

Draft Murrumbidgee Land Use Plan

NOVEMBER 2021

Murrumbidgee Council

Prepared for

Murrumbidgee Council

Contact

habitat planning

Habitat Planning
409 Kiewa Street
Albury NSW 2640
02 6021 0662
habitat@habitatplanning.com.au
habitatplanning.com.au

Habitat Planning Pty Ltd
ABN 29 451 913 703
ACN 606 650 837

Murrumbidgee COUNCIL

PO Box
Jerilderie NSW 2716
1300 MRMBGE (676 243)
mail@murrumbidgee.nsw.gov.au
www.murrumbidgee.nsw.gov.au

The information contained in this document produced by Habitat Planning is solely for the use of the person or organisation for which it has been prepared. No section or element of this document may be removed from this document, reproduced, electronically stored or transmitted in any form without the written permission of Habitat Planning.

Project Number 02577

Document Control

REVISION NO	DATE OF ISSUE	AUTHOR	APPROVED
04	8/11/2021	MJ	MJ & DH

Foreword

The Murrumbidgee Land Use Plan is the next important and significant step in planning for the future growth and development of the new Murrumbidgee local government area and builds on recent planning work undertaken by Council.

It will, in conjunction with other planning strategies, inform future changes to Council's planning controls including the zoning of land to ensure that there is an adequate supply to cater for the local needs of the community for the next 20 years.

The Plan reinforces Murrumbidgee's unique local character and what makes it a great place to live, work and visit. It provides a strategic assessment of existing conditions and trends, as well as balancing residential and economic activities, whilst looking after and enhancing local character, the natural environment, heritage, public spaces and places.

Ruth McRae Mayor

Acknowledgement

Murrumbidgee Council acknowledges the traditional custodians of the land and pays respect to Elders past, present and future. This Plan acknowledges a strong belief amongst Aboriginal people that if we care for country, it will care for us. This is supported by the knowledge that the health of a people and their community is reliant on a strong physical and emotional connection to place.

Conserving Aboriginal heritage and respecting the Aboriginal community's right to determine how it is identified and managed will preserve some of the world's longest standing spiritual, historical, social and educational values.



Yo-thun-ing-yuna Ngarratya painted by Barundji/Barkindji artists Elsie Black, Gertrude Gittins, Eileen Ballangarry and Sos Hawkins

Contents

Foreword 3

Acknowledgement 3

1. Introduction 7

1.1. Purpose 8
1.2. Objectives 8
1.3. Study Area 9
1.4. Planning Policy Framework 11
1.5. Consultation 15
1.6. Implementation, Monitoring and Review 20
1.7. Associated Studies and Investigations 20

2. Murrumbidgee Council Area 21

2.1. Overview 22
2.2. Social and Community 22
2.3. Economy 34
2.4. Environment 45
2.5. Infrastructure 53

3. Land Use Plan 58

3.1. Darlington Point 60
3.2. Coleambally 87
3.3. Jerilderie 110
3.4. Rural and Environmental Areas 136

4. Implementation 143

4.1. Future Actions 144

Appendix A: Biodiversity Constraints Analysis 150

Appendix B: Aboriginal Cultural Heritage Assessment. 151

Appendix C: Heritage Review Inventory Report 152

Appendix D: Consistency with Riverina Murray Regional Plan 2036 153

Appendix E: Consistency with Section 9.1 Ministerial Directions 161

Appendix F: Summary Table – Candidate Rezoning Sites 174

Figures

Figure 1: National Context Map 9
Figure 2: Regional Context Plan 9
Figure 3: Study Area 10
Figure 4: Planning Policy Framework 11
Figure 5: NSW Housing System Pillars 12
Figure 6: Murrumbidgee Population 22
Figure 7: Population Projections for Murrumbidgee 24
Figure 8: Housing Type 25
Figure 9: Size of dwellings 26
Figure 11: Housing Summary 27
Figure 12: Housing Tenure 28
Figure 13: Index of Relative Socio-Economic Disadvantage 29
Figure 14: Summary of Community and Open Space Facilities 30
Figure 15: Summary of economic conditions 34
Figure 16: Residential location of local workers by LGA 35
Figure 17: Residential location of local workers by LGA 35
Figure 18: Agricultural supply chain 38
Figure 19: Land and Soil Capability Mapping 39
Figure 20: Land Use Plan, 2017) 40
Figure 21: Tourism Expenditure by Industry 41
Figure 22: Digital Connectivity 41
Figure 23: Soil Type Map 46
Figure 24: Topography Map 47
Figure 25: Murray Murrumbidgee Climate change snapshot 50
Figure 26: Transport and road infrastructure 53
Figure 27: Transgrid Electrical Supply Map 56
Figure 28: Land Zoning Map – Darlington Point 60
Figure 29: Open Space and Community Facilities Map – Darlington Point 63
Figure 30: Agricultural Land Capability Map – Darlington Point 65
Figure 31: Category 1 Exempt Land Map 66
Figure 32: Plant Community Types associated with Threatened Ecological Communities 67
Figure 33: Terrestrial Biodiversity Map – Darlington Point 67
Figure 34: 1 in 100 Year Flood Map for Darlington Point 68
Figure 35: 1 in 100 Year Flood Map – Hydraulic Categories for Darlington Point 68
Figure 36: Waterways Map – Darlington Point 69
Figure 37: Extract of Bushfire Prone Land Map for Darlington Point 70
Figure 38: Recommended Heritage Conservation Area for Darlington Point 71
Figure 39: Land Use Conflict Map – Darlington Point 73
Figure 40: Crown Lands Map – Darlington Point 74
Figure 41: Combined Constraints and Opportunities Map – Darlington Point 75
Figure 42: Darlington Point water supply scheme distribution map 76
Figure 43: Darlington Point sewage transfer system 77
Figure 44: Land Use Plan – Darlington Point 84
Figure 45: Lot Size Map – Darlington Point 85
Figure 46: Land Zoning Map - Coleambally 87
Figure 47: Open Space and Community Facilities Map – Coleambally 90
Figure 48: Agricultural Land Capability Map – Coleambally 93
Figure 49: Category 1 Exempt Land Map 93
Figure 50: Plant Community Types associated with Threatened Ecological Communities 94
Figure 51: Terrestrial Biodiversity Map – Coleambally 95
Figure 52: Extract of Bushfire Prone Land Map for Coleambally 95
Figure 53: Waterways Map – Coleambally 96
Figure 54: Land Use Conflict Map – Coleambally 98
Figure 55: Crown Lands Map – Coleambally 99
Figure 56: Combined Constraints and Opportunities Map – Coleambally 100
Figure 57: Coleambally water supply scheme distribution map 101
Figure 58: Coleambally sewage system 102
Figure 59: Land Use Plan – Coleambally 107
Figure 60: Lot Size Map – Coleambally 108
Figure 61: Land Zoning Map - Jerilderie 110
Figure 62: Open Space and Community Facilities Map – Jerilderie 113
Figure 63: Agricultural Land Capability Map – Jerilderie 115
Figure 64: Category 1 Exempt Land Map 116
Figure 65: Plant Community Types associated with Threatened Ecological Communities 117
Figure 66: Terrestrial Biodiversity Map – Jerilderie 117
Figure 67: 1 in 100 Year Flood Map for Jerilderie 118
Figure 68: 1 in 100 Year Flood Map – Hydraulic Categories for Jerilderie 118
Figure 69: Waterways Map – Jerilderie 119
Figure 70: Heritage Map - Jerilderie 120
Figure 71: Land Use Conflict Map – Jerilderie 122
Figure 40: Crown Lands Map – Jerilderie 123
Figure 73: Combined Constraints and Opportunities Map – Jerilderie 124
Figure 74: Water Reticulation Network – Jerilderie 125

Figure 75: Jerilderie sewage system 126
Figure 76: Land Use Plan – Jerilderie 133
Figure 77: Lot Size Map – Jerilderie 134
Figure 78: Murrumbidgee Council Rural Landholdings 136

Tables

Table 1: Housing 2041 Vision 12
Table 2: Economic Vision for NSW – Action Items 13
Table 3: Survey Questionnaire Results 16
Table 4: Summary of Government Agency Consultation 18
Table 5: Population Summary 22
Table 6: Population Projections 2041 23
Table 7: Household Summary 25
Table 8: Household Projections 2041 27
Table 9: Weekly Rental Payments 28
Table 10: Mortgage Monthly Repayments 28
Table 11: Expected wait time for social housing 29
Table 12: Key Performance Indicators for Open Space 31
Table 13: Hierarchy of parkland provision 32
Table 14: Employment Base 34
Table 15: Median Weekly Income 35
Table 16: Strengths, Challenges and Opportunities 42
Table 17: Issues and Challenges for Murrumbidgee Council 43
Table 18: Darlington Point Population Projections 2016-2041 60
Table 19: Darlington Point Housing Projections 2016-2041 61
Table 20: Darlington Point Existing Residential Land Supply 62
Table 21: Water Supply Upgrade requirements – Darlington Point 76
Table 22: Sewerage Supply Upgrade requirements – Darlington Point 77
Table 23: Darlington Point Existing and Proposed Residential Land Supply 80
Table 24: Darlington Point Existing and Proposed Industrial Land Supply 81
Table 25: Key Land Use Planning Considerations – Darlington Point 82
Table 26: Darlington Point Population Projections 2016-2041 87
Table 27: Coleambally Housing Projections 2016-2041 88
Table 28: Coleambally Existing Residential Land Supply 89
Table 29: Coleambally Industrial Land Supply 91
Table 30: Water Supply Upgrade requirements – Coleambally 101
Table 31: Sewerage Supply Upgrade requirements – Coleambally 102
Table 32: Coleambally Existing and Proposed Residential Land Supply 104
Table 33: Key Land Use Planning Considerations – Coleambally 105
Table 34: Jerilderie Population Projections 2016-2041 110
Table 35: Jerilderie Housing Projections 2016-2041 111
Table 36: Jerilderie Existing Residential Land Supply 112
Table 37: Jerilderie Industrial Land Supply 114
Table 38: Water Supply Upgrade requirements – Jerilderie 125
Table 39: Sewerage Supply Upgrade requirements – Jerilderie 126
Table 40: Jerilderie Existing and Proposed Industrial Land Supply 129
Table 41: Jerilderie Existing and Proposed Residential Land Supply 130
Table 42: Key Land Use Planning Considerations – Jerilderie 131
Table 43: Key Land Use Planning Considerations – Rural & Environmental 142
Table 44: Action Items: Policy Statements 144
Table 45: Action Items: LEP Amendments 147
Table 46: Action Items: DCP Amendments 149
Table 47: Consistency with Riverina-Murray Regional Plan 154
Table 48: Consistency with Ministerial Directions 162
Table 49: Summary of Proposed Candidate Rezoning Sites 175

1. Introduction

1.1. Purpose

The purpose of the *Murrumbidgee Land Use Plan* is to provide a clear direction to achieving Murrumbidgee's medium to long-term urban and rural growth needs.

The Land Use Plan will provide a context for future land use that builds upon the actions and strategic planning ambitions outlined within Council's Local Strategic Planning Statement, as well as other strategic planning work undertaken by both Council and other government agencies.

Upon completion, the Land Use Plan will inform the preparation of a new comprehensive Local Environmental Plan, which combines the former Jerilderie Shire and Murrumbidgee Shire planning controls and will provide a clear and consistent direction for targeted growth in specific areas across the new Murrumbidgee Local Government Area.

The Land Use Plan provides strategic guidance for the short, medium and long-term direction of Murrumbidgee's growth and development until 2040 and in some cases beyond that, which will underpin the social, economic, environmental and infrastructure decision making of Council.

1.2. Objectives

The overall objective of the Land Use Plan is to guide the future development and use of land within Murrumbidgee for the next 20 years and beyond.

The objectives of the Strategic Land Use Plan are to assist in:

- preparing a new consolidated Local Environmental Plan for the newly formed Murrumbidgee Council area;
- providing the community with a greater degree of certainty and confidence regarding future land use planning decisions for the area;
- maintaining productive agricultural land not required for urban expansion, whilst also encouraging alternative rural and complementary industries and renewable energy developments;
- protecting the natural environment including biodiversity and heritage from use and development;
- ensuring that infrastructure works are appropriately planned for and funded to support growth;
- separating incompatible land uses;
- reducing development speculation; and
- considering development proposals.

1.3. Study Area

1.3.1. Regional Context

The Murrumbidgee Council area is located in the Riverina Region of south-western New South Wales and is located approximately 640 kilometres south west of Sydney and 420 kilometres north of Melbourne.

Murrumbidgee adjoins a number of other NSW local government areas including; Griffith, Leeton, Narrandera, Federation, Berrigan, Edward River, Hay and Carrathool.



Figure 1: National Context Map

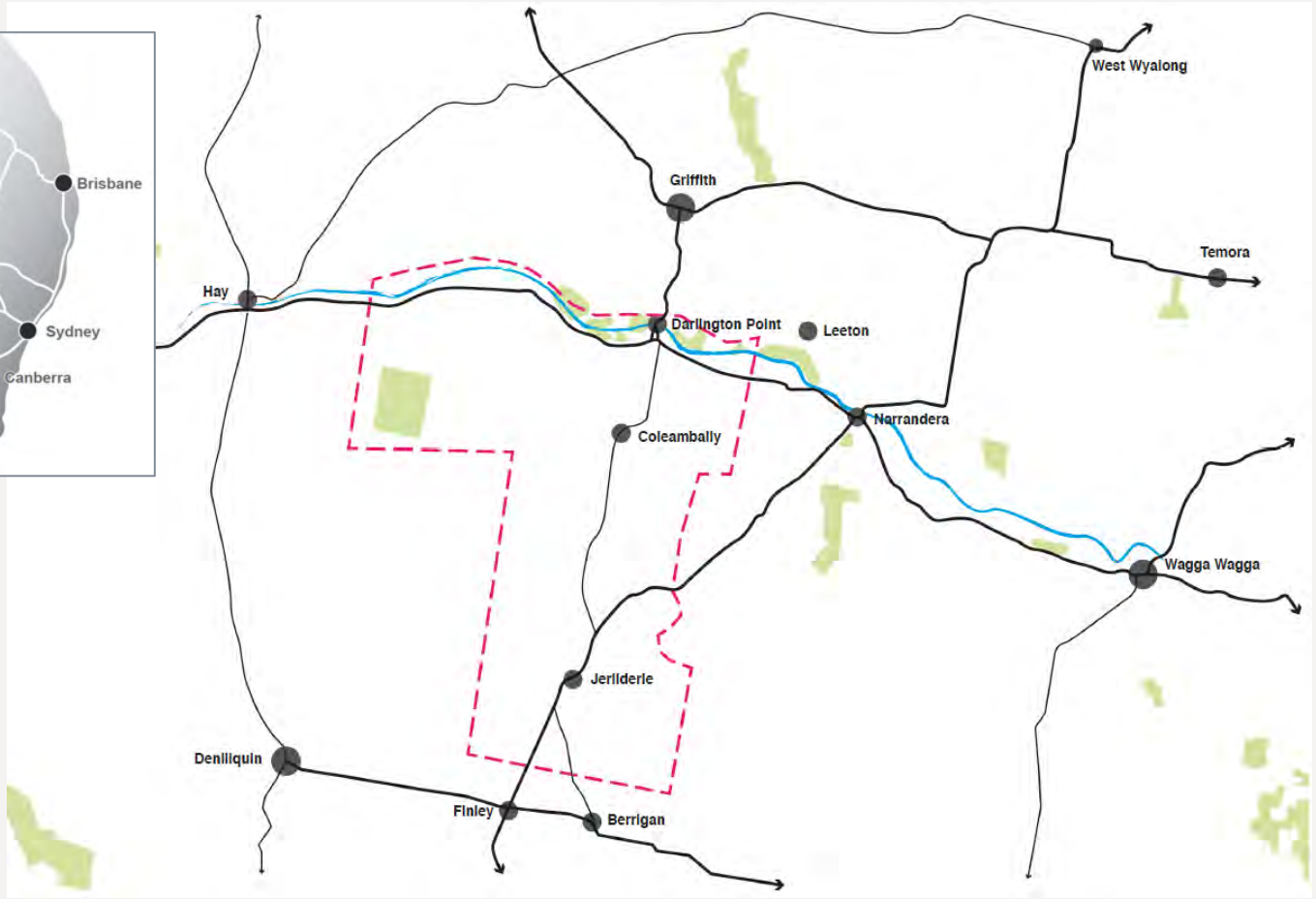


Figure 2: Regional Context Plan

1.3.2. Local Context

The new Murrumbidgee Council area was proclaimed on 12 May 2016, following the amalgamation of the former Jerilderie and Murrumbidgee Council areas.

The new council area has an area of 688,502 hectares (6,885km^2) and primarily consists of rural land, but does comprises the townships of Darlington Point, Coleambally and Jerilderie.

The Land Use Plan applies to the whole Murrumbidgee Council area.

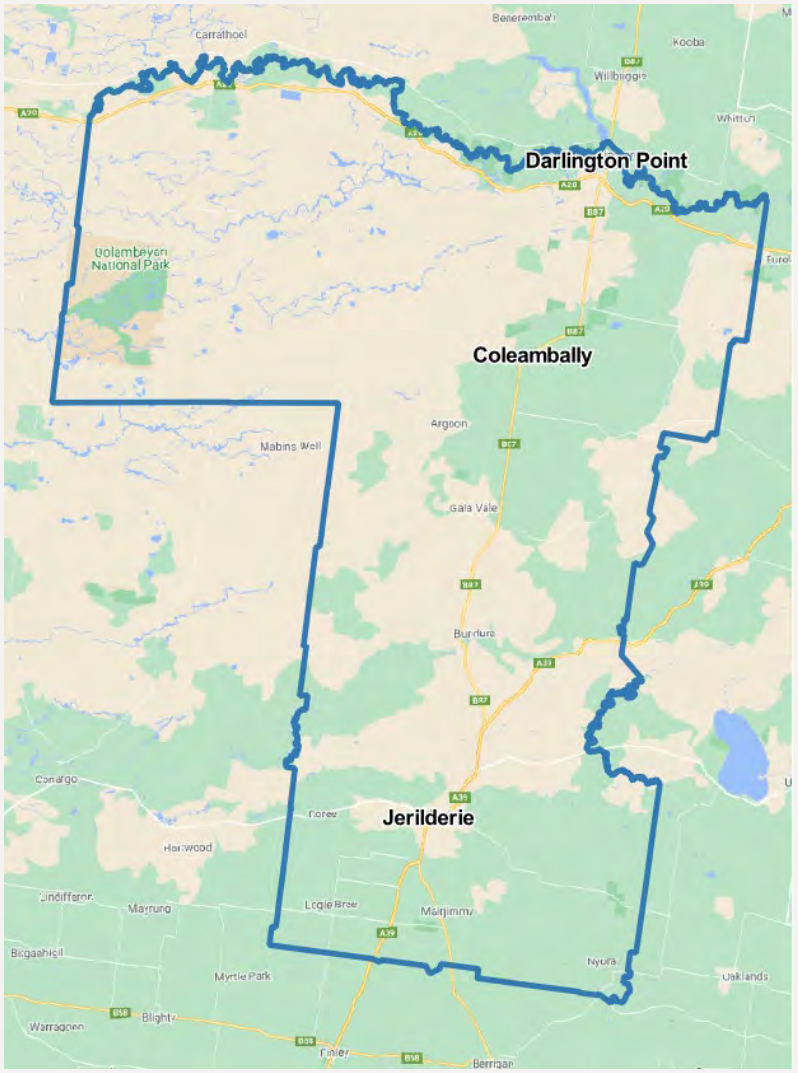


Figure 3: Study Area

1.4. Planning Policy Framework

The Land Use Plan has been prepared having regard to the planning policy framework that influences the management of land.

Land use planning is undertaken on a number of different levels from Federal down through state, regional, local, as well as specific localities or sites. The level of detail in land use planning under this hierarchy generally increases as the area to which it is applied decreases.

More recently, the NSW government has committed to shifting the NSW planning system into a strategic-led planning framework so that planning decisions are informed by a strategic plan, where each level of planning informs the next, setting the context and direction to be detailed in subsequent plans.

Placed in a planning context, strategic planning is therefore a proactive process rather than reactive.

Strategic plans are to provide clear line-of-sight between the key strategic priorities and the Land Use Plan has been prepared having regard to the planning policy framework. The Land Use Plan builds upon the actions and strategic planning ambitions outlined within the Riverina Murray Regional Plan and Council's Local Strategic Planning Statement (LSPS).

Further consideration of these key strategic planning documents is provided on the following page.

Upon completion, the Land Use Plan will inform a review of Council's new Local Environmental Plan (LEP) and Development Control Plan (DCP), which are the main tools to deliver the Council's and community's vision.

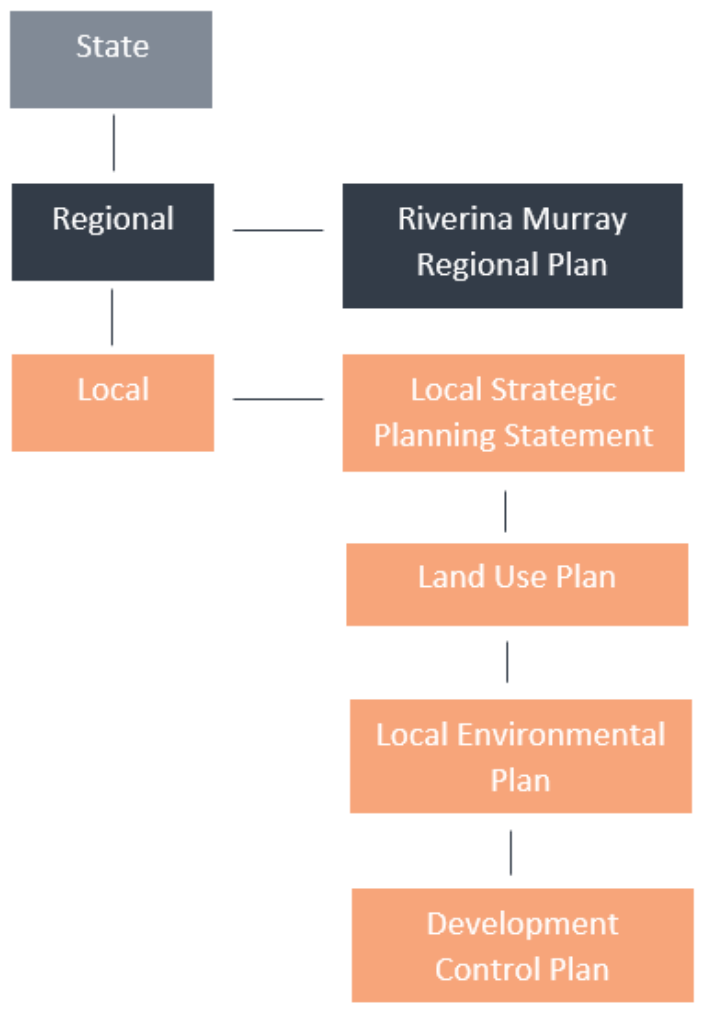


Figure 4: Planning Policy Framework

Housing 2041: NSW Housing Strategy

Housing 2041: NSW Housing Strategy represents the NSW Governments' 20 year vision for housing in NSW. Housing needs change over the course of our lives, reflecting our different aspirations and lifestyles, as well as the economic, environmental and social conditions of the day. All of these factors play a part in influencing our housing choices and the decisions we make and, in turn, the way we plan for and shape the character of our communities.

The plan embodies the NSW Government's goals and ambitions to deliver better housing outcomes by 2041 including housing in the right locations, housing that suits diverse needs and housing that feels like home.

The 20 year vision for Housing 2041 are outlined below:

Table 1: Housing 2041 Vision

People and communities have:	Homes in NSW are:
• Access to housing security, diversity and support, irrespective of whether they live in metropolitan or regional areas • choices that enable them to afford a home without compromising on basic needs • support and opportunity in differing circumstances, including people in crisis, social housing residents, private rental tenants and those who aspire to home ownership.	• accessible and suitable for different stages of life or changing circumstances • connected to local facilities, jobs and social networks, with infrastructure, services and spaces that people need to live sustainably • designed to support human wellbeing and respond to the environment, maximise technology and support local character and place.

Housing 2041 is underpinned by four key pillars being: supply, diversity, affordability and resilience of housing. The right type and size of housing (diversity) and housing in the right locations must be planned relative to infrastructure, the market and environmental factors (resilience). The amount of housing (supply) will also impact the cost (affordability) of housing.

The Housing Strategy has been prepared having regards to these four key pillars.



Figure 5: NSW Housing System Pillars
(Source: NSW Department of Planning, Industry and Environment)

A 20-Year Economic Vision for Regional NSW

The 20-Year Economic Vision for Regional NSW is the NSW Government's plan to drive sustainable, long-term economic growth in regional NSW.

It forms the roadmap to unlock significant economic potential in regional NSW. It sets out a long-term plan and a framework for how the NSW Government will provide the foundations for businesses to invest in regions with confidence.

Regional NSW is divided into five types of regional economies based on underlying geography, population and economic features. These include Metro Satellites, Growth Centres, Coastal, Inland and Remote.

The Murrumbidgee Council area is located within the Western Riverina and classified as an 'inland' economy.

The 20-Year Economic Vision outlines that:

> *inland regions will benefit from a strong focus on building community resilience. Accelerating research and investment in key enablers, such as climate-resilient water infrastructure and technology use in agriculture and food production, will help support these economies with more productive and sustainable industries.*

The action items to achieve this objective are outlined in Table 2.

Specifically, the Land Use Plan addresses action item No. 1, which seeks to investigate inland intermodals near the production of agricultural products. In response, the Land Use Plan recommends establishing new industrial areas within both Jerilderie and Darlington Point including potential opportunities to create a transport hub at the intersection of the Kidman Way and Sturt Highway in Darlington Point.

Similarly, the Land Use Plan responds to action item No. 4, which seeks to provide clear signals to attract industries to targeted locations. As outlined above, the Plan seeks to identify specific land use zones to encourage coordinated growth in the right location and discourage ad hoc and unplanned growth within inappropriate locations.

Table 2: Economic Vision for NSW – Action Items

Action Item	Principles
1. Infrastructure	• Principle 1: Affordable, reliable and fast mobile and internet connectivity to support. • Principle 2: Improved travel between regional centres and from regional centres to international gateways. • Principle 3: Freight networks that will increase the competitiveness of key regional sectors. • Principle 4: Reliable accessible water and energy.
2. Skills	• Principle 5: A skilled labour force for current and future needs of the regions.
3. Advocacy and Promotion	• Principle 6: Recognising each region's strengths and underlying endowments.
4. Business Environment	• Principle 7: Regulation and planning to promote commercial opportunities.
5. Economic Strength and Diversity	• Principle 8: Sustainable economies and communities are better able to recover from shocks

Riverina-Murray Regional Plan

The Riverina-Murray Regional Plan is a 20 year blueprint for the future of the region.

The vision for the Riverina Murray region is outlined as follows:

> *To create a diversified economy founded on Australia's food bowl, iconic waterways and a strong network of vibrant and connected communities.*

To achieve this vision, the Regional Plan has set four goals for the region:

- **Goal 1** – A growing and diverse economy.
- **Goal 2** – A healthy environment with pristine waterways.
- **Goal 3** – Efficient transport and infrastructure networks.
- **Goal 4** – Strong, connected and healthy communities.

The Land Use Plan is consistent with the following Directions:

- **Direction 4**: Promote business activities in industrial and commercial areas.
- **Direction 15:** Protect and manage the region's many environmental assets.
- **Direction 21:** Align and protect utility infrastructure investment.
- **Direction 22:** Promote the growth of regional cities and local centres.
- **Direction 25:** Building housing capacity to meet demand.
- **Direction 27:** Manage rural residential development.
- **Direction 28:** Deliver healthy built environments and improved urban design.
- **Direction 29:** Protect the region's Aboriginal and historic heritage.

Murrumbidgee Council Local Strategic Planning Statement

The Murrumbidgee Council Local Strategic Planning Statement (LSPS) establishes a 20 year vision for land use planning in the local area.

The strategic planning vision of the LSPS is outlined as follows:

> *To experience land use and development outcomes in the future that both benefit the community and minimise environmental impacts.*

To achieve this vision, the LSPS is based on four key themes:

- **Theme 1** – Built environment.
- **Theme 2** – Natural environment.
- **Theme 3** – Infrastructure.
- **Theme 4** – Economic growth.

The Land Use Plan is consistent with the following strategic agenda items:

- **BE1 – Supply of land**: To ensure there is 15-20 years supply of zoned land and choice of sites for urban development.
- **B33 – Location of industrial development**: To prevent land use conflicts with adjoining non-industrial land.
- **BE5 – Non-Aboriginal heritage**: To ensure the rich history of the Murrumbidgee Council area is protected and maintained.
- **NE1 – Environmentally sensitive land**: To ensure environmentally sensitive areas are identified and provided with the appropriate level of safeguards against detrimental environmental impacts.
- **NE6 – Climate change**: To ensure land use and development is prepared for the consequences of climate change.
- **IP4 – Civil infrastructure in urban and rural area**: To ensure local infrastructure adequately performs its intended purpose.
- **EG2 – Supply and choice in commercial development sites**: To ensure there is always choice of sites for new commercial development.
- **EG7 – Productive agricultural land**: To prevent development that reduces the amount of land available for agriculture.

1.5. Consultation

1.5.1. Overview

Consultation with the community and relevant government agencies represents an important component of the Land Use Plan, enabling the collection and consideration of aspirations, values and concerns for the future of the Murrumbidgee Council area.

The purpose of the consultation was to:

- Communicate and inform the community and stakeholders of the process for the Land Use Plan;
- Understand the stakeholder and community views, which will inform the preparation of the Land Use Plan;
- Identify key issues and input from the community and government agencies and opportunities to resolve them;
- Assist in establishing a clear vision for each township;
- Gain public ownership of the resulting plan.

There are several advantages of consultation when undertaken effectively:

- Increase in community/understanding of the Land Use Plan and the process by which it evolves;
- Improve the quality of the Land Use Plan as it will benefit from a broad cross section of ideas at the outset and feedback during its creation;
- Integrating results from previous consultation processes;
- The Land Use Plan will receive ‘buy-in’ and ownership by community and agencies.

1.5.2. Program of Consultation

The Land Use Plan has been prepared based on recent community consultation, as well as previous consultation undertaken as part of other Council strategic planning projects.

Consultation has included the following:

- Media release issued by Council at the start of the initial consultation phase;
- Consultation with all landowners via Council’s hardcopy and electronic newsletters during May 2020;
- Contact via letter of all relevant government agencies and service providers seeking input into the Draft Land Use Plan;
- Consultation with affected landowners via letter during January 2021;
- Placement of information flyers within key locations around the three main townships;
- Creation of an online and hardcopy questionnaire available for residents to complete.
- Engagement via social media such as Facebook and Instagram;
- Advertisement in local newspapers to generate community interest.

Further consultation will be undertaken with the community as part of the exhibition of the Draft Land Use Plan, which will be used to inform the Final Land Use Plan.

1.5.3. Outcomes of Consultation

General Community

Community feedback was received via face to face discussions, completion of the community questionnaire and written submissions provided to Council.

A total of 45 submissions were received, including 14 from Darlington Point, 10 from Coleambally and 17 from Jerilderie. Four submissions were received from persons living outside of the Murrumbidgee Council area.

A summary of the consultation results from each township is provided in **Table 3**.

Table 3: Survey Questionnaire Results

Survey Questions	Darlington Point	Coleambally	Jerilderie
I live:	▪ Inside the LGA – 85% ▪ Outside the LGA – 15%	▪ Inside the LGA – 100% ▪ Outside the LGA – 0%	▪ Inside the LGA – 94% ▪ Outside the LGA – 6%
I shop:	▪ Locally in my town – 7% ▪ Outside of town (Griffith) – 93%	▪ Locally in my town – 80% ▪ Outside of town (Griffith) – 20%	▪ Locally in my town – 94% ▪ Outside of town (Albury, Shepparton) – 6%
I live here because?	▪ Affordable housing ▪ Natural environment (rivers, bushland) ▪ Family support and connections	▪ My work ▪ Safe place for me and my family ▪ Family support and connections	▪ Safe place for me and my family ▪ My work ▪ Family support and connections
What key items would make people want to live in the area?	▪ Affordable housing ▪ Natural environment and recreation ▪ Jobs	▪ Jobs ▪ Agricultural opportunities ▪ Affordable housing	▪ Jobs ▪ Agricultural opportunities ▪ Sense of community
What key things would encourage travellers to stop in town?	▪ Natural environment (rivers, creeks etc) ▪ More attractive business area ▪ More shops	▪ Better toilets ▪ Better recreational facilities ▪ More attractive business area	▪ More attractive business area ▪ Natural environment (rivers, creeks etc) ▪ More shops
Council should work harder to:	▪ Make places more attractive ▪ Improve social, health and recreational facilities ▪ Encourage more things for people to do	▪ Encourage more things for people to do ▪ Support new businesses and investment ▪ Build and improve infrastructure	▪ Support new businesses and investment ▪ Make places more attractive ▪ Build and improve infrastructure
What should Council zone more land for?	▪ Environmental ▪ Agricultural ▪ Residential	▪ Residential ▪ Agricultural ▪ Business	▪ Business ▪ Industrial ▪ Residential

Survey Questions	Darlington Point	Coleambally	Jerilderie
If Council were to rezone more residential land, what is the priority?	▪ Town size blocks (1,000m2) ▪ Hobby farms (2ha) ▪ Larger residential blocks (4,000m2)	▪ Town size blocks (1,000m2) ▪ Hobby farms (2ha) ▪ Larger residential blocks (4,000m2)	▪ Large residential blocks (4,000m2) ▪ Town size blocks (1,000m2) ▪ Hobby farms (2ha)
What are the residential areas closest to you like?	▪ Needs improvements ▪ Have some poor developments ▪ Needs a greater variety of housing types	▪ Are nicely planned and attractive ▪ Needs improvements ▪ Are mostly attractive	▪ Are nicely planned and attractive ▪ Are mostly attractive ▪ Have some poor developments
What are some things that could be undertaken to improve these areas?	▪ More attractive streetscapes and street trees ▪ Improved street lighting ▪ More emphasis on compliance	▪ Improved street lighting ▪ Better road access (kerb, gutters and footpaths) ▪ More attractive streetscapes and street trees	▪ Improved street lighting ▪ Better drainage ▪ More emphasis on compliance
What are the priorities for compliance in the residential areas?	▪ Rubbish, old car removal ▪ Yards are kept tidy ▪ No living in sheds	▪ Rubbish, old car removal ▪ Yards kept tidy ▪ No living in sheds	▪ Rubbish, old car removal ▪ Yards kept tidy ▪ Better quality backpacker accommodation
What are the key challenges facing the local area?	▪ Lack of employment ▪ Lack of infrastructure, services and facilities ▪ Loss of biodiversity or heritage	▪ Pressure on agriculture land from other activities ▪ Lack of employment ▪ Lack of infrastructure, services and facilities	▪ Lack of employment ▪ Pressure on agriculture land from other activities ▪ Lack of infrastructure, services and facilities
In encouraging sustainability what should Council's priorities be?	▪ Conservation of the natural environment ▪ Waste and recycling ▪ Revegetation works	▪ Conservation of the natural environment ▪ Waste and recycling ▪ Working with other government agencies	▪ Waste and recycling ▪ Conservation of the natural environment ▪ Nothing, Council has other priorities

Public Authorities and Government Agencies

Feedback from government agencies and service providers was provided via written feedback and is summarised in **Table 4.**

Table 4: Summary of Government Agency Consultation

Public Authority	Submission Details
NSW Police Force	No specific details provided in relation to the LUP, however NSW Police Force would like to be involved for proposed developments relating to: ▪ Nursing homes; ▪ Public housing/low cost housing estates; ▪ Licensed premises; ▪ Holiday and caravan parks.
Essential Energy	▪ Need to liaise with Essential Energy in the early planning stages of future development that will impact the electrical network; ▪ Need to create a process for easement creation as part of the DA approval process.
NSW Department of Primary Industries – Agriculture	▪ Strategic planning should focus on ensuring appropriate land use objectives, lot size and zonings to protect and support agricultural production from inappropriate neighbouring land uses.
NSW Rural Fire Service	▪ The preparation of the LUP should have regard to the provisions of *Planning for Bushfire Protection 2019*. ▪ Strategic planning should provide for the exclusion of inappropriate development in bushfire prone areas. ▪ Where increased residential densities are proposed on bushfire prone land, a Strategic Bushfire Study shall be prepared. ▪ Consideration needs to be given to 'Grassland Hazards' in the Murrumbidgee Council's Bushfire Prone Land map.
NSW Planning Industry & Environment – Biodiversity Conservation Division	▪ Undertake a study of Aboriginal cultural heritage values for the local government area in partnership with the local Aboriginal community; ▪ Implement a biodiversity strategy for the Murrumbidgee LGA ▪ Make a Development Control Plan consistent with *State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017* to regulate high conservation vegetation; ▪ Promote biodiversity certification for new urban release areas and spot re-zonings; ▪ Validate High Environmental Value (HEV) mapped areas in the Murrumbidgee including vegetation likely to provide habitat for Koalas and other threatened species. ▪ Development should be compatible with flood behaviour, flood hazard and flood emergency management. ▪ Assess and manage the impacts of climate change (such as heat, floods, storms and drought).
Transport for NSW	▪ Land use planning should ensure that the classified road and rail network are not adversely impacted by proposed changes; ▪ Direct access to the Classified road network and State roads should not be relied upon. ▪ The Classified road network needs to be protected from 'ribbon development'.
NSW Department of Primary Industries – Fisheries	▪ Planning instruments and associated strategies need to identify and proactively protect waterways from inappropriate development. ▪ Waterways/watercourses, recognised sensitive aquatic habitats and other key fish habitats such as threatened species habitat mapping should be included within land use mapping.

Public Authority	Submission Details
Heritage NSW	▪ Undertake a heritage study of non-Aboriginal heritage. ▪ Prepare an Aboriginal Cultural Heritage Study to inform Council's consolidated LEP. ▪ Support the ongoing use of the Aboriginal Heritage Information Management System (AHIMS) to identify known locations of items of Aboriginal cultural heritage and requiring appropriate due diligence as part of the development application process.
NSW EPA	▪ Suitable separation distances (buffer zones) should be established at the strategic planning stage, particularly between sensitive land uses and industry. ▪ The LUP should consider adjacent existing activities and zonings to any proposed areas to ensure conflicts do not occur. For example between rural and rural residential development and industrial and residential activities. ▪ High noise generating activities should be located a suitable distance from noise sensitive land uses. ▪ Land use planning and site selection should be used to ensure that odour impacts do not adversely affect residential and other sensitive areas.

1.6. Implementation, Monitoring and Review

The recommendations of the Land Use Plan will be implemented via a review of Council's existing Local Environmental Plans. This will include a review of existing land use zones, as well as the introduction of local provisions and maps to achieve certain development outcomes.

The new Local Environmental Plan will also be supported by the creation of a new Development Control Plan.

The Land Use Plan should be reviewed regularly incorporating changes in the circumstances as they evolve over time and that take account of shifting priorities and policy changes including:

- The types of development being undertaken;
- The rate of land consumption by various land use types;
- The supply of land for various land use types;
- The standard and capacity of infrastructure;
- Environmental impacts;
- Legislative changes; and
- Community views.

1.7. Associated Studies and Investigations

The preparation of the Land Use Plan has been informed by the following associated studies and investigations:

- Non-Aboriginal Heritage Review, prepared by Noel Thomson Architecture Pty Ltd;
- Aboriginal Cultural Heritage Assessment, prepared by AREA Environmental Consultants and Communication;
- Biodiversity Assessment, prepared by AREA Environmental Consultants and Communication;
- Darlington Point Flood Risk Management Strategy and Plan, prepared by Catchment Simulation Solutions;
- Murrumbidgee Integrated Water Cycle Management Strategy, prepared by NSW Public Works Advisory.

Copies of these strategies are included with the Land Use Plan.

2. Murrumbidgee Council Area

2.1. Overview

This section of the Land Use Plan provides an overview of the matters that are relevant to the future planning of Murrumbidgee as a whole. Details regarding each of the three townships are addressed in Section 3.

2.2. Social and Community

Areas of analysis in this section include population demographics and trends, housing, welfare need and dependency, community capacity, community services, recreation and open space, as well as skills and education, which will influence key issues for planning.

2.2.1. Population

The official population of the Murrumbidgee council area as of 30 June 2016 was **3,836**, which has remained steady since 2011.

In terms of where the population lives, Darlington Point accounts for 30 percent of the total population, with Coleambally accounting for 35 percent and Jerilderie 27 percent. The remaining 8 per cent of the population resides in rural areas outside of the three main townships.

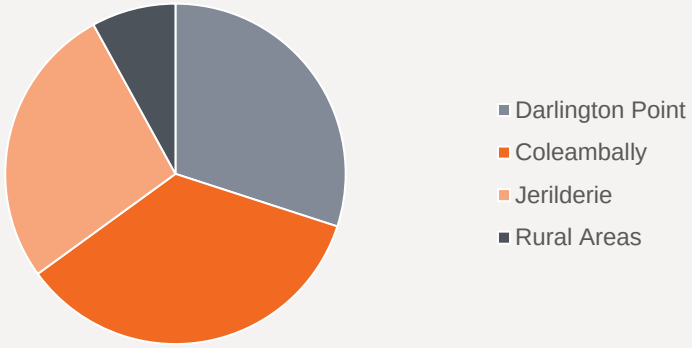


Figure 6: Murrumbidgee Population

Table 5: Population Summary

	Population (2016)	% of LGA
Darlington Point	1,162	30
Coleambally	1,331	35
Jerilderie	1,029	27
Rural Areas	314	8
Total	3,836	100

Males make up 52 percent of the total population, as compared to females who comprise 48 percent of the population. This percentage split differs from the remainder of regional NSW whereby females comprise a larger percentage of the population.

Similarly, Aboriginal and Torres Strait Islanders comprise 7.4 percent of the total population as compared to 5.5 percent for the remainder of regional NSW.

NSW DPIE prepare population projections for each LGA using ‘low’, ‘medium’ (‘common’) or ‘high’ growth scenarios. For the period between 2016 and 2041, using common (medium) planning assumptions, the total population of Murrumbidgee is predicted to decline 3,836 persons in 2016 down to 3,860 persons in 2041. This represents a total reduction in the population of 156 persons over this period or an annual population reduction of 6.

Notwithstanding, when using NSW DPIE high growth rate scenario, the population between 2016 and 2041 is predicted to increase from 3,836 persons in 2016 to 4,182 persons in 2041. This represents a total increase in the population of 346 persons over this period or an annual population increase of approximately 14 persons.

Whilst it is acknowledged that as a whole Murrumbidgee is predicted to decline, it is expected that the population of the main townships of Darlington Point, Coleambally and Jerilderie will remain steady or in fact may slightly increase.

This will be the result of in migration from retired farmers and the elderly from outlying rural areas in recognition of the wider range of services and housing available to this age group.

Furthermore, Council is also expecting the population of Murrumbidgee to increase into the future as a result of a number of other factors.

Such factors include the decentralisation of persons away from metropolitan and larger centres, technological improvements and opportunities to work from home, lower land and housing prices, as well as a recent influx in the number of development enquiries and proposed large scale agricultural and renewable energy production developments.

This projected higher growth rate scenario is also reflective of the fact that the population of Murrumbidgee grew between 2011 and 2016 from 3,838 persons to 3,929 persons. This represents an annual population increase of 18.2 persons.

All of these factors are likely to contribute to increased permanent and short term/seasonal worker population that need to be catered for.

In recognition of these factors, a higher population growth rate scenario has been adopted for Murrumumbidgee, which is projected to grow by approximately 500 persons between 2016 and 2041 to **4,336**. This equates to an annual population increase of approximately 20 persons.

Table 6: Population Projections 2041

	Population (2016)	**DPIE Projection (Common Growth)**			**DPIE Projection (High Growth)**			**Council Projection (High Growth)**		
		Additional Population	Annual Change (Persons)	Population (2041)	Additional Population	Annual Change (Persons)	Population (2041)	Additional Population	Annual Change (Persons)	Population (2041)
Darlington Point	1,162	-47	-1.88	1,115	104	4.16	1,266	150	6	1,312
Coleambally	1,331	-55	-2.22	1,276	121	4.84	1,452	175	7	1,506
Jerilderie	1,029	-42	-1.67	987	93	3.72	1,122	135	5.4	1,164
Rural Areas	314	-12	-0.47	302	28	1.12	342	40	1.6	354
Total	3,836	-156	-6.24	3,680	346	13.84	4,182	500	20	4,336

***Note:** NSW DPIE projections have been adjusted to align with confirmed ABS population data as at 30 June 2016.

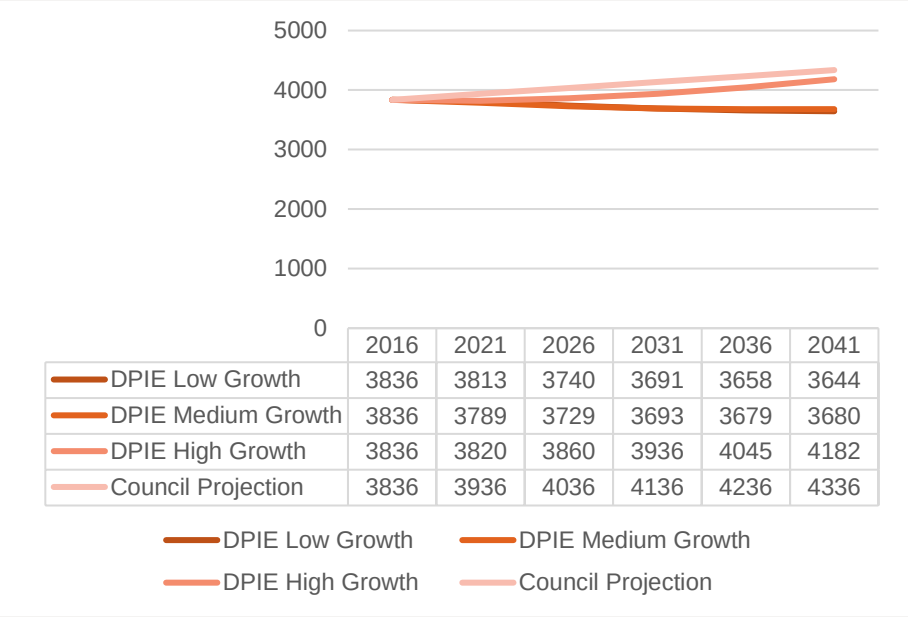


Figure 7: Population Projections for Murrumbidgee

In 2016 the median age of residents was **41** years compared to 43 for regional NSW as a whole indicating a slightly younger age profile.

Notwithstanding, consistent with NSW and national trends the number of persons aged over 65 is predicted to increase from 17% in 2016 to 24% by 2041.

Whilst the overall population of Murrumbidgee is projected to slightly decline or stay static under the medium growth scenario of NSW DPIE, the total number of persons aged over 65 will increase. As a result, this will place pressure on additional services and facilities, namely residential accommodation, health care and transportation for this age group.

This in turn will result in a reduction in the working age population, which will place further pressures on local economies and the workforce, particularly when compounded by an under-representation of younger working aged persons in the community.

Council will need to investigate opportunities to increase the proportion of younger aged persons within the workforce, particularly those aged between 20-29 years of age.

2.2.2. Housing

Housing is perhaps the most influential factor in determining how Council's planning instruments should be framed for the future. The trends in housing in Murrumbidgee are fairly similar to those for population.

The population of the council area in 2016 was housed in 1,936 dwellings located within the townships of Coleambally, Darlington Point and Jerilderie, as well as in rural areas.

Of these, 62 percent were classified as 'family households' and comprised at least one parent and child, whilst 'lone person households' were the next largest household type comprising 25 percent of the total housing stock.

Table 7: Household Summary

	Dwellings (2016)	Household Size
Darlington Point	536	2.45 persons
Coleambally	659	2.3 persons
Jerilderie	546	2.3 persons
Rural Areas	195	2.45 person
Total	1,936	

Of the total number of houses, the predominant housing type was separate houses. These made up approximately 91% of the total housing stock, when compared with other forms of housing (semi-detached, row or terrace house, townhouse, flat or apartment).

This figure is much higher when compared against the NSW and National average of 66.4% and 72.9% respectively.

It is noted however that Council have seen in recent years a general increase in the demand for short term and temporary workers accommodation. In certain circumstances, this has resulted in ad hoc and uncoordinated development that has the potential to detract from the residential amenity of the area and create land use conflicts.

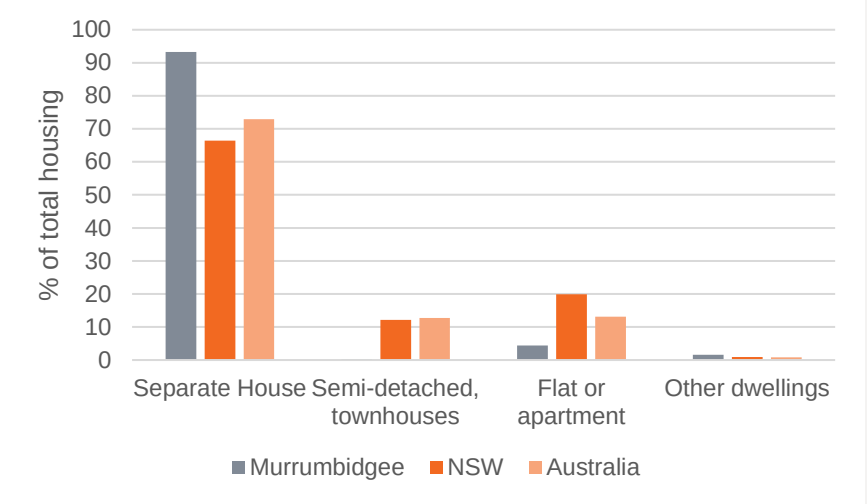


Figure 8: Housing Type

The size of dwellings within Murrumbidgee varies from state and national averages with households generally comprising 3 or more bedrooms with comparatively fewer 1 and 2 bedroom dwellings (Figure 9).

Specifically, the number of one bedroom dwellings only comprises 3% of the total housing stock. This figure is not reflective of the fact that approximately 28% of the household types comprise single (or lone) persons households.

When considering a future ageing population and in-migration from outlying rural areas, there will be a need for additional smaller dwellings.

The average household size within Murrumbidgee was 2.4 persons per household. This figure has declined from 2.5 in 2006 and reflects a nationwide trend of smaller household sizes, which is expected to further decline to 2.03 by 2041.



Figure 9: Size of dwellings

Housing approvals (short term and permanent) within Murrumbidgee have been reflective of population growth remaining steady over time. On average, 9 new dwellings are constructed each year across the council area. For the most part, the majority of these housing approvals have occurred within the RU5 Zone, primarily due to a lack of alternative residential product.

In recent times however, there has been an increase in the demand for short-term and worker accommodation, which has the potential to create land use conflicts with established dwellings.

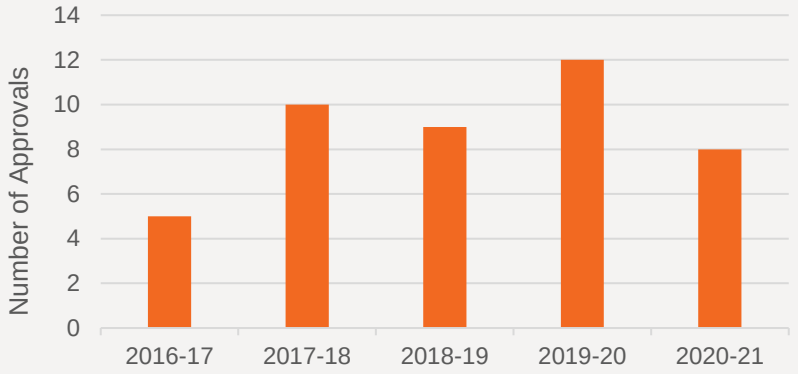


Figure 10: Residential Building Approvals

Based on Council population projections, the Murrumumbidgee Local Government Area is expected to grow by 500 persons between 2016 and 2041 to 4,336.

This will equate to the construction of **208 new dwellings** over this time period using an average household size of 2.4 persons per household.

This equates to the construction of 8 new dwellings per annum.

Notwithstanding the above, when using a reduced average household size of 2.03 persons per household as per NSW DPIE forecasts, this will require the construction of **246 new dwellings** between 2016 and 2041.

This equates to the construction of 9.8 new dwellings per annum.

Table 8: Household Projections 2041

	Dwellings (2016)	DPIE Projection (Common Growth)			DPIE Projection (High Growth)			Council Projection (High Growth)		
		Additional Dwellings	Annual Change (Dwellings)	Dwellings (2041)*	Additional Dwellings	Annual Change (Dwellings)	Dwellings (2041)	Additional Dwellings	Annual Change (Dwellings)	Dwellings (2041)
Darlington Point	536	-23.10	-0.92	-	51.13	2.05	587.13	73.89	2.95	609.89
Coleambally	659	-26.95	-1.08	-	59.65	2.39	718.65	86.21	3.45	745.21
Jerilderie	546	-20.79	-0.83	-	46.02	1.84	592.02	66.50	2.66	612.50
Rural Areas	195	-6.16	-0.25	-	13.63	0.55	208.63	19.70	0.79	214.70
Total	1,936	-77	-3.08	-	170.44	6.82	2,106.44	246.31	9.85	2,182.31

***Note:** No dwelling projections have been included under the common growth scenario as this is a negative number

As will be discussed later in Section 3 of this Land Use Plan, whilst it is acknowledged that the main township of Murrumbidgee already has a degree of residential land supply, which could cater for the projected housing needs of the community there is a need to create additional land supply.

Several of the key obstacles to achieving additional residential land supply are due to instances of land banking and land speculation. This has resulted in much of the undeveloped zoned residential land being locked up and excluded from development based on a lack of interest of owners to develop this land. This is exacerbating land supply issues due to a relative lack of development fronts and opportunities to develop other land.

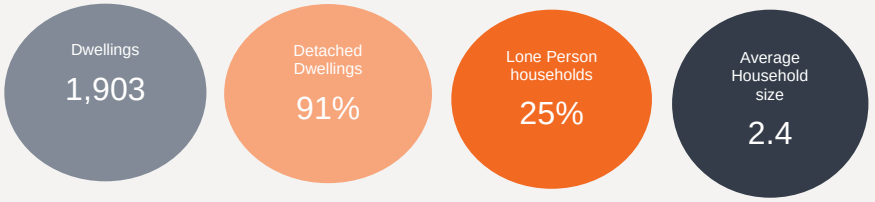


Figure 11: Housing Summary

2.2.3. Housing Affordability

Household tenure refers to whether someone owns or rents a property. The percentage of households that own their property outright in Murrumbidgee (36.3%) is comparatively higher than state (32.2%) and national (31.0%) average.

Conversely, the percentage of households owned with a mortgage in Murrumbidgee (24.9%) is comparatively lower than state (32.3%) and national (34.5%) averages.

The number of households that rent is also generally higher than state and national averages, which may be reflective of lower median rental prices, a general lack of available or suitable housing stock to buy, as well as a transient/rural workforce.

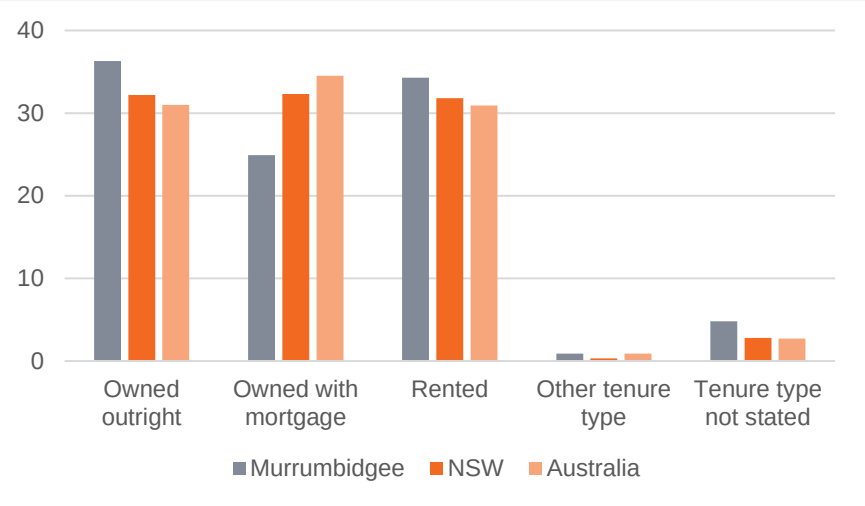


Figure 12: Housing Tenure

At the 2016 Census, the proportion of weekly rental and monthly mortgage repayments was comparatively lower than the NSW and national average with the vast majority of household rents and mortgage repayments comprising less than 30% of total household incomes. This indicates a low level of rental and housing stress and indicates housing affordability.

Table 9: Weekly Rental Payments

Weekly rental payments	Murrumbidgee	NSW	Australia
Median rent	$150	$380	$335
Households where rent <30% of household income	94%	87.1%	88.5%
Households where rent >30% of household income	6%	12.9%	11.5%

Table 10: Mortgage Monthly Repayments

Mortgage monthly repayments	Murrumbidgee	NSW	Australia
Median mortgage repayment	$900	$1,986	$1,755
Households where mortgage <30% of household income	96.6%	92.6%	92.8%
Households where mortgage >30% of household income	3.4%	7.4%	7.2%

A review of the Department of Family and Community Services online wait time register for Darlington Point (S126), Coleambally (S113) and Jerilderie (S107) indicates that the expected waiting time for general applications as at 30 June 2020 for social housing are as follows:

Notwithstanding, it is noted that the number of applicants in each of these townships was less than 5 applicants indicating a general low level of demand for social housing.

Table 11: Expected wait time for social housing

Housing Type	Expected waiting time		
	Darlington Point	Coleambally	Jerilderie
Studio/1 bedroom property	-	-	-
2 bedroom property	-	-	-
3 bedroom property	Up to 2 years	10+ years	2 to 5 years
4+ bedroom property	Up to 2 years	10+ years	-

Source: NSW Department of Family and Community Services

2.2.4. Socio-Economic

The 2016 Socio-Economic Indexes for Areas (SEIFA) measures the relative level of socio-economic disadvantage based on a range of Census characteristics. The index is derived from attributes that reflect disadvantage such as low income, low educational attainment, high unemployment, and jobs in relatively unskilled occupations. A lower score on the index means a higher level of disadvantage.

The SEIFA index for the Murrumbidgee council area is 961 which is comparable to surrounding local government areas.

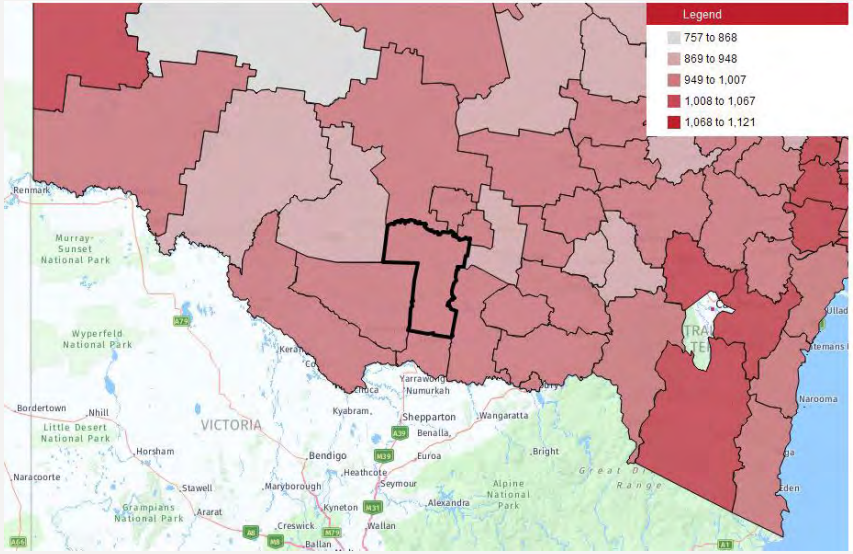


Figure 13: Index of Relative Socio-Economic Disadvantage

In 2016, 186 people (or 4.8 percent of the population) in Murrumbidgee Council reported needing help in their day-to-day lives due to disability. This was a similar percentage in 2011.

Analysis of the need for assistance of people in Murrumbidgee Council compared to Regional NSW shows that there was a lower proportion of people who reported needing assistance with core activities as compared to other areas.

2.2.5. Community Facilities

There are a number of community facilities and services available to the residents of Murrumbidgee. Community infrastructure assets include health, aged care support, community facilities and halls, libraries, swimming pools and a range of quality educational facilities.

The community has access to nine (9) public halls, a public library, which operates in the southern portion of the council area, as well as a mobile library service that operates in the northern half of the council area. Council administrative offices are also located within each of the main townships.

Educational and health care facilities also operate within each of the main townships and include; pre-schools, childcare centres, primary schools, high schools, local hospitals and allied health care. In addition, the community has access to other community facilities such as police, fire brigade and ambulance.

A plan identifying these individual facilities within each township is provided in Sections 3.1 to 3.3.

Murrumbidgee Council offers a number of direct community services to local communities including:

- Community transport.
- Meals on wheels.
- Home modifications and maintenance.
- Social support e.g. art groups, one on one social support to access their communities.
- Domestic assistance.
- Funding of equipment for residents such as wheelchairs, lifts etc.
- Personal care.

The Murrumbidgee Council area has a number of community groups and organisations that illustrate the capacity and ability of the community. Some of these groups include local chambers of commerce, progress associations, Lion's Club, Rotary, APEX, Men's sheds, Country Women's Association (CWA), State Emergency Services (SES), landcare groups, local church groups, as well as various local sporting or hobby groups.

2.2.6. Recreation and Open Space

The Murrumbidgee council area provides a variety of indoor and outdoor recreational activities. More specifically, Council is responsible for maintaining three (3) sports fields, two (2) community sports centres, three (3) swimming pool complexes, as well as being responsible for maintaining 186 hectares of formal public open space areas across the council area.

Other recreational facilities within the council area include: skate parks, tennis courts, football and cricket ovals, golf courses, race tracks and gyms, shooting and pistol ranges,

In recognition of the natural features of the area residents and visitors also have access to water-based recreational activities including fishing, boating and water skiing, as well as camping, bush walking and bike riding.

A plan identifying existing recreational facilities within each township is provided in Section 3.1 to 3.3.

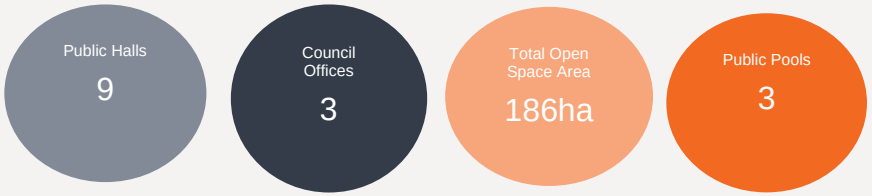


Figure 14: Summary of Community and Open Space Facilities

Notwithstanding the above, it is necessary to consider the current provision of open space and whether additional public open space is required to service the future needs of the population and expectant population growth.

Consideration has been given to the NSW Government's *Draft Greener Places Design Guide.* The Draft Greener Places Design Guideline outlines that there are six core criteria that drive the planning of open space for recreation. These include:

- Accessibility and connectivity.
- Distribution.
- Size and shape.
- Quantity.
- Quality.
- Diversity.

Of these core criteria, the distribution of open space is one of the key principles that need to be considered when planning open space. Distribution refers to the ability of residents to gain access to public open space within an easy walk from home, workplaces, and schools, which is an important factor in the quality of life. The geographic distribution of open space is a key access and equity issue for the community, which is typically measured by walking or travel distance.

The Guidelines outline that at the local or neighbourhood-level scale, residents should have access to a public open space area within 400m/ 5 minutes safe walking distance as per Table 12.

Table 12: Key Performance Indicators for Open Space

Access Level	Performance Indicator
Local access	
High-density area (>60 dwellings/ha)	2-3 minutes walk / 200m walking distance to a local park (barrier free).
Medium to low density areas (<60 dwellings/ ha)	5 minutes walk / 400m walking distance to a local park (barrier fee).
District access	25 minutes walk / 2km proximity to a district park. District parks also provide local access.
Regional access	Up to 30 minutes travel time on public transport or by vehicle to regional open space. Regional parks also provide local and district access.

Source: Draft Greener Places Design Guide, 2021

The provision and size of open space areas is also critical when planning new greenfield residential areas. According to the Guideline, the public open space network will include a range of parks serving different catchment sizes – a hierarchy of service. Typically, the further up the hierarchy, the larger the park is and the more diverse the range of opportunities within that park.

A summary of the open space hierarchy contained within the Guideline is reproduced in Table 13.

Table 13: Hierarchy of parkland provision

Park Type	Typical Opportunities	Example Design Solutions
Local Park	Local play and recreation opportunities	Local park of 5,000m^2 with 50% road frontage and functional space for informal activities
Linear Park/ Open Space corridor	Recreation and active transport pathways, linkages to formal parks, minor recreation features such as seats, active opportunities such as fitness equipment.	Large creekside linear park with a minimum of 20m from top of bank and not steeply sloping.
District Park	Local and destination play, picnic and gathering spaces for groups, large active spaces for youth and recreation spaces.	District park of a minimum 2ha with 50% road frontage and large usable area for active recreation
District Sports Precinct	Provision of formal, developed playing areas for field and court sports and built sporting facilities.	10+ha site with multiple fields and courts and building facilities supporting formal use such as clubhouses, amenities and parking.
Regional/ Metropolitan/ Citywide Parks	Large group spaces, picnic and barbecue facilities, large destination play, key landscape features, path and trail based recreation, long stay facilities	Large destination parklands of more than 5ha focussed around a key landscape feature such as a riverside or central reserve.

Source: Draft Greener Places Design Guide, 2021

2.2.7. Land Use Conflicts

Land use conflicts may arise when incompatible land uses are situated in close proximity to each other. Land use conflicts may impact on the amenity of sensitive land uses, the efficient use of productive land, or environmental and landscape values.

Some of the key land use conflicts that will need to be managed ongoing include:

- Bushfire risks on development that adjoins heavily vegetated areas or open grasslands.
- Flooding impacts on development from adjoining rivers and waterways.
- Sensitive environmental values at the interface of development with natural areas.
- Potential odour impacts associated with the operation of sewerage treatment works or industries.
- Noise and amenity impacts between industrial and commercial development and sensitive land uses (residential, educational).
- Impacts on the productive viability of agriculture from the encroachment of residential or rural residential development including; weed infestation, domestic animals, noise, lights, spray drifts etc.
- Amenity impacts such as noise adjoining key transport corridors (road, rail).

Careful consideration will be required when planning future land uses to ensure that they will not result in conflicts between land uses.

A plan identifying potential land use conflicts within each township is provided in Sections 3.1 to 3.3.

2.2.8. Key Issues for Planning

Population:

2.2.8.1 Population decline/stagnation and opportunities to reverse this.

2.2.8.2 Population growth and the need to provide adequate supply of zoned and appropriately located land for a range of development.

2.2.8.3 Decline in working age persons and potential impacts on local economy.

2.2.8.4 Under-representation of younger working age persons in the community.

2.2.8.5 Over-representation of older persons (comparatively) that will continue to grow in line with national trends resulting in increased demand for facilities and services including:

- o appropriate housing (independent and dependent)
- o access to health care
- o public transport and disabled access

Housing:

2.2.8.6 Ensuring development is appropriately located to avoid natural and man-made land use conflicts.

2.2.8.7 An increasing demand for housing by retirees and the type of housing this generates.

2.2.8.8 Lack of affordable housing options, particularly for older low-income earners adding to housing stress in the community.

2.2.8.9 Providing a range of housing types and options that suit the needs of residents and encourages in-migration.

2.2.8.10 Supply of zoned and serviced land to meet the future demand.

2.2.8.11 Residue supply of undeveloped urban zoned land due to a lack of landowner ability or aspirations to develop this land.

2.2.8.12 Ensuring compatibility between different housing types such as freestanding, higher density and short-term housing to reduce the potential for land use conflicts.

2.2.8.13 Increase in large lot residential and rural lifestyle housing options to provide choice in the housing market.

2.2.8.14 Increase in short-term, tourist and worker accommodation developments and ensure these integrate with the permanent population.

2.2.8.15 Lack of diversity in housing, particularly one and two bedroom dwelling stock.

Community Services:

2.2.8.16 Declining representation of young people due to a lack of jobs and tertiary educational opportunities.

2.2.8.17 Increased demand for facilities and services for older populations.

2.2.8.18 Ability to retain young people to sustain growth and provide balance in the community.

Recreation and Open Space:

2.2.8.19 Provision and maintenance of recreational facilities in the face of an ageing population.

2.2.8.20 Provision of appropriate recreational facilities that cater for the needs of local residents.

2.2.8.21 Provision of additional recreational facilities that build on the areas' natural environmental features and competitive advantages.

Land Use Conflicts:

2.2.8.22 Ensuring development is appropriately located to avoid natural and man-made land use conflicts.

2.3. Economy

Areas of analysis in this section include economic output and employment base, agriculture, industrial activities, commercial activities and retail hierarchy, tourism, local/ regional development opportunities, threats and opportunities, which will influence key issues for planning.

2.3.1. Economic Output

The Murrumbidgee Council area has traditionally been home to a variety of agricultural industries, with a growing interest in recent times in renewable energy projects (solar, biomass).

In 2017/18 nearly half of employment in the council area was in agriculture, forestry and fishing, which had a total value output of $237 million. Other significant sectors in the area include manufacturing, retail trade, education and training and health care.

Murrumbidgee Council's Gross Regional Product for 2018 was estimated at $0.41 billion contributed to by 603 local businesses and 1,970 jobs. The value of annual exports was $225 million, and the Murrumbidgee Council area was the 5th highest LGA in NSW for worker productivity (GDP/worker) at $206,641.

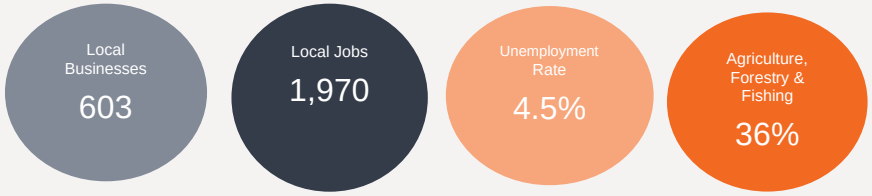


Figure 15: Summary of economic conditions

2.3.2. Employment Base

Traditional sectors within the economy such as agriculture and manufacturing have seen a decline since 2006, whereas industries such as education and training, construction, accommodation and food services and health care and social assistance have increased.

These figures show that the employment base of the economy is expanding and diversifying.

Table 14: Employment Base

Industry	2006	2011	2016	Change 2006-2016	
				%	No.
Agriculture, forestry and fishing	796	668	625	- 3.5	- 171
Manufacturing	209	149	131	- 2.8	-78
Education and Training	97	107	123	+ 2.3	+26
Construction	75	67	110	+ 2.6	+35
Accommodation and food services	66	72	79	+1.3	+13
Health care and social assistance	119	131	135	+1.9	+16

The labour force within the Murrumbidgee Council area at the time of the 2016 Census amounted to 1,805, of which 81 persons or 4.5 percent of the population were unemployed.

Whilst it is noted that the unemployment rate within the Murrumbidgee council area has increased from 3.5 percent in 2006, this figure is still well below the average unemployment rate for regional NSW of 6.6 percent.

The 2019 NSW Department of Planning, Infrastructure and Environment Population Projections indicate that the working age population (aged 15-64) within Murrumbidgee is estimated to decrease from 2,450 in 2016 to 2,200 in 2041 – a change of 250. This trend is reflective of a wider demographic shift towards an ageing population.

The weekly family household income in Murrumbidgee at the 2016 Census was $1,461. This is compared to the weekly household income of NSW ($1,780) and Australia as a whole ($1,734).

Table 15: Median Weekly Income

Median weekly income	Murrumbidgee	NSW	Australia
Personal	$659	$664	$662
Family	$1,461	$1,780	$1,734
Household	$1,197	$1,486	$1,438

2.3.3. Unpaid Work

At the 2016 Census, 28.7 percent of the population reported doing some form of volunteering. This is compared to the average for regional NSW of 20.8% and highlights that there is a high degree of community spirit amongst residents living within the Council area.

Similarly, 372 carers provided unpaid assistance to a person with a disability, long term illness or old age and 223 people provided unpaid care for children other than their own in 2016.

2.3.4. Workforce Location

The majority of persons working within Murrumbidgee also live within the Local Government Area. Those persons who work in the Murrumbidgee council area but live outside of this area commute from adjoining council areas. Griffith (9.1 percent) and Berrigan (4.7 percent) are the two largest centres that persons commute from, whilst other places including; Leeton, Edward River, Carrathool and Narrandera make up the other commuter locations.

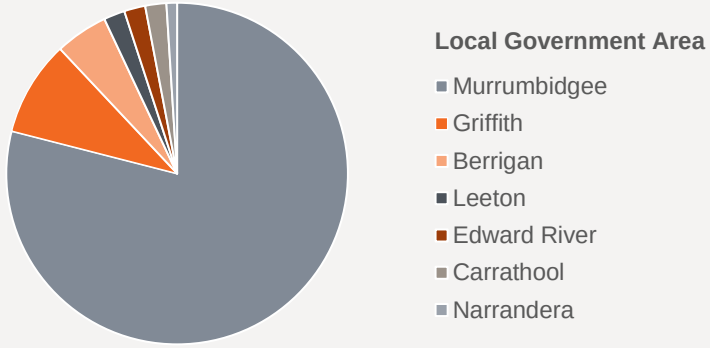


Figure 16: Residential location of local workers by LGA

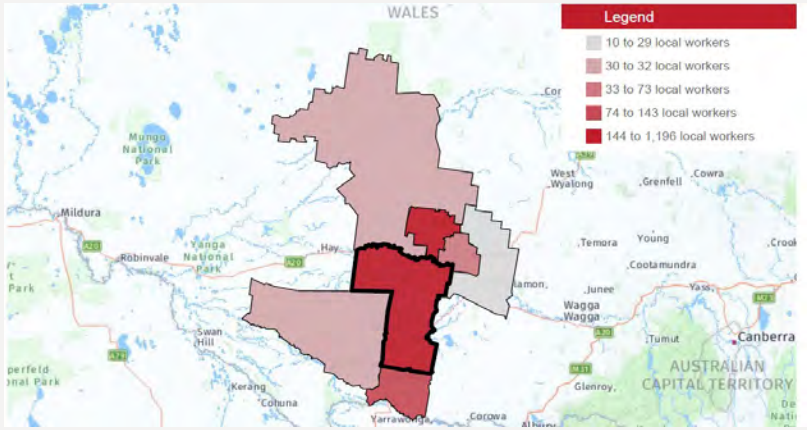


Figure 17: Residential location of local workers by LGA

2.3.5. Travel to Work

Similar to most rural and regional areas, the majority of people travelled to work via car. The Murrumbidgee Council area does however have a higher percentage of people who walked to work (8.3 versus 3.5 percent) or worked from home (12.6 versus 5.8 percent) as compared to the average for regional NSW.

2.3.6. Major Employers

Some of the largest employers within the Murrumbidgee Council area include:

- Murrumbidgee Council.
- Jerilderie Hospital.
- IGA Supermarkets Jerilderie & Coleambally.
- BP Service Station.
- Jerilderie Grain Storage and Handling.
- Billabong Produce.
- Altina Wildlife Park.
- Freedom Foods.
- Yarrow Park Olive Farm.
- Organic One Winery.
- Prickle Hill Farm Produce.
- RIVCOTT Cotton Gin.
- Coleambally Irrigation Co-Operative Limited.
- Wisemans Organics.
- Baiada Chicken Farms.
- Various almond Farms.

2.3.7. Commercial and Retail

The main commercial and retail areas in the Council area are contained within the three main townships of Darlington Point, Coleambally and Jerilderie.

Each of these towns operate with a traditional country main street, which provide local commercial, retail and convenience goods to residents and visitors. Each of the townships is zoned RU5 Village to allow for flexibility in the planning process. It is recommended however that further controls be included within Council's DCP to coordinate and direct growth to appropriate locations to maintain a centralised retail core.

Council in recent years has undertaken a number of beautification works along these main streets to support economic activity to try and encourage more visitors and passing motorists to stop in these centres.

Darlington Point has a very close link with Griffith to the north and relies heavily on the commercial facilities of that town. Similarly, Jerilderie has a relationship to Berrigan and Finley located to the south.

Retail patterns and community feedback indicate that a proportion of the Murrumbidgee Council residents travel to purchase higher order goods outside the Council area as these areas have a greater number of larger 'chain' stores'.

Griffith and Wagga Wagga have a greater influence on Darlington Point and Coleambally, whilst Corowa, Deniliquin and Albury-Wodonga have closer ties to Jerilderie.

Local commercial and retail businesses in recent times have also faced increasing pressures from online competition (e.g. online shopping).

2.3.8. Industrial Activities

Manufacturing and industrial activities are the second largest employer within the Murrumbidgee Council area, representing 8.1% of total employment.

Whilst traditional industries such as manufacturing have seen a slight decline over time due to technological advancements and productivity enhancing machines, the construction industry has grown as a result of a number of large construction projects that have occurred within the area. These include agricultural production and construction works associated with new agricultural industries (dam construction, poultry farms, almond plantations cotton gins etc), as well as renewable energy projects (solar). These provide both direct and flow on impacts.

Industrial zoned land is currently available in both Coleambally and Jerilderie, however Council have identified a lack of industrial land in parts of the Murrumbidgee Council area, namely Darlington Point which are adversely impacting on the attractiveness of the Murrumbidgee Council area to prospective businesses and investors. A supply and demand analysis of industrial zoned land has been provided in Section 3 of this Plan.

Council has also identified opportunities for the creation of a transport hub or interchange terminal at the junction of the Sturt Highway and Kidman Way (Waddi).

Previous planning investigations have also identified several large-scale industrial and commercial businesses operating within the residential zone immediately adjacent to existing residential dwellings due to a lack of appropriately zoned and located industrial land. This has the potential to create land use conflicts.

Council's Economic Development Strategy identifies:

> *the region has large agricultural and manufacturing sectors that require transport and logistics services. As such, transport and logistics play an integral and enabling role in the growth and development of these two important sectors. Focusing transport and freight that align with State and regional policies that improve linkages can increase productivity of agriculture and manufacturing.*



Example of Industrial Development in Darlington Point

Agriculture

Agriculture, forestry and fishing are the largest employers within Murrumbidgee. The majority of the Council area comprises rural land, which is home to a variety of agricultural industries including sheep, cattle, wheat, corn, winter cereal, rice, cotton, nuts, horticulture, poultry and egg production, timber milling and food processing.

The economic benefits of agriculture are significant to Murrumbidgee and have both direct and flow on effects through all stages of the agricultural supply chain.

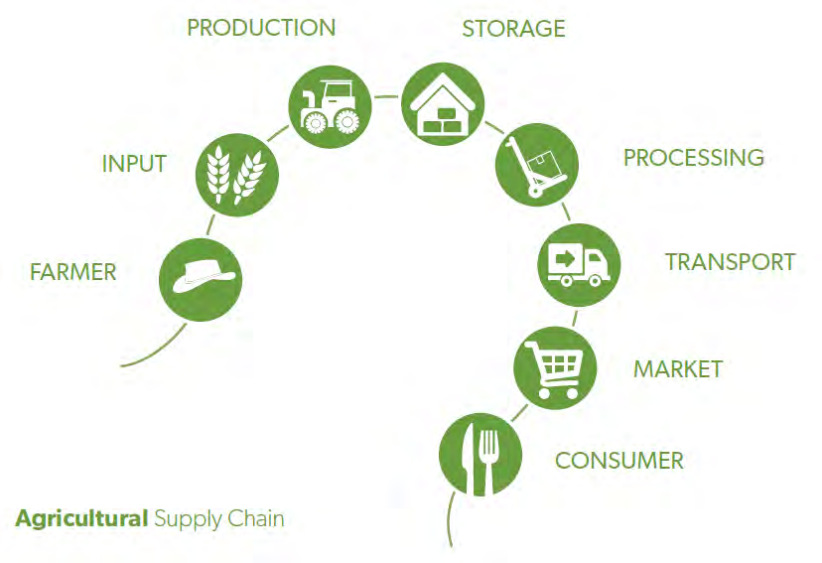


Figure 18: Agricultural supply chain
(Source: Riverina Murray Regional Plan, 2017)

Land and soil capability are key determinates in the agricultural quality of land. A Land and Soil Capability (LSC) map has been prepared for NSW as a whole. It provides a broad-scale, regional view as to the dominant LSC class present through the assessment of eight key soil and landscape limitations (water erosion, wind erosion, salinity, topsoil acidification, shallow soils/rockiness, soil structure decline, waterlogging and mass movement).

The mapping is based on an eight class system with values ranging between 1 and 8 which represent a decreasing capability of the land to sustain landuse. Class 1 represents land capable of sustaining most landuses including those that have a high impact on the soil (e.g., regular cultivation), whilst class 8 represents land that can only sustain very low impact landuses (e.g., nature conservation).

Land within the Murrumbidgee Council area ranges from Classes 3-6. The majority of the Council area is classified as Class 4 quality land, whilst areas of higher quality agricultural land (Class 3) are located around the central and southern portions of the local government area.

A description of these LSC classes is provided below:

- **Class 3:** Moderate limitations. Land capable of sustaining high impact land uses using more intensive, readily available and accepted management practices.
- **Class 4:** Moderate to severe limitations. Land generally not capable of sustaining high impact land uses unless using specialised management practices with high level of knowledge, expertise, inputs, investment and technology. Limitations are more easily managed for lower impact land uses (e.g. grazing)
- **Class 5:** Severe limitations. Land not capable of sustaining high impact land us es except where resources allow for highly specialised land management practices to overcome limitations (e.g. high value crops). Lower impact land uses (e.g. grazing) can be managed by readily available practices
- **Class 6:** Very severe limitations. Land incapable of sustaining many land use practices (e.g. cultivation, moderate to high intensity grazing and horticulture). Highly specialised practices can overcome some limitations for some high value products. Land often used for low intensity land us es (low intensity grazing).

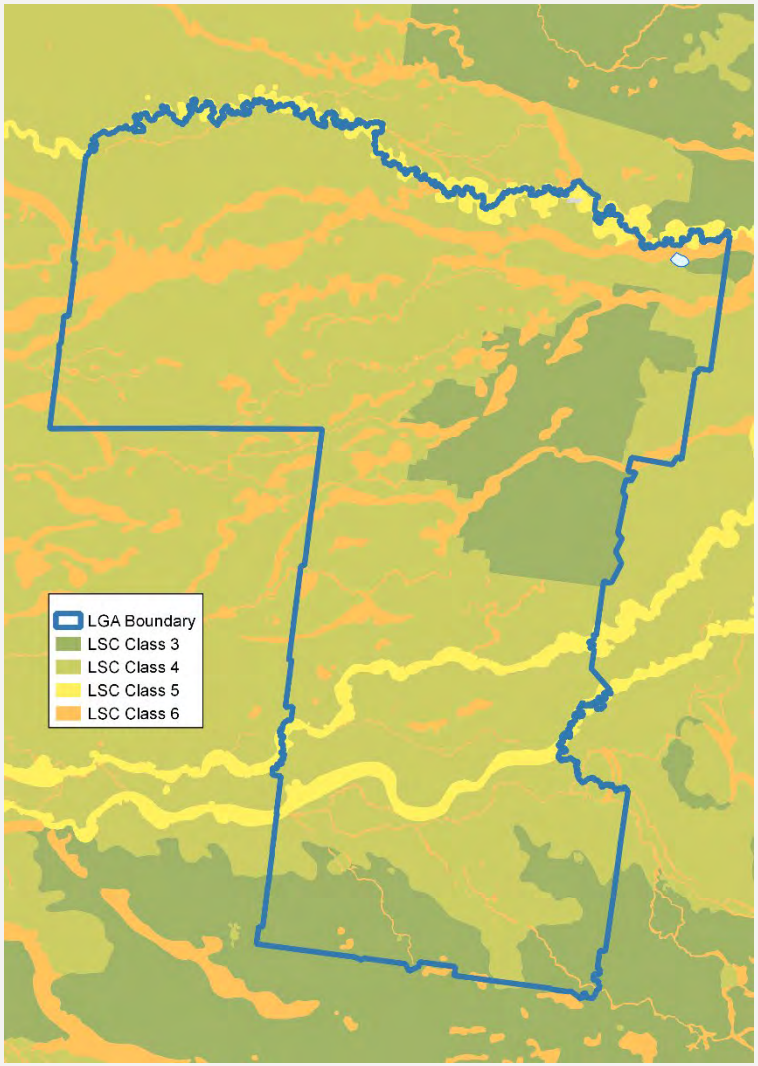


Figure 19: Land and Soil Capability Mapping
(Source: NSW SEED Map, 2021)

The NSW Government's 2017 Landuse Map captures how the landscape in NSW is being used for food production, forestry, nature conservation, infrastructure and urban development. In Murrumbidgee the three main land uses comprise grazing, dryland cropping and irrigated cropping.

Figure 13 illustrates that grazing is more prevalent in the southern and western portions of the Council area, whilst cropping, particularly irrigated cropping is more prevalent in the central portions around Coleambally due to its location within the Coleambally Irrigation Area.

This irrigation area is run by the Coleambally Irrigation Co-Operative Limited (CICL) and is Australia's fourth largest irrigation company. The irrigation scheme spans an area of approximately 457,000 hectares and supplies irrigation and drainage services to nearly 500 farms via gravity across 516 kilometres of supply channels and 711 kilometres of drainage channels.

The irrigation area delivers between 200,000 and 300,000 megalitres of water a year on farm.

The availability and reliability of water is important for ongoing agricultural operations. Water resource management is vested in all three tiers of government, so a cooperative and collaborative approach that involves all stakeholders is required.

Land use planning can play a key role in protecting the security of water supplies by appropriately locating, monitoring and managing development, and the impact of existing land uses. This is especially relevant in the Murrumbidgee and Coleambally irrigation areas, where significant investments have been made in irrigation networks and water storages.

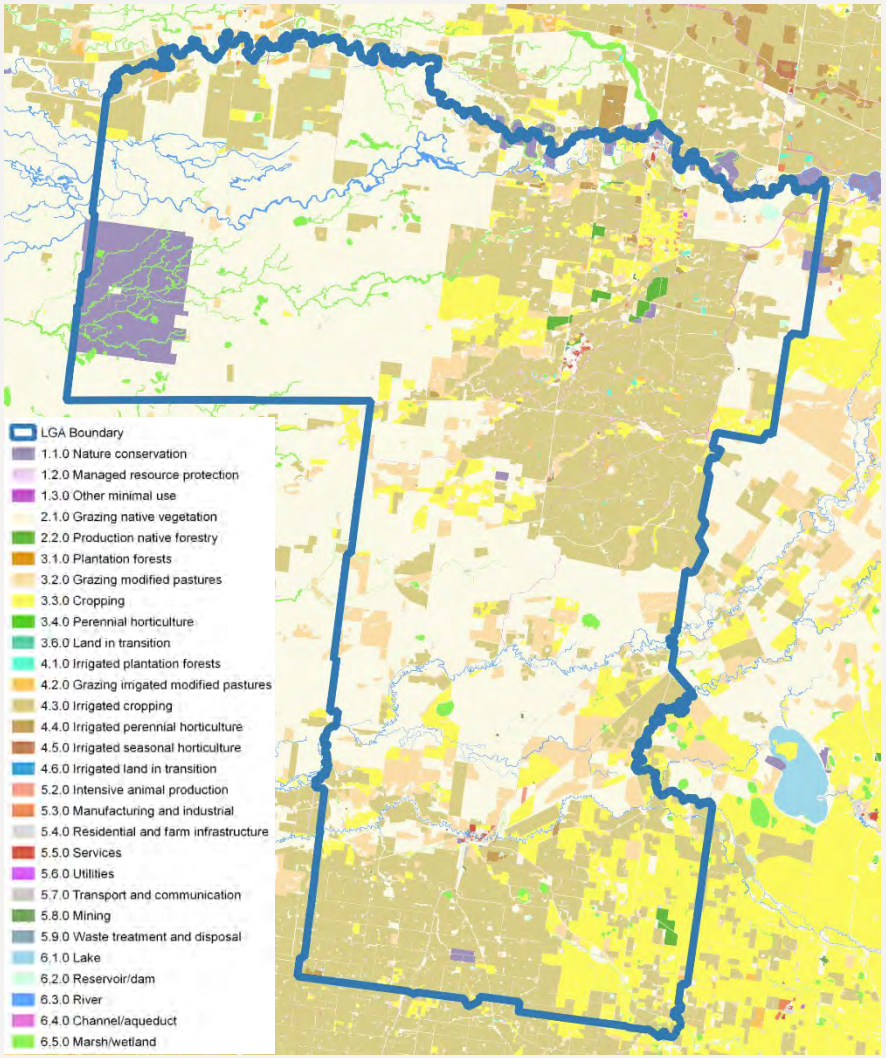


Figure 20: Land Use Plan, 2017)
(Source: NSW SEED Map, 2020)

Agricultural production has become more efficient over time through the emergence of new technologies and productivity enhancing machinery. Whilst this has improved the economic output and efficiency of these industries these changes have seen a decline in agriculture and the manufacturing sector's labour demand, which has consequential social and economic impacts.

During this time period, we have also seen a general trend towards larger farm sizes to achieve economies of scale to remain economically viable. Whilst this has generally had a positive impact on farm operations, it has created a challenge for young or emerging farmers accessing affordable land.

The changing nature of agriculture has also seen changes in farming practices, including a shift to more intensive production methods (e.g. feedlots, aquaculture), improved land and water management and the introduction of higher yielding plant and livestock varieties.

Whilst traditional agricultural operations such as grazing and cropping including sheep, cattle, corn, winter cereal, rice, poultry and egg production still remain the predominant agricultural activities, there has been a recent emergence of other alternative rural industries such as cotton and nuts (almonds). The growth of agricultural tourism has also been increasing over time.

Due to the significant role that agriculture plays in the Murrumbidgee Council area, there is a need to ensure that high quality agricultural land is protected ongoing.

In particular, the Murrumbidgee Council area has seen an increased interest in the renewable energy sector (solar, biomass), which has the potential to place pressures on traditional agricultural lands. Also, to a lesser degree, traditional agricultural areas are experiencing pressures from urban and rural residential growth, particularly at the fringes of the main townships.

Further discussion regarding the land use planning controls that currently apply to Council's rural areas are discussed in Section 3.4.

2.3.9. Tourism

The Murrumbidgee tourism profile shows that the Council area plays a daytrip function in the Riverina region. Over the last five years, around 56% of visitations to Murrumbidgee and surrounds was from day-trips.

Of the 75,265 people working in the Riverina, it is estimated that 4,390 jobs are supported by tourism, with 49 of those in the Murrumbidgee council area.

The tourism industry is the ninth most productive industry in Murrumbidgee, generating $4,404 million in 2016-2017.



Figure 21: Tourism Expenditure by Industry

The Murrumbidgee Council area has a number of key tourist attractions including the Murrumbidgee River, Altina Wildlife Park, Yarrow Park olive grove and winery, Ned Kelly Raid Trail, Murrumbidgee Valley Regional Park – Willbriggie and Oolambeyan National Park.

Given the natural and agricultural features of the area, there is an opportunity to grow 'eco-tourism', as well as agricultural tourism, which are currently restricted by land use planning controls.

Tourism within Murrumbidgee is also supported by a strong events scene which runs throughout the year including the Riverina Classic Catch and Release Fishing Competition in Darlington Point, Jerilderie Gold Cup, Darlington Point Spring Fair and Taste Coleambally.

2.3.10. Digital Connectivity

Digital communications and technology have become a fundamental enabler of business innovation and economic development. The emergence of the digital economy has increased the propensity for individuals and businesses to interact and trade with suppliers, partners and customers through communication technologies.

In recognition of the important role that digital connectivity provides, Murrumbidgee Council has applied and been successful in receiving a $1.2m grant under the Federal Government's Regional Connectivity Program to improve internet speeds and mobile phone coverage around the three main townships and surrounding areas.

This will deliver new coverage across 6,400sqkm, boosting internet and mobile data to over 3,000 residents and 430 businesses.

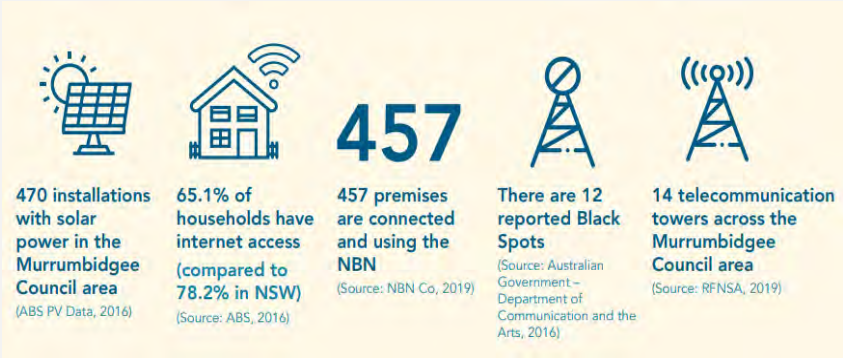


Figure 22: Digital Connectivity
(Source: Murrumbidgee Economic Development Strategy)

2.3.11. Strengths, Challenges and Opportunities

The *Murrumbidgee Economic Development Strategy* identifies a number of strengths, challenges and opportunities that will inform the land use planning decisions of Council. These are reproduced below.

Table 16: Strengths, Challenges and Opportunities

Strength	Benefit and Opportunity
Water and Irrigation System	• The Murrumbidgee River is a significant natural resource that enhances the attractiveness and lifestyle of the Council area and supports a range of agricultural, tourism and recreational activities. • Access to water and irrigation systems is a critical input for agricultural production. • Modernisation irrigation systems leads to effectively receiving and delivering water when and where it is needed.
Agriculture	• Extensive arable land available in Murrumbidgee Council, which can be used for agriculture. • Murrumbidgee Council area has developed strengths around agriculture, with opportunities for both irrigated and dry-land production. • Capitalising on its natural resources and irrigated assets, agriculture has become the primary driver of economic growth in Murrumbidgee Council. Agriculture is a highly productive industry in Murrumbidgee, generating $100.9 million in value add in 2017/18 (Source: NIER, 2018). Agriculture is an important source of export earnings for the Murrumbidgee economy. It exports 79.5% of its agricultural output in 2017/18 outside the Murrumbidgee Council boundaries (Source: NIER, 2018). Most went to the Australian market, but $44.5 million went to international markets. • The industry is even more important from an employment perspective, with Agriculture, Forestry and Fishing, making up over 40% of the employment in the area. Unfortunately, specialization comes at a cost – agriculture is highly exposed to adverse impacts such as drought, flooding, water security, commodity prices and policy changes. This industry is also being driven by productivity improvements which are leading to growth in production using less labour. • The increasing size of farms has led to the challenge of young (or emerging) farmers accessing affordable land. • Opportunity to support export capabilities and opportunities such as complementary manufacturing in corn, cotton and almonds.
Lifestyle	• The people who live in the area enjoy an enviable country lifestyle, high levels of personal security and social amenity and a good representation of services. • High levels of volunteerism and above average working hours contribute to engaged and committed communities. • Sporting infrastructure is excellent across a range of pursuits.
Transport links	• Newell Highway (major freight link between Melbourne and Sydney) and Sturt Highway (major freight between Adelaide and Sydney). With increased population in these cities in recent years, expanding market opportunities are available to the Murrumbidgee Council area. • Opportunity to support projects that improve connections and supply chain efficiencies.

Table 17: Issues and Challenges for Murrumbidgee Council

Issue	Challenge for Murrumbidgee Council
Water Security	• Water security and allocation is seminal to the future of Murrumbidgee townships, and to agricultural production. Council will need to partner with key water management stakeholders to pursue regional and catchment scale approaches to better manage our water resources. • Murray Darling Basin Plan – a Commonwealth Government initiative affecting four States. It aims to sustainably share the water in the system. However, it is an issue for Murrumbidgee Council agricultural industry. The ramifications are becoming more evident and are spread throughout the businesses and broader community as a whole.
Residential Land and Housing Shortages	• Residential land availability and affordable rental accommodation are an issue in parts of the Murrumbidgee Council area. This adversely impacts upon the capacity of businesses in the region to attract and retain workers. It also limits and the availability of housing for seasonal workers, particularly in Coleambally and Darlington Point. • For example there are currently only 5 properties for rent within the Murrumbidgee Council area and approximately 20 residential dwellings indicating a lack of supply of housing options. • Murrumbidgee Council is an agricultural based economy. The region has a high proportion of seasonal workers, who utilize short stay accommodation in the region during peak periods of agricultural activity, generally related to horticulture harvest/picking seasons.
Industrial land	• Lack of industrial land in parts of the Murrumbidgee Council area, which adversely impacts on the attractiveness of the Murrumbidgee Council area to prospective businesses and investors.
Population	• A shift in the size and structure of the population, including the outward migration of young people (20-24 years) as they leave in the region to study and/or seek employment. • Globally, from 2011 to 2016, 21% of people move every five years, but in Australia, the rate is 39%. • Liveability means different things to different people when attracting new residents.
Dependence on Agriculture	• A heavy reliance of agriculture means that the flow-on impacts of downturns is large., affecting most people in the Murrumbidgee Council community. • Murrumbidgee has relatively low mass and population. There is an increasing reliance on agricultural production which exposes the Community to external forces such as security of water assets, strong commodity prices and rising input costs. Economic diversity and transformation of the sector is needed.
Land Use Planning Constraints	• It was reported that Council planning regulations are not keeping pace with the changing needs of business and industry growth.
Barriers to Education and Skill Attainment	• Skills and educational attainment are challenges for the Murrumbidgee community. Low levels of education comparative to regional NSW is a challenge for planning social change and economic growth. It is noted that the Murrumbidgee Council area provides no tertiary or vocational training facilities with the closest facilities located in Griffith (TAFE), Wagga Wagga and Albury (Charles Sturt University). Poor internet access in the past has also limited remote learning opportunities.
Digital Connectivity	• Connectivity is complicated by low levels of digital enterprise in the small and medium sized businesses and visitor industry sectors.

2.3.12. Key Issues for Planning

Economy:

2.3.12.1 Retention of existing businesses to secure local employment and anchor the local economy.

2.3.12.2 Attract new businesses and industries to the Council area. In particular those industries that support or value-add to the agricultural sector and will provide local employment.

Commercial and Retail:

2.3.12.3 Make the town centres of Darlington Point, Coleambally and Jerilderie attractive places to visit for both residents and visitors.

2.3.12.4 Ensure a sufficient supply of commercial zoned land to provide opportunities for economic development.

2.3.12.5 Proximity of regional centres and the opportunities this creates for local businesses.

2.3.12.6 Commercial opportunities presented by the Murrumbidgee River (Darlington Point) and Billabong Creek (Jerilderie) to capitalise on the unique environment and natural asset.

2.3.12.7 Re-use of heritage buildings for commercial developments to allow them to be maintained and in the public realm.

Industrial:

2.3.12.8 Ensure a sufficient supply of industrial zoned and serviced land to provide opportunities for economic development.

2.3.12.9 Manage the impact of industrial areas on residential amenity and the need for separation.

Agriculture:

2.3.12.10 Protection of high-quality agricultural land for agriculture.

2.3.12.11 Changing agricultural practices and providing opportunities for alternatives.

2.3.12.12 Create a resilient agricultural sector by securing long-term water supply and developing strong partnerships within the agricultural sector.

2.3.12.13 Controlling minimum lot sizes for subdivision and the effects of subdivision in rural areas on agriculture.

2.3.12.14 Relationship between ‘hobby’ farmers and full time farmers and the conflicts that can occur between the two.

2.3.12.15 Intensive agriculture needs to be appropriately located and controlled to minimise any potential conflict.

2.3.12.16 Impacts of renewable energy industries on existing agricultural operations.

Tourism:

2.3.12.17 Tourist industry growth and opportunities this creates for the local economy.

2.3.12.18 Seasonal peaks in tourist activity and difficulties this presents for sustaining related businesses year round.

2.3.12.19 Suitable locations for large tourist and short term accommodation developments to ensure minimal environmental impacts.

2.3.12.20 Opportunities to grow eco-tourism and agricultural tourism (such as ‘artisan food and drink premises’ via the introduction of new LEP definitions and clauses consistent with recent changes to the Standard Instrument LEP.

2.4. Environment

Areas of analysis in this section include economic output and employment base, agriculture, industrial activities, commercial activities and retail hierarchy, tourism, local/ regional development opportunities, threats and opportunities as well as implications and key issues for planning.

2.4.1. Vegetation

The Murrumbidgee Local Government Area lies in the Riverina IBRA bioregion and both the Murrumbidgee and Murray Fans IBRA subregions.

Vegetation within the northern portion of the Council area includes River red gum and river cooba on channels, Black box, lignum and old man saltbush on floodplains, Myall and old man saltbush with other saltbush and grasses formerly widespread on backplains, as well as White cypress pine on dunes.

Similarly, vegetation in the southern portions of the Council area include extensive river red gum forests with river cooba on channels and low floodplains, Yellow Box and black box with saltbush on high floodplains and terraces, as well as White cypress pines on dunes, sandy levees and lunettes.

Much of this vegetation has however been removed since pre-European settlements through past agricultural practices. This has created patches of remnant vegetation of semi-arid woodlands around which most of the original vegetation has been removed.

Remnant vegetation provides crucial habitat for the Council area's wildlife, including several threatened species. The remaining vegetation also provides benefits in relation to prevention and amelioration of dry land salinity, reducing soil loss and the provision of shade and shelter for stock or adjoining crops.

These patches of remnant vegetation primarily exist along rivers, including forested wetlands and Riverina wetlands comprising River Red Gum (Eucalyptus camaldulensis) and Black Box (Eucalyptus largiflorens). Adjacent to the river there are several billabongs providing further habitat for wildlife.

The Murrumbidgee Council area is also home to two (2) National Parks including the Murrumbidgee Valley National Park and Oolambeyan National Park. The Council area also includes a number of state forests, nature reserves and regional parklands including the Palmer State Forest, Bretts State Forest, Boona State Forest, Ugobit State Forest, South west woodland nature reserve, Jerilderie nature reserve and Murrumbidgee Valley Regional Park.

In total, these areas comprise an area of 688 hectares of land.

See Biodiversity Constraints Analysis prepared by AREA Environmental and Heritage Consultants for further details.



Oolambeyan National Park

2.4.2. Threatened Species

The Murrumbidgee Council area contains 68 listed threatened species of flora and fauna at both the State and Federal level.

The more prominent threatened species contained within Murrumbidgee include: Southern Bell Frog, Glossy Ibis, White-bellied Sea Eagle, Brolga, Plains Wanderer, Superb Parrot, Brown Treecreeper (eastern subspecies), grey-crowned Babbler (eastern subspecies), Turnip Copperburr, Red Darling Pea, Silky Swainson-pea and the Sand-hill Spider Orchid. The majority of species listed within the Council area are avian (bird) and flora species.

These species are listed under the NSW *Biodiversity Conservation Act 2016* and/or the Federal *Environment Protection and Biodiversity Conservation Act 1999.*

Furthermore, The Council area contains a number of Threatened Ecological Communities including Grassy Box Gum Woodland.

Notwithstanding the above, it is recommended that the terrestrial biodiversity map of the LEP be amended as it applies to the three main townships. This is in recognition that a portion of this mapping applies to urban land that has been developed and contains no areas of environmental significance

2.4.3. Soils

The dominate soil types within the Murrumbidgee Council area are red brown earths, grey, brown and red clays and siliceous sands. Alluvial soils (medium texture, loams and clay loams) are also present in the northern portion of the Council area adjacent to the Murrumbidgee River. These soils are also subject to wind erosion.

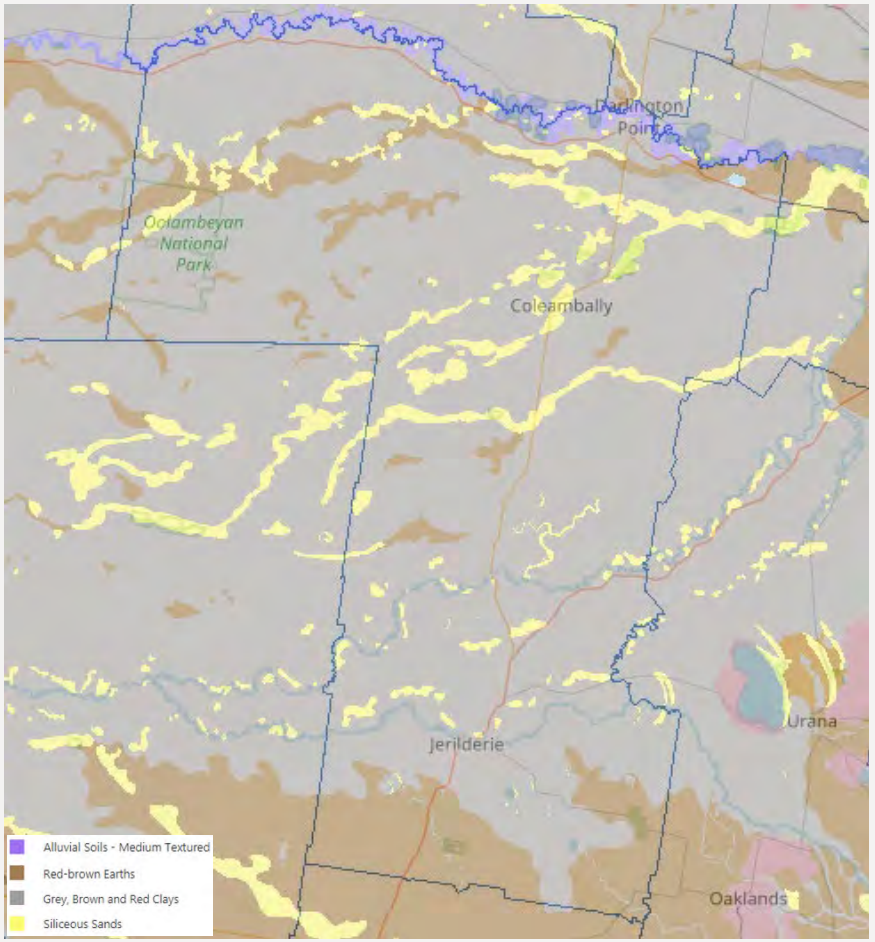


Figure 23: Soil Type Map
(Source: NSW SEED Map, 2021)

2.4.4. Topography

The general topography of the Murrumbidgee Council area is general flat with elevation ranging from approximately 105 to 130 metres.

Therefore, steep land is not considered to be a constraining issue for development.

2.4.5. Waterways and Catchments

The Murrumbidgee Council area contains two key waterways, being the Murrumbidgee River located in the northern portion of the Council area and Billabong Creek located in the southern portion, which are both identified as floodplain wetlands.

Billabong Creek is believed to be the World's longest creek at approximately 320 kilometres.

The Council area is one of a number of LGA's located within the most important catchment and productive agricultural region of Australia, being the Murray Darling Basin. Development within these catchments can have a significant impact on downstream users and the surrounding environment. These land use impacts must be properly planned for and managed to protect water quality.

Notwithstanding the above, it is recommended that the Wetlands Map of the LEP be amended as it relates to Jerilderie. For example, the Jerilderie Showground is identified as a wetland on this map.

The groundwater conditions in Murrumbidgee are unknown with the exception of information obtained relating to site specific proposals.

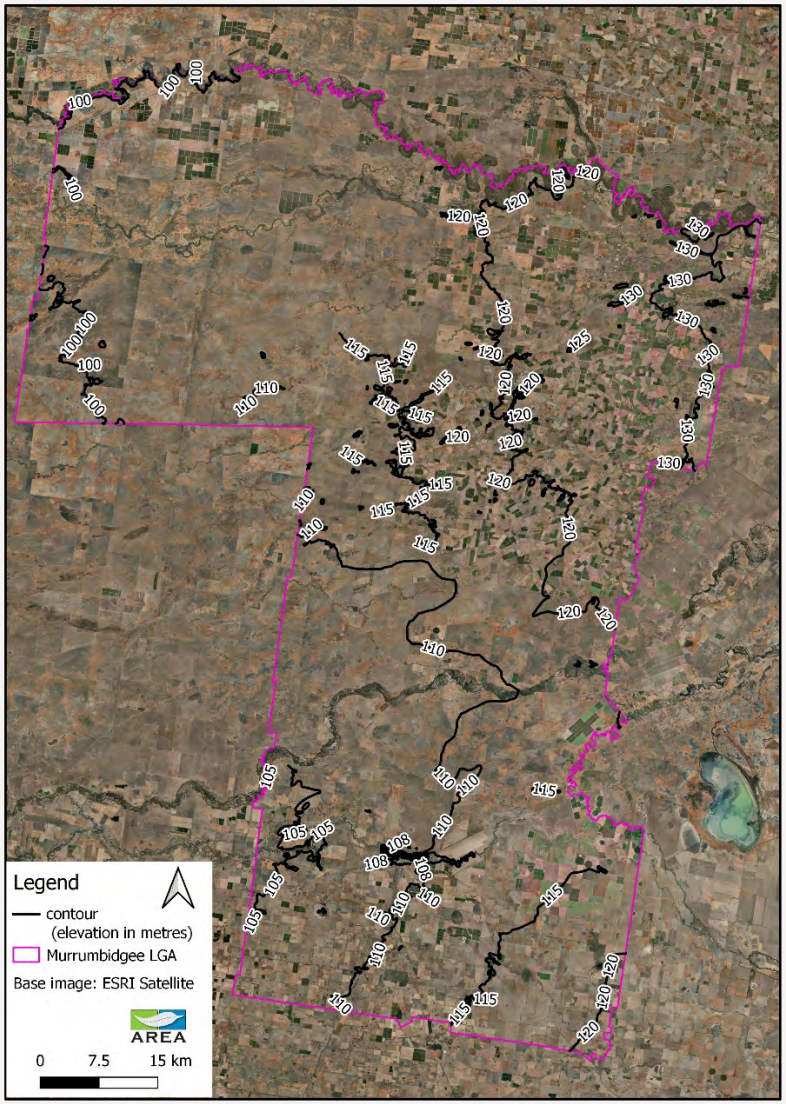


Figure 24: Topography Map
(Source: Biodiversity Constraints Analysis, Area Consulting, 2021)

2.4.6. Contaminated Land

Matters regarding land contamination are an important consideration in the land use planning process and can occur from previous land use activities including industrial or agricultural operations. Careful consideration of land contamination is required to ensure that the level of exposure to harmful substances is restricted to an acceptable level.

The Murrumbidgee Council area has only one (1) NSW Environment Protection Authority (EPA) listed site, being the former Mobil Depot in Coleambally.

Nonetheless, it is expected that there are a number of other unregistered sites located across the Council area that may be subject to land contamination given their previous site activities. For this reason, it is recommended that Council prepare a contaminated land/unhealthy building land register to identify these sites.

Consideration of land contamination is required as part of the planning process including the rezoning of land and the determination of Development Applications in accordance with the requirements of State Environmental Planning Policy No. 55 – Remediation of Land.

Where necessary, land may need to be remediated in order for it to be further developed.

2.4.7. Air

Generally, air quality within the Council area is of high quality. It is likely to be influenced by emissions from vehicles, dust from vehicles traveling on unsealed roads, emissions from industry, dust from agricultural activities and natural hydrocarbons and particulate emissions from vegetation. Smoke from stubble burning of agricultural paddocks and the use of solid fuel heaters also contributes to the particulate count in air quality. Climatic conditions, particularly prevailing winds also play a part in air quality.

There are no industrial activities within the Council area that are having an adverse impact on air quality.

2.4.8. Noise

Noise pollution can be defined as unwanted noise and does not need to be determined by decibel level alone. Noise can be an unpleasant nuisance and the degree to which this has an impact on the population is an indicator of the pressure on individual's quality of life.

Noise pollution can come from various sources including industry, agriculture, road traffic, airports and household music or pets. Generally, noise issues within the Council area are restricted to a few isolated instances of issues like household music or pets, although there have been some reports of residents having noise issues associated with certain industries.

Land use planning needs to consider the issue of noise and consider separation of activities which are incompatible due to noise levels. For example, industrial areas may be separated from residential areas by light industrial, recreational facilitates and/or retail activities.

2.4.9. Salinity

Dryland salinity is a key natural resource management issue and needs to be addressed to ensure productive and sustainable land use. Australia's past land uses-including agricultural development have significantly changed Australia's landscapes and natural systems. The changes have affected the soil, water and nutrient balances resulting in land degradation which affects the wider community.

Changes to the landscape can create widespread and rapidly growing problems of dryland salinity, which can negatively impact both farmers, as well as regional and urban infrastructure, such as water supply, roads and buildings are now also at risk.

Notwithstanding, salinity is not regarded as an issue for future urban development in the Council area.

2.4.10. Bushfire

According to the NSW Rural Fire Service (RFS), a bushfire prone area is land that can support a bush fire or is likely to be subject to bush fire attack.

In general, a bush fire prone area is a mapped area that identifies the vegetation types and associated buffer zones. These are generally areas close to bush fire hazards such as forests, woodlands or grasslands.

Bushfire mapping is classified into three different categories:

- ***Vegetation Category 1*** being land at highest bushfire risk.
- ***Vegetation Category 2*** being land at lowest bushfire risk.
- ***Vegetation Category 3*** being land at medium bushfire risk.

In addition, a bushfire vegetation buffer is applied around each patch of identified bushfire hazard. A 100 metre buffer applies around Vegetation Category 1 land, whilst a 30 metre buffer applies around both Vegetation Category 2 and Vegetation Category 3 land.

Examples of bushfire prone land within Murrumbidgee include the large areas of remnant vegetation contained within the Council area including the Murrumbidgee Valley Regional Park, as well as to parts of Darlington Point and Coleambally (see Section 3 for further details). No bushfire mapping applies to Jerilderie.

Council is currently in discussions with the NSW RFS to update this mapping to reflect current day bushfire hazards and policy changes.

Areas identified as being bushfire prone are subject to development and planning controls designed to improve the survivability of developments that are exposed to a bush fire hazard.

Developments, such as residential dwellings in a bush fire prone area need to meet the requirements of *Planning for Bush Fire Protection, Guidelines 2019*. This guideline requires certain bush fire protection measures to be included to render a building less susceptible to damage or destruction from bush fire.

Consideration of bushfire matters is also required in relation to residential subdivisions and Special Fire Protection Purposes such as schools, childcare centres, nursing homes, hospitals etc, which requires approval from the NSW RFS. This is to ensure that a suitable level of protection is provided for the more vulnerable people who use these facilities.

2.4.11. Flooding

Parts of the Murrumbidgee Council area, namely adjoining the Murrumbidgee River, Billabong and Wangamong Creeks are subject to inundation from flooding.

In response, Council have prepared the Darlington Point and Jerilderie flood studies to investigate the impacts of flooding within these main townships. Outside of these areas, flood information in the Murrumbidgee Council area is largely anecdotal and based on observations of actual events rather than any catchment modelling.

The above flood studies have been prepared in accordance with the NSW Floodplain Development Manual to assess options for minimising the danger to life and property during floods.

The Probable Maximum Flood (PMF) is the largest flood that could physically occur and although improbable, is theoretically possible. A number of historical floods in Australia have approached the magnitude of a PMF and previous flood studies reveal that a significant proportion of Darlington Point and Jerilderie would be inundated in a PMF event.

Notwithstanding the above and in accordance with the recommendations of the NSW Floodplain Development Manual, Councils are only required to consider the 1 in 100 year flood level as being an acceptable level of risk. Development below the 1 in 100 year flood event is generally not permitted.

Both Darlington Point and Jerilderie are subject to the 1 in 100 year flood event as outlined in Section 3.

2.4.12. Climate Change

According to the Murray Murrumbidgee Climate Change Snapshot:

> *Based on long-term (1910–2011) observations, temperatures in the Murray Murrumbidgee Region have been increasing since about 1950, with higher temperatures experienced in recent decades.*
>
> *The region is projected to continue to warm during the near future (2020–2039) and far future (2060–2079), compared to recent years (1990–2009). The warming is projected to be on average about 0.6°C in the near future, increasing to about 1.9°C in the far future. The number of high temperature days is projected to increase, with fewer potential frost risk nights anticipated.*
>
> *The warming trend projected for the region is large compared to natural variability in temperature and is of a similar order to the rate of warming projected for other regions of NSW.*
>
> *The region currently experiences considerable rainfall variability across the region and from year-to-year and this variability is also reflected in the projections. However, all of the models agree that spring rainfall will decrease in the future.*

Consequently, Council's land use planning decisions will need to have regard to the future impacts of climate change, particularly the greater occurrence of natural hazards to ensure that development is appropriately located to avoid harm from these hazards.

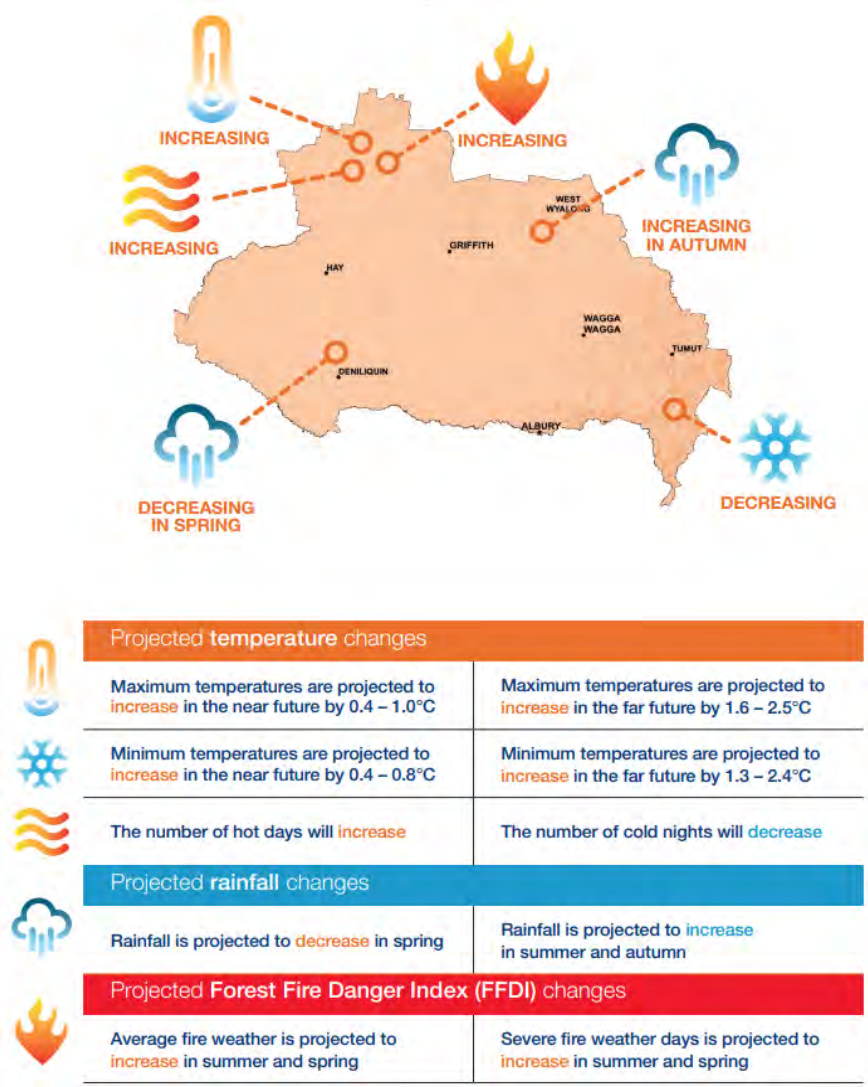


Figure 25: Murray Murrumbidgee Climate change snapshot
(Source: NSW Office of Environment and Heritage)

2.4.13. Heritage

Heritage, culture, history and tradition are fundamental aspects of the identity of a place, and can include Aboriginal, non-Aboriginal, natural, archaeological, movable, maritime and intangible cultural heritage. These aspects define the local character of a place and help create and maintain a sense of meaning for communities.

Aboriginal Heritage

The original inhabitants of the Murrumbidgee Council area were the Wiradjuri people.

Areas of significance to Aboriginal people can generally be expected to occur across the Council area. This includes both traditional and contemporary associations of Aboriginal people with the environment as well as physical sites (i.e. that contain archaeological evidence).

Aboriginal heritage exists as tangible and intangible evidence. The former mainly comprises archaeological sites and physical objects or artefacts, whose locations can be broadly predicted by a combination of landform variables e.g. shell middens and earth mounds tend to occur along rivers, artefact scatters representing ancient campsites tend to occur on flat, well drained ground near permanent water sources, whilst burials and cemeteries tend to occur in sand hills near watercourses. Examples of intangible heritage includes memories or stories and ‘ways of doing’, which include language and ceremonies.

The regional archaeological context indicates a strong association between evidence of Aboriginal occupation and reliable water sources. This is typical of the archaeological record broadly, but there are some nuances in the Murrumbidgee region. Recorded sites are more likely near the junctions of major waterways with other waterways. They are also likely near ephemeral water courses, including relict water courses, drainage lines and depressions in the landscape.

There are three (3) identified archaeological sites within the Murrumbidgee Council area including the Warrangesda Aboriginal Mission and Station, which is state-listed.

The NSW Aboriginal Heritage Information Management System (AHIMS) is the main source of data for information on recorded sites in the Council area, as well as providing the basis for predicting the presence of sites in unsurveyed areas. There are a number of recorded Aboriginal sites within the Council area, however this is likely to be a small sample of the actual number of sites contained within the council boundary.

See Section 3 of this report and the Aboriginal Cultural Heritage Review prepared by AREA Environmental and Heritage Consultants for further details.

Non-Aboriginal Heritage

The Murrumbidgee Council area contains 23 non-Aboriginal heritage-listed properties as outlined within Schedule 5 of the Jerilderie Local Environmental 2012 and the Murrumbidgee Local Environmental Plan 2013. All of these items are of local heritage significance with the exception of the Jerilderie Railway station Group, which is state-listed.

In addition, a number of archaeological sites are listed as local heritage items and the Jerilderie Main Street is also identified as a local heritage conservation area.

A Heritage Review Inventory Report has been prepared by Noel Thomson Architecture in support of the Land Use Plan. The purpose of this report was to review the current heritage listings and recommend any deletions and/or additions to this list.

See Section 3 of this report and the Heritage Review Inventory Report for further details. A map showing identified heritage sites is also provided in Section 3 as it relates to the main townships.

2.4.14. Biosecurity

Recent changes have taken place with the introduction of the *Biosecurity Act 2015* which provides a framework for the prevention, elimination and minimisation of biosecurity risks, which are placing an impact on biodiversity.

Some of the key priority weeds found in the local area include: Spiny Burr Grass, Boxthorn, St John's Wort and Alligator weed. Eradication of these species continues to be vigorously supported by Council and the community and Council continues to slash and spray road shoulders to help with weeds, and also for reduction of fire hazards within the road network.

2.4.15. Key Issues for Planning

Biodiversity & Threatened Species:

2.4.15.1 Ensure that environmentally sensitive areas are identified and protected from development.

2.4.15.2 Require development proposals to consider the environmental impacts of vegetation removal in accordance with local and state government legislation.

2.4.15.3 Review the Terrestrial Biodiversity Map of the three townships and Wetlands Map for Jerilderie to better reflect environmental conditions.

2.4.15.4 Minimise development impacts on the Murrumbidgee River and Billabong Creek and their environs.

Climate Change and Natural Hazards:

2.4.15.5 Adopt the recommendations of the *Darlington Point Flood Risk Management Study and Plan* including the introduction of a Flood Planning Map for the township, as well as DCP controls.

2.4.15.6 Prepare an amended Bushfire Prone Land map in association with the NSW RFS.

2.4.15.7 Require new development proposals to consider the provisions of *Planning for Bushfire Protection Guidelines 2019*.

2.4.15.8 Consider matters regarding land contamination as part of the development application and rezoning process having regard to the requirements of *State Environmental Planning Policy No. 55 – Remediation of Land*.

Heritage:

2.4.15.9 Implement the recommendations of the *Murrumbidgee Land Use Plan - Aboriginal Cultural Heritage Review*.

2.4.15.10 Require development proposal to consider impacts on matters of Aboriginal Cultural Heritage in accordance with the recommendations of the Aboriginal Cultural Heritage Review and relevant local and state government legislation.

2.4.15.11 Amend Schedule 5 and the Heritage maps of the LEP consistent with the recommendations of the *Heritage Review Inventory Report*.

Environmental Impacts of Development:

2.4.15.12 Ensure that due consideration is given the environmental and off-site amenity impacts of development including noise, air quality and odours.

2.5. Infrastructure

Infrastructure underpins economic activity, growth and development and is fundamental to a prosperous economy. It includes transport infrastructure, power, water, sewerage, gas, electricity, drainage and telecommunications.

Generally, the three townships are well serviced with reticulated infrastructure, whilst the rural areas rely upon on-site infrastructure. Sewerage and water capacity are the main challenges facing the three major townships, as well as the cost and sustainability of maintaining and upgrading infrastructure.

2.5.1. Transport

Local and regional road network

Transportation within the Murrumbidgee Council area is predominately by road. According to the NSW Office of Local Government, the Council area has 1,715.10 kilometres of roads.

The region is strategically located with the state classified Kidman Way, Newell and Sturt Highways passing through the area representing major transport corridors for the Riverina area.

The other main regional roads within Murrumbidgee are:

- Oaklands Road.
- Conargo Road.
- Morundah Road/Main Canal Road/Yamma Road.
- Berrigan/Oaklands Road.
- Urana Road.
- Whitton Road.

In addition, the area also includes a number of local and rural roads. The majority of local roads within the main townships are sealed, however there are a number of rural roads that remain unsealed, but are maintained in a generally good standard as part of Council's scheduled grading and re-sheeting works. The Murrumbidgee area also contains 19 council owned bridges, which Council is responsible for maintaining.

Public transport in Murrumbidgee is consistent with most other regional and rural towns and is generally limited to a daily school bus and coach service. A community transport service does however operate within the townships for the elderly.

Concern however has been raised with heavy vehicle traffic utilising Kidman Way that passes through the main street of Darlington Point. Traffic data counts indicate that the Kidman Way accommodates approximately 1,000 vehicles per day with about 25% of these being heavy vehicles. This in turn is creating amenity and pedestrian safety issues.

Accessibility within the townships is generally good with a number of constructed on and off road shared pedestrian and bicycle paths. Council has prepared a number of strategic plans and policies that seek to expand this footpath and bicycle network.

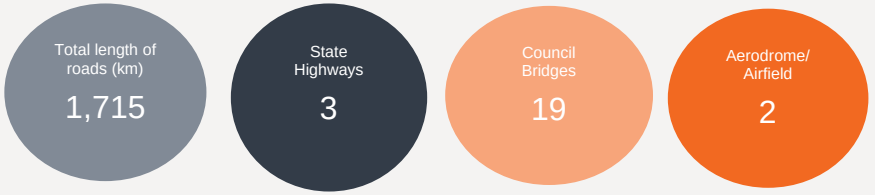


Figure 26: Transport and road infrastructure

Rail Network

There are no operational railway lines within the Murrumbidgee Council area. A former railway line exists in Jerilderie, however this line is not active. The former state heritage-listed Jerilderie Railway Station still exists today but is currently vacant.

Regional Air Services

There are no commercial passenger airports contained within the Murrumbidgee Council area with the closest facilities being Griffith Airport and Narrandera Regional Airport. Other commercial passenger air services located within proximity to Murrumbidgee are located at Wagga Wagga and Albury.

Jerilderie is however serviced via an aerodrome, which contains a sealed airstrip and associated building. This facility is currently leased by an agricultural company and primarily used for agricultural work. Similarly, Coleambally also has an airstrip, which is used for agricultural purposes.

Other surrounding airfields and aerodromes are located at Berrigan and Tocumwal, which are also primarily used for agricultural purposes.

Freight and Logistics

The Council area is ideally located between Adelaide, Sydney and Melbourne. Specifically, the Newell Highway provides the major freight link between Melbourne and Sydney and the Sturt Highway, which provides the major freight link between Adelaide and Sydney. Similarly, a further opportunity exists to improve freight and logistics in the area from the establishment of the Inland Rail network.

Given this location, there are more than a dozen freight and transport services that operate out of Darlington Point, Coleambally and Jerilderie and its surrounds. Many of these freight businesses are focused on rural and manufacturing industries.

An opportunity therefore exists to capitalise on the strategic location of the Council area for transport and logistics services. Council has previously identified an opportunity for the creation of a transport hub or interchange terminal at the junction of the Sturt Highway and Kidman Way (Waddi).

The Murrumbidgee region is also within comfortable travelling distance by road from regional centres such as Griffith, Wagga Wagga, Corowa and Albury-Wodonga.

Transport Services

The Murrumbidgee Council area has some (although limited). Public bus services that operate throughout the area (Monday to Friday), which is mainly limited to a school bus service. V-Line operate coach services out of the three main townships to Melbourne and Sydney. There are also private bus and coach services for charter, as well as local taxi services in Griffith, Leeton and Narrandera.

A community transport service for the aged and disabled is available to each of the townships and provides transport to surrounding larger regional centres several times a week, which is supported by community drivers. In addition, Cyprusview in Colemabally and Valmar Support Services in Jerilderie offer similar services.

A community car is also available for use and is run by the Berrigan and District Home and Community Support Services.

2.5.2. Water

Council in association with the NSW Public Works Advisory is in the process of preparing an Issues Paper to the Integrated Water Cycle Management Strategy (IWCMS), which will identify current and future capacity issues and upgrade requirements.

The outcomes of this Paper will inform further recommendations to the IWCMS and the conclusions of this Issues Paper are discussed below.

A reticulated water supply scheme is available to each of the townships, with each town currently operating its own water treatment plant. Water supply for Darlington Point and Coleambally is drawn from bores. Jerilderie's town water supply comes from Billabong Creek, which also provides non-potable water through dual reticulation. The average water usage within the townships is 2 megalitres per day.

Water supply within each of the main townships is via a reticulated/ potable water supply system, which is serviced by individual water filtration plants. Each of these systems have capacity for some additional growth, however Council has identified the need to undertake a number of maintenance and upgrade works to each of these systems, to ensure an appropriate Level of Service (LoS).

Outside of the main township, the rural areas are reliant upon on on-site capture and collection via the use of water tanks or the carting in of water for stock and domestic purposes.

Large irrigation channels also run throughout the Council area, which service the rural industries in Murrumbidgee. These systems are privately owned and/or run by irrigation schemes.

Further details regarding water supply as they relate to each township is discussed in Section 3.

2.5.3. Sewerage

As outlined above, Council in association with the NSW Public Works Advisory is in the process of preparing an Issues Paper to the IWCMS, which will identify current and future capacity constraints.

A reticulated sewerage scheme is available to each of the townships, with each town currently operating its own wastewater treatment plant. Each of these facilities contain holding and evaporation ponds and are subject to an EPA licence. These systems are also generally centrally located within each of the townships due to the relatively flat topography of the area.

There have been no recent complaints regarding any of Council's sewerage treatment plants, however concern has been raised with regards to the location of the Darlington Point facility, which may hamper opportunities for future growth due to its central location immediately adjacent to existing residential dwellings. This facility also has capacity issues and is located on flood prone land.

Sewerage disposal outside of the main townships is via on-site effluent disposal as per council's 'On-Site Sewage Management Plan'.

Further details regarding sewerage supply as they relate to each township is discussed in Section 3.

2.5.4. Drainage

Drainage within the Murrumbidgee Council area is comprised of constructed stormwater drainage and rural drainage. Specifically, each of the main townships are connected to a Council drainage system (pit and pipe) or directed to roadside table drains or constructed stormwater drainage areas, such as Lake Jerilderie.

Drainage within the rural areas is not formalised and comprises overland flow and stormwater run-off, which is directed into local drainage lines and downstream waterways.

2.5.5. Gas

The Murrumbidgee Council area does not have access to a reticulated gas supply with gas in both the rural areas and three townships serviced by a bottled gas supply.

2.5.6. Electricity

Electrical supply is available to the Murrumbidgee Council area, which is provided and maintained by Essential Energy. This system services both the resident population and large-scale industries operating within the area.

The NSW Department of Planning, Infrastructure and Environment has identified that the region has significant potential for renewable energy industries, with vast open spaces and a strategic advantage in terms of location.

More specifically, TransGrid's *NSW Connection Opportunities* report identified Darlington Point and Griffith as two locations with capacity for renewable energy generation. In response, Council has seen a recent increase in enquiries and development applications in renewable energy production and biomass industries with large-scale solar farms constructed in Coleambally (150MW) and Darlington Point.

Consideration will be required to balance the competing needs for large scale renewable energy production facilities within the Council area and the impacts that this may have on traditional agricultural lands including the loss of productive farmland and potential land use conflicts.

Consideration is also required as to the social and economic impacts of these industries during construction and the pressures this may place on Council's infrastructure, as well as local residents and businesses, including accommodation venues.

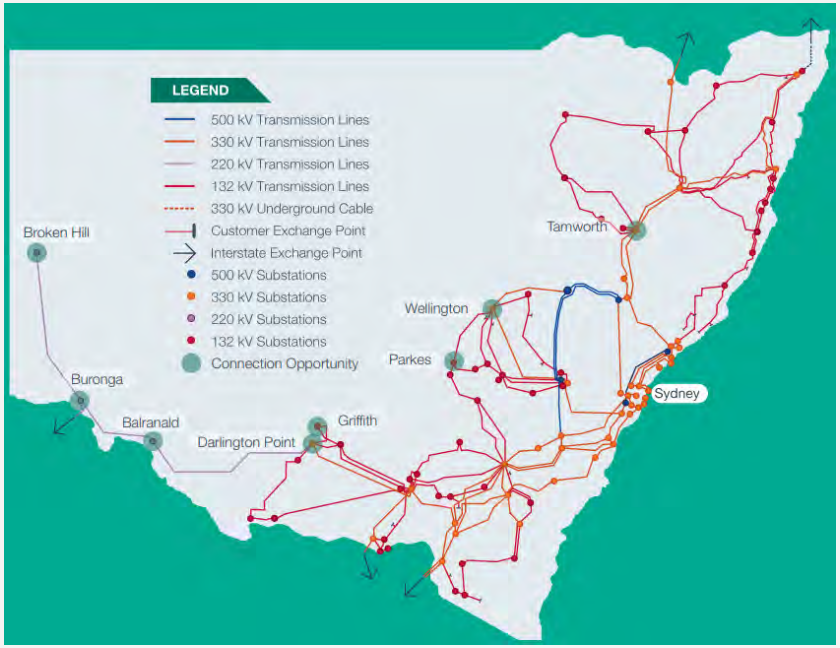


Figure 27: Transgrid Electrical Supply Map
(Source: Transgrid Connection Opportunities, 2016)

To help offset the impacts of large-scale renewable energy works, it is recommended that Council include a condition on any subsequent approval requiring the payment of a developer contribution to help contribute towards the cost of maintaining infrastructure.

For those projects that are state-significant and determined by the Minister for Planning, it is recommended that a developer contribution be secured via a Voluntary Planning Agreement.

2.5.7. Telecommunications

Telstra advises that it maintains the existing telecommunications network throughout the Council area, which is provided via 14 telecommunication towers.

Furthermore, the area is serviced via a high speed fixed wireless broadband network, which is provided by NBN Co and provides connection for 457 premises.

2.5.8. Waste Management

Murrumbidgee Council operates three waste disposal sites in each of the townships. An open pit method of disposal is used with fencing provided to control access. The sites are operated on scheduled opening hours under supervision and closed at all other times unless access is arranged.

Council residents living in each of the three towns are provided with a weekly garbage collection service, utilising 240L garbage bins. Darlington Point and Coleambally also have a fortnightly recycling collection service.

Murrumbidgee Council participates in the RAMJO Waste Management Group to develop regional waste strategies and continues to operate the DrumMuster programme for clean, empty farm chemical containers. In addition, Council is involved in the mobile muster and ink cartridge recycling programs.

No container deposit facilities have been made available in the Council area since the Container Deposit scheme was commenced in NSW in late 2017.

2.5.9. Key Issues for Planning

Infrastructure:

2.5.9.1 Finalise and adopt the recommended actions of the Integrated Water Cycle Management Strategy.

2.5.9.2 Capacity of existing infrastructure and the need to be able to meet the growing demand created by new development.

2.5.9.3 Township growth and the need to consider what areas are best suited for efficient infrastructure expansion.

2.5.9.4 Cost of road construction and maintenance creating challenges for the large number of roads which Council is responsible for managing.

2.5.9.5 Access along main roads to ensure safety.

2.5.9.6 Heavy vehicles and the impact on road surfaces and amenity.

2.5.9.7 Use of main streets by heavy vehicles and opportunities for alternative routes and bypasses within the larger towns.

2.5.9.8 Reliance on motor vehicles for transport and a need to encourage alternative travel methods such as walking and cycling.

2.5.9.9 Lack of public transport due to low viability from small population bases and large distances involved.

2.5.9.10 Potential conflicts between renewable energy production and traditional agricultural activities.

2.5.9.11 Availability and access to high quality telecommunications and internet services.

2.5.9.12 Ensure that new developments make an appropriate contribution towards the provision or augmentation of infrastructure consistent with Council's adopted Infrastructure Contributions Plans.

2.5.9.13 Ensure that development occurs in a staged and logical sequence to minimise pressures on infrastructure.

3. Land Use Plan

Darlington Point



3.1. Darlington Point

Darlington Point is a rural town situated on the Murrumbidgee River in the northern part of the Murrumbidgee Council area. The town is located approximately 30 kilometres south of Griffith, 30 Kilometres north of Coleambally and 50 kilometres west of Leeton.

The main township is located on the intersection of the Sturt Highway and Kidman Way and covers an area of approximately 10.5 square kilometres.

The main urban areas are zoned RU5 Village under the LEP to provide for the residential and commercial needs of the township. Other zones within the town include the R5 Large Lot Residential, RE1 Public Recreation, E1 National Parks and Nature Reserves, E3 Environmental Management, SP2 Infrastructure, W1 Natural Waterways and W2 Recreational Waterways Zones.

3.1.1. Social and Community

Population

Darlington Point had a total population of 1,162 at the 2016 Census, which accounted for 30 percent of the total Murrumbidgee Council area.

Population and demographic trends within Darlington Point are consistent with the broader Murrumbidgee Council area as outlined in Section 2.2.

Table 18: Darlington Point Population Projections 2016-2041

	Population (2016)	Additional Population (persons)	Annual change (persons)	Population (2041)
DPIE Projection (Common Growth)	1162	-47	-1.88	1,115
Council Projection (High Growth)	1162	150	6	1,312

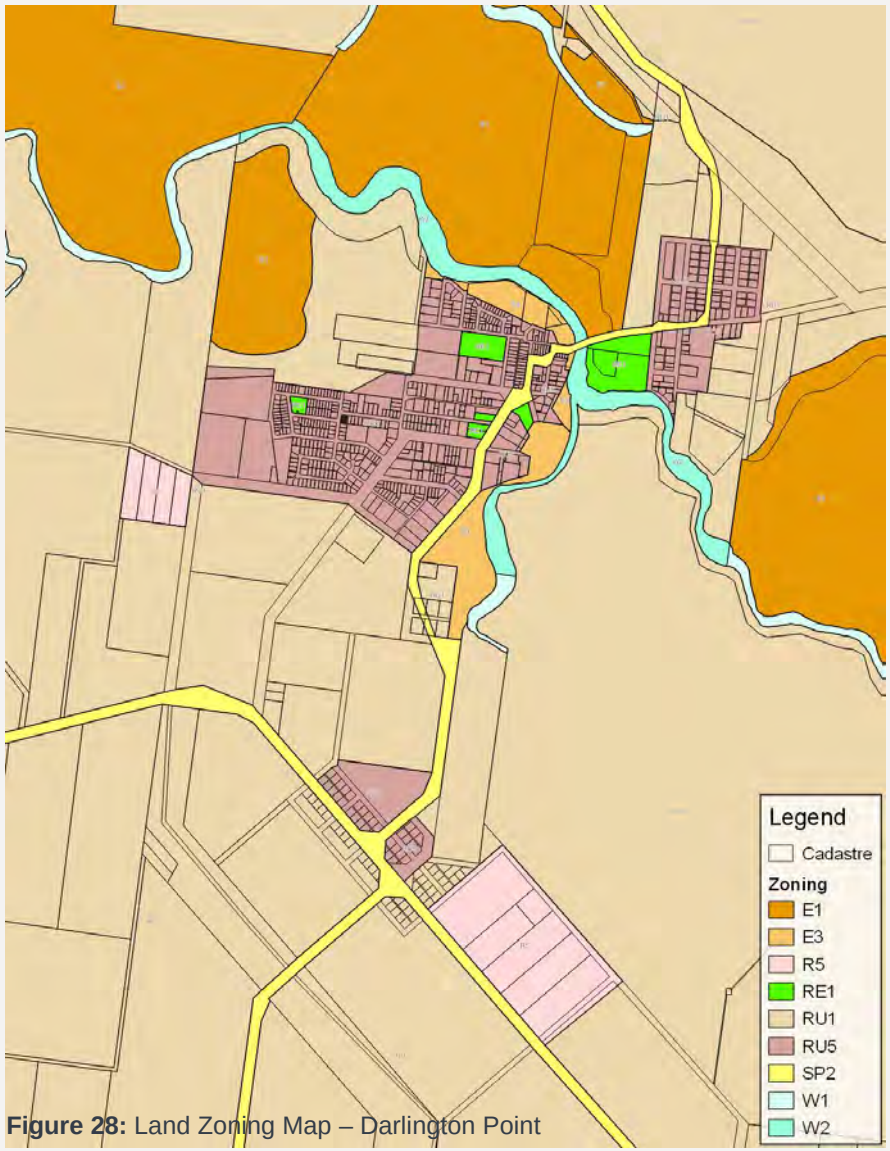


Figure 28: Land Zoning Map – Darlington Point

Housing

At the 2016 Census, there were 536 dwellings in Darlington Point. The predominant housing type in the township is single detached dwellings, with the largest household type being classified as 'family households' comprising at least one parent and child. The average size of households within Darlington Point is 2.45 persons per household.

Building approvals for Darlington Point have remained low but steady over time with an average of 2.7 new dwellings constructed per annum, which is reflective of population growth.

Anecdotally, demand for housing is forecast to increase in response to the establishment of a number of large industries and agricultural businesses proposed within close proximity to the town. In addition, the township is also located within commuting distance to Griffith and Leeton, which may generate demands for additional housing.

To accommodate some of this projected growth, Council has recently approved a residential subdivision on the western side of town at Young Street.

Table 19: Darlington Point Housing Projections 2016-2041

	Housing (2016)	Additional Dwellings	Annual change (dwellings)	Housing (2041)
DPIE Projection (Common Growth)	536	-23.10	-0.92	-
Council Projection (High Growth)	536	73.89	2.95	609.89

Consequently, demand for housing is expected to remain stable or slightly increase over time, particularly given the limited range and type of residential product (namely large lot and low density residential) available to purchasers.

Current housing issues facing Darlington Point include:

- Increased demands for short-term or temporary worker accommodation in the township and potential amenity and land use conflicts this may create.
- Instances of residents living in sheds or outbuildings.
- Impacts of flooding on residential zoned land, particularly in North Darlington Point.
- Infrastructure and servicing capacity constraints (sewer), including the location of the Darlington Point Wastewater Treatment Plant.
- Competition for housing from surrounding larger regional centres such as Griffith and Leeton.
- Development servicing costs to construct residential subdivisions versus expected land sales prices.
- Lack of large lot or rural lifestyle housing options.
- Land use conflicts between commercial and industrial businesses and existing residents from a lack of industrial zoned land.
- Ageing population and demands for appropriate housing types.

Residential Land Supply

An analysis of residential land supply had been used to determine how much residential land is currently available for consumption.

For the purposes of this assessment, a lot is considered to be 'vacant' where it does not contain a dwelling as at 30 June 2021.

The residential land within Darlington Point has been categorised as follows:

- **Standard Residential**, being land zoned RU5 Village with a minimum lot size of 600m^2. This land is connected to Council's reticulated sewerage;
- **Large Lot Residential**, being land zoned R5 Large Lot Residential with lot sized of 2ha or larger. This land is not connected to Council's reticulated sewerage.

Whilst it is acknowledged that the RU5 Village zone has a default minimum lot size of 600m^2, this is not representative of the established residential subdivision pattern of the town, which is more consistent with a minimum lot size of 1,200m^2.

Table 20 provides an analysis of the current supply of residential zoned land (both developed and undeveloped) in Darlington Point. The figures used in this table are based on an average of 6.5 lots per hectare, which equates to an average lot size of 1,200m^2. This calculation also assumes 20% of the development site is required for roads, drainage and open space.

Based on this analysis, Darlington Point has an approximate 93.6 years supply of residential zoned land based on an average take-up rate of 2 dwellings per annum.

When considering population projections outlined in Table 6 above and using an average take-up rate of 3 dwellings per annum, the level of residential land supply is reduced to approximately 62.3 years.

As can be seen in Table 12, there is currently no available land specifically identified for low density (1,500m^2-4,000m^2) and large lot residential (2ha) purposes. The provision of additional land for this purpose is considered critical to the ongoing viability of the town and also provides a point of difference to nearby centres including Griffith and Leeton.

Table 20: Darlington Point Existing Residential Land Supply

Summary	Growth Rate	Land Supply	No. of additional lots	Demand (dwellings p.a.)	Years Supply
Standard Residential (600m^2)	DPIE Projection (High Growth)	36ha	187	2	93.6
	Council Projection (High Growth)	36ha	187	3	62.3
Low Density Residential (1,500m^2 – 4,000m^2) **Large Lot Residential (2ha+)**	DPIE Projection (High Growth)	0	0	0	0
	Council Projection (High Growth)	0	0	0	0

Whilst it is acknowledged that Darlington Point already has a relatively large level of residential land supply, this is primarily limited to a number of individual landowners who do not have any development aspirations, or the land is being used for an alternative purpose.

For example, the land at 64-66 Britts Road is currently being used for intensive agricultural purposes (apiary) and is not likely to be developed in the short to medium term. Similarly, land on the eastern side of the sewerage treatment works is constrained by this facility due to odour.

When taking into consideration the environmental constraints and current aspirations of landowners, the actual supply of residential land is reduced to approximately 19 hectares. This brings the total actual years supply of residential land down to 49.4 and 32.93 years respectively when using either NSW DPIE or Council population projections.

Community Facilities

Darlington Point is serviced with a number of community facilities including a pre-school, primary school with over 100 students, a doctor's clinic, police station and a museum. Council also runs an administration office to service the needs of local residents and a mobile library services the town every Thursday. A community hall is also available for hire and the area has a number of churches and a local cemetery.

In recognition of the wide range of community facilities and historical population trends, there is capacity within the existing facilities to accommodate the expected marginal population growth to 2041 (150 persons under Council's high growth projection).

A plan showing the existing community facilities is provided in Figure 29.

Recreation and Open Space

The Darlington Point area is well serviced by a number of public recreation and open space areas including Fig Tree Park, CWA Park and the strategically located Lions Park at the northern entrance of town. The town also has a sportsground, skate park, swimming pool and local playgrounds that are available for use.

Given the natural attributes of the area and the town's location alongside the Murrumbidgee River, the area has access to outdoor and water-based recreational facilities including two boat ramps, walking, camping, picnicking and fishing locations, as well as access to 15 different sandy beaches.

Private recreation facilities include the Darlington Point Sports Club, which provides a golf course, tennis courts and lawn bowls.

In recognition of future population growth and consistent with the key performance criteria of the NSW Government's *Draft Greener Places Design Guide,* it is recommended that a new local park be constructed on the western side of town to service the future population in this area and ensure that all residents have access to open space within a general 400m / 5 minutes walking distance.

A plan showing existing and proposed open space is provided in Figure 29.

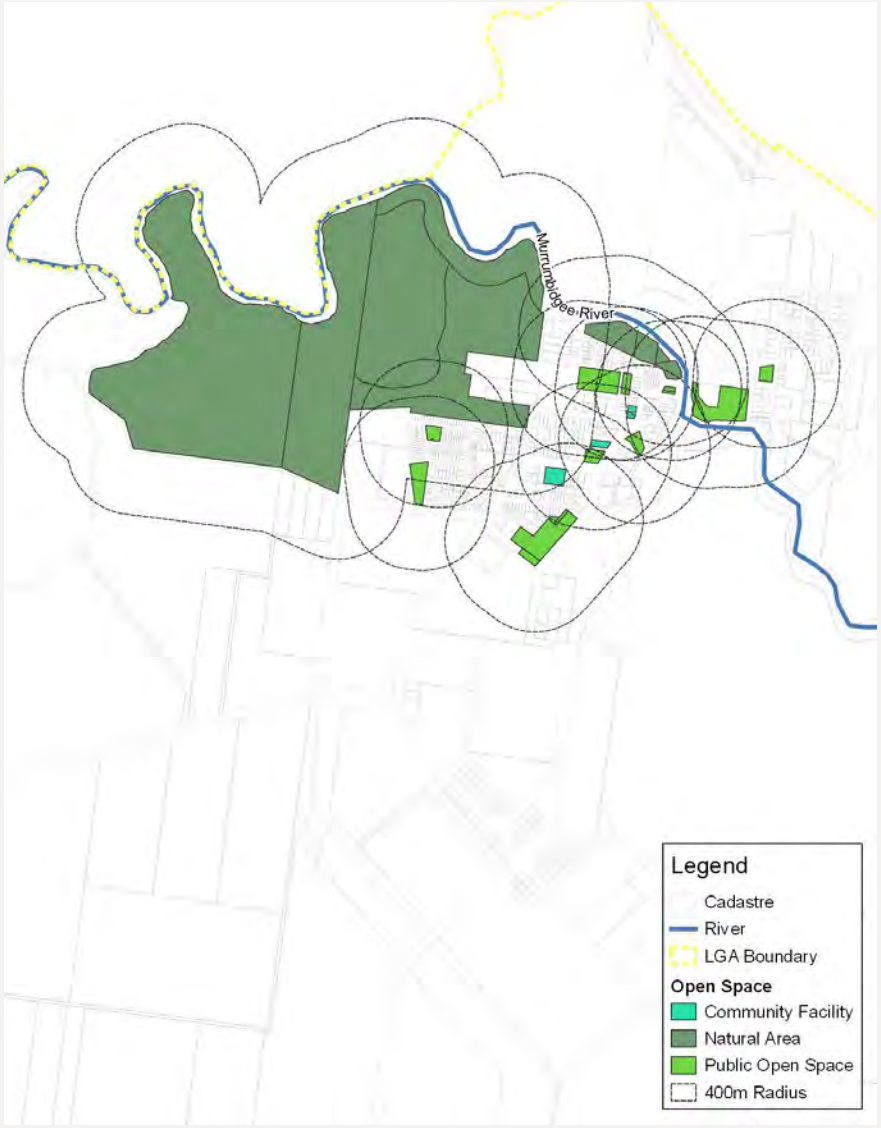


Figure 29: Open Space and Community Facilities Map – Darlington Point

3.1.2. Economy

Commercial and Retail

The main commercial and retail centre of Darlington Point is focussed around Carrington Street, which is the main street. The main commercial area includes an NRMA garage, newsagent-hardware store, service station, supermarket, butcher, post-office and pharmacy.

The area also contains a number of restaurants and cafes, as well as the Punt Hotel, which is centrally located within the main street. A truck stop/roadhouse is also located on the key intersection of the Sturt Highway and Kidman Way at Waddi to service passing traffic.

The main township is zoned RU5 Village under the current LEP to provide flexibility in zoning and to allow for a range of commercial, residential and light industrial activities.

Opportunities also exist to better connect the main street with the adjoining Murrumbidgee River and there is also a need for more accommodation within the main commercial area.

Industry

There is currently no industrial zoned land within Darlington Point, which is creating problems regarding the long-term expansion of the town and resulting in potential new businesses establishing within other towns or regional centres.

Council in recent times has received a number of enquiries and interest for the establishment of industrial development, however due to a lack of zoning this has resulted in potential new businesses establishing elsewhere.

Similarly, given the lack of industrial zoned land, there are several large commercial and industrial industries currently operating within the residential areas, which has in the past created land use conflicts.

Given the towns' strategic location on one of the main inland transport corridors, an opportunity exists to create a transport depot or interchange. The location of this facility should occur alongside these main transport routes, but away from sensitive land uses.

Tourism

Due to the town's location alongside the Murrumbidgee River and on key transport routes, Darlington Point provides nature-based tourism opportunities for visitors. The Murrumbidgee River and Murrumbidgee Regional Park at Willbriggie offer River Redgums and water access for recreational activities. Ten kilometres east of Darlington Point is the Altina Wildlife Park, which offers unique tours via personalised carts.

Demands for tourism have increased over time and the town provides short-term accommodation at the Darlington Park Caravan Park, the Sports Club and at Campbell Street.

An opportunity exists to build on the natural environmental values of the area with increasing demand for 'eco-tourism' and agricultural tourism, as well as to increase the range of unique or high-end accommodation and restaurant options.

Furthermore, the former saw mill site in North Darlington Point provides a potential tourism opportunity as a key development site. It is acknowledged however that the development potential of this land is constrained by the fact that it is owned by the NSW Parks and Wildlife Service.



Altina Wildlife Park

Agriculture

The majority of the Murrumbidgee Council area is zoned for rural and agricultural purposes and is broadly used for dryland and irrigated cropping, as well as grazing.

Land within and immediately surround Darlington Point is generally rated as Class 4 – Moderate to severe limitations and Clause 5 – Severe limitations in terms of agricultural land quality (Figure 30).

All rural land within and surrounding the main township of Darlington Point is zoned RU1 Primary Production with a corresponding 200 hectare minimum lot size for subdivision. This land is generally used for broadacre grazing purposes.

Although the Council area can be viewed as a traditional rural and agriculturally based local government area, the main townships and immediate surrounds are urban in nature or have been developed for hobby farming type purposes.

Future development and expansion of Darlington Point will need to ensure that residential and rural residential growth does not restrict existing productive agricultural operations.

Similarly, land management for native vegetation removal in the rural zones is undertaken in accordance with the Local Land Services Act 2013. For the purposes of this Study, much of the land surrounding the main Darlington Point township is classified as ‘Category 1 Exempt Land’ as it was cleared of native vegetation as at 1 January 1990 (Figure 31).

Under the LLS Act, Category 1 land is unregulated and owners can remove native vegetation so long as they do not knowingly harm an animal or damage the habitat of an animal that is a threatened species or part of a threatened ecological community

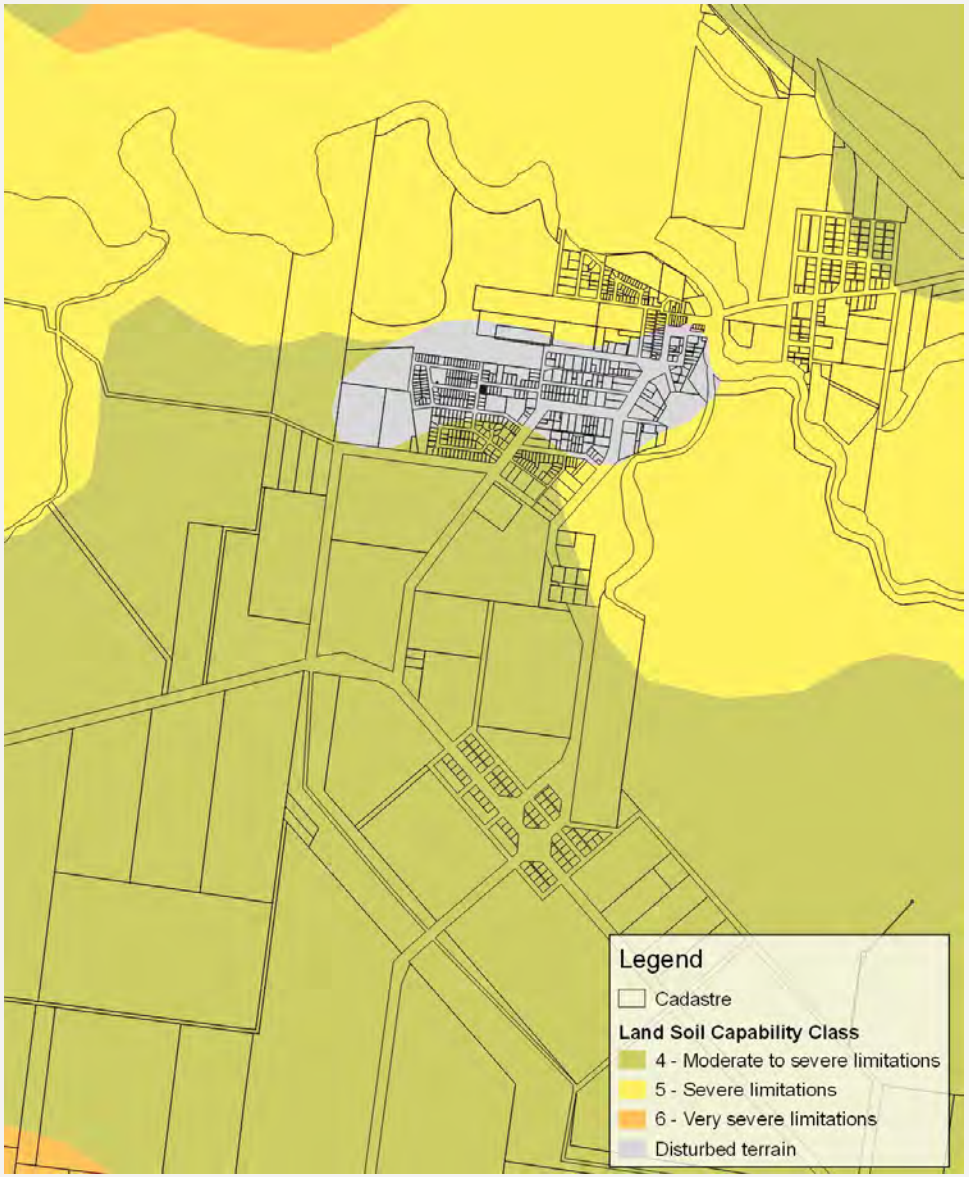


Figure 30: Agricultural Land Capability Map – Darlington Point



Figure 31: Category 1 Exempt Land Map
(Source: Area Environmental and Heritage Consultants, 2021)

3.1.3. Environment

Vegetation and Threatened Species

Darlington Point with its riverine environment is comprised of a range of vegetation types including; forested wetlands (River Red Gums and Black Box woodland), semi-arid woodlands (Weeping Myall), grassy woodland (Yellow Box), freshwater wetlands (Lignum shrubland, Sedge), as well as grasslands (Plains grassland).

Of these, a number are classified as endangered (Weeping Myall) or critically endangered (Plains grassland, shallow freshwater wetland sedgeland and Yellow Box – River Red Gum)(Figure 32).

Other environmental features within the area include the Tiddalik Wetlands, which provides a drainage function and the 2,000 hectare Cuba State forest, which is located approximately 11 kilometres east of Darlington Point.

The area is also home to a number of native fauna including the Painted honeyeater, Superb parrot, Brown treecreeper, Grey-crowned Babbler (eastern subspecies) and the Dusky woodswallow, which are listed as 'vulnerable' under the NSW *Biodiversity Conservation Act 2016* and/or the Federal *Environment Protection and Biodiversity Conservation Act 1999.*

The LEP maps much of Darlington Point as an area of 'Terrestrial Biodiversity' within which Clause 6.3 requires Council to consider the impact of development on flora and fauna as well as "any appropriate measures proposed to avoid, minimise or mitigate" those impacts. These areas have been identified through aerial imagery and have not been 'ground truthed' for significance. They also do not identify scattered vegetation.

Having regard to the vegetation types in the study area, vegetation potentially presents as a constraint for development not just because of its biodiversity significance but also because of the high cost of offsetting its removal. Fortunately, there remains large tracts of land that are either unconstrained by stands of remnant vegetation or contain scattered paddock trees at a lower density.

Further matters regarding biodiversity are contained in the Biodiversity Constraints Analysis report prepared by AREA Environmental and Heritage Consultants in support of the Land Use Plan.

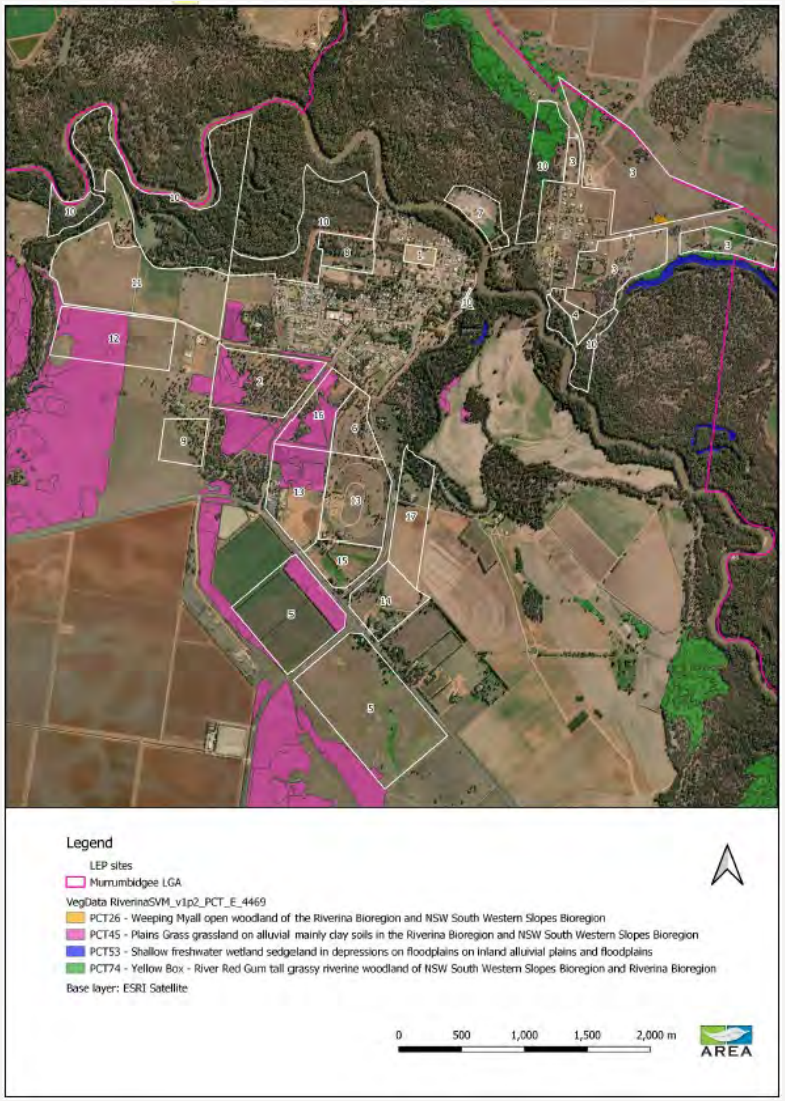


Figure 32: Plant Community Types associated with Threatened Ecological Communities (Source: Area Environmental and Heritage Consultants, 2021)

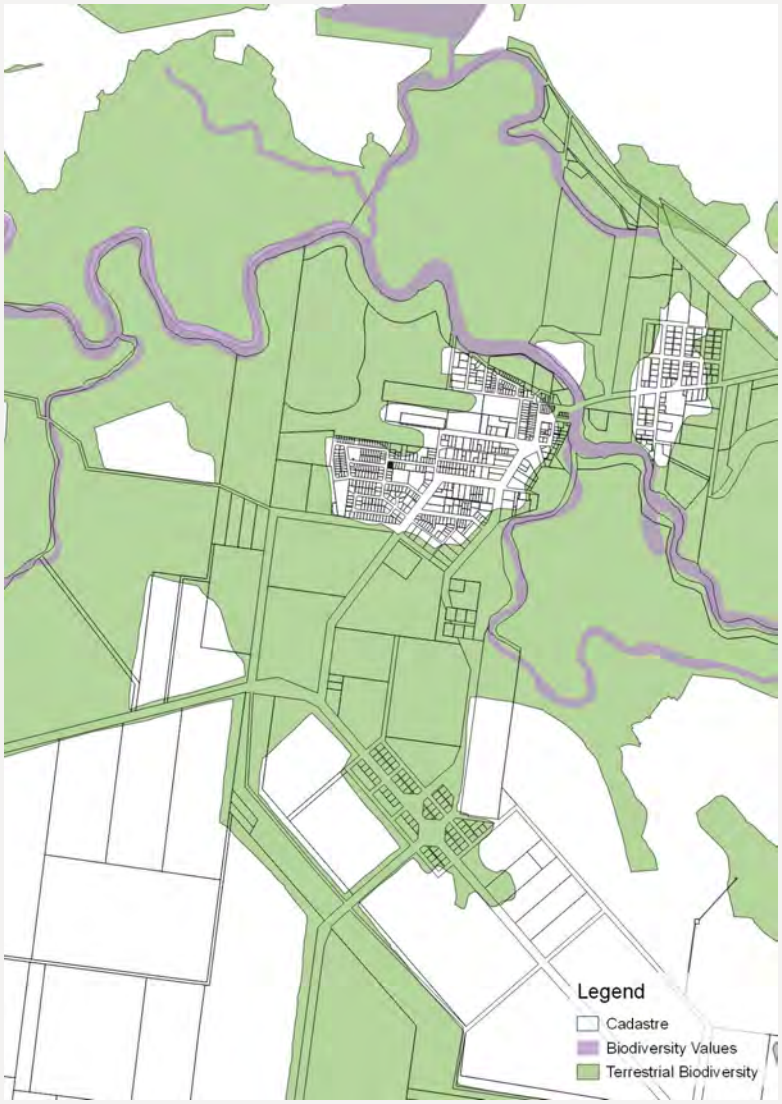


Figure 33: Terrestrial Biodiversity Map – Darlington Point

Flooding

Darlington Point has been the subject of a number of severe floods due to its location alongside the Murrumbidgee River.

In response, Council have recently completed the *Darlington Point Flood Risk Management Study and Plan* to investigate the impacts of flooding within the township.

This Plan identifies the land immediately adjoining the Murrumbidgee River as ‘floodway’, whilst land further back from this waterway is categorised as ‘flood fringe’ and ‘flood storage’.

This plan and previous flood assessment have been used to construct a flood levee bank around the main township to protect it from flooding.

It is noted however that no levee bank is currently proposed around north Darlington Point, which will limit development that can occur in this area until such time as a levee bank is constructed.

In accordance with the requirements of the NSW Floodplain Development Manual, development should seek to minimise the danger to life and property during floods.

Specifically, future development should seek to avoid areas of flood storage and floodway, which align with a high hazard level of flooding.

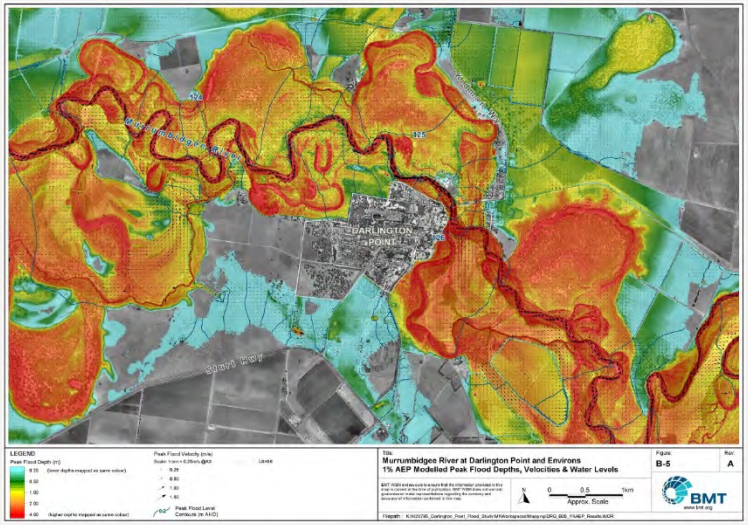


Figure 34: 1 in 100 Year Flood Map for Darlington Point
(Source: Murrumbidgee River at Darlington Point Flood Study, 2018)

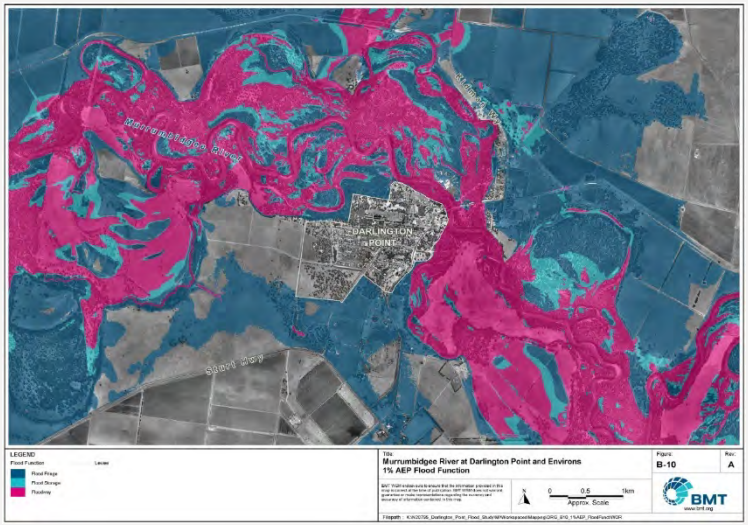


Figure 35: 1 in 100 Year Flood Map – Hydraulic Categories for Darlington Point (Source: Murrumbidgee River at Darlington Point Flood Study, 2018)

Waterways

The iconic Murrumbidgee River winds its way through Darlington Point and provides one of the key tourist, recreational and natural asset for the community. The interface with the river is varied in character and includes many areas of superb natural environmental lands as well as highly used recreational areas.

Protection of the waterway from inappropriate development and/or pollution is critical for the ongoing development of the township and the environmental health of this waterway.

Development near waterways is regulated by a number of state and local government policies including the *Water Management Act 2000*. Development within the bed or banks of the river or within 40 metres of a watercourse also requires separate approval from relevant NSW state government agencies to ensure the ongoing protection of these waterbodies.

The LEP contains specific controls regarding riparian land, wetlands and areas of groundwater vulnerability as identified within Figure 36. In addition, Clauses 6.4-6.6 of the LEP contains specific matters that Council must consider when assessing an application in proximity to the Murrumbidgee River.

Consideration of these areas will be required in the future rezoning of any land, particularly areas of groundwater vulnerability where effluent is proposed to be disposed of on-site.

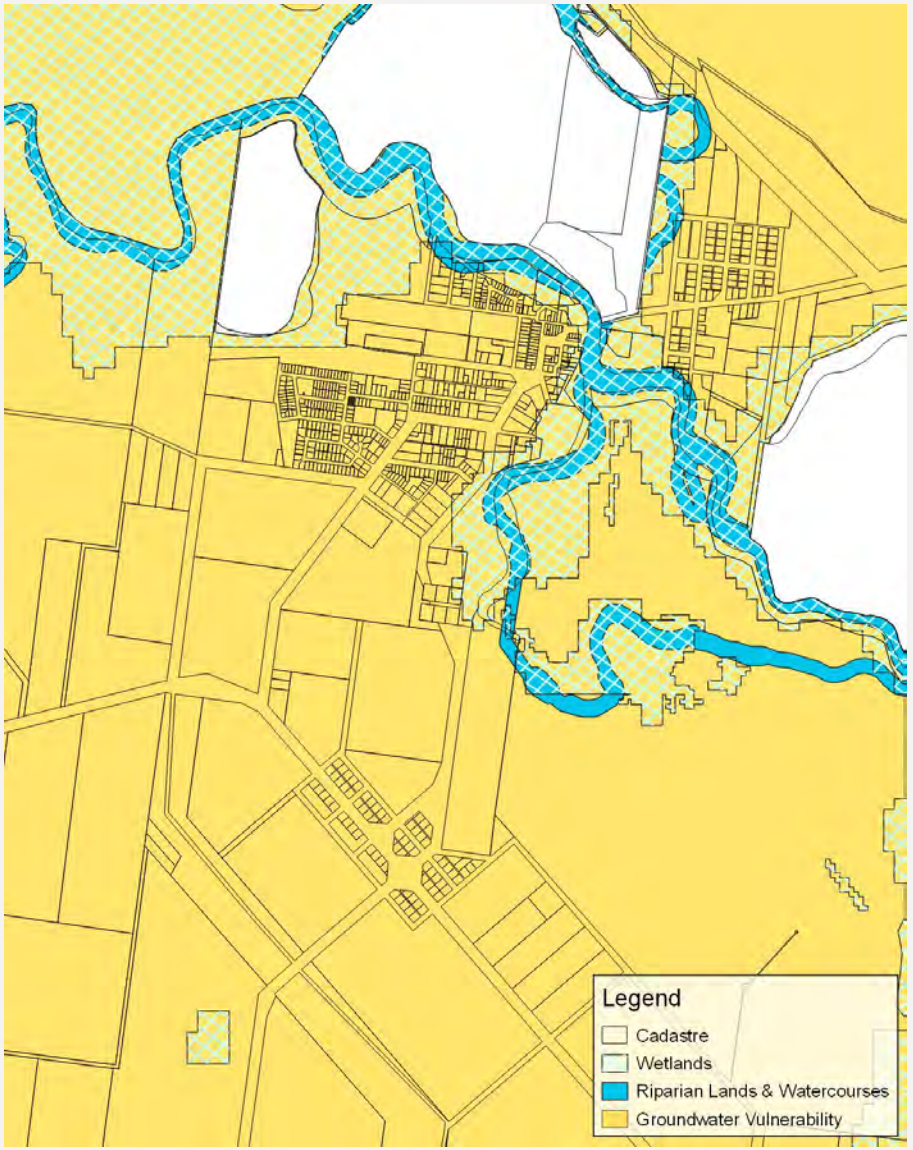


Figure 36: Waterways Map – Darlington Point

Bushfire

A portion of the township is classified as bushfire prone ('Vegetation Category 2' and 'Vegetation Buffer'). Any development of this land or adjoining land shall have regard to the relevant bushfire planning requirements as outlined within the NSW RFS document titled *Planning for Bushfire Protection Guidelines 2019*.

In addition, *Planning for Bushfire Protection Guideline 2019* now provides a broader definition of grassland than previous versions with any undeveloped land now considered to be 'grassland vegetation'.

Consequently, further development of land shall have regard to the bushfire prone land map, as well as the broader grassland bushfire hazard. Where necessary, any future subdivisions shall incorporate relevant bushfire provision measures such as Asset Protection Zones, whilst the construction of new buildings shall achieve relevant Bushfire Attack Level (BAL) ratings in accordance with the requirements of PBP.

Council is currently in discussions with the NSW RFS to update this mapping to reflect current day bushfire hazards and policy changes.



Figure 37: Extract of Bushfire Prone Land Map for Darlington Point
(Source: NSW Planning Portal, 2020)

Non-Aboriginal Heritage

Only one (1) item of non-Aboriginal heritage is identified in Darlington Point, being the Court House Group. However, following a review of the heritage map contained within the LEP, it is recommended that this listing be reviewed to confirm its location as it is currently incorrectly mapped.

A Heritage Review Inventory Report has been prepared by Noel Thomson Architecture in support of the Land Use Plan. The purpose of this report was to review the current heritage listings and recommend any deletions and/or additions to this list.

The report recommends the inclusion of a number of new items of environmental heritage including:

- Survey Tree "BM AN 42", Kidman Way, Darlington Point
- Darlington Point War Memorial, Carrington Street, Darlington Point
- Darlington Point Church, 2 Hay Road, Darlington Point
- Former headmasters' residence, 4 Hay Road, Darlington Point
- Darlington Point Public School (original school building), Hay Road, Darlington Point
- St Oliver Plunkett's Catholic Church, 7 Hay Road, Darlington Point
- Palm Tree Avenue, Hay Road, Darlington Point
- St Paul's Anglican Church, 23 Carrington Street, Darlington Point
- Punt Hotel, 5 Punt Road, Darlington Point
- Murrumbidgee Shire Hall (former), Carrington Street, Darlington Point
- Darlington Point Wharf, Murrumbidgee River, Darlington Point
- Tree, Darlington Street, Darlington Point
- Club Building, Ryan Street, Darlington Point
- Water Trough, Stock Street, Darlington Point
- Darlington Point War Memorial Swimming Pool, Carrington Street, Darlington Point
- Corner Store, 53 Carrington Street, Darlington Point
- Darlington Point Sports Club, 6 Demamiel Street, Darlington Point
- Toganmain Station Homestead, Sturt Highway, Darlington Point

The report also recommends the establishment of a Heritage Conservation Area for Darlington Point around the main commercial centre (Figure 38). This is on the basis that the buildings within this area contain strong thematic characteristics and their significance could be better appreciated if they were considered as part of a group or area.

Specifically, the Bridge Street (Kidman Way) and Punt Road area is the main commercial precinct for Darlington Point. There is a consistency of architectural styles from the inter-war period in the 1920's to the 1930's and a later added 2 storey building from the 1980's. The building types, styles and scale reflect the development of Darlington Point to support the pastoralists and trade of the region from the prosperous times of the early to mid twentieth century.

See Heritage Review Inventory Report prepared by Noel Thomson Architecture for further details.

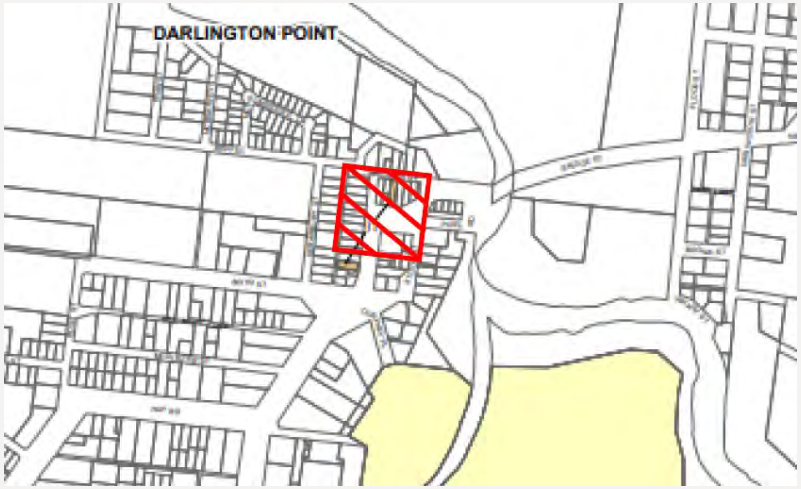


Figure 38: Recommended Heritage Conservation Area for Darlington Point
(Source: Heritage Review Inventory Report, Noel Thomson, 2021)



Former Murrumbidgee Shire Hall

Aboriginal Heritage

The Darlington Point area has a strong relationship and ties to traditional landowners and contains a number of significant places and items of Aboriginal Cultural Heritage significance.

A review of the Aboriginal Heritage Information Management System (AHIMS) database revealed 77 registered Aboriginal sites within five kilometres of Darlington Point, including 25 registered Aboriginal sites contained on a single property located on the corner of Britts Road and Hay Road.

Culturally modified trees were the most dominant site type, appearing at 70 sites. Other site types present included a small number of artefact scatters, two ceremonial sites, a burial, a hearth, a shell (midden) site and a restricted site.

Two sites of Aboriginal cultural heritage significance were recorded in the LEP and the State Heritage Inventory. This includes the Warangesda Aboriginal Mission and Station (SHI database #5055095; LEP Item A4). This mission is unique to NSW as it is the only mission or reserve site that retains a group of original 19th century building ruins and archaeological relics.

The other LEP item is the Waddie Creek Scarred Trees (SHI database #2100005; LEP Item A5).

An Aboriginal Cultural Heritage report has been prepared by AREA Environmental and Heritage Consultants to provide a general assessment of likely sites of cultural heritage.

A predictive archaeological model has been prepared to draw general conclusions about the likelihood of cultural heritage remains in an area based on the archaeological and landscape contexts.

The archaeological context indicates a strong association between evidence of Aboriginal occupation and reliable water sources. More specifically, Aboriginal cultural heritage sites are more likely near the junctions of major waterways with other waterways. There is also an increased likelihood of sites near ephemeral water courses.

Previous archaeological studies have identified culturally-modified trees as a very common site type. Stone artefact sites are common in the broader region but are in low numbers nearby to the study area. Burial mounds, hearths and ceremonial sites also appear in the archaeological record of the Murrumbidgee region.

Specifically, the Darlington Point study area includes a large number of registered Aboriginal Cultural heritage items. Much of the township is located adjacent to, or nearby to the Murrumbidgee River. On this basis alone, Darlington Point is considered to have a generally high Aboriginal heritage potential.

Nonetheless, there are portions of the study area that have high levels of disturbance and are distant from the Murrumbidgee River and other water sources.

Accordingly, any future development should seek to limit the impacts on Aboriginal heritage and where necessary be supported by a due diligence or Aboriginal cultural heritage assessment to ensure the ongoing protection of these heritage assets, which contribute to the social and cultural values of the town.

For further details regarding Aboriginal Cultural Heritage, see the Aboriginal Cultural Heritage Review report prepared by AREA Environmental and Heritage Consultants.

Land Use Conflicts

As outlined within Section 2.2.7, land use conflicts arise when incompatible land uses are situated in close proximity to each other. Land use conflicts may impact on the amenity of sensitive land uses, the efficient use of productive land, or environmental and landscape values.

An assessment of land use conflicts for Darlington Point has been undertaken consistent with the NSW Department of Primary Industry's Land Use Conflict Risk Assessment (LUCRA) guidelines. There are four key steps involved in undertaking a LUCRA and these include:

1. Gather information about proposed land use changes and associated activities.
2. Evaluate the risk level of each activity.
3. Identify risk reduction management strategies
4. Record LUCRA results.

Key potential land use conflicts contained within Darlington Point include:

5. Sewerage treatment works
6. Waste management centre

Other land use conflicts that are specific to Darlington Point that need to be considered include:

7. Bushfire risks on development that adjoins heavily vegetated areas or open grasslands.
8. Flooding impacts on development from adjoining rivers and waterways.
9. Amenity impacts such as noise adjoining key transport corridors (road, rail).

Careful consideration will be required when planning future land uses to ensure that they will not result in conflicts between land uses.

A plan showing these potential land use conflicts is provided in Figure 39.

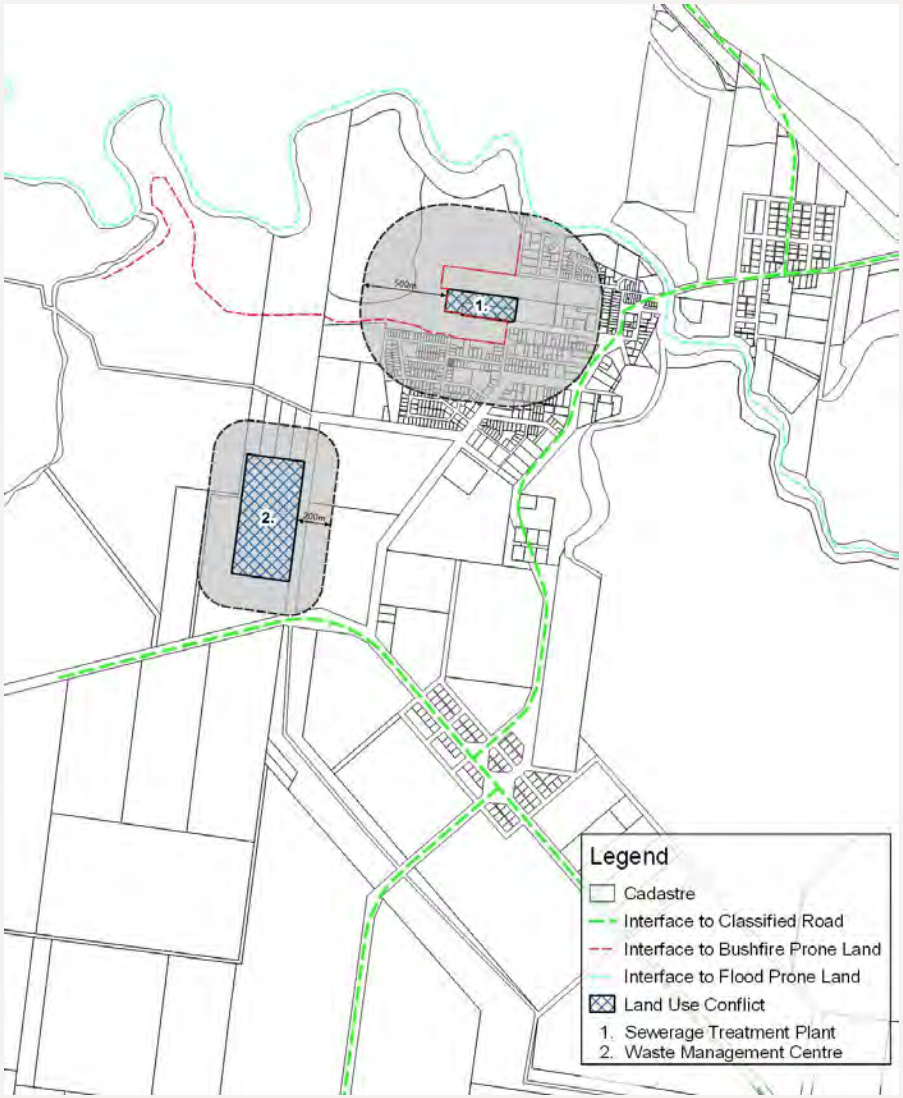


Figure 39: Land Use Conflict Map – Darlington Point

Crown Lands

The township of Darlington Point contains large tracts (over 200 hectares) of Crown Land Reserves held in public ownership. Council is the manager of some of this land, whilst other portions are subject to lease or licence agreements.

Some of this land has been developed and used for open space and recreation purposes, whilst the remainder of this land remains undeveloped. A large proportion of this land adjoins the Murrumbidgee River, is densely vegetated and is subject to flooding.

The public ownership status of this land is therefore placing a constraint on development in the absence of the land being devolved to Council.

Given the amount of Crown Lands contained within the township and its location, it is recommended that discussions be undertaken with Crown Lands to try and acquire some of this land for the future growth of Darlington Point.



Figure 40: Crown Lands Map – Darlington Point

Summary of Constraints and Opportunities

To help assist identifying potential candidate sites for rezoning and/or redevelopment, consideration has been given to the environmental constraints and opportunities as outlined within this Section.

A plan showing the combined constraints and opportunities for Darlington Point is provided in Figure 41.

The features have informed the proposed zoning recommendations outlined in Section 3.1.5.

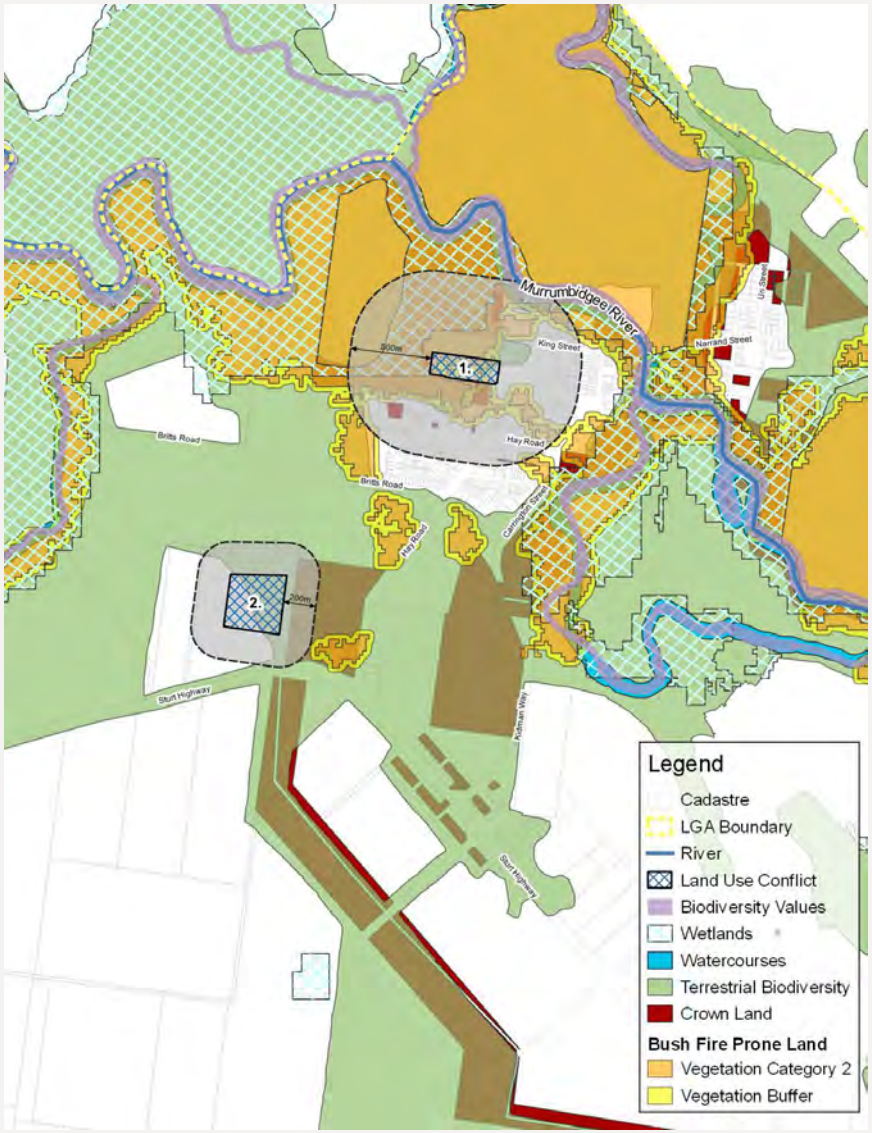


Figure 41: Combined Constraints and Opportunities Map – Darlington Point

3.1.4. Infrastructure

Council in association with the NSW Public Works Advisory is in the process of preparing an Issues Paper to the Integrated Water Cycle Management Strategy (IWCMS), which will identify current and future capacity issues and upgrade requirements.

The outcomes of this Paper will inform further recommendations to the IWCMS and the conclusions of this Issues Paper as they relate to Darlington Point are discussed below.

Water

Darlington Point's town water is supplied from two bores/reservoirs with the water system having recently been upgraded, including minor repairs and the installation of a gas chlorinator. In addition, several private water supply schemes operate in the township and outlying rural areas.

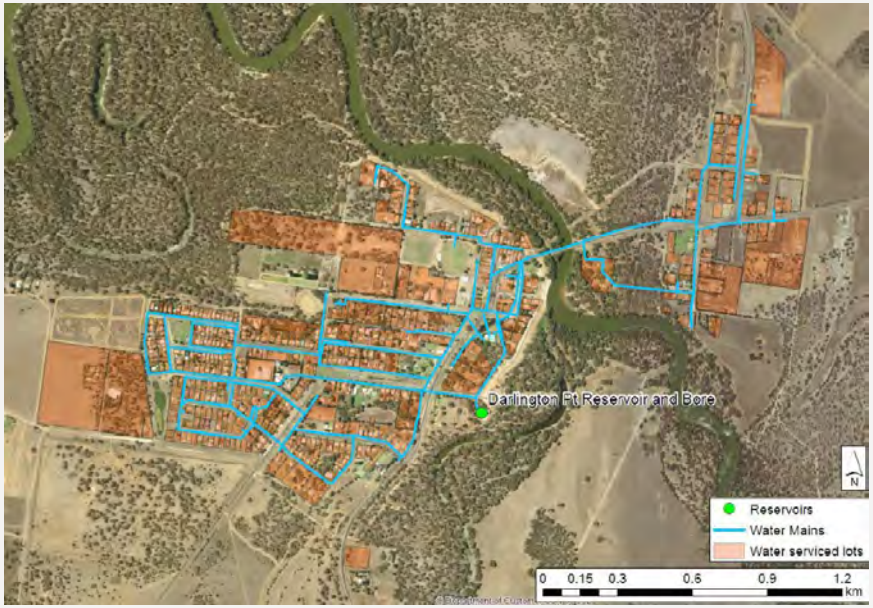


Figure 42: Darlington Point water supply scheme distribution map
(Source: Draft Integrated Water Cycle Management Strategy)

The IWCMS Issues Paper identifies the following capacity issues in terms of water supply in Darlington Point. These items will need to be addressed so as to achieve projected future population growth.

Based on this analysis projected residential development can be achieved subject to augmentations of the existing water network.

Table 21: Water Supply Upgrade requirements – Darlington Point

Compliance Target	Issues
System capacity	**Minimum pressures** - With the estimated 2020 99th percentile peak day demands, the minimum pressures in the current system are 12.5m. WSAA Code WSA 03-2011 recommends a minimum service pressure target of 20m head. This may still be considered acceptable depending on what Councill nominates as there LOS service standard (design basis).
	Supply reliability - With the estimated 2020 99th percentile peak day demands, the time for the reservoir to draw to 70% is 0.5 hours. For the 2050 peak day demands, the time for the current reservoir to draw to 70% is 0.3 hours. This may not be enough time to resolve the issue
	Fire flows - In general, if a fire were to occur during a peak demand period, the distribution system will not be able to meet the 15m pressure required for a fire brigade with pumping appliance connected. Increasing the reservoir size and bore pump capacity will allow the system to supply more pressure for a fire flow. It should be noted that according to clause 3.1.5 of the WSAA Code WSA 03-2011, water supply systems need not be designed for firefighting unless required by a Water Agency's operating licence.
	Water losses - The infrastructure leakage index (ILI) for Darlington Point WSS is 8.5, which is more than 4 times higher than the industry standard, indicating a very high water loss. The water loss is around 620 L/assessment/day which is 6.7 times the state median

Sewerage

The Darlington Point sewerage treatment plant has limited capacity to accommodate additional growth and is currently only sized to service approximately 1,200 people. For land outside of the reticulated network, effluent can be disposed of on site via individual packaged plants.

The location of this facility is also problematic as it is located within close proximity to the town centre and residential dwellings, which may cause land use conflicts and odour issues as the town continues to grow.

Previous investigations as part of the Darlington Point Township Structure Plan identified the need to investigate opportunities, subject to a cost benefit analysis to relocate the sewerage treatment facility from the central urban area to a new location, with suitable buffers from current or future residential development. This would remove potential land use conflicts/restrictions that may restrict growth opportunities of the town.

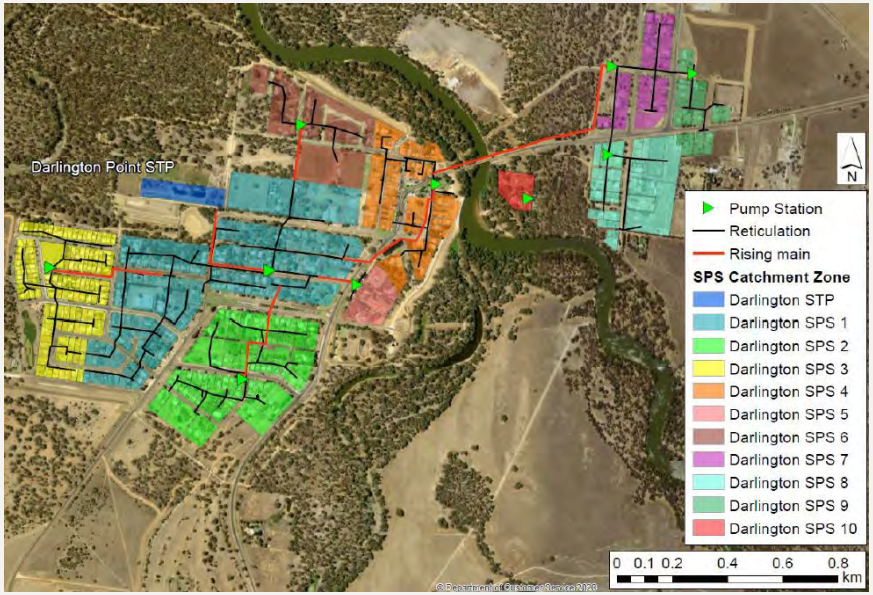


Figure 43: Darlington Point sewage transfer system
(Source: Draft Integrated Water Cycle Management Strategy)

The IWCMS Issues Paper identifies the following capacity issues in terms of sewerage supply in Darlington Point. These items will need to be addressed so as to achieve projected future population growth.

Table 22: Sewerage Supply Upgrade requirements – Darlington Point

This table has been removed from the public exhibition version pending the finalisation of the IWCMS.

Based on this analysis, the existing sewerage plant has enough capacity to service development until 2043 subject to the augmentation of a number of individual Sewerage Pump Stations.

Whilst the location of the current sewerage treatment plant is currently a constraint on development, given that this system does not need to be upgraded in the short to medium term, as well as the fact that there is a large supply of additional zoned residential land located elsewhere, it is not recommended that the sewerage treatment plant be relocated due to the financial costs.

Transport

Darlington Point experiences high volumes of heavy vehicles and trucks that pass through the town at high speeds creating vehicle and pedestrian safety problems.

There is also no truck parking area available for drivers passing through Darlington Point outside of a small area opposite the Darlington Point Club. Similarly, there is a need to ensure that development on main intersections and roads is appropriately designed to improve the visual appearance of the town. Where new access points are proposed from classified roads, this will require approval from Transport for NSW.

Other Services

Gas (bottled), electricity and telecommunications infrastructure are available and can be extended to service future development. Drainage infrastructure is also appropriate and should continue to occur via a ‘pit and pipe’ system.

Where large lot residential subdivisions are proposed, drainage can be via vegetated swale/table drains.

Darlington Point is also serviced by an existing waste management facility located to the south west of the main township. This facility is currently zoned rural and it is recommended that this facility be rezoned to a special activities zone to ensure its ongoing protection.

3.1.5. Darlington Point Land Use Plan

Recommendations

The Land Use Plan identifies four candidate sites to be rezoned for residential purposes (Figure 44). These parcels are described as follows:

- 7 Boyd Street, Darlington Point (Lot 2, DP335057 & Lots 14-19, DP3754)
- Darlington Street, Darlington Point (part)(Lot 73, DP751688 & Lot 66, DP751688)
- 92 & 164 Britts Road, Darlington Point (Lot 5, DP1115843 & Lot 1, DP1103528).
- Britts Road, Darlington Point (part)(Lot 2, DP1103528).

The recommended rezoning of this land is consistent with the environmental constraints of the land, as well as infrastructure and servicing provision.

The properties represent both infill and greenfield development and are currently zoned RE1 Public Recreation and RU1 Primary Production with a minimum lot size of 200 hectares.

More specifically, it is proposed to rezone the existing sportsground from RE1 Public Recreation to RU5 Village with a 600m^2 minimum lot size. The rezoning of this land is consistent with previous strategic planning work, which identified an opportunity to relocate the sportsground to the south of the township adjacent to the existing golf club. In doing so, this will increase the amount of flood free land available for infill residential development.

The Plan also recommends rezoning the land to the south of Darlington Street from RU1 Primary Production to R2 Low Density Residential with a 5,000m^2 minimum lot size. This land is located above the flood level and can provide opportunities for low density residential development (15 lots).

In order to cater for the long term future needs of Darlington Point, the Strategy recommends rezoning land on the western side of town for residential development.

Given the relatively large amount of conventional residential land supply currently available within the township, it is recommended that this land be zoned at lower residential densities.

In doing so, this will provide a greater variety of residential lot types and will provide lifestyle options for persons looking to relocate to Darlington Point.

The rezoning of this land at lower densities also reduces the amount of potential land supply, places less pressure on infrastructure and services as effluent can be disposed of on-site above 5,000m^2 and provides a transition from the main urban area to the surrounding rural environment.

Specifically, land on the northern side of Britts Road located immediately adjacent to RU5 Village zoned land is proposed to be zoned R2 Low Density Residential with a minimum lot size of 5,000m^2. This land has a total area of 65 hectares and would result in the creation of an additional 104 low density residential lots.

In recognition of this large amount of residential land supply, it is recommended that the rezoning of this land be staged commensurate with demand. In the interim it is recommended that only the eastern half of this land be rezoned.

Similarly, the Land Use Plan recommends rezoning the southern side of Britts Road to R5 Large Lot Residential with a 2 hectare minimum lot size. The rezoning of this land forms an extension of existing R5 zoned land already developed on the southern side of this roadway. This land has a total area of approximately 38 hectares, which could result in the creation of an additional 15 large lot residential lots. It is noted that there is currently no supply of R5 zoned land available in the town and it is recommended that all of this land be rezoned in the interim, pending confirmation of biodiversity values on the western portion of this land. An opportunity also exists to extend this zoning further south in the future.

Based on the land zoning and minimum lot size recommendations, the propose rezoning sites have the potential to cater for up to approximately 256 additional residential lots as outlined in Table 23. Based on the DPIE medium growth rate of 2 dwellings per annum, this equates to a residential land supply of approximately 128 years.

When considering the forecast take-up rate of 3 dwellings per annum, this level of residential land supply is reduced to approximately 85 years.

Table 23: Darlington Point Existing and Proposed Residential Land Supply

Summary		Area	Proposed No. of additional lots	Demand (dwellings p.a.)	Years Supply
Existing Supply					
RU5 Village (600m^2 +)	DPIE Projection (High Growth)	36ha	187	2	93.6
	Council Projection (High Growth)	36ha	187	3	62.3
R5 Large Lot Residential (2ha+)	DPIE Projection (High Growth)	0	0	0	0
	Council Projection (High Growth)	0	0	0	0
Proposed Supply					
R2 Low Density Residential (5,000m^2)	DPIE Projection (High Growth)	30ha	48	2	24
	Council Projection (High Growth)	30ha	48	3	16
R2 Low Density Residential (5,000m^2) (Future)	DPIE Projection (High Growth)	39ha	60	2	30
	Council Projection (High Growth)	39ha	60	3	20
R5 Large Lot Residential (2ha+)	DPIE Projection (High Growth)	38ha	15	2	7.5
	Council Projection (High Growth)	38ha	15	3	5
Total*	DPIE Projection (High Growth)	108ha	256	2	128
	Council Projection (High Growth)	108ha	256	3	85

***Note:** Figure excludes land identified as R2 Low Density Residential (future)

The other key land use planning recommendation includes the establishment of an industrial area and business park to the south of the township on the key intersections of the Sturt Highway and Kidman Way (Figure 42).

These parcels of land are described as follows:

- Sturt Highway, Darlington Point (Lot 149, DP750908).
- Sturt Highway, Darlington Point (Lots 150 & 288, DP750908 & Lots 1-5, DP759030).
- 20 Bundure Street, Darlington Point (Lot 153, DP750908, Lots 1-5, DP759030).
- 54 Bundure Street, Darlington Point (Lot 216, DP750908).
- Sturt Highway, Darlington Point (Lots 1-9, DP759030 and part Lot 11, DP750908).

This land is strategically located and avoids areas of environmental significance or hazards, as well as nearby sensitive land uses that have the potential to create land use conflicts. It is also recommended that Council relocate its existing depot site on Kerarbury and Boyd Streets to this land so as to free up prime village zoned land within the main township.

In total, the Land Use Plan recommends rezoning approximately 160 hectares of land for industrial purposes, which can be developed at various lot sizes.

In recognition of the need to coordinate land development, the provision and extension of services, as well as the large amount of industrial land supply proposed within this Plan, it is recommended that development within this area be staged.

Specifically, it is recommended that approximately 85 hectares of land be rezoned in the short-term surrounding the Sturt Highway and Kidman Way with the remaining land to be rezoned when demand permits. The staging of industrial land rezonings is also reflective of the fact that much of this future industrial land is Crown Lands owned.

The development of this land could result in the creation of approximately 68 industrial lots based on an average lot size of 8,000m^2. This equates to an approximately 23 years supply of industrial land supply based on demand.

It is noted however that an interested party has already approached council regarding the future development options for Lot 149, DP750908. Consequently, this may further reduce the level of industrial land supply if this property is developed in the interim.

Due to the prominent location of this land, it is recommended that as part of the review of the Development Control Plan, that new controls be included that govern building design and appearance including; building setbacks, car parking, vehicular access, signage and landscaping. This will ensure that the development of this land does not detract from the overall visual appearance of the township.

Table 24: Darlington Point Existing and Proposed Industrial Land Supply

Summary	Area	Proposed No. of additional lots	Demand	Years Supply
IN1 General Industrial	85ha	68	3	23
IN1 General Industrial (Future)	80ha	64	3	21
Total	165ha	132	3	44

Other changes recommended by the Plan include rezoning certain lands for environmental protection purposes in recognition of their environmental features and constraints, as well as placing Council's key infrastructure facilities within a special use zone to ensure its ongoing protection.

It is also recommended that the Terrestrial Biodiversity Map be reviewed as it applies to the urban areas of Darlington Point as it currently maps land that is developed or contains no identified significant vegetation.

Similarly, it is recommended that the Heritage Map and Schedule 5 of the LEP be reviewed consistent with the recommendations of the Heritage Review.

Key Land Use Planning Considerations

Table 25: Key Land Use Planning Considerations – Darlington Point

Population and Housing:

DP1 Ensure a sufficient supply and range of residential zoned land to cater for expected demand.

DP2 Rezone land to the west of the main township on the northern side of Britts Road to R2 Low Density Residential with a 5,000m$^{2.}$ minimum lot size.

DP3 Rezone land to the west of the main township on the southern side of Britts Road to R5 Large Lot Residential with a 2 hectare minimum lot size.

DP4 Rezone the Darlington Point Sports Oval to RU5 Village Zone with a 600m^2 minimum lot size.

DP5 Rezone a small portion of land above the flood level at the southern end of Darlington Street to R2 Low Density Residential with a 5,000m^2 minimum lot size.

DP6 Ensure short-term accommodation developments are appropriately designed and located to minimise impacts on surrounding residents.

DP7 Encourage infill development by exploring incentive strategies.

DP8 Locate residential development outside of flood prone areas and investigate opportunities to extend current flood levee system.

Community Facilities and Open Space:

DP9 Continue to review community facilities and open space provisions within town, with gaps identified and strategies developed.

DP10 Ensure zoning is flexible to allow for the establishment of community facilities within central locations that are accessible.

DP11 Establish a new public open space area on the western side of town to service the proposed residential development in this area.

Commercial and Retail:

DP12 Retain flexible land use zoning in the main commercial centre to encourage a range of businesses.

DP13 Encourage the development of land currently bordered by Demamiel Street, Carrington Street, Hay Road and a public laneway for commercial purposes.

DP14 Encourage the establishment of a motel or short term stay accommodation development within the centre of town.

Industry:

DP15 Rezone land on the intersection of the Kidman Way and Sturt Highway to IN1 General Industrial and/or B6 Enterprise Corridor.

DP16 Incorporate specific controls into the DCP to ensure an appropriate interface is achieved between industrial development and the Sturt Highway including vehicular access, building design, setbacks, landscaping and signage.

DP17 Investigate opportunities to create a transport depot or truck interchange or parking area near the Sturt Highway and Kidman Way interchange.

Tourism:

DP18 Encourage the establishment of a motel or short term stay accommodation development within the centre of town.

DP19 Rezone the former saw mill site on the northern side the Murrumbidgee River SP3 Tourist.

Agriculture:

DP20 Limit residential and rural residential sprawl into established rural areas that has the potential to create land use conflicts and undermine the viability of productive agricultural businesses.

Environment:

DP21 Rezone environmental lands adjoining the Murrumbidgee River to E3 Environmental Management.

DP22 Require development proposals to consider the environmental impacts of vegetation removal in accordance with local and state government legislation.

DP23 Review the Terrestrial Biodiversity Map, Groundwater Vulnerability, Riparian Lands and Watercourse Map and Wetlands Map of the LEP to better reflect environmental conditions.

DP24 Require development proposal to consider impacts on matters of Aboriginal Cultural Heritage in accordance with the recommendations of the Aboriginal Cultural Heritage Review.

DP25 Adopt the recommendations of the Darlington Point Flood Risk Management Study and Plan including the introduction of a Flood Planning Map for the township.

DP26 Prepare a Bushfire Prone Land map in association with the NSW RFS.

DP26 Require new development proposals to consider the provisions of *Planning for Bushfire Protection Guidelines 2019*.

DP27 Amend Schedule 5 and the Heritage maps of the LEP consistent with the recommendations of the Heritage Review Inventory Report.

Infrastructure:

DP28 Finalise and adopt the recommended actions of the Integrated Water Cycle Management Strategy.

DP29 Ensure that new developments make an appropriate contribution towards the provision or augmentation of infrastructure consistent with Council's adopted Infrastructure Contributions Plans.

DP30 Ensure that development occurs in a staged and logical sequence to minimise pressures on infrastructure.

DP31 Rezone Council Sewerage Treatment Plant and Waste Management Centre SP2 Infrastructure.

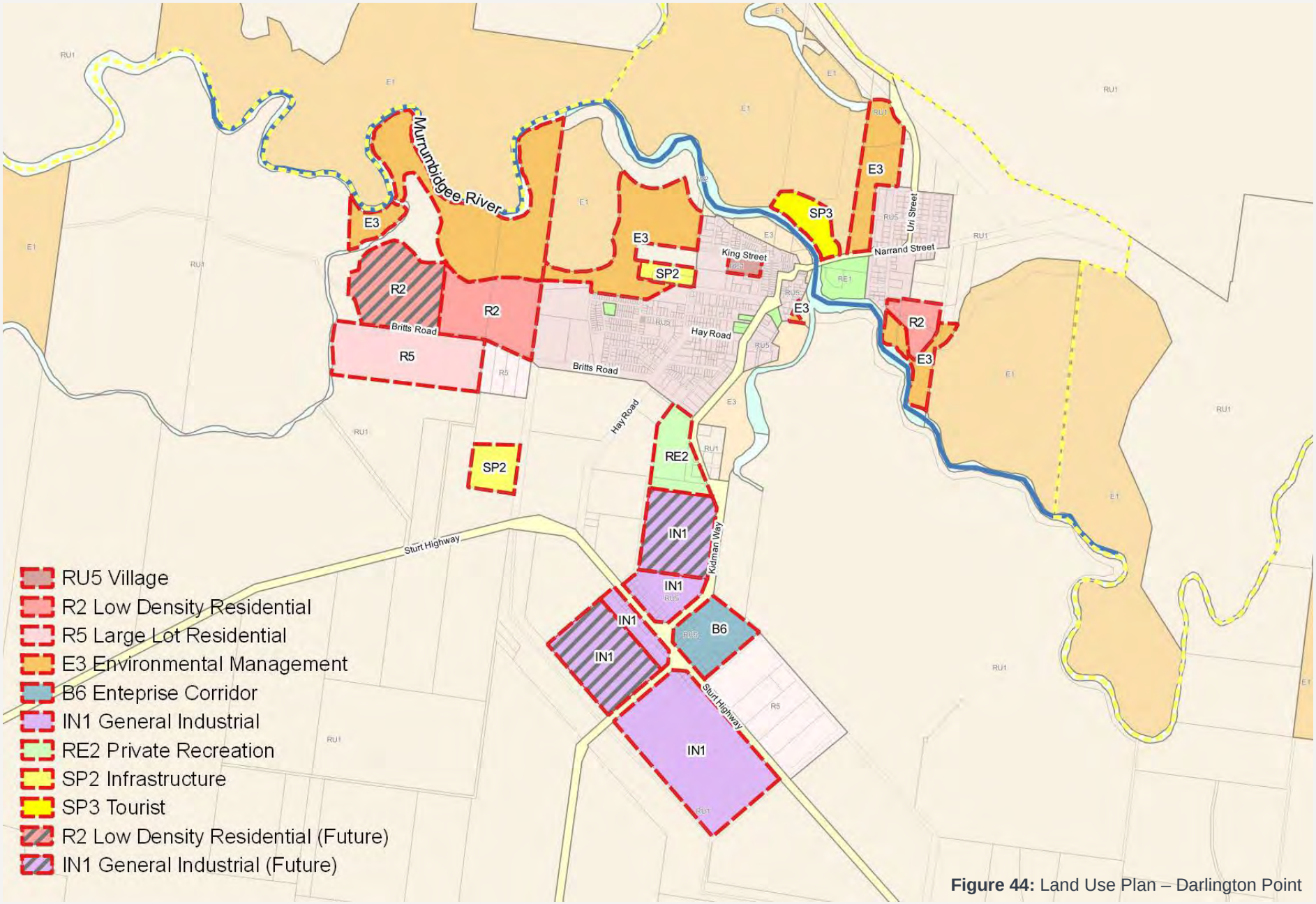


Figure 44: Land Use Plan – Darlington Point

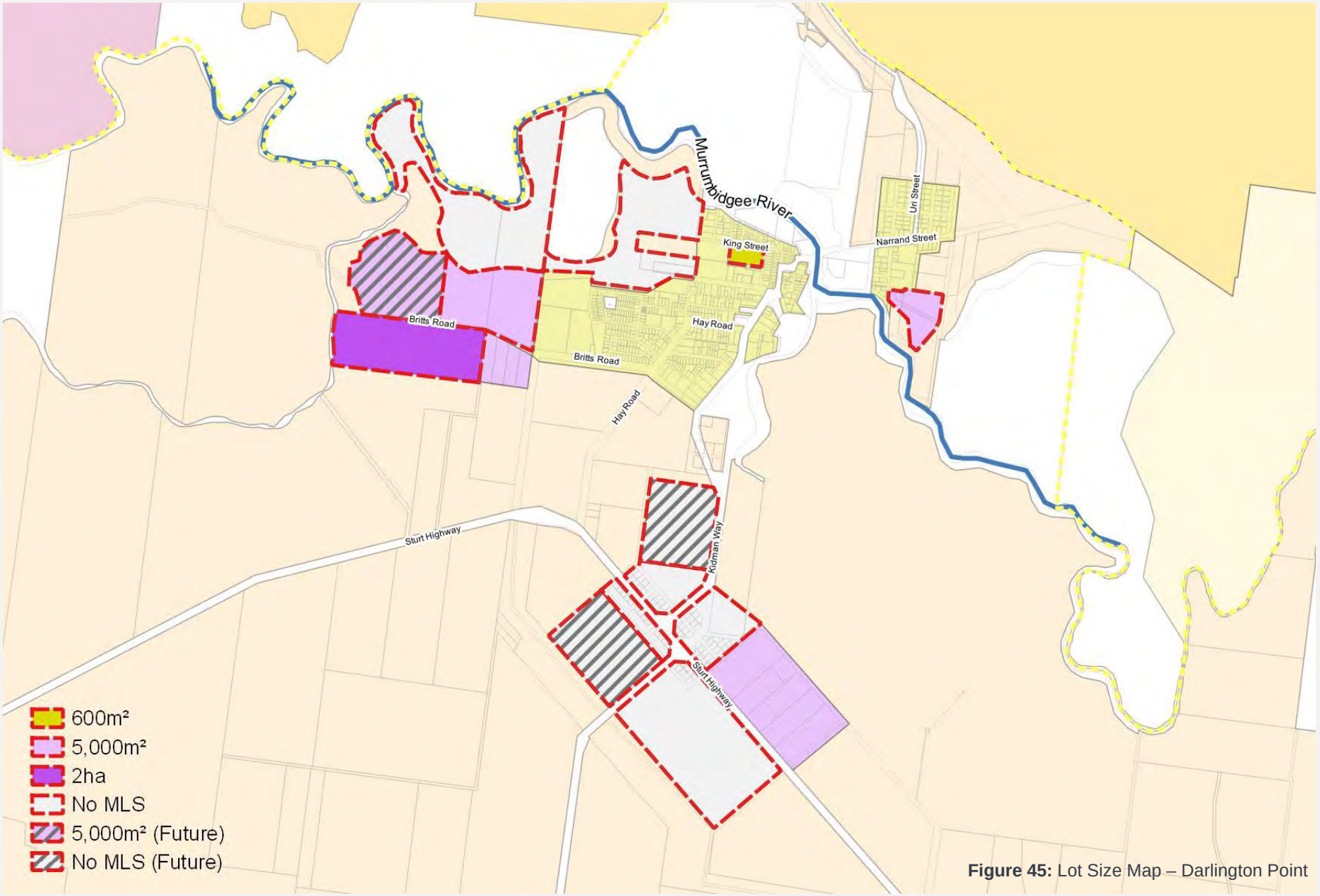


Figure 45: Lot Size Map – Darlington Point


Coleambally

3.2. Coleambally

Coleambally is the largest of the three townships of the Murrumbidgee Council area. It was established in 1968 to act as the centre for the surrounding Coleambally Irrigation Area and is the newest town in NSW celebrating its 50-year anniversary in 2018.

The town is located approximately 30 kilometres south of Darlington Point and 70 kilometres north of Jerilderie.

The main urban areas are zoned RU5 Village under the LEP to provide for the residential and commercial needs of the township. Other zones within the town include the R5 Large Lot Residential, IN1 General Industrial, RE1 Public Recreation, RE2 Private Recreation, RU1 Primary Production zones and RU3 Forestry zones.

3.2.1. Social and Community

Population

Coleambally had a total population of 1,331 people at the 2016 Census, which accounted for 35 percent of the total Murrumbidgee area.

Population and demographic trends within Coleambally are consistent with the broader Murrumbidgee Council area as outlined in Section 2.2.

Table 26: Darlington Point Population Projections 2016-2041

	Population (2016)	Additional Population (persons)	Annual change (persons)	Population (2041)
DPIE Projection (Common Growth)	1,331	-55	-2.22	1,276
Council Projection (High Growth)	1,331	175	7	1,506

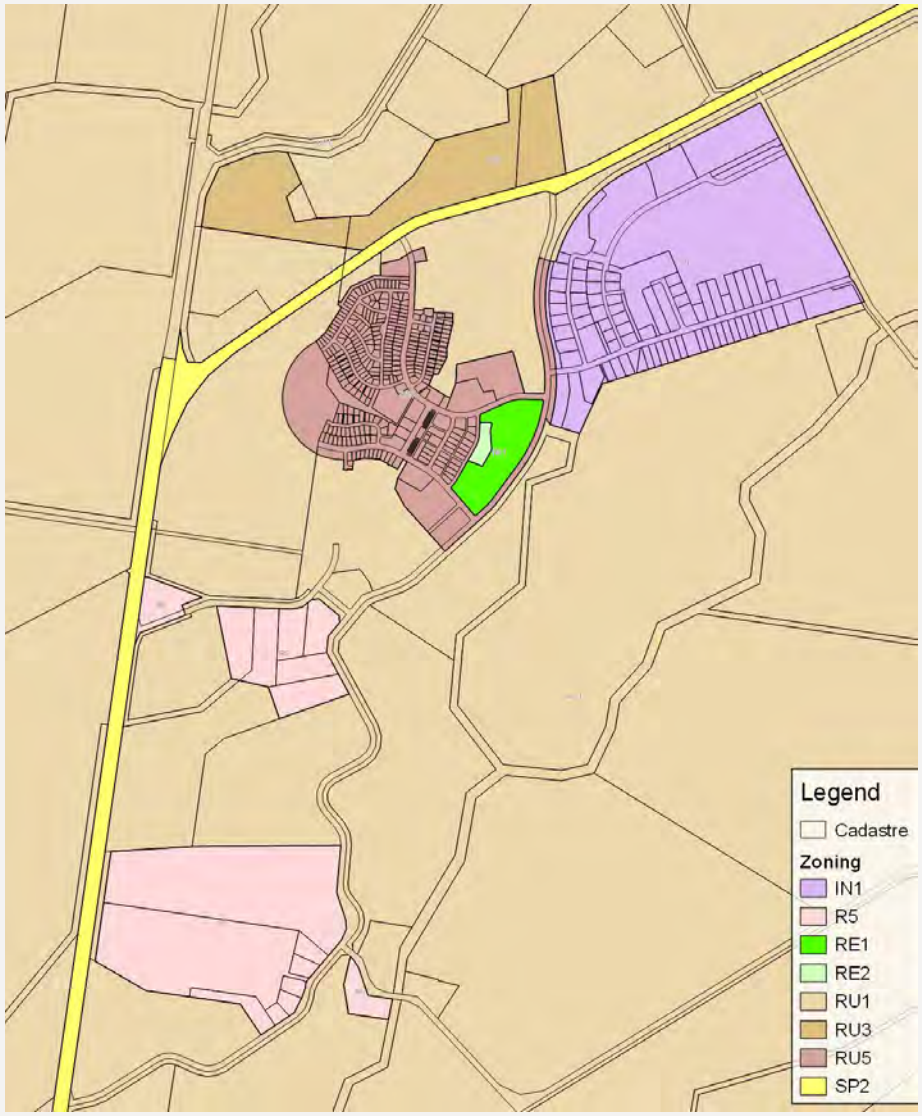


Figure 46: Land Zoning Map - Coleambally

Housing

At the 2016 Census, there were 659 dwellings in Coleambally. The predominant housing type in the township is single detached dwellings, with the largest household type being classified as ‘family households’ comprising at least one parent and child. The average size of households within Darlington Point was 2.3 persons per household.

Building approvals for Coleambally have remained low but steady over time with 3-4 new dwellings constructed per annum, which is reflective of population growth.

Anecdotally, demand for housing is forecast to increase in response to the establishment of a number of large industries and agricultural businesses proposed within close proximity to the town.

Table 27: Coleambally Housing Projections 2016-2041

	Housing (2016)	Additional Dwellings	Annual change (dwellings)	Housing (2041)
DPIE Projection (Common Growth)	659	-26.95	-1.08	-
Council Projection (High Growth)	659	86.21	3.45	745.21

Current housing issues facing Coleambally include:

- Increased demands for short-term or temporary worker accommodation in the township and potential amenity and land use conflicts this may create.
- Instances of residents living in sheds or outbuildings.
- Ageing population and demands for appropriate housing types.

Residential Land Supply

An analysis of residential land supply had been used to determine how much residential land is currently available for consumption.

For the purposes of this assessment, a lot is considered to be 'vacant' where it does not contain a dwelling as at 30 June 2021.

The residential land within Coleambally has been categorised as follows:

- **Standard Residential**, being land zoned RU5 Village with a minimum lot size of 600m^2. This land is connected to Council's reticulated sewerage;
- **Large Lot Residential**, being land zoned R5 Large Lot Residential with lot sized of 2ha or larger. This land is not connected to Council's reticulated sewerage.

Whilst it is acknowledged that the RU5 Village zone has a default minimum lot size of 600m^2, this is not representative of the established residential subdivision pattern of the town, which is more consistent with a minimum lot size of 1,000m^2.

There are currently approximately 15 vacant developed residential zoned lots within the township that are available for development. Furthermore, there is approximately 11.5 hectares of residential zoned land located to the south west of the main township, which can be further subdivided for conventional residential purposes.

It is noted that there is another approximate 7 hectare sized parcel of land zoned RU5 Village located to the south of Kookaburra Avenue. However, this land has not been included within the existing residential land supply as it is heavily vegetated and is proposed to be rezoned for environmental purposes.

In addition, there is approximately 87 hectares of undeveloped land located to the south of Coleambally along Pine Drive that is zoned R5 Large Lot Residential with a 2 hectare minimum lot size that could be further developed.

Table 28 provides an analysis of the current supply of residential zoned land (both developed and undeveloped) in Coleambally. The figures used in this table are based on an average of 8 lots per hectare for RU5 zoned land, which equates to an average lot size of 1,000m^2. Land supply in the R5 Large Lot Residential Zone has been calculated using a 2 hectare minimum lot size. This calculation also assumes 20% of the development site is required for roads, drainage and open space.

Based on this analysis, Coleambally has an approximate 62 years supply of residential zoned land based on an average take-up rate of 2.5 dwellings per annum.

When considering population projections outlined in Table 12 and using an average take-up rate of 3.5 dwellings per annum, the level of residential land supply is reduced to approximately 35 years.

Table 28: Coleambally Existing Residential Land Supply

Summary	Growth Rate	Land Supply	No. of additional lots	Demand (dwellings p.a.)	Years Supply
Standard Residential (600m^2)	DPIE Projection (High Growth)	11.5ha	89*	2.0	44.5
	Council Projection (High Growth)	11.5ha	89*	2.5	35.6
Large Lot Residential (2ha+)	DPIE Projection (High Growth)	87	35	0.5	70
	Council Projection (High Growth)	87	35	1.0	35

* This figure includes the existing 15 constructed lots that are vacant

Community Facilities

Coleambally is well serviced with a number of community facilities including a pre-school, playgroup, primary school (St Peter's), a K-12 school (Coleambally Central), residential program for Aboriginal boys (Tirkandi Innaburra), a medical centre, aged care hostel, police station and ambulance station. Council also runs an administration office and a mobile library services the town every Wednesday. A community hall is also available for hire and the area has a number of churches and a local cemetery.

In recognition of the wide range of community facilities and historical population trends, there is capacity within the existing facilities to accommodate the expected marginal population growth to 2041.

A plan showing the existing community facilities is provided in Figure 47.

Recreation and Open Space

The Coleambally area is serviced by a number of public recreation and open space areas including the Coleambally Sports and Recreation Complex, Apex Park, John McInnes Square and Lions Park, which is situated at the town's entrance and contains the imposing Bucyrus Erie dragline excavator.

The town caters for tennis, netball, basketball, football, lawns bowls, cricket and squash. In addition, it is serviced with an outdoor heated swimming pool, clay target shooting club, pistol club and golf course.

The Coleambally Lake Committee has recently been established to investigate opportunities to create a new lake and associated recreation and parking facilities to the south west of the main township. A residential subdivision is also proposed surrounding this lake.

In recognition of future population growth and consistent with the key performance criteria of the NSW Government's *Draft Greener Places Design Guide,* it is recommended that a new local park be constructed on the south western side of town to service the future population in this area and ensure that all residents have access to open space within a general 400m / 5 minutes walking distance.

A plan showing existing and proposed open space is provided in Figure 47.

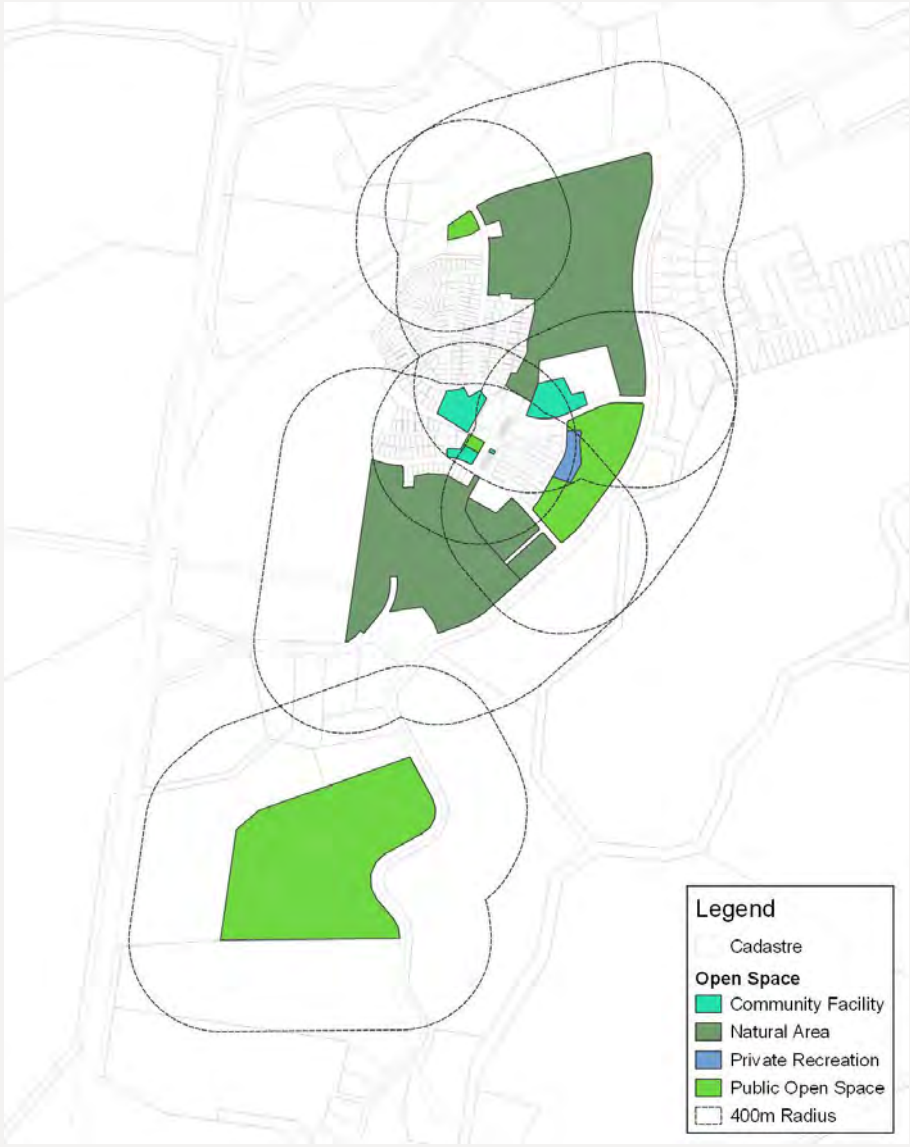


Figure 47: Open Space and Community Facilities Map – Coleambally

3.2.2. Economy

Commercial and Retail

The main commercial and retail centre of Coleambally is focussed around Brolga Place, which is the main street. The main commercial area includes banking services, a butcher, supermarket, service station, post office, newsagent, hairdresser, clothing stores, take-away food shop, pharmacy, account and legal services.

The area also contains a number of cafes, coffee shops and restaurants, as well as the Brolga Hotel, which is located at the northern edge of the main street.

The main township is zoned RU5 Village under the current LEP to provide flexibility in zoning and to allow for a range of commercial, residential and light industrial activities.

Further commercial development within the township should occur around the established main street.

Industry

Coleambally is well serviced with industrial zoned land with approximately 155 hectares of land located on the eastern side of town zoned IN1 General Industrial.

This industrial area provides the town with automotive and tyre services, transport, hardware and building supplies, engineering and agricultural industries.

A supply and demand analysis of existing industrial zoned land has been undertaken and is provided in Table 29.

As can be seen in this table, there is approximately 60 hectares of vacant industrial zoned land that could be developed. Based on an average lot size of 5,000m^2 – 7,000m^2 which is consistent with the current established lot pattern, this could equate to an industrial land supply of 84-115 lots.

A review of recent council building and planning approvals for the previous 5 years shows that on average, 3 new industrial developments are constructed each year in Coleambally.

Based on current industrial supply and demand figures, this equates to approximately 28-38 years worth of industrial land.

Accordingly, the town is well serviced with industrial zoned land and there is no need to rezone more land for this purpose, given a large proportion of this area still remains undeveloped.

Table 29: Coleambally Industrial Land Supply

Supply and Demand Analysis	No.
Amount of industrial zoned land	155ha
Total Lots Created	81
Total Lots Consumed (developed)	60
Total Vacant Lots	21
Vacant Industrial zoned land (to be developed)	59ha
Potential additional lot supply (based on average lot size of 5,000m^2 – 7,000m^2)	84-115*
Land supply (years) (based on demand for 3 industrial lots p.a.)	28-38

* This figure will be lower if several larger industrial lots are created similar to other examples within the industrial estate.

Tourism

Coleambally enjoys a number of tourist attractions that make it an ideal place to visit including; retail, recreation, agricultural and nature-based activities. These permanent attractions are in addition to a number of events held throughout the year.

It is recommended that land use zoning remain flexible to continue to support a variety of tourist opportunities.

As outlined above, the Coleambally Lake Committee has also recently been established to investigate opportunities to create a new lake and associated recreation and parking facilities to the south west of the main township so as to encourage additional tourism opportunities consistent with a number of other regional and rural townships. It has been proposed that this lake can be constructed on Council owned land and filled with surplus irrigation water.



Coleambally Water Tower

Agriculture

The majority of the Murrumbidgee Council area is zoned for rural and agricultural purposes and is broadly used for dryland and irrigated cropping, as well as grazing.

Land within and immediately surrounding Coleambally is rated as Class 6 - Very severe limitations in terms of agricultural land quality (Figure 48).

All rural land within and surrounding the main township of Coleambally is zoned RU1 Primary Production with a corresponding 200 hectare minimum lot size for subdivision. This land is generally used for broadacre grazing and irrigated cropping purposes.

Although the Council area can be viewed as a traditional rural and agriculturally based local government area, the main townships and immediate surrounds are urban in nature or have been developed for hobby farming type purposes.

Future development and expansion of Coleambally will need to ensure that residential and rural residential growth does not restrict existing productive agricultural operations.

Similarly, land management for native vegetation removal in the rural zones is undertaken in accordance with the *Local Land Services Act 2013*. For the purposes of this Study, much of the land surrounding the main Coleambally township is classified as ‘Category 1 Exempt Land’ as it was cleared of native vegetation as at 1 January 1990 (Figure 49).

Under the LLS Act, Category 1 land is unregulated and owners can remove native vegetation so long as they do not knowingly harm an animal or damage the habitat of an animal that is a threatened species or part of a threatened ecological community

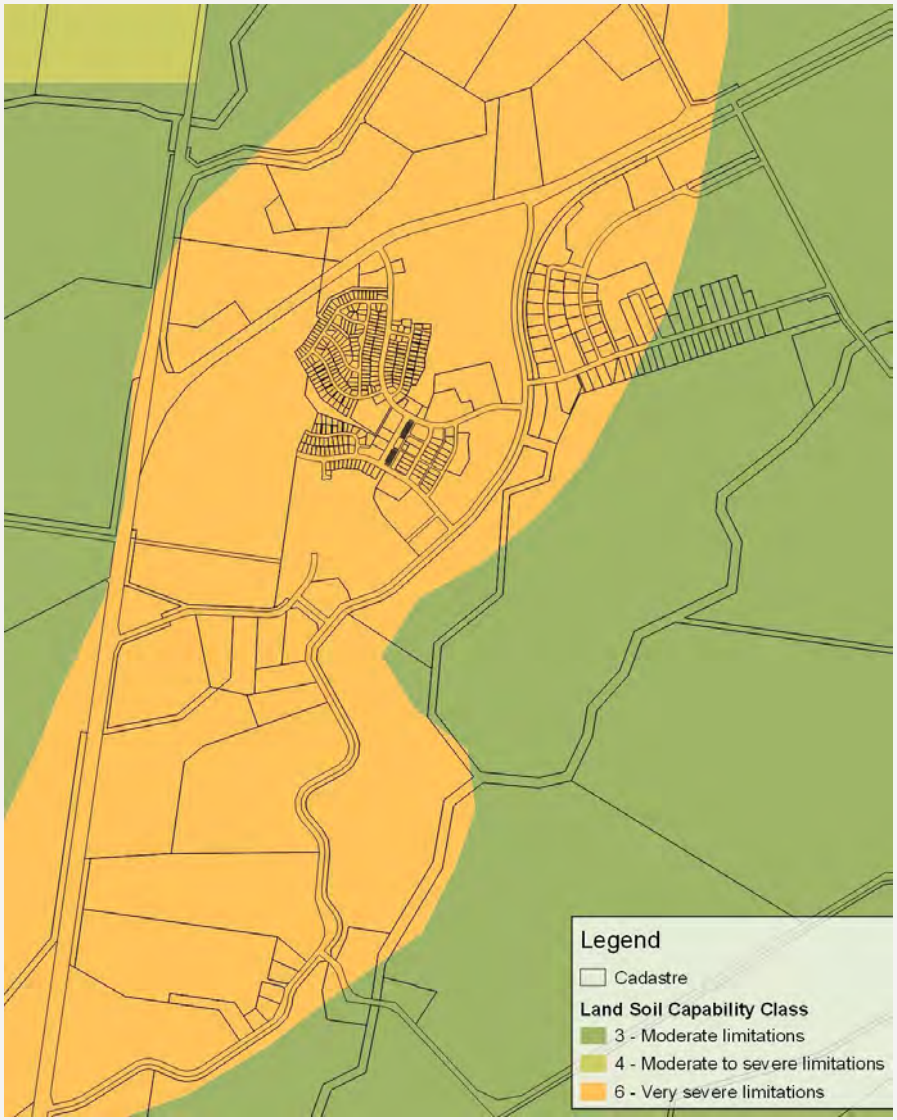


Figure 48: Agricultural Land Capability Map – Coleambally

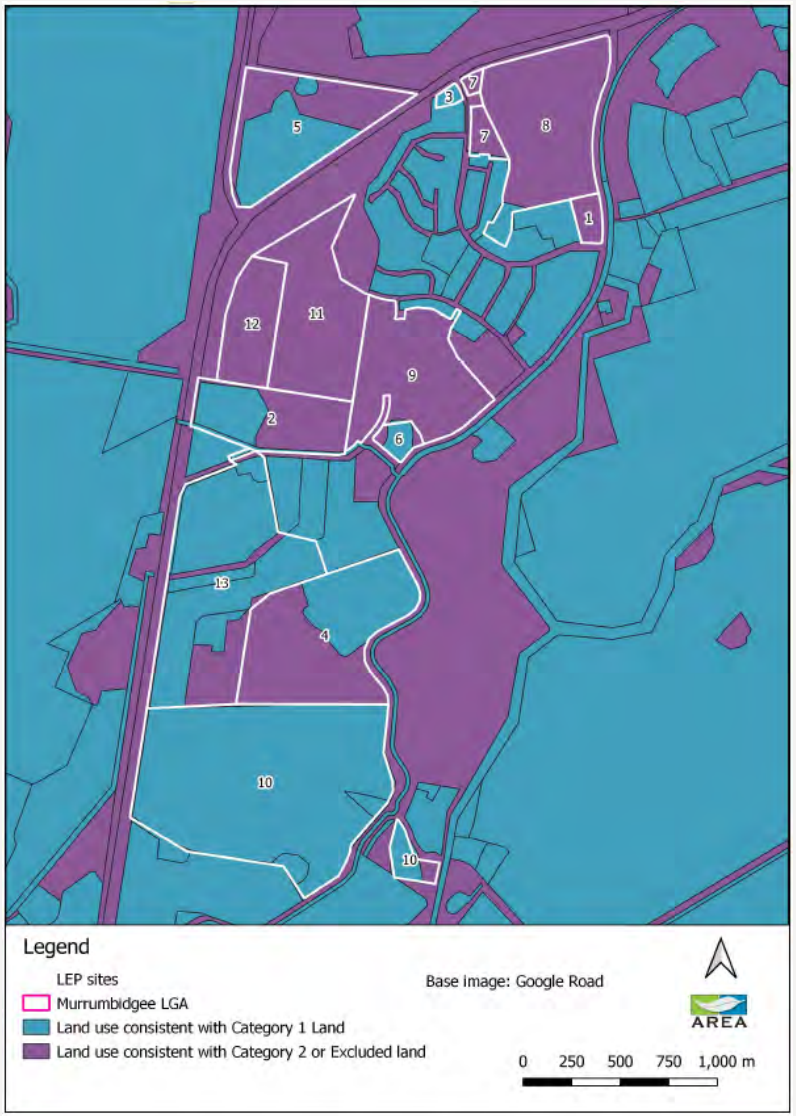


Figure 49: Category 1 Exempt Land Map
(Source: Area Environmental and Heritage Consultants, 2021)

3.2.3. Environment

Vegetation and Threatened Species

Coleambally is surrounded by dense vegetation including semi-arid woodlands (Black Box, Cypress Pine and Weeping Myall), Riverine sandhill woodlands (White Cypress Pine), Forested wetlands (River red gums), as well as grasslands (Speargrass, Windmill grass and Plains Grassland).

Of these, a number are classified as endangered (Sandhill pine woodland, Myall woodland) and critically endangered (Artesian springs ecological community and natural grasslands).

The area is also home to a number of native fauna including the Grey-crowned babbler (eastern subspecies), Painted honeyeater, Southern Myotis and Superb parrot, which are all listed as 'vulnerable' under the *Biodiversity Conservation Act 2016* and/or the Federal *Environment Protection and Biodiversity Conservation Act 1999.*

The LEP maps much of Coleambally as an area of 'Terrestrial Biodiversity' within which Clause 6.3 requires Council to consider the impact of development on flora and fauna as well as "any appropriate measures proposed to avoid, minimise or mitigate" those impacts. These areas have been identified through aerial imagery and have not been 'ground truthed' for significance. They also do not identify scattered vegetation.

Having regard to the vegetation types in the study area, vegetation presents as a constraint for development not just because of its biodiversity value but also because of the high cost of offsetting its removal. Specifically, this is the reason that the proposed Coleambally Lake project has not been progressed due to the biodiversity offsetting costs to develop this land.

Fortunately, there remains areas of land that are either unconstrained by stands of remnant vegetation or contain scattered paddock trees at a lower density.

Further matters regarding biodiversity are contained in the Biodiversity Constraints Analysis report prepared by AREA Environmental and Heritage Consultants in support of the Land Use Plan.

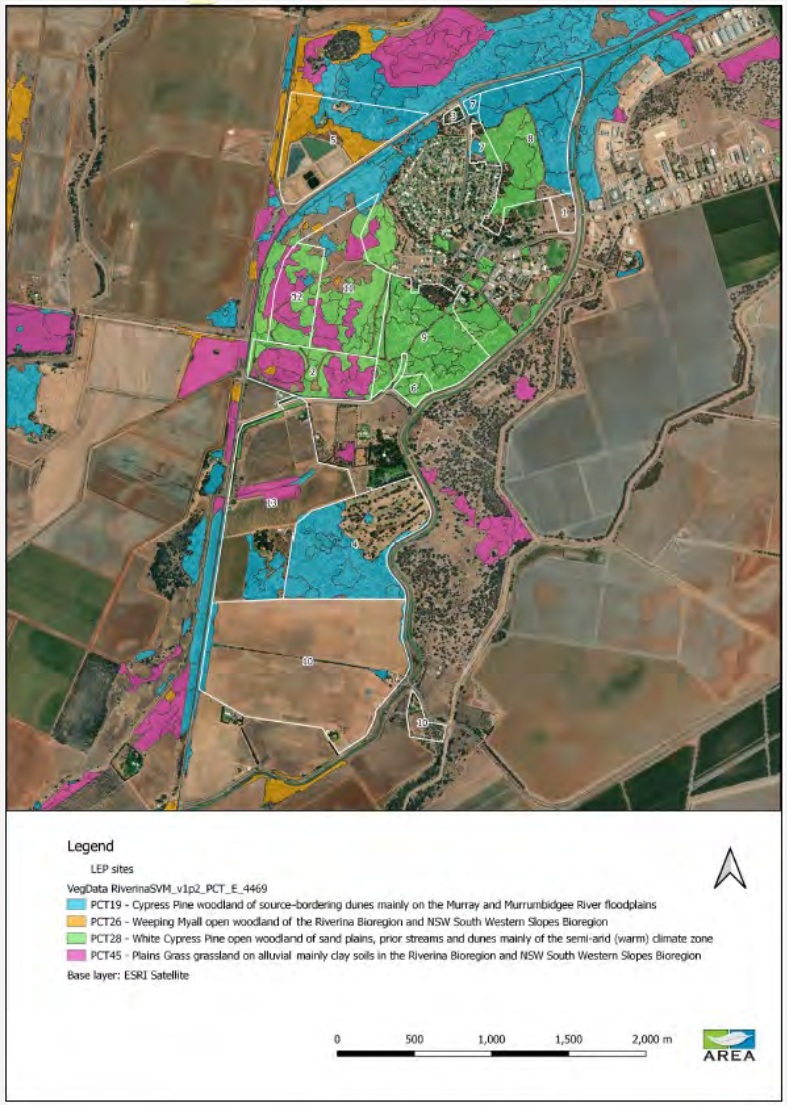


Figure 50: Plant Community Types associated with Threatened Ecological Communities (Source: Area Environmental and Heritage Consultants, 2021)

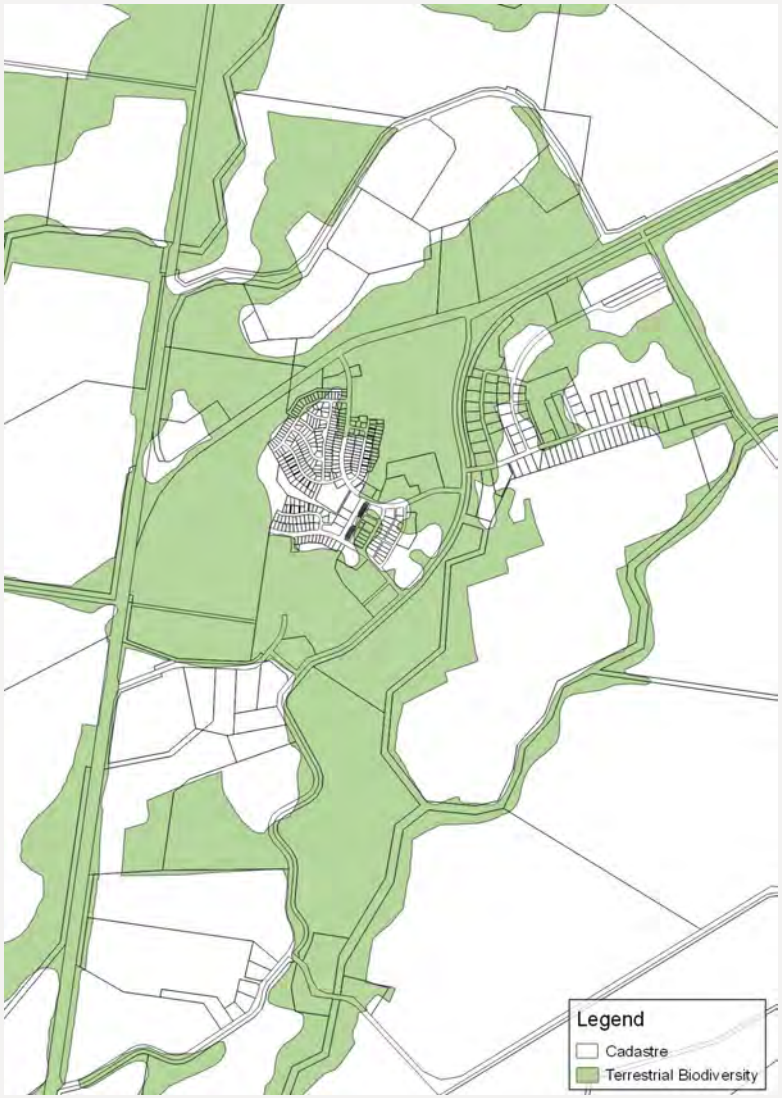


Figure 51: Terrestrial Biodiversity Map – Coleambally

Flooding

Coleambally is not subject to flooding or inundation.

Bushfire

The entire township west of Pine Drive is classified as being bushfire prone. Therefore, any development of this land or adjoining land shall have regard to the relevant bushfire planning requirements as outlined within the NSW RFS document titled *Planning for Bushfire Protection Guidelines 2019*.

In addition, *Planning for Bushfire Protection Guideline 2019* now provides a broader definition of grassland than previous versions with any undeveloped land now considered to be 'grassland vegetation'.

Consequently, further development of land shall have regard to the bushfire prone land map, as well as the broader grassland bushfire hazard. Where necessary, any future subdivisions shall incorporate relevant bushfire provision measures such as Asset Protection Zones, whilst the construction of new buildings shall achieve relevant Bushfire Attack Level (BAL) ratings in accordance with the requirements of PBP.

Council is currently in discussions with the NSW RFS to update this mapping to reflect current day bushfire hazards and policy changes.



Figure 52: Extract of Bushfire Prone Land Map for Coleambally
(Source: NSW Planning Portal, 2020)

Waterways

Coleambally does not contain any identified waterways, but rather contains a number of constructed irrigation channels that service the wider Coleambally Irrigation Area.

Notwithstanding, the entire township is identified as being subject to groundwater vulnerability as it contains important aquifers (Renmark and Calivil Formations), which are used for consumptive and beneficial uses including urban water supplies.

Consequently, Clause 6.4 of the LEP contains specific matters regarding groundwater vulnerability that Council must consider when assessing a development application.

Consideration of these areas will be required in the future rezoning of any land, particularly areas of groundwater vulnerability where effluent is proposed to be disposed of on-site.

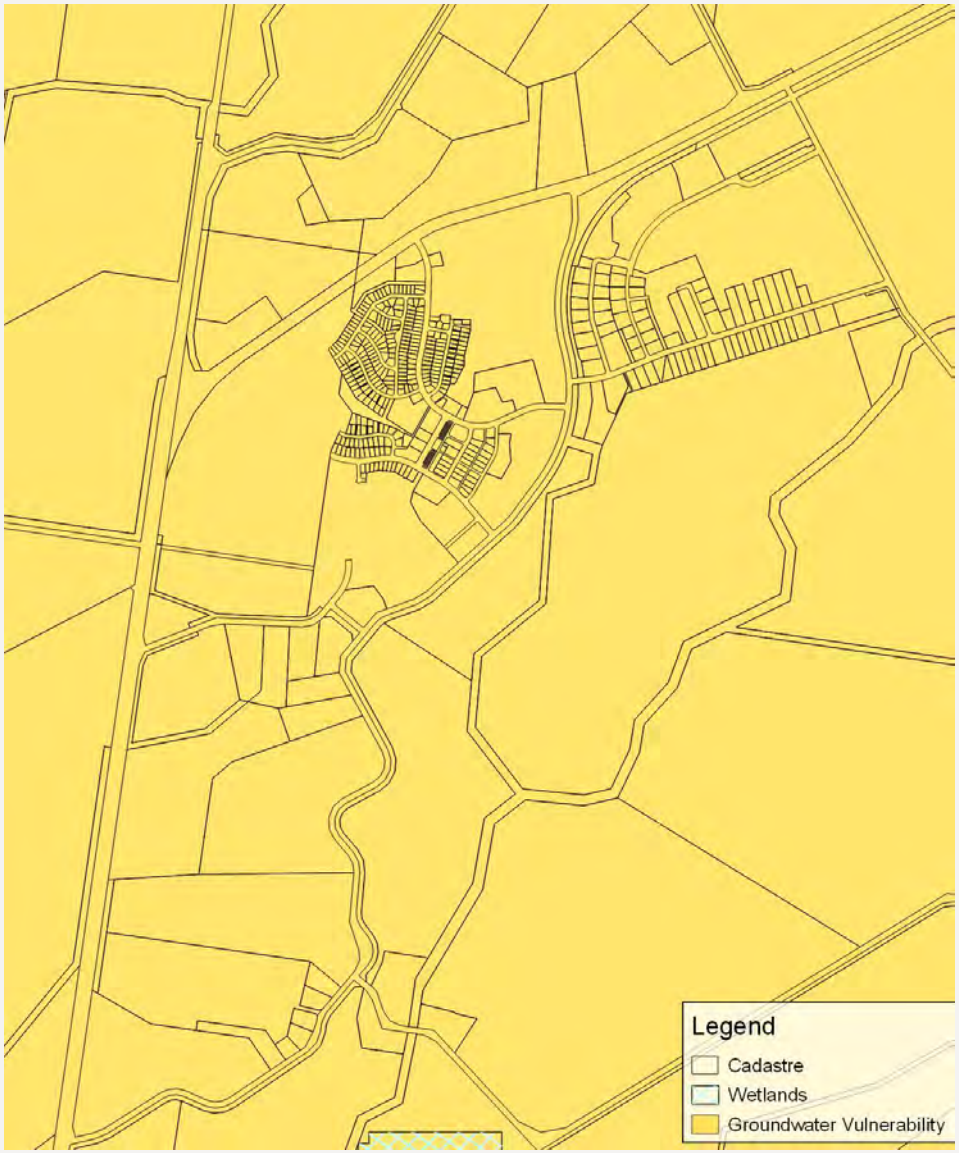


Figure 53: Waterways Map – Coleambally

Non-Aboriginal Heritage

There are currently no non-Aboriginal heritage items recorded in Coleambally. Reasons for this could include the relatively young age of the town, but the more likely scenario is that matters regarding heritage have not been previously investigated.

A Heritage Review Inventory Report has been prepared by Noel Thomson Architecture in support of the Land Use Plan. The purpose of this report was to review the current heritage listings and recommend any deletions and/or additions to this list.

The report recommends the inclusion of a number of items of environmental heritage including:

- Police Station, Brolga Place and Kookaburra Avenue, Coleambally
- Post Office and shopping centre, 33-35 Brolga Place, Coleambally
- Coleambally Community Hall, Kingfisher Avenue, Coleambally
- St Mark the Evangelist Anglican Church, 26 Kookaburra Avenue, Coleambally
- Uniting Church, 13 Kingfisher Avenue, Coleambally
- Catholic Church of St Peter, 20 Kingfisher Avenue, Coleambally
- St Peters Primary School, Currawong Crescent, Coleambally
- Coleambally Central School, 11 Kingfisher Avenue, Coleambally
- Bucyrus Class Dragline, Lions Park, Coleambally
- Coleambally Water Tower, Kingfisher Avenue, Coleambally
- Coleambally Memorial Swimming Pool, Falcon Road, Coleambally
- Coleambally Station, Four Corners Road, Coleambally
- Kyola Station, 110 Kyola Road, Coleambally
- The Avenue, The Avenue, Donald Ross Drive, Coleambally
- Gala Vale, Kulki Lane via Coleambally
- Argoon Church, Corner Kulki Lane and Stud Park North Road, Argoon
- Noonameena & Coleambally Station, Four Corners Road, Coleambally
- Coleambally Main Canal Bridge No. 2, Coleambally
- Coleambally Offtake Bridge Regulator, Coleambally

See Heritage Review Inventory Report prepared by Noel Thomson Architecture for further details.

Aboriginal Heritage

Generally, the Coleambally area has low archaeological potential due to its distance from a reliable water source. It is important to note however that prior streams may be present within or nearby, which could reveal uncovered archaeological items.

A review of the NSW Aboriginal Heritage Information Management System (AHIMS) has revealed one previously-recorded Aboriginal site within the township of Coleambally with three others located to the west of Kidman Way, but in proximity to the township. All previously-recorded sites are culturally-modified trees.

Existing ground disturbances are variable in Coleambally but the regional and local archaeological contexts indicate a low likelihood for sites of Aboriginal heritage even where disturbance is low.

Nonetheless, any remnant mature vegetation should be inspected for possible cultural modification prior to clearance. Other site types are possible where disturbances are low.

Key future development sites, proposed to the south west of Coleambally have been inspected as part of an Aboriginal Cultural Heritage Assessment Report prepared by AREA Environmental and Heritage Consultants.

A pedestrian survey was undertaken on Wednesday 17 March 2021 by AREA Environmental and Heritage and a representative of the Griffith Local Aboriginal Land Council. The site was adequately covered and one possible culturally-modified (scarred) tree was recorded in the south-west corner. No other sites or areas of archaeological sensitivity were recorded and the report concluded that there will be no archaeological constraints to the development of this land.

For further details regarding Aboriginal Cultural Heritage, see the Aboriginal Cultural Heritage Review report prepared by AREA Environmental and Heritage Consultants.

Land Use Conflicts

As outlined within Section 2.2.7, land use conflicts arise when incompatible land uses are situated in close proximity to each other. Land use conflicts may impact on the amenity of sensitive land uses, the efficient use of productive land, or environmental and landscape values.

An assessment of land use conflicts for Coleambally has been undertaken consistent with the NSW Department of Primary Industry's Land Use Conflict Risk Assessment (LUCRA) guidelines. There are four key steps involved in undertaking a LUCRA and these include:

1. Gather information about proposed land use changes and associated activities.
2. Evaluate the risk level of each activity.
3. Identify risk reduction management strategies
4. Record LUCRA results.

Key potential land use conflicts contained within Coleambally include:

1. Sewerage treatment plant
2. Industrial land

Other land use conflicts that are specific to Coleambally that need to be considered include:

3. Bushfire risks on development that adjoins heavily vegetated areas or open grasslands.
4. Amenity impacts such as noise adjoining key transport corridors (road, rail).

Careful consideration will be required when planning future land uses to ensure that they will not result in conflicts between land uses.

A plan showing these potential land use conflicts is provided in Figure 54.

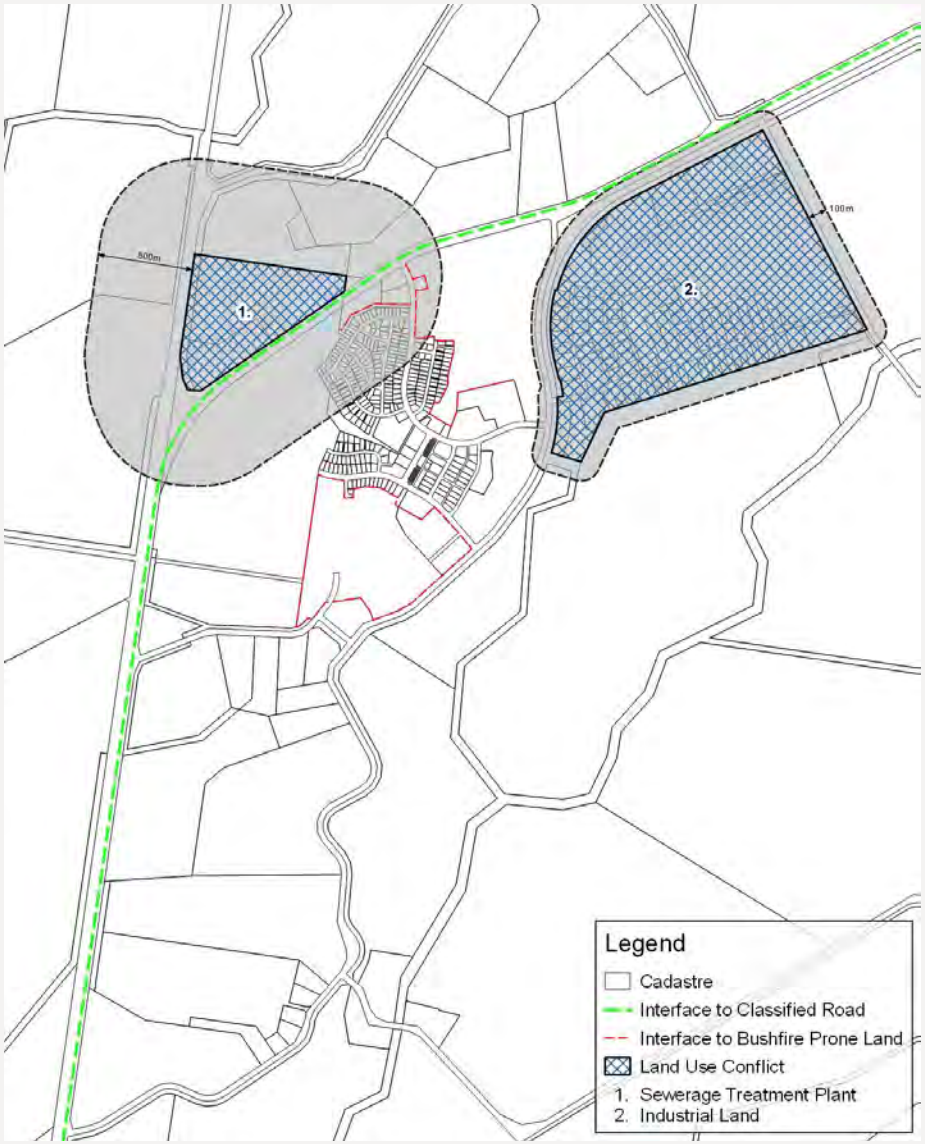


Figure 54: Land Use Conflict Map – Coleambally

Crown Lands

The township of Coleambally contains a number of Crown Land Reserves held in public ownership. Council is the manager of some of this land, whilst other portions are subject to lease or licence agreements.

This land is generally located to the south and west of the main urban township and includes the Coleambally Golf Club.

The public ownership status of this land may therefore being placing a constraint on development in the absence of the land being devolved to Council.



Figure 55: Crown Lands Map – Coleambally

Summary of Constraints and Opportunities

To help assist identifying potential candidate sites for rezoning and/or redevelopment, consideration has been given to the environmental constraints and opportunities as outlined within this Section.

A plan showing the combined constraints and opportunities for Coleambally is provided in Figure 56.

The features have informed the proposed zoning recommendations outlined in Section 3.2.5.

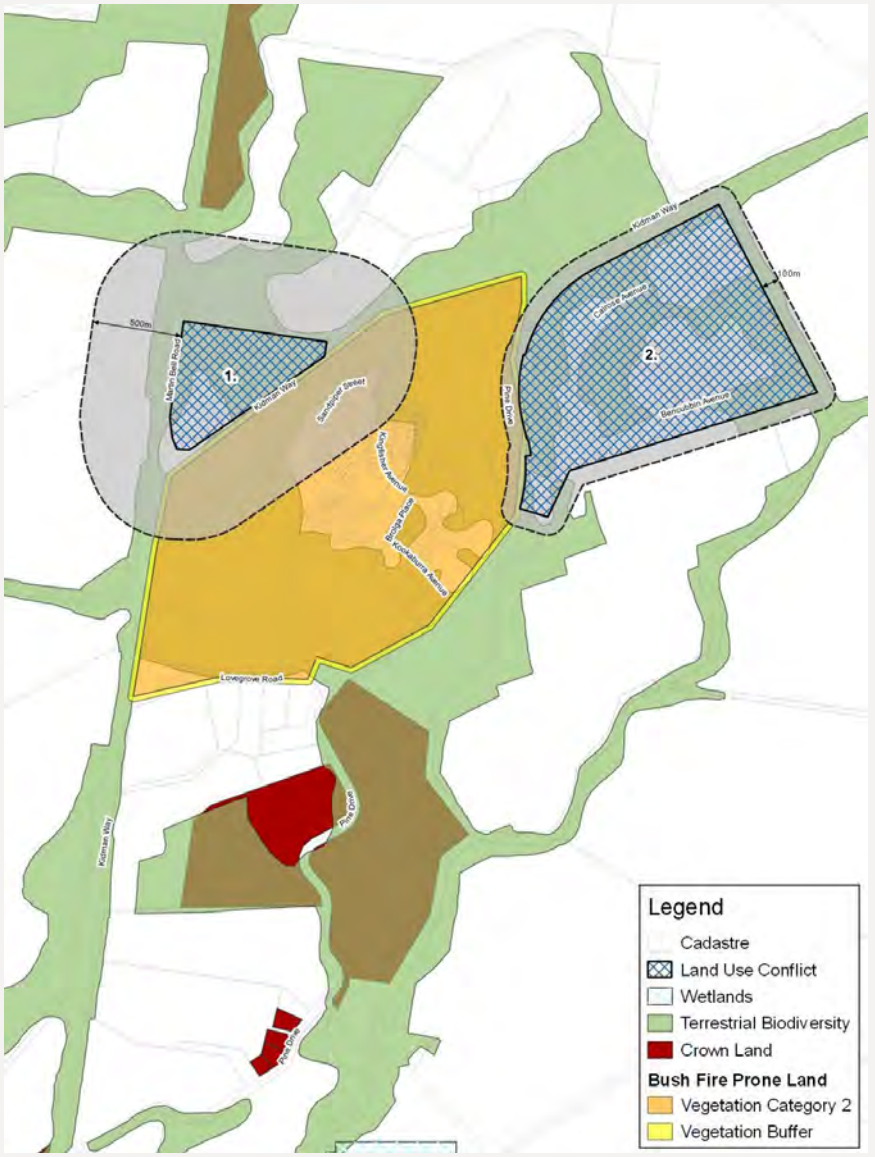


Figure 56: Combined Constraints and Opportunities Map – Coleambally

3.2.4. Infrastructure

Council in association with the NSW Public Works Advisory is in the process of preparing an Issues Paper to the IWCMS, which will identify current and future capacity issues and upgrade requirements.

The outcomes of this Paper will inform further recommendations to the IWCMS and the conclusions of this Issues Paper as they relate to Coleambally are discussed below.

Water

Coleambally's town water is supplied from two bores/reservoirs and the water is filtered and chlorinated at the water filtration plant. Minor repairs have been carried out to the water mains over the past 12 months.

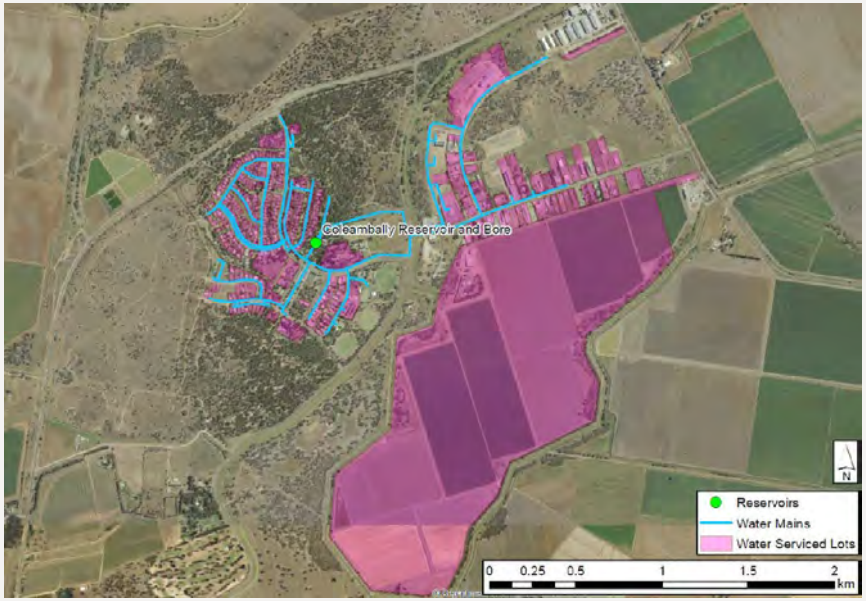


Figure 57: Coleambally water supply scheme distribution map
(Source: Draft Integrated Water Cycle Management Strategy)

The IWCMS Issues Paper identifies the following capacity issues in terms of water supply in Coleambally. These items will need to be addressed so as to achieve projected future population growth.

Based on this analysis projected residential development can be achieved subject to augmentations of the existing water network. It is also recommended that as part of a broader strategy that council investigate and reduce current water losses to ensure that service capacity is not unnecessarily reduced.

Table 30: Water Supply Upgrade requirements – Coleambally

This table has been removed from the public exhibition version pending the finalisation of the IWCMS.

Sewerage

The Coleambally sewerage treatment works is located to the north west of the township on the opposite side of Kidman Way. This facility currently services the town via holding and evaporation ponds and is subject to an EPA licence.

Due to the plants' relatively isolated location and ongoing management operations, Council has received no complaints in regard to this facility.

Given the important role that this facility provides, it is recommended that it is rezoned to a special activities zone to ensure its ongoing protection.

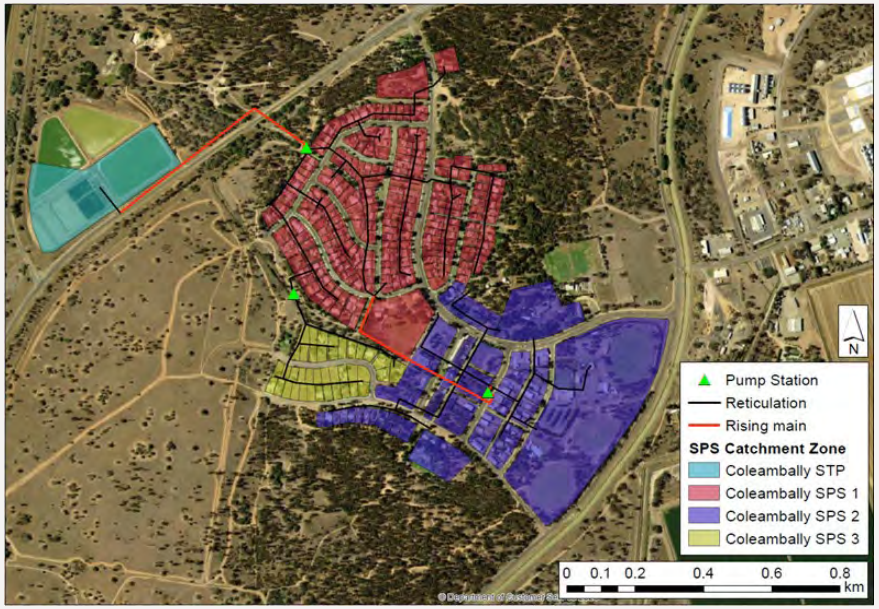


Figure 58: Coleambally sewage system
(Source: Draft Integrated Water Cycle Management Strategy)

The IWCMS Issues Paper identifies the following capacity issues in terms of sewerage supply in Coleambally. These items will need to be addressed so as to achieve projected future population growth.

Table 31: Sewerage Supply Upgrade requirements – Coleambally

This table has been removed from the public exhibition version pending the finalisation of the IWCMS.

Transport

Coleambally is located alongside the Kidman Way, which is state-listed roadway that services the Murrumbidgee Irrigation area and links the Newell and Sturt Highways. Road access to the town is via two main intersections with primary vehicular access via Kingfisher Avenue, whilst a secondary intersection is available via Pine Drive.

Previous discussions with Transport for NSW have advised that no additional driveways or roadways would be permitted to connect to this roadway.

Other Services

Gas (bottled), electricity and telecommunications infrastructure are available and can be extended to service future development.

Drainage infrastructure is also appropriate and should continue to occur via a 'pit and pipe' system. Where large lot residential subdivisions are proposed, drainage can be via vegetated swale/table drains.

3.2.5. Coleambally Land Use Plan

Recommendations

The Land Use Plan identifies four candidate sites to be rezoned for residential purposes (Figure 59). These parcels of land are described as follows:

- Kingfisher Avenue, Coleambally (Part Lot 534, DP1097168).
- Kookaburra Avenue, Coleambally (Part Lot 464, DP862112).
- 46 Lovegrove Road, Coleambally (Lot 92, DP750872).
- 5012 Kidman Way, Coleambally (Part Lot 94, DP750872).

The recommended rezoning of this land is consistent with the environmental constraints of the land, as well as infrastructure and servicing provision.

The properties represent both infill and greenfield development and are currently zoned RU1 Primary Production with a minimum lot size of 200 hectares.

More specifically, it is proposed to rezone land on the eastern side of the Coleambally Central School, as well as land to the north of Bluebonnet Crescent from RU1 Primary Production to RU5 Village with a 600m^2 minimum lot size. The rezoning of this land represents infill development within close proximity to infrastructure and services. Combined, this land has a total area of approximately 7 hectares, which could result in the creation of an additional 45 conventional residential lots.

The Land Use Plan also recommends rezoning land to the south west of the main township from RU1 Primary Production to RU5 Village with a 600m^2 minimum lot size. This land is largely unconstrained with the exception of a number of scattered paddock trees and adjoins vacant land currently zoned RU5 Village, which is accessed via Kookaburra Way. The total size of this area is approximately 7 hectares in size, which could result in the creation of an additional 45 conventional residential lots.

In order to achieve a diversity of residential lot types it is proposed to rezone land to the south of Lovegrove Road and adjoining the Kidman Way from RU1 Primary Production to R5 Large Lot Residential with a 2 hectare minimum lot size. This land is unconstrained from an environmental perspective and already adjoins land that has been developed for large lot residential purposes. The total size of this area is approximately 40 hectares, which has the potential to create an additional 16 large lot residential properties.

The proposed land zoning recommendations contained within this Plan is outlined in Figure 55.

Based on the land zoning and minimum lot size recommendations, this land has the potential to cater for up to approximately 89 additional residential lots as outlined in Table 32.

Based on the current take up rate of 2.5 dwellings per annum, this equates to a residential land supply of approximately 44 years.

When considering the forecast take-up rate of 3.5 dwellings per annum, this level of residential land supply is reduced to approximately 35 years.

This level of proposed residential land supply is in addition to the existing supply that is currently available and brings the total supply to 92 years.

The Land Use Plan does not recommend rezoning any additional industrial land given the large level of supply that already exists.

Other changes recommended by the Plan include rezoning certain lands for environmental protection purposes in recognition of their environmental features and constraints, as well as placing Council's key infrastructure facilities within a special use zone to ensure its ongoing protection.

It is also recommended that the Terrestrial Biodiversity Map be reviewed as it applies to the urban areas of Coleambally as it currently maps land that is developed or contains no identified significant vegetation. Similarly, it is recommended that the Heritage Map and Schedule 5 of the LEP be reviewed consistent with the recommendations of the Heritage Review.

Table 32: Coleambally Existing and Proposed Residential Land Supply

Summary		Area	Proposed No. of additional lots	Demand (dwellings p.a.)	Years Supply
Existing Supply					
RU5 Village (600m² +)	DPIE Projection (High Growth)	11.5ha	89*	2.0	44.5
	Council Projection (High Growth)	11.5ha	89*	2.5	35.6
R5 Large Lot Residential (2ha+)	DPIE Projection (High Growth)	87	35	0.5	70
	Council Projection (High Growth)	87	35	1.0	35
Proposed Supply					
RU5 Village (600m² +)	DPIE Projection (High Growth)	14ha	89	2.0	44.5
	Council Projection (High Growth)	14ha	89	2.5	35.6
R5 Large Lot Residential (2ha+)	DPIE Projection (High Growth)	40ha	16	0.5	32
	Council Projection (High Growth)	40ha	16	1.0	16
Total	DPIE Projection (High Growth)	152.5ha	229	2.5	91.6
	Council Projection (High Growth)	152.5ha	229	3.5	65.4

* This figure includes the existing 15 constructed lots that are vacant

Key Land Use Planning Considerations

Table 33: Key Land Use Planning Considerations – Coleambally

Population and Housing:

C1 Ensure a sufficient supply and range of residential zoned land to cater for expected demand.

C2 Rezone land to the south west of Coleambally for to RU5 Village with a 600m^2 minimum lot size.

C3 Rezone land on the corner of Kingfisher Avenue and Pine Drive to RU5 Village with a 600m^2 minimum lot size.

C4 Rezone land to the south of Lovegrove Road to R5 Large Lot Residential with a 2 hectare minimum lot size.

C5 Ensure short-term accommodation developments are appropriately designed and located to minimise impacts on surrounding residents.

Community Facilities and Open Space:

C6 Continue to review community facilities and open space provisions within town, with gaps identified and strategies developed.

C7 Ensure zoning is flexible to allow for the establishment of community facilities within central locations that are accessible.

C8 Establish a new public open space area on the south western side of town to service the proposed residential development in this area.

C9 Rezone the Coleambally golf club and Lions Park to RE1 Public Recreation.

Commercial and Retail:

C10 Retain flexible land use zoning in the main commercial centre to encourage a range of businesses.

C11 Encourage new commercial development to occur within the main commercial centre of town around Brolga Place and Kestrel Road.

C12 Introduce new building and planning controls within the DCP that sets minimum design standards for the construction of new buildings or alterations and additions to existing buildings.

Industry:

C13 Monitor demand for industrial zoned land and develop currently undeveloped industrial land to satisfy demand.

Agriculture:

C14 Limit residential and rural residential sprawl into established rural areas that has the potential to create land use conflicts and undermine the viability of productive agricultural businesses.

Environment:

C15 Require development proposals to consider the environmental impacts of vegetation removal in accordance with local and state government legislation and the recommendations of the Biodiversity Constraints Analysis for Murrumbidgee Council.

C16 Review the Terrestrial Biodiversity Map of the LEP as it relates to the main urban area of Coleambally Point to better reflect environmental conditions.

C17 Require development proposal to consider impacts on matters of Aboriginal Cultural Heritage in accordance with the recommendations of the Aboriginal Cultural Heritage Review.

C18 Prepare a Bushfire Prone Land map in association with the NSW RFS.

C19 Require new development proposals to consider the provisions of *Planning for Bushfire Protection Guidelines 2019*.

C20 Amend Schedule 5 and the Heritage maps of the LEP consistent with the recommendations of the Heritage Review Inventory Report.

C21 Rezone densely vegetated reserves to the north and south of Coleambally to E3 Environmental Management.

C22 Incorporate specific controls into the DCP to ensure development adjoining the large environmental reserves provides an appropriate interface to these public lands.

Infrastructure:

C23 Finalise and adopt the recommended actions of the Integrated Water Cycle Management Strategy.

C24 Ensure that new developments make an appropriate contribution towards the provision or augmentation of infrastructure consistent with Council's adopted Infrastructure Contributions Plans.

C25 Ensure that development occurs in a staged and logical sequence to minimise pressures on infrastructure.

C26 Rezone Council Sewerage Treatment Plant and Cemetery SP2 Infrastructure.

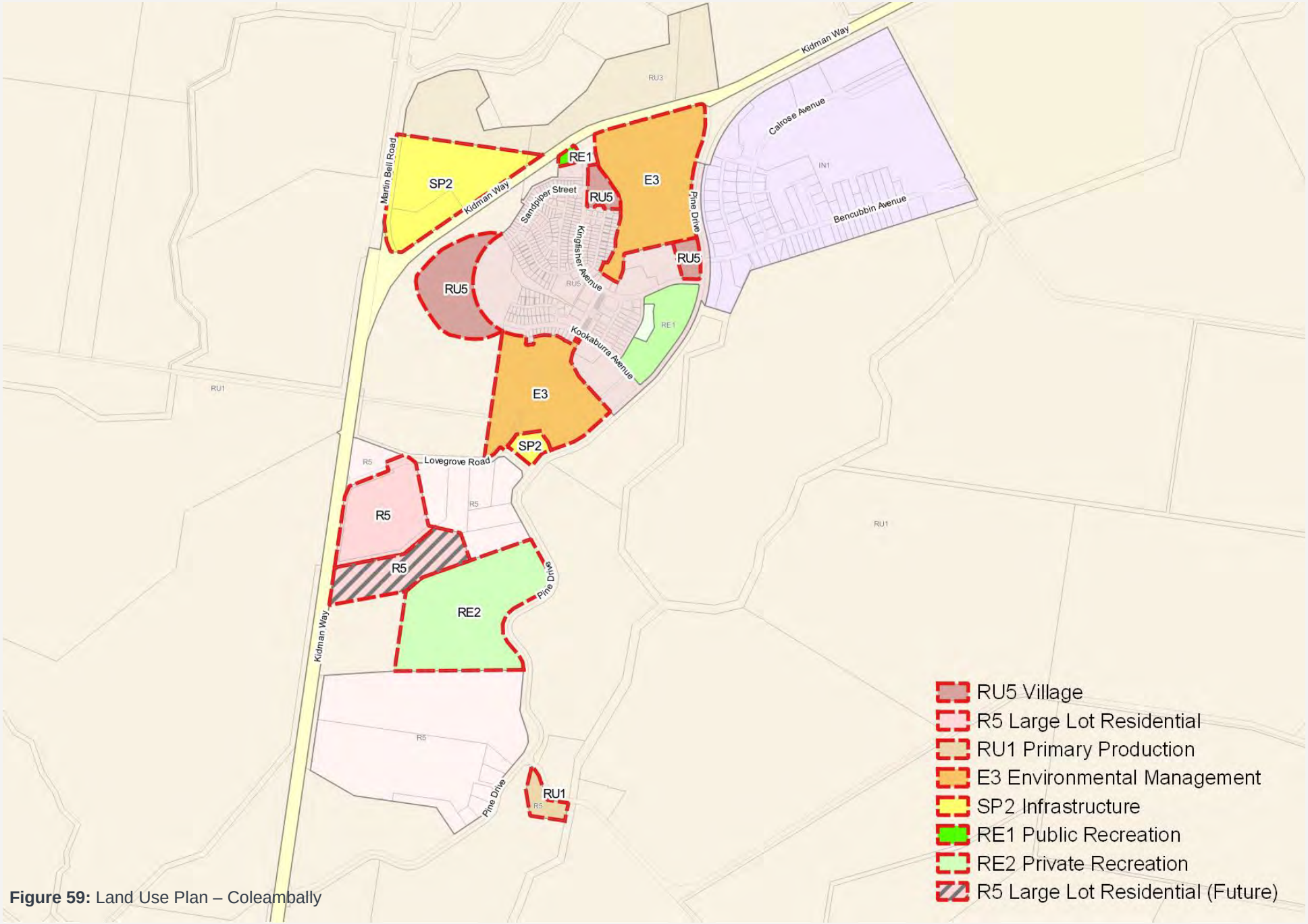


Figure 59: Land Use Plan – Coleambally

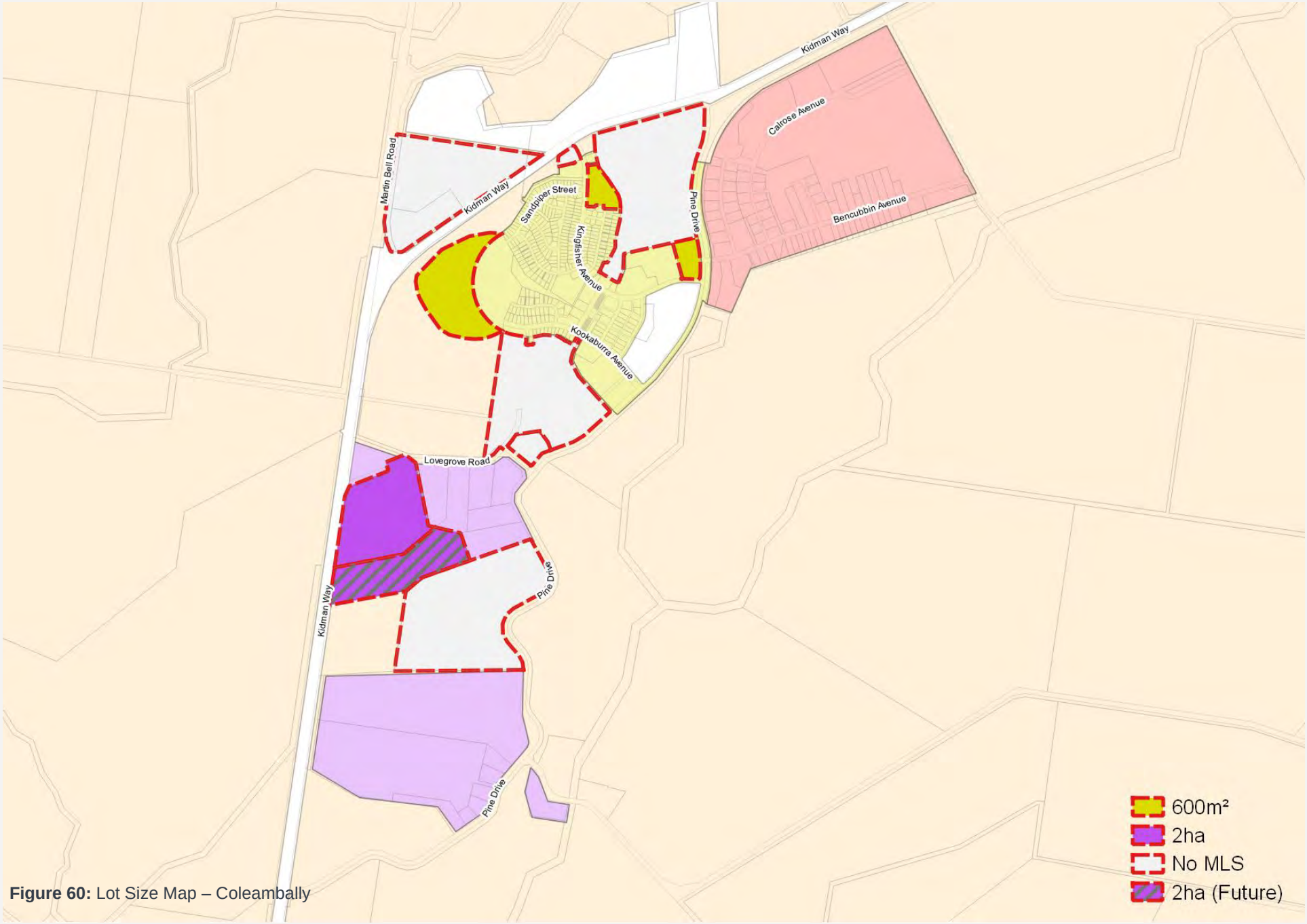


Figure 60: Lot Size Map – Coleambally

Jerilderie



3.3. Jerilderie

Jerilderie is the smallest of the three townships of the Murrumbidgee Council area and is located within the southern portion of the local government area.

The town is located approximately 70 kilometres south of Coleambally, 40 kilometres north west of Berrigan, 40 kilometres north east of Finley, 60 kilometres east of Conargo and 60 kilometres west of Urana.

The main urban areas are zoned RU5 Village under the LEP to provide for the residential and commercial needs of the township. Other zones within the town include the R5 Large Lot Residential, IN1 General Industrial, RE1 Public Recreation, RU1 Primary Production zones, E1 National Parks and Reserves, SP2 Infrastructure ad W2 Recreational Waterways zones.

3.3.1. Social and Community

Population

Jerilderie had a total population of 1,029 at the 2016 Census, which accounted for 27 percent of the total Murrumbidgee area.

Population and demographic trends within Jerilderie are consistent with the broader Murrumbidgee Council area as outlined in Section 2.2.

Table 34: Jerilderie Population Projections 2016-2041

	Population (2016)	Additional Population (persons)	Annual change (persons)	Population (2041)
DPIE Projection (Common Growth)	1,029	-42	-1.67	987
Council Projection (High Growth)	1,029	135	5.4	1,164

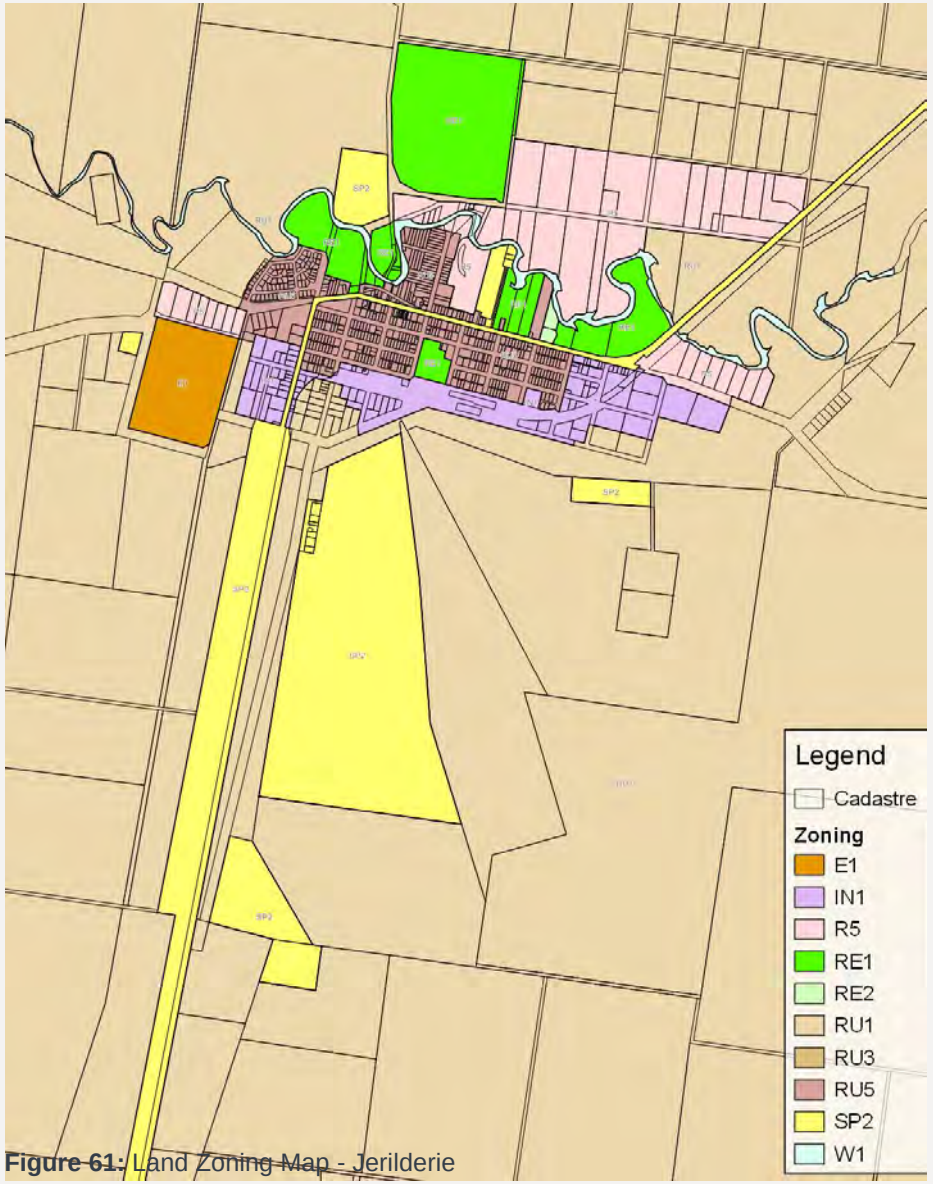


Figure 61: Land Zoning Map - Jerilderie

Housing

At the 2016 Census, there were 546 dwellings in Jerilderie. The predominant housing type in the township is single detached dwellings, with the largest household type being classified as 'family households' comprising at least one parent and child. The average size of households within Jerilderie was 2.3 persons per household.

Building approvals for Jerilderie have remained low but steady over time with 2-3 new dwellings constructed per annum, which is reflective of population growth.

Anecdotally, demand for housing is forecast to increase in response to the establishment of a number of large industries and agricultural businesses proposed within close proximity to the town.

Table 35: Jerilderie Housing Projections 2016-2041

	Housing (2016)	Additional Dwellings	Annual change (dwellings)	Housing (2041)
DPIE Projection (Common Growth)	546	-20.79	-0.25	-
Council Projection (High Growth)	546	66.50	2.66	612.50



Lake Jerilderie and Luke Park

Current housing issues facing Jerilderie include:

- Lack of urban residential land with a minimum lot size of 1,000m^2.
- Lack of large lot and rural residential land.
- Ageing population and demands for appropriate housing.

Residential Land Supply

An analysis of residential land supply had been used to determine how much residential land is currently available for consumption.

For the purposes of this assessment, a lot is considered to be 'vacant' where it does not contain a dwelling or has been sold as at 30 June 2021.

The residential land within Coleambally has been categorised as follows:

- **Standard Residential**, being land zoned RU5 Village with a minimum lot size of 600m^2. This land is connected to Council's reticulated sewerage;
- **Large Lot Residential**, being land zoned R5 Large Lot Residential with lot sized of 2ha or larger. This land is not connected to Council's reticulated sewerage.

Whilst it is acknowledged that the RU5 Village zone has a default minimum lot size of 600m^2, this is not representative of the established residential subdivision pattern of the town, which is more consistent with a minimum lot size of 1,000m^2.

There are currently approximately 25 vacant developed and undeveloped residential zoned lots within the township that are available for development. All residential zoned land within the town has been developed with the exception of public parks or the like, which are zoned residential

In addition, there is approximately 70 hectares of developed and undeveloped land located to the north of Showgrounds Road that is zoned R5 Large Lot Residential with a 2 hectare minimum lot size that could be further developed.

In recognition of a general lack of developed residential zoned land, Council has constructed the Wunnamurra residential estate located to the west of town. All lots have been sold and developed within Stage 1 with the exception of one, whilst of the 37 lots created as part of Stage 2, 14 of these have been sold and 6 houses have been subsequently constructed.

Whilst it is acknowledged that there is an additional supply of R5 Large Lot Residential zoned land located either side of Billabong Creek, it is noted that these properties are subject to high hazard flooding and are located within a floodway and cannot be further developed.

Table 36 provides an analysis of the current supply of residential zoned land (both developed and undeveloped) in Coleambally. The figures used in this table are based on an average of 8 lots per hectare for RU5 zoned land, which equates to an average lot size of 1,000m^2. Land supply in the R5 Large Lot Residential Zone has been calculated using a 2 hectare minimum lot size. This calculation also assumes 20% of the development site is required for roads, drainage and open space.

Based on this analysis, Jerilderie has an approximate 19.5 years supply of residential zoned land based on an average take-up rate of 2 dwellings per annum.

When considering population projections outlined in Table 21 above and using an average take-up rate of 3 dwellings per annum, the level of residential land supply is reduced to approximately 13 years.

Table 36: Jerilderie Existing Residential Land Supply

Summary	Growth Rate	Land Supply	No. of additional lots	Demand (dwellings p.a.)	Years Supply
Standard Residential (600m^2)	DPIE Projection (High Growth)	4ha	25*	1.5	17
	Council Projection (High Growth)	4ha	25*	2.5	10
Large Lot Residential (2ha+)	DPIE Projection (High Growth)	70ha	14**	0.5	28
	Council Projection (High Growth)	70ha	14**	0.5	28

* This figure includes vacant developed land, as well as likely estimated brownfill (infill) lots
**This figure accounts for the number of existing holdings and development potential of this land

Community Services

Jerilderie is well serviced with a number of community facilities including a pre-school, two primary schools (St Joseph's and Jerilderie Public School), a hospital, private medical centre, aged care hostel and police and ambulance stations. Council also runs an administration office to service the needs of local residents and the town has a visitor information centre and library.

A community hall is also available for hire and the area has a number of churches and a local cemetery.

A plan showing the existing community facilities is provided in Figure 62.

Recreation and Open Space

Jerilderie is serviced with a number of public recreation and open space areas including Memorial Park, Luke Park, Monash Park, Brew Park and Elliott Park.

The town also has an indoor sports complex, community gym, racecourse, swimming pool, tennis courts, bowling greens and football and netball facilities. In addition, Jerilderie has an 18 hole golf course and Lake Jerilderie also provides recreation activities such as water skiing for residents and visitors, as well as outdoor exercise stations.

Consideration of the performance criteria of the NSW Government's *Draft Greener Places Design Guide* has been undertaken. Given the existing level of open space provision and the location of proposed areas for rezoning, the Land Use Plan does not recommend the creation of any new open space area.

A plan showing existing and proposed open space is provided in Figure 62.

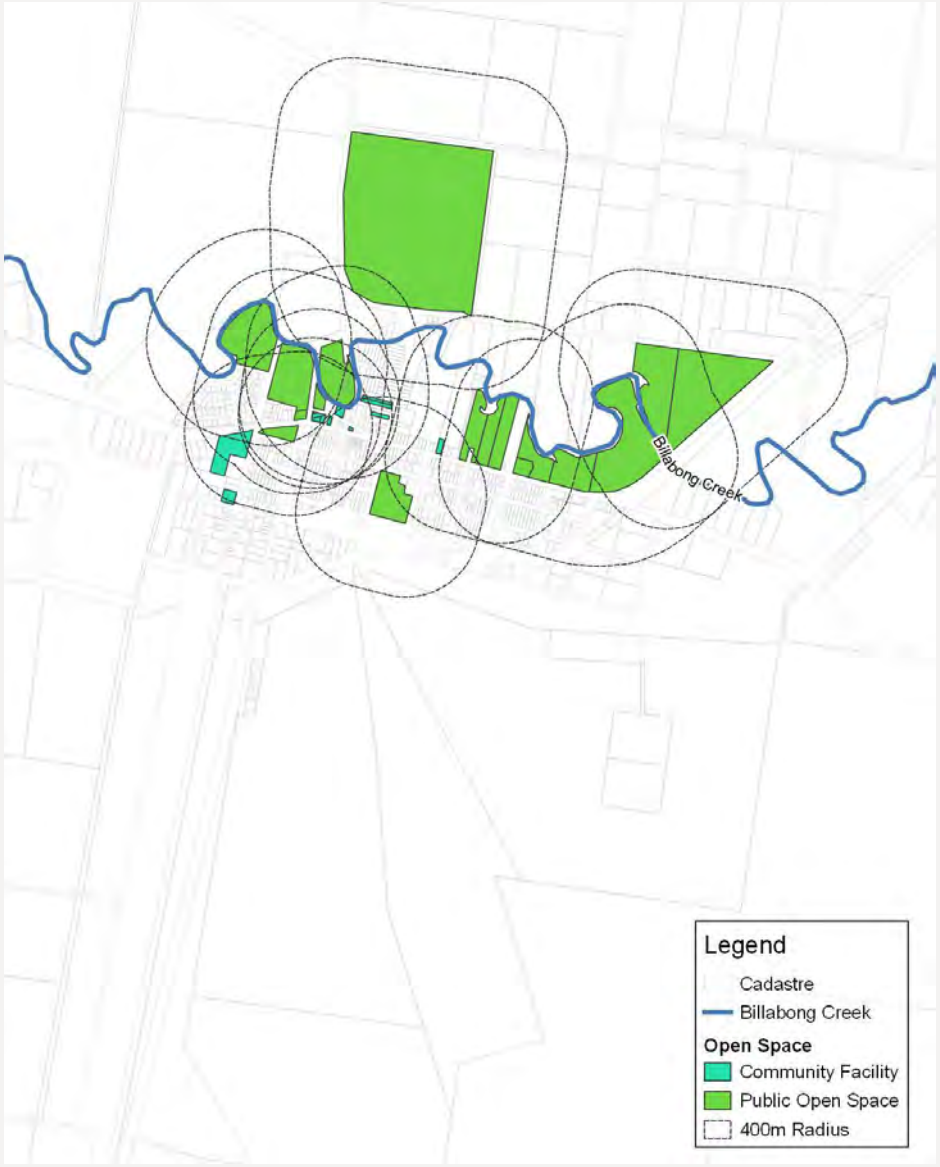


Figure 62: Open Space and Community Facilities Map – Jerilderie

3.3.2. Economy

Commercial and Retail

The main commercial and retail centre of Jerilderie is focussed around Jerilderie Street, which is the Main Street. The main commercial area includes banking services, a butcher, supermarket, service station, newsagent, hairdresser, clothing stores, take-away food shop and pharmacy.

The area also contains several cafes, as well as three hotel/pubs and a sports club, which are located along the main street. The town also have three motels, a bed and breakfast accommodation and caravan park.

The main township is zoned RU5 Village under the current LEP to provide flexibility in zoning and to allow for a range of commercial, residential and light industrial activities.

Further commercial development within the township should occur around the established main street.

Industry

Jerilderie has a reasonable supply of industrial zoned land with approximately 80 hectares of land located on the southern side of the town zoned IN1 General Industrial.

Much of this land is located alongside the former Jerilderie railway line and extends along Sargood Street and Oaklands Road to the east. Land to the west of Southey Street is also zoned for industrial purposes and contains a recently constructed new service station, as well as Council's depot site.

A supply and demand analysis of existing industrial zoned land has been undertaken and is provided in Table 37.

As can be seen in this table, there is approximately 16.5 hectares of vacant industrial zoned land that could be developed. Based on an average lot size of 2,000m^2 – 4,000m^2 which is consistent with the current established lot pattern, this could equate to an industrial land supply of 41-82 lots.

A review of recent council building and planning approvals for the previous 5 years shows that on average, 1.5 new industrial developments are constructed each year in Jerilderie.

Based on current industrial supply and demand figures, this equates to approximately 27-55 years worth of industrial land.

Notwithstanding the relatively large industrial land supply, given that a large proportion of this land comprises former railway line owned by ARTC, the land may not be available for development in the short to medium term.

Therefore, there is a need to provide additional industry land to meet future demand.

Table 37: Jerilderie Industrial Land Supply

Supply and Demand Analysis	No.
Amount of industrial zoned land	80ha
Total Lots Created	83
Total Lots Consumed (developed)	65
Total Vacant Lots	18
Vacant Industrial zoned land (to be developed)	16.5ha
Potential additional lot supply (based on average lot size of 2,000m^2 – 4,000m^2)	41-82*
Land supply (years)(based on demand for 1.5 industrial lots p.a.)	27-55

* This figure will be lower if several larger industrial lots are created similar to other examples within the industrial estate.

Tourism

Jerilderie enjoys a number of tourist attractions that make it an ideal place to visit including; water recreation activities on Lake Jerilderie, the Ned Kelly Raid Trail and the Jerilderie Apex Mini Rail. These permanent attractions are in addition to a number of events held throughout the year. It is recommended that land use zoning remain flexible to continue to support a variety of tourist opportunities.

Agriculture

The majority of the Murrumbidgee Council area is zoned for rural and agricultural purposes and is broadly used for dryland and irrigated cropping, as well as grazing.

Land within and immediately surround Jerilderie is generally rated as Class 4 – Moderate to severe limitations, Class 5 – Severe limitations and Class 6 – Very severe limitations in terms of agricultural land quality (Figure 63).

All rural land within and surrounding the main township of Jerilderie is zoned RU1 Primary Production with a corresponding 213 hectare minimum lot size for subdivision. This land is generally used for broadacre grazing and dryland cropping purposes.

Although the Council area can be viewed as a traditional rural and agriculturally based local government area, the main townships and immediate surrounds are urban in nature or have been developed for hobby farming type purposes. Future development and expansion of Jerilderie will need to ensure that residential and rural residential growth does not restrict existing productive agricultural operations.

Similarly, land management for native vegetation removal in the rural zones is undertaken in accordance with the *Local Land Services Act 2013*. For the purposes of this Study, much of the land surrounding the main Jerilderie township is classified as 'Category 1 Exempt Land' as it was cleared of native vegetation as at 1 January 1990 (Figure 64).

Under the LLS Act, Category 1 land is unregulated and owners can remove native vegetation so long as they do not knowingly harm an animal or damage the habitat of an animal that is a threatened species or part of a threatened ecological community.

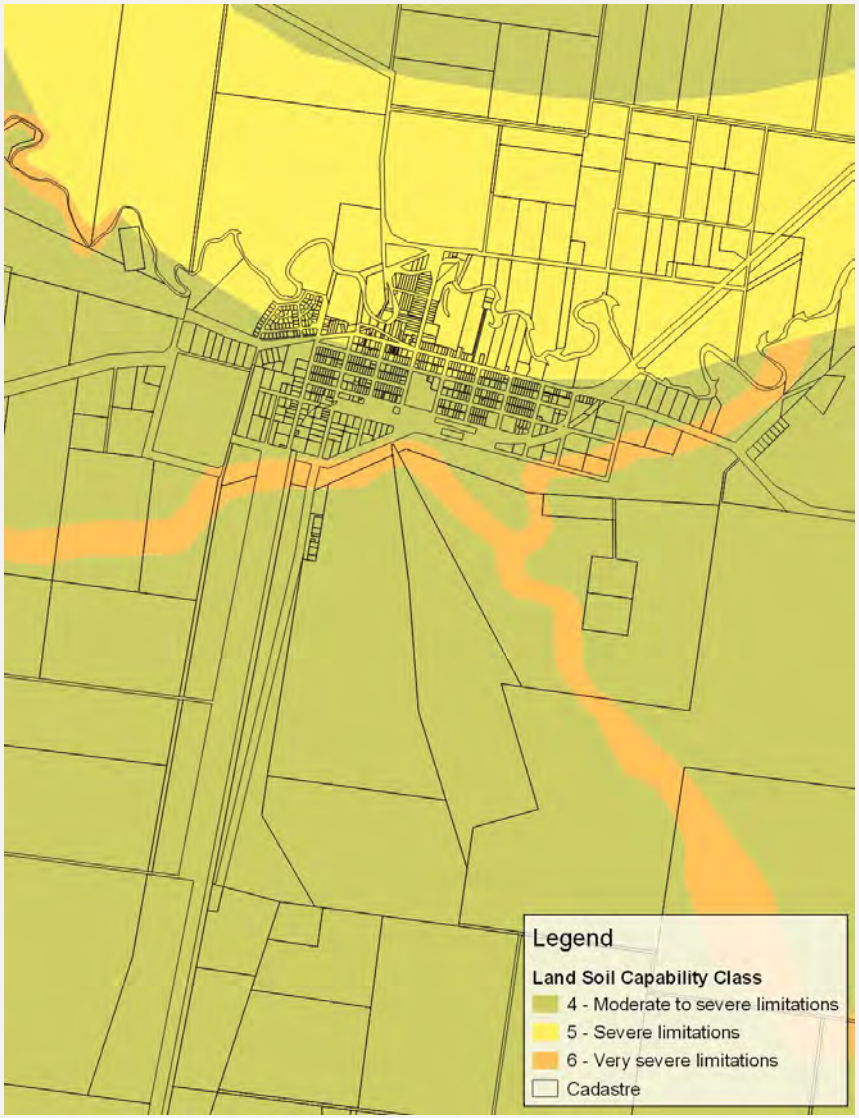


Figure 63: Agricultural Land Capability Map – Jerilderie

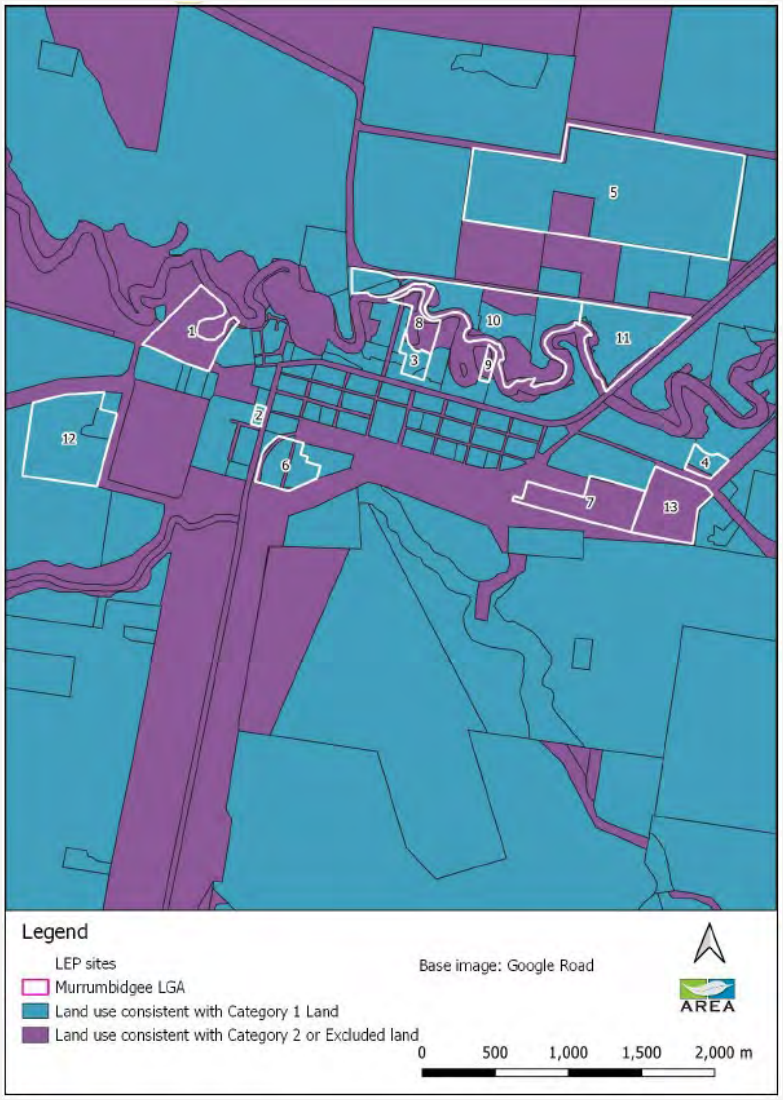


Figure 64: Category 1 Exempt Land Map
(Source: Area Environmental and Heritage Consultants, 2021)

3.3.3. Environment

Vegetation and Threatened Species

Environmental features within and surrounding Jerilderie are generally limited to the riparian lands located either side of Billabong Creek, as well as the Jerilderie Nature Reserve, which contains the vulnerably listed Red Darling Pea.

Other environmental lands surrounding the town have been identified on the state government's Biodiversity Values Map (Figure 66) as it provides habitat for the threatened Plains wanderer (*Pedionomus torquatus*).

Flora species present and surrounding Jerilderie include: forested wetlands (river red gums) and grasslands (forb-rich speargrass). None of these are associated with a Threatened Ecological Community.

Other recorded species within and surrounding Jerilderie include: Austral Pillwort, Brolga, Koala, Red darling pea, Slender darling pea and the Tunrip copperburr. These species are listed as 'endangered' and 'vulnerable' under the *Biodiversity Conservation Act 2016.*

The LEP maps parts of Jerilderie as an area of 'Terrestrial Biodiversity' within which Clause 6.3 requires Council to consider the impact of development on flora and fauna as well as "any appropriate measures proposed to avoid, minimise or mitigate" those impacts. These areas have been identified through aerial imagery and have not been 'ground truthed' for significance. They also do not identify scattered vegetation.

Having regard to the vegetation types in the study area, vegetation potentially presents as a constraint for development not just because of its biodiversity significance but also because of the high cost of offsetting its removal. Fortunately, there remains large tracts of land that are either unconstrained by stands of remnant vegetation or contain scattered paddock trees at a lower density.

Further matters regarding biodiversity are contained in the Biodiversity Constraints Analysis report prepared by AREA Environmental and Heritage Consultants in support of the Land Use Plan.



Figure 65: Plant Community Types associated with Threatened Ecological Communities (Source: Area Environmental and Heritage Consultants, 2021)



Figure 66: Terrestrial Biodiversity Map – Jerilderie

Flooding

Jerilderie has been the subject of a number of floods due to its location alongside Billabong Creek.

In response, Council have recently completed a flood study for Jerilderie to investigate the location and degree of flooding within the township.

This Plan identifies the land immediately adjoining Billabong Creek as ‘floodway’ whilst land further back from this waterway is categorised as ‘flood fringe’ and ‘flood storage’.

Following the completion of this flood study, it was revealed that a number of parcels of land currently zoned RU5 Village and R5 Large Lot Residential located either side of Billabong Creek are subject to high hazard flooding and are located in a ‘Floodway’ and ‘Flood Storage Area’.

In accordance with the requirements of the NSW Floodplain Development Manual, development should seek to minimise the danger to life and property during floods.

Specifically, future development should seek to avoid areas of flood storage and floodway, which align with a high hazard level of flooding.

Accordingly, it is recommended that these parcels of land be rezoned to a more appropriate zone in recognition of the environmental constraints that apply to this land.

Conversely, the flood study identified land that is free from flooding or is only subject to low-level flooding, which would be appropriate for urban development. More specifically, this includes land located immediately adjacent to Wunnamurra Estate at the western edge of town.

Accordingly, it is recommended that this land, with the exception of a small back-runner/back runner, be rezoned to RU5 Village. Similarly, land located at the eastern edge of town and only subject to low-level flooding be rezoned to R5 Large Lot Residential.

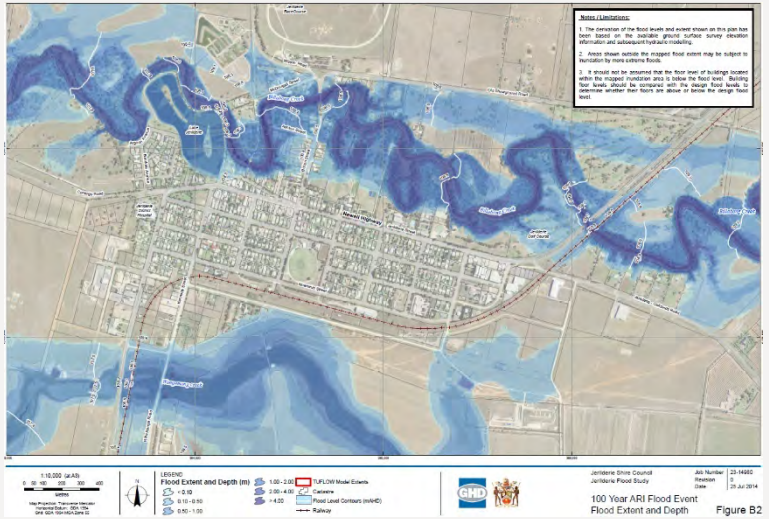


Figure 67: 1 in 100 Year Flood Map for Jerilderie
(Source: Jerilderie Flood Study, 2014)

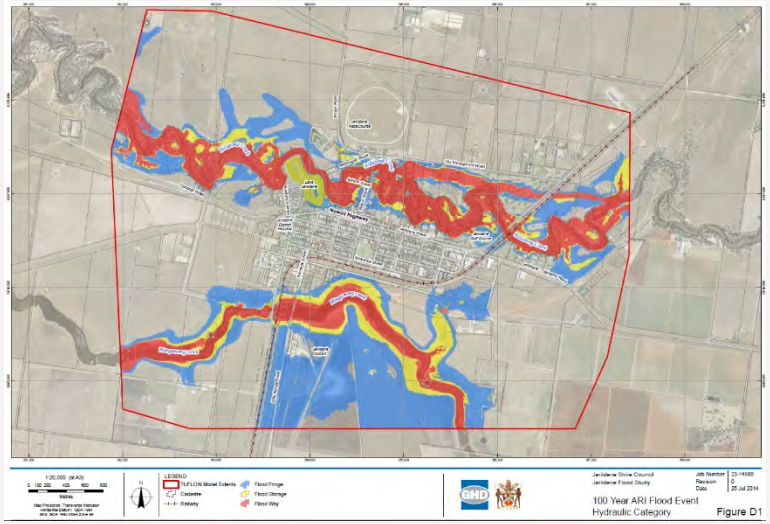


Figure 68: 1 in 100 Year Flood Map – Hydraulic Categories for Jerilderie
(Source: Jerilderie Flood Study, 2014)

Waterways

Billabong Creek winds its way through Jerilderie and provides one of the key tourist, recreational and natural asset for the community. The interface with the creek is varied in character and includes areas of natural environmental lands as well as highly used recreational areas including Lake Jerilderie.

Protection of the waterway from inappropriate development and/or pollution is critical for the ongoing development of the township and the environmental health of this waterway.

Development near waterways is regulated by a number of state and local government policies including the *Water Management Act 2000*. Development within the bed or banks of the river or within 40 metres of a watercourse also requires separate approval from relevant NSW state government agencies to ensure the ongoing protection of these waterbodies.

The LEP contains specific controls regarding riparian land and wetlands as identified within Figure 65. In addition, Clauses 6.6-6.7 of the LEP contains specific matters that Council must consider when assessing an application in proximity to Billabong Creek.

Consideration of these areas will be required in the future rezoning of any land, particularly areas of high hazard flooding (floodways).

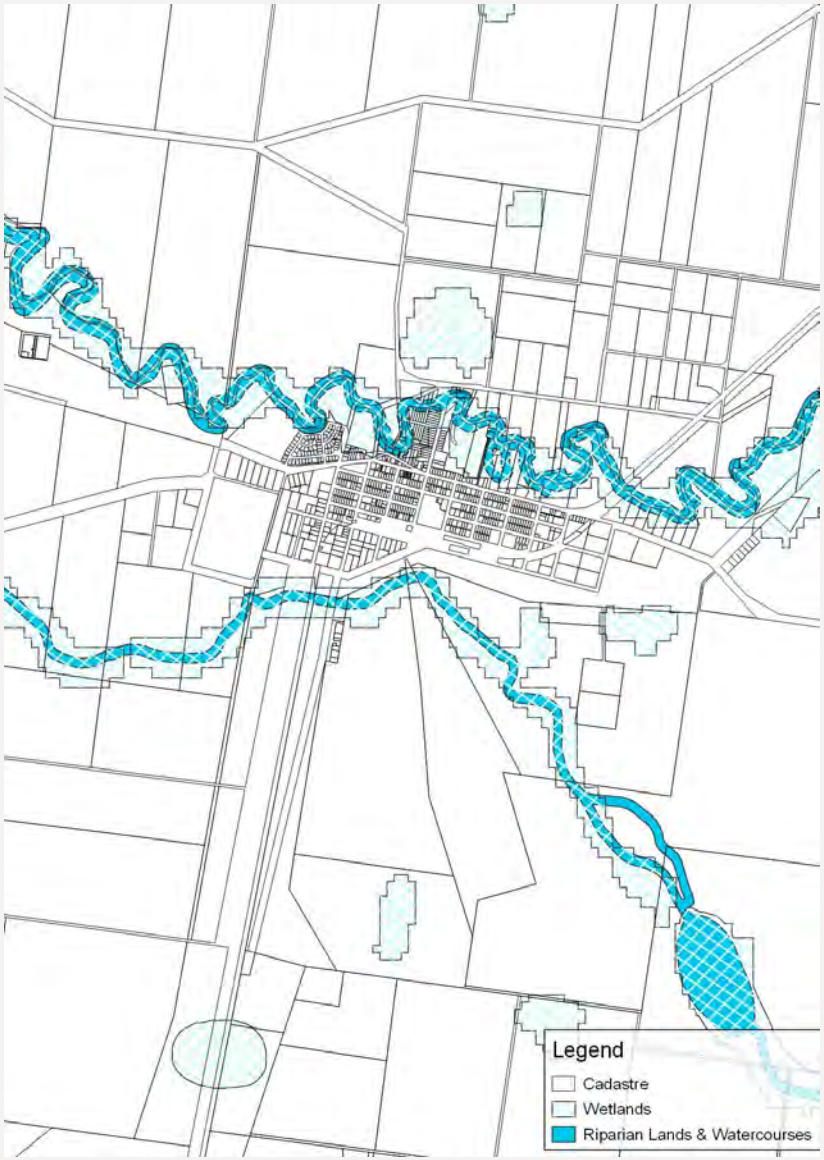


Figure 69: Waterways Map – Jerilderie

Bushfire

No lands within and surrounding Jerilderie are identified as being bushfire prone. Notwithstanding, the NSW RFS document titled *Planning for Bushfire Protection Guidelines 2019* now provides a broader definition of grassland than previous versions with any undeveloped land now considered to be 'grassland vegetation'.

Consequently, further development of land shall have regard to the broader grassland bushfire hazard. Where necessary, any future subdivisions shall incorporate relevant bushfire provision measures such as Asset Protection Zones, whilst the construction of new buildings shall achieve relevant Bushfire Attack Level (BAL) ratings in accordance with PBP.

Non-Aboriginal Heritage

The Jerilderie Township includes a number of identified non-Aboriginal heritage items, including the former Jerilderie Rail Station Group, which is identified as a State Heritage item.

A section of the Jerilderie Main Street is classified as a Heritage Conservation Area and the town also has several identified archaeological sites, including the site of the former Park Homestead, Police Stables and The Willows.

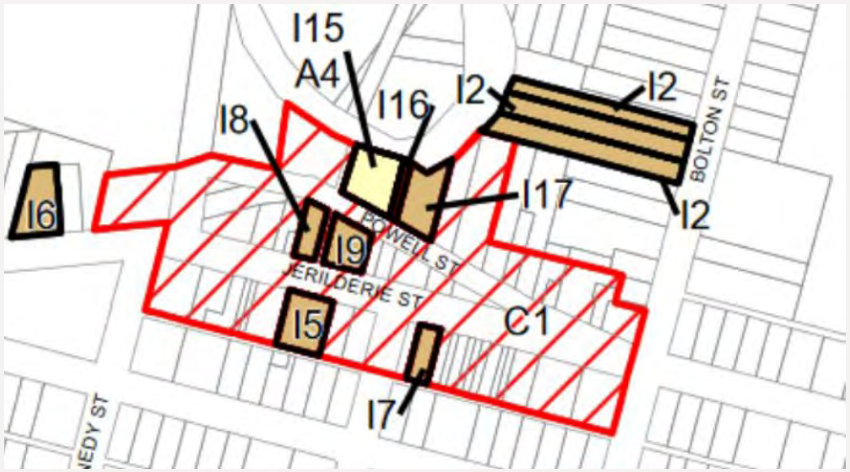


Figure 70: Heritage Map - Jerilderie

A Heritage Review Inventory Report has been prepared by Noel Thomson Architecture in support of the Land Use Plan. The purpose of this report was to review the current heritage listings and recommend any deletions and/or additions to this list.

The report recommends the inclusion of a number of new items of environmental heritage including:

- CWA Building, 10 Bolton Street, Jerilderie
- Murrumbidgee Council Offices, 35 Jerilderie Street, Jerilderie
- Jerilderie Civic Hall, 33 Jerilderie Street, Jerilderie
- Jerilderie Post Office (former), 6 Jerilderie Street, Jerilderie
- Jerilderie Cenotaph/War Memorial, Jerilderie Street, Jerilderie
- House, 9 Coreen Street, Jerilderie
- House, 19 Coreen Street, Jerilderie
- House, 65 Nowranie Street, Jerilderie
- House, 39 Mahonga Street, Jerilderie
- House, 86 Mahonga Street, Jerilderie
- House, 92 Mahonga Street, Jerilderie
- House, 76 Jerilderie Street, Jerilderie
- House, former doctors practice, 94 Jerilderie Street
- Wunnamurra Homestead Complex, 2797 Berrigan Road, Jerilderie
- Booroobanilly Church and School, Booroobanilly Road, via Jerilderie
- Jerilderie Rock Weir, Billabong Creek, Jerilderie
- Coonong Weir, Colombo Creek, Jerilderie
- Algudgerie Wier, Billabong Creek, Jerilderie
- Cocketegedong Weir, Colombo Creek, Jerilderie

It is also recommended that the heritage mapping contained within the LEP be amended to better reflect the actual location of identified heritage items. For example, the Park Homestead Site and Monash Park Grandstand.

Concern has also been raised in relation to the listing of the main street as a Heritage Conservation Area following the completion of a number of street improvement works, as well as the construction of several new buildings within this precinct.

The Heritage Review Inventory Report has assessed this area and reaffirmed its significance as outlined below:

> *Jerilderie Street (Newell Hwy) is the main commercial street for Jerilderie. It has an eclectic collection of building types and this includes some housing. There are a variety of architectural styles ranging from the 1860's and up to the 1980's. The building types, styles and scale reflect the changes to the region over the preceding 140 years.*
>
> *…Jerilderie Street is composed of commercial buildings and these are interspersed with residential buildings with small gardens which demonstrates the economic development of the town from the late nineteenth through to mid twentieth century…The Jerilderie Street and Powell Street area comprises many buildings that have local historic significance for the manner which is illustrative of the late 19th and early 20th century economic development, the businesses/buildings include; Jerilderie Hotel, Supermarket, Newsagency, Post Office, Café, Bakery, Café/Take-Away, Lolly Shop, Old & Motor Services, Computer, Old Traders building, Windmill and Houses in Powell Street.*

For these reasons, it is recommended that the existing heritage conservation area be retained.

Lastly, it is also recommended that the current heritage controls contained within the DCP be reviewed and updated.

See Heritage Review Inventory Report prepared by Noel Thomson Architecture for further details.

Aboriginal Heritage

Four sites have been recorded within five kilometres of Jerilderie, all on the AHIMS database. Three are culturally-modified trees and a stone artefact site comprise the previously-recorded sites. The nearest of these is approximately 2.5 kilometres from the main township area. No other Aboriginal heritage sites were recorded on a searched database.

This may be a function of the low numbers and scale of existing heritage assessments. The proximity of the town to reliable water indicates that unrecorded heritage sites are very likely where historical disturbances are low. Land adjoining Billabong Creek has moderate to high levels of existing disturbances which reduces heritage potential. However, there are pockets of relatively undisturbed land that have high archaeological potential.

The archaeological context indicates a strong association between evidence of Aboriginal occupation and reliable water sources. More specifically, sites are more likely near the junctions of major waterways with other waterways. There is also an increased likelihood of sites near ephemeral water courses such as Billabong and Algudgerie creeks.

Accordingly, development should seek to limit the impacts on Aboriginal heritage and where necessary be supported by a due diligence or Aboriginal cultural heritage assessment to ensure the ongoing protection of these heritage assets, which contribute to the social and cultural values of the town.

For further details regarding Aboriginal Cultural Heritage, see the Aboriginal Cultural Heritage Review report prepared by AREA Environmental and Heritage Consultants.

Land Use Conflicts

As outlined within Section 2.2.7, land use conflicts arise when incompatible land uses are situated in close proximity to each other. Land use conflicts may impact on the amenity of sensitive land uses, the efficient use of productive land, or environmental and landscape values.

An assessment of land use conflicts for Jerilderie has been undertaken consistent with the NSW Department of Primary Industry's Land Use Conflict Risk Assessment (LUCRA) guidelines. There are four key steps involved in undertaking a LUCRA and these include:

1. Gather information about proposed land use changes and associated activities.
2. Evaluate the risk level of each activity.
3. Identify risk reduction management strategies
4. Record LUCRA results.

Key potential land use conflicts contained within Jerilderie include:

1. Sewerage treatment plant
2. Industrial land
3. Aerodrome
4. Waste Management Centre

Other land use conflicts that are specific to Jerilderie that need to be considered include:

5. Bushfire risks on development that adjoins heavily vegetated areas or open grasslands.
6. Flooding impacts on development from adjoining rivers and waterways.
7. Amenity impacts such as noise adjoining key transport corridors (road, rail).

Careful consideration will be required when planning future land uses to ensure that they will not result in conflicts between land uses.

A plan showing these potential land use conflicts is provided in Figure 71.

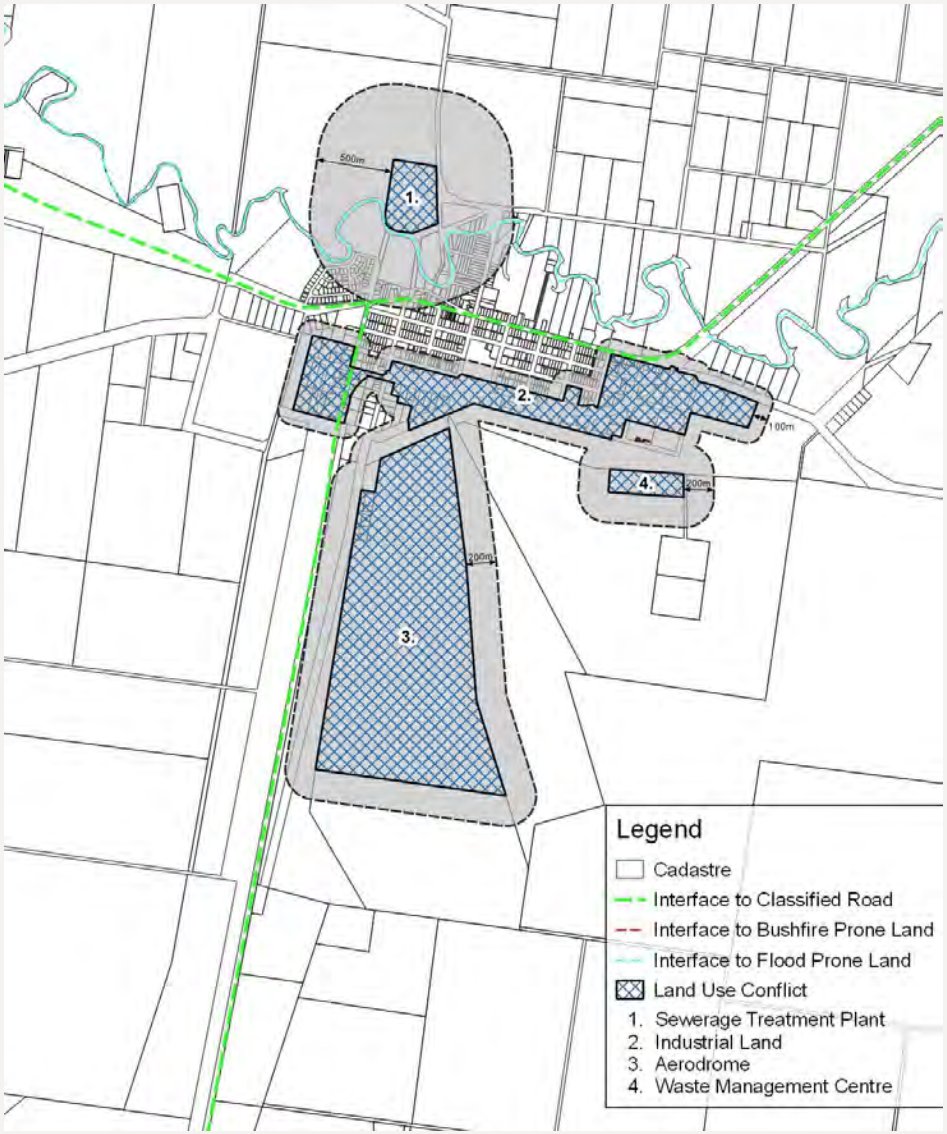


Figure 71: Land Use Conflict Map – Jerilderie

Crown Lands

The township of Jerilderie contains large tracts of Crown Land Reserves held in public ownership. Council is the manager of some of this land, whilst other portions are subject to lease or licence agreements.

Some of this land has been developed and used for open space and recreation purposes such as the racecourse, Monash Park and Golf Course, whilst the remainder of this land remains undeveloped. A proportion of this land adjoins Billabong Creek and is subject to flooding.

The public ownership status of this land is therefore placing a constraint on development in the absence of the land being devolved to Council.

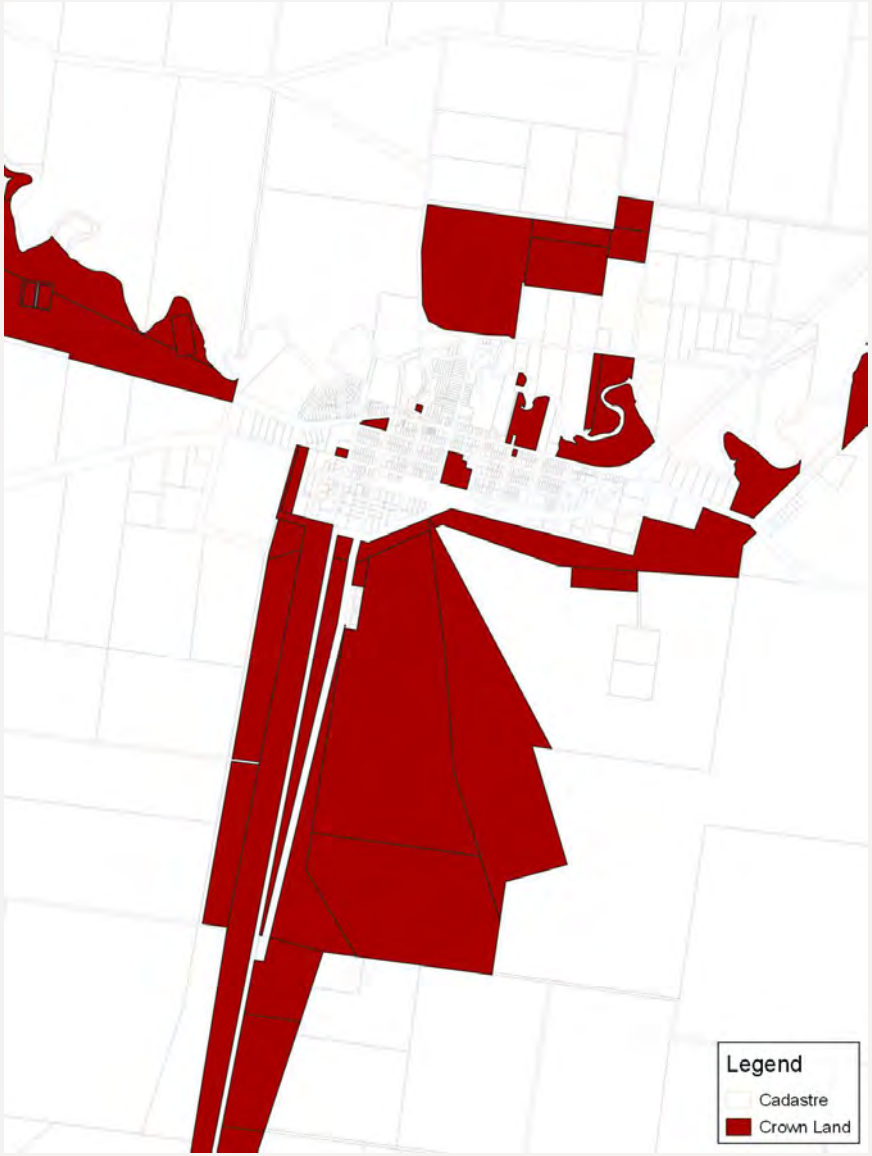


Figure 72: Crown Lands Map – Jerilderie

Summary of Constraints and Opportunities

To help assist identifying potential candidate sites for rezoning and/or redevelopment, consideration has been given to the environmental constraints and opportunities as outlined within this Section.

A plan showing the combined constraints and opportunities for Jerilderie is provided in Figure 73.

The features have informed the proposed zoning recommendations outlined in Section 3.3.5.

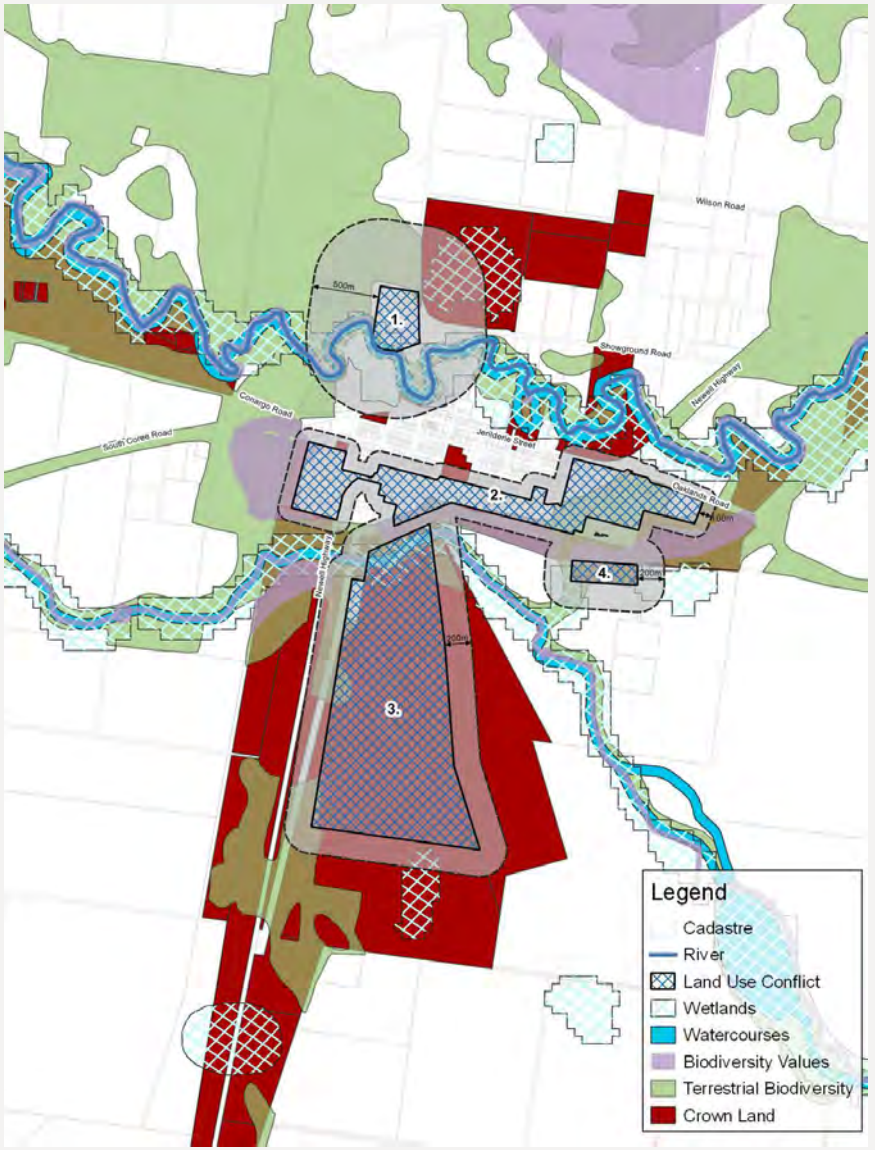


Figure 73: Combined Constraints and Opportunities Map – Jerilderie

3.3.4. Infrastructure

Council in association with the NSW Public Works Advisory is in the process of preparing an Issues Paper to the IWCMS, which will identify current and future capacity issues and upgrade requirements.

The outcomes of this Paper will inform further recommendations to the IWCMS and the conclusions of this Issues Paper as they relate to Jerilderie are discussed below.

Water

Jerilderie's town water supply comes from Billabong Creek, where it is filtered and chlorinated via a chemical mixing/flocculation tank and cleaned via a sedimentation tank and sand filter at the water filtration plant.

Minor repairs have been carried out to the water main network in 2017-18 and ongoing upgrading and replacement of Jerilderie's older raw water mains with PVC pipe will continue into the future.

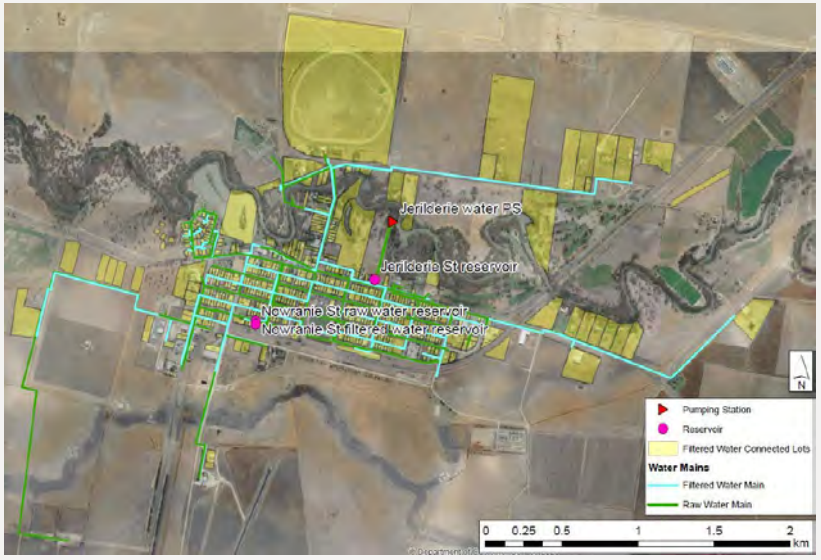


Figure 74: Water Reticulation Network – Jerilderie

Jerilderie has a 500 megalitre per annum high security water license for extraction from the Billabong Creek, whilst the town lake has a 100 megalitre per annum general security licence for extraction from the Billabong Creek. Whilst these licenses provide water supply for the township, they are susceptible to climatic conditions. During periods of drought, water may need to be supplied from alternative sources.

The IWCMS Issues Paper identifies the following capacity issues in terms of water supply in Jerilderie. These items will need to be addressed so as to achieve projected future population growth.

Based on this analysis projected residential development can be achieved subject to augmentations of the existing water network. It is also recommended that as part of a broader strategy that council investigate and reduce current water losses to ensure that service capacity is not unnecessarily reduced.

Table 38: Water Supply Upgrade requirements – Jerilderie

This table has been removed from the public exhibition version pending the finalisation of the IWCMS.

Sewerage

The Jerilderie sewerage treatment works is located on the northern side of the town adjacent to the racetrack and operates with holding and evaporation ponds.

This facility is protected and zoned SP2 Infrastructure and is subject to an EPA licence. Council is also licensed to provide wastewater from the Jerilderie sewerage treatment plant to the adjacent Racecourse to help maintain its turf track.

Council has received no recent complaints in regard to this facility and it has continued to operate without issue.

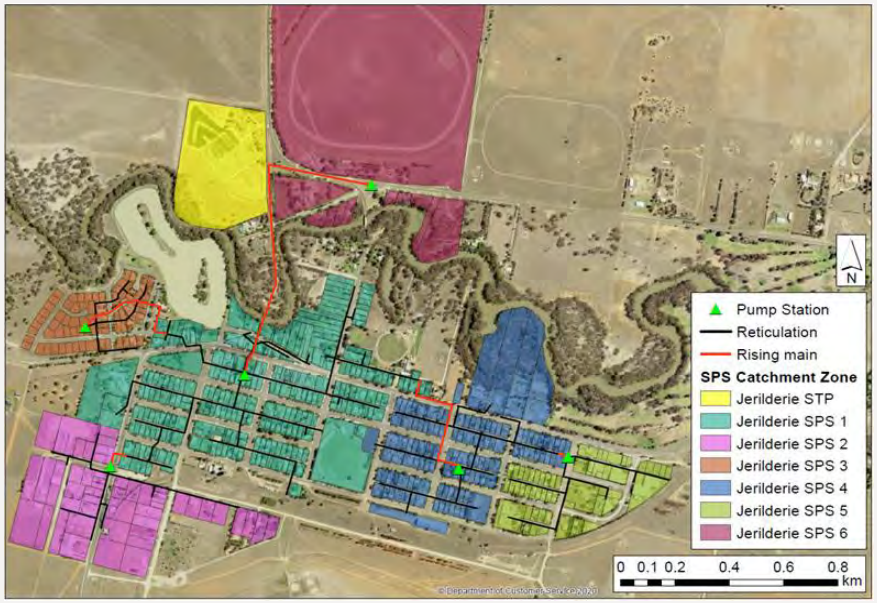


Figure 75: Jerilderie sewage system
(Source: Draft Integrated Water Cycle Management Strategy)

The IWCMS Issues Paper identifies the following capacity issues in terms of sewerage supply in Jerilderie. These items will need to be addressed so as to achieve projected future population growth.

Table 39: Sewerage Supply Upgrade requirements – Jerilderie

This table has been removed from the public exhibition version pending the finalisation of the IWCMS.

Transport

Jerilderie is the main inland route linking Melbourne and Brisbane; and the shortest route from Adelaide to Sydney. It is the start of The Kidman Way, a 644 kilometre stretch of road where caravaners and campers can Backtrack to the Outback.

The Newell Highway passes through the main street of Jerilderie (Jerilderie Street) and is therefore subject to heavy vehicle traffic including B-Doubles and Road Trains.

Council has undertaken a number of street improvement works to the main street in recent times to improve the visual appearance of this area, as well as to improve pedestrian safety.

Consideration of any new proposals alongside any main roads will require approval from the NSW Roads and Maritime Service.

Other Services

Gas (bottled), electricity and telecommunications infrastructure are available and can be extended to service future development. Drainage infrastructure is also appropriate and should continue to occur via a ‘pit and pipe’ system.

Similarly, the Jerilderie waste management facility is well separated from nearby sensitive land uses and appropriately zoned special use to ensure its ongoing protection.

3.3.5. Jerilderie Land Use Plan

Recommendations

The Land Use Plan identifies four candidate sites to be rezoned for residential purposes (Figure 76). These parcels of land are described as follows:

- Conargo Road, Jerilderie (Part Lot 80, DP1225744).
- 25-27 Southey Street, Jerilderie (Lots 205 & 206, DP240764).
- 1 Brown Street, Jerilderie (Part Lot 2, DP661986).
- Showgrounds Road/Newell Highway, Jerilderie (Lots 3 & 4, DP831820, Lots 148-151 & 153-155, DP756425 and Lot 2, DP831820).

The recommended rezoning of this land is consistent with the environmental constraints of the land, as well as infrastructure and servicing provision.

The properties represent both infill and greenfield development and are currently zoned IN1 General Industrial and RU1 Primary Production with a minimum lot size of 200 hectares.

More specifically, it is proposed to rezone land on the western side of Jerilderie to RU5 Village with a 600m^2 minimum lot size. The rezoning of this land represents an expansion of the adjoining Wunnamurra residential estate, which Council is currently developing. Stage 1 of this estate is all sold with a portion of stage 2 now also sold. All infrastructure and services are available to the land and can be extended, however it is recommended that an existing flood back runner be retained within a rural zone. The portion of land proposed to be rezoned has a total area of approximately 13 hectares, which could result in the creation of an additional 86 conventional residential lots.

The Land Use Plan also recommends rezoning 25-27 Southey Street from IN1 General Industrial to RU5 Village with a 600m^2 minimum lot size. The rezoning of this land is reflective of its current use as it has been developed for independent aged care housing. Consequently, the rezoning of this land will not add additional residential land supply, but rather correct a mapping anomaly.

It is also recommended that the southern portion of 1 Brown Street be rezoned from R5 Large Lot Residential to RU5 Village with a 600m^2 minimum lot size. The rezoning of this land is reflective of the fact that it is located above the relevant flood height and immediately adjoins existing urban zoned land. This land is approximately 3.5 hectares in size, which could result in the creation of 22 additional lots.

Lastly, it is recommended that an additional area of land to the north of Jerilderie be rezoned from RU1 Primary Production to R5 Large Lot Residential with a 2 hectare minimum lot size. This land is approximately 78 hectares in size, which could result in the creation of 31 additional lots.

In recognition of the additional supply of R5 zoned land proposed by this Plan and to avoid an oversupply of residential zoned land, the Land Use Plan recommends back-zoning approximately 50 hectares of land currently zoned R5 Large Lot Residential bordered between Billabong Creek and Showgrounds Road. This land is located within a floodway and cannot be further developed and NSW flood planning requirements. As a result, the existing level of land supply of large lot residential will increase by approximately 30 hectares.

Based on the land zoning and minimum lot size recommendations, this land has the potential to cater for up to approximately 139 additional residential lots as outlined in Table 41. Based on the current take up rate of 2 dwellings per annum, this equates to a residential land supply of approximately 69 years.

When considering the forecast take-up rate of 3 dwellings per annum, this level of residential land supply is reduced to approximately 46 years.

This level of proposed residential land supply is in addition to the existing supply that is currently available.

The other key land use planning recommendation includes the expansion of industrial land to the south east and south west of the former railway line to ensure an appropriate level of industrial land supply.

These parcels of land are described as follows:

- 1 Coreen Street, Jerilderie (Lots 3 & 4, DP758541).
- Kennedy Street, Jerilderie (Lots 16-19, 45, 97, 99, 102, 129, 130, 152, DP756426)
- 5-7 Kennedy Street, Jerilderie (Lots A & B, DP334550)
- James Street, Jerilderie (Part Lot 203, DP756426)
- 10 Southey Street, Jerilderie (Lot 8, DP917301, Lot 2, DP595132 and Lot 46, DP756426)

This land is strategically located and in some instance already adjoins industrial zoned land or is being used for industrial purposes.

The land is large largely unconstrained from an environmental and servicing perspective and avoids areas of environmental significance or hazards, as well as nearby sensitive land uses that have the potential to create conflicts.

The Land Use Plan recommends rezoning land at the eastern edge of Coonong Street from RU1 Primary Production to IN1 General Industrial. The land has an approximate area of 4 hectares, which has potential to create an additional 8-16 lots based on an average lot size of 2,000m^2 – 4,000m^2. This could result in an additional 5-10 years' worth of industrial land supply.

In addition, the Land Use Plan recommends rezoning land to the southeast of town adjacent to Council's waste management centre from RU1 Primary Production to IN1 General Industrial. The land has an approximate area of 31 hectares, which has potential to create an additional 62-124 lots based on an average lot size of 2,000m^2 – 4,000m^2. This could result in an additional 41-82 years' worth of industrial land supply.

The other site proposed to be rezoned to IN1 General Industrial is located along Kennedy Street and includes the Council saleyards and other light industrial businesses. This land is approximately 10 hectares in size and is already largely developed. The rezoning of this land for industrial purposes is considered to be reflective of its current use.

Table 40: Jerilderie Existing and Proposed Industrial Land Supply

Summary	Area	Proposed No. of additional lots	Demand	Years Supply
Existing				
IN1 General Industrial	16.5ha	41-82	1.5	27-55
Proposed				
IN1 General Industrial	35ha	70-140	1.5	46-93
Total	51.5ha	103-206	1.5	67-137

In addition, the Plan seeks to correct several zoning anomalies including rezoning the Jerilderie Fire Station and aged care units from industrial to RU5 Village, as well as zoning the northern portion of the Jerilderie Golf Club as recreation.

It is also recommended that the Terrestrial Biodiversity Map be reviewed as it applies to the urban areas of Jerilderie as it currently maps land that is developed or contains no identified significant vegetation. Similarly, it is recommended that the Heritage Map and Schedule 5 of the LEP be reviewed consistent with the recommendations of the Heritage Review.

Table 41: Jerilderie Existing and Proposed Residential Land Supply

Summary		Area	Proposed No. of additional lots	Demand (dwellings p.a.)	Years Supply
Existing Supply					
RU5 Village (600m² +)	DPIE Projection (High Growth)	4ha	25*	1.5	17
	Council Projection (High Growth)	4ha	25*	2.5	10
R5 Large Lot Residential (2ha+)	DPIE Projection (High Growth)	70ha	14**	0.5	28
	Council Projection (High Growth)	70ha	14**	0.5	28
Proposed Supply					
RU5 Village (600m² +)	DPIE Projection (High Growth)	17ha	108	1.5	72
	Council Projection (High Growth)	17ha	108	2.5	43
R5 Large Lot Residential (2ha+)	DPIE Projection (High Growth)	78ha	31	0.5	62
	Council Projection (High Growth)	78ha	31	0.5	62
Total*	DPIE Projection (High Growth)	169ha	178	2 (or 1.84)	89
	Council Projection (High Growth)	169ha	178	3 (or 2.66)	59

* This figure includes vacant developed land, as well as likely estimated brownfill (infill) lots
**This figure accounts for the number of existing holdings and development potential of this land

Key Land Use Planning Considerations

Table 42: Key Land Use Planning Considerations – Jerilderie

Population and Housing:

J1 Ensure a sufficient supply and range of residential zoned land to cater for expected demand.

J2 Rezone land to the immediate west of Wunnamurra Estate to RU5 Village with the exception of a small flood runner/back water.

J3 Rezone land north of Showground Road to R5 Large Lot Residential.

J4 Rezone RU5 Village zoned located either side of Billabong Creek identified as a floodway to RU1 Primary Production.

J5 Ensure short-term accommodation developments are appropriately designed and located to minimise impacts on surrounding residents.

J6 Encourage infill development by exploring incentive strategies.

Community Facilities and Open Space:

J7 Continue to review community facilities and open space provisions within town, with gaps identified and strategies developed.

J8 Ensure zoning is flexible to allow for the establishment of community and recreation facilities within central locations that are accessible.

J9 Rezone the existing Legacy Units and Jerilderie Fire Station located on the western side of Southey Street from IN1 General Industrial to RU5 Village.

C10 Establish a new public open space area on the western side of town to service the proposed residential development in this area.

Commercial and Retail:

J11 Retain flexible land use zoning in the main commercial centre to encourage a range of businesses.

J12 Encourage new commercial development to occur within the main commercial centre of town around Jerilderie Street.

J13 Introduce new building and planning controls within the DCP that sets minimum design standards for the construction of new buildings or alterations and additions to existing buildings.

Industry:

J14 Rezone land generally bound by Coonong Street, Kennedy Street and Saleyards Road from RU1 Primary Production to IN1 General Industrial.

J15 Rezone land generally bound by Coonoong Street and Jerilderie Oaklands Road from RU1 Primary Production to IN1 General Industrial.

J16 Rezone land west of town from RU1 Primary Production to IN1 General Industrial. Only rezone once demand warrants.

Agriculture:

J17 Limit residential and rural residential sprawl into established rural areas that has the potential to create land use conflicts and undermine the viability of productive agricultural businesses.

Environment:

J18 Require development proposals to consider the environmental impacts of vegetation removal in accordance with local and state government legislation.

J19 Review the Terrestrial Biodiversity Map of the LEP as it relates to the main urban area of Jerilderie to better reflect environmental conditions.

J20 Adopt the recommendations of the Jerilderie Flood Study including the introduction of a Flood Planning Map for the township.

J21 Require development proposal to consider impacts on matters of Aboriginal Cultural Heritage in accordance with the recommendations of the Aboriginal Cultural Heritage Review.

J22 Amend Schedule 5 and the Heritage maps of the LEP consistent with the recommendations of the Heritage Review Inventory Report.

J23 Locate residential development outside of flood prone areas.

J24 Prepare a Bushfire Prone Land map in association with the NSW RFS.

J25 Require new development proposals to consider the provisions of Planning for Bushfire Protection Guidelines 2019.

Infrastructure:

J24 Finalise and adopt the recommended actions of the Integrated Water Cycle Management Strategy.

J25 Ensure that new developments make an appropriate contribution towards the provision or augmentation of infrastructure consistent with Council's adopted Infrastructure Contributions Plans.

J26 Ensure that development occurs in a staged and logical sequence to minimise pressures on infrastructure.

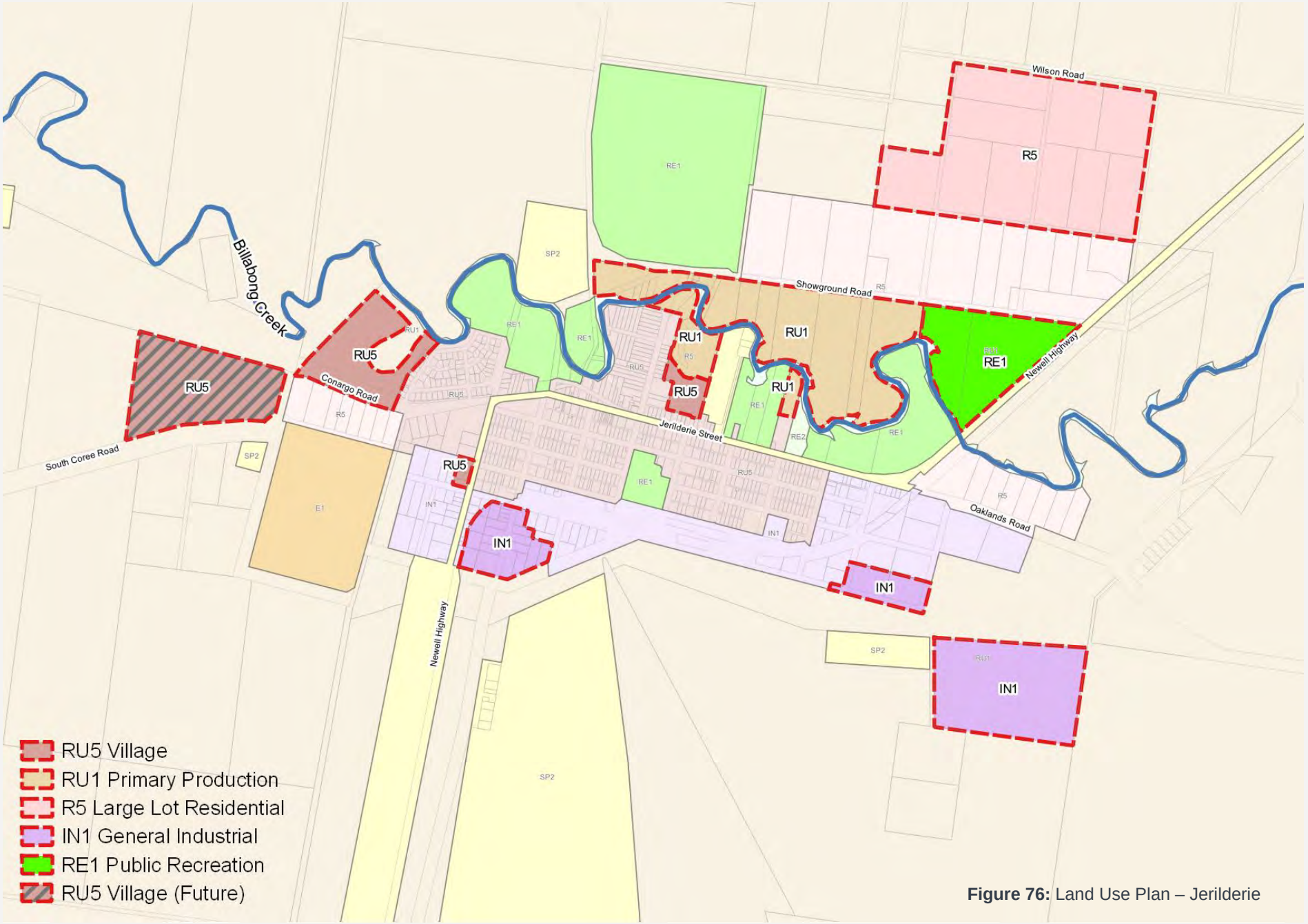


Figure 76: Land Use Plan – Jerilderie

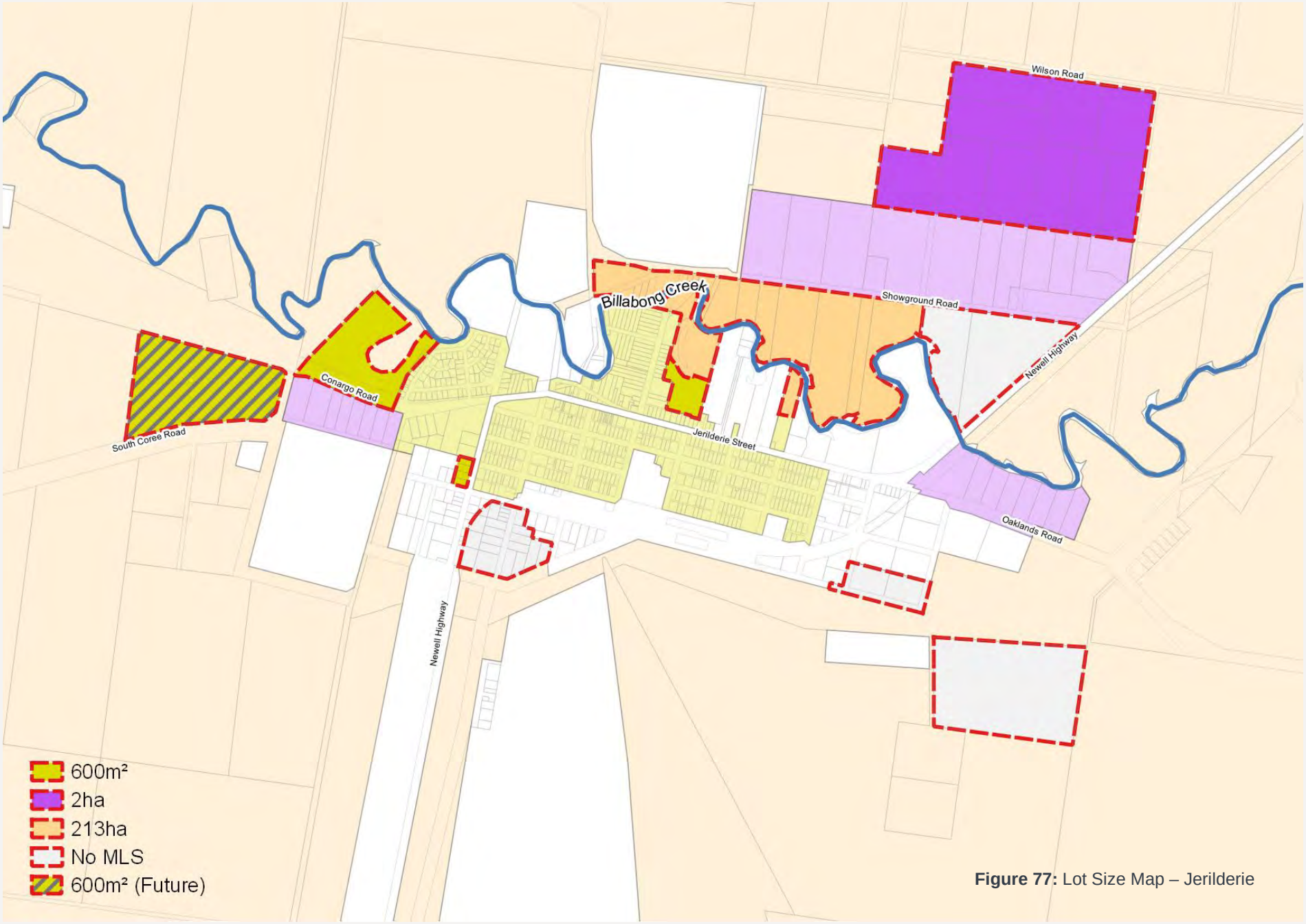


Figure 77: Lot Size Map – Jerilderie

Rural and Environmental Areas

3.4. Rural and Environmental Areas

This section of the Land Use Plan relates to both rural and environmental lands across the broader area and the key issues and pressures facing these areas.

3.4.1. Rural

As outlined within Section 2 of this Plan, the majority of the Council area is rural land, which is home to a variety of agricultural industries including sheep, cattle, wheat, corn, winter cereal, rice, cotton, nuts, horticulture, poultry and egg production, timber milling and food processing.

The economic benefits of agriculture are significant to Murrumbidgee and have both direct and flow on effects through all stages of the agricultural supply chain. It is therefore important that rural land be protected ongoing.

In May 2020, the Murrumbidgee Council area had approximately 984 rural landholdings. According to Council's rates system, the total number of these landholdings has declined over time in response to changing agricultural practices and the need to increase productivity or expand to remain viable, usually both.

In the face of this decline, property size generally needs to double every 20 years for farm businesses to remain viable into the future. If farming businesses cannot expand, then the enterprises must change to generate more income from the same area (e.g. change production to higher value crops or look to value add).

Landholdings in the southern and central portions of the Council area range in size from approximately 120 hectares up to 350 hectares with the average size of these landholdings being approximately 200 hectares. Conversely, the average size of landholdings in the northern and western part of the Council area are much larger. Lot sizes in this area are attributable to several large farm holdings that have been established in this area.

Three of the largest farm holdings to be established in the Council area include "Huddersfield" (5,000ha), "Kerarbury" (6,700ha) and "Optifarm" (3,600ha). Together, these three farms comprise over 15,000 hectares.

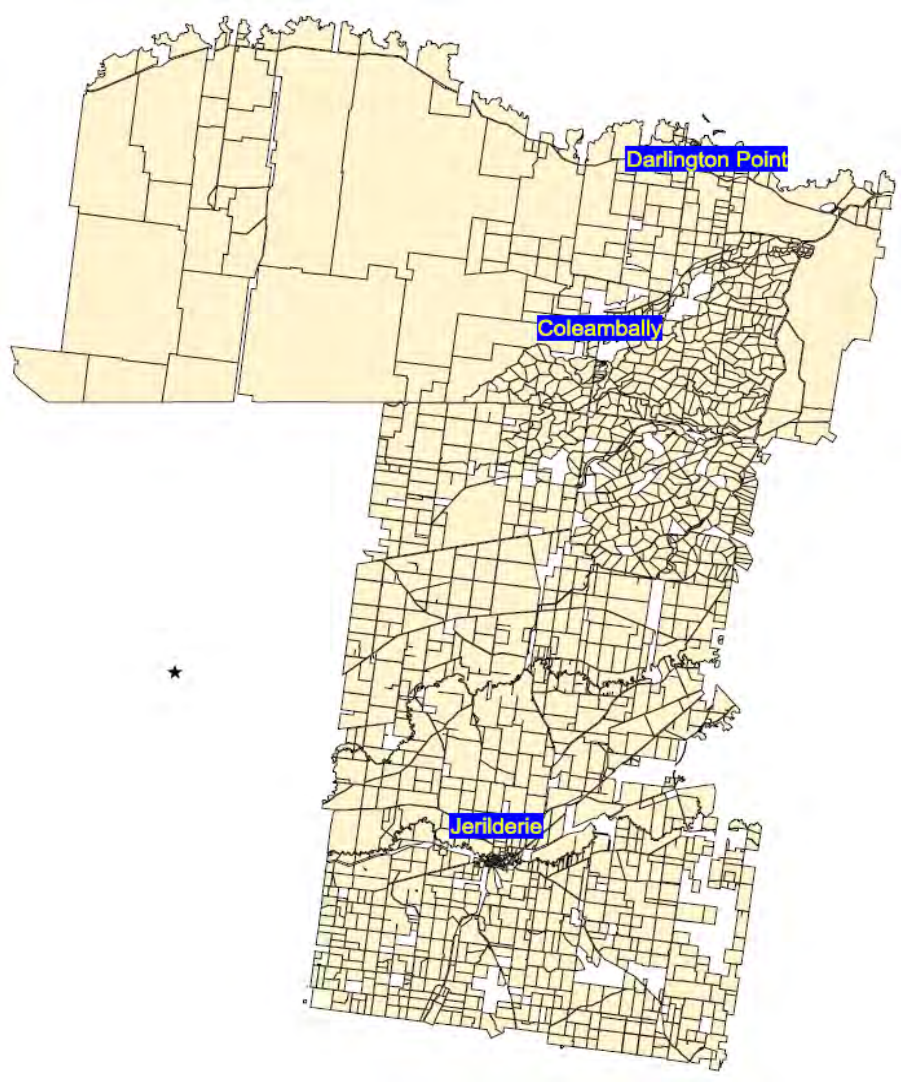


Figure 78: Murrumbidgee Council Rural Landholdings

It is Department of Primary Industries (Agriculture) policy to support the retention of agricultural land, particularly prime cropping and pasture land for commercial food and fibre production. To this end, the fragmentation of rural land through subdivision is generally seen as working against this objective as is the approval of dwellings on rural land.

The NSW Department of Primary Industries document titled *Right to Farm Policy* is a key consideration for the development of rural land and outlines the following principles:

> *The NSW Government recognises the value of agriculture for growing food and fibre for domestic and international markets and is concerned about the potential loss or impaired use of agricultural land. Agriculture is important to local, regional, and state economies and communities.*
>
> *Addressing land use conflicts that arise from lawful agricultural practices is an issue of shared obligations. Farmers, neighbours, land developers, new land buyers as well as local and state government all have a significant role to play.*

The Policy is currently undergoing review and has identified as one of the key considerations:

> *The loss of agricultural land to non-agricultural uses pushes production further away from markets and critical infrastructure, and breaks up the rural landscape, reducing the production capacity of the land and making our food chains more vulnerable to shocks…*
>
> *Farmers can find themselves increasingly surrounded by residential land users who are sensitive to the noise and smells of farming which leads to conflict. The onus is often placed on farmers to respond to complaints about their operations and the lack of support in resolving complaints creates stress and anxiety for farmers. The complexity of the planning framework is overwhelming, costly and difficult to interpret. The inconsistency of how planning requirements are applied across councils can deter investment in new or expanding operations. A planning framework that incorporates the needs of agriculture will make it easier to interpret and ensure councils are supported in their decisions to promote and protect agriculture in their communities.*

Whilst the overall objective of this Land Use Plan is to consolidate the two former LEP's and identify future urban growth and development opportunities, this is not to come at the expense of the ongoing promotion and protection of agricultural land.

For the most part, the Land Use Plan does not recommend any large-scale changes to existing rural planning requirements, but however seeks to ensure consistency between the former Jerilderie and Murrumbidgee Council areas.

The purpose of this Plan is to also support ancillary value-adding commercial and industrial activities that are part of the agricultural supply chain.

Zoning and Minimum Lot Size Provisions

The rural areas of the Murrumbidgee Council area are zoned RU1 Primary Production and RU3 Forestry under the relevant LEPs that currently apply to this land. Whilst the application of these rural zonings has been uniformly applied, it is noted that there are some discrepancies between the minimum lot size maps of the former Jerilderie and Murrumbidgee Council areas.

For example, the former Jerilderie LEP adopted a minimum lot size of 213ha in the RU1 Primary Production zone, whilst the former Murrumbidgee LEP adopted a minimum lot size of 200 hectares for this same zone.

It is recommended that as part of the proposed consolidated LEP, that a uniform minimum lot size be applied across the rural zones of the new Council area so as to avoid confusion.

Specifically, it is recommended that a 200 hectare minimum lot size be adopted for the RU1 Primary Production zone. This minimum lot size is considered more practical and will still achieve the same objective of protecting rural land from fragmentation and land use conflicts.

Whilst it is acknowledged that this will result in a reduction in the minimum lot size of the former Jerilderie Council area from 213 hectares down to 200 hectares, the additional subdivision and development opportunities that this will create is considered limited.

The minimum lot size applicable to the RU3 Forestry zone does not need to change as both LEP's do not adopt a minimum lot size for this zone.

Land Use Tables

Similar to matters regarding minimum lot size, the Land Use Tables of the former Jerilderie and Murrumbidgee LEPs also differ. Whilst the objectives for each of these zones is identical, the range of permitted and prohibited land uses outlined in Items 2-4 vary.

For this reason, it is recommended that a comparative analysis be undertaken of the two LEPs to determine the most appropriate range of permitted and prohibited land uses. In summary, it is recommended that the more flexible land use provisions apply.

It is further recommended that the RU1 Primary Production zone adopts an 'open zone'. That is, one where a broad variety of land uses can be considered, which allows for greater flexibility.

The open approach minimises the need to undertake 'spot rezonings' or other ad hoc LEP amendments to permit additional acceptable uses that were not anticipated during the initial LEP preparation.

Subdivision of Rural Land for certain developments

At present, Clause 4.2 of the Jerilderie and Murrumbidgee LEPs provides for flexibility in the rural subdivision controls, as it allows for the subdivision of rural land less than the minimum lot for the purposes of primary production.

This clause provides flexibility in rural development and supports changing agricultural trends towards more intensive farming options.

To further support the development outcomes of the rural zones and allow for greater flexibility in this zone, it is recommended that Council adopt a new clause within the LEP that allows for the subdivision of rural zoned land less than the minimum lot size for other permissible land uses.

For example, should a landowner wish to construct a freight transport facility or agricultural produce industry, which are both permitted in the RU1 zone on their land, this would require that the proposed development achieve the minimum lot size of the zone, which in this instance is 200 and 213 hectares respectively. This is not considered practical or viable and is creating a barrier for new supportive ancillary industries being established.

An example of this clause is available within Clause 4.2C – exceptions to minimum lot sizes for certain rural subdivisions of the *Albury Local Environmental Plan 2010*.

Similarly, it is also recommended that Council investigate opportunities to allow for boundary adjustments between certain rural and environmental zones, again to allow for the greater flexibility of development within these rural areas.

An example of such a clause is available within Clause 4.2G – boundary adjustments in certain rural and environmental zones of the *Griffith Local Environmental Plan 2014.*

Rural Lifestyle and Urban Development Pressures

Pressures from urban and rural lifestyle development is one of the key issues facing the ongoing viability and protection of rural zoned land.

As outlined with Sections 3.1-3.3 above, the Land Use Plan recommends rezoning certain lands on the fringe/periphery of each of the three main townships. Whilst the extension of urban development into outlying rural areas has the potential to adversely affect existing productive agricultural operations, these sites have been carefully selected to minimise their impacts on these existing land uses.

More specifically, residential and large lot residential development activities are proposed to the west of Darlington Point, whilst industrial and commercial activities are proposed to the south. The proposed residential land is separated from nearby agricultural activities and will adjoin environmental and urban development.

Britts Road has been used as the boundary between low density residential (5,000m^2+) and large lot residential development (2ha+) to the south of this road. In doing so, this will provide a transition in lot sizes from the main urban area and will avoid the situation of conventional residential development butting up immediately adjacent to agricultural land.

In Coleambally, additional residential development has been proposed to the south west of the township. Again, this land is already largely separated from surrounding rural lands via dense vegetation and existing lot configurations and will not adversely affect existing agricultural activities.

In Jerilderie, the Land Use Plan recommends extending the RU5 Village zone to the west of the town, thereby forming an extension of the Wunnamurra Residential Estate. This land is not currently used for any productive agricultural activities and is largely separated from adjoining land uses via Conargo Road and Billabong Creek.

Similarly, the Land Use Plan recommends introducing additional R5 Large Lot Residential zoned land to the south of Wilsons Road adjoining the Jerilderie Racecourse. Again, this land is separated from adjoining rural lands, is already largely fragmented into 12 lots and proposes a larger minimum lot size (2ha+) that will minimise conflicts with adjoining rural lands.

Other changes proposed by the Plan include extending industrial land to the south west and south east of the township. Again, these lands are not currently used for productive agricultural activities due to their size and proximity to urban development.

Renewable Energy and its impacts on Agriculture

Due to the relatively lower cost of rural land and the strategic location of the Murrumbidgee Council area, Council in recent years has seen increased interest in the renewable energy sector (solar, biomass), which is placing pressures on traditional agricultural lands, including the loss of productive farmland and potential land use conflicts. Specifically, Council have approved two large-scale solar farms in Coleambally (150MW) and Darlington Point.

This matter is not limited to the Murrumbidgee Council area and is occurring across the rural portions of the State. In response, the NSW Government released the *Large-scale Solar Energy Guidelines for State Significant Development,* December 2018.

Whilst the Guideline recognises that large-scale solar energy projects can support jobs and investment in regional NSW and offer the potential for significant economic benefits in regional communities that may not have similar opportunities from other industries, there is a need to ensure that they are appropriately planned.

Specifically, the Guideline recommends that solar farms should avoid important agricultural lands, including Biophysical Strategic Agricultural Land (BSAL), irrigated cropping land, and land with a land and soil capability class of 1, 2 or 3. Parts of the Murrumbidgee Council area have a soil capability class of 3, whilst the area surrounding Coleambally is irrigated cropping land.

Careful consideration will need to be given to the competing needs of these activities including consideration of the loss of prime agricultural quality land, as well as the potential creation of land use conflicts between these activities.

Due to the significant role and importance that agriculture plays in the Murrumbidgee Council area, there is a need to ensure that high quality agricultural land is protected ongoing.



Coleambally Solar Farm

3.4.2. Environmental

The Murrumbidgee Council area has a number of environmental and natural landscapes that warrant protection ongoing including National Parks such as the Murrumbidgee Valley National and Regional Parks such as the Willbriggie Regional Park.

Zoning and Minimum Lot Size Provisions

The environmental areas of the Murrumbidgee Council area are zoned E1 National Parks and Nature Reserves or E3 Environmental Management under the respective LEPs. It is noted however, that there is no E3 Environmental Management zone applicable to the former Jerilderie Council area.

Following a review of the minimum lot size maps of the Jerilderie and Murrumbidgee LEPs it is noted that there is no minimum lot size applicable to the E1 and E3 zoned land and the two plans are consistent.

Land Use Tables

Similar to matters regarding minimum lot size, the Land Use Tables of the former Jerilderie and Murrumbidgee LEPs are also identical. Therefore, any consolidated LEP will be able to retain the existing Land Use Table applicable to this zone.

Review of Environmental Mapping and Overlays

As part of the preparation of this Land Use Plan, a Biodiversity Constraints Analysis has been undertaken by AREA Environmental and Heritage Consultants of proposed candidate rezoning sites.

This assessment involved a desktop assessment and analysis of biodiversity and ecological spatial data.

Consequently, it is recommended that a further analysis and ground truthing be undertaken of the relevant environmental maps and local clauses contained within the former Jerilderie and Murrumbidgee LEP's as they relate to the three main townships and as discussed within this Plan. Specifically, these include the following LEP maps:

- Terrestrial Biodiversity
- Groundwater Vulnerability
- Riparian Lands and Watercourse
- Wetlands

A review has also been undertaken of the relevant LEP clauses contained in the former Murrumbidgee and Jerilderie LEPs that enable these local maps. Following a review of these clauses, it is noted that the wording of these clauses is identical and does not require revision.

Development on Riverfront Land

Development adjacent to waterways and within river beds and banks has the potential to adversely affect environmentally sensitive land in terms of biodiversity, water quality, Aboriginal cultural heritage and the like.

Therefore, consideration should be given to development on environmentally sensitive land. Whilst it is acknowledged that the Murrumbidgee LEP contains local provisions regarding development on river front areas (Clause 6.7) and development on river beds and banks (Clause 6.8), it is noted that no such clauses apply to the southern portion of the local government area, being the former Jerilderie area.

For this reason, it is recommended that these clauses be included in the new consolidated LEP so that they apply to the whole local government area.

Development of Environmentally Significant Land

As outlined within Sections 3.1-3.3 above, the Land Use Plan recommends rezoning certain lands on the fringe/periphery of each of the three main townships. Whilst the extension of urban development into outlying areas has the potential to adversely affect environmentally sensitive locations, these sites have been carefully selected to minimise their impacts.

More specifically, residential and large lot residential development activities are proposed to the west of Darlington Point, whilst industrial and commercial activities are proposed to the south. The proposed land uses are located on largely cleared land classified as 'Category 1' under the *Local Land Services Act 2013* and generally seek to avoid areas of environmental significance.

In recognition of the environmental values of the area, the Land Use Plan recommends rezoning certain parcels of land for environmental purposes to ensure the ongoing protection of this land. Specifically, this relates to land adjoining the Murrumbidgee River that is heavily treed and contains forested wetlands that are also subject to inundation from flooding.

In Coleambally, additional residential development has been proposed to the south west of the township. Whilst this land does contain patches of scattered vegetation, it is considered less constrained and environmentally sensitive as compared to other potential development sites.

In recognition of the proposed impacts of development, the Land Use Plan also recommends rezoning several parcels of land from rural to environmental to ensure its ongoing protection and to help off-set any tree losses on adjoining lands. These parcels of land are located on the northern and southern fringes of the main township and contain dense vegetation comprising Weeping Myall woodland and Cyprus Pine woodland, both of which are part of a Threatened Ecological Community.

In Jerilderie, the Land Use Plan recommends extending the RU5 Village zone to the west of the town, thereby forming an extension of the Wunnamurra Residential Estate, as well as introducing additional R5 Large Lot Residential zoned land to the south of Wilsons Road adjoining the Jerilderie Racecourse.

These parcels of land have been selected as they are largely cleared of biodiversity values. It is noted however that the proposed rezoning does seek to retain a back-runner within the proposed RU5 expansion area, due to the impacts of flooding, as well as the fact that this area contains a large amount of remnant vegetation.

Other changes proposed by the Land Use Plan seek to rezone land along Billabong Creek as it is subject to high hazard flooding and is located within a classified floodway. This area also contains large areas of remnant riverine vegetation that will be subsequently protected ongoing.

Consideration of Development Proposals

Council is required under the NSW *Environmental Planning and Assessment Act 1979* to consider the environmental impacts of development including, but not limited to matters such as:

- Biodiversity (flora and fauna)
- Aboriginal cultural heritage
- Non-Aboriginal heritage
- Waterways and drainage
- Soils

Consequently, any future development proposals will need to be assessed against the relevant requirements of the EP&A Act, as well as any other relevant legislation, Acts or guidelines. Consideration should also be given to the recommendations and outcomes of the accompanying supporting environmental studies prepared as part of this Land Use Plan.

Development Control Plan Provisions

As part of the review of Council's existing planning controls, it is recommended that Council introduce additional environmental protection controls into the Development Control Plan.

These controls should be based on the outcomes of these investigations and should adopt current-day best practice requirements.

Key Land Use Planning Considerations

Table 43: Key Land Use Planning Considerations – Rural & Environmental

Rural:

R1 Adopt a consistent minimum lot size for the RU1 Primary Production Zone, being 200 hectares.

R2 Review the range of permitted and prohibited land uses within the RU1 Primary Production Zone and ensure consistency between the former Murrumbidgee and Jerilderie council areas.

R3 Investigate opportunities for an 'open' land use table for the RU1 Zone to allow greater flexibility for industrial and commercial-related activities to occur within this zone.

R4 Introduce a new LEP clause that allows for subdivision less than the minimum lot size in the rural zones for permitted land uses.

R5 Investigate options to allow for boundary adjustments between certain rural and environmental zones.

R6 Introduce additional provisions within Council's Development Control Plan regarding development within rural areas.

R7 Limit the expansion of urban land into adjoining rural lands that has the potential to create land use conflicts.

R8 Assess rural development proposals in accordance with relevant legislation, Acts and guidelines.

R9 Assess renewable energy proposals in accordance with the NSW Large-scale Solar Energy Guidelines for State Significant Development.

Environmental:

E1 Review and ground truth current environmental zonings contained within the Land Zoning Map of the LEP to better reflect environmental conditions.

E2 Review the Terrestrial Biodiversity Map, Groundwater Vulnerability, Riparian Lands and Watercourse Map and Wetlands Map of the LEP to better reflect environmental conditions.

E3 Adopt a Riverfront area clause for the Murrumbidgee Council area.

E4 Limit the expansion of urban land into adjoining environmentally sensitive lands that has the potential to create land use conflicts.

E5 Require development proposals to consider the environmental impacts of vegetation removal in accordance with local and state government legislation and the recommendations of the Biodiversity Constraints Analysis for Murrumbidgee Council.

E6 Require development proposal to consider impacts on matters of Aboriginal Cultural Heritage in accordance with the recommendations of the Aboriginal Cultural Heritage Review.

E7 Prepare a Bushfire Prone Land map in association with the NSW RFS.

E8 Require new development proposals to consider the provisions of *Planning for Bushfire Protection Guidelines 2019*.

E9 Amend Schedule 5 and the Heritage maps of the LEP consistent with the recommendations of the Heritage Review Inventory Report.

E10 Introduce additional provisions within Council's Development Control Plan regarding environmental protection and environmental lands.

4. Implementation

4.1. Future Actions

Below is a summary of the future actions proposed within the Murrumbidgee Land Use Plan, as well as whose responsibility it is to facilitate and undertake the action and the indicative timing.

It is noted that the land use planning recommendations of this Plan will be incorporated within the scheduled review of the Murrumbidgee and Jerilderie LEPs and DCP, which is to commence at the conclusion of this project (short term). Other actions will be undertaken ongoing by Council and other relevant government agencies as part of the development application process.

These action items have been broken down into subcategories comprising policy statements, LEP amendments and DCP amendments.

Table 44: Action Items: Policy Statements

Action No's.	Description	Responsibility	Timing
General			
DP1, C1, J1	Ensure a sufficient supply and range of residential zoned land to cater for expected demand.	Council	Short, Ongoing
DP3, C5, J5	Ensure short-term accommodation developments are appropriately designed and located to minimise impacts on surrounding residents.	Council	Ongoing
DP4, J6	Encourage infill development by exploring incentive strategies.	Council	Short, Ongoing
DP9, C6, J7	Continue to review community facilities and open space provisions within town, with gaps identified and strategies developed.	Council	Ongoing
DP10, C6, J8	Ensure zoning is flexible to allow for the establishment of community and recreation facilities within central locations that are accessible.	Council	Short
DP12, C8, J10	Retain flexible land use zoning in the main commercial centre to encourage a range of businesses.	Council	Short, Ongoing
DP14, DP15, C11	Encourage the establishment of a motel or short term stay accommodation development within the centre of town.	Council, Development industry	Ongoing
DP20, C13, J16, R1, E4	Limit residential and rural residential sprawl into established rural areas that has the potential to create land use conflicts and undermine the viability of productive agricultural businesses.	Council	Ongoing
DP22, C14, J17, E5	Require development proposals to consider the environmental impacts of vegetation removal in accordance with local and state government legislation and the recommendations of the Biodiversity Constraints Analysis for Murrumbidgee Council.	Council, Biodiversity Conservation Division	Ongoing

DP24, C16, J20, E6	Require development proposal to consider impacts on matters of Aboriginal Cultural Heritage in accordance with the recommendations of the Aboriginal Cultural Heritage Review.	Council, Biodiversity Conservation Division	Ongoing
DP26, C17, J24, E7	Prepare a Bushfire Prone Land map in association with the NSW RFS.	Council, Rural Fire Service	Short
DP26, C18, J25, E8	Require new development proposals to consider the provisions of Planning for Bushfire Protection Guidelines 2019.	Council, Rural Fire Service	Ongoing
DP28, C20, J24	Finalise and adopt the recommended actions of the Integrated Water Cycle Management Strategy.	Council, Public Works Advisory	Short
DP29, C21, J25	Ensure that new developments make an appropriate contribution towards the provision or augmentation of infrastructure consistent with Council's adopted Infrastructure Contributions Plans.	Council	Ongoing
DP27, C22, J26	Ensure that development occurs in a staged and logical sequence to minimise pressures on infrastructure.	Council	Ongoing
R8	Assess rural development proposals in accordance with relevant legislation, Acts and guidelines.	Council	Ongoing
R9	Assess renewable energy proposals in accordance with the NSW Large-scale Solar Energy Guidelines for State Significant Development.	Council	Ongoing
Darlington Point			
DP5	Locate residential development outside of flood prone areas and investigate opportunities to extend current flood levee system.	Council	Short, Ongoing
DP11	Establish a new public open space area on the western side of town to service the proposed residential development in this area.	Council	Medium-Long
DP13	Encourage the development of land currently bordered by Demamiel Street, Carrington Street, Hay Road and a public laneway for commercial purposes.	Council, Development industry	Ongoing
DP17	Investigate opportunities to create a transport depot or truck interchange or parking area near the Sturt Highway and Kidman Way interchange.	Council, Transport for NSW	Short
DP16	Investigate the former saw mill site in North Darlington point as an 'opportunity site' for redevelopment and possible future use. Such development should only occur once it is flood free.	Council, Development Industry	Ongoing
DP21	Adopt the recommendations of the Darlington Point Flood Risk Management Study and Plan including the introduction of a Flood Planning Map for the township.	Council, Department of Planning, Industry and Environment	Short

Coleambally			
C7	Investigate alternative sites for the proposed Coleambally Lake project.	Council	Short-medium
C10	Establish a new public open space area on the western side of town to service the proposed residential development in this area.	Council	Medium-Long
C9	Encourage new commercial development to occur within the main commercial centre of town around Brolga Place and Kestrel Road.	Council	Ongoing
C12	Monitor demand for industrial zoned land and develop currently undeveloped industrial land to satisfy demand.	Council	Short, Ongoing
Jerilderie			
J22	Locate residential development outside of flood prone areas.	Council	Short, Ongoing
J12	Encourage new commercial development to occur within the main commercial centre of town around Jerilderie Street.	Council	Ongoing

Table 45: Action Items: LEP Amendments

Action No.	Description	Responsibility	Timing
General			
R1	Adopt a consistent minimum lot size for the RU1 Primary Production Zone, being 200 hectares.	Council	Short
R2	Review the range of permitted and prohibited land uses within the RU1 Primary Production Zone and ensure consistency between the former Murrumbidgee and Jerilderie council areas.	Council	Short
R3	Investigate opportunities for an 'open' land use table for the RU1 Zone to allow greater flexibility for industrial and commercial-related activities to occur within this zone.	Council	Short
R4	Introduce a new LEP clause that allows for subdivision less than the minimum lot size in the rural zones for permitted land uses.	Council	Short
R5	Investigate options to allow for boundary adjustments between certain rural and environmental zones	Council	Short
E1	Review and ground truth current environmental zonings contained within the Land Zoning Map of the LEP to better reflect environmental conditions.	Council	Short
DP23, C15, J18, E2	Review the Terrestrial Biodiversity Map, Groundwater Vulnerability, Riparian Lands and Watercourse Map and Wetlands Map of the LEP to better reflect environmental conditions.	Council	Short
E3	Adopt a Riverfront area clause for the Murrumbidgee Council area.	Council	Short
DP27, C19, J21, E9	Amend Schedule 5 and the Heritage maps of the LEP consistent with the recommendations of the Heritage Review Inventory Report.	Council, Heritage Branch	Short
Darlington Point			
DP2	Rezone land to the west of the main township on the northern side of Britts Road to R2 Low Density Residential with a 5,000m^2 minimum lot size.	Council	Short
DP3	Rezone land to the west of the main township on the southern side of Britts Road to R5 Large Lot Residential with a 2 hectare minimum lot size.	Council	Short
DP4	Rezone the Darlington Point Sports Oval to RU5 Village Zone with a 600m^2 minimum lot size.	Council	Short
DP5	Rezone a small portion of land above the flood level at the southern end of Darlington Street to R2 Low Density Residential with a 5,000m^2 minimum lot size.	Council	Short
DP15	Rezone land on the intersection of the Kidman Way and Sturt Highway to IN1 General Industrial and/or B6 Enterprise Corridor.	Council	Short
DP31	Rezone Council Sewerage Treatment Plant and Waste Management Centre SP2 Infrastructure.	Council	Short

DP19	Rezone the former saw mill site on the northern side the Murrumbidgee River SP3 Tourist.	Council	Short
DP21	Rezone environmental lands adjoining the Murrumbidgee River to E3 Environmental Management.	Council	Short
DP25	Adopt the recommendations of the Darlington Point Flood Risk Management Study and Plan including the introduction of a Flood Planning Map for the township.	Council	Short
Coleambally			
C2	Rezone land to the south west of Coleambally for to RU5 Village with a 600m^2 minimum lot size.	Council	Short
C3	Rezone land on the corner of Kingfisher Avenue and Pine Drive to RU5 Village with a 600m^2 minimum lot size.	Council	Short
C4	Rezone land to the south of Lovegrove Road to R5 Large Lot Residential with a 2 hectare minimum lot size.	Council	Short
C9	Rezone the Coleambally golf club and Lions Park to RE1 Public Recreation.	Council	Short
C25	Rezone Council Sewerage Treatment Plant and Cemetery SP2 Infrastructure.	Council	Short
C21	Rezone densely vegetated reserves to the north and south of Coleambally to E3 Environmental Management.	Council	Short
Jerilderie			
J2	Rezone land to the immediate west of Wunnamurra Estate to RU5 Village with the exception of a small flood runner/back water.	Council	Short
J3	Rezone land north of Showground Road to R5 Large Lot Residential.	Council	Short
J4	Rezone RU5 Village zoned located either side of Billabong Creek identified as a floodway to RU1 Primary Production.	Council	Short
J9	Rezone the existing Legacy Units and Jerilderie Fire Station located on the western side of Southey Street from IN1 General Industrial to RU5 Village.	Council	Short
J13	Rezone land generally bound by Coonong Street, Kennedy Street and Saleyards Road from RU1 Primary Production to IN1 General Industrial.	Council	Short
J14	Rezone land generally bound by Coonoong Street and Jerilderie Oaklands Road from RU1 Primary Production to IN1 General Industrial.	Council	Short
J15	Rezone land west of town from RU1 Primary Production to IN1 General Industrial. Only rezone once demand warrants.	Council	Short
J19	Adopt the recommendations of the Jerilderie Flood Study including the introduction of a Flood Planning Map for the township.	Council	Short

Table 46: Action Items: DCP Amendments

Action No.	Description	Responsibility	Timing
General			
C12, J12	Introduce new building and planning controls within the DCP that sets minimum design standards for the construction of new buildings or alterations and additions to existing buildings. Particular attention should be paid to commercial and industrial developments.	Council	Short
R6	Introduce additional provisions within Council's DCP regarding development within rural areas.	Council	Short
E10	Introduce additional provisions within Council's DCP regarding environment protection and environmental lands including vegetation clearing.	Council	Short
G1	Introduce new building and planning controls within the DCP that sets minimum design standards for the construction of short term accommodation including shipping containers and transportables.	Council	Short
G2	Introduce minimum engineering design guidelines for urban development.	Council	Short
G3	Introduce a new control that requires any request for on-site effluent disposal to be accompanied by a Land Capability Assessment.	Council	Short
G4	Introduce minimum information requirements for development applications.	Council	Short
G5	Update and amend the heritage protection guidelines.	Council	Short
G6	Incorporate new controls in relation to natural hazards (bushfire, flooding, land contamination).	Council	Short
Darlington Point			
DP16	Incorporate specific controls into the DCP to ensure an appropriate interface is achieved between industrial development and the Sturt Highway including vehicular access, building design, setbacks, landscaping and signage.	Council	Short, Ongoing
DP17	Incorporate specific controls into the DCP regarding the development of the main commercial centre of Darlington Point.	Council	Short
Coleambally			
C22	Incorporate specific controls into the DCP to ensure development adjoining the large environmental reserves provides an appropriate interface to these public lands.	Council	Short
Jerilderie			
DP13	Incorporate specific controls into the DCP to ensure an appropriate interface is achieved between residential development and Conargo Road including interface treatments and subdivision design.	Council	Short, Ongoing

Appendix A: Biodiversity Constraints Analysis

Appendix B: Aboriginal Cultural Heritage Assessment

Appendix C: Heritage Review Inventory Report

Appendix D: Consistency with Riverina Murray Regional Plan 2036

Table 47: Consistency with Riverina-Murray Regional Plan

Goal, Direction & Action Title	Relevance to Land Use Plan	Consistency
Goal 1 – A connected and prosperous economy		
Direction 1 – Protect the region's diverse and productive agricultural land.	Large parts of the Murrumbidgee Local Government Area are zoned for rural purposes.	The Land Use Plan primarily supports the productive rural lands of the Murrumbidgee council area despite the fact that it proposes modest urban expansion at the peripheral/fringe of the three main townships. Whilst it is acknowledged that the Plan seeks to rezone RU1 Primary Production zoned land adjoining the three main townships an assessment of this land has been undertaken in accordance with the agricultural capability and class rating. Specifically, the land soil capability class of agricultural land surrounding Darlington Point is identified as Class 4 – Moderate to severe limitation and Class 5 – Severe limitations. At present this land immediately adjoins the main urban centre and is used for broadacre (albeit low-scale) agriculture. The total land proposed for rezoning comprises 238 hectares spread across 6 different landholdings of varying quality and condition. The land soil capability class of agricultural land within and surrounding Coleambally is identified primarily as Class 6 – Very severe limitation, which is reflective of the fact that large portions of it contain native vegetation, which limit its agricultural capability. The land is used for small scale broadacre agriculture and the total land proposed for rezoning for residential purposes comprises 50 hectares. Of the remaining land proposed to be rezone, the zoning is considered to be reflective of the lands' current use (such as the sewerage treatment plant) or environmental features. Lastly, the land soil capability class of agricultural land within and surrounding Jerilderie is identified Class 4 – Moderate to severe limitations and Class 5 – Severe limitations. The land is used for small scale broadacre agriculture and the total land proposed for rezoning comprises 136 hectares. It is noted however that the Land Use Plan also recommends back-zoning approximately 50 hectares of land immediately adjoining Billabong Creek as RU1 Primary Production. Overall, the proposed modest reduction of rural zoned land is considered to be acceptable given the agricultural classification of the land, its location and generally fragmented nature. The rezoning of this land has also been carefully selected so as to avoid land use conflicts with adjoining productive agricultural lands. Outside of these proposed rezoning changes the Land Use Plan seeks to ensure consistency between the current Murrumbidgee and Jerilderie LEP's, which vary in terms of their rural controls (minimum lot size, LEP provisions).

		Furthermore, the Land Use Plan recommends introducing several new local provisions to help support development in rural areas. Specifically, these include the introduction of a new local provision regarding exceptions to rural subdivisions to allow permitted developments on rural zoned land (except for dwellings)(see Clause 4.2C of the Albury LEP). Similarly, the Plan also recommends introducing a new local provision to allow for boundary adjustments between certain rural and environmental zones, again to allow for the greater flexibility of development within these rural areas (see Clause 4.2G of the Griffith LEP). In addition, it is also recommended that Council adopt an 'open zone' for the rural areas. That is, one where a broad variety of land uses can be considered, which allows for greater flexibility.
Direction 2 – Promote and grow the agribusiness sector.	Applies as the Land Use Plan seeks to amend the range of permitted agricultural land use types.	The Land Use Plan is consistent with this direction as it recommends adopting an 'open zoning' for the rural zoned lands. In doing so, this will provide for a wider range of supportive and complementary uses such as agricultural produce industries, artisan food and drink industries to be established. The Plan also recommends rezoning additional land at key strategic locations for industrial purposes to support and encourage agricultural-related businesses such as manufacturing/production and logistics.
Direction 3 – Expand advanced and value-added manufacturing.	Applies as the Land Use Plan seeks to amend the range of permitted land use types.	Complies, as the Land Use Plan seeks to rezone additional land for industrial and commercial purposes. In particular, it is noted that Darlington Point currently does not currently have a dedicated industrial area, which is deterring new businesses from establishing and resulting in the establishment of large scale industries in inappropriate locations.
Direction 4 – Promote business activities in industrial and commercial areas.	Applies as the Land Use Plan recommends changes to the main commercial centres.	Complies, one of the key outcomes of the Land use Plan is to reinforce and strengthen the economic viability of the main commercial centres of each of the townships. As outlined above, the Plan recommends zoning additional land for industrial purposes and recommends retaining the current RU5 Village zone so as to maximise flexibility in the land use planning system. Furthermore, as part of the review of Council's DCP, additional controls will be included that provides further details and guidelines for where commercial and industrial development is to be encouraged, as well as setting minimum design requirements to ensure that appropriate outcomes are achieved.
Direction 5 – Support the growth of the health and aged care sectors.	Applies as the Land Use Plan provides population growth estimates.	As part of the preparation of the Land Use Plan, a demographic analysis was undertaken. Murrumbidgee like the remainder of Australia is experiencing an ageing of its population, which will increase into the future. As a result, this will place additional demands on additional facilities and services, namely health and aged care. Given the modest growth projected for each of the townships there is enough capacity within these systems to accommodate additional growth from a health care perspective. It is recommended however that additional appropriate and adaptable aged care housing be provided within the main townships.

Direction 6 – Promote the expansion of education and training opportunities.	Yes	The Land Use Plan does not derogate from this direction.
Direction 7 – Promote tourism opportunities.	Applies as the Land Use Plan identifies additional tourism opportunities	The Land Use Plan complies with this direction as it seeks to encourage and promote tourism within the three main townships and the wider Murrumbidgee area. Broadly speaking, the Plan seeks to strengthen the role of each of the townships and better promote the facilities that each has to offer. More specifically, the Plan identifies zoning the former saw mill site in Darlington Point SP3 Tourism as this represents a key opportunity site to promote tourism for the area. In addition, it is also recommended that Council build upon its natural assets and promote opportunities for eco-tourism through the land use tables of the LEP. Similarly, an opportunity also exists to protect and promote heritage tourism opportunities by preserving items and areas of historical significance.
Direction 8 – Enhance the economic self-determination of Aboriginal communities.	Applies, as the Land Use Plan has regard to matters regarding Aboriginal Cultural Heritage.	The Murrumbidgee Council area has a rich cultural history that warrants protecting and promoting into the future. In particular, the local government area contains a number of state significant Aboriginal Cultural places including the Warrangesda Mission site. An Aboriginal Cultural Heritage Assessment has informed the recommendations of the Plan, which seek to avoids areas of significance and retain these for the ongoing self-determination of traditional landowners.
Direction 9 – Support the forestry industry.	Applies, as the Murrumbidgee Council area contains forestry land.	The Land Use Plan does not derogate from the aims of this direction as it does not seek to reduce the amount of forestry owned land and more broadly supports agricultural industries.
Direction 10 – Sustainably manage water resources for economic opportunities.	Yes, as the Murrumbidgee Council area contains a number of significant waterways.	The Land Use Plan is consistent with this direction as it seeks to manage and protect key waterways throughout the council area including the Murrumbidgee River and Billabong Creek. These waterways are already zoned for this purpose, however it is recommended that a new local provision be introduced to control development on river front areas. Both Darlington Point and Jindera are centred around water-based activities, which the Plan seeks to promote and enforce. A proposal was identified in Coleambally for the creation of a new recreational lake that would promote tourism, however the elected site contained a large Threatened Ecological Community, which severely limited the ability to be able to develop this land. Matters regarding water supply and sustainability are also currently being investigated by Council and NSW Public Advisory as part of the preparation of an IWCM strategy. The initial discussion paper has identified a number of required works to the water supply system including the need to address water losses currently being experienced in the system.

Direction 11 – Promote the diversification of energy supplies through renewable energy generation.	Yes, as the Murrumbidgee Council area is located within a high solar generation area.	The Land Use Plan does not derogate from the aims of this direction as Murrumbidgee currently contains two state-significant solar farms and has approved a number of smaller solar farms. The Plan does however identify the need to ensure that renewable energy proposals do not result in the loss of highly productive agricultural land.
Direction 12 – Sustainably manage mineral resources.	Yes, as the Murrumbidgee Council area contains mineral resource	Complies, the Land Use Plan does not derogate from the aims of this direction as it does not propose any changes to existing mineral resource areas.
Goal 2 – A healthy environment with pristine waterways		
Direction 13 – Manage and conserve water resources for the environment.	Yes, as the Murrumbidgee Council area contains a number of water resources.	Complies. As outlined above, the Land Use Plan recommends introducing a new riverfront clause to provide for the ongoing protection of waterways.
Direction 14 – Manage land uses along key river corridors.	Yes, as the Land Use Plan seeks to rezone land adjoining river corridors.	The Land Use Plan is consistent with this direction despite seeking to rezone several parcels of land alongside river corridors in both Darlington Point and Jerilderie. Notwithstanding, the land proposed to be rezoned is setback from these waterways or located above the relevant flood height. The proposed areas for rezoning also avoids significant vegetation and areas of high cultural significance.
Direction 15 – Protect and manage the region's many environmental assets.	Yes, as the Land Use Plan seeks to rezone land for environmental purposes.	The Land Use Plan has been informed by the preparation of a shire wide biodiversity and Aboriginal cultural heritage assessment. In response, candidate rezoning sites were selected where they avoided areas of environmental significance and in some instances recommend rezoning land for environment protection in recognition of the environmental values of this land. Whilst it is acknowledged that the Plan recommends amending the terrestrial biodiversity and wetlands map, this is in recognition of further more detailed environmental assessment that has been undertaken to better reflect the environmental conditions of the land.
Direction 16 – Increase resilience to natural hazards and climate change.	Yes, as the Land Use Plan addresses natural hazards	The Land Use Plan complies with this direction as it has given due consideration to the impacts of climate change, which are likely to result in more variable and extreme weather events such as flooding and bushfire. The land use zoning recommendations of the Plan have been informed by the preparation of flood studies for both Darlington Point and Jerilderie and seeks to avoid areas subject to natural hazards, particularly high hazard flooding. Specific development controls and flood maps will also be incorporated into the DCP to ensure that flooding is appropriately considered at the development application stage.

		In addition, the Land Use Plan also recommends that the bushfire prone land map for Murrumbidgee be amended consistent with recent changes to *Planning for Bushfire Protection Guidelines 2019*.
Goal 3 – Efficient transport and infrastructure networks		
Direction 17 – Transform the region into the eastern seaboard's freight and logistics hub.	Yes, as the Land Use Plan seeks to rezone land to encourage freight and logistics	The Land Use Plan complies with this direction as it seeks to rezone key strategic sites for the purposes of industrial or business development, namely freight or logistics. These sites are located alongside key transport corridors and can help grow and expand freight and logistics within the Murrumbidgee Council area.
Direction 18 – Enhance road and rail freight links.	Yes	The Land Use Plan does not derogate from the aims of this direction.
Direction 19 – Support and protect ongoing access to air travel.	Yes, as the Murrumbidgee Council area contains several airfields.	The Land Use Plan does not derogate from the aims of this direction and avoids locating development within proximity to identified aerodromes/airfields.
Direction 20 – Identify and protect future transport corridors.	Yes	The Land Use Plan will not affect future transport corridors. Furthermore, where development is proposed alongside key transport routes, local provisions will be included seeking to limit the number of access points onto these roadways.
Direction 21 – Align and protect utility infrastructure investment.	Yes, as the Murrumbidgee Council area contains a number of utility infrastructure.	Complies, as the Land Use Plan seeks to rezone all of Council's key strategic infrastructure assets within an SP2 Infrastructure zone. This will ensure their ongoing protection and the Plan identifies appropriate buffer zones around these facilities so as preclude the establishment of sensitive land uses, which may limit their ability to operate. Also, as part of the preparation of the LUP, Council in association with the NSW Public Advisory are preparing an IWCM, which will identify existing capacity of Council's water and sewerage infrastructure and funding required to maintain an appropriate level of service.
Goal 4 – Strong, connected and healthy communities		
Direction 22 – Promote the growth of regional cities and local centres.	Yes, as the Land Use Plan seeks to promote growth.	The Land Use Plan is consistent with this direction as it seeks to promote and strengthen the economic role of each township, as well as the wider Murrumbidgee as a whole. To achieve this, the Plan recommends rezoning additional land for residential, commercial and industrial development, which will support population growth and business development. The Plan also seeks to protect areas of environmental and cultural significance, promote tourism and identify key opportunities and constraints.

		The Land Use Plan adopts a number of different population projections, which indicate that the population is likely to remain steady or slightly increase, particularly in response to large scale renewable energy projects and new and emerging agricultural industries. By rezoning additional land, this will strengthen and promote the growth of these small rural townships.
Direction 23 – Build resilience in towns and villages.	Yes, as the Land Use Plan identifies a number of land use planning recommendations.	The Land Use Plan seeks to build resilience in each of the townships by maintaining flexible land use zonings. In addition, the Plan also recommends adopting 'open zones' and removing barriers to development and inconsistencies between the two LEPs that currently apply to the newly amalgamated Murrumbidgee local government area. The Plan identifies and avoids areas of environmental and cultural significance, as well as areas subject to natural hazards. Infrastructure provision and servicing has also been investigated and in some instances such as Darlington Point, larger lot sizes are proposed as this does not place additional demands on Council's sewerage supply infrastructure.
Direction 24 – Create a connected and competitive environment for cross-border communities.	Not applicable	Murrumbidgee is not a cross-border community.
Direction 25 – Build housing capacity to meet demand.	Yes, as the Land Use Plan identifies future housing needs.	The Land Use Plan is consistent with this direction as it identifies existing and projected housing needs. When using Council's high growth population projection, an additional approximate 250 new dwellings will need to be constructed up to 2041 across the three townships. In order to cater for this expected growth, the Land use Plan identifies additional residential zoned land on the peripheral of each of the three townships or via infill development. A supply and demand analysis has been undertaken for residential land and the Plan aims to achieve a good level of supply to cater for any unforeseen or significant increases in population. Furthermore, the Plan seeks to provide for a range of housing products, particularly in Darlington Point to cater for demands for more low density (5,000m^2) or large lot residential (2ha) land, which are currently not available. In doing so, this expands the range of available housing types and provides a point of difference to encourage persons to move to the Murrumbidgee area in recognition of the lifestyle opportunities it presents.
Direction 26 – Provide greater housing choice.	Yes, as the Land Use Plan provides a greater choice of housing	Complies, as outlined above, the Land Use Plan seeks to provide for a wider range of residential product outside of traditional urban (600m^2) and rural (100ha+) options by introducing new R2 and R5 zoned areas. This fills the 'missing middle' that is not currently available and also reduces pressures on infrastructure and is more reflective of the rural lifestyle amenity that the Murrumbidgee council area provides. The Plan also identifies the need for additional aged care housing and ageing in place, as well as options to encourage infill development within the main townships.

Direction 27 – Manage rural residential development.	Yes, as the Land Use Plan recommends rural residential development	The Land Use Plan is consistent with this direction as it seeks to manage and avoid land use conflicts associated with rural residential development. An analysis of each of the three townships has been undertaken and areas proposed for either conventional residential or large lot residential purposes have been carefully selected so as to avoid highly productive agricultural lands or the creation of land use conflicts. The Plan identifies the long term future residential needs for Murrumbidgee (50+ years) and therefore seeks to avoid land speculation or land banking generally associated with rural residential development.
Direction 28 – Deliver healthy built environments and improved urban design.	Yes, as the Land Use Plan recommends urban design controls.	The Land Use Plan is consistent with this direction as it recognises the need to ensure a high level of building design and amenity. In response, it is recommended that Council amend its DCP to include new/updated building design requirements, including specific controls for strategic sites that adjoin key transport corridors. The Plan also investigates the open space needs of the community in accordance with the NSW Government's *Draft Greener Places Design Guide.* As a result, it is recommended that a new local park be established within both Darlington Point and Coleambally to serve the future needs of the community. This open space area will need to comply with the 6 key performance indicators of the Guide and generally be located within 400m / 5 minutes walking distance of users.
Direction 29 – Protect the region's Aboriginal and historic heritage.	Yes, as the Land Use Plan seeks to protect areas of cultural heritage.	The Land Use Plan is consistent with this direction as it has been underpinned by the recommendations of a cultural heritage assessment prepared for the wider Murrumbidgee council area. As outlined within Section 2, the Murrumbidgee Council area has strong associations with traditional landowners, being the Wiradjuri people with a large number of registered Aboriginal sites recorded for the Murrumbidgee area, particularly in Darlington Point due to its location alongside a permanent water source. A predictive archaeological model was prepared to draw general conclusions about the likelihood of cultural heritage remains in an area based on the archaeological and landscape contexts. In response, the proposed rezoning sites have been selected as they avoid areas of either identified cultural significance or sites with a medium to high likelihood of containing items of Aboriginal cultural significance. Consequently, the Land Use Plan is consistent with this direction.

Appendix E: Consistency with Section 9.1 Ministerial Directions

Table 48: Consistency with Ministerial Directions

No.	Title	Applicable to Land Use Plan	Consistency
1.	**Employment and Resources**		
1.1	Business and Industrial Zones	Yes, as the Land use Plan seeks to rezone land for commercial and industrial purposes.	The Land Use Plan is consistent with the aims and objectives of this direction as it seeks to encourage employment growth in suitable locations, protects employment and industrial zoned land and will support the viability of identified centres. The Plan does not propose to reduce the area of industrial or commercial zoned land and in fact seeks to rezone more land for this purpose. More specifically, an industrial supply and demand analysis has been undertaken for each of the three townships. This analysis found that there is an adequate supply of industrial zoned land within Coleambally and there is no need to rezone additional lands in the short to medium term (pending demand). The analysis did however identify the need to rezone industrial lands in both Darlington Point and Coleambally. In particular, it is noted that Darlington Point currently has no designated industrial zoned land, which as a result is discouraging the establishment of new industrial businesses within the town. In addition, this has resulted in the establishment of a number of industrial businesses within the village zone immediately adjacent to sensitive land uses (houses), which is creating amenity impacts such as visual appearance, traffic, noise, dust, odour and the like. For this reason, it is recommended that a new IN1 General Industrial zone be established at the intersection of the Kidman Way and Sturt Highway. This land is strategically located on a key transport route, is not subject to any environmental or natural hazards and is well-separated from the main townships so as to avoid issues of land use conflicts. It is noted that council has already received strong interest for the development of industrial zoned land and the proposed rezoning will satisfy this demand. The rezoning of this land is also consistent with the recommendations of a structure plan previously prepared for this township. Similarly, the Land Use Plan recommends rezoning additional lands within Jerilderie for industrial purposes. Whilst it is acknowledged that Jerilderie already has a level of industrial land supply, it is noted that much of the remaining undeveloped land is held in public ownership (railcorp/ARTC) and is therefore unable to be developed in the short to medium term. The rezoning of additional industrial zoned land will ensure that there is choice in industrial land supply. Matters regarding commercial land have also been considered. It is noted that each of the three main townships are zoned RU5 Village which provides for a variety of land use types and the Land Use Plan does not recommend changing this so as to retain flexibility in land use planning. It is recommended however that the DCP be amended to include additional urban design controls for both commercial and industrial development to ensure that an appropriate built form is achieved.

1.2	Rural Zones	Yes, as the Land Use Plan seeks to rezone rural zoned land	The aims and objectives of this direction are to protect the agricultural production value of rural land. Whilst it is acknowledged that the Land Use Plan recommends rezoning rural zoned land for urban purposes (residential, commercial, industrial) this is considered justifiably inconsistent in this instance for the reasons outlined below. Whilst it is acknowledged that the Plan seeks to rezone RU1 Primary Production zoned land adjoining the three main townships an assessment of this land has been undertaken in accordance with the agricultural capability and class rating. Specifically, the land soil capability class of agricultural land surrounding Darlington Point is identified as Class 4 – Moderate to severe limitation and Class 5 – Severe limitations. At present this land immediately adjoins the main urban centre and is used for broadacre (albeit low-scale) agriculture. The total land proposed for rezoning comprises 238 hectares spread across 6 different landholdings of varying quality and condition. The land soil capability class of agricultural land within and surrounding Coleambally is identified primarily as Class 6 – Very severe limitation, which is reflective of the fact that large portions of it contain native vegetation, which limit its agricultural capability. The land is used for small scale broadacre agriculture and the total land proposed for rezoning for residential purposes comprises 50 hectares. Of the remaining land proposed to be rezone, the zoning is considered to be reflective of the lands' current use (such as the sewerage treatment plant) or environmental features. Lastly, the land soil capability class of agricultural land within and surrounding Jerilderie is identified Class 4 – Moderate to severe limitations and Class 5 – Severe limitations. The land is used for small scale broadacre agriculture and the total land proposed for rezoning comprises 136 hectares. It is noted however that the Land Use Plan also recommends back-zoning approximately 50 hectares of land immediately adjoining Billabong Creek as RU1 Primary Production. Overall, the proposed modest reduction of rural zoned land is considered to be acceptable given the agricultural classification of the land, its location and generally fragmented nature. The rezoning of this land has also been carefully selected so as to avoid land use conflicts with adjoining productive agricultural lands. The Land Use Plan is also generally consistent with the aims and objectives of the Riverina-Murray Regional Plan as it promotes and supports productive agricultural lands and agri-business through more flexible land use provisions, whilst also ensuring consistency across the two LEP's that apply to the recently amalgamated Murrumbidgee Council area. Consequently, the proposed land zoning and minimum lot size recommendations of the Land Use Plan are considered minor given the relatively low productive agricultural value of the land.
1.3	Mining, Petroleum Production and Extractive Industries	Not applicable as the Land Use Plan does not impact on mining, petroleum or extractive industries.	Not applicable.
1.4	Oyster Aquaculture	Not applicable as the Murrumbidgee council area is	Not applicable.

		not within a Priority Oyster Aquaculture Area.	
1.5	Rural Lands	Yes, as the Planning Proposal affects land within an existing rural zone.	The Direction requires that the planning proposal must: *a) be consistent with any applicable strategic plan, including regional and district plans endorsed by the Secretary of the Department of Planning and Environment, and any applicable local strategic planning statement* *b) consider the significance of agriculture and primary production to the State and rural communities* *c) identify and protect environmental values, including but not limited to, maintaining biodiversity, the protection of native vegetation, cultural heritage, and the importance of water resources* *d) consider the natural and physical constraints of the land, including but not limited to, topography, size, location, water availability and ground and soil conditions* *e) promote opportunities for investment in productive, diversified, innovative and sustainable rural economic activities* *f) support farmers in exercising their right to farm* *g) prioritise efforts and consider measures to minimise the fragmentation of rural land and reduce the risk of land use conflict, particularly between residential land uses and other rural land uses* *h) consider State significant agricultural land identified in State Environmental Planning Policy (Primary Production and Rural Development) 2019 for the purpose of ensuring the ongoing viability of this land* *i) consider the social, economic and environmental interests of the community.* The planning proposal can be considered to satisfy these requirements for the following reasons: a) it is consistent with the Riverina-Murray Regional Plan 2036 prepared by the Department of Planning (see Attachment B) and particularly Goal 4 – Strong, connected and healthy communities; b) the subject land is generally classified as Classes 4-6 on the land soil capability mapping and therefore does not represent state-significant agricultural land. This land is only being used for small scale broadacre agriculture and its development for alternative uses will have a positive impact on the small townships and wider Murrumbidgee council area; c) the subject land is cleared of vegetation and has been selected as it represents low quality environmental lands consistent with the recommendations of a biodiversity constraints analysis and relevant environmental mapping prepared by the NSW state government; d) the land is not constrained in terms of natural hazards including bushfire and flooding and has limited other physical constraints; e) given the size of these landholdings there is little opportunity for agricultural innovation and investment given the small size of the property and surrounding urban development;

			f) the subject lands are not part of a commercial farming operation (that would require protection) and will not adversely affect any adjoining commercial faming operations; g) the land is already highly fragmented and a land use conflict assessment has been undertaken, which confirms that the development of this rural land for urban purposes will not create conflicts with adjoining agricultural operations; h) the subject land is not identified as State significant; and i) there will be a net benefit to the townships of Darlington Point, Coleambally and Jerilderie through an increase in population. Having regard for the above, the proposal is considered to be justifiably inconsistent with this Direction.
2.	**Environment and Heritage**		
2.1	Environment Protection Zones	Yes, as this direction applies to all Planning Proposals (Land Use Plan).	The Land Use Plan is consistent with this direction as it seeks to avoid and protect areas of environmental significance. A biodiversity constraints analysis was prepared for the entire Murrumbidgee Council area to identify areas of environmental significance. Consequently, the land use planning recommendations of the Plan seek to avoid areas of environmental significance to ensure the ongoing protection of this land. Specifically, this largely includes cleared land consistent of Category 1 land under the LLS Act. In addition, the Land Use Plan also recommends back-rezoning certain lands, namely in Darlington Point and Coleambally to E3 Environmental Management to ensure this land is protected ongoing and to better reflect the environmental values of this land. Much of this land contains dense vegetation and threatened ecological communities and is inappropriate for development or held in public ownership. Whilst it is acknowledged that the Plan does recommend reviewing the Terrestrial biodiversity and wetlands maps, this is in recognition of the fact that these maps have not been ground truthed and apply in some instances to urban zoned land that does not contain any recognised environmental features. Similarly, a separate request has also been made to the Biodiversity Conservation Division of DPIE seeking a review of the Biodiversity Map as it relates to land in Jerilderie (Coonong Road). See Appendix A for further details.
2.2	Coastal Management	Not applicable as the Murrumbidgee council area is not within a coastal zone.	Not applicable.
2.3	Heritage Conservation	Yes, as this Direction applies to all Planning Proposals (Land Use Plan)	The Land Use Plan is consistent with the aims and objectives of this direction as it seeks to conserve items, areas, objects and places of environmental heritage significance and indigenous heritage significance. Specifically, a Heritage Review Inventory Report has been prepared by a qualified heritage consultant to review the current heritage listings contained within the LEP and identify any additional sites that warrant inclusion. Upon

			review, this report recommends including a number of new heritage items within Schedule 5 and the heritage maps of the LEP. It is also recommended that a new heritage conservation area be established for Darlington Point. Consequently, the Land Use Plan seeks to implement the recommendations of this heritage review to ensure that items of heritage significance are protected and maintained ongoing. Similarly, a cultural heritage report has also been prepared for the Murrumbidgee Council area. This report undertook a review of registered heritage sites and established a predictive model for the local government area. An assessment of each of the candidate rezoning sites was undertaken from a cultural heritage perspective. Only those sites that had a low likelihood of containing items of Aboriginal cultural significance were subsequently proposed for rezoning with other alternative sites retained within their current zoning.
2.4	Recreation Vehicle Areas	Yes, as this Direction applies to all Planning Proposals.	The Land Use Plan is consistent with this direction because it does not advocate the designation of land as a recreation vehicle area pursuant to an order in force under section 11 (1) of the *Recreation Vehicles Act 1983*.
2.5	Application of E2 and E3 Zones and Environmental Overlays in Far North Coast LEPs.	Not applicable to the Murrumbidgee Local Government Area.	Not applicable.
2.6	Remediation of Contaminated Land	Yes, as the Land Use Plan applies to land that has been used for a purpose referred to in Table 1 to the contaminated land planning guidelines.	The Land Use Plan is justifiably inconsistent with this direction as it seeks to rezone certain land that has previously been used for a purpose referred to in Table 1 to the contaminated land planning guidelines. It is noted that each of the sites proposed to be rezoned comprises former broadacre grazing or cropping land. A historical search of council records has not identified any of this land as being contaminated nor is there any physical evidence to suggest that the land is contaminated. Despite the lack of evidence to suggest any land contamination, consistent with the requirements of State Environmental Planning Policy No. 55 – Remediation of Land it is recommended that a preliminary site investigation be submitted as part of the development application process, where a change of use to a more sensitive use is proposed. Notwithstanding the above, it is noted that proposed candidate rezoning site J1 in Jerilderie located adjacent to the Wunnamurra Estate contains evidence of former sheep dips. Consequently, the zoning of this land has been amended to avoid this area and it is recommended that a detailed site investigation (DSI) be prepared prior to any development occurring on-site.
3.	**Housing, Infrastructure and Urban Development**		

3.1	Residential Zones	Yes, as the Land Use Plan seeks to rezone land for residential purposes.	The Land Use Plan is consistent with the aims and objectives of this direction as it seeks to encourage a range of housing types, makes efficient use of infrastructure and minimise impacts of urban land on rural and environmental lands. A residential supply and demand analysis has been prepared for each of the townships identifying the existing level of supply and proposed additional residential land supply. Following the completion of this assessment, it is recommended that additional lands be rezoned to cater for the long term needs of each of the townships. Specific details regarding each of these have been outlined in Section 3.1-3.3 and are discussed below. The Land Use Plan recommends rezoning additional lands on the western side of Darlington Point. In recognition of the relatively large supply of RU5 zoned land (600m^2 minimum lot size) it is recommended that additional residential lands be zoned R2 Low Density Residential with a 5,000m^2 minimum lot size and R5 Large Lot Residential with a 2ha minimum lot size. It is noted that at present, Darlington Point does not have any supply of R5 zoned and the Land Use Plan seeks to address this land supply shortage. Similarly, in recognition of the lifestyle and amenity values that Darlington Point brings and to provide an alternative residential product to other nearby towns including Griffith and Leeton, it is recommended that council introduce a new R2 zone with a 5,000m^2 minimum lot size. The introduction of this new zone will provide greater diversity in the housing market and also places less pressure on infrastructure and services as effluent can be disposed of on-site. Other sites proposed for rezoning include the Darlington Point football ground and land at the southern end of Darlington Street. Both of these sites represent infill development that is located above the relevant flood height. In Coleambally, it is proposed to rezone additional RU5 zoned land to the south west of the main township. This area already adjoins land that is zoned for residential purposes, but is yet to be developed. The development of this land will form an extension of this area and has access to relevant infrastructure and services subject to augmentation and extension. The Plan also recommends zoning additional lands to the south of Lovegrove Road to an R5 zone consistent with he existing development pattern in this area. Reticulated water and road access is already available to this land and the lot sizes proposed mean that sewerage can be disposed of on-site with further extensions. Lastly, the Land Use Plan recommends rezoning land on the western side of Jerilderie RU5 with a 600m^2 minimum. The rezoning of this land will form an extension of the adjoining Wunnermara estate, which council is currently developing. All of stage 1 of this subdivision has been sold and so too has a portion of stage 2. The rezoning of this land will cater for the medium to long term needs of the community. In addition, the Plan also recommends rezoning land on the northern side of Showground Road south of Wilson Road to R5 Large Lot Residential. This area is already fragmented and adjoins land developed for residential lifestyle purposes. Notwithstanding the above, the Land Use Plan does recommend ‘back-zoning’ a portion of land zoned R5 Large Lot Residential located either side of Billabong Creek in Jerilderie to RU1 Primary Production. This land is heavily constrained as it has been identified within a floodway as per the Jerilderie flood study. The rezoning of this land is therefore considered to be justifiably inconsistent and reflects the development potential of this land.

3.2	Caravan Parks & Manufactured Home Estates	Yes, as this Direction applies to all Planning Proposals (and Land Use Plan)	The Land Use Plan is consistent with this Direction because it does not reduce the opportunities for caravan parks and manufactured homes estates on land nor does it seek to rezone land currently being used a caravan park or manufactured homes estate.
3.3	Home Occupations	Revoked 9 November 2020	Not applicable.
3.4	Integrating Land Use and Transport	Yes, as the Land Use Plan seeks to rezone land for residential, commercial, industrial and tourist purposes.	The Land Use Plan applies to the entire Murrumbidgee Local Government Area and primarily aims to strength and reinforce the role of each of the main townships so as to appropriately cater for the future needs of these communities. As a result, the Plan identifies additional land proposed to be rezoned for residential, commercial, industrial and tourist purposes. Much of this land immediately adjoins the main urban areas of thew townships and forms an extension of existing urban development, thereby ensuring that the sites are easily accessible in terms of facilities and services. The land is unconstrained in terms of natural hazards and can be serviced with relevant infrastructure and services. Similarly, an assessment of public open space has been undertaken and the Plan recommends establishing new open space areas in Darlington Point and Coleambally, which are within 5 minutes walking distance of users. Much of the land across Murrumbidgee is flat, thereby improving opportunities for alternative transport modes (walking, cycling). It is also recommended that the DCP be amended to include minimum engineering design requirements including the construction of footpaths in new residential estates. The Land Use Plan also recommends rezoning additional land for industrial purposes. These sites are located in strategic locations and adjoin major transport routes consistent with the recommendations of the Riverina-Murray Regional Plan. Notwithstanding, given the higher level role that these important roadways play, it is recommended that access to and from these classified roads be limited so as to ensure the safety and efficiency of these roads.
3.5	Development Near Regulated Airports and Defence Airfields	Not applicable, as the Murrumbidgee Local Government Area does not contain a regulated airport or defence airfield.	Not applicable, although it is noted that the Land Use Plan does seek to avoid development near established airfields.
3.6	Shooting Ranges	Yes, as the Land Use Plan applies to the entire Murrumbidgee Local Government Area which contains shooting ranges.	The Land Use Plan is consistent with this direction as it does not alter or remove any zone or provision relating to an existing shooting range of land adjoining a shooting range.

3.7	Reduction in non-hosted short term rental accommodation period	Not applicable to the Murrumbidgee Local Government Area.	Not applicable.
4.	**Hazard and Risk**		
4.1	Acid Sulphate Soils	Yes, as the Murrumbidgee Local Government Area contains areas of acid sulphate soils.	The Land Use Plan is consistent with this direction as it does not seek to rezone or change the land use planning controls applicable to land classified as acid sulphate soils.
4.2	Mine Subsidence & Unstable Land	Not applicable, as Murrumbidgee does not contain a Mine Subsistence District.	Not applicable.
4.3	Flood Prone Land	Yes, as the Land Use Plan applies to flood prone land.	The proposed Land Use Plan is consistent with this direction as it has been informed by the recommendations of Flood Studies prepared for both Darlington Point (Murrumbidgee River) and Jerilderie and which comply with the floodplain development manual and relevant DPIE guidelines. Specifically, each of the candidate sites were chosen because they are either flood free or only comprise low level flood prone land (flood fringe) commensurate with their proposed use. All areas have two way access away from the hazard and no sensitive uses are proposed on high hazard flood prone land. For the most part only industrial or large lot residential development is proposed on low hazard flood prone land and these sites have been included as part of the relevant flood study. Following the completion of both of these flood studies, the Land Use Plan recommends introducing a flood planning area map that can either be included in the LEP or the DCP. It is also recommended that new controls be introduced into the DCP to control the development of flood prone land. Whilst it is acknowledged that the Plan recommends rezoning several sites that are classified as high hazard (floodway), the rezoning of this land is limited to environmental protection purposes and does not increase the development potential (and therefore risk) of this land. In addition, the Land Use Plan also recommends back-zoning a number of properties, namely adjoining Billabong Creek in Jerilderie that are subject to high hazard flooding and are located within a floodway. The rezoning of this land for rural purposes is considered to reflect the actual development potential of this land. See the relevant flood studies for further details.
4.4	Planning for Bushfire Protection	Yes, as the Land Use Plan seeks to rezone land that is identified or adjoins land mapped as bushfire prone.	The Land Use Plan is generally consistent with the aims and objectives of this direction. It is noted that at present, the Murrumbidgee Council area does not have an endorsed bushfire prone land map and relies on the bushfire mapping overlay contained within the NSW Planning Portal. Notwithstanding, matters regarding bushfire are

			considered on an individual case by case basis in accordance with the NSW RFS guideline titled: *Planning for Bushfire Protection Guidelines 2019* (PBP). Under these revised guidelines, an additional grassland hazard has been added that will need to be considered in the rezoning and development assessment process. The subject Land Use Plan is considered to be justifiably inconsistent with the aims and objectives of this direction as a constraints and opportunities analysis was undertaken as part of the preparation of the Land Use Plan including an identification of land use conflicts including bushfire. For the most part, the land proposed to be rezoned under this Plan is cleared and in most instances is classified as a grassland hazard. The Plan seeks to avoid areas of heavy vegetation and trees and generally adjoins the main urban areas of each township on land that is currently used for small-scale grazing or cropping. As a consequence, these areas have access to sealed roads, which can provide two way access away from the hazard, as well as a reticulated water supply, which can be used during times of a bushfire. The Land Use Plan also recommends amending the DCP to include additional controls regarding natural hazards including bushfire, that will require developments to comply with PBP. Specifically, this will include the establishment of relevant asset protection zones (APZs) within the development site and developments will be encouraged to provide appropriate interfaces such as roads or fire breaks between the hazard and the development site so as to achieve compliance with PBP. Notwithstanding the above it is recommended that before additional greenfield development occurs within Darlington Point that the existing reticulated water supply network be upgraded so as to achieve minimum fire fighting water pressure requirements. It is also noted that Council has also recently been in discussions with the NSW Rural Fire Service regarding the preparation of a new bushfire prone land map that complies with current day requirements and more accurately reflects the bushfire hazard as it applies to the Murrumbidgee council area.
5.	**Regional Planning**		
5.1	Implementation of Regional Strategies	Revoked 17 October 2017.	Not applicable.
5.2	Sydney Drinking Water Catchment	Not applicable, as the land is not located within the Sydney Drinking Water Catchment.	Not applicable.
5.3	Farmland of State & Regional Significance on the NSW Far North Coast	Not applicable, does not apply to the Murrumbidgee Local Government Area.	Not applicable.

5.4	Commercial and Retail Development along the Pacific Highway, North Coast	Not applicable, as the subject land is not located within proximity to the Pacific Highway.	Not applicable.
5.5	Development in the Vicinity of Ellalong, Paxton and Millfield (Cessnock LGA)	Revoked 18 June 2010.	Not applicable.
5.6	Sydney to Canberra Corridor	Revoked 10 July 2008.	Not applicable.
5.7	Central Coast	Revoked 10 July 2008.	Not applicable.
5.8	Second Sydney Airport: Badgerys Creek	Revoked 20 August 2018.	Not applicable.
5.9	North West Rail Link Corridor Strategy	Not applicable, does not apply to the Murrumbidgee Shire Local Government Area.	Not applicable.
5.10	Implementation of Regional Plans	Yes, as this Direction applies to all Planning Proposals (and Land Use Plan) that apply to land where a Regional Plan has been prepared.	The Land Use Plan is generally consistent with the goals, directions and actions as contained within the *Riverina-Murray Regional Plan 2036* for the reasons outlined in Appendix D. A full response in relation to this Regional Plan has been provided in Appendix D.
5.11	Development of Aboriginal Land Council Land	Not applicable, as the subject land is not identified on the Land Application Map of State Environmental Planning Policy (Aboriginal Land) 2019	Not applicable.
6.	**Local Plan Making**		
6.1	Approval and Referral Requirements	Yes, as this Direction applies to all Planning Proposals (and Land Use Plan).	The Land Use Plan is consistent with this direction because it does not propose the inclusion or provision that requires the concurrence, consultation or referral of development applications to a Minister or a public authority and does not nominate any development as 'designated development'.

6.2	Reserving Land for Public Purposes	Yes, as this Direction applies to all Planning Proposals (and Land Use Plan).	The Land Use Plan is consistent with this Direction because it does not remove or propose any land for public purposes.
6.3	Site Specific Provisions	Not applicable as the Land Use Plan does not propose any site-specific provisions.	Not applicable.
7.	**Metropolitan Planning**		
7.1	Implementation of A Plan for Growing Sydney	Revoked 9 November 2020	Not applicable.
7.2	Implementation of Greater Macarthur Land Release Investigation	Revoked 28 November 2019.	Not applicable.
7.3	Parramatta Road Corridor Urban Transformation Strategy	Not applicable, does not apply to the Murrumbidgee Local Government Area.	Not applicable.
7.4	Implementation of North West Priority Growth Area Land Use and Infrastructure Implementation Plan	Not applicable, does not apply to the Murrumbidgee Local Government Area.	Not applicable.
7.5	Implementation of Greater Parramatta Priority Growth Area Interim Land Use and Infrastructure Implementation Plan	Not applicable, does not apply to the Murrumbidgee Local Government Area.	Not applicable.

7.6	Implementation of Wilton Priority Growth Area Interim Land Use and Infrastructure Implementation Plan	Not applicable, does not apply to the Murrumbidgee Local Government Area.	Not applicable.
7.7	Implementation of Glenfield to Macarthur Urban Renewal Corridor	Not applicable, does not apply to the Murrumbidgee Local Government Area.	Not applicable.
7.8	Implementation of Western Sydney Aerotropolis Plan	Not applicable, does not apply to the Murrumbidgee Local Government Area.	Not applicable.
7.9	Implementation of Bayside West Precincts 2036 Plan	Not applicable, does not apply to the Murrumbidgee Local Government Area.	Not applicable.
7.10	Implementation of Planning Principles for the Cooks Cove Precinct	Not applicable, does not apply to the Greater Murrumbidgee Local Government Area.	Not applicable.
7.11	Implementation of St Leonards and Crows Nest 2036 Plan	Not applicable, does not apply to the Murrumbidgee Local Government Area.	Not applicable.
7.12	Implementation of Greater Macarthur 2040	Not applicable, does not apply to the Murrumbidgee Local Government Area.	Not applicable.
7.13	Implementation of the Pyrmont Peninsula Place Strategy	Not applicable, does not apply to the Murrumbidgee Local Government Area.	Not applicable.

Appendix F: Summary Table – Candidate Rezoning Sites

Table 49: Summary of Proposed Candidate Rezoning Sites

Site No.	Address	Current Zone	Proposed Zone	Biodiversity	Heritage	Flooding	Infrastructure	Recommendation
Darlington Point								
DP1	King Street	RE1 Public Rec	RU5 Village	N/A	N/A	N/A	Centrally located with ready access to infrastructure and services.	Rezone to RU5 Village. Council to confirm land classification pending future development.
DP2	Hay/Britts Road	RU1 Primary Production	R5 Large Lot Residential	Contains Threatened Ecological Community (TEC) (PCT45 – Plains Grassland)	Contains 25 registered Aboriginal sites	N/A	Located adjacent to urban land and can be connected to services.	Retain current zoning as the property contains a significant number of cultural heritage items and TEC.
DP3	North DP	RU1 Primary Production	RU5 Village	N/A	Low-moderate heritage potential	Medium-high hazard flooding (0.5-1m depth) (flood fringe and storage)	Located at the fringe of urban development and would require significant upgrades to infrastructure.	Retain current zoning due to flooding and infrastructure constraints.
DP4	Darlington Street	RU1 Primary Production	R5 Large Lot Residential	N/A	Low-moderate heritage potential	N/A	Located at the fringe of urban development and would require significant upgrades to infrastructure.	Rezone to R2 Low Density Residential with a 5,000m^2 minimum lot size to allow for on-site disposal of sewer.
DP5	Kidman/Sturt	RU1 Primary Production	IN1 General Industrial	Small section of TEC fronting Sturt Highway (needs to be ground truthed)	Low-moderate heritage potential	Low hazard flooding (flood fringe)	Located at the fringe of urban development and would require significant upgrades to infrastructure.	Rezone to IN1 General Industrial. Matters regarding infrastructure to be further investigated and if necessary, appropriate land be aside on individual development lots to allow for on-site effluent disposal.
DP6	Golf Club	RU1 Primary Production	RE1 Public Recreation	N/A	Contains 3 registered Aboriginal sites.	Low hazard flooding (flood fringe)	N/A development does not require reticulated services	Rezone to RE1 Public Recreation to reflect current use.

Site No.	Address	Current Zone	Proposed Zone	Biodiversity	Heritage	Flooding	Infrastructure	Recommendation
					Moderate-high heritage potential			
DP7	Mill Park	E1 National Park	SP3 Tourism	N/A	N/A	Low hazard flooding (flood fringe and storage)	The subject land is centrally located and has access to services. Opportunities also exist for on-site effluent disposal depending on proposed use.	Rezone to SP3 Tourism.
DP8	Boyd Street (STP)	RU1 Primary Production	SP2 Special Activities	N/A	Low-moderate heritage potential	N/A	N/A sewerage treatment plant.	Rezone to SP2 Special Activities, although remove zoning over privately owned land to the north.
DP9	Sturt Highway (landfill)	RU1 Primary Production	SP2 Special Activities	N/A	Low-moderate heritage potential	Low hazard flooding (flood storage)	N/A waste management centre.	Rezone to SP2 Special Activities.
DP10	Murrumbidgee River	RU1 Primary Production	E3 Environmental Management	Yes, dense vegetation	Moderate-high heritage potential	High hazard flooding (floodway)	N/A environmental lands.	Rezone to E3 Environmental Management to reflect environmental values of land.
DP11	Britts Road (North)	RU1 Primary Production	RU5 Village	N/A	Low-moderate heritage potential	N/A	Located at the fringe of urban development and would require upgrades and extension to infrastructure.	Rezone to R2 Low Density Residential to provide alternative residential product and transition in lot sizes. Adopt a 5,000m^2 minimum lot size to allow for effluent disposal on-site. Due to potential level of land supply, stage development commensurate with demand.
DP12	Britts Road (South)	RU1 Primary Production	R5 Large Lot Residential	Threatened Ecological Community (western half) (PCT 45 Plains Grassland)	Low-moderate heritage potential	Low hazard flooding (Flood fringe, depth 0-0.25m)	Located at the fringe of urban development and would require upgrades and	Rezone to R5 Large Lot Residential. Adopt a 2 hectare minimum lot size to

Site No.	Address	Current Zone	Proposed Zone	Biodiversity	Heritage	Flooding	Infrastructure	Recommendation
							extension to infrastructure.	allow for effluent disposal on-site. Council/landowner to investigate and/or confirm the TEC listed on the western half of the property.
DP13	Bundure Street (south of Golf club)	RU1 Primary Production	IN1 General Industrial (future)	Threatened Ecological Community (western half) (PCT 45 Plains Grassland)	N/A	Low hazard flooding (flood fringe)	Located at the fringe of urban development and would require upgrades and extension to infrastructure.	Rezone eastern half to IN1 General Industrial and retain western half as rural due to the presence of a threatened ecological community. Due to amount of proposed supply, this land should only be rezoned once demand permits.
DP14	Clarke Street (Waddi)	RU1 & RU5	B6 Business Park	N/A	N/A	Low hazard flooding (flood fringe)	Located at the fringe of urban development and would require upgrades and extension to infrastructure.	Rezone to B6 Business Park.
DP15	Clarke Street (Cnr Kidman and Sturt)	RU5 Village	IN1 General Industrial	N/A	N/A	Low hazard flooding (flood fringe)	Located at the fringe of urban development and would require upgrades and extension to infrastructure.	Rezone to IN1 General Industrial. Matters regarding infrastructure to be further investigated and if necessary, appropriate land be aside on individual development lots to allow for on-site effluent disposal.
DP16	Hay Road (east)	RU1 Primary Production	RE1 Public Recreation (future)	Threatened Ecological Community (PCT45 – Plains Grassland)	Contains 5 registered Aboriginal sites. Moderate-high heritage potential	Low hazard flooding (flood fringe)	Located at the fringe of urban development and would require upgrades and	Retain as RU1 Primary Production due to the presence of a threatened ecological community.

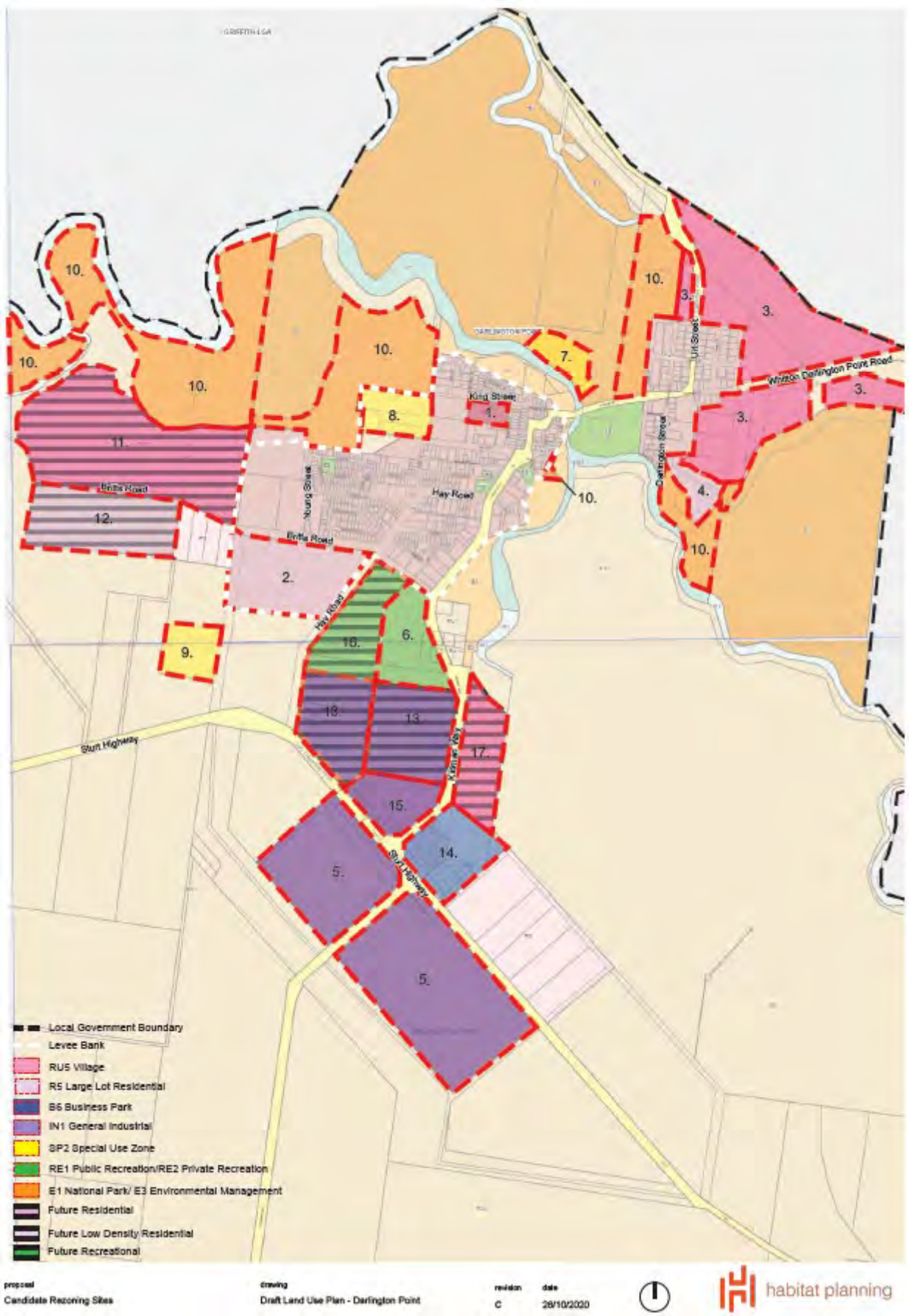
Site No.	Address	Current Zone	Proposed Zone	Biodiversity	Heritage	Flooding	Infrastructure	Recommendation
							extension to infrastructure.	
DP17	Kidman Way (east)	RU1 Primary Production	RU5 Village (future)	N/A	Low-moderate heritage potential	High hazard flooding (partially located in a floodway)	Located at the fringe of urban development and would require upgrades and extension to infrastructure.	Retain current RU1 Primary Production Zone as a portion of the site is located within a floodway and additional residential land is proposed elsewhere.
Coleambally								
C1	Kingfisher Avenue	RU1 Primary Production	RU5 Village	N/A	N/A	N/A	Centrally located with ready access to infrastructure and services.	Rezone to RU5 Village.
C2	Lovegrove Road (trotting track)	RU1 Primary Production	R5 Large Lot Residential	Threatened Ecological Community (PCT 45– Plains Grassland PCT 28 – White Cypress)	N/A	N/A	Located at the fringe of urban development and would require upgrades and extension to infrastructure.	Retain as RU1 Primary Production as the majority of the site contains a threatened ecological community. The biodiversity and offsetting costs associated with developing this land make this site unviable.
C3	Kingfisher (Lions Park)	RU1 Primary Production	RE1 Public Recreation	N/A	N/A	N/A	N/A development does not require reticulated services	Rezone to RE1 Public Recreation to reflect current use.
C4	Pine Drive (Golf club)	RU1 Primary Production	RE1 Public Recreation	Threatened Ecological Community (PCT19 – Cypress Pine Woodland)	N/A	N/A	N/A development does not require reticulated services	Rezone to RE1 Public Recreation to reflect current use.
C5	Kidman Way (STP)	RU1 Primary Production	SP2 Special Activities	Threatened Ecological Community (PCT19 – Cypress Pine Woodland	N/A	N/A	N/A sewerage treatment plant.	Rezone to SP2 Special Activities to reflect current

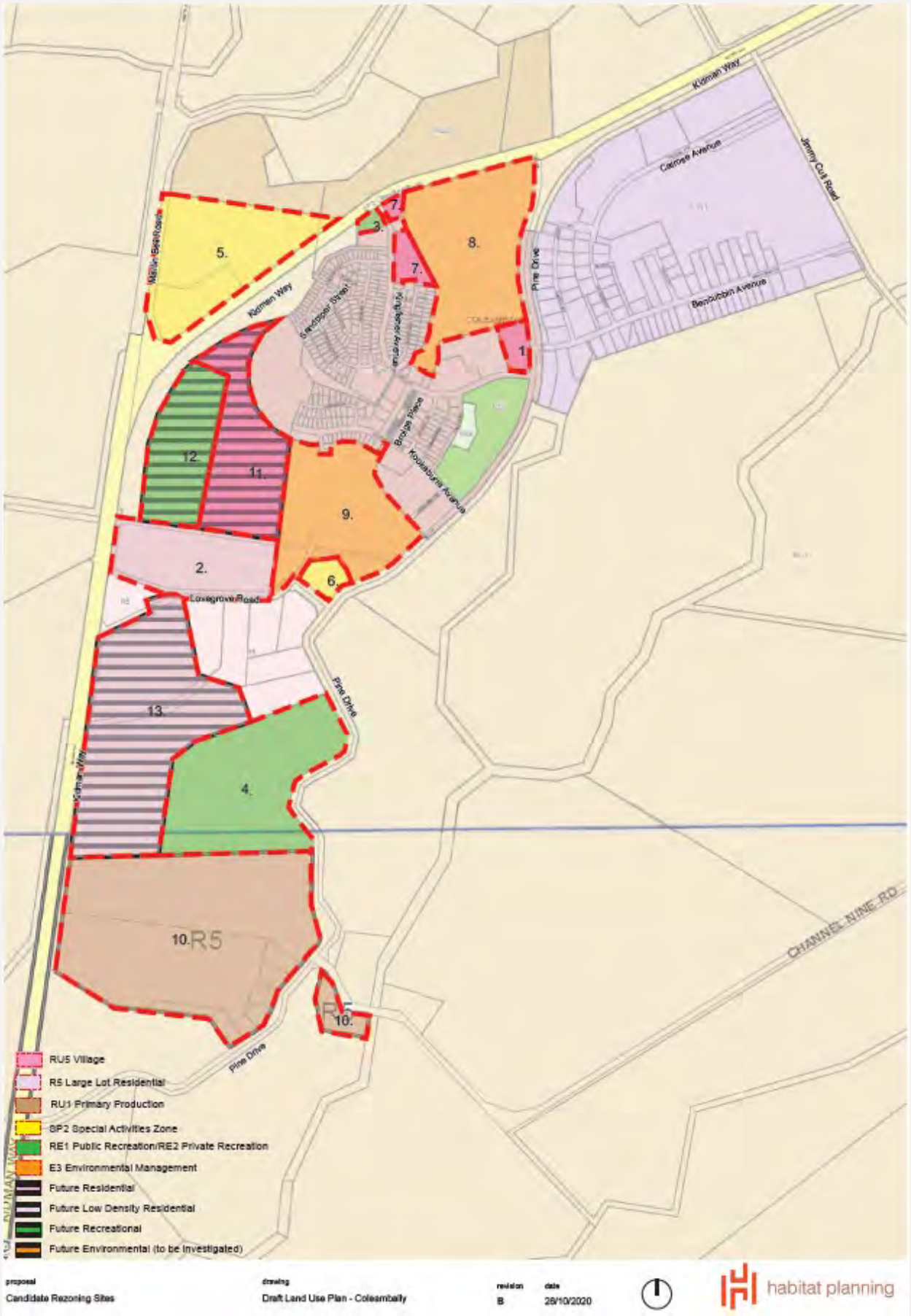
Site No.	Address	Current Zone	Proposed Zone	Biodiversity	Heritage	Flooding	Infrastructure	Recommendation
				PCT26 – Weeping Myall)				use and to protect this facility.
C6	Lovegrove Road (cemetery)	RU1 Primary Production	SP2 Special Activities	Threatened Ecological Community (PCT 28 – White Cypress)	N/A	N/A	N/A cemetery.	Rezone to SP2 Special Activities to reflect current use and to protect this facility.
C7	Kingfisher Way (east)	RU1 Primary Production	RU5 Village	Threatened Ecological Community (PCT19 – Cypress Pine Woodland PCT 28 – White Cypress)	N/A	N/A	Centrally located with ready access to infrastructure and services.	Retain as RU1 Primary Production as the majority of the site contains a threatened ecological community. The biodiversity and offsetting costs associated with developing this land make this site unviable.
C8	Kingfisher Way (north reserve)	RU1 Primary Production	E3 Environmental Management	Threatened Ecological Community (PCT19 – Cypress Pine Woodland PCT 28 – White Cypress)	N/A	N/A	N/A environmental protection.	Rezone to E3 Environmental Management to reflect the environmental values of this land. Council to consider establishing as a biodiversity offset site.
C9	Kookaburra Way (south reserve)	RU1 Primary Production	E3 Environmental Management	Threatened Ecological Community (PCT 28 – White Cypress)	N/A	N/A	N/A environmental protection.	Rezone to E3 Environmental Management to reflect the environmental values of this land. Council to consider establishing as a biodiversity offset site.
C10	Pine Drive	R5 Large Lot Residential	RU1 Primary Production	N/A	N/A	N/A	Already zoned R5 Large Lot Residential.	Retain in the current R5 zone as other land identified for rezoning to R5 is no

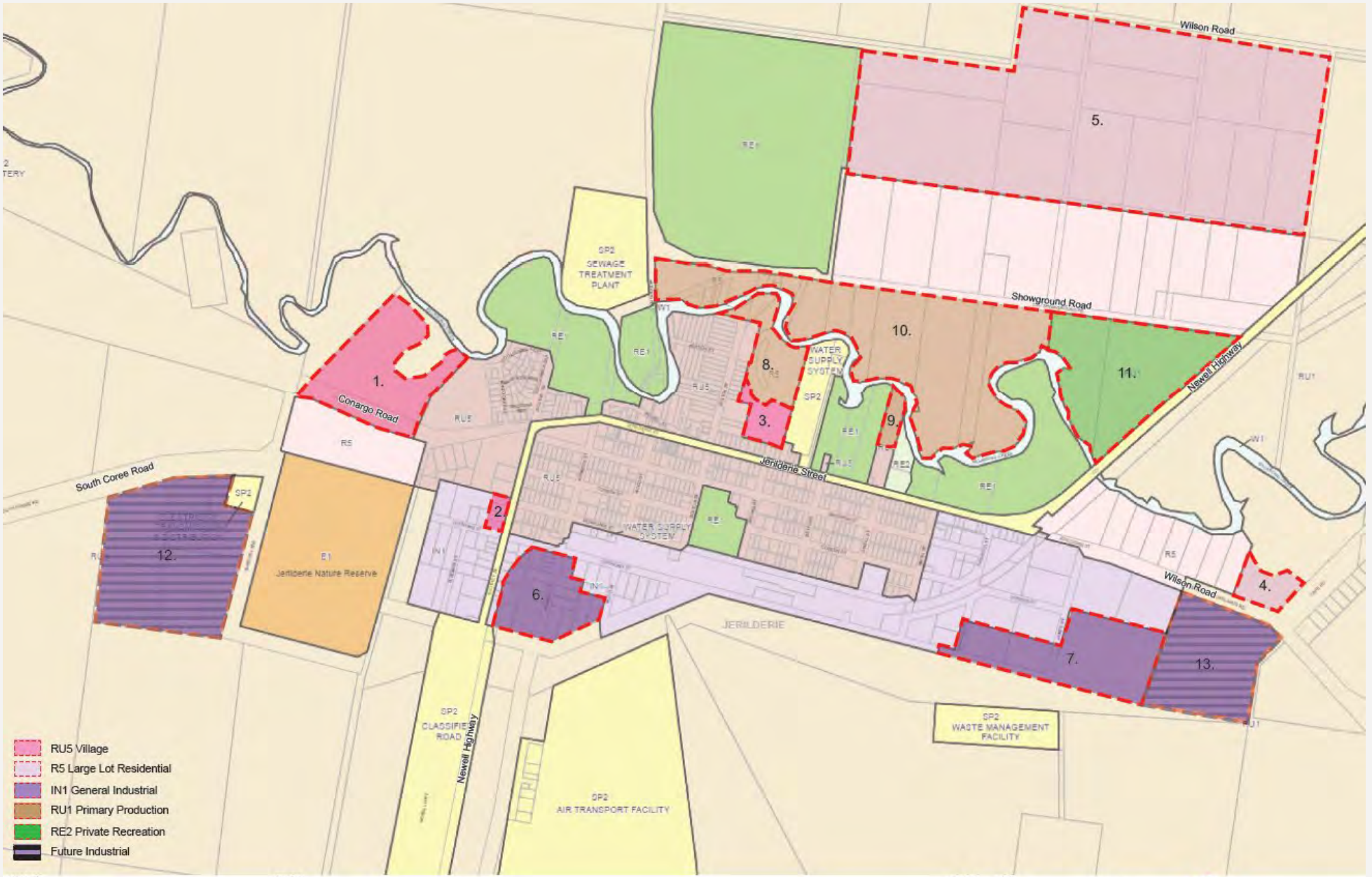
Site No.	Address	Current Zone	Proposed Zone	Biodiversity	Heritage	Flooding	Infrastructure	Recommendation
								longer proposed due to biodiversity constraints.
C11	Kookaburra (Lake Site – Res)	RU1 Primary Production	RU5 Village	Threatened Ecological Community (PCT 45– Plains Grassland PCT 28 – White Cypress)	N/A	N/A	Centrally located and can be connected to infrastructure and services via extension.	Only rezone the northern portion to RU5 Village and retain the southern portion as RU1 Primary Production as the majority of the site contains a threatened ecological community. The biodiversity and offsetting costs associated with developing this land make this site unviable.
C12	Kookaburra (Lake Site – Lake)	RU1 Primary Production	RE1 Public Recreation	Threatened Ecological Community (PCT 45– Plains Grassland PCT 28 – White Cypress)	N/A	N/A	Located at the fringe of urban development and would require upgrades and extension to infrastructure.	Only rezone the northern portion to RU5 Village and retain the southern portion as RU1 Primary Production as the majority of the site contains a threatened ecological community. The biodiversity and offsetting costs associated with developing this land make this site unviable.
C13	Lovegrove (South)	RU1 Primary Production	R5 Large Lot Residential (Future)	Threatened Ecological Community (PCT19 – Cypress Pine Woodland PCT 45– Plains Grassland	N/A	N/A	Located at the fringe of urban development and would require upgrades and extension to infrastructure (water supply).	Rezone northern portion to R5 Large Lot Residential, but retain southern portion as RU1 Primary Production as it contains a threatened ecological community.
Jerilderie								

Site No.	Address	Current Zone	Proposed Zone	Biodiversity	Heritage	Flooding	Infrastructure	Recommendation
J1	Conargo Road 'Wunnamurra'	RU1 Primary Production	RU5 Village	N/A	Moderate heritage potential	Low hazard flooding (flood fringe)	Centrally located with ready access to infrastructure and services.	Rezone RU5 Village
J2	Southey Street (aged care)	IN1 General Industrial	RU5 Village	N/A	N/A	N/A	Already developed for aged care purposes.	Rezone to RU5 Village to reflect current use of land.
J3	Brown Street (south)	R5 Large Lot Residential	RU5 Village	N/A	Low-moderate heritage potential	N/A	Centrally located with ready access to infrastructure and services.	Rezone southern portion of the property to RU5 Village as it is flood free and has access to services.
J4	Cape Road	RU1 Primary Production	R5 Large Lot Residential	N/A	Low-moderate heritage potential	N/A	Adjoins existing urban land developed for residential purposes.	Rezone portion of site above flood level to R5 Large Lot Residential.
J5	Showgrounds Road	RU1 Primary Production	R5 Large Lot Residential	Yes, contains Red Darling Pea	N/A	N/A	Located at the fringe of urban development and would require upgrades and extension to infrastructure (water supply).	Rezone to R5 Large Lot Residential. Matters regarding effluent disposal are satisfactory as effluent can be disposed of on site due to the proposed lot sizes (2ha).
J6	Kennedy Street	RU1 Primary Production	IN1 General Industrial	N/A	N/A	N/A	Already developed for a variety of purposes.	Rezone to IN1 General Industrial
J7	Coreen Street	RU1 Primary Production	IN1 General Industrial	Yes, Biodiversity Values Map	N/A	Yes, low hazard flooding (flood fringe)	Located at the fringe of urban development and would require upgrades and extension to infrastructure.	Rezone to IN1 General Industrial pending confirmation of Biodiversity Values Map.
J8	Bolton Street	R5 Large Lot Residential	RU1 Primary Production	N/A	High heritage potential	Flood prone land (flood storage and fringe)	N/A no additional development proposed.	Rezone to RU1 Primary Production to reflect high hazard flooding of the land.

Site No.	Address	Current Zone	Proposed Zone	Biodiversity	Heritage	Flooding	Infrastructure	Recommendation
J9	121 Jerilderie Street	R5 Large Lot Residential	RU1 Primary Production	N/A	High heritage potential	Flood prone land (flood storage and fringe)	N/A no additional development proposed.	Rezone to RU1 Primary Production to reflect high hazard flooding of the land.
J10	Showground Road (south)	R5 Large Lot Residential	RU1 Primary Production	N/A	Variable heritage potential	High hazard flooding (floodway)	N/A no additional development proposed.	Rezone to RU1 Primary Production to reflect high hazard flooding of the land.
J11	Newell Highway (golf club)	RU1 Primary Production	RE1 Public Recreation	N/A	Moderate heritage potential	High hazard flooding (foodway)	N/A development does not require reticulated services	Rezone to RE1 Public Recreation to reflect current use.
J12	Conargo Road (south)	RU1 Primary Production	IN1 General Industrial (future)	N/A	N/A	N/A	Located at the fringe of urban development and would require significant upgrades to infrastructure.	Rezone to IN1 General Industrial. Matters regarding infrastructure to be further investigated and if necessary, appropriate land be aside on individual development lots to allow for on-site effluent disposal.
J13	Coonong Street	RU1 Primary Production	IN1 General Industrial (future)	Yes, Biodiversity Values Map	N/A	N/A	Located at the fringe of urban development and would require upgrades to infrastructure.	Rezone to IN1 General Industrial (future) pending confirmation of Biodiversity Values Map.


GRIFFITH LGA
DARLINGTON POINT
King Street
Hay Road
Brolga Street
Darlington Street
Union Street
Wilton Darlington Point Road
Sturt Highway
Kidman Way
10.
11.
12.
2.
9.
8.
1.
7.
3.
4.
6.
16.
18.
13.
17.
15.
14.
5.
Local Government Boundary
Levee Bank
RU5 Village
R5 Large Lot Residential
B6 Business Park
IN1 General Industrial
SP2 Special Use Zone
RE1 Public Recreation/RE2 Private Recreation
E1 National Park/ E3 Environmental Management
Future Residential
Future Low Density Residential
Future Recreational
proposal
Candidate Rezoning Sites
drawing
Draft Land Use Plan - Darlington Point
revision
C
date
26/10/2020
habitat planning


Kiloran Way
Miller Bell Road
Ridmen Way
Sandpiper Street
Kingfisher Avenue
Bridge Place
Koolabunna Avenue
Lovegrove Road
Pine Drive
Jenny Cull Road
Carnoe Avenue
Beebubbin Avenue
Channel Nine Rd
1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.
12.
13.
RU5 Village
R5 Large Lot Residential
RU1 Primary Production
SP2 Special Activities Zone
RE1 Public Recreation/RE2 Private Recreation
E3 Environmental Management
Future Residential
Future Low Density Residential
Future Recreational
Future Environmental (to be investigated)
proposal
Candidate Rezoning Sites
drawing
Draft Land Use Plan - Coleambally
revision
B
date
28/10/2020
habitat planning


Wilson Road
5.
Showground Road
10.
11.
Newell Highway
SP2
SEWAGE TREATMENT PLANT
RE1
1.
Conargo Road
RU5
R5
8.
WATER SUPPLY SYSTEM
3.
9.
Jerilderie Street
South Coree Road
2.
12.
E1
Jerilderie Nature Reserve
6.
IN1
JERILDERIE
4.
Wilson Road
7.
13.
SP2
CLASSIFIED ROAD
Newell Highway
SP2
AIR TRANSPORT FACILITY
SP2
WASTE MANAGEMENT FACILITY
RU5 Village
R5 Large Lot Residential
IN1 General Industrial
RU1 Primary Production
RE2 Private Recreation
Future Industrial
proposal
Candidate Rezoning Sites
drawing
Draft Land Use Plan - Jerilderie
revision
B
date
26/10/2020
habitat planning