiversity-culturally significant sites throughout the LGA on private land and reserves. There are opportunities for strategic environmental corridors to link these pockets, providing links for species movements to the Murray River and to neighbouring Councils.

Informed stewardship of cultural and environmental assets is especially important if current trends in dryer climate conditions continue to expand vital habitats along vital water infrastructure and water storage areas.



There are opportunities for joint management of these iconic cultural and environmental assets between the private sector, government, environmental groups, cultural groups and communities to carry out the stewardship of these assets to protect and enhance sites. Joint management provides vast opportunities, for example educational experiences, including hands-on environmental learning activities for school-aged children.

Challenges

Planning controls protect and enhance significant cultural assets identified in the Berrigan Local Environmental Plan (LEP) and further identified sites will be included in future reviews of the plan. Berrigan Shire Council actively seeks funding opportunities to undergo direct seed plantings along road corridors where appropriate, providing valuable strategic environmental links across the LGA. The challenge for the Berrigan Shire LGA is the lack of accurate local base-line data for culturally significant sites and pockets of moderate to significant biodiversity. Furthermore, there is minimal strategic mapping to indicate potential environmental corridors including on private land and government lands such as irrigation networks within the Berrigan Shire LGA to neighbouring LGAs in NSW and Victoria. There is minimal cross-government integration to facilitate planning, funding and joint management to protect and enhance these significant sites. There are very few anecdotal records of cultural history, namely Aboriginal history, to ensure adequate protection through planning mechanisms.

To deliver this Planning Priority, Council will:

- refer to regional cultural studies to inform local land use and planning
- provide resources for local heritage and culture advice to inform planning processes
- establish local base-line data of environment and culturally significant sites to provide adequate protection to existing sites and promote further development of sites within the LGA
- establish regional base-line data of strategic corridors and potential sites to add to a strategic corridor to provide cross border and cross LGA biodiversity and cultural connections.

- Provide local government support to establish and manage stewardship sites

strategic links via re-vegetation programs and development conditions.

Monitoring and Reporting

- provide a progress report of LSPS outcomes achieved from defined actions as an addendum to the Council's end of term report.

Planning Priority 6 - Action

- support investigation of carbon capture projects
- work with local land managers on projects that add to local LGA biodiversity and strategic links.
- extend and connect roadside conservation areas identified and

Relationship to Other Plans

- Riverina Murray Regional Plan – D15
- Berrigan Shire 2027 Our Community Strategic Plan outcome SO1 and SO4
- Murray Regional Environmental Plan No 2 – Riverine Land (MREP-2)

Referencing:

- i <https://profile.id.com.au/berrigan> accessed 5 March 2020
- ii <https://forecast.id.com.au/berrigan> accessed 5 March 2020
- iii <https://www.planning.nsw.gov.au/-/media/Files/DPE/Factsheets-and-faqs/Research-and-demography/Population-projections/2019-Berrigan.pdf> accessed 5 March 2020
- iv <https://atlas.id.com.au/berrigan> accessed 5 March 2020
- v <https://transport.vic.gov.au/ports-and-freight/key-freight-projects#Shepparton> accessed 5 March 2020
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- vii <https://economy.id.com.au/berrigan/value-of-agriculture> accessed 11 March 2020
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